Connect

Tallaght University Hospital | Ospidéal Ollscoile Thamhlachta

An Academic Partner of Trinity College Dublin

Quarterly Newsletter for GPs

Summer 2024 - Issue 31

Dear Colleagues,

These are exciting times. I am sure at this stage you have heard the wonderful news that the Hospital has been approved for 196 new beds. The official announcement was made by the Minister for Health Stephen Donnelly on May 29th.

This is a very positive development as we forge even closer links with you our medical colleagues in the community. As you know our hospital has been operating over capacity for many years as the population of the area that we serve has grown significantly, with increased demand coming from an older and more complex patient group.

Some of the key benefits of the new beds will include a reduction in lengthy trolley waits in the ED and shorter waiting times for surgeries in the Hospital.

Once constructed, the new single rooms will also make it much easier to control infection. We are looking forward to progressing this build as quickly as possible on the shovel-ready site already identified on our grounds, beside the Phoenix Staff Restaurant.

We have also just launched our first-ever Five-Year Research & Innovation Strategy for the Hospital, which outlines plans to build a new state-of-the-art Innovation Centre and Clinical Research Facility on our main campus. This will enable us to continue the important work of developing new and better ways to treat our patients.

I want to thank you for your continued support and cooperation as we enter this new and exciting phase of our development.

Kind regards,

Lucy Nugent,
CEO.

Modernising the OPD

Tallaght University Hospital is planning a number of quality improvement projects in our Outpatient Department (OPD) over the coming months. The primary aim of this, is to make it easier for patients and GPs to access the OPD.

This will be achieved by improving OPD processes, to empower patients to engage proactively with the Hospital at key points throughout their outpatient journey. We also hope that digitalising the referrals process will improve communication with you, our GP colleagues in the community. Over the coming months the focus in TUH will be aligning our staff, processes and technology to achieve these goals.

The immediate focus will be to increase the volume of OPD referrals that we are receiving digitally and move away from paper referrals. Electronic OPD referrals should be sent to the Central Referrals Office (CRO) in TUH, via Healthlink, to enable TUH to better manage and communicate with you, our GP colleagues.

Over the coming weeks we will be engaging with GPs directly and will provide updates to the Tallaght LINCC committee and via our website. Sean Humphreys is the project lead and can be contacted by email – Sean.Humphreys@tuh.ie

We welcome any feedback.

Down Syndrome Podcast Series

Tallaght University Hospital has just launched their third, Let's Talk About Podcast Series which this time focuses on Down Syndrome. Each episode is targeted at individuals with Down syndrome, their families and carers, health and social care staff and anybody who has an interest in the health needs of adults with this lifelong condition. Over five episodes, the podcast series looks at what Down syndrome is, common health issues and the importance of health screening from the age of 35.

The series is hosted by Geraldine Kyle, a registered Nurse Tutor in TUH and throughout the five podcasts she speaks to several health experts for people with intellectual disabilities as well as Ross O'Neill, a young man with Down syndrome, and the mother of a young adult with Down syndrome.

Commenting on the series Geraldine Kyle said, "As a healthcare professional and a mother of a young adult with Down Syndrome I welcome the opportunity to discuss best practices, on how to support the healthcare needs of this diverse population. Our subject matter and experts provide valuable information which will be of interest to individuals, parents, doctors, nurses and Health and Social Care Professionals."

The five-part series can be found on the Hospital's YouTube Channel, and Facebook page, as well as on Spotify and Podbean. Each episode is approximately 15 minutes long and targeted at anyone who wants to learn more about Down syndrome, what it is, the health implications for those living with it and practical advice on how to provide healthcare to these patients.

New AI Technology Launched

"How we walk is reflective of how well we are, and changes in how we walk can indicate we are becoming unwell!" A new AI-powered technology, driven by a smartphone app hailed a significant breakthrough was launched recently at TUH. GaitKeeper measures walking speed which is often referred to by doctors as the "sixth vital sign."

GaitKeeper is so sensitive it can even indicate if someone could be living with early symptoms of Alzheimer's disease or other disorders that affect the brain. This is important as new drugs (expected to be approved in Ireland this summer) will for the first time offer treatments to those in the early stages of the disease.

This new software has been developed by Dublin City University principal investigator Dr. Aidan Boran working in conjunction with consultants, physiotherapists, and patients in the Hospital.

He explains, "GaitKeeper uses AI computer algorithms to analyse a person's walk, by using a single video recorded on a mobile phone, making it very portable, and very easy to use. Working with the AI, our augmented reality app ensures the solution is very consistent and standardised in all settings."

Professor Seán Kennelly Consultant Geriatrician and Director of the Institute of Memory & Cognition was the lead clinician investigator in the GaitKeeper project. He explains, "Up until now gait analysis in clinical settings has been very limited, not because it is not important, but due to the expense, inaccuracies, high level of training required and the space that equipment takes up. This new technology changes all of that. Using AI and AR, the GaitKeeper app captures over 20 points on a person's body, 60 times per second as they walk, using a phone."

This app represents a significant breakthrough and means gait assessments can be conducted by anyone, anywhere, at any time. Gone is the need for specialised equipment like sensors, mats, or special clothing. The assessments can be done in Nursing Homes, GP practices, outpatient clinics, hospital wards, and even in someone's own home."

For patients with chronic diseases such as Parkinson's disease, multiple sclerosis, or arthritis, walking speed serves as an indicator of disease progression and response to treatment. GaitKeeper collects longitudinal data on walking speed, support base, swing, flexion, and symmetry measures. It is already being used in TUH to gauge frailty status – identifying increased risks of adverse events such as falls, prolonged Hospital stays and overall functional decline.

The development of GaitKeeper was significantly funded by Enterprise Ireland through their Commercialisation Fund Programme, and supported by the Insight Centre for Data Analytics, DCU Invent and Innovate Health at TUH.

Image of GaitKeeper and how it functions

Major Tallaght Survey

The third round of an important survey of residents in Tallaght about their health needs has just begun. The project has been commissioned by the Academic Primary Care Collaboration (APCC) and has been Funded by HSE Dublin South, Kildare & West Wicklow Community and The Adelaide Health Foundation. Run by Trinity College Dublin, The Health Assets & Needs Assessment (HANA) Survey is trying to find out what the local community in Tallaght believe is needed in terms of additional services and facilities.

In 2001 and 2014, the HANA Project carried out surveys of health and wellbeing in 13 electoral divisions of Tallaght looking at topics including demographics, health status, chronic illness, physical activity, as well as use of healthcare and community services and amenities in Tallaght.

Now HANA researchers have once again invited primary carers to share their thoughts and letters have been sent to randomly selected households.

The impact of Rounds One and Two recommendations has been significant resulting in many new and improved healthcare services for Tallaght including;

1. **New Community Radiology Unit in Tallaght Cross**
2. **Extended TLC 'Out-of-Hours' Doctors' Services**
3. **Funding for Local Sports Partnerships**
4. **ExWell Medical** offers supervised exercise classes for those with long-term illnesses.
5. **Health Facilities at Tallaght University Hospital (TUH):** This includes Psychiatry, Cardiology, Disability Memory Services, and extra staff for Chronic Disease Management and Acute Frailty Units.
6. **Integrated Care Programme for Older Persons (ICPOP):** ICPOP at TUH started in 2016 and focuses on managing care for older individuals with complex needs.

This latest HANA round is dedicated to reviewing developments in healthcare, sport and hobby facilities, and community amenities. Researchers want to understand the opinions of the local community about the services needed to continue building a healthy Tallaght. The HANA team have contracted Ipsos-MRBI to do the fieldwork data collection. Participation is entirely voluntary.

Research & Innovation Strategy

The Hospital has just launched its new five-year Research & Innovation Strategy.

The document outlines plans to build a new state-of-the-art Innovation Centre and Clinical Research Facility on the Hospital's main campus to facilitate the rapid translation of research and innovation to the healthcare system.

Head of Innovation at Tallaght University Hospital (TUH), Dr. Natalie Cole said, "Innovate Health represents a new operating model for healthcare innovation where industry, healthcare professionals, designers, medical device manufacturers, engineers and IT work in close collaboration through the entire development process, from idea generation to deployment. We look forward to continuing to do more of this important work as we chart the way forward with our new five-year strategy document."

Head of Research at TUH, Dr. Sadhbh O Neill Scanlon said "Until now Research & Innovation have been operating as separate departments at TUH. With the Research Strategy being reviewed it is timely for Research & Innovation to merge. The purpose of this document is to highlight the priority areas for the Research & Innovation Strategy over the next five years (2024-2029). It means that all research and innovation will now happen under the umbrella of Innovate Health at TUH."

Launching the new Research & Innovation Strategy, John Kelly, Deputy CEO of TUH said "Research & Innovation is at the heart of our hospital, and our dynamic, independent Board of Directors empower us to make pragmatic decisions to improve the patient experience."

Pictured from left to right in the picture are; Deputy CEO & Executive Lead for Research & Innovation, John Kelly; Head of Research at TUH, Dr. Sadhbh O Neill Scanlon; TUH CEO, Lucy Nugent; Dr. Vivienne Byers, Member of the TUH Board, Professor Anne-Marie Brady, Chair of TUH; Mr. Martin Lyes, Member of the TUH Board and Head of Innovation at TUH, Dr. Natalie Cole

Clinical Trials at TUH

On May 20th each year Clinical Trials Day is celebrated, it is an opportunity to reflect, recognise and admire all that has been accomplished thanks to clinical trials, the people behind them and of course the patients.

In 2023 our Oncology/Haematology Clinical Trials Unit at TUH considered 160 patients for potential trials in many cancer types. These included Renal, Prostate, Lung, Haematology, Bladder, Gastric and Colorectal Cancers. A total of 111 patients consented to these studies. Additionally, there were 942 visits by patients enrolled on Clinical Trials or being assessed for eligibility to a trial run by our Cancer Clinical Trials Team.

Our oncology team operate a patient-centred approach and strives to provide access to cutting-edge therapies, personalised care and comprehensive support to individuals affected by cancer. By collaborating with Cancer Trials Ireland and international partners, they contribute to the global effort to find effective and safe treatments, ultimately working towards a future where cancer is no longer such a devastating disease.

Pictured from left to right are members of the team that care for patients taking part in Cancer Trials Lisa O'Neill, Data Manager; Rhonda Mooney, Senior Data Manager & Study Start Up Specialist; Christine Leonard, CNM 3; Ashley Bazin, Team Leader; Heather Sloane, CNM 2; Mark Mc Dermott, Data Manager; Una Murtagh, CNM 2 and Patricia Quinn, Research Assistant

Funding to Trial Wearable Device

Professor Patrick Mitchell our Respiratory Consultant has been successful in his bid to secure funding from the Public Service Innovation Fund. The €75,000 will enable Prof Mitchell and his team to begin testing wearable devices, which can be integrated into a digital platform for patients with severe asthma.

This new project will initially involve 50 patients that attend the Hospital and have a diagnosis of moderate to severe asthma.

They will use a wearable device and a home spirometer (measuring lung function). This will enable patients to measure and record their sleep patterns, pulse rate, activity levels, and lung function on a weekly and/or symptom-prompted basis. The wearable device will link to a digital platform so results can be recorded. Those using the device will also be able to record patient-reported outcome measures (PROMs) over a six month period.

The new wearable device will then harvest this information to provide the medical team with a retrospective and objective dataset of results to detail how the patient with asthma was doing over the preceding months.

These results will reveal if the wearable devise was able to detect a significant change in their condition, which in the future will allow for early intervention and treatment, if needed.

Professor Patrick Mitchell, Respiratory Consultant

Acute Stroke Unit (ASU) Services

Stroke services at TUH now provide acute stroke assessment to a wider catchment area which includes Naas and Portlaoise. This has resulted in a 200% increase in our emergency 'FAST' calls. There were over 600 'FAST' calls in 2023 and the ASU now treats over 400 strokes per year.

The current 'door-to-CT' time is 15 minutes and the 'door-to-decision' time is 22 minutes. A third of our strokes are due to atrial fibrillation and underlying cardiac disease so effective cardiac monitoring is a core component of ASU care. All nine acute stroke beds are now equipped with new Mindray Physiological monitors. The unit now uses continuous 12-lead ECG monitoring supported by the latest Mindray software and reporting tools. It is designed to detect and alert staff of any atrial fibrillation.

As the service develops staffing levels have grown on the William Stokes Unit, with two new consultant posts and 14 new nurses joining the stroke team this year. There is a strong tradition of staff development & supporting specialised stroke nurse education in our William Stokes Unit. Six staff nurses are currently completing the TUH "Fundamentals of Stroke Nursing"

15 mins
Door-to-CT time

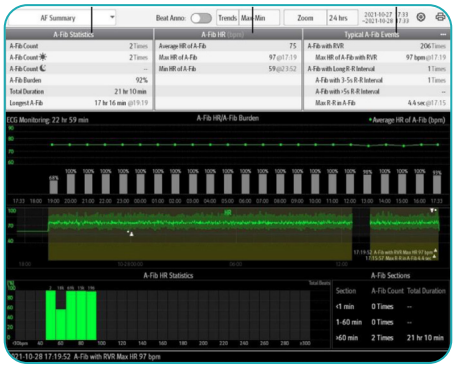
22 mins
Door-to-decision time

+200% Increase
emergency 'FAST' calls

training and 22 staff nurses have been comprehensively trained in stroke specific care. Two staff nurses have progressed to stroke candidate ANP roles and two staff nurses have stroke CNS roles.

The service is active in stroke prevention, a daily rapid access TIA / stroke prevention clinic is run with colleagues in Neurology and a weekly multidisciplinary atrial fibrillation clinic takes place with colleagues in Cardiology.

The service is also involved in stroke research. Including the CONVINCE trial, and is a National Co-ordinating Centre for the BLTZ-AF registries and TICH-3 trial, as well as a consortium partner in the Horizon 2020 EHRA-Paths programme.



Atrial Fibrillation Summary Report

Pictured from left to right: Professor Rónán Collins, Director of Stroke Services/ Consultant Physician; Aloy Anthony, Clinical Engineer; Darina McCarthy, Clinical Nurse Manager, William Stokes Unit; and Jason Connolly, Principal Clinical Engineer.

Rare Disease Research Consortium

The Rare Disease Research Catalyst Consortium (RDCat) was launched recently with key involvement from Tallaght University Hospital (TUH). RDCat is made up of of Irish-based healthcare professionals, active researchers, patients and advocacy groups working together with international partners to advance rare disease research. As part of this, Professor Patrick Mitchell, Respiratory Consultant here at TUH is to be responsible for rare disease early career research training.

RDCat believe anyone living with a rare disease who wants to join in research and clinical trials should be able to. The group also ensures Ireland is fully engaged in important European health projects, teaming up to collaborate with groups around the world. RDCat will find diagnoses for people living with an unsolved rare disease and will standardise training so the next generation of researchers is Rare Aware.

They will also make sure that patients' voices are centred in research and policy discussions. The project is funded by the Health Research Board and hosted by UCD School of Medicine.

Coordinated by Professor Rachel Crowley, UCD School of Medicine, RDCat will be delivered by a multidisciplinary consortium in collaboration with RCSI University of Medicine and Health Sciences, Trinity College Dublin, the five Irish Lead hospitals and Rare Disease Ireland.

TUH is already part of the European Reference Network of hospitals in Europe contributing to the virtual network that facilitates discussion on complex or rare diseases and conditions that need highly specialised treatment.

If you would like any more information about any articles in the Connect or have suggestions for future editions please do get in touch

Email: GPConnect@tuh.ie