

# Spark Impact 2025 Projects

# Making Every Contact Count for Brain Health

**Tim Dukelow, Consultant**

**Westfield Integrated Care Centre,  
Ballincollig, Cork**

Recent years have seen an increasing focus on the concepts of brain health and dementia prevention. It is now recognised that 14 modifiable risk factors are responsible for 45% of dementia cases globally. In Ireland, awareness of these risk factors among the general population is poor. Ireland's dementia awareness campaign has proven ineffective in increasing awareness that dementia risk is modifiable. Expert-delivered education is highlighted as a desired method to improve awareness of modifiable risk factors for dementia and is a priority in improving brain health in an Irish context. Making Every Contact Count (MECC) for Brain Health is a 3-week MDT delivered educational intervention. The aim of the programme is to assess the feasibility and effectiveness of MECC in improving brain health awareness and engendering behavioural change amongst community-dwelling older adults. The intervention utilizes the HSE, Health behaviour change framework, Making Every Contact Count in a dementia prevention context. Content will relate to the four MECC risk factors, namely smoking, alcohol, healthy diet and exercise. Pre/post questionnaires will be distributed to capture knowledge and lifestyle changes. This innovative initiative utilises an established behaviour change framework to facilitate dementia prevention, in a manner which is scalable on a national level.

# Digitalising Preoperative Assessment in Beaumont Hospital

**Dr. Tanya O'Neill, Consultant**

**Beaumont Hospital**

Preoperative assessment (POA) is a process that triages and risk stratifies patients for perioperative complications. At risk patients are identified and their fitness optimised in a timely manner resulting in reduced surgical mortality and morbidity, improved theatre utilisation and cost savings. This project will transform the POA service in Beaumont Hospital from an inefficient, paper-based system to a secure, cloud hosted, online POA platform with integrated risk stratification, customisable clinical algorithms and action tags. This digital shift aligns with the HSE's Digital Health Strategic Roadmap and will streamline the entire process, reducing errors, improving data accuracy, and enhancing communication between healthcare professionals. Patients will benefit from a more convenient and accessible experience, including remote, online questionnaire completion and automated medication reminders. The platform will reduce administrative burden and generate cost savings by reducing delays and cancellations due to incomplete pre-assessments. The elimination of paper assessments will reduce expenses whilst conforming with the HSE Climate Action Strategy 2023-2050. Ultimately, this project aims to enhance staff efficiency, improve patient care and optimize resource utilisation, leading to reduced elective surgical waiting lists and a more effective and sustainable healthcare system.

## DysK: device based remote monitoring of dystonia severity

**Shameer Rafee, NCHD**

### St Vincent's University Hospital

Cervical dystonia is a painful, lifelong movement disorder with no cure, severely impacting patients' quality of life. The only effective treatment, botulinum toxin, requires costly, resource-intensive 3-monthly neurology clinic visits. Current assessments rely on subjective reporting, leading to suboptimal dosing and treatment outcomes. Neurologists lack the resources to monitor patients at ideal intervals (0, 4, 6, 8, and 12 weeks), further compromising care. My research repurposes an existing commercial device to objectively measure neck movement and assess dystonia severity. Our proof of concept, presented at the American Academy of Neurology, demonstrates the device's effectiveness and ease of use. This innovation enables personalized treatment plans, reduces unnecessary clinic visits, and optimizes toxin dosing. Patients gain the ability to monitor their condition and take control of their care, while healthcare systems benefit from reduced costs and resource strain. This device has the potential to transform cervical dystonia management, improving patient outcomes and healthcare efficiency. With SPARK funding, we can scale this solution, delivering measurable impact for patients and the HSE.

## Surgery on Time: Data-Driven Pathway Optimisation at St. James's Hospital

**Ricardao Sampaio, Service Improvement Lead**

### St James Hospital, Dublin

Surgery on Time (SOT) is a data-driven pathway optimisation initiative at St. James's Hospital that combines Lean methodologies with real-time analytics to improve elective surgical services. By integrating with the hospital's Digital Visual Management System (DVMS), SOT enhances Day of Surgery Admission (DOSA), ensuring early bed availability and reducing cancellations. The project employs machine learning and optimisation models to forecast operating room times and optimise theatre schedules, reducing scheduling errors and supporting on-time starts. This complements the hospital's Operational Excellence Programme, which sustains improvements through rapid improvement events, daily huddles, and data-driven problem-solving. Surgery on Time aligns seamlessly with existing pathway improvements such as pre-assessment protocols and front-door frailty identification, ensuring patient readiness and efficient bed utilisation. The initiative fully meets SPARK Impact Funding criteria, focusing on pathway optimisation without developing new apps, EHRs, or commercial products. As a proven solution with a clear translational component, SOT delivers measurable improvements in surgical throughput, patient experience, and operational efficiency. By fostering real-time decision-making and continuous improvement, Surgery on Time positions St. James's Hospital at the forefront of patient-centred, data-driven care.

# Objective Vestibular Testing VNG/CALORICS for the Direct Vertigo Pathway

**Pauline Mc Bride, Audiologist**

**Audiology Department Our Lady of Lourdes Hospital Drogheda**

A one-stop multidisciplinary vertigo pathway (DAVP), including senior audiologist, clinical specialist vestibular physiotherapist & consultant otolaryngologist, commenced in OLOL in September 2022. The first year of this pathway was audited and showed that it: Reduced vertigo patients' waiting time for initial assessment from 24 to 9 months. It allowed patients to start their rehabilitation at their first assessment instead of an additional 8 months wait with the previous traditional ENT pathway. DAVP patients had less referrals for Imaging (12%), VNG (16%) and had a reduced number of total appointments of 2.5 compared to the traditional ENT pathway of 4.1, 4.7 and 4.8 respectively. This equated to a cost saving of 314 Euro per patient (75,360 Euro annually with a KPI of 240). It also releases 408 ENT appointments which equates to 12.75 extra ENT clinic/ surgery days annually. However, our clinical acumen is urgently in need of the support of objective Caloric testing and videonystagmography (VNG), the gold standard in vestibular testing for patients with complex vertigo pathologies. Currently these patients need to travel from the North East to Beaumont for these tests with a turnaround time of at least 9 months, necessitating another review appointment, travel expenses and administration resources.

# CSF Procalcitonin: A Novel Marker for Neurosurgical Infection Diagnosis

**Niamh Reidy, NCHD**

**Cork University Hospital**

Cork University Hospital (CUH) is one of only two adult Irish neurosurgical centres. Neurosurgical patients undergo life-saving interventions which risk serious infectious complications. Diagnosing these infections is challenging due to non-specific symptoms, altered cerebrospinal fluid (CSF) parameters following surgery, and false-negative CSF cultures from prior antimicrobial use. Consequently, antibiotic overuse may occur in neurosurgical units,(1) driving antimicrobial resistance, while underdiagnosis of Infections leads to delays in treatment. Procalcitonin (PCT) is an established biomarker released in response to bacterial infections, which may differentiate infectious from inflammatory processes. In CUH a CE-IVD marked PCT assay is routinely used to test serum samples from patients with suspected sepsis. However, for diagnosis of neurosurgical infections, CSF PCT is likely the optimal sample type, according to a recent systematic review.(2) The 2017 Infectious Diseases Society of America guidelines highlight that CSF PCT, alone or combined with CSF lactate, shows promise in distinguishing bacterial from postoperative aseptic meningitis.(3) To our knowledge, no other Irish hospital laboratory measures CSF PCT. This study aims to 1) Verify CSF PCT's diagnostic value in neurosurgical infections by retrospectively testing stored CSF and comparing performance to standard methods and alternative biomarkers. 2) Implement routine CSF PCT testing to improve diagnostic accuracy for neurosurgical infections

# SEREN Connect: Transitional Care Education Programme for Youth with T1D

**Niamh O'Rourke, Advanced Nurse Practitioner**

**Regional Hospital Mullingar**

Transitioning from paediatric to adult healthcare is a critical phase for young people with chronic conditions. Transition can be defined as a purposeful, planned process that addresses the medical, psychosocial and educational/vocational needs of adolescents and young adults with chronic physical and medical conditions as they move from child-centred to adult-orientated healthcare systems' (Blum et al, 1993). At the Regional Hospital Mullingar, the Paediatric Diabetes Service is committed to enhancing this transition by adapting and implementing SEREN Connect, a double award-winning transitional care education programme originating in the NHS Wales Executive. Designed for young people aged 14-25 with Type 1 diabetes, SEREN Connect offers structured, interactive education, peer support, and age-appropriate Irish resources to help navigate key challenges. The programme is jointly delivered by paediatric and adult services, ensuring a seamless transfer of care. By collaborating with SEREN Connect, our project aims to develop an Irish equivalent that aligns with National Clinical Guidelines. This initiative will provide structured educational support, keeping young people engaged in managing their condition during this critical period. Our goal is to reduce the risk of avoidable complications and empower young people with Type 1 diabetes to lead healthier, more fulfilling lives.

# Mater Surgical Signout Entry

**Lauren O'Connell, NCHD**

**Department of Colorectal Surgery, Mater  
Misericordiae University Hospital**

The Mater Surgical Signout Entry entails creation and implementation of a computer-based proforma for surgical handover. This is a simple and achievable project which aims to improve the safety and efficacy of surgical handover for unscheduled care patients, by standardising the process of updating the document and ensuring capture of key clinical information at each handover, as well as streamlining the data entry process to enhance productivity and efficiency for the clinician end user.



# Clinical Nurse Specialist-Led Palpitations Clinic

**Geraldine O’Gara, Acute Clinical Nurse Specialist**

## Beaumont Hospital/ Integrated care

Palpitations account for up to 25% of GP referrals to Dublin North cardiology integrated care service, and a similar rate of referrals for Beaumont Hospital cardiology assessment. Although often benign, palpitations can cause significant patient distress and may, less commonly, be the initial presenting symptom of underlying cardiovascular disease. Typically, patients wait over a year for clinic assessment and then, a second year, for 24-hour ambulatory ECG. This delay can lead to unnecessary emergency department visits, inefficient use of healthcare resources, and more rarely, delayed diagnoses. We propose to develop a cardiology CNS led, consultant supported, palpitations clinic in the integrated care setting. We will see appropriate lower risk patients with palpitations, from the integrated care and Beaumont Hospital cardiology clinic waiting lists, for early triage/risk stratification, specialist assessment, appropriate investigation, reassurance and targeted treatment/onward referral, when indicated. Newer technologies allowing remote monitoring of heart rhythm, ie. Kardia Alive Cor devices and Cardiostat monitors, will facilitate the efficient running of this innovative clinic.

# Provision of Cutting Edge Model 3 Hospital SLT Nasendoscopy Clinic

**Emer Fahy, Speech and Language Therapist**

## Midlands Regional Hospital Tullamore

This project aims to provide access to a cutting-edge Speech and Language Therapy (SLT) led nasendoscopy clinic in a Model 3 hospital in Ireland. The use of nasendoscopy within the field of SLT is an essential diagnostic tool used to assess and treat people with both swallowing difficulties (dysphagia) and voice problems (dysphonia). Currently there is no Model 3 hospital providing this service. This project proposes the purchase of specialist nasendoscopy equipment which facilitates the provision of this unique service. Nasendoscopy skills currently exist within our SLT staffing pool. To demonstrate our goals, we have run a short successful pilot for our current inpatients and Head and Neck Cancer (HNC) outpatients with outcomes illustrating more timely access to specialist diagnostics, improved swallow safety and enhanced patient experience. This project addresses the growing ENT patient waitlist, supports HNC patients in the “survivorship” phase of recovery and improves access to objective assessments for MRHT inpatients. This project has potential to be used as a ‘proof of concept’, establishing the first SLT led nasendoscopy clinic in a Model 3 hospital in Ireland. This would facilitate upscaling across other Model 3 hospitals and wider community services.

## Role of MR SPECTROSCOPY (MRS) Imaging in ACTIVE SURVEILLANCE - SALVAGE evaluation in patients with Negative Multiparametric Magnetic Resonance Imaging (MRS-AS-SALVAGE)

**Dr. Declan Sheppard, Consultant**

University of Galway and University Hospital Galway

Our early pilot project has demonstrated that the addition of magnetic resonance spectroscopy (MRS) to standard multi-parametric magnetic resonance imaging (mpMRI)(current best standard of care) in patients undergoing active surveillance has the potential to change treatment plans in up to 53% of patients, where it is felt that mpMRI may be under-staging disease.. Of the 53% of patients where treatment was changed, MRS identified unexpected disease in 33% of cases or upgraded the volume of disease in 20% of cases. In selected cases, MRS will significantly impact positively on earlier disease progression, earlier treatment and potentially patient prognosis and care. The author fully acknowledges the use of UpToDate for background information regarding Prostate Cancer Active surveillance

## SMART-FLOW: Harnessing Multimodal Data and Machine Learning

**Dr. Bairbre McNicholas, Consultant to Optimize Fluid Management in Intensive Care**

University Hospital Galway

Fluid management in critically ill patients requires a precise balance to avoid both fluid overload and overly aggressive removal, each of which can adversely affect patient outcomes. Globally, thousands of patients each year receive continuous renal replacement therapy (CRRT) for fluid removal, yet the optimal rate of removal remains uncertain, resulting in wide variations in clinical practice and inconsistent outcomes. Observational studies indicate that excessively high ultrafiltration rates may lead to hypotension, organ hypoperfusion, and increased mortality, whereas inadequate fluid removal can prolong mechanical ventilation and delay recovery. These findings underscore the urgent need for more refined, evidence-based approaches to CRRT management. Recognizing fluid management as a complex, multidisciplinary intervention, we propose an innovative machine learning framework that integrates both numeric clinical data and unstructured nursing and physician notes, utilizing natural language processing to uncover critical insights. The resulting decision support system will be rigorously evaluated through repeated cross-validation, validated with a held-out dataset, and tested prospectively in real-world care settings. Ultimately, this scalable solution will empower healthcare professionals by providing data-driven insights on when and how much fluid to remove, potentially transforming clinical practice, enhancing patient safety, and improving overall outcomes in critical care.

## Integrated Care Pathway for Managing Idiopathic Intracranial Hypertension Effectively

**Alina Buture, Consultant**

**Mater Misericordiae University Hospital**

Idiopathic Intracranial Hypertension (IIH) is a growing chronic condition predominantly affecting overweight women of childbearing age. It results from elevated fluid pressure in the skull, leading to headaches, vision disturbances, and, if untreated, blindness. The condition is strongly linked to obesity, with incidence rates rising alongside global obesity trends. Simple interventions such as weight loss and medication can significantly improve outcomes, with weight loss often leading to disease remission. Conversely, weight gain exacerbates the condition. Our audit of IIH care at Mater Misericordiae University Hospital identified critical gaps in the diagnostic and management process, particularly a lack of connection to dietetic support services. Addressing these gaps is essential to ensuring patients receive comprehensive care which extends beyond acute hospital treatment. This project aims to develop an integrated care pathway to better support IIH patients by bridging hospital care with community-based resources. This pathway will emphasize multidisciplinary collaboration, to promote sustainable weight management and disease remission. By improving care coordination and expanding access to necessary support, this initiative seeks to reduce the burden of IIH, enhance patient outcomes, and align with global health priorities addressing obesity-related conditions.

dementia care across Ireland. Her work exemplifies leadership, innovation, partnership, and dedication to equitable, holistic care.

## Revolutionising Rehabilitation with cutting-edge technology supported therapy devices

**Catriona Cox, Occupational Therapist**

**St Patrick's Community Hospital, Carrick on Shannon, Co Leitrim**

Technology is integral to daily life in the 21st century and is transforming how health and social care services are delivered and experienced. In the field of Occupational Therapy, we are ready to embrace technology supported therapy devices with the aim of sustainably improving people's independence and quality of life. Rehabilitation Technologies are pushing the boundaries of what's possible, offering patients new hope and opportunities for recovery. As technology continues to advance at an unprecedented pace, its impact on the field of rehabilitation is nothing short of revolutionary. With Tyromotion their motto is "Get Better Every Day".



## University Hospital Galway Ophthalmology Department Clinical Nurse Specialist - 'Nurse Injector'

**Elizabeth McElnea, Consultant**

### University Hospital Galway

Massive numbers of intravitreal injections are administered annually for the treatment of blinding conditions such as neovascular age-related macular degeneration, vascular occlusions and in particular branch and central retinal vein occlusions and diabetic macular oedema. Presently these are undertaken solely by medical staff. Employment of a clinical nurse specialist 'nurse injector' would expand the service capacity, enable our NCHDs to perform other duties in keeping with their own particular skill set, reduce waitlists and promote the development of an efficient, effective, timely intravitreal injection service.

## RespRedirect: Redirecting Sub-Acute Respiratory Presentations Away from the ED

**Assoc Professor Stanley Miller, Consultant  
Respiratory Physician,**

### Mater Misericordiae University Hospital

Anecdotally, it is well understood that patients with sub-acute conditions that require specialist care often end up in Emergency Departments (EDs) because, although they don't need emergency care, it is the only option available if they are unable to wait for routine scheduled appointments. An audit of presentations to the Mater Hospital ED in June 2024 (n=1252) confirmed that up to 11% of presentations (and subsequent admissions) could have been avoided if patients had access to urgent specialist care. RespRedirect will develop, pilot and test the value of an urgent clinic for sub-acute respiratory patients that present to the Mater Hospital ED and Acute Medical Assessment Unit (AMAU), with potential to replicate the model for other clinical presentations. The urgent clinic will be run weekly by a respiratory consultant and nurse specialist, with the nurse specialist then providing follow up and onward referral to other services as required. The clinic will accept suitable referrals from the ED and AMAU teams enabling them to send patients home on the basis that they will receive specialist follow up within 1 to 2 weeks. Ultimately, the clinic will grow to accept direct referrals from local GPs to prevent the ED presentation altogether.

# Fast Access Breast Radiotherapy - Fast Tracking Care and Efficiency

**Samantha Ryan, Research Fellow & Clinical Specialist Radiation Therapist**

## St Lukes Radiation Oncology Network

Our project aims to revolutionize breast radiotherapy planning by automating key processes to drastically reduce wait times from patient consent to treatment. Currently, our planning process is time-consuming and labour-intensive, delaying the final stages of a patient's treatment journey, which can typically span months from diagnosis through chemotherapy, surgery, and finally radiotherapy. While we already use an AI segmentation tool to automate the laborious task of delineating patient organs and targets, we lack an automated planning solution. When combined with AI segmentation, such a solution could reduce a patient's time to treatment from 15 days to just 5 days. Breast cancer patients deserve timely and effective radiotherapy, which not only alleviates anxiety by providing faster access to care but also frees up our skilled staff to focus on more complex, personalized treatment. Our initiative will streamline workflows, enhance the consistency and quality of radiotherapy plans, improve scheduling stability, and reinforce our commitment to patient-centred care. Additionally, this aligns with the HSE's dedication to innovation and excellence in healthcare delivery. By improving efficiency and accuracy in treatment planning, our project offers a swift, reliable, and innovative approach to breast cancer care that benefits patients, clinical staff, and the wider HSE.

# Digital Pathology in Breast Cancer: Pathology Explanation Clinics and AI

**Dr. Maire Lavelle, Consultant**

## University Hospital Limerick

I plan to use HSE Spark funding to implement digital pathology in breast pathology in UHL to serve a number of projects including: creating "pathology explanation clinics" where I can show and discuss pathology findings in person with a patient in the breast unit in UHL. Please refer to YouTube video from University of Limerick <https://youtu.be/zGxvJIABVJM?si=Z5b5nKZQThAMFm7o> At 2.00.00 I present a talk on these clinics and how they benefit patients. These clinics, if successful, have scalability. I am also working with university of Limerick to develop AI in breast pathology, particularly in the areas of Her2 immunohistochemistry. This is a "hot topic" in breast cancer as the guidelines around administration of the drug herceptin in breast cancer based on the immunohistochemical findings is changing. This project has ethical approval, but a digital scanner in UHL is needed to proceed efficiently. Other benefits of digital pathology in breast pathology include instant and secure digital transfer of challenging cases abroad for expert second opinion. Right now, cases must be packaged and physically transported. As they are made of glass, there is a risk of damage and of loss. In addition, there is the environmental aspect of transport and packaging. Another benefit will be labour-saving in the laboratory. At present, for multidisciplinary meetings, slides and reports must be printed and retrieved from filing, and then returned after the meeting. Digital pathology is accessible with a computer only, saving on all this clerical and lab aide work and paper waste. Like the use of digital images in radiology, digital images is the future in Pathology. I would like Limerick to be an Irish leader in this area. UHL has a managed laboratory service with Roche. As part of this, Roche will fund the software and updates for digital pathology. The HSE spark fund could be used to purchase the equipment which is not covered by the agreement.

# Cardiac Prehabilitation - a New Era in Preventive Cardiology

**Shane O'Farrelly, Physiotherapist**

**Connolly Hospital Blanchardstown**

In Ireland, cardiovascular disease (CVD) claims over 9,000 lives per year, despite being preventable in 80% of cases. In part, this is because traditional risk-reduction strategies are only initiated after a secondary outcome, e.g., myocardial infarction (MI). As such, the current healthcare system focuses on managing CVD after an adverse event rather than true primary prevention. In contemporary practice, we can now identify patients with moderate coronary artery disease (CAD), without ischaemia or infarction, using CT coronary angiography (CTCA) and so, we have a unique opportunity to intervene at an earlier time point in an important population to prevent their first 'heart attack'. The Cardiac Prehabilitation Programme (CPP) represents a paradigm shift in preventive cardiology by identifying patients with moderate CAD on CTCA and intervening before their first major cardiovascular event. Our multidisciplinary team, with a strong track record in secondary-prevention cardiac rehabilitation, will deliver a 12-week hybrid prehabilitation programme combining education, exercise, behaviour change strategies, wearable technology, and psychological support to transform preventive cardiovascular care, leading to better patient outcomes and a more sustainable healthcare model.

# PATH4CF Platform for adherence to therapies for people with CF

**Paul McNally, Consultant**

**Children's Health Ireland**

A new generation of highly effective but ultra-high-cost medicines for people with CF have transformed the lives of many people with the condition. Our research group have demonstrated that these medicines have dramatic health benefits for people with CF. However, using the best currently available measures, we showed that adherence to treatment reduces after one year, with lower adherence associated with reduced effectiveness of the medicine. We urgently need to understand the link between adherence to therapy and outcomes for these life-changing medicines, but our tools to measure adherence are poor. Current tools are not user-friendly or intuitive, involve additional work for patients and as a result are rarely used. Using design methodology, we have conducted interviews and workshops with children, parents and families with CF to establish the principles upon which the design of an ideal device should be based, and have demonstrated the feasibility of some technical aspects of an ideal device. We now want to work with a wider group of stakeholders and design a more suitable device to accurately measure real-world adherence to these drugs in research studies so that we can clearly understand the impact of reduced adherence on important clinical outcomes for people with CF.

# Greening an Oncology Day Ward

**Seamus O' Reilly, Consultant**

Cork University Hospital

What we prescribe saves lives but how we prescribe damages the planet. While cancer mortality has declined by a third in the past 3 decades but these survival gains have occurred at great collateral cost to the environment and therefore paradoxically to human health (<https://doi.org/10.1016/j.cpo.2023.100410> ). Healthcare accounts for 5% of all global emissions. The annual climate toxicity of a medical oncologist now equates to the emissions of 1-4 rocket launches. Modern cancer care would not be possible without plastics, the signature material of our age, however its production requires fossil fuels, and its associated microplastic waste is carcinogenic (<https://doi.org/10.1016/j.clbc.2024.11.010> ). To address the dilemma of how we reconcile our duty of care to patients and our duty of care to the planet we evaluated 300 National Cancer Control Programme (NCCP) chemotherapy protocols. Over 1000 sustainability touch points were identified. (<https://doi.org/10.1200/OP-24-00680>). A computer screen wallpaper infographic was developed. This proposal assembles an interdisciplinary patient inclusive team to integrate it into cancer care delivery in an NCCP accredited Cancer Centre. Outputs from the project will include a physical and virtual checklist for prescribers, a pharmacoeconomic assessment to determine its financial viability and a protocol to facilitate its national implementation.

# Multidisciplinary Clinical Care Pathway for Patients with Chronic Airway Disease

**Mona Thornton, Consultant**

Saint Vincent's University Hospital

This consultant-led project aims to improve the management of airway disease by integrating ENT and respiratory care into a single, streamlined clinical setting. By fostering real-time collaboration between specialists, we will enhance diagnostic accuracy, optimize resource utilization, and create a more efficient, cost-effective service for patients with airway conditions. Goals & Objectives Improve the Management of Airway Disease: Establish a structured, multidisciplinary approach to airway diagnostics and treatment. Enhance the accuracy and timeliness of diagnoses, leading to better patient outcomes. Enhance Efficiency of Service: Develop a seamless integrated care pathway to reduce unnecessary referrals. Enable real-time decision-making between ENT and respiratory consultants. Ensure Cost Efficiency: Optimize resource allocation by consolidating assessments into a single clinic visit. Reduce duplication of investigations and follow-ups, lowering overall healthcare costs. Reduce Waiting Times: Minimize delays in assessment and treatment by streamlining patient pathways. Improve access to specialist care through a coordinated, consultant-led approach. Key Activities & Tasks Implement a consultant-led integrated ENT-Respiratory clinic. Develop clear referral criteria and standardized assessment protocols. Train clinical teams on best practices for multidisciplinary airway management. Monitor and evaluate service efficiency, cost savings, and patient outcomes. This project will transform airway disease management by delivering high-quality, efficient, and cost-effective care while reducing patient wait times and optimizing healthcare resources.

# Renal Denervation - a Novel Treatment for Resistant Hypertension

**Richard Armstrong, Consultant**

Tallaght University Hospital

Hypertension is one of the most significant contributors to death and disability worldwide, affecting over a billion people, including 35% of adults in Ireland. Despite lifestyle changes and medication, many patients remain uncontrolled, leading to increased risks of stroke, heart attack, and kidney failure. Renal Denervation (RDN) is a groundbreaking, minimally invasive procedure that safely reduces systolic blood pressure by an average of 10 mmHg, lowering the risk of cardiovascular events by up to 30%. This project proposes implementing RDN as a pilot initiative within the hospital group, establishing Tallaght University Hospital (TUH) as a center of excellence for this innovative treatment. All treatment decisions will be made by a multi-disciplinary team, ensuring patient safety and optimal outcomes. The pilot will also generate valuable data through research and audits, contributing to advancements in secondary stroke prevention and kidney health. Aligned with TUH's commitment to innovative care, this project fills a critical gap, as RDN is not yet widely available in Ireland. By reducing emergency admissions and preventing complications, RDN offers significant benefits to patients and the healthcare system, positioning TUH as a leader in hypertension management while providing life-changing care to those who need it most.

