

41ST ANNUAL REPORT

2021



National Rehabilitation
University Hospital

EMPOWER, ENCOURAGE, ENABLE



Commission for Accreditation
of Rehabilitation Facilities
Details of NRH Accreditation on
www.nrh.ie

Our Mission

The National Rehabilitation Hospital espouses the values established by the Sisters of Mercy to provide high quality care and treatment to patients irrespective of background or status, but on the basis of need. The hospital, in partnership with the patients and families, endeavours to achieve health and social gain through effective treatment and education of patients who, following illness or injury, require dedicated interdisciplinary rehabilitation services. The hospital aims to achieve this in a manner that is equitable and transparent in its service delivery, sensitive and responsive to those availing of its services and supportive of the staff entrusted with its delivery.

Patient Activity 2021

Inpatient and Day-Patient Services	Inpatients	Day Cases	Total
Spinal Cord System of Care Programme	123	–	123
Brain Injury Programme	92	–	92
Stroke Specialty Programme	82	–	82
Prosthetic Orthotic and Limb Absence Rehabilitation (POLAR) Programme	73	27	100
Paediatric Patients (Inpatients and Day- Patients)	78	–	78
TOTAL	448	27	475
Total of Inpatients and Day-Patients discharged			475

Outpatient Consultant Led Clinics	Consultant Clinic Attendances
Spinal Cord System of Care Programme	682
Brain Injury and Stroke Specialty Programmes	1,131
Prosthetic, Orthotic and Limb Absence Rehabilitation (POLAR) Programme	193
Paediatric Patients (Inpatients and Day-Patients)	32
Total Outpatient Consultant Led Clinic Attendances	2,038

Outpatient Therapy Led Clinics	Therapy and Nurse Led Clinic Attendances
Spinal Cord System of Care Programme	2,672
Brain Injury and Stroke Specialty Programmes	4,697
Prosthetic Orthotic and Limb Absence Rehabilitation (POLAR) Programme	2,561
Paediatric Patients	1,441
Total Outpatient Therapy and Nurse Led Clinics	11,371

Diagnostic Services	Urodynamics	Radiology	Total
Spinal Cord System of Care Programme	185	1,030	1,215
Brain Injury and Stroke Specialty Programmes	124	–	124
TOTAL	309	1,030	1,339
Total Diagnostic Services			1,339

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Chairman's Report



Kieran Fleck
Chairman

In 2021, ensuring continuity of safe, high quality rehabilitation services to our patients, during a protracted global pandemic, posed challenges of great magnitude for the NRH.

Yet, as captured throughout the Annual Report, many accomplishments, developments and key milestones were achieved during the year and the hospital embraced the many opportunities for learning and innovation as they arose. The delivery of rehabilitation services was adapted and reshaped as required to ensure that patients could receive essential rehabilitation programmes during the pandemic, with every decision taken having the safety and wellbeing of patients, staff and families at its core.

The New Hospital Development

In 2021, patients and staff settled into the new world class hospital environment, purpose-designed for the delivery of specialist rehabilitation services. This is Phase One of a three-phase redevelopment plan. Phase One facilitates only some of the hospital services in the new environment, while other services remain in the original building (Cedars), so it is vital now that Phase Two is advanced as quickly as possible as there are increased costs and inefficiencies in managing and running the hospital across two sites. Work has been progressing apace in 2021 to prepare for the appointment of a Design Team for the second phase of the redevelopment plan. Phase Three will include the completion of the 235 bed hospital in accordance with an NRH brief for the long term development of the campus. The Board is involved in all decision-making processes in relation to the development plan.

The NRH was delighted to receive the Royal Institute of Architects in Ireland (RIAI) 2021 'Building for All' award for Universal Design. This award is a recognition of the contribution of the NRH Accessibility Committee along with the Design Team led by O'Connell Mahon Architects, and our Access Consultants, in pushing the boundaries to ensure the hospital has additional and best practice features of Accessible design throughout.

The RIAI Jury Citation summarised the achievement as follows: The National Rehabilitation Hospital demonstrates the positive impact of involving diverse users throughout the design process by providing an environment specifically meeting the requirements of patients and staff. Consideration of Universal Design principles is evident from design concept through to detail design. This includes landscaping and access to nature, capturing views to the Dublin Mountains, natural light and ventilation, as well as easy circulation, way-finding and use of colour.

Corporate Governance

The Board incorporates the principles of good corporate governance into its responsibilities. This includes having an effective Board structure; evaluation of the Board and its meetings; review of duties and liabilities of Board members; review of the Terms of Reference of Board sub-committees; compliance with legal and regulatory frameworks and GDPR compliance. The Board's knowledge and understanding of hospital matters is enhanced by membership of staff and patient representatives on the Board.

Hospital Activity and Performance Data Reporting

Monthly reports are circulated to the Board to ensure its members are fully informed in relation to all key issues and milestones on an ongoing basis.

NRH Board of Management

Mr Barry Dunlea resigned from the Board in June, and Professor Richard Reilly resigned in September, after many years of voluntary service. On behalf of the patients we serve, the Sisters of Mercy, the Board, Management and staff, I thank Barry and Richard for their dedicated work and commitment during their tenure as Board members. Their contributions are greatly appreciated and we wish them well for the future.

I thank each Board Member for your ongoing work and commitment to the NRH. The voluntary and selfless contribution each Board Member makes in sharing their expertise and experience towards achieving the hospital's strategic objectives is highly valued and appreciated.

We warmly welcomed Mr Terence Liston to the Board in November and we also welcomed Professor Jacinta Morgan as Clinical Director.

Quality Improvement and CARF Accreditation

The Board participate in the CARF survey within the Leadership and Governance Accreditation Standards. Following an extensive three-day Digitally Enabled Site Survey of the hospital's clinical and business services, the NRH received its formal three-year accreditation award by CARF which is an independent, international accrediting body for Rehabilitation Services. The hospital staff deserve enormous credit for the ongoing dedication to improving services to our patients, even in the most challenging circumstances.

NRH Education, Training, Research and Innovation Department

In 2021 the Board were delighted with the announcement that the project led by Professor Áine Carroll to develop formal links with UCD with a view to creating a clinical research centre at the NRH was finalised and that the NRH is now formally part of the UCD network. The network was successful in securing €5.3m funding from the HRB to develop the necessary research infrastructure. Staff in the NRH can now access the educational and research resources available through the UCD Clinical Research Centre (CRC).

On behalf of the Board, I wish to extend sincere appreciation and best wishes to Ms Maeve Nolan on her retirement in June after over 20 years' service to the NRH. Maeve served on the Board for two terms as Staff Representative and was Senior Clinical Psychologist on the Spinal Cord System of Care Programme, as well as Academic Lead in the year prior to her retirement.

The Academic Lead appointment was approved by the Board at the end of 2021 and Ms Ruth Maher will take up the post in early in 2022. The Board also extended their appreciation to Ms Sarah Kearney for her hard work as Interim Academic Lead in 2021.

The NRH Strategic Plan 2020 – 2024

The Board approved the revised hospital's Strategy for 2020-2024 and are grateful to Ms June Stanley, Deputy Chief Executive and Director of Operational Services for leading on the project to develop the strategy documents and implementation plan and keeping the strategy under review.

Note of Appreciation

We extend our grateful appreciation to Sr Brenda Dolphin, Provincial Leader, for the continued support and contribution of the Sisters of Mercy.

We also thank the HSE for its ongoing support and look forward to working constructively together to maintain and improve the invaluable services provided by the NRH.

We are grateful for the continued assistance and services from Mason Hayes + Curran, Solicitors; and our Auditors, Robert J. Kidney and Company.

The members of the Board of Management and of its subcommittees in 2021 also deserve our thanks, namely:

- the Medical Board,
- the Audit Committee,
- the Nominations Committee,
- the Executive Committee,
- the Finance Committee,
- the Ethics Committee.

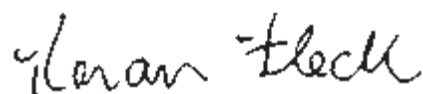
The Chairpersons and members of each committee give their time, voluntarily and without remuneration, in the interests of the hospital and the patients we serve. The Terms of Reference of these committees were reviewed in 2021.

And finally, our sincere thanks to the staff of the hospital and the Chief Executive, Derek Greene. Since the beginning of this global pandemic over two years ago, the Board is acutely aware of the extraordinary role that the management and staff have played in dealing with this unprecedented crisis. The Board extends its sincere gratitude for the invaluable contribution of the hospital's management and staff towards maintaining service delivery to patients, while keeping the curtailment of services to a minimum.

The Board is aware that many of you have been affected directly and personally during the pandemic. On behalf of the Board, I wish to convey sincere condolences to all staff members who have been bereaved due to COVID-19, and for other reasons during 2021 – our thoughts are with you at this very difficult time.

Thank you again for your dedication and service to the NRH and our patients. Let us hope for a better year and better times ahead as we look forward to progressing Phases Two and Three of the new hospital and further enhancing the environment for our patients and staff.

The AGM in May was a digitally enabled event due to the pandemic restrictions. It was live-streamed to ensure it was accessible to staff, patients and external stakeholders of the hospital.



Kieran Fleck
Chairman



Chief Executive's Report



Derek Greene
Chief Executive

Delivering & Developing Specialist Rehabilitation Services Nationally – During a Global Pandemic

During 2021, the NRH continued to respond in creative and innovative ways to the continuous challenges and ongoing adjustments as required due to COVID-19. The protracted global pandemic caused apprehension in everyone and many supports were put in place to assist patients and staff at a time of great stress and uncertainty.

All hospital decisions taken since the onset of COVID-19 have been based on Public Health Guidelines, HSE and best Clinical Microbiological advice available to us. Service delivery approaches and patient and staff supports were updated, implemented and circulated throughout the hospital to all Programmes and Services as soon as we received the advice.

It was vital that, despite the pandemic, each patient admitted would be given the chance to maximise their recovery potential and receive a personalised rehabilitation programme. This treatment could not be postponed until after the pandemic, and the NRH Programmes and Teams galvanised resources to establish new protocols allowing services to remain open, even through periods of Level Five restrictions, in line with Public Health advice.

NRH management will continue doing our utmost to protect our staff, their families, and most importantly the vulnerable patients entrusted into our care.

Severe visiting restrictions were extremely difficult for patients and families throughout 2021. Staff made every effort to facilitate online and telephone contact, family meetings via telehealth and onsite visits and carer training when public health guidelines allowed. Additional services and activities for patients were offered during weekends and evenings as part of the Max Rehab (Maximising Rehabilitation Opportunities) initiative. Staff look forward to welcoming families and carers back onsite and integrated into the rehabilitation programmes when it is safe to do so.

Throughout the year, the Management team and Board of the hospital have extended their deep appreciation and gratitude to every member of staff for their ongoing flexibility, responsiveness, and commitment in putting patients first during the ongoing pandemic, and also in the support they have shown for colleagues during this difficult time.

During the year, the staff and management at the NRH were greatly saddened by the loss of our highly valued colleagues; Lorcan Sheils, Michael Sheridan, Aidan Lyons and Angela O'Riordan. May they Rest in Peace.

I would like to place on record our sincerest thanks to our staff who once again rose to meet the challenges posed to them by the pandemic, and also to our many staff who unfortunately couldn't visit or return home to see their families overseas, many of whom had contracted COVID-19, because of the travel restrictions.

The New Hospital Development

In June, the hospital marked the first anniversary of the move into the new state-of-the-art, purpose-built hospital where the needs of our patients can be met in the new environment specifically designed to accommodate the needs of those requiring complex specialist rehabilitation services.

The provision of integrated therapy spaces enables delivery of care and treatment by Interdisciplinary Teams in the new hospital and the delivery of Interdisciplinary quality care continues to be a key focus for the NRH. This also impacts positively on staff who will benefit from delivering services in a new and innovative environment designed specifically around patients' needs.

The Management Team are currently developing a briefing document in preparation for the appointment of a Design Team for Phase Two of the Three-Phase Development Plan for the NRH Campus.



The NRH COVID Vaccination Programme Team

National Trauma Strategy

Dr Éimear Smith, was appointed as Clinical Lead for the Central Trauma Network and Dr Valerie Twomey, Brain Injury Programme Manager is an NRH representative in this key initiative. Mr Keith Synnott was appointed as National Clinical Lead for Trauma Services in Ireland. Rehabilitation is an integral part of a trauma network, and as the national provider of complex specialist rehabilitation services, the NRH continued its involvement in the process for the National Trauma Strategy launched by the HSE and Department of Health.

Staffing Matters – Workforce Planning

The Workforce Planning document approved by the HSE has been used as the basis for staffing the new hospital. A successful recruitment campaign for nursing staff, health and social care professionals, and medical staff has resulted in a very positive response from Irish and overseas Healthcare Professionals.

Highlights and Key Issues in 2021

DIGITAL SOLUTIONS

In 2021, substantial progress was made on putting structures in place for the major project underway at the NRH to transition from paper-based to electronic healthcare records. The tendering process was completed and in 2022 the contracts will be signed with the successful tenderer to develop and install the systems that will enable the hospital to progress its digital health journey.

The Cyber Attack on healthcare systems nationally impacted the hospital in May, however thanks to astute crisis management employed by the Head of Information Management and Technology, and his team, disruption to services to patients was kept to an absolute minimum. There was also a subsequent review to ensure robust business continuity systems are in place in the event of any similar attacks in the future.

DELAYED TRANSFERS OF CARE

This is an ongoing significant challenge for the NRH which affects patients' admission to our services, causing considerable lengthening of our waiting lists. A working group of representatives from the HSE and the NRH has been set up to explore if an improved and more timely funding model can be introduced to reduce the impact of this issue on all services. This initiative has already resulted in some positive outcomes to date.



“ Throughout the year, the Management team and Board of the hospital have extended their deep appreciation and gratitude to every member of staff for their ongoing flexibility, responsiveness, and commitment in putting patients first during the ongoing pandemic, and also in the support they have shown for colleagues during this difficult time. ”

THE NRH BOARD

I would like to formally acknowledge, on behalf of the staff, all the work that the Board undertakes to maintain our governance structure to the highest possible standard, guiding us through difficult times, promoting the case for the next phases of the new hospital and at all times supporting Patient and Staff needs. The NRH is very grateful and appreciative to have the Board and Chairman – Mr Kieran Fleck, who support the hospital as they do. Thank you sincerely for all your ongoing support and direction, and your time and commitment to the hospital, which is given on a voluntary basis by every member of the Board.

In Conclusion

My sincere thanks to each and every staff member for your commitment and dedication to our patients and their families – you have risen to extraordinary and unparalleled challenges in the past two years and your professionalism and resilience cannot be overestimated - the hospital is very fortunate and proud to have such an exceptional team of staff. Thank you, one and all.

We at the NRH are privileged to work with our patients and enter into their lives at a time when they have experienced a life-changing event or trauma – we look forward to continuing to provide the services we do with the aim of making a difference for the better in the lives of our patients and their families.

Derek Greene
Chief Executive

Overview of COVID-19 Vaccination Programme at the NRH

JUNE STANLEY

Deputy CEO, Director of Operational Services

During 2021 we were delighted to run a successful Covid-19 vaccination programme throughout the year including Dose 1, 2 and Boosters.

In January 2021 we commenced the preparation phase, agreeing the operational and clinical procedures, setting up the vaccination centre, securing and configuring the IT hardware and commencing training for the vaccinators and administration teams. Vaccination of our vaccinators and first tranche of staff was facilitated through other healthcare providers while we awaited our own supply.

By February 2021 we were fully prepared and trained, and upon securing our first vaccine delivery, immediately commenced the staff vaccination programme on 10th February 2021. Following national guidelines, staff most at risk were prioritised. Clinics continued throughout the month, and by early March 2021 the NRH had facilitated vaccine access for all staff and inpatients. We had also provided vaccine clinics to accommodate other healthcare workers in community services.

Our vaccine clinics were staffed by Administrative, Nursing, Pharmacy and Medical teams who were supported by their colleagues in their base departments. The vaccine clinics were supported by many other teams throughout the hospital including Technical Services, Clinical Engineering, IM&T, Catering and Cleaning Services.

In addition to clinic days, significant enabling work was completed in scheduling clinics, contacting staff and making arrangements for them to attend. Managers across the organisation were extremely supportive in communicating with their teams and freeing up staff to attend the vaccination clinics on the appointed days.

Following on from the clinics the Administration and Pharmacy teams reconciled records on the national vaccination system, completed quality checks and ensured that queries were addressed. The NRH made the decision to run clinics electronically from the outset and while that created initial challenges it was the best option in the long-term.

Clinics were run in accordance with COVID 19 restrictions which created logistical challenges. Special vaccination clinics were arranged in the Outpatients Department for some patients who had been inpatients for their first vaccine and were discharged prior to their second dose. Our thanks to the Outpatients team who freed up their facility to accommodate a number of vaccination clinics for those who needed to remain distanced from the inpatient area for COVID-19 reasons. Some regional hospitals and Covid-19 vaccination centres also accommodated patients who had their first dose at NRH but would have been required to travel a long distance to return to NRH for their second dose.

Ireland East Hospital Group were instrumental in establishing the vaccine supply chain and assisting with data quality reconciliation advice. Once our numbers requiring vaccination dropped to smaller numbers, our staff and inpatients were accommodated through the COVID 19 Vaccination Centres and also other healthcare facilities. Thank you to our Programme Managers and their teams for liaising with those centres to ensure our inpatients received vaccines expeditiously.

Sincere thanks to all the staff involved in the clinics who worked tirelessly and attended on rostered days off to ensure that the vaccine clinics could reach as many people as possible once vaccine supply was secured. Feedback from clinic attendees was overwhelmingly positive and a testament to those who ran the clinics in a professional, cohesive and upbeat manner.

It is clear to see that the successful vaccination programme was only achieved through a considerable effort on the part of the vaccination team, our support departments and all our colleagues in the NRH and beyond. It was a privilege to lead out on this landmark programme.

Nicola Bell, Olive Keenan and John Mooney at the launch of the new HR Portal where staff can easily access all employee related information on the NRH Intranet.





NRH Board of Management



Mr Kieran Fleck
Chairman



Mr Henry Murdoch



Mr Derek Greene
Secretary



Prof Jacinta Morgan
Clinical Director



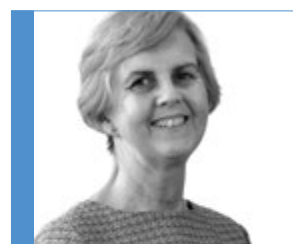
Prof Áine Carroll



Ms Breda Moriarty



Prof Richard Reilly
(to October)



Ms Frances Campbell
Director of Nursing



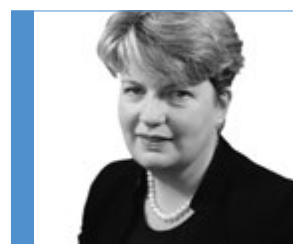
Mr Paul McNeive



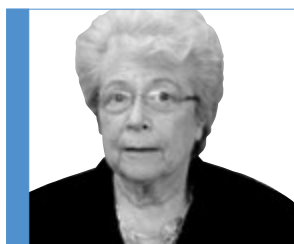
Dr John O'Keeffe



Ms Pauline Sheils



Ms Elizabeth Maguire



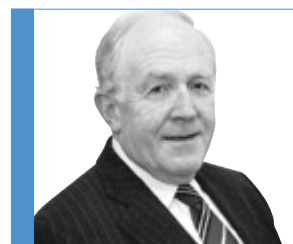
Sr Helena O'Donoghue



Mr Robert Costello



Mr Terence Liston
(from November)



Mr Barry Dunlea
(to June)

NRH Committees

Board of Management

Mr Kieran Fleck	(11/11)*
<i>(Chair)</i>	
Mr Derek Greene	(11/11)*
<i>(Secretary)</i>	
Mr Henry Murdoch	(11/11)*
Sr Helena O'Donoghue	(10/11)*
Mr Barry Dunlea	(6/11)*
<i>(to June 2021)</i>	
Mr Paul McNeive	(11/11)*
Prof Jacinta Morgan	(11/11)*
Ms Elizabeth Maguire	(11/11)*
Ms Pauline Sheils	(10/11)*
Dr John O'Keeffe	(9/11)*
Ms Breda Moriarty	(9/11)*
Ms Frances Campbell	(9/11)*
Prof Richard Reilly	(7/9)*
<i>(to October 2021)</i>	
Prof Áine Carroll	(10/11)*
Mr Robert Costello	(10/11)*
Mr Terence Liston	(2/2)*
<i>(from November 2021)</i>	

* Total Board Meeting Attendance

Executive Committee

Mr Derek Greene
<i>(Chair)</i>
Prof Mark Delargy
Ms June Stanley
Mr Sam Dunwoody
Ms Elayne Taylor
Ms Frances Campbell
Dr Áine Carroll
Dr Amanda Carty
Ms Rosemarie Nolan
Ms Olive Keenan
Ms Anne O'Loughlin
Ms Rosie Kelly
Ms Cathy Quinn

Medical Board

Prof Áine Carroll
<i>(Chair)</i>
Dr Jacinta McElligott
Prof Jacinta Morgan
Prof Robert Flynn
Dr Brian McGlone
Dr Tom Owens
Dr Nicola Ryall
Dr Éimear Smith
Mr Keith Synnott
Dr Susan Finn
Mr Seamus Morris
Dr John MacFarlane
Dr Paul Carroll
Dr Cara McDonagh
Dr Eugene Wallace
Dr Jacqui Stow
Dr Raymond Carson
Dr Maria Frampton
Dr Sean Carroll
Dr Mairead Hayes
Dr Laura Ryan
Dr Kinley Roberts
Dr Sabrina McAlister
Dr Aaisha Khan
Dr Kieran O'Driscoll
Dr Fiona Kearns

Ethics Committee

Ms Elizabeth Maguire
<i>(Chair)</i>
Dr Jacqui Stow
Dr Maeve Nolan
<i>(from November 2021)</i>
Dr Simone Carton
Mr Derek Greene
Ms Elayne Taylor
Ms Frances Campbell
Ms Pauline Sheils
Fr Michael Kennedy
Ms Breda Moriarty
Prof Richard Reilly
<i>(to October 2021)</i>
Ms June Stanley
Mr Sam Dunwoody
Ms Cliona McGovern
Mr John Maher

Patients Forum

Mr Tim Rice
<i>(Chair)</i>
Ms Liz Maume
Representative from
Therapeutic Recreation
Service
Mr Mark Barry
<i>(IWA Sport)</i>
Ms Esther Fitzgerald

All Patients and family members are invited to attend

In attendance:

Member of NRH Executive Committee

Finance & General Purpose Committee

Mr Kieran Fleck
<i>(Chair)</i>
Mr Barry Dunlea
<i>(to June 2021)</i>
Ms Frances Campbell
Mr Robert Costello
Mr Terence Liston
<i>(from November 2021)</i>

In attendance:

Mr Derek Greene

Audit Committee

Mr Dermot Quinn
<i>(Chair)</i>
Mr Barry Dunlea
<i>(to June 2021)</i>
Mr Henry Murdoch
Mr Terence Liston
<i>(from November 2021)</i>

In attendance:

Ms June Stanley
Mr Sam Dunwoody
Mr Robert Costello

Nomination Committee

Ms Elizabeth Maguire
<i>(Chair)</i>
Mr Kieran Fleck
Mr Derek Greene
Ms Breda Moriarty



Financial Statement



Sam Dunwoody
Director of Finance

The first three months of 2021 in particular were extremely challenging for all at the NRH as we faced another wave of COVID-19, which impacted our frontline healthcare service, and our most medically vulnerable patients and staff. However, the NRH continued to strive to increase bed capacity and occupancy but maintain a safe and healthy environment for both patients and staff.

There was ongoing recruitment of the additional staffing required to manage and deliver the significant changes in service demands and increased caseload complexities throughout 2021 and the hospital continued to recruit in line with the HSE approved Workforce Planning. The bed capacity increased to 107 by the end of 2021 with plans that 120 beds will be open in 2022.

Financially 2021 began with the HSE approving an opening funding allocation for service provision which was less than our closing 2020 funding level even after the inclusion of the additional funding to cover payroll costs in 2021 associated with the National Wage Agreement funding requirements. The opening allocation for 2021 was set at €39.364m – a decrease of €0.521m on our final 2020 (€39.886m) funding. This decrease is excluding the €0.566m allocated for pay cost increases in 2021 so the total reduction was €1.087m. The NRH was expected to initially maintain existing level of service for 2021 as part of our Service Level Agreement with the HSE but ultimately open as many of the remaining new beds in the new 120 bed hospital. Throughout 2021 the hospital continued to negotiate with the HSE for further funding to enable the increased bed capacity of the new 120 bed hospital building as well as providing other services in the old hospital. There were further additional once off allocations resulting in €8.694m uplift allocated by December 2021 for ongoing services. The changes to funding for pension and retirement lump sums decreased by €0.332m at year end due to lower retirement lump sum cost in 2021 compared to 2020.

2021 Fiscal Outcome

The year-end final allocation was €49.449m (2020: €41.595m) set against our total net expenditure incurred in 2021 of €49.445m (2020: €40.834m). This resulted in an overall surplus of circa €4,244 for the year – this surplus was achievable due to the HSE providing a once off €8.600m funding allocation in 2021 which was provided to cover the underfunding that occurred at the commencement of services in 2021. The net result over the two years is now showing a cumulative overspend of just €0.037m (0.001%) for the Hospital and that was following the hospital very tight fiscal policy, monitoring of expenditure across all areas and was only achievable with very strong working relationships with budget holders and line managers across the organisation. Appreciation and thanks to all the staff for their continued support and commitment in managing costs while maintaining safe services for our patients throughout 2021. The final outturn is a very positive result considering the year we have just come through and hopefully as a first charge in 2022 will be manageable in the overall service expenditure and provision of services. This result will increase further into 2022 even though the “once off” funding has again been included but the additional expenditure associated to the increased full year cost of the new hospital and the additional beds coming on stream in the first half of 2022 still have not been funding in the current allocation for 2022 services.

A summary of the 2021 Revenue Income & Expenditure Account is as follows:

	Budget 2021 €000	Actual 2021 €000	Variance Current Year €000	Actual 2020 €000
Opening Deficit / (Surplus)		42		803
Pay Expenditure	42,594	42,620	26	36,785
Non-Pay Expenditure	14,883	14,866	(17)	11,637
Gross Expenditure	57,477	57,528	9	49,225
Less Income Receipts	(8,028)	(8,042)	(14)	(7,588)
Net Expenditure	49,449	49,486	(5)	41,637
Revenue Allocation	49,449	49,449		41,595
Closing Deficit / (Surplus)		37		42

Income and Expenditure Account

Service-related pay costs increased from €33.308m to €39.430m – an increase of 18.38%. Payroll costs increased by €6.122m (2020: €4.894m) due to increased staffing levels related to increased inpatient bed capacity, cover for COVID related absences, national pay increases, service increases and service pressures and increased maternity cover. Excluded from this figure is the Pensions and Lump Sums expenditure of €3.191m (2020: €3.476m). The current level of funding is having an effect on the level of services we can provide and is making it increasingly difficult to meet the demands for rehabilitation programmes as our patient complexity continues to increase including increased levels of enhanced nursing for some very complex patients.

Appreciation and thanks to all staff for your continued support and commitment in managing costs while maintaining safe services for our patients throughout 2021.





Non-Pay expenditure shows an increase of €3.229m – an increase of 27.75% on the expenditure incurred in 2020. The major of this increased expenditure related to the New Hospital development day to day running costs and some elements of increased cost due to COVID and the treatment and care of our increased number of very complex patients. The main areas of expenditure were:-

The cost associated to the manufacture and supply of Artificial Limbs and Orthotics which made up 27.6% (€4.101m) of expenditure (2020: €3.452m). This was a 18.8% increase of €649,000 on 2020 costs. Other categories of Non-Pay expenditure which increased were: Drugs & Medicines, Medical and Surgical, Catering, Cleaning, Patient Transport, Maintenance, Insurance and Administration and Computer Supplies. Radiology, Lab costs and catering costs increased marginally while bank interest and fees, Legal and Office Supplies also showed increases in expenditure with the remaining categories in line with 2020 expenditure.

As a Teaching Hospital it is vitally important that the NRH continues to invest in staff training and education across the organisation to support our teams in delivering this specialised national service. In previous years increases in income receipts helped offset much of the non-pay and pay overruns and this again occurred but to a lesser extent due to the restrictions imposed by COVID. We again received grants from the NRH Foundation which help fund the purchase of new ward and therapy equipment. 2021 saw a slight improvement in increased level of receipted income from approved charges related to Road Traffic Accidents (RTA) insurance claims which contributed to the yearend result.

2021 saw income receipts increase by €0.454m to €8.042m (2020: €7.588m) a increase of 6% on 2020). The main areas of income changes of note were: Sales of Artificial Limbs and Orthotics increased to €4.103m (2020: €3.450m), Income from External Agencies decreased by €0.374m, of which €227,000 was due to decreased Grant Aid from the NRH Foundation, from €426,241 in 2020 to €199,466 in 2021. 2021 saw a increase in canteen and other income receipts of circa €60,000 to €0.370m (2020: €0.310m) and also a 7.78% increase in RTA receipts of circa €64,500 from €829,132 in 2020 to €893,643 in 2021.

The inflow of income receipts from Road Traffic Accidents is extremely unpredictable and the decreased receipts over our budget projections has added to the overall net result in 2021.

Capital Grants

Capital Funding approved during 2021 was as follows:

	2021 €	2020 €
Capital Project –		
Hospital Redevelopment Project – HSE	1,511,115	10,805,972
Minor Capital – Projects		
X-Ray Replacement Equipment Ultrasound	104,189	–
SLT Fees Equipment and		
Ventilator replacement	158,921	93,211
COVID Works	–	100,140
Maintenance	–	25,015
DLRCC – Road improvement /		
Boundary works	–	174,675
	1,774,225	11,199,013

“ Our sincere gratitude and thanks to all those who have donated and raised funds through the NRH Foundation over the past year – your kindness has made, and will continue to make a difference to the lives of the patients we serve, their families and carers ”

Developments

Hospital Senior Management met with the designated HSE Senior Management Acute Operations Team as part of a continuous review process and to discuss a number of issues including temporary bed closures – COVID 19, New Hospital Development and reopening beds, additional service funding, current staffing and related funding levels, increased number of patients experiencing delayed discharges, the National Clinical Programme for Rehabilitation Medicine, ongoing service pressures, service developments and waiting list initiatives, employee levels and revenue allocation adjustments and submissions.

The Hospital continued to seek additional minor Capital funding throughout 2021 in support of services in our existing hospital buildings. Grant funding was sought for replacement medical and diagnostic equipment for our Radiology and Speech and Language Service as well as replacement Nippy Ventilators for our Spinal Cord Injury Programme. We are very thankful that these items were funded by the HSE which has helped to maintain our services in line with international standards and best practice.

The Hospital received €199,466 in Grant Aid from the NRH Foundation in support of replacement equipment, Recreational Therapy Service, Music Therapy Service and some new diagnostic and monitoring equipment, all of which was very much appreciated. These additional services and equipment will all go towards enhancing services for our patients. Our sincere gratitude and thanks to all those who have donated and fundraised over the last year in what was very difficult and challenging times for all as your kindness generosity has and will continue to make a difference to the lives of the patients we serve, their families and carers.



Sam Dunwoody
Director of Finance



Clinical Director's Report



Professor Jacinta Morgan
Clinical Director

National context

In 2021 the COVID-19 pandemic, through acute hospital activity peaks associated with its alpha, delta, and omicron variants, continued to challenge the Irish Health Service. With the application of rigorous preadmission screening and strict IPC (Infection Prevention and Control) procedures in our new hospital the NRH recorded only 2 hospital acquired cases among our patients in 2021. The COVID-19 committee met weekly throughout the year to co-ordinate all aspects of pandemic preparedness within the NRH. June Stanley, Rose Curtis and their teams jointly delivered a successful 3-dose vaccination programme for staff and patients between February and November.

The effects of the HSE-wide cyberattack in May 2021 reverberated throughout the health service and demanded flexibility from staff in meeting the many interagency communication challenges that arose. Our IMT department liaised extensively with the national health cybersecurity team as they rebuilt and secured our IT systems.

Dr Jacinta Mc Elligott continued as clinical lead of the National Clinical Programme for Rehabilitation Medicine (NCPRM) a role she has held since 2016. Dr Mc Elligott is clinically active in the Peamount level 2 specialist rehabilitation unit which continues to thrive as the first tangible expression, outside of the NRH, of the managed clinical rehabilitation network concept presented in the NCPRM model of care (2018).

The MMUH (Mater Misericordiae University Hospital) was designated as the major trauma centre for the Central Trauma Network in 2021. The NRH is already collaborating with the trauma strategy implementation group as we seek to expand and enhance our clinical services to meet the needs of the most vulnerable and disabled trauma patients.

NRH clinical services

Detailed clinical activity in 2021 is shared in the programme reports within this document; IDT (interdisciplinary team) working underpins this clinical activity and two critical NRH projects are focused on increasing our effectiveness as teams. The Interdisciplinary Quality Care Team is now embedded in all clinical and operational activities and challenges us daily to reflect on potential for enhancement of our teamwork in all settings. The CRMS (Clinical Rehabilitation Management System) electronic record project is progressing and, in the medium term, will alter fundamentally our team interactions and clinical record keeping.

The QSR (quality, safety and risk) committee is concerned primarily with ensuring safe clinical governance within the NRH and its role in this respect evolved further during 2021. The clinical director chairs this committee and reports its activities directly to the Hospital Board. Those activities include, but are not limited to, systematic evaluation, ratification and dissemination of clinical policies, development support for quality improvement plans that assimilate patient and carer feedback, and monitoring of staff compliance with mandatory training.

Paralympians Nicole Turner, Kerrie Leonard, and Gary O'Reilly with members of the NRH Organising Committee at the 8th Annual Sports Championships.



The presence of several new and replacement substantive consultants has already enhanced the depth and quality of clinical services related to the delivery of complex specialist rehabilitation in the NRH and further afield.

Dr Raymond Carson, Dr Sabrina McAlister, Dr Kinley Roberts, (Brain Injury and Stroke Programmes) and Dr Jacqui Stow (POLAR¹ and SCSC²) were appointed as consultants in Rehabilitation Medicine in late 2020 and commenced their substantive posts in 2021. Ms Grainne Colgan was appointed as an Orthopaedic Consultant (special interest in upper limb disorders) in 2021 to a shared post across MMUH, Cappagh National Orthopaedic Hospital, the Central Remedial Clinic and the NRH.

Dr Laura Ryan, Consultant Microbiologist, is a joint appointment with SVUH³. Since her arrival as a locum consultant in early 2020, Dr Ryan has been the lynchpin of our responsiveness to COVID-19. She has outlined an ambitious programme for the NRH in all areas of microbiology practice through direct patient contact with her IPC team, clinician education and translational research.

Dr Kirk Levins, Consultant in Pain Medicine, is a joint appointment with SVUH and the National Maternity Hospital. Since 2018, as SVUH pain fellow, Dr Levins has been central to the revival of the NRH's intrathecal pump programme. He will assist NRH consultants and other clinical staff in developing appropriate procedural skills that are now underpinned by agreed standardised practice protocols. Dr Levins is working with the NRH academic department to advance his existing SVUH research practice within the NRH.

Professor Jacinta Morgan
Clinical Director

¹ Prosthetic, orthotic and limb absence rehabilitation

² Spinal Cord System of Care

³ St Vincent's University Hospital



Admitting Consultants (Consultants in Rehabilitation Medicine)



Prof Jacinta Morgan
Clinical Director



Prof Áine Carroll
Chairperson, NRH Medical Board



Dr Nicola Ryall



Dr Jacinta McElligott



Dr Éimear Smith



Dr Susan Finn



Dr Eugene Wallace



Dr Paul Carroll



Dr Jacqui Stow



Dr Cara McDonagh



Dr John MacFarlane



Dr Kinley Roberts

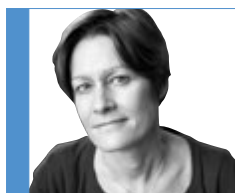


Dr Sabrina McAlister



Dr Raymond Carson

Consultants with clinical attachment at the NRH



Dr Maria Frampton
Consultant Psychiatrist



Dr Laura Ryan
Consultant Microbiologist



Dr Brian McGlone
Consultant Radiologist



Prof Robert Flynn
Consultant Urologist



Dr Mairéad Hayes
Consultant Intensivist

Medical Board Report



Prof Áine Carroll
Chairperson, NRH Medical Board

As current Chair of the Medical Board, in preparation for the annual report, I am very grateful for the privilege of reflecting on a year of shared endeavours and marvelling at the vitality and spirit of the NRH family.

We have weathered the storm of three waves of coronavirus and a cyberattack and not just endured – you have excelled! On behalf of the Medical Board, I sincerely thank each and every one of you for fortitude, your compassion and your vitality.

2021 was another extremely challenging year, however our staff continued to go the extra mile to enable change, thereby supporting each other and protecting patients. Many of these acts go unnoticed however the impact that these have on patient experience is immeasurable. Thank you.

Prof Jacinta Morgan continued in her role as Clinical Director and on behalf of the Medical Board, I would like to congratulate her on a very successful first year in post. We wish her every continued success.

2021 brought changes to the medical leadership in the hospital. We welcomed Dr Raymond Carson in March 2021 to Pine and Holly Units following the retirement of Professor Mark Delargy.

We were delighted to welcome Dr Kinley Roberts and Dr Sabrina McAlister in their new permanent Consultant posts.

Dr Jacqui Stow commenced her new consultant role in the Spinal Cord System of Care unit and Prosthetic, Orthotic, Limb Absence Rehabilitation (POLAR) Programme. We welcomed Dr Fiona Kearns, Consultant Ophthalmologist who will be advancing the NRH Ophthalmology Service and Orthoptics Clinics. We wish all colleagues health and happiness in their new roles.

Dr Jacinta McElligott, continued to lead the National Clinical Programme for Rehabilitation Medicine and more details are provided later in this report.

Prof Áine Carroll continues in her work as Professor of Healthcare Integration and Improvement at UCD. Further detail on the academic development can be found in the Academic Department Report.

Dr Eimear Smith continues in her role as Rehabilitation Medical Lead in the Trauma Strategy

The Medical Board wishes to extend our sincere appreciation to our colleagues Dr Laura Ryan, Dr Brian McGlone, Dr Maria Frampton, Prof Robert Flynn and Dr Mairead Hayes for all their expertise, support and commitment to the clinical care of patients at the hospital and their support and leadership within their areas of expertise to the clinical services teaching and research programmes at NRH.

Dr Eugene Wallace and Dr Paul Carroll represent the Irish Association of Rehabilitation Medicine on the RCPI Working Group on Traffic Medicine. Dr Paul Carroll took over from Dr Eimear Smith as National Specialty Director at RCPI. The Medical Board thank Dr Smith for her excellent work in this role and we wish Dr Carroll every success.

Dr Raymond Carson has taken over as Clinical Lead for the Neurobehavioural Service at the NRH in partnership with Dr Simone Carton, Principal Neuropsychologist. Dr Carson is also developing a new outpatient clinical in Beaumont Hospital. Dr Carson continues as joint clinical lead with Dr Susan Finn for the Transition Clinic for young people with acquired brain injury. He is joint clinical lead of the PDoC service with Dr Jacinta McElligott. Dr Carson also continues in his role as senior clinical examiner for the MRCPI and MRCP (UK) examinations. We congratulate him on his appointment to the MRCPI Clinical Examination Board. He is also a member of the Scenario Writing Group for the MRCP (UK) PACES examination and helps devise new scenarios.

Dr Carson has also taken on the mantle of lead trainer at NRH for the RCPI basic specialist training (BST) programme. The Medical Board would like to congratulate Dr Carson on his promotion to Associate Clinical Professor at UCD School of Medicine. Dr Carson is also involved as Principal Investigator in a number of research projects at the NRH.



National Clinical Programme for Rehabilitative Medicine (NCPRM) 2021 report for the NRH – Dr Jacinta McElligott

2021 can only be described as a year of challenges, transition, and changes, but also one of tangible progress for the National Clinical Programme for Rehabilitation Medicine (NCPRM).

The NCPRM, the Clinical Advisory Group (CAG) and the Working Group (WG) are the cornerstone of the workstreams for the implementation of the Rehabilitation Model of Care (MOC), including the development of guidelines and standards and care pathways, as well as working within and across the National Clinical Programmes (NCP) and across the health service.

The NCPRM submitted a paper on the rehabilitation response and interventions in the COVID 19 pandemic, and the Standards for Community Teams for consideration by the National Clinical Advisors and Group Lead (NCAGL) in 2021. Also, in 2021 funding for homecare packages for ventilator dependent patients was advanced through the estimates process.

On behalf of myself and NCPRM, the Clinical Advisory Group (CAG) and the Working Group (WG):

Sincere thanks to Dervla Kenny, Programme Manager for Neurology, Rehabilitation and Epilepsy for her hard work and support, particularly in the National Clinical Programme (NCP) workshops, webinars and publications.

I also wish to thank Lara Burton Cassidy, Programme Manager for Rehabilitation Medicine and Stroke from July, for her outstanding work and commitment to the NCPRM, CAG Consultants in Rehabilitation Medicine and the MDT Health and Social Care combined Working Group.

The NCPRM would like to commend and thank Edina O'Driscoll whose appointment as Programme Manager for the first Managed Clinical Rehabilitation Network (MCRN) demonstrator in CHO 6 and 7 played a pivotal role in its development, and paved the way for the integration of MCRN in the development of new rehabilitation units in response to Covid – 19 and in the implementation plans for the Rehabilitation MOC, Stroke, Neurology, and Trauma strategies.

In Spring, 2021, the National Steering Group for the implementation of the Neurorehabilitation Implementation Framework welcomed Ciara Lynch, as the new manager for the MCRN demonstrator CHO 6 and 7. Leana Colgan was appointed as Rehabilitation Co-ordinator, and staff were recruited for Specialist Community Neurorehabilitation Teams for CHO 6 and 7.

Amanda Carty and the IRE-ROC (Rehabilitation Outcome Collaborative) project advanced in 2021 towards completion, its primary outcome to inform the development of a national rehabilitation outcomes data base. The IRE-ROC knowledge and learning has been successfully incorporated into rehabilitation outcomes evaluations within the context of Rehabilitation MOC, MCRN, Trauma rehabilitation integration and outcome collaboratives.

Rehabilitation Services at Peamount Hospital – Dr Eugene Wallace

Since it's opening during the pandemic in August 2020, a new Level 2 Neurorehabilitation service with 10 beds in Peamount Hospital has helped expand much needed access to specialist rehabilitation following neurological injury in the country in line with the development of a Managed Clinical Rehabilitation Network.

During 2021, 64 patients were admitted from across the Dublin Mid-Leinster Hospital Group to the service with varied conditions including stroke, traumatic brain injury, Guillian Barre and post Covid critical care neuropathy. Of these patients with high care needs (average admission RCS score 11.74) and an average length of stay of 55 days (range 6-139) 85% were able to return home with a similar proportion not needing any home care support.

As we move into 2022, hopefully moving past the pandemic, we will be expanding our services with the approval in place to increase our bed capacity to 15 beds while also aiming to establish a community rehabilitation team and to offer additional options for supporting patients with neurological conditions in the community – particularly short admissions for re-enablement or hospital admission avoidance.

Specialist Registrar Training Programme

The NRH welcomes Dr Atekeh Rehman and Dr Jacqui Shanahan on to the Higher Specialist Training programme in Rehabilitation Medicine.

NCHD and BST Training Programme

The Medical Board extends their sincere appreciation for the continued dedication, commitment and excellent patient care provided by all our trainees to our patients and the interdisciplinary team working throughout the hospital. In particular, we are grateful for our colleagues' many improvement activities including clinical audit and research, which helps improve the quality of the services we provide and improve patient experience.

Academic Activity

UNDERGRADUATE MEDICAL EDUCATION

The NRH continues to serve as a vibrant teaching site for the training of undergraduate Medical Students from Trinity

College Dublin, University College Dublin, and the Royal College Surgeons of Ireland.

The Medical Board sincerely thank Dr Prasanna K Venkatesh and Dr Ruairi Connolly, Clinical Tutors for their hard work and contribution to our undergraduate medical programmes throughout 2021 at the NRH.

Despite the challenges of COVID, a large volume of students obtained valuable clinical experience at the NRH. Approximately 60 medical students from TCD and 35 medical students from the RCSI had the opportunity to participate for 3 weeks and 2 weeks clinical rotations, respectively. In addition, over 200 UCD medical students participated in the Disability module.

Knowledge mobilisation activities by Medical Staff in 2021

PUBLICATIONS IN PEER REVIEWED JOURNALS:

1. Burke, C., Broughan, J., McCombe, G., Fawsitt, R., **Carroll, Á.** and Cullen, W. (2021), "What are the priorities for the future development of integrated care? A scoping review", *Journal of Integrated Care*, Vol. ahead-of-print No. aheadof-print. <https://doi.org/10.1108/JICA-01-2021-0002>
2. **Carroll, Á.**, O'Brien S, Harrington D, Cheallaigh CN, Lawlee A-M, Sukumar P. The Unmet Rehabilitation Needs in an Inclusion Health Integrated Care Programme for Homeless Adults in Dublin, Ireland. *International Journal of Environmental Research and Public Health*. 2021; 18(15):7917. <https://doi.org/10.3390/ijerph18157917>
3. Roberts K, Casey M, Coghlan D, Cornall C, Hudson C, Stokes D, **Carroll, Á.** A scoping review protocol to map the evidence on the use of action research methodology by healthcare professionals and in healthcare team settings. *HRB Open Research*. 2021 Jul 5;4(68):68.
4. Casey, M., Coghlan, D., **Carroll, Á.**, Stokes, D., Roberts, K. and Hynes, G., 2021. Application of action research in the field of healthcare: a scoping review protocol. *HRB Open Research*, 4(46), p.46.
5. **Carroll, Á.**, Stokes, D. and Darley, A., 2021. Use of complexity theory in health and social care: a scoping review protocol. *BMJ open*, 11(7), p.e047633.
6. **Carroll, Á.** The Irish Healthcare System as a Complex Adaptive System: *Irish Medical Journal*; 2021; Vol 114; No. 4; P332
7. O'Farrell, A., McCombe, G., Broughan, J., **Carroll, Á.**, Casey, M., Fawsitt, R. and Cullen, W., 2021. Measuring integrated care at the interface between primary care and secondary care: a scoping review. *Journal of Integrated Care*.
8. Phelan, A., Rohde, D., Casey, M., Fealy, G., Felle, P., O'Kelly, G., Lloyd, H. and **Carroll, Á.**, 2021. Co-Creating Descriptors and a Definition for Person-Centred Coordinated Health Care: An Action Research Study. *International Journal of Integrated Care*, 21(1).
9. Murtagh, S., McCombe, G., Broughan, J., **Carroll, Á.**, Casey, M., Harrold, Á., Dennehy, T., Fawsitt, R. and Cullen, W., 2021. Integrating Primary and Secondary Care to Enhance Chronic Disease Management: A Scoping Review. *International Journal of Integrated Care*, 21(1).
10. **É Smith**, Is it time to redefine or rename the term "Central Cord Syndrome"? *Spinal Cord* 2021; 59:935-6.
11. Carroll P, Dervan A, Maher A, McCarthy C, Woods I, Kavanagh R, Beirne C, Harte G, O'Flynn D, Murphy P, Quinlan J, Holton A, Casey S, Moriarty F, Smith É, O'Brien FJ, Flood M. Patient and Public Involvement in Preclinical Research: A Scoping Review Protocol. *HRB Open Res*. 2021; 4:61. Doi 10.12688/hrbopenres.13303.2
12. C Cogley, M Nolan, P D'Alton, É Smith. You were lying in limbo and you knew nothing: A thematic analysis of the information needs of spinal cord injured patients and family members in acute care. *Disability & Rehabilitation* 2021 Aug 31;1-11. doi: 0.1080/09638288.2021.1970259. Online ahead of print.

BOOK CHAPTERS:

1. **Carroll, Á.** and Harnett, P.J., 2021. Ireland Case Study. In *Handbook Integrated Care* (pp. 1185-1202). Springer, Cham.
2. **Carroll, Á.**, 2021. Integrated Care Through the Lens of a Complex Adaptive System. In *Handbook Integrated Care* (pp. 595-609). Springer, Cham.

PRESENTATIONS:

1. **Dr Maria Frampton**, National Meeting for the College of Psychiatrists in Ireland (COPi), October 4th 2021, Author: Dr Maria Frampton.
2. **Dr Maria Frampton** The Full Picture: Awareness of Diversity in Psychiatry, Author: Dr Maria Frampton.
3. **Dr Maria Frampton** A different kind of rehabilitation: the psychiatry of brain and spinal injury.
4. **Dr Raymond Carson** NRH Grand Round.

Presentations – abstract submissions

5. **Smith É**, Transitioning from paediatric to adult spinal cord injury services: a quality improvement project. Steel Assembly Conference, 9th – 11th Dec. 2021, Orlando/ virtual.
6. C Cogley, M Nolan, P D'Alton, **É Smith**. You were lying in limbo and you knew nothing: A thematic analysis of the information needs of spinal cord injured patients and family members in acute care. (Poster) ISCoS annual scientific meeting, 30th Sept – 2nd Oct 2021 (Virtual)

Invited presentations:

1. New frontiers in spinal cord injury rehabilitation, Irish Spine Society Annual Meeting, Galway 20th November 2021. É Smith
2. Transitioning form paediatric to adult spinal cord injury services, Steel Assembly Webinar 7th May 2021. É Smith



SECTION 2

NRH REHABILITATION PROGRAMMES

Brain Injury Programme





Dr Valerie Twomey
Programme Manager

Professor Jacinta Morgan
Medical Director, Brain Injury Programme
NRH Clinical Director

The Brain Injury Programme at the NRH, in collaboration with the patients, their families and carers, provides specialist brain injury rehabilitation designed to assist people with acquired brain injury (ABI) to achieve optimum functional independence, social participation and community integration.

The programme provides the national, and only, post-acute complex specialist inpatient rehabilitation service for people with acquired brain injury in the Republic of Ireland. The programme also provides the only specialist inpatient rehabilitation beds for patients with a Prolonged Disorder of Consciousness (PDoC) and patients with neurobehavioural disorders. As a national tertiary level service, referrals are received nationwide from acute hospitals, HSE service areas, GPs and other primary care services.

The Brain Injury Programme has developed a full continuum of care which includes:

- Brain Injury Comprehensive Integrated Inpatient Rehabilitation Programme
- Brain Injury Outpatient Rehabilitation Programme
- Brain Injury Home and Community Based Rehabilitation Programme
- Brain Injury Vocational Programme

The Brain Injury Programme is accredited by CARF (the Commission for Accreditation of Rehabilitation Facilities) as a Specialty Programme of Rehabilitation. In 2021, following survey in late 2020, the programme's accreditation was confirmed for the 5th time consecutively as a Specialty Brain Injury Programme for Inpatient, Outpatient, Home & Community and Vocational Services.

Demographics, Activity and Outcomes for Inpatient Services – 2021

92 patients received inpatient rehabilitation services in 2021. Of the patients discharged from the programme, 84 were admitted to the Comprehensive Integrated Inpatient Rehabilitation Programme (CIIRP), and 8 patients were admitted for review or assessment.

DEMOGRAPHICS AND ACTIVITY

Of the 84 patients admitted to the Comprehensive Integrated Inpatient Rehabilitation Programme (CIIRP):

49

(58%) had a diagnosis of Non-traumatic Brain Injury

34

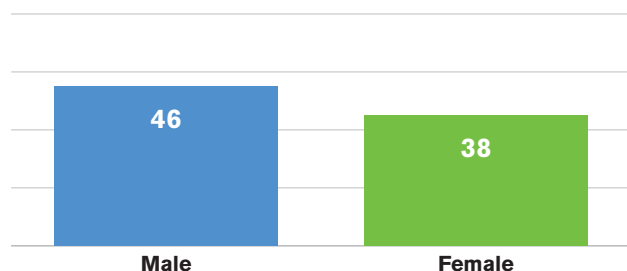
(41%) had a diagnosis of Traumatic Brain Injury

1

(1%) had a diagnosis of other Neurological Conditions



GENDER OF INPATIENTS SERVED BY THE BI PROGRAMME IN 2021



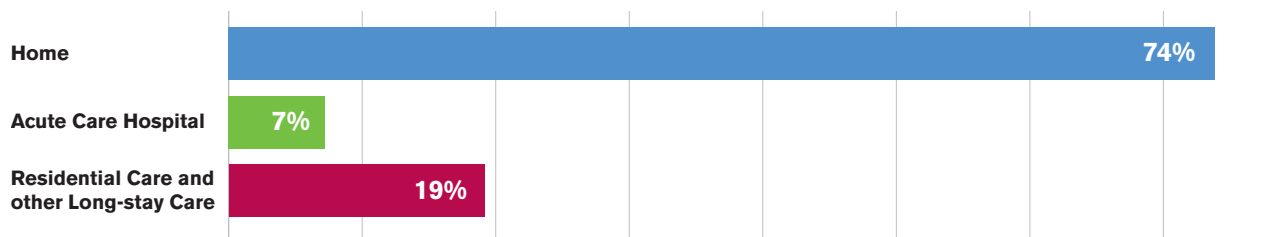
AGE PROFILE OF INPATIENTS SERVED BY THE BI PROGRAMME IN 2021

Average age	47 years
Lower age range	17 years
Higher age range	73 years

Outcomes

EFFECTIVENESS, EFFICIENCY OF, AND ACCESS TO THE DAY PROGRAMME

DISCHARGE LOCATION OF INPATIENTS SERVED BY THE BI PROGRAMME IN 2021



Indicator	Target Set – 2021	Outcome
Average Days Waiting for Admission	Average days waiting for admission would be less than 90 days	Patients waited an average of 124 days for admission to the programme
Incidence of Positive Change in Outcome Measure at Discharge	Improvement in Functional Independence Measure (FIM) Score – target 90%	80% of patients showed improvement
	Improvement in Barthel Score – target 90%	80% of patients showed improvement
Average Score Change in Outcome Measures at Discharge	Patients would improve on average by at least 10 points as measured on the FIM and Modified Barthel	FIM Average Improvement 28 points Barthel Average Improvement 15 points
Average Rehabilitation Length of Stay	Length of stay would be less than or equal to 84 days	103 days
Discharge to Home Rate	75% of patients would be discharged to home	74% of patients were discharged directly to home

The programme continues to deliver high quality, effective rehabilitation in a national context of increasing patient complexity and numbers, increasing demand for earlier access, and a higher proportion of all patients having higher complexity of needs than previously seen. Our interdisciplinary teams of experts continue to deliver consistent and excellent patient outcomes.

Programme Goals and Achievements In 2021

The Programme continued to successfully operate during 2021 despite the COVID-19 pandemic, with particular emphasis on providing continued access and high-quality safe care for patients, and support to families which resulted in the opening of further beds in our brain injury, stroke and prolonged disorder of consciousness services.

PERSON-CENTRED COORDINATED CARE

Under our programme for quality improvement and guided by the NRH Quality Goal, several initiatives were undertaken in 2021.

Programme Manager

Dr Valerie Twomey (Senior Clinical Neuropsychologist) is the Programme Manager for the Brain Injury Programme.

Clinical Services delivered within the Brain Injury and Stroke Specialty Programmes:

- **Medical**

Patient care and treatment is delivered by Consultant led interdisciplinary teams (medical, nursing, and health & social care professionals). Clinical responsibility is held by **Prof Jacinta Morgan** (NRH Clinical Director, and Medical Director of the Brain Injury and Stroke Programmes) in collaboration with Consultant colleagues **Dr Jacinta McElligott, Dr Paul Carroll, Dr Raymond Carson, Dr Kinley Roberts** and **Dr Sabrina McAllister, Dr Eugene Wallace**, and **Dr John McFarlane** provide rehabilitation input on behalf of NRH in major referring hospitals in Dublin and Cork respectively. A rotating team of NCHDs continue to provide medical support at the NRH.

- **Nursing – Pine, Rose, Ash and Holly Units**

Rehabilitation nursing staff provide nursing care, support and direction to patients. They act as an important communication link with the patients' family, visitors and with the other members of the interdisciplinary team. Nursing staff assist patients in practicing what they are learning in therapies and teach patients how to manage their personal care, along with their families and carers.

- **Pre-admission and Liaison Service**

The Pre-admission and Liaison Service provides an invaluable link between the hospital, home, and patients' healthcare professionals, acting as an advocate and liaising with referring hospitals to assess the person's clinical needs and evaluate their readiness for admission to the programme. The service supports patients from all HSE hospital groups and community healthcare organisations nationally and has led the development of a national clinical care pathway for patients with a Persistent Disorder of Consciousness (PDoC).

- **Clinical Psychology**

In 2021, clinical psychology and specialist clinical neuropsychology services were provided to the Brain Injury and Stroke Specialty Programmes, integral to high-calibre interdisciplinary rehabilitation on all Units. Core services include assessment of mood, adjustment, and psychological wellbeing, neuropsychological assessment of cognitive function, assisted decision-making and capacity assessment, facilitation of interdisciplinary formulation of complex presentations, cognitive rehabilitation, evidence-based psychotherapeutic interventions for patients and families, and positive behaviour support interventions. Other ongoing initiatives and new developments in 2021 include: the 'Mind Matters' psychological adjustment group; the Cognitive Communicative Affective Rehabilitation Service (CCARS) project; and the Neurobehavior Service incorporating Inpatient services and Outpatient clinics. This service is integral to the Brain Injury and Stroke Programmes, providing complex clinical and neuropsychological expertise in collaboration with Consultants in Neuropsychiatry and Rehabilitation medicine.

- **Nutrition and Dietetics**

In 2021, the service was provided mainly to inpatients of the Brain Injury Programme. A small number of Outpatient consultations took place remotely and a pilot enteral feeding clinic commenced. While the focus of the service continues to support patients with therapeutic and complex dietary needs, the increase in staffing secured as part of the workforce planning process enabled greater focus on education and support of patients in managing chronic disease and preventing recurrence of stroke. The department is represented on the Stroke Education Working Group and has delivered a number of patient education sessions including: 'ABCs: Anticoagulants, Blood Pressure and Cholesterol' and 'Eating and Drinking Well'.



- **Occupational Therapy**

The Brain Injury Occupational Therapy team continues to have a strong commitment and involvement with the integration of the change of practices and daily structures within the new hospital. The team worked through the pandemic and responded to changing needs throughout the year which included adapting therapy groups, maintaining guidelines when in community settings and supporting patients to engage in therapeutic leave essential to their rehabilitation goals. In 2021 a Senior OT completed SMART training and was successful in becoming an accredited SMART Assessor. A wide range of initiatives were developed and rolled out by OTs in the Brain Injury Programme in line with the hospital's four strategic pillars, some of these include: a streamlined education plan for OTs to support learning needs, and peer supervision meetings for Senior OTs to support with day-to-day challenges and share learning; OTs have been involved with the rollout of AOTI Neurological Advisory Group Neuro-Networks, a monthly virtual learning and networking opportunity; A Brain Injury OT forum within the team structure to promote collaborative learning and support connectedness within the new hospital; Exploring challenges with day-to-day communication among Brain Injury OTs located over three floors and five units; Provision of specialist OT input onto Holly high dependency unit following its opening.

- **Pharmacy**

Patients' medicines are reconciled on admission and discharge to ensure that their medication list is accurate at transitions of care. Medicines are procured and dispensed for all inpatients and on discharge from the Brain Injury and Stroke Specialty Programmes. Pharmacy staff work as part of the Interdisciplinary Team (IDT), they attend consultant rounds and Medicines Prescription Administration Record (MPAR) reviews to optimise medications. Pharmacists provide education to patients on their medicines and a personalised Medicine List is provided to each patient. Staff also answer medication queries and provide education sessions for IDT colleagues.

- **Physiotherapy**

The Physiotherapy team provides a service across five Inpatient Units for the NRH Brain Injury and Stroke Specialty Programmes, and provides consults with the Outpatient Programme and other services as required. Despite the challenges of a difficult year in 2021, the team continued to promote delivery of rehabilitation across six days a week to optimise physical activity and wellbeing for all patients. The programme of clinical reasoning and skill training for Staff Grade Physiotherapists continued and the connection made pre-COVID with the Nursing Education Department in CUH was re-established. Monthly IDT 'Games mornings' were developed for patients on three ABI Units and links with IWA continued promoting activity and sports participation for all. Support for staff development included secondments to Regional Rehabilitation Centre, and the NRH Electronic Patient Record project; Lead of HCR audit on stroke education against CARF standards, and completion of Benign Paroxysmal Positional Vertigo (BPPV) audit for patients with TBI.

The challenges for the team included: flexibly managing several organisational changes concurrently while incorporating changing COVID restrictions; reduced senior staffing levels; and Brexit – delays in receiving equipment in a timely manner secondary to restrictions at customs have resulted in increased non-clinical time.

- **Radiology**

The Diagnostic Radiology service supports Inpatient and Outpatient management following brain injury and stroke. Ultrasound-guided botulinum toxin injection into salivary glands in conjunction with the Medical teams is available for use in selected patients with sialorrhoea. DXA surveillance for those at risk of low bone density is widely used in brain injured patients. Preventative screening of the urinary tract by Ultrasound and X-ray is also employed to detect occult pathology in the most immobile patients. Case review and discussion at monthly Clinical Interdisciplinary Radiology Meetings of pre- and post-admission brain CT and MRI scans is provided to facilitate understanding of structural brain deficits and to assist with ongoing inpatient management.

- **Social Work**

Social Work with individual families is currently a hybrid between onsite meetings and telehealth service delivery. Social Workers on the Brain Injury and Stroke Specialty programmes provide the 'Brain Injury Awareness for Friends and Family' (BIAFF) Programme. This has been a challenge during COVID-19, however, it is planned to recommence the in-person groupwork as soon as is possible. COVID restrictions in hospital visiting has been very stressful for patients and families. Increased family visits and carer training was possible after March 2021. The new Complex Discharge Coordinator social work post facilitates pre-admission social work intervention and discharge planning at an earlier stage in the rehabilitation continuum of care and works to resolve barriers to patients' discharge. The coordinator works closely with the Pre-admission coordinators and a senior HSE staff member to plan for patients' timely and appropriate transfers of care onwards. Social Workers participate in the BI Education Committee, the Behavioural Consultancy Forum, and the Disorders of Consciousness Working Group.

- **Speech & Language Therapy**

The SLT team within the Brain Injury and Stroke Specialty Programmes manages the communication and swallowing needs of the patients. SLTs continually monitor and review treatment and management plans to recognise and respond to the changing needs of patients, families and carers - including how treatment goals and patients' choices may change at different stages of illness and disability. SLTs attend weekly chart rounds, goal setting and family meetings, and discharge conferences, often supporting and facilitating patients with communication difficulties to participate in these meetings. Patients have access to Fiberoptic Endoscopic Evaluation of Swallowing (FEES) and Audiology screening onsite and may have access to Videofluoroscopy services, from their referring hospitals.

- **Therapeutic Recreation Service**

The NRH Therapeutic Recreation Service encourages and facilitates patients' participation in leisure and recreation activities. It provides an opportunity to explore how patients can return to hobbies or interests they enjoyed before their injury, or to explore new leisure pursuits. The ultimate aim is reintegration back into the community through involvement in hobbies or interests.

- **Creative Arts Therapy (CAT) – Music Therapy and Art Therapy**

Music Therapy: Interdisciplinary Team (IDT) assessment and treatment sessions for individual patients take the form of collaborative sessions where the music therapist works with other professionals on addressing specific shared rehabilitation goals through music. The Music therapy Assessment Tool of Awareness in Disorders of Consciousness (MATADOC) assessment tool is used with Prolonged Disorder of Consciousness patients as part of the IDT battery of assessments, and for these patients IDT treatment sessions with music therapy take place with the patient's family members. Subject to COVID guidelines, the therapeutic choir runs with the IDT where singing is used within a social group interactive session to support social communication skills as well as physical goals. In collaboration with the Therapeutic Recreational Service (TRS) patients are invited to a weekly music session to socially interact and work towards rehabilitation goals. Members of the team also attend these group sessions with their patients to facilitate individual goals.

Art Therapy: Weekly collaborative interdisciplinary sessions take place to maximise patients' assessment and rehabilitation goals through arts-based means, such as physical and cognitive goals through manipulation of art materials.



SECTION 2

NRH REHABILITATION PROGRAMMES

Stroke Specialty Programme





Dr Valerie Twomey
Programme Manager

Professor Jacinta Morgan
Medical Director, Stroke Specialty Programme
NRH Clinical Director

The Stroke Specialty Programme at the NRH, in collaboration with the patients, their families and carers, provides specialist stroke rehabilitation designed to lessen the impact of impairment, and to assist people with stroke to achieve optimum functional independence, social participation and community integration.

The programme provides the national, and only, post-acute complex specialist inpatient rehabilitation service for people with stroke in the Republic of Ireland. Referrals are received nationwide from acute hospitals, HSE service areas and primary care services.

The Stroke Programme is accredited by CARF (the Commission for Accreditation of Rehabilitation Facilities) and in 2021, following survey in late 2020, the programme's accreditation was confirmed for the 5th time consecutively as a Speciality Stroke Programme for Inpatient, Outpatient, Home & Community Based Services.

Demographics, Activity and Outcomes for Inpatient Services – 2021

82 patients received inpatient rehabilitation services in 2021. Of the patients discharged from the programme, 75 were admitted to the Comprehensive Integrated Inpatient Rehabilitation Programme (CIIRP), and 7 patients were admitted for short review or assessment.

DEMOGRAPHICS AND ACTIVITY

Of the 75 patients admitted to the Comprehensive Integrated Inpatient Rehabilitation Programme (CIIRP):

23

(31%) had a diagnosis of Haemorrhagic Stroke

45

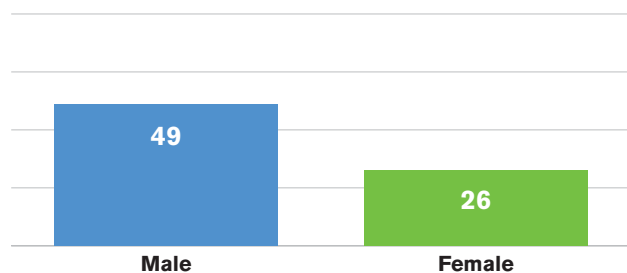
(60%) had a diagnosis of Ischaemic Stroke

7

(9%) had a diagnosis of Other Stroke



GENDER OF INPATIENTS SERVED BY THE STROKE PROGRAMME IN 2021



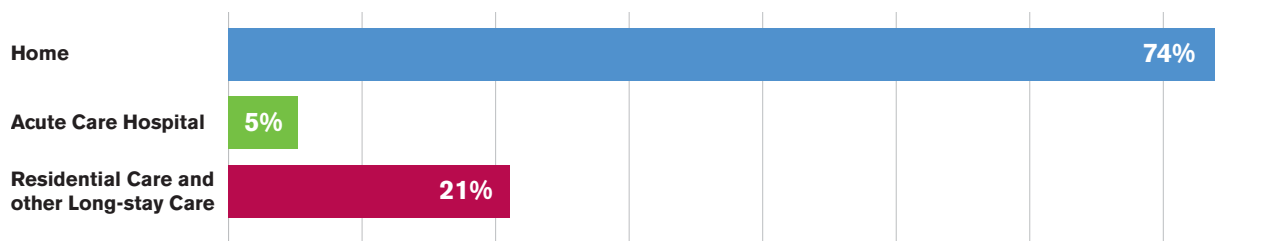
AGE PROFILE OF INPATIENTS SERVED BY THE STROKE PROGRAMME IN 2021

Average age	51 years
Lower age range	18 years
Higher age range	72 years

Outcomes

EFFECTIVENESS, EFFICIENCY OF, AND ACCESS TO THE DAY PROGRAMME

DISCHARGE LOCATION OF INPATIENTS SERVED BY THE STROKE PROGRAMME IN 2021



Indicator	Target Set – 2021	Outcome
Average Days Waiting for Admission	Average days waiting for admission would be less than 70 days	Patients waited an average of 99 days for admission to the programme
Incidence of Positive Change in Outcome Measure at Discharge	Improvement in Functional Independence Measure (FIM) Score – target 90%	88% of patients showed improvement
	Improvement in Barthel Score – target 90%	77% of patients showed improvement
Average Score Change in Outcome Measures at Discharge	Patients would improve on average by at least 10 points as measured on the FIM and Modified Barthel	FIM Average Improvement 28 points Barthel Average Improvement 20 points
Average Rehabilitation Length of Stay	Length of stay would be less than or equal to 84 days	89 days
Discharge to Home Rate	75% of patients would be discharged to home	74% of patients were discharged directly to home

The Stroke Specialty programme continues to deliver high quality, effective rehabilitation in a national context of increasing patient complexity and numbers, increasing demand for earlier access, and a higher proportion of all patients having higher complexity of needs than previously seen.

Programme Goals and Achievements in 2021

The Programme continued to successfully operate our inpatient and outpatient services during the COVID-19 pandemic, with particular emphasis on providing continued access and high-quality safe care for patients and support to families. Having successfully opened our dedicated stroke inpatient unit with an initial 15 beds, we were successful in opening a further two beds in 2021, with the remaining three beds planned to open in 2022.

Throughout 2021 we welcomed the consolidation of the Cognitive, Communicative and Affective Rehabilitation Service (CCARS) following successful piloting, and thanks to the dedication of the stroke specialty team we look forward its continued evolution into 2022.

PERSON-CENTRED COORDINATED CARE

Stratifying Stroke as distinct from other acquired brain injury and illness has enabled the programme to view, analyse and report data in a more person-centred coordinated way. New targets have been set for operational and functional outcomes and having access to this key information enabled us to give detailed feedback to the HSE's National Clinical Programme for Stroke in their Strategy Consultation.

ENABLING INTEGRATED CARE

Stroke is a leading cause of death and disability worldwide and in Ireland, approximately 10,000 people will have a stroke event each year. According to the recently published Irish Heart Foundation National Stroke Audit, just one in four patients were recorded as having received acute or post-acute rehabilitation. Increasing demands on healthcare services has led the HSE to consider the role of patients in managing their own healthcare, with an emphasis on chronic disease self-management programmes and the development of a national framework for supported self-management. These initiatives have guided the development and design of the NRH Stroke Specialty Programme and aim to make better use of consultations with professionals and for patients to take a greater role in managing their own health condition.

Programme Manager

Dr Valerie Twomey (Senior Clinical Neuropsychologist) is the Programme Manager for the Brain Injury and Stroke Specialty Programme.

Clinical Services Delivered within the Stroke Specialty Programme

- **Medical**

Patient care and treatment is delivered by a Consultant led interdisciplinary team (medical, nursing, and health & social care professionals). In 2021 clinical responsibility was held by **Prof Jacinta Morgan** (NRH Clinical Director, and Medical Director of the Brain Injury and Stroke Specialty Programmes) in collaboration with Consultant colleagues **Dr Sabrina McAlister** and **Dr Kinley Roberts**.

- **Nursing – Willow Unit**

Rehabilitation nursing staff provide nursing care, support, and direction to patients. They act as an important communication link with the patients' family, visitors and with the other members of the interdisciplinary team. Nursing staff assist patients in practicing what they are learning in therapies and teach patients how to manage their personal care, along with their families and carers.

Clinical Services delivered by a range of Health and Social Care Professionals within the Stroke Programme are equivalent to those delivered within the Brain Injury Programme – these are listed on page 23.



REHABILITATIVE TRAINING UNIT

MAUREEN GALLAGHER
REHABILITATIVE TRAINING UNIT MANAGER

The Rehabilitative Training Unit (RTU) is part of the NRH Brain Injury Programme continuum of care. The 'Next Stage Programme' at the RTU provides group and individual rehabilitative training (RT) for adults with acquired brain injury. It is a national service accepting referrals from around the country. For service users who do not live within commuting distance of the NRH, an 8-bed accommodation facility is available onsite.

The RTU delivers two integrated CARF accredited programmes: The Vocational Programme and the Home & Community Programme. During 2021 the programme continued with online delivery. Allocation to a programme is determined by each person's goals, as determined at referral and through the Individual Training Plan while on the programme. Training is delivered through 25 training modules grouped in the following areas: Brain Injury Awareness and Management, Personal and Social Development; Life Skills Management; Information Technology; Educational and Project Support; and Vocational Assessment, Planning and Exploration.

The continued success of the programme rests in the client-centred, holistic approach to delivery, allocation of each trainee to a caseworker, the flexibility of an individualised training programme for each person, and a comprehensive discharge planning process. Successful outcomes are measured by the achievement of individualised rehabilitation goals as identified by the trainee and their family including increased independent living, reintegration to community and family life, and return to work, education or training.

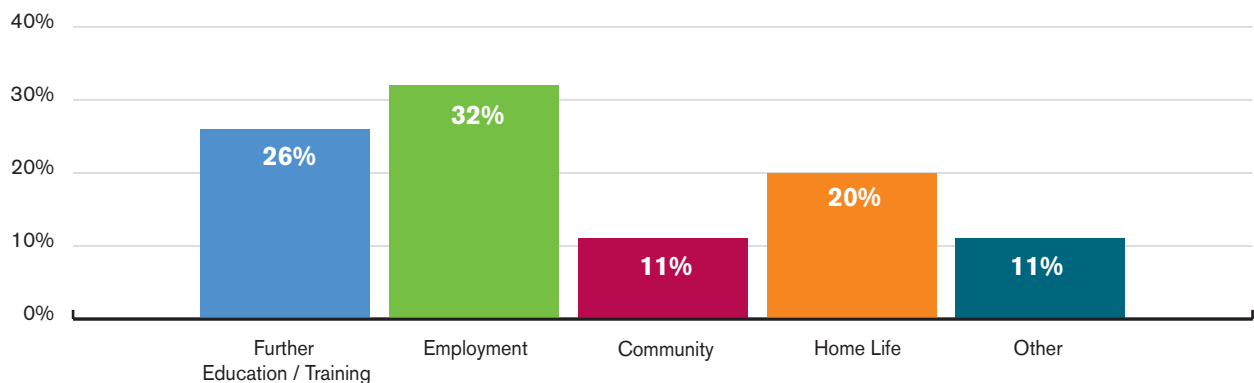
EFFECTIVENESS, EFFICIENCY OF, AND ACCESS TO THE DAY PROGRAMME

Indicator	Target Set – 2021	Outcome
Discharge to employment, training or education	50% discharged to training, employment or education	58% (11) Trainees were discharged to training, employment or education
Average days waiting for access to programme (Day-place or with onsite accommodation)	Average days waiting will be less than 365 days (12 months)	53% (10) were waiting less than 365 days. Average days waiting was 426 days.
Average active length of stay	Average number of active training days will be less than 365 days (12 months)	Average number of active training days was 356 days.
Completion rate of outcome measures	90% completion rate of outcome measures – Mayo-Portland Adaptability Inventory (MPAI)	90% (17) had MPAI completed and documented in their files.
Incidence of positive participation score change	90% will show a positive change on exit MPAI	90% (17) showed a positive change on exit MPAI
Individual Training Plan (ITP) timelines	75% will have an Individual Training Plan completed within 42 days of admission	76% (13) were completed within 42 days of admission.
Programme throughput	10 trainees will be discharged biannually	58% (11) Trainees discharged in half-year 1 (H1) and 8 trainees discharged half-year 2 (H2) = total of 19 trainees discharged during 2021.

The extended waiting times for access to the service reflects the person-centred approach to management of the preadmission waiting list. Individuals are afforded the time they require to be ready to undertake their training place, in some cases this could be months. Engagement with referrers, family and the individual during this process ensures a comprehensive evaluation of their needs and readiness to take up their training place.

The RTU has an allocation of 17 WTE training places funded by the HSE. Number of referrals, waiting times, and active training days were all impacted by the effect of COVID-19. The RTU received 25 referrals in 2021, 11 for trainees requiring accommodation and 14 for day places. In 2021 14 (74%) males and 5 (26%) females completed the training programme.

RTU 2021 OUTCOMES



In 2021 26% (5) trainees were discharged to appropriate education and training programmes, 31% (6) were discharged to employment, 11% (2) were discharged to community services and 20% (4) were discharged to home life having reached their community reintegration goals on discharge. Two trainees (11%) ceased to attend the programme for personal reasons.

New Developments and Services

In 2021 the RTU continued to develop and deliver remote and blended training programmes in response to the ongoing COVID-19 restrictions. Training sessions were delivered via telehealth platforms MS Teams and Attend Anywhere. The individualised programme planning continued, and when national health protocols allowed, blended learning was provided through the scheduling of blocks of on-site individual sessions alongside the remote training sessions. This facilitated those who otherwise may not have been able to travel for their programme.

The RTU delivered several stakeholder events online in 2021 including an RTU Trainee Reunion, a Family Information Day for families on the waiting list and our inaugural Family Education and Awareness Day for the families of the current trainee group. A series of 15 talks by Past Trainees was delivered online to the current trainees, which provided the opportunity for peer mentoring. RTU Trainees gave online presentations at the NRH Careers Evening in October 2021 and to the inpatient Brainworks groups. RTU team members delivered online presentations to community hospitals and organisations during the year.

The RTU provided virtual Taster Sessions and tours of the Unit for inpatients in the Brain Injury Programme who wanted to experience what the RTU programme could offer them. These also provided the RTU trainees with an opportunity for appropriate peer mentoring roles with the visiting patients. In 2021 we facilitated brain injury inpatients to attend these sessions remotely via Microsoft Teams or in-person according to our COVID-19 protocols.

Feedback from the RTU Trainees Exit Questionnaire in 2021 was very positive. 79% (15) of trainees discharging from the programme completed the questionnaire. Of those who responded, 73% (11) rated 5/5 and 27% (4) rated 4/5 on their overall level of satisfaction with the programme. Post discharge questionnaires will be administered to these trainees during 2022.

Future Plans and Developments For 2022

The RTU has an approved Standard Operating Procedure for a return to on-site training groups and will return to full on-site services with vocational and community integration elements as soon as permitted. We plan to maintain a blended remote and in-person learning programme to accommodate those individuals who may not be able to attend on-site.

The RTU is engaging stakeholders in a process of growing our vocational programme during 2022, and to work with our partners in the development of spaces for the greater integration of practical transferable work skills for those trainees who have strengths in this area. The RTU will focus on strengthening the working links with our partners in the community, including brain injury organisations, HSE services, and community-based organisations.

The RTU is very appreciative of the support that it has received from the wider NRH community through this challenging year.



SECTION 2

NRH REHABILITATION PROGRAMMES

Spinal Cord System of Care (SCSC) Programme





Dr Éimear Smith
Medical Director
SCSC Programme
(to November)



Eugene Roe
Programme Manager



Cara McDonagh
Medical Director to SCSC
Programme (from November)

The Spinal Cord System of Care (SCSC) Programme at the NRH has developed a continuum of care for people with spinal cord dysfunction. This encompasses the inpatient rehabilitation phase, an outpatient phase with the capacity to see patients in interdisciplinary clinics, consultant led clinics and single therapy treatments. Further linkages to community services include a nursing liaison service, a pilot vocational programme and links with the voluntary organisation Spinal Injuries Ireland (SII).

Spinal cord dysfunction may result from traumatic injury or non-traumatic injury including such disorders as benign or malignant spinal cord tumours, demyelination, vascular or inflammatory disorders. The SCSC Programme also includes the management of patients with peripheral neuropathies, such as Guillain Barre Syndrome as similar principles of rehabilitation apply to these conditions.

Persons with spinal cord dysfunction have many needs and may face wide-ranging long-term restrictions in their ability to live independently, to drive or use public transport, return to work or education, participate in leisure and social activities, fulfil family roles, and maintain personal, sexual and family relationships. The SCSC Programme at the NRH is designed to assist patients and their family and carers to manage their impairments and to promote greater levels of functional independence, social participation, and community reintegration.

Patient care and treatment is delivered by an Interdisciplinary Team (IDT) with overall clinical responsibility led by the Medical Director of the programme. Dr Éimear Smith continues in her role as Rehabilitation Medical Lead in the National Trauma Strategy and in November 2021 Dr Cara McDonagh took over the Medical Director post and consultant Dr Jacqui Stow joined the consultant body in the SCSC Programme.

Demographics, Activity and Outcomes for Inpatient Services – 2021

DEMOGRAPHICS AND ACTIVITY

In total 123 persons were discharged from the SCSC Programme in 2021. 100 of these patients were admitted for a full goal setting rehabilitation programme (Comprehensive Integrated Inpatient Rehabilitation Programme – CIIRP).

Of the 100 patients admitted to the Comprehensive Integrated Inpatient Rehabilitation Programme (CIIRP):

46

(46%) had a diagnosis of Traumatic Spinal Cord Injury

42

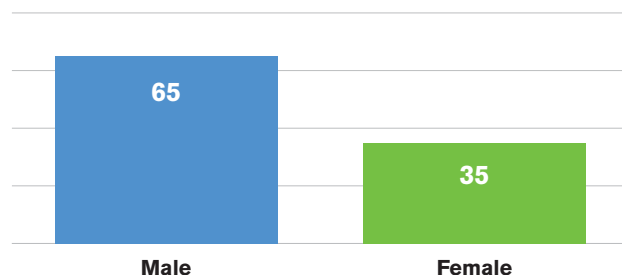
(42%) had a diagnosis of Non-traumatic Spinal Cord Injury

12

(12%) had a diagnosis of Neuropathic or Neurological Disorders



GENDER OF PATIENTS DISCHARGED FROM THE SCSC PROGRAMME IN 2021



AGE PROFILE OF PATIENTS DISCHARGED FROM THE SCSC PROGRAMME IN 2021

Average age	50 years
Lower age range	17 years
Higher age range	87 years

Outcomes

EFFECTIVENESS, EFFICIENCY OF, AND ACCESS TO THE PROGRAMME

Indicator	Target Set – 2021	Outcome – 2021	Note / Trend
Average Days Waiting for Admission from referral to inpatient waiting list.	Target: Admission of patients within 60 days.	Average days waiting for admission was 59 days.	This was within target for the first time in 5 years with the opening of additional beds in the new hospital assisting the improvement.
Average Rehabilitation Length of Stay (LOS)	Target: Average length of stay less than 90 days.	Average LOS was 89 days.	The LOS in the SCSC Programme is negatively impacted for a number of patients who wait for long periods to access onward care.
Delayed Transfers of Care	Target: To lose less than 8% of bed days to delayed transfers of care.	Bed days lost to delayed transfers of care amounted to 11% in 2021.	Delayed transfers of care is the term used when patients who have completed their rehabilitation programme and are medically fit for discharge but are awaiting access to onward care.
Discharge to Home Rate	Target: To discharge at least 75% of patients to home	91% of patients were discharged to home.	8% of discharged patients were discharged back to the acute referring hospital and 1% were discharged to other long term care facilities.

Some Programme Highlights In 2021

- The annual Women's Day peer support event took place as a virtual event in 2021
- Peer support was also available virtually with staff in Spinal Injuries Ireland.
- Workforce planning continued in 2021 with progress made in recruiting personnel to meet the target of having all 40 SCSC beds open by Quarter One 2022. A further success in workforce planning was the establishment of a post for an Education and Peer Support Officer.
- The Education Committee continued work on a series of educational materials for patients, families and healthcare professionals.
- The SCSC Programme also presented at two grand rounds on 'pressure injuries' and on an 'IDT approach to risk feeding'.
- In collaboration with the National Clinical Programme for Rehabilitation Medicine, the SCSC Programme supported the successful application to HIQA for a Health Technology Assessment (HTA) for the national systematic provision of a pathway for a domiciliary ventilatory support for adults with a spinal cord injury.

Programme Manager's Report

Eugene Roe is Programme Manager for the SCSC Programme.

The COVID-19 pandemic continued unabated with the required infection prevention controls impacting on family visiting, weekend therapeutic leave and peer support. The SCSC Programme continues to operate over both the new and old hospital buildings and this remains an operational challenge for the team.

2021 saw a 48% rise in referrals to the programme returning to pre-Covid levels of referral. The focussed management of admissions resulted in a consistently high bed occupancy rate of 94%. As ever, the SCSC Programme was supported by generous fundraising undertaken by individuals and groups in 2021 and these efforts are very much appreciated by both patients and staff of the programme.

Medical Director's Report

Dr Éimear Smith was Medical Director for the SCSC Programme to November 2021, when the post was taken up by **Dr Cara McDonagh**.

2021 arrived with the shining light of a SARS-CoV2 vaccine on the near horizon which helped staff in the SCSC programme rise to the challenge of meeting another surge of the pandemic. Staff worked hard to continue to care for patients and maintain standards as well as managing the risk associated with admitting patients who were close contacts from acute hospitals. The rapid roll out of the vaccine with the help of dedicated staff from all programmes, including SCSC, to staff and patients was a great source of hope and reassurance. Our new hospital infrastructure was a huge help with managing infection control in this prolonged and most serious surge of infections.

Despite these challenges, 2021 saw important steps forward for the SCSC programme including the first discharge home of a ventilator dependent patient with a spinal cord injury after receiving their rehabilitation. Over the years, staff in the SCSC programme have seen the impact that pressure injuries have on patients who must spend long periods on bed rest. The appointment of a Tissue Viability Nurse (TVN) for the NRH has been instrumental in ensuring skin care is to the forefront in the NRH. To reduce the incidence of pressure injuries in the NRH and in our referring hospitals, a quality improvement project commenced in 2021 involving the TVN, our nurse educators and staff from the SCSC programme, and are aiming to work with our colleagues around the country.

Many members of the SCSC programme participated in research this year including an international research study to validate a physiotherapy and occupational therapy dataset with international partners including Shepherd Centre Atlanta, Swiss Paraplegic centre and Magee Rehabilitation Philadelphia.

Clinical Services delivered within the SCSC Programme include:

- **Medical**

The Medical Director of the Programme is Dr Cara McDonagh who works in collaboration with Consultant Colleagues Dr Éimear Smith and Dr Jacqui Stow.

- **Nursing – Lily, Oak and Fern Units**

Rehabilitation nursing staff provide nursing care, support and direction to patients. They act as an important communication link with the patients' family, visitors and with the other members of the interdisciplinary team. Nursing staff assist patients in practicing what they are learning in therapies and teach patients how to manage their personal care, along with their families and carers.



- **Clinical Psychology**

While the continued COVID restrictions did not allow us to physically come together, it didn't stifle our ongoing collaboration with our colleagues in the UK (SIPAG - Spinal Injury Psychologists Group) and Europe (ESPA - European Spinal Psychologists Association). The ESPA Conference took place in 2021 as a virtual event, with presentations from the NRH SCSC psychology service showcasing the Patient Experience Project (PEP) as well as doctoral and postgraduate research completed by Emma Brennan and Clodagh Cogley. In June 2021, Senior Psychologist and Academic Lead, Dr Maeve Nolan retired. For twenty years Maeve dedicated herself to providing the highest standards of care to people with spinal cord injury and was a central and much respected figure in the Spinal Injury Programme. We wish to formally acknowledge and thank her for her enormous contribution to the SCSC programme and support provided for people with spinal cord injury. SCSC psychology continues to work with the Interdisciplinary Team on the development of patient information provision and resources supporting optimum self-management for people with SCI.

- **Nutrition and Dietetics**

For patients with SCI, Nutrition and Dietetics intervention focuses on managing nutritional risk and ensuring that patients are well nourished in the initial rehabilitation phase, and as recovery progresses, shifts to address issues with long term health. The increase in staffing secured as part of the workforce planning process enabled greater focus on education and support of patients to manage long-term health issues such as excess weight gain, as well as delivery of group education sessions 'Healthy Eating after a Spinal Cord Injury'.

- **Occupational Therapy**

Occupational Therapists (OTs) work with patients following SCI or illness to optimise their ability to participate in meaningful everyday activities ranging from personal care, home and community activities to vocational and leisure pursuits. OTs support patients in discharge planning arranging for assessment of the home environment and recommendation of equipment required to maximise independence and safety. In 2021 OTs contributed to improvements in IDT working with attendance at Handover and IDT Huddles. OTs participated in research for the International Spinal Cord Injury (ISCI) Physical Therapy – Occupational Therapy (PT-OT) Basic Data Set. The first ventilatory dependent patient was discharged in 2021 with lessons learned for regarding the OT processes involved. There were challenges with delivery of OT services due to unplanned staff absence due to COVID regulations.

- **Pharmacy**

Patients' medicines are reconciled on admission and discharge to ensure that their medication list is accurate at transitions of care. Medicines are procured and dispensed for all Inpatients of the Programme, and on discharge. Pharmacy staff work as part of the Interdisciplinary Team (IDT), they attend consultant rounds; and Medicines Prescription Administration Record (MPAR) reviews to optimise medications. Pharmacists provide education to patients on their medicines and a personalised Medicine List is provided to each patient. Staff also answer medication queries and provide education sessions for IDT colleagues.

- **Physiotherapy**

The physiotherapy team in the SCSC Programme continued to meet the ongoing pandemic challenges and in addition to delivering the physiotherapy service in 2021, over six weeks of cover for staff absence was provided to the respiratory service to ensure all patients' critical needs were met. Virtual education sessions were provided to stakeholders including Spinal Injuries Ireland, physio teams in Beaumont and Limerick, and on-site training with physios from Cork University Hospital. John Lynch presented a poster at the International Spinal Cord Society's Annual Scientific Meeting in September. Members of the SCSC physio team were also involved in numerous IDT initiatives including Pressure Injury Awareness initiatives aimed nationally. In 2021, John Lynch became Level 1 certified in use of the Ekso Bionics exoskeleton.

- **Radiology**

Key amongst the Radiology services provided are regular Inpatient and Outpatient imaging of the renal tract, using ultrasound and x-ray to detect stones and other complications in order to prevent the morbidity and mortality associated with occult urinary tract disease, including sepsis. For newly admitted, high dependency, cervical SCI patients, the assessment of diaphragmatic function by ultrasound and the radiographic evaluation of spinal instrumentation are essential tools. An on-call 24 hour x-ray service is also provided, mainly used for acute chest and musculoskeletal conditions. DXA evaluation of baseline bone density is available for all spinal injury patients using state of the art equipment. The aim is to establish a Centre of Excellence for Bone Health and for fracture prevention in the neurologically injured patients of our national referral centre in conjunction with new national guidelines. New DXA services such as Body Composition Analysis can also be provided for immobilised neurologically injured patients.

- **Social Work**

Social Workers within the SCSC Programme deliver services to patients throughout their rehabilitation and in the immediate post-discharge stage as required. Pre-discharge outreach visits are completed in consultation with Interdisciplinary Teams and the Discharge Liaison OT (DLOT). The Complex Discharge Coordinator Social Worker engages in pre-admission discharge planning in conjunction with NRH colleagues, as part of a pathway approach. Social Workers on the spinal programme now offer a hybrid approach to family counselling, supports and peer services involving in-person and online services. The pandemic visiting restrictions were extremely challenging for patients and families particularly during the lockdown period, however, increased visits and family & carer training have been possible since March. Family events were facilitated by Social Work and Psychology staff on several Saturdays in 2021 as part of the Maximising Rehabilitation Opportunities (Max Rehab) initiative. A collaborative project with Social Work, Psychology and Liaison Nursing colleagues is ongoing to develop a resource pack for parents with SCI.

- **Speech & Language Therapy**

The Speech and Language Therapy (SLT) team has increased the service it provides to the SCSC Programme. The SLT service offers assessment, diagnosis and treatment of dysphagia and communication needs to patients in the programme. Patients have access to Fiberoptic Endoscopic Evaluation of Swallowing (FEES) and audiology screening onsite and may have access to video fluoroscopy services from their referring hospitals.

- **Spinal Liaison Service**

The Liaison Service is a nurse led service offered to all patients who come through the Spinal Cord System of Care. The service covers 26 counties and offers: education and advice both for patients and family members, attendance at family and community conferences during the Inpatient stay at the NRH; active involvement through the delivery of specialised knowledge helping to prevent complications; pre-admission assessments; post-discharge review and annual review.

- **Therapeutic Recreation Service**

The NRH Therapeutic Recreation Service encourages and facilitates patients' participation in leisure and recreation activities. It provides an opportunity to explore how they can return to hobbies or interests they enjoyed before their injury, or to explore new leisure pursuits. The ultimate aim is reintegration back into the community through involvement in hobbies or interests.

- **Creative Arts Therapy (CAT) – Music Therapy and Art Therapy**

Music Therapy: The 'Voice Group' for patients with spinal cord injury is a collaborative IDT initiative with Music Therapy, Speech and Language Therapy and Physiotherapy colleagues. Specific singing techniques, using physiotherapy methods, are utilised to address vocal strength and breathing. In collaboration with the Therapeutic Recreational Service (TRS) patients are invited to a weekly music session to socially interact (within public health guidelines) and work towards rehabilitation goals. Members of the team also attend these group sessions with their patients to facilitate individual goals.

Art Therapy: Weekly collaborative interdisciplinary sessions take place for individuals where assisted or adapted art-making takes place. Where patients cannot physically engage with art-making, their expression is supported through directing the art therapist attuned to their current experience to initiate and complete artwork.



SECTION 2

NRH REHABILITATION PROGRAMMES

Prosthetic, Orthotic and Limb Absence Rehabilitation (POLAR) Programme





Dr Jacqui Stow
Medical Director



Dr Nicola Ryall
Consultant in
Rehabilitation Medicine



Aoife Langton
Programme Manager

The Prosthetic, Orthotic and Limb absence Rehabilitation (POLAR) programme provides a continuum of care for people with congenital limb absence and limb amputation. The service provides pre-amputation consultations, assessment of rehabilitation needs post amputation, both Inpatient and Day-patient rehabilitation, Outpatient follow-up and therapy services, and links to community services.

Persons with limb absence have many and varied needs. Many may present with a previous complex medical history, others because of their limb absence may face wide-ranging long-term limitations in their ability to return to their previous living arrangements, their previous work or education, leisure and social activities, or they may face limitations in fulfilling family roles or maintaining personal relationships.

The POLAR Programme provides care through the full continuum of patient's lives. Our aim is that patients commence rehabilitation as soon as possible following amputation, and we liaise with acute treating teams to facilitate this. Patients can undertake rehabilitation either as an Inpatient or a Day-patient. The programme has 12 inpatient beds based on POPPY Unit and a capacity of 7 Day-patient places. For some patients, return to walking requires the assistance of others and we continue to offer hands-on training to carers for those patients on our 'walking with help' programme. In partnership with Ability Matters, the programme offers an outpatient prosthetic-led service as well as interdisciplinary clinics, consultant led clinics and single therapy treatments. In line with COVID restrictions, the Programme has continued to offer telehealth clinics where needed, to ensure patient safety.

The POLAR service has two permanent Rehabilitation consultants responsible for the rehabilitation care of our patients. Dr Jacqui Stow, Consultant in Rehabilitation Medicine, provides care for inpatients and day-patients undergoing rehabilitation and consultant led IDT clinics for both primary and established patients. For part of this year, we were joined by Dr Aaisha Khan who led out in the Day Programme. Dr Nicola Ryall, Consultant in Rehabilitation Medicine, provides specialist Upper Limb and Complex Case Clinics as well as consultations and liaison with acute treating teams in St Vincent's Hospital.

The feedback received from patients throughout 2021 has been positive, praising the dedication and expertise of our staff in the POLAR programme despite the challenges posed by a difficult year.

Demographics, Activity and Outcomes for Inpatient Services

DEMOGRAPHICS AND ACTIVITY

A total of 100 persons were discharged from the POLAR Programme in 2021. Of these patients, 73 were admitted for a full goal setting rehabilitation programme (Comprehensive Integrated Inpatient Rehabilitation Programme – CIIRP), 5 patients were admitted to the inpatient unit for a short review or assessment. There was a reduction from 18% to 6% in non-CIIRP patients – these admissions in the main, represent assessment beds. The introduction of our preadmission coordinator post has assisted greatly in reducing the need for assessment admissions resulting in a greater throughput of CIIRP discharges.

A further 27 patients received their care as day-patients of which 24 were for a full programme and 3 patients for assessment, again highlighting the positive contribution that the preadmission co-ordinator role has had in the programme. On occasion, primary patients moved from Inpatient to Day-patient and vice-versa depending on patient need.



Of the total of 100 patients admitted,

42

(42%) sustained their amputation as a result of vascular disease

23

(23%) as result of diabetes

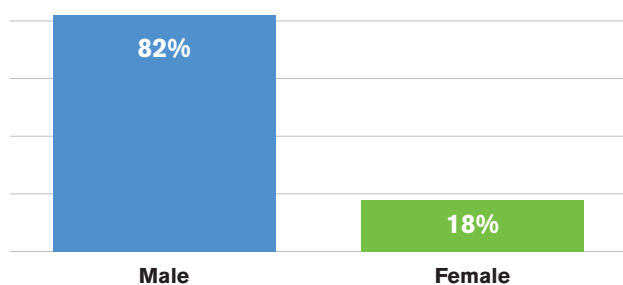
5

(5%) as a result of trauma and

30

(30%) as a result of another diagnosis

GENDER OF PATIENTS DISCHARGED FROM POLAR PROGRAMME IN 2021



AGE PROFILE OF PATIENTS DISCHARGED FROM POLAR PROGRAMME IN 2021

Average age	64 years
Lower age range	26 years
Higher age range	86 years

Types of Amputation	Total (n=100)
Below knee	42% (n=42)
Above knee	39% (n=39)
Bilateral lower limb	13% (n=13)
Upper limb	1% (n=1)
Through knee	3% (n=3)
Through hip	1% (n=1)
Partial Foot	1% (n=1)

Outcomes

EFFECTIVENESS, EFFICIENCY OF, AND ACCESS TO THE POLAR INPATIENT PROGRAMME

Indicator	Target Set – 2021	Outcome	Note / Trend
Average Days Waiting for Admission from referral to inpatient waiting list.	Target: Admission of patients within 40 days.	Average waiting time for admission was 60 days	A reduction from 2020 - from 90 days to 60 days waiting
Average Length of Stay (LOS) for all Inpatients	Target: Average length of stay less than 60 days	Average LOS was 55 days	Target achieved
Average Wait times for admission to the POLAR Day unit	Target: Admission of Day-patients within 30 days	Average waiting time for admission is 17 days	Target achieved
Delayed transfers of care	Target: To lose less than 2% of bed days to delayed transfer of car	1% bed days lost to delayed transfers of care	Target achieved
Increase in functional improvement	Target: 90% of patients will improve their Barthel score	93% of patients improved their Barthel score during their admission	Target achieved

Some Programme Highlights in 2021

- The NRH POLAR team, wider senior hospital management and the NRH strategic partner Ability Matters engaged with external stakeholders including senior management in the HSE, acute hospital teams, community colleagues to deliver education and information related to the POLAR programme and collaborate in a more effective way to improve patient rehabilitation outcomes.
- In a response to COVID 19 many clinics continued to use technology so that patients could be seen virtually rather than in person to protect patient safety
- The POLAR programme continued to lead out on community, outreach, and satellite clinics throughout the country. Clinics are based in Galway on a weekly basis, and a monthly clinic occurs in Carrick on Shannon, Letterkenny and Castlebar, along with a 6-weekly consultant visit to Galway.
- Staff in the POLAR programme took part in the Max Rehab (Maximising Rehabilitation Opportunities) initiative which resulted in therapy now being offered Monday – Saturday from 8am to 8pm.
- The service is benefitting from the pre-admission co-ordinator role and an uplift in POLAR administration staff.
- The patient education programme was revamped to ensure patients receive a more IDT approach to this aspect of their care
- The ‘open wound’ pathway of care recommenced resulting in the relevant patients receiving their rehabilitation at an earlier stage in their journey.
- The POLAR Day-patients service was moved to the integrated therapy area ensuring that patients have a specific location for their care.

Programme Manager

Aoife Langton is the manager of the POLAR programme.

Planned and coordinated interdisciplinary working is at the core of POLAR patient centred care. The move of the day-patients to the integrated therapy area coupled with the introduction of a dedicated doctor to the area has assisted this greatly. The introduction of a clinical specialists' roles to some disciplines and an uplift in staffing in line with workforce planning along with the move to providing treatment over 6 days has assisted in strengthening IDT working and enhanced patient care. In 2021, the focussed management of admission ensured a consistently high bed occupancy rate of 94% and despite the challenges of COVID-19 patient throughput has remained high with 100 patients discharged this year.



Medical Director

Dr Jacqui Stow is the Medical Director of the POLAR Programme.

In 2021 we had to contend with the ongoing challenge of ensuring that our particularly vulnerable patient population were protected from exposure to COVID-19. The new hospital environment continued play a significant role in meeting this challenge. This led to our service continuing to offer telehealth links for family meetings as well as family and carer training. Telehealth clinics were provided where they could be facilitated as per patient need. Patients admitted during 2021 to commence rehabilitation were more 'rehabilitation-ready' thanks to the ongoing review afforded to them by our pre-admission coordinator. Links with the rehabilitation teams in Clontarf hospital provided pre-prosthetic rehabilitation and provided consultant oversight and outreach prosthetic as well as physiotherapy input through our outreach physiotherapist. This is a step towards achieving rehabilitation for service users closer to home. The 6-weekly consultant led interdisciplinary clinic continued in Merlin Park, Galway.

Training in rehabilitation to our junior doctors continued and informative presentations were provided to therapists and referrers to improve patient care and outcomes.

Pre-Admissions Coordinator

The development of this post has offered patients, support networks and referrers a key contact person while they await admission. It has also enabled patient pathways to be developed further ensuring that goal setting commences at the referral stage and continues throughout the patient's journey.

Nursing – Poppy Unit

The POLAR Programme consists of 12 inpatient beds in Poppy unit and also accommodates seven Day-patients from the POLAR Programme with a staff nurse dedicated to this day service. The Programme has reshaped its service in line with the NRH objective of continuous improvement in efficiency, effectiveness, and patient outcomes. Professional development continues to be a focus for the staff on Poppy Unit. Educational and Continuous Professional Development undertaken by staff remains a priority. Two nurses are completing their Masters. Members of nursing from Poppy Unit continue to be involved in the following committees: - Drugs and Therapeutics Committee; Smoking Cessation; National Pressure Ulcer Collaborative Steering Group; Falls Prevention Group. Quality, Safety and Risk Committee, Productive Ward steering committee and Catheter Care Bundles, as well commencing the auditing supporting tool Meg.

Clinical Psychology

COVID-19 continued to present challenges throughout the year for patients, intensifying the experience of loss, frustration, and isolation for many. Supporting patients necessitated flexible working practices using telehealth to make psychological interventions accessible, and the provision of support to patients during the weekend. Psychology continued to especially contribute to the ongoing review and implementation of new goal setting procedures and the exploration of a pain management service for patients. Psychology contributed to the rollout of IDT patient education to prepare patients for discharge and support patient understanding of altered sensations post amputation. POLAR Psychology also provided education on the psychological aspects of limb loss to students attending the UCC MSc Older Person Rehabilitation Programme. Psychology joined the IDT at the pre-assessment clinic to assess patient cognition and mood with a view to facilitating patients' quick access to psychological support and intervention on admission.

Nutrition and Dietetics Report

The goal of nutritional therapy is to support patients in optimising control of chronic conditions such as Diabetes and Chronic Kidney Disease, and in making behavioural and lifestyle changes to improve their long-term health. This is achieved on a one-to-one basis and through the POLAR Healthwise Talks. This year the team also facilitated the supervision and training of two post graduate students from the MSc Clinical Nutrition and Dietetic course in UCD which was very successful. 2021 also saw the Ready Reckoner for adjusted weights in the POLAR programme updated and work on the NRH Guidelines for the dietetic management of patients with renal disease continued throughout the year.

Occupational Therapy

Occupational Therapists in prosthetic rehabilitation work with both adult and paediatric patients presenting with upper and lower limb amputations or limb absence, congenital or newly acquired, to support and enable independence in their daily lives. One of the main drivers for 2021 was Interdisciplinary Team (IDT) working, both as part of the Max Rehab project for the NRH, and programme specific for POLAR. The IDT within POLAR has focussed on two pilot projects throughout 2021: goal setting and patient education. These projects have been very successful in maintaining patient centeredness within the programme. These projects have ensured the patients are at the forefront of their goal setting and their understanding of new learning throughout their rehabilitation journey. Within the POLAR service, functional occupations are paramount to prosthetic rehabilitation. As a result, a functional standing balance group has been developed and piloted, with OT leading and members of the IDT taking part to fully maximise patient's functional potential during their admission and into the community.

Pharmacy

Patients' medicines are reconciled on admission and discharge to ensure that their medication list is accurate at transitions of care. Medicines are procured and dispensed for all Inpatients of the Programme, and on discharge. Pharmacy staff work as part of the Interdisciplinary Team (IDT), they attend consultant rounds; and Medicines Prescription Administration Record (MPAR) reviews to optimise medications. Pharmacists provide education to patients on their medicines and a personalised Medicine List is provided to each patient. Staff also answer medication queries and provide education sessions for IDT colleagues.

Physiotherapy Report

The physiotherapy team provide services to all patients attending the POLAR Programme. Education and training was also provided to acute and community services via the outreach service. The physiotherapy team worked collaboratively with the Interdisciplinary Team (IDT) to change the way the education programme is delivered to patients. We have started using a 'Theme of the Week' to guide our education sessions, involving more IDT members in these sessions. A new IDT group; Standing Balance Group, has commenced this year with positive patient and therapist feedback. The physiotherapy team have been involved in looking at how we manage patients' pain, with a particular emphasis on phantom limb pain. We continue to be involved in a research project with The Gait Keeper App to explore its efficacy in the POLAR patient population.

Prosthetic and Orthotic Services

Prosthetic and Orthotic Services for the POLAR Programme are delivered by our strategic partner, Ability Matters – see page 44.

Radiology

Specific to the POLAR Programme, Radiology provides X-ray and Ultrasound imaging of soft tissues of the residuum following amputation to assess for acute and chronic complications causing residual limb pain and other limb-fitting issues. Aspiration of fluid collections and haematomas can also be performed under ultrasound guidance in specific circumstances. Estimation of fracture risk is guided by DXA evaluation of bone density, which is often decreased on the side of lower limb amputation.

Social Work

Medical Social workers on the POLAR Programme have continued to work with patients to ensure a safe discharge is accomplished. The impact of the housing crisis coupled with the challenges in recruitment of carers across the country has meant that safe discharge to home is increasingly more complex. We offer additional supports to patients with complex psychosocial issues not only as Inpatients and Day-patients but also through peer support. 2021 saw the commencement of an online peer support group which offers patients the opportunity to discuss limb loss related issues and have access to further information, support, and advocacy.

Speech & Language Therapy

The Speech and Language Therapy Service continues to provide audiology, swallowing and voice consults to patients from the POLAR Programme as required.



Therapeutic Recreation Service

The NRH Therapeutic Recreation Service encourages and facilitates patients' participation in leisure and recreation activities. It provides an opportunity to explore how they can return to hobbies or interests they enjoyed before their injury, or to explore new leisure pursuits. The ultimate aim is reintegration back into the community through involvement in hobbies or interests.

Creative Arts Therapy (CAT) – Music Therapy and Art Therapy

Music Therapy: Music therapy input is provided weekly to both day patients and inpatients through a music therapy and IDT group session. The aim of the sessions is to use music-based methods to support patients in addressing pain relief and facilitate physical, emotional, and social interaction goals. Many patients continue to consistently attend the group with positive results and feedback, for example:

'The music therapy group is the highlight of my week'

Feedback from a patient in the POLAR Programme

Art Therapy: Art therapy input continues through group input for day patients and inpatients with aims to support peer and emotional support and develop communication and social skills. Feedback in relation to the art therapy group has been consistently positive specifically in relation to peer support and social interaction.

'I loved the sessions - it got me thinking about things and it was helpful to put that down on paper'

Feedback from a patient in the POLAR Programme

STRATEGIC PARTNERSHIP: ABILITY MATTERS GROUP (AMG)

The Strategic Partnership Agreement continues to provide strategic oversight and governance of the POLAR Programme. Challenges continue with the ongoing pandemic and resultant waves of infection.

Alternative and interim models of care, established during COVID-19 have continued in 2021 with the use of:

- Alternate clinic space to segregate appointments and patients
- Proactive telephone review consultations to monitor long term outcomes and emerging needs
- Screening of patients and those attending clinic sites
- Limited numbers of concurrent patients in clinic sites.

The reorganised mechanism and operational structure of clinical service delivery to maximise care whilst prioritising patient safety during COVID has evolved our service delivery model to maintain activity and, of note, we have increased orthotic activity in 2021 compared with 2020. This model of service is becoming the 'new normal'.

The Strategic Partnership Meetings, held bi-monthly, serve as a formal setting to monitor governance and service performance. The regular day to day liaison between AMG and the NRH is effective and efficient.

All satellite clinics are now open however, there is still some backlog in limited sites which we are reducing with additional virtual and in-person clinical activity.

Prosthetics – Demographics, Activity and Outcomes for Prosthetic services in NRH and Satellite clinics 2021

Prosthetic Activity Data: 6,687 attendances in 2021 to prosthetic clinics.

Prosthetic Referrals

As well as our management of established patients, Ability Matters received 193 new prosthetic referrals (this includes patients referred to the Mercy University Hospital in Cork) in 2021. Of these 193 patients, assessed and reviewed, 111 patients were deemed suitable for prosthetics and prescriptions were raised to assist with their care plan.

When prescriptions are not raised it is typically due to patient capability, often linked to comorbidities such as vascular status, delayed or failed wound healing and physical robustness.

Orthotics Service

The orthotics service operates across all of the specialist rehabilitation programmes, with daily clinics serving both inpatients and outpatients. Our Orthotists specialise in whole body orthotics and combine traditional assessment methods with state-of-the-art technology to provide premium quality orthotic devices. A full patient assessment enables our clinicians to understand and determine the type of orthotic device required, allowing patients to function to the best of their ability. Our clinicians prescribe a full range of bespoke and off-the-shelf orthoses, manufactured by hand or through our advanced robotic machinery. There were 3,195 attendances to the orthotic clinics in 2021. This is a continued increase, in part, supported by the investment in additional clinicians and the expansion of some satellite service activity. REHAPP, our clinical information management system has been introduced into orthotics. This has been used for several years in prosthetics and will help manage the patient pathway and capture outcomes of appointments and episodes of care.

A therapy session in the Sports and Exercise Therapy Department





SECTION 2

NRH REHABILITATION PROGRAMMES

Paediatric Family-Centred (PAEDS) Rehabilitation Programme





Dr Susan Finn
Medical Director
PAEDS Programme



Ghyslaine Brophy
Programme Manager



Aoife Langton
Programme Manager

The Paediatric Family-Centred Rehabilitation (Paeds) Programme at the NRH is the national tertiary rehabilitation service for children and young people requiring complex specialist interdisciplinary rehabilitation.

The Paeds Programme has ten beds between Inpatient and day-places. It operates as a five-day service. The Programme delivers paediatric rehabilitation services to children and young people up to the age of 18 who require a complex specialised interdisciplinary rehabilitation intervention. The Comprehensive Integrated Inpatient Rehabilitation Programme (CIIRP) is accredited by The Commission for Accreditation of Rehabilitation Facilities (CARF) and meets international best practice standards. Although it is modest in size, the challenges of the Programme for the experienced Paediatric Team are broad and exacting. The Programme's vision of a 'rehabilitation without walls' approach offers a more child and family-centred approach. The Programme provides for more fluid movement between the services based on assessment of individual clinical need and social circumstances.

The Programme accepts referrals for patients with the following diagnoses:

- Acquired brain injury of traumatic origin (traffic accidents, falls, assaults, sport injuries) and non-traumatic origin (tumour, stroke, infection)
- Acquired spinal cord dysfunction of traumatic and non-traumatic origin (transverse myelitis, tumour, Guillian-Barre Syndrome)
- Acquired and congenital limb absence requiring prosthetic intervention
- Other acquired neurological conditions requiring specialist rehabilitation

Referrals are received from across Ireland: major referring hospitals are Children's Health Ireland (CHI) at Crumlin, Tallaght, and Temple Street hospitals, and Beaumont, and Cork University Hospital neurosurgical units. Referrals are also accepted directly from general practitioners (GPs).

Family-centred care is the cornerstone of the Paeds Programme. It places children and families at the centre of the service by advocating for the needs of service users, protecting their rights, respecting their diversity, values, and preferences, and actively involving them in the provision of care. The team place a particular emphasis on working with the family as a whole.

There are some joint pathways between the adult and paediatric clinical teams at the NRH with regard to management of care and transition to adult specialist rehabilitation services.

The rehabilitation needs of each child and young person referred are assessed by the paediatric team either through the Inpatient or Day-patient service, or a one-day interdisciplinary team screening assessment, to establish whether these needs can be met by the services available at the NRH.

Comprehensive assessments are usually carried out during the initial period of admission and may be followed by a period of intensive individual goal-focused rehabilitation treatment as appropriate.

The Paeds Programme team also provide a follow-up or review rehabilitation service to children and young people as they grow and develop through childhood, where further assessment and advice may be needed. Excellent communication with community health, educational and social care services is an essential element of the continuum of care for our patients.



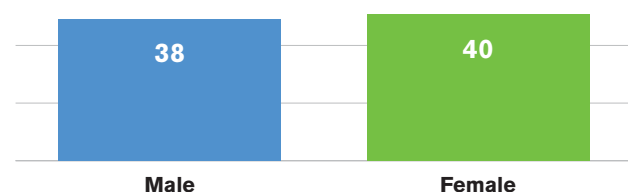
Demographics, Activity and Outcomes for the Paeds Services – 2021

DEMOGRAPHICS & ACTIVITY

In 2021 the Paediatric Family-Centred Rehabilitation programme served 78 patients as Inpatients or Day-places, of which 43 were new patients to the programme and 35 were a readmission.

Type of Rehabilitation Admission / Activity	Description	Number in 2021
PAED 1 – Full Rehabilitation Programme CIIRP	Children and young people admitted for their main rehabilitation programme, either as inpatient or day place. The full programme meets CIIRP standards	41
PAED 2 – Assessment and/or Specialist Programme	Children and young people assessed for a particular goal such as cognitive assessment, either as Inpatient or Day-patient or for a Multidisciplinary Team (MDT) pre-admission assessment of rehabilitation needs	37
Outpatient Clinic Services	Spinal Injury, ABI clinics, Transition to Adult clinics	93
Outpatient Therapy Services	Therapy treatment and or reviews by team member(s)	258
Outreach Activities	Pre-admission, during admission and post-discharged follow-up outreach work	111

GENDER OF THE CIIRP PATIENTS (FULL REHAB) DISCHARGED BY THE PAEDS PROGRAMME IN 2021



AGE PROFILE OF THE CIIRP PATIENTS (FULL REHAB) DISCHARGED BY THE PAEDS PROGRAMME IN 2021

Age range **1 to 17 years**

Age group	
0 to 6	10
7 to 12	10
13 to 18	21

The large supply of books donated by Children's Books Ireland are very much appreciated and enjoyed by everyone in Daisy Unit.



Outcomes

EFFECTIVENESS, EFFICIENCY OF, AND ACCESS TO THE PAEDS PROGRAMME

The indicators and outcome targets shown below relate specifically to the service provided to the CIIRP (Comprehensive Integrated Inpatient Rehabilitation Programme) – to patients who attended for a full rehabilitation programme in 2021.

Indicator	Target Set – 2021	Outcome	Note / Trend
Discharge to Home Rate	75% of the CIIRP* patients (full rehabilitation programme) to be discharged home	100%	Target achieved
Average Days Waiting for Admission	80% of CIIRP patients to be admitted within 85 days.	24% were admitted within 85 days	The average wait was 210 days
Average Rehabilitation Length of Stay	Length of stay of CIIRP patients to be less than 90 days	Average LoS was 49 days	The lowest stay was 17 days, and the highest was 158 days
Completion rate of Outcome Measure	95% completion of both the admission and discharge Paediatric Barthel Measure	100% completion of the Barthel	
Delayed transfers of care	Less than 1% of bed days available to the Programme to be lost to delayed transfer of care	0 bed days lost	

* CIIRP - Comprehensive Integrated Inpatient Rehabilitation Programme

Of the 41 patients seen by the Paeds Programme for a full rehabilitation programme (CIIRP), the diagnoses are as follows;

Traumatic Brain Injury (TBI)	Brain Infection	Brain Tumour	Aneurysm, AVM	Subarachnoid Haemorrhage (nonaneurysm, Non AVM)	Other BI	Traumatic Spinal Injury	Other Spinal Injury	Neuro-pathies	Limb Absence	Total
11	1	7	3	3	11	1	4	0	0	41



Paeds Programme Highlights in 2021

The COVID-19 pandemic continued to dominate events in 2021. The team's adaptability and creativity continued to shine through with effective virtual and remote provision of assessment and treatment by offering a combination of Inpatient and telehealth interventions in a patient and family-centred approach throughout the year.

2021 also saw the team's continued involvement with the NRH Strategic Plan. Delivery of services is being facilitated by the members' engagement with the integrated interdisciplinary framework that fosters a collaborative approach to planning, reviewing, and achieving patient goals. This structure has also been hugely facilitated with the move to the fully integrated Daisy Unit. The team's involvement with the Max Rehab initiative, although still limited due to restrictions, allows for other rehabilitation opportunities at weekends. The revision of the workforce plan also allowed for a better skill mix and staffing number to deliver safe and effective paediatric rehabilitation. Work continues for the development of a separate paediatric outpatient team to implement fully its outpatient, outreach, and community services.

The Monday morning 'Get Set, Go!' group which prepares the children and young people for the upcoming week, and the 'Feel Good Friday' group which provides suggestions for the weekends at home, enhance and maximise rehab opportunities. The Paeds team also delivered the 'Heads Up' module to young people living with an acquired brain injury who were transitioning from Primary to Secondary School.

The collaborative work between the School at the NRH and the interdisciplinary team plays a significant role in relation to the transitioning of school-age children and young people back into local education. In 2021, 28 school-age patients attended school at the NRH. Following discharge, 1 returned to a Special School, 14 to National Schools, 11 to Second Level Schools, 1 to pre-school and 1 to college.

Again, this year, due to COVID restrictions, numerous national and international conferences took place remotely, however the team continued networking with colleagues, gaining insights and sharing knowledge, especially in terms of provision of paediatric rehabilitation during the pandemic. Rebecca Woods (SLT) and Sharon Leahy (OT) attended and presented at the Childhood Brain Injury Trust (CBIT) Conference in April 2021 on 'The Creative use of Assistive Technology (AT) to Support Children with Acquired Brain Injury'. At the conference, the presentation by the two NRH therapists demonstrated how the use of AT helps children with ABI achieve their personal rehabilitation goals. Following this presentation, the two therapists were invited to write a blog about 'The Creative use of Assistive Technology' for the CBIT website. Creative Use of Technology - Child Brain Injury Trust

Also, Sharon Leahy (OT) and Tom Meredith (Physiotherapist) virtually attended and presented a poster at the International Spinal Cord Society (ISCoS) Conference in October on 'The case for regular review and timed intervention for a child with Spinal Cord Injury'. This poster highlighted the importance of the regular review clinics provided by the paediatric team for children with spinal cord injuries, and the NRH interdisciplinary approach to helping children with SCI and their families to achieve new goals at different developmental stages.

The Physiotherapy Team along with our Occupational Therapy colleagues and the IWA Liaison service, promoted participation in physical activity through the 'Daisy Olympics', culminating in the first ever participation by paediatric patients in the NRH Sports Championships.

Every year, the Paeds Programme benefits from various types of donations and sponsored awareness-raising activities, including those organised by the patients themselves and their families. The Programme gratefully acknowledges the generous support of all its donors in 2021.

Programme Manager (shared post)

The Programme Manager Post was shared by Ghyslaine Brophy and Aoife Langton. In preparation for Ghyslaine's planned retirement in 2022, the programme welcomed Clare Hudson to the Programme in Q4 for the handover process. Clare will take over as fulltime Programme Manager following Ghyslaine's retirement.

Clinical Services delivered within the Paeds Programme include:

- **Medical**

In 2021, Consultant Paediatrician Dr Susan Finn, Medical Director of the Paediatric-Family Centred Programme, continued to work collaboratively with her Consultant Colleagues in Rehabilitation Medicine for paediatric patients referred to the NRH. When necessary, Consultants review new referrals in their inpatient setting to help plan their rehabilitation admission.

- **Nursing – Daisy Unit**

Nursing staff on Daisy Unit work collaboratively with the other members of the Paeds Interdisciplinary Team to ensure delivery of a quality standard of care and rehabilitation to the children, young people, and their families. Nursing staff work with the children and their parents over 24 hours, providing care, education, supervision, and support. The Primary Nurse initiative continues to benefit patients and their parents.

- **Clinical Psychology**

The Clinical Psychology and Neuropsychology service within the Paeds Programme work as part of the interdisciplinary Team. Psychology services include neuropsychological assessment, cognitive rehabilitation, behavioural advice and support to parents and the team. They also provide therapeutic intervention, both individually and in group settings, drawing upon a range of therapeutic modalities based on the individual needs of each child. Along with other IDT members, the psychologist plays a key role in supporting and educating parents, and when necessary, the young person's siblings.

- **Creative Arts Therapy (CAT) - Music Therapy and Art Therapy**

Music Therapy is an evidence-based profession using psychoanalytic theories to inform the therapy process by observing how the children and young people interact with the environment, the therapist, and the music. The children and young people receive individual interdisciplinary assessment and treatment interventions. Joint collaborative sessions involve the music therapist working with other professionals on addressing specific shared rehabilitation goals through music. There are also IDT group sessions where music-based methods are applied to support children in achieving their rehabilitation goals.

Art therapy supports patients' rehabilitation goals and needs. Individual sessions (weekly evening sessions) address patients' emotional and communication needs utilising a dynamic psychotherapy framework. Patients are supported to engage in a range of art processes to express and externalise their experience.

- **Liaison Service**

Effective and on-going liaison with Children's Health Ireland (CHI) and other referring hospitals continues, ensuring a smooth transition from the acute or community setting to the NRH. The liaison nurse acts as an advocate for patients and families, and liaises with healthcare professionals in referring hospitals, community services and schools during the pre-admission, inpatient and post discharge stages. The liaison nurse has an active role in the waiting list planning group on the Paeds Programme including information and report gathering and using pre-admission planning documents to improve communication to the wider team. The Liaison Nurse is involved in triaging and assessing patients to ensure that the timing and delivery of their rehabilitation is appropriate. The Liaison Nurse played a crucial role in setting up the Virtual Health ABI, SCI and Consultant led triage pre-admission clinics with parents, as well as gathering all relevant information for the IDT in preparation for the virtual consultation.



- **Nutrition and Dietetics**

In order to meet the increasingly complex nutritional needs of children, the dietetic service continues to grow and implement practice to support children throughout their rehabilitation journey.

- **Occupational Therapy**

Occupational Therapists on the Paediatric Programme provide OT input for children and young people. It is an occupation-focused, play and fun filled service that strives towards evidenced based practice. In 2021, the OTs in the Paediatric service continued to adapt their response to service delivery during the pandemic. This has included the provision of therapy and education with children, parents, siblings, teachers, and special needs assistants via telehealth when indicated. OTs contribute to IDT working in projects such as 'Get set Go!', 'Feel Good Friday' and the messy play group. The use of occupation in horticulture sessions was also a feature of the service in 2021. They have continued to network nationally with community and acute hospital colleagues to share knowledge and learning and promote an integrated care pathway.

- **Pharmacy**

The Pharmacy Department reconciles all patients' medications on admission and discharge, to ensure that the medication list is accurate at transitions of care. The Pharmacists liaise with community pharmacies regarding sourcing of medication, both on admission and discharge. The Pharmacy Department provides advice on dosing and administration of medication to staff and patients and carers as appropriate. Patients (and their carers) are provided with age-appropriate information about their medication during their stay and on discharge. All patients are provided with medication for their therapeutic leave, as part of their rehabilitation, and on discharge, to ensure continuity of supply.

- **Physiotherapy**

Physiotherapists on the Paediatric Programme work closely with other members of the interdisciplinary team (IDT), providing specialist physical assessment and intervention to paediatric patients with spinal cord injury, brain injury and limb absence. In response to the pandemic, physiotherapists demonstrated flexibility in reverting to virtual outpatient therapy and review clinics as needed. Physiotherapists contributed to the IDT and parent education series and provided paediatric-specific Inservice education to staff grade physiotherapists within the NRH. Physiotherapy and Occupational Therapy staff from the Paediatric Programme presented a poster at ISCoS 2021 highlighting the importance of the regular SCI review clinics conducted by the Paediatric Team. Staffing pressures remained for the team owing to unexpected leave, some COVID-19 related.

- **Prosthetics and Orthotics**

Prosthetic and Orthotic Services for the PAEDS-POLAR Programme are delivered by our strategic partner, Ability Matters - see AM report on page 44.

- **Radiology**

X-rays are occasionally used in the paediatric age group under strict controls due to radiation exposure concerns. Ultrasound is the preferred imaging modality in children, where appropriate. The paediatric DXA unit (for age 3-19 years) employs low dose techniques and uses dedicated paediatric software to diagnose and monitor children with suspected low bone density.

- **Social Work**

The social worker role for the Paediatric Programme involves supporting children as they adjust to their illness and disability, as well as assisting the families and carers of the children with the emotional and practical impact they are experiencing. They do this by providing counselling, care coordination, connections to important resources and addressing financial and housing concerns. The Social Worker, along with the identified key nurse, acts as a link between the family and carers and the interdisciplinary team throughout the rehabilitation process, as well as with outside services and agencies. The new Social Work outpatient-outreach post for the Programme is proving to be of great benefit to children and their families, but also to the inpatient team. This additional service is to enhance supports for patients, their families, and carers at the pre-admission and post-discharge stage of their rehabilitation.

- **Speech & Language Therapy (SLT)**

In 2021 the Speech and Language Therapy Service for the paediatric programme continued to engage in a collaborative interdisciplinary response to the ongoing impact of the Covid 19 Pandemic on our services. SLTs in the Programme continued to liaise with schools and community teams to provide ABI specialist neuro-rehabilitation support and education. SLTs promote, attend, and contribute to the IDT Education Inservice sessions on Daisy Unit on topics such as: IDT Approach to managing Ataxia and IDT Approach to Creating a Communication-Friendly Environment. SLTs also prepared and delivered several external educational presentations such as 'Speech, Language, Communication and Swallowing Needs Following Acquired Brain Injury in Late Adolescence', 'Let's Talk - Interaction and Play-supporting children and young people with additional needs through inclusive interaction and play' and SLTs presented to Third level students in Trinity College Dublin on 'Cognitive-Communication Disorders in children with ABI'. The SLT service also continued to facilitate clinical placements by supervising third level students studying clinical speech and language therapy at Trinity College Dublin.

Aoife Langton and Ghyslaine Brophy, Programme Managers for the Paediatric Family-Centred Programme in 2021.





SECTION 2

NRH REHABILITATION PROGRAMMES

Outpatient Programme





Dr Amanda Carty
Outpatient Programme Manager

The Outpatient Programme provides a wide range of rehabilitation Outpatient Services to patients from the Brain Injury Programme, Stroke Speciality Programme, and the Spinal Cord System of Care. These activities are broadly defined as Consultant-led clinics, - HSCP* and Nurse-led care, and diagnostic services.

*Health & Social Care Professionals (HSCP) including Physiotherapy, Occupational Therapy, Speech & Language Therapy, Social Work, and Clinical Psychology.

Outcomes

	Target	Outcome – Brain Injury Programme	Outcome – Spinal Cord System of Care
Access	Outpatient Therapy Waiting Times will be less than 40 days	54 days	47 days
Efficiency	Less than 10% DNA (Did Not Attend) Rate at Consultant Clinics	6%	6%
Effectiveness	Patients will achieve 80% of goals set for Therapy Outpatient Services (OPS)	71%	98%
Stakeholder Feedback	Implement patient recommendations from Stakeholder Experience Telehealth Survey	Ongoing. Some items within continuing Covid-19 restrictions.	

An Online Interdisciplinary Speech & Language and Occupational Therapy Session taking place in the Outpatients Department.

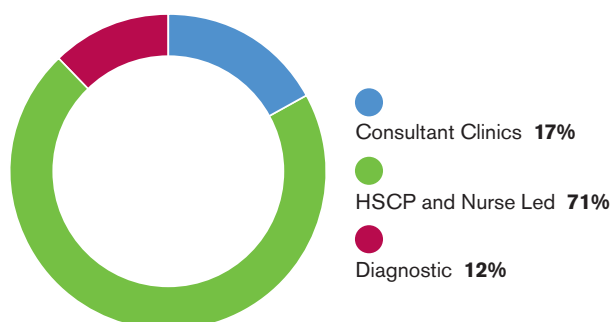




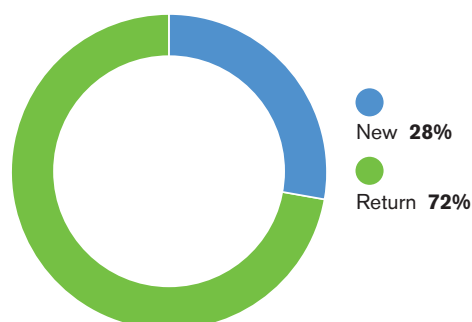
Overview of Activity

Attendances	Brain Injury & Stroke Programmes		Spinal Cord System of Care		Total Attendances
	New Patients	Review Patients	New Patients	Review Patients	
Consultant Clinics	503	628	110	572	1,813
HSCP and Nurse Led Clinics	1,747	2,950	641	2,031	7,369
Diagnostic Services: Urodynamics Radiology		124		98 - Ur 1,030 - Rad	1,252
Total	2,250	3,702	751	3,731	10,434

ACTIVITY BY TYPE

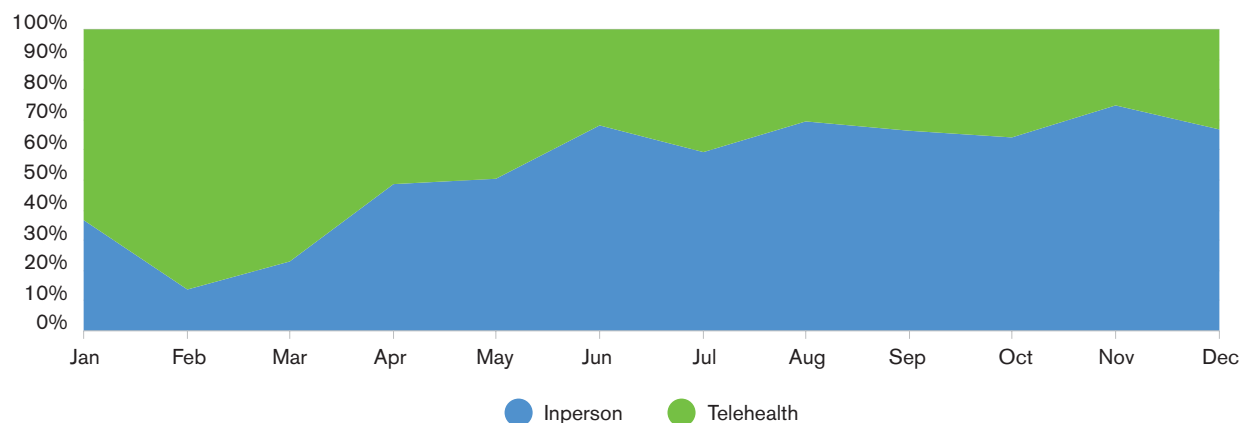


NEW AND RETURN ACTIVITY



Consultant Clinics and Therapy services continue to be offered both in-person and via Telehealth using the Attend Anywhere platform.

OPD CONSULTANT CLINICS INPERSON V TELEHEALTH 2021



Referrals to the Outpatient Programme have increased in 2021. All new referrals are directed through NRH Consultants as reflected here.

Consultant Clinic Referrals	Referrals	Discharges
Brain Injury Programme	538	433
Spinal Cord System of Care	234	51
HSCP and Nurse Led Clinics	1,747	2,950
Diagnostic Services: Urodynamics Radiology		124
Total	772	484

The increase in referrals to outpatient services mirrors the increase in referrals to the inpatient services. To maintain access to inpatient beds, more patients are referred to the outpatient programme as reflected in the numbers above. Most of these patients will progress into Therapy programmes and or Nurse-led and Diagnostic services. The Outpatient Therapy team have noted an increase in the complexity of needs of patients being referred to the services. More patients are requiring a larger interdisciplinary programme rather than single therapy programmes, reflecting the rise in complexity.

OUTPATIENT HEALTH & SOCIAL CARE PROFESSIONAL (HSCP) AND NURSE LED ACTIVITY

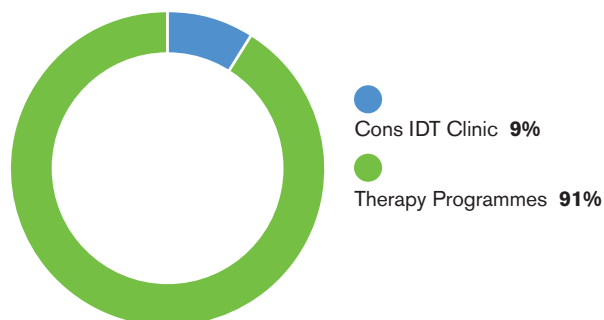
The Outpatient HSCP Team comprises of Occupational Therapy including driving and vocational assessment, Physiotherapy, Medical Social Work, Speech and Language Therapy, Neuropsychology, Sexual Wellbeing and Orthoptist input. This team delivers assessment and therapeutic input in several different ways:

- Interdisciplinary Consultant Led Clinics or Consultant Clinic attendance on request for example, Spasticity Management
- Therapy Led Rehabilitation providing:
 - Interdisciplinary Assessment
 - Interdisciplinary Coordinated Rehabilitation Programmes
 - Group Rehabilitation Programmes such as Meet & Teach, Pilates and Grasp* Programmes
 - Single Discipline Assessment Programmes

*Graded Repetitive Arm Supplementary Programme

The chart below illustrates the breakdown between HSCP (Therapy) and Nurse led services provided within consultant led clinics and, direct therapy-led rehabilitation.

HSCP AND NURSE-LED INPUT TO CONSULTANT IDT CLINICS



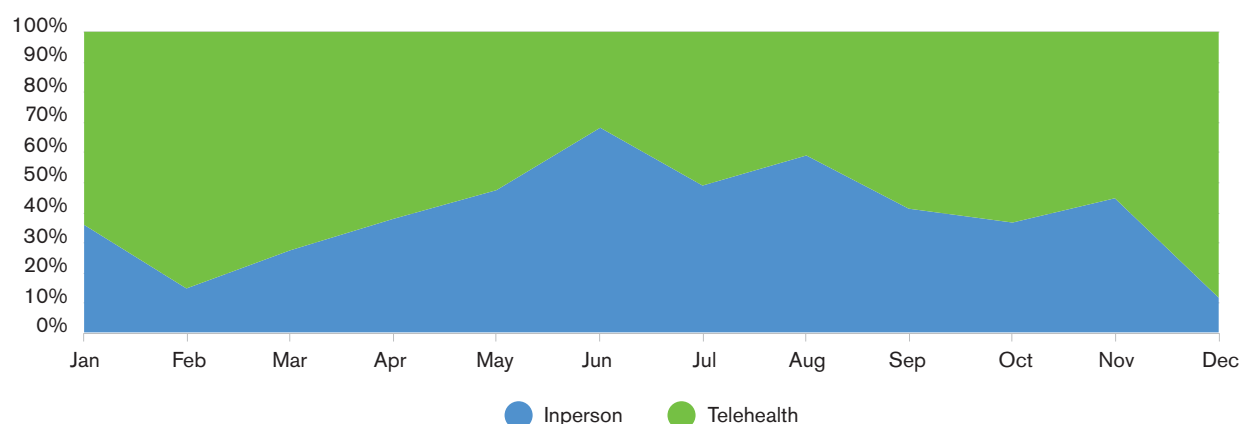


The delivery of in-person rehabilitation remained a challenge throughout 2021 due to the pandemic and as a result, Outpatient rehabilitation programmes were delivered through limited in-person care and through telehealth. Therapy groups remain entirely through telehealth due to Covid 19.

New telehealth group programmes were implemented this year such as 'Making the most of your memory' and 'Grasp' (Graded Repetitive Arm Supplementary Programme). Patient feedback supports the delivery of these in-person groups due to the benefits of peer support. Our aim is to recommence these in-person groups as soon it is safe to do so.

The below chart illustrates the breakdown between Therapy delivered in-person and by telehealth programmes.

OPS HSCP IN-PERSON V TELEHEALTH 2021



Patient Survey – 'Your experience of using telehealth for rehabilitation during Covid 19'

Our patient survey of their experience using telehealth, indicated that most respondents would like to continue using telehealth, or a combination of telehealth and in-person rehabilitation. There was a proportion (18%) who wish to return to in-person care only. The Outpatients Programme is developing plans to incorporate these responses, and others, in an effective and patient centred manner, as soon as Covid 19 allows for a safe change in our service delivery.



The Therapy Garden is designed with various surfaces to practice walking and wheelchairs skills.

Developing Specialist Services

The Outpatients Programme continuously works to improve the speciality and quality of services available to patients. In 2021, several new developments were implemented or completed, despite the challenges posed by Covid 19 to both the NRH and the wider healthcare system.

EXPERT STAFF

The Outpatients Programme administration team is essential to the delivery of all activity across the programmes and as Outpatient activity has increased or developed, the Outpatients administration team has adapted to meet this changing clinical need, never more so than the previous two years. The admin team is highly efficient and is fundamental to the provision of the high-quality patient care delivered in the Outpatients Programme. With Covid-19 and the introduction of telehealth, as well as new developments in 2021, admin roles have changed significantly. Targeted training in e-health and digital transformation is planned for the team to further support their role in delivering quality patient care.

There was a small, but very welcome increase in the Therapy team with an additional resource provided to the vocational rehabilitation service. There was also an increase in social work personnel, which will provide much needed social work input across all services in the Outpatient Programme.

New Clinics

JOINT OPHTHALMOLOGY AND ORTHOPTIC CLINICS

In 2021 the addition of an Ophthalmologist and Orthoptist to the outpatient service was welcomed. This service provides single and joint assessment for both inpatient and outpatient services, meaning patients can receive both Ophthalmology and Orthoptic services in one visit.

ELECTRONIC ASSISTIVE TECHNOLOGY

An Electronic Assistive Technology (AT) clinic for outpatients also commenced this year. These clinics are very significant additions to the suite of specialist services that can be accessed by NRH outpatients.

New Initiatives

Physiotherapy Wait List Initiative: In 2021, the Outpatient Programme secured a temporary uplift in physiotherapy to facilitate a targeted wait list action plan. This therapist provided treatment programmes for patients who were waiting for physiotherapy only, and therefore accelerated access for these patients.

Max Rehab (Maximising Rehabilitation Opportunities): The outpatient programme staff have participated in the NRH 'Max Rehab' initiative which will see the extension of the service hours to 8am-8pm over a 6-day week – Monday to Saturday. This will continue to develop in Outpatients in 2022.

Electronic Patient Record Project (Clinical Rehabilitation Management System – CRMS): The outpatient programme staff have commenced engagement with this project, across clinical and administrative teams and look forward to assisting the design and working with the new system.

New Hospital Phase 2: The outpatient programme has also commenced planning for Phase 2 of the new hospital development through the identification of the infrastructure required to deliver highly specialised, coordinated, and integrated ambulatory care services to all NRH outpatients.

The team input into all these initiatives demonstrates the on-going commitment of staff to the development of services to maximise rehabilitation services and outcomes for all patients, while continuing to provide very high levels of direct patient care. We look forward to further engagement in these exciting projects in 2022 to ensure a welcome modernisation of the outpatient systems and facilities which will further facilitate the delivery of the highest standards of clinical care.



Section 3

Clinical Services Provided Across All Programmes



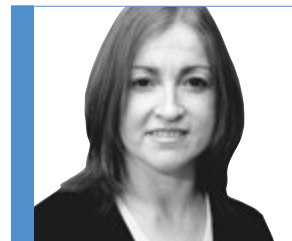
Dr Simone Carton
Head of Clinical Psychology



Alastair Boles
Senior Dental Surgeon (Special Needs) HSE Dun Laoghaire



Anne O'Loughlin
Principal Social Worker



Kim Sheil
Dietitian Manager



Rosie Kelly
Physiotherapy Manager



Cathy Quinn
Physiotherapy Manager



Frances Campbell
Director of Nursing



Clare Hudson
A/SLT Manager



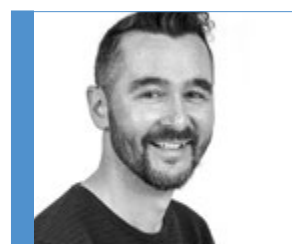
Lisa Held
Occupational Therapy Manager



Michael Brogan
Occupational Therapy Manager



Dr Jacintha More O'Ferrall
Consultant in Occupational Health



Stuart McKeever
Therapeutic Recreational Specialist



Dr Brian McGlone
Consultant Radiologist



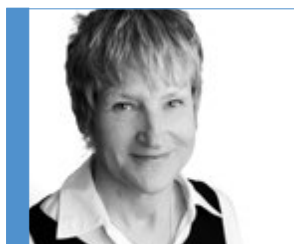
Prof Robert Flynn
Consultant Urologist



David Farrell
Senior Clinical Engineer



Maureen Gallagher
Rehabilitative Training Unit Manager



Sheena Cheyne
Chief II Pharmacist



Maya Tom
IPC CNM II



Asha Alex
IPC CNM III

Nursing Department

FRANCES CAMPBELL
DIRECTOR OF NURSING

The Nursing Department navigated through 2021 under continuing COVID restrictions. We acknowledge all clinical staff for their ongoing commitment and resilience during the second year of the pandemic.

Staff recruitment in 2021 for the nursing department amounted to 29 Registered General Nurses and 11 Healthcare assistants which could not have been achieved without the dedication and commitment of many staff, especially Human Resources, Assistant Directors of Nursing, Clinical Facilitators, Clinical Nurse Managers and Specialist Nurses. We welcome all new staff and wish them well. The Department aims to reach 244 staff within clinical areas to enable us to open 120 beds.

Senior Management Team

The Assistant Director of Nursing (ADON) Nurse Management structure highlights the length and breadth of nursing involvement, scale and complexity of nursing operations and day to day management of over 200 staff. Our structure clearly sets out our responsibilities and accountabilities while supporting the Clinical House Manager and Programmes in actively managing performance at Unit level. Our priority continues to ensure we are providing the right staff at the right time to the right patient, how we 'manage the house', manage our risks and patient care and how all of this is overseen by the ADON Team, reporting to the Director of Nursing. In addition, the ADONs oversee the accuracy of our records and all payments to staff. It is also important for staff to understand that Nursing Management are available to support all clinical staff on a day-to-day basis.

Clinical House Manager

The development and expansion of the Clinical House Manager role has continued to evolve providing house management cover during core and out of hours. This service is invaluable and a great support to both the management and Unit staff.

New Developments

DIABETIC SERVICE

The Diabetes Nurse (0.5WTE) post commenced in NRH in January 2021. A total of 110 patients with a background medical history or new diagnosis of diabetes were referred to the Diabetes Nurse Specialist and required this service. Development and Implementation of evidence-based Standard Operating Procedures and guidelines in the management of Diabetes, as well as staff education, were the priorities of 2021. The Diabetes Service, including comprehensive diabetes assessments, has been an invaluable addition to our nursing services in 2021. Training is also provided to all NRH registered nurses on use of safety needles for insulin administration, blood glucose and ketone monitoring safe practices.

TISSUE VIABILITY SERVICE

Tissue viability is an umbrella term which may include acute and chronic wounds. The NRH tissue viability service includes pressure injury prevention, wound management and staff training, as well as participation in audits and research. The role of the Tissue Viability Nurse is to develop and maintain an efficient service for patients, families and the Interdisciplinary Team to prevent potential tissue damage, as well as advise on current wounds. Prior to the commencement of the Tissue viability service in February 2021, patients with pressure injuries or other wounds were reviewed by designated staff who had tissue viability qualification. 196 patients were individually assessed in 2021 and follow up reviews were continued up to wound healing. The service implemented evidence based standard operating procedure for clinical photography; standardisation of wound dressings; wound dressing aseptic technique; and collaboration with Nurse education providing training to students on placement on wound management and pressure injury prevention. A Patient Information leaflet on pressure injury prevention were developed in collaboration with Nurse education department as part of QIP on pressure injury prevention. The service hosted an awareness day for NRH patient and staff to promote pressure injury prevention.



THE RESUSCITATION DEPARTMENT

The Resuscitation Department within the NRH is responsible for the delivery of both Basic and Advanced Life Support Training to all NRH Employees. It is an affiliated Training Site of the Irish Heart Foundation ensuring standardisation of CPR Training in line with national and international standards. The Department also guides policy and resuscitation practice under the governance of the NRH Cardiopulmonary Resuscitation Committee, monitoring and directing implementation of the National Early Warning Scoring System, Do Not Attempt Resuscitation Orders, ensuring Standardisation of Emergency Equipment, running Workshops and Simulations, and auditing Outcomes and Practice. To further promote and develop each of these areas the Post of Resuscitation Officer was sanctioned and the newly appointed Resuscitation Officer commenced in post in July.

Meanwhile, throughout 2021 Cardiopulmonary Resuscitation (CPR) Courses continued, incorporating the measures that COVID 19 Safety Restrictions demanded. A resilient team of Instructors offered a suite of courses which varied between on-line education sessions with short classroom-based assessment workshops and full classroom sessions covering both Basic Life Support and Advanced Life Support Skills. A plan for the acquisition of new training equipment to facilitate one-to-one skills practice was proposed. December 2021 saw fulfilment of Phase 1 of this proposal, and Phase 2 will follow in 2022.

Building on the existing Training Framework, scheduling for 2022 is in progress with a variety of courses on offer to suit the increasing numbers and diversity of patients and staff members.

Education sessions, Assessment and Audit of the National Early Warning System is essential as these steps continue to influence patient outcomes. Participation in joint ventures, such as membership of The Deteriorating Patient Committee, a joint venture between SVUH and NRH will assist with benchmarking, and promotion of the best practice guidelines in patient care.

Standardisation of emergency equipment and skills transfer are key components required to provide a service in emergency situations as both medical, nursing, and paramedical staff rotate between Units and Facilities. The Resuscitation Department will commence a review of documentation, equipment suitability, training needs and compliance in early 2022. The findings will inform further projects throughout the year.

Acknowledging the great work and commitment throughout the Infection Prevention and Control team, clinical staff and all staff who assisted with the extra education required for correct use of PPE. We acknowledge the number of staff who continue to redeploy to different departments to assist with the increased workload during this time. The norm during 2021 continued with virtual team meetings and teleconference calls.

Post Graduate Education

Congratulations to all who pursued post graduate education and who were successful in completing this year.

Best wishes to our retirees William Murray and Michael Byrne.

We would like to acknowledge the staff who have lost family members in the last year and were unable to travel home our thoughts are with them and their families. We also remember the deceased Staff and Patients in 2021, and their families, they are forever in our thoughts.

Infection Prevention and Control Department

DR LAURA RYAN
CONSULTANT MICROBIOLOGIST

The Infection Prevention and Control (IPC) team consists of Dr Laura Ryan, Consultant Microbiologist, Asha Alex, IPC CNM III and Maya Tom, IPC CNM II. The IPC team oversees infection prevention and control in the NRH, however infection prevention and control is everyone's responsibility. The IPC team aim to provide a safe environment for all patients while they participate in a full rehabilitation programme in the NRH.

Monitoring and surveillance

The IPC team continuously monitor cleaning standards with regular audits of the environment and patient equipment. Audits on compliance with care bundles are also frequently monitored. Results of audits are fed back in real time to the Unit staff and also to the Hygiene and Infection Prevention and Control Committee (HIPCC) and Quality, Safety and Risk (QSR) Committee.

Surveillance forms a crucial component of infection prevention and control in the NRH. As the majority of our patients are admitted from other healthcare organisations, large numbers of patients are already colonised with a Multidrug Resistant Organisms (MDRO) on admission. We endeavour to ensure all patients with an identified MDRO are monitored and cared for with appropriate transmission-based precautions to limit the spread of resistant organisms in the NRH. Monthly updates on surveillance figures are reported to the HIPCC. The IPC team also now participate in the National Surveillance Programmes (National Enhanced Clostridioides difficile Surveillance) and submit relevant Key Performance Indicator (KPI) data to HSE Acute Business Intelligence Unit monthly.

Outbreaks of infection or increased numbers of cases of MDRO colonisation will prompt the convening of the Outbreak Committee with the immediate implementation of appropriate measures.

Education

The IPC team provide education to all staff on hand hygiene, standard precautions and other mandatory topics, as well as other important topics such as COVID-19, catheter-associated urinary tract infection prevention, legionellosis, antimicrobial stewardship and intravascular device infection prevention training.

Challenges in 2021

The IPC team continued to provide education, training, surveillance, management of and contact tracing for COVID-19, in conjunction with other departments within the NRH, helping to ensure staff and patients were kept as safe as possible as the pandemic continued.

Innovations in 2021

The IPC team have worked on improving communication throughout 2021: developing an IPC portal on the intranet for staff to access policies and procedures; implementing IPC related icons on the PSAG (Patient Status at a Glance) board on the units to facilitate interdepartmental communication of infection status of the patient; and updating of IPC signs for individual patients on each Unit to ensure staff may comply with appropriate PPE. The IPC team also introduced multiple new audits, developed new policies and commenced new surveillance of urinary tract infections.



Sexual Wellbeing Service (SWS)

PAULINE SHEILS

CLINICAL NURSE SPECIALIST IN SEXUAL WELLBEING AND ILLNESS OR DISABILITY

The patient, with or without their partner, remains as the focus of the service with support and counselling provided in relation to the impact of the illness or disability on their sexuality, relationship, sexual function and fertility issues.

2021 was a very challenging year with the continuing pandemic and other reasons affecting the service. Despite re-deployment to work with other services, reducing the time available, the Sexual Wellbeing Service was managed effectively and any patient seeking the service was facilitated, despite on occasion there being a short delay. 146 patients were seen for one or more visits, an increase of two patients on the previous year.

External healthcare agencies continue to recognise the uniqueness of this service and regularly request training, workshops and presentations at their conferences. Unfortunately, due to COVID restrictions in 2021 these educational sessions were curtailed but some continued through online and webinar format. A series of educational talks have been completed for NRH staff and are available on the hospital Intranet.

Education Provided

Information and education sessions were provided to the following groups:

- Parents of patients in the paediatric service,
- A Women's group in the Brain Injury Programme
- A Men's group in the Brain Injury Programme.
- A Sexuality and Disability Spinal Course was delivered to staff from the NRH and Mater hospitals
- A Webinar was presented to Temple Street hospital on issues around sexuality and teenagers. An
- An in-person workshop for women with metastatic cancer was delivered in Cork for a group of over 221 attendees,
- A Webinar presented on Sexuality and living with a stoma.

Committees

The SWS Clinical Nurse Specialist also sits on the following committees: Sexual Wellbeing Steering Group, The Drugs and Therapeutic Committee, The Ethics committee, The Cardio-Pulmonary Resuscitation (CPR) Committee, and is a Staff Representative on the Board of Management.



Deputy Chief Executive June Stanley live-streaming a message to staff on the first anniversary of the move to the new hospital.

Spinal Liaison Service

SIOBHÁN O'DRISCOLL – SPINAL LIAISON NURSE

PAULA KEANE – SPINAL LIAISON NURSE

The Spinal Liaison service is a nurse-led patient focused service available to all patients in the Spinal Cord System of Care (SCSC) Programme, their families and associated healthcare professionals.

The liaison roles are fast evolving into Advanced Nurse Practitioner (ANP) roles which also incorporates Registered Nurse Prescribers, and the first ANP Roles within the NRH. ANPs practice both autonomously and collaboratively in a defined area of advanced nursing practice. A word of thanks to all those involved in bringing these positions to fruition.

The liaison service is closely linked with the NRH Nurse Education department in delivering education, particularly Neurogenic Bowel Education. Requests and demand for this course increased in 2021 and over 220 external staff nurses were educated. This course continued to be facilitated virtually and feedback from same has been extremely positive. Invaluable administration support for this course was provided by Janette Hamill, Academic Department, as well as the ICT helpdesk staff. In 2021 we delivered one in-person classroom-based Train the Trainer Neurogenic Bowel Course with 10 attendees.

As in previous years, there was an increase in the number of phone calls from patients, families and healthcare professionals seeking advice and information in 2021. Patient complexities continue to increase. Delivery of neurogenic bowel care in the community is improving, however the availability of carers to staff homecare packages has led to delayed transfers of care for some patients.

2021 LIAISON STATISTICS

- Post Discharge Phone Calls - 102
- Patients Requesting Advice and Information - 685
- Families Requesting Advice and Information - 207
- Annual Reviews - 111
- Pre-admission assessments - 50
- Health Professionals seeking advice and Information - 584
- Home Visits - 6

Siobhan O'Driscoll's liaison role has a particular focus on Respiratory issues in our Spinal Injury and Brain Injury patient populations, and the role incorporates being part of the IDT tracheostomy team which spans across all programmes to give advice and support to the treating team caring for individuals with a tracheostomy. Training on Airway management continues a weekly basis for all staff,

One of our highlights in 2021 was the discharge of our first fully ventilated patient back to their home and family. In addition to this, we conditioned this patient in the PNS (Phrenic Nerve Stimulator) very successfully that they can managed 16hrs without the ventilator.



Urology Department

PROFESSOR ROBERT FLYNN – CONSULTANT UROLOGIST

GEORGINA RICH – ACTING CNM2

CAROLINE AHERN – CLINICAL NURSE SPECIALIST NEURO-UROLOGY

OONAGH CREAN – CNM2 (TO SEPTEMBER 2021)

Urology Service

The Urology Department provides a Monday to Friday service and is available to patients from all Rehabilitation Programmes at the NRH. The majority of referrals come from the Spinal Cord System of Care. We provide a full Neuro-urology service for inpatients and follow-up post discharge. We also support in the management of other urological issues where necessary. The urology service strives to deliver patient focused and quality care and has been shaped around our commitment to providing best practice. Our clinic numbers continue to grow, while telephone calls to the department increased significantly reflecting the need for support and advice.

The Urology Department team includes Prof Robert Flynn; Oonagh Crean CNMII (to September '21); Georgina Rich, Acting CNMII; Caroline Ahern, Clinical Nurse Specialist Neuro-Urology; Edel Gormley, Urology Staff Nurse; Natasha King, Urology Administrator, and we were delighted to welcome Derek Cahill, our new Decontamination Technician in 2021.

Urology Clinics

Consultant Urologist Prof Flynn attends for two clinics per week and sees both inpatients and outpatients; procedures run in parallel with the clinics. In 2021 **434** patients attended the Consultant-led clinics.

NURSE-LED CLINICS

The Nurse-Led clinic (NLC) is a lifelong service with the majority of our spinal patients attending on an annual or bi-annual basis. The clinic includes a comprehensive assessment, phlebotomy, urine culture, renal ultrasound and Kidney, Ureter and Bladder (KUB) x-ray if necessary. Educational needs are addressed and advice is provided as part of the clinic. The NLC works very closely with the Radiology Department to provide this service. Patients present with various needs to this clinic and often require referral to the Rehabilitation Consultants, Multidisciplinary Clinics, Liaison Service, Sexual Wellbeing Service, Public Health Nurses or GPs. **778** patients attended this clinic in 2021.

URODYNAMICS CLINIC

The urodynamic clinic operates one morning per week for Outpatients. We provide extra clinics during the week to facilitate inpatients. In 2021 we performed **185** procedures.

FLEXIBLE CYSTOSCOPY INCLUDING SUPRAPUBIC CATHETER (SPC) INSERTION

This is a valuable service for our patients, who would otherwise have to wait long periods to have these procedures performed in a general hospital. We provide education and training on the routine change of a SPC for patients, family members, carers and healthcare professionals. In 2021 a total of **57** flexible cystoscopies and **9** SPC insertions were performed.

We also facilitate the Speech and Language Therapy Service to perform Fiberoptic Endoscopic Evaluation of Swallow (FEES) procedures

INTRAVESICAL BOTOX CLINIC

This is a new service which has proven very successful and valuable for our patients, who would otherwise have to wait for up to two years for the procedure in a general hospital. The service can be provided in a timely manner and the feedback has been extremely positive. In 2021 a total of **42** Intravesical Botox procedures were performed.

EDUCATION

Education is provided at each clinic and on an individual basis depending on patient needs. We also facilitate education with families, carers, and healthcare professionals by appointment and support training, education and competencies for nursing staff within the NRH.

TELEPHONE SUPPORT

Telephone communication is vital in providing support and advice to our patients, their families and to other Healthcare Professionals. Advice on bladder issues is the most common query. We received over **2,640** telephone calls from patients and Healthcare Professional seeking advice in 2021.

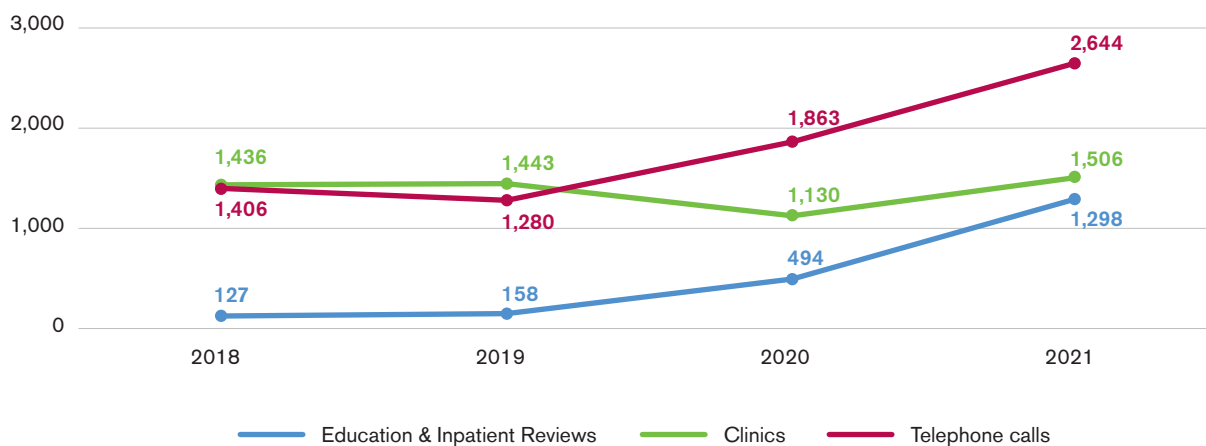
New Developments

We were delighted to see the opening of our new Endoscopy Suite in June. This included the provision of new decontamination equipment, bringing the department into line with the National Decontamination Standards.

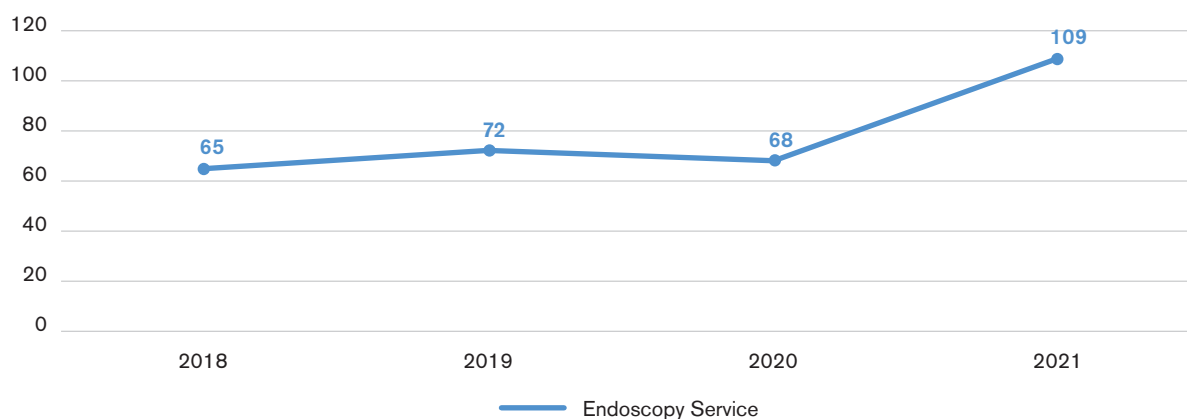
Audits

A number of audits were carried out in 2021 including: Decontamination Audit, Nurse Referral for Radiological Procedures Audit and Nurse Prescribing of Medications Audit.

UROLOGY DEPARTMENT ACTIVITY



ENDOSCOPY SERVICE





Clinical Engineering Department

DAVID FARRELL
SENIOR CLINICAL ENGINEER

Services Provided

The Clinical Engineering Department in the NRH is responsible for the provision of an in-house service and maintenance programme for medical devices equipment.

Clinical Engineering provides technical support for a diverse range of medical devices in different areas such as High Dependency Units, Pharmacy, CSSD, Ophthalmology, Urology, Phlebotomy, Radiology, and Therapy services.

Key Developments in 2021

In 2021 clinical engineering, in collaboration with the HSE's Health Business Services, successfully completed procurement requests on behalf of: Speech and Language Therapy, Fern High Dependency Unit and the Radiology Department. The successful completion of these procurement applications saw the purchase and commissioning of latest technology in the areas of non-invasive ventilation and ultrasound; and a new Speech & Language Therapy procedure room was equipped with the latest in Fibreoptic Endoscopic Evaluation of Swallowing systems.

Clinical Engineers continue to develop the HSE National Asset Management System with continued inputting of legacy and new equipment. This will be of benefit when managing the life cycle of assets, cost projection and equipment replacement. We compiled submissions for HSE's National Equipment Replacement Programme of identified unreliable and at-risk medical equipment and replacement costs.

Clinical Engineering Upgrade Initiatives in 2021

- Focussed renewal of bespoke, cost-effective toileting and showering solutions across all programmes was undertaken. As patient handling and hygiene becomes more complex, new tilt and space shower chairs and electric shower trolleys were purchased.
- Research and procurement of specialist beds and patient handling equipment was undertaken for the provision of rehabilitation healthcare of complex bariatric admissions to the NRH.
- Relocation and upgrade of the clinical engineering workshop was completed

Medical Device Activities

- In total, 447 maintenance requests were received by Clinical Engineering in 2021
- 359 work orders were closed out by Clinical Engineering and 88 work orders were closed out by external service providers.

Clinical Psychology

DR SIMONE CARTON
HEAD OF CLINICAL PSYCHOLOGY

Description of Psychology Service

The psychology team provides clinical services for patients, families, carers, and fellow health care professionals across the full continuum of care from pre-admission stage. The focus for psychology is to integrate rehabilitation as a '...way of thinking...' (Wade, 2002) with psychological theory and practice, research and education, clinical and service initiatives, and advocacy within the NRH and the wider health care community, nationally and internationally.

Summary of key new developments, milestones, and issues in 2021

2021 was a distinctive year for the NRH and the department of psychology as we continued to settle into the new hospital building and integrate into and adapt further to many new ways of working, such as working hours spread over 6 days and 8am to 8pm, and practices such as interdisciplinary teamwork, unit huddles, goal setting and developing the electronic health care record. These practices continue to be in formation, and over the last 12 months there have been improvements in many aspects of the delivery of services, and also a keen awareness of the challenges to adapt, review and 'pivot' as necessary, in order to ensure the best delivery of care for patients at the NRH. Members of the psychology department weave their clinical practice and knowledge throughout the many working groups and committees at the NRH. We endeavour to support colleagues and patients promoting a positive culture through education and training with all staff, and specific supports at a time of crisis and also COVID. For the psychology service, 2021 saw progress in the implementation of our three-year strategy with developments in clinical practices and services across the six programmes in line with the NRH strategy and national strategies.

A key milestone in 2021 was the retirement of our colleague Dr Maeve Nolan after 20 years' service to the patients and staff at the NRH. Maeve was a member of the NRH Board, a leader, especially in education on the Spinal Cord System of Care Programme, the first Academic Lead and an outstanding psychologist at NRH. Her legacy at NRH will prevail for many years and we wish her well in her retirement.

Cross Programmatic Services

Members of the psychology team continue to initiate and develop a number of projects pertinent to all clinical programmes, including the following:

- **Positive Approaches to Challenging Events (PACE):** PACE is a two-tiered (PACE I & II) training programme for all staff designed and delivered by the psychologists. It is part of the mandatory training at the NRH to support staff about how best to respond to behaviours and events that may concern or interfere with the patient's rehabilitation programme, safety and or contribute to staff stress and low morale. Using the model of Positive Behaviour Support, the objectives of PACE are to understand the potential triggers and context of behaviours and events of concern, while always ensuring a compassionate and 'no-blame culture'. Facilitating staff to attend PACE has improved with PACE I now on-line and the delivery of PACE II to specific units or programmes adapted to their needs. PACE is under the governance of the Behaviour Forum. It is informed by the 'lessons learned' from events that challenged us, and this in turn, informs our policies and practices related to behaviours and events that challenge. In 2021, the Irish Society of Chartered Physiotherapists commissioned training in PACE. Dr Sarah Casey developed a proposal which successfully secured funding through the National HSCP Office, for the delivery of a full 1-day PACE workshop in early 2022 to an external, multidisciplinary audience.



- **Patient Experience Project (PEP):** This started following a donation to the psychology department with the aim to develop psychological materials in a range of formats to capture the patient experience especially for new patients as they try to make 'sense' of their diagnosis and their life especially following discharge. PEP is designed to cater for different learning styles and are consistent with the self-management ethos of the NRH. A collaboration between the psychology department and students of film and animation from IADT, this evolving project presents a series of animations, patient stories and staff inputs on a wide range of topics relevant to living with acquired disability.

Phase 1 of this project was completed in 2020 and we now have a total of 11 animations, 9 patient stories and 9 inputs from the psychology department on topics ranging from brain health, to resilience, the role of psychology in rehabilitation and the process of adjustment. An additional two videos on the role of psychiatry and suicide awareness, presented by Dr Maria Frampton, Consultant Psychiatrist, completes the current corpus. The entire series will be made widely available to patients, families, and healthcare professionals in 2022. It is hoped they will be of value to patients, staff and professionals seeking to understand more about the experience of disability.

- **Assisted Decision-Making (Capacity) Act, 2015:** The on-going participation and contribution of personnel from psychology to the formation and now after many years the implementation of this Act into clinical practice has been considerable. In preparation for the commencement of the Assisted Decision-Making (Capacity) Act (ADMA), Dr Sarah Casey, in partnership with Medical Social Work colleagues established the ADMA Implementation Group. They commenced a staff awareness campaign and have developed an ADMA and Consent Workshop that will be piloted in early 2022.
- **Psychology-Psychiatry Colloquia:** This is a clinical time to review the psychological and psychiatric status of patients across programmes attending psychology and psychiatry. It is an invaluable time to share information and support each other caring for some very complex clinical presentations.

Professional activity

Members of Psychology Department are active members in the Academic Department through the Academic Steering Committee. Dr Sarah Casey was invited to join the Academic Steering Committee in 2021 and Suvi Dockree and Drs Simone Carton, Sarah Casey and Eimear Cunningham have continued their active contribution to the interdisciplinary Research Advisory Group within the Academic Department.

Professional representation continues at a national level. Within the Psychological Society of Ireland, Drs Simone Carton, Sarah Casey, and Hannah Gallivan are active members of the Division of Neuropsychology Committee, involved in the development and delivery of professional learning and development events, professional advocacy, and guidance for supervision in clinical neuropsychology practice. Representing the PSI Division of Neuropsychology, Dr Sarah Casey continues her role on the National Clinical Programme for Rehabilitation Medicine Working Group. Sarah is also currently collaborating with other colleagues within the Division of Neuropsychology to develop a Training and Competencies Framework for Clinical Neuropsychology in Ireland.

Research

Brennan, E. & Swords, L. (2021, October 7). Parenting With a Spinal Cord Injury: A Systematic Review of Mothers' and Fathers' Experiences. *Rehabilitation Psychology*. Advance online publication. <http://dx.doi.org/10.1037/rep0000415>

Allen, N., Hevey D., **Carton S.** & O'Keeffe F. (2001). Life is about 'constant evolution': the experience of living with an acquired brain injury in individuals who report higher or lower posttraumatic growth. *Disability and Rehabilitation*, DOI:10.1080/09638288.2020.1867654

Deirdre M Twomey, Niamh Allen, Maria L.F Agan, Aoife Hayes, Andrea Higgins, **Simone Carton**, Richard Roche, David Hevey, Nuala Brady, Jessica Bramham, Fiadhait O'Keeffe. Self-reported outcomes and patterns of service engagement after an acquired brain injury: a long-term follow up study. *Brain Injury* Vol 35, 2021 – Issue 14

Casey, S.J. & Carroll, P (2021). Sleep as a modifiable risk factor in primary and secondary stroke prevention. *Professional Diabetes and Cardiology Review*, Spring 2021, 21-24.

Cogley, C., D'Alton, P. **Nolan, M.** & Smith, E. (2021) "You were lying in limbo and you knew nothing": A thematic analysis of the information needs of spinal cord injured patients and family members in acute care. *Disability and Rehabilitation*, DOI: 10.1080/09638288.2021.1970259

Dental Service

ALASTAIR BOLES

SENIOR DENTAL SURGEON (SPECIAL NEEDS), HSE DÚN LAOGHAIRE

The Dental Unit at the NRH provides a dental service for all Inpatients of the hospital, and also for Outpatients with additional needs from the Dún Laoghaire area. The dental unit mainly offers a primary care dental service. Dental treatment for Inpatients is mostly limited to treatment that can be provided within the time available while patients are admitted to the NRH.

In 2021, Inpatient and Outpatient referrals were impacted by the pandemic. Outpatients were treated from some community residential units and local nursing homes. Onward referrals of patients being discharged from the hospital are organised to other regions of the country's public dental service as required.

Each year, students from the Dental Hospital are facilitated through observation of the Dental Service provided at NRH as part of their training.

Patients and staff welcomed the opening of the new Aquatic Physiotherapy Pools in April.





Nutrition & Dietetics

KIM SHEIL
DIETITIAN MANAGER

Despite the challenges of the COVID pandemic, 2021 was an exciting year for the department, with additional staffing secured, bringing the department complement to 5.8 WTE dietitians.

New Service Developments and Milestones

POLICY DEVELOPMENT

The NRH Enteral Feeding Policy and NRH Standard Operating Procedure (SOP) for Safe Insertion and Ongoing Care of Nasogastric Feeding Tubes were completed in 2021, along with supporting resources.

TRAINING AND EDUCATION

The department, in collaboration with the Clinical Facilitators, delivered a Train the Trainer programme for Checking Balloon Volume of Enteral Feeding Tubes. Fifteen nurses completed the training. Training in the use of nutritional screening tools was incorporated into the nursing induction programme. The dietitian delivered training in Parenteral Nutrition to medical, nursing and pharmacy staff.

PARENTERAL NUTRITION

In 2021 the first ever paediatric patient requiring parenteral nutrition was admitted to the NRH. This is a specialised form of nutritional intervention required by patients who cannot be fed by the intestinal route. The dietitians played a central role in organising the patient's nutritional needs, delivering staff training, and developing draft policies and SOPs.

OUTPATIENT SERVICE

In 2021 a small number of Outpatient consultations were carried out remotely. An Outpatient enteral feeding clinic pilot commenced in late 2021.

Resource development

A range of resources to support the safe management of patients were developed, including:

- Carbohydrate counting guide to assist patients with Type 1 Diabetes in making appropriate food choices from the NRH menu.
- Pictorial guide to Healthy Eating to facilitate patients with literacy and communication difficulties.
- Nutrition sections of Spinal Cord Injury patient education booklets on bowel, bladder, and skin care.
- Ready Reckoner for Estimating Actual Weight in Amputees.

Committees and Working Groups

The Dietitians are active participants in the following: Diabetes Steering Committee; Nutrition & Hydration Steering Committee; Enteral Feeding Working Group; Research Advisory Group; Parenteral Nutrition Planning Group; Stroke Education Working Group.

National Participation

The NRH dietitians convened a national interest group for dietitians working in the neurorehabilitation. The inaugural meeting took place in September 2021. The aim of the group is to develop the speciality of rehab nutrition, to support those working in the area and to develop national patient resources, guidelines, and standards of care.

The dietitians participated in updating the INDI Nutrition Support Reference Guide, used by dietitians across all clinical settings in Ireland.

Occupational Therapy

LISA HELD AND MICHAEL BROGAN
OCCUPATIONAL THERAPY MANAGERS

EDWINA WALSH
DEPUTY OT MANAGER

We thank all Occupational Therapy staff for their phenomenal commitment to our patients throughout a remarkably challenging 2021, and for their ability, despite high levels of Covid-related staff absence, to progress services with many patient-centred developments during the year. Our department's mission is to lead in advancing the services of the NRH by enhancing patient's participation in meaningful occupations as part of their journey through evidence-based practice, innovative research, and education. We are incredibly proud of the progress made in services which OTs across the NRH have influenced.

Overview of Occupational Therapy Services

Occupation is any activity that a person needs to, wants to or is expected to do during the course of their everyday lives. Occupational Therapy (OT) helps people participate in everyday meaningful activities and promotes health and well-being, through occupation.

Occupational Therapists (OTs) analyse the physical, mental and social components of an activity, and adapts the activity or the environment to suit the person's needs. OT helps a person learn new skills with or without assistance or adaptive aids. OT programmes are goal-orientated and designed specifically to meet the unique needs of each patient through individual and, or group sessions designed to focus on physical, cognitive and behavioural rehabilitation. Interventions include personal care, home and community skills training, self-management, patient education and family training.

The OT service provides comprehensive services to patients from all clinical rehabilitation programmes at the NRH, namely; Brain Injury; Stroke; Spinal Cord System of Care; Prosthetic Orthotic and Limb Absence Rehabilitation (POLAR), and Paediatric Programmes. OT activity specific to each of these programmes is outlined in Section Two of this report.

OT Service Developments and Initiatives during 2021

- **The OT Department Strategy** – The four pillars of the OT Strategy below have continued to be central to influencing how OT staff have contributed to all opportunities throughout 2021 to enhance NRH services, enable IDT working and contribute towards influencing meaningful patient outcomes. There are examples throughout the individual service reports below.
- **Workforce Planning** – 2021 provided a much-awaited milestone for the OT Department with the introduction of Clinical Specialist positions across all clinical Programmes. We are closely monitoring the impact of the ever-changing dependency levels of our patients and annual leave on the requirement for accurate work force planning.
- **OT Manager Capacity** – OT Managers have continued to advocate for the increased capacity required to manage and support 46 staff based in 17 locations in the NRH, and manage related services safely and effectively.
- **New Hospital Development** – As our teams are well settled into their units and services in the new NRH building, 2021 has provided the opportunity to reflect on lessons learnt from the transition to the new hospital environment, to inform the function of spaces throughout phase 2 of the project. We are eagerly contributing to the schedule of accommodations which will inform the design of how treatment spaces will be incorporated into phase 2 for both inpatient and outpatient services.
- **Assistive Technology (AT) Service** – The Assistive Technology Clinic has expanded significantly. Huge credit goes to the staff who work in this service and continue to advocate for the use of AT so creatively in supporting the rehabilitation of our patients. The Assistive Technology (AT) Clinic offers a service to inpatients and outpatients at the NRH to explore access to use of: Alternative and Augmentative Communication (AAC); Computers, Laptops, Tablets and Phones; and Environmental Control Systems (ECS).



- **IDT working** – OTs within Unit and service teams have continued to influence how 'Occupation' is central to how we support our patients using a 24/7 approach to rehabilitation. Group interventions across all programmes have been worked into patients' typical routines and have influenced how we meet our patients needs in a more meaningful way. The IDT framework continues to provide a structure for how we can work together effectively to achieve best patient outcomes.
- **Shared learning opportunities** – Structures in place to promote sharing of knowledge, skills, and experiences across the OT department were reviewed in 2021 by our CPD committee and additional opportunities have been created as adjuncts to staff grade rotations across all programmes, with new opportunities expanding to spend sessions in Outpatients, Assistive Technology and Practice Education.
- **Powered mobility working group** – This group has continued to collaborate with the CRC and embed pathways into our practice to ensure best practice and consistency in approach in providing our services to patients in need of powered mobility.
- **Referrals Project**– This project continued to enable continuity of service and ease of communication given that OT staff numbers have increased and now work across 17 locations in the hospital. OTs across all services have worked with the Electronic Patient Record project team to influence the design of the new system.

Outpatient Occupational Therapy Service

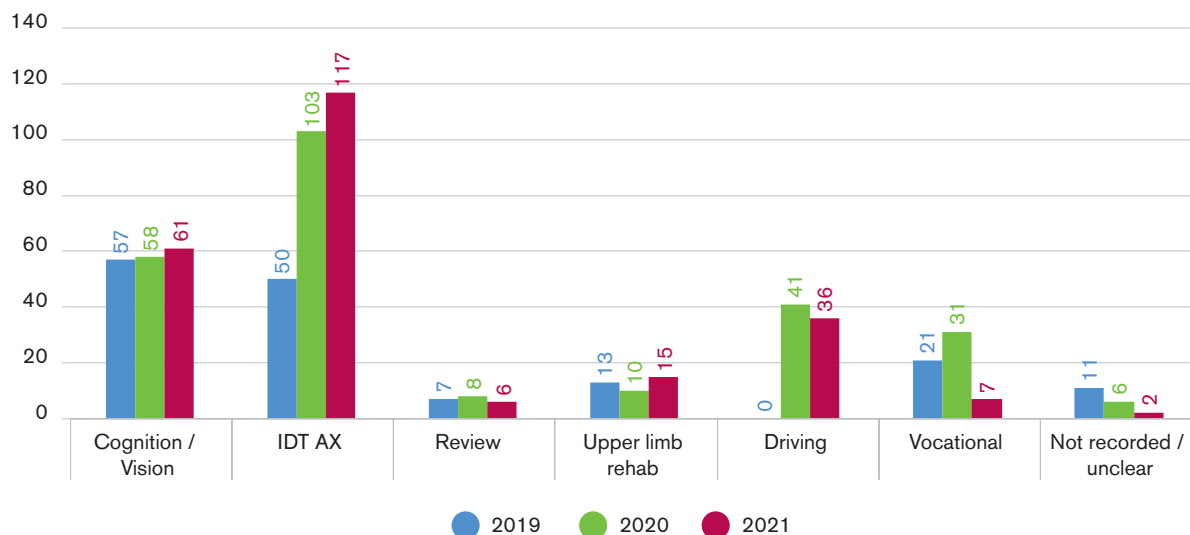
SERVICES DELIVERED BY THE OUTPATIENT OT SERVICE INCLUDE:

- Individual and Joint Interdisciplinary assessment and treatment
- Groups interventions; Meet and Teach, GRASP, Making the Most of Your Memory, Open Mic
- Multidisciplinary clinics
- Driving off-road and on-road assessment



Powerlifter Shannon Pollock provides a demonstration to patients and staff in the new Sports and Exercise Physiotherapy Department.

PRIMARY REASON FOR REFERRAL IN 2021



SERVICES

DELIVERED ACROSS ALL NRH PROGRAMMES (CROSS PROGRAMMATIC SERVICES)

- Discharge Liaison Occupational Therapy (DLOT)
- Driving Assessment and training
- Horticultural Therapy
- Practice Education
- Splinting
- Woodwork
- Wheelchair and Seating
- Vocational Service

DISCHARGE LIAISON OCCUPATIONAL THERAPY (DLOT)

There was a welcome uplift to the staffing in the DLOT service as a result of the workforce planning project. A staff grade OT joined the team in 2021 and also an OT Assistant to provide assistance on visits, management of the equipment store and also in the delivery of equipment to patient's homes. The DLOT service received 81 referrals and with 10 active patients from the previous year, the total number of patients who received input was 91. The majority of these patients had a weighting of 3 reflecting the intense input required to facilitate their discharge to home through home visits, equipment provision and housing adaptations. 7 patients had day of discharge IDT visits during the year which was a continuation of an initiative from the previous year and continues to be of great benefit in facilitating discharge and quality outcomes for the more complex patients where indicated. 77% of the patients referred to the service were discharged home in keeping with the wider hospital KPI for discharge. The average number of home visits per week is 15-20 visits with a total number of 196 visits in 2021.

OT DRIVING SERVICE

Fully licenced drivers across all inpatient programmes have the opportunity to explore a return to driving. OT coordinate referrals with input from the medical team and the Irish Wheelchair Association. Office-based pre-driving screens and on-road functional assessment and driving rehabilitation is available for medically appropriate patients. The IWA is available on-site two days a week. Outpatients with visual or cognitive changes can be referred to Outpatients. The IWA have centres nationwide that focus on teaching people with physical difficulties to drive. A total of 151 patients were referred for on road assessment from all programmes in 2021.



HORTICULTURAL THERAPY SERVICE

Covid 19 restrictions continued to affect every aspect of the hospital including the OT garden, nonetheless it continued to flourish. Patient attendance was maintained by working with smaller groups and 1:1 sessions. Links were maintained remotely and in-person with GIY, Festina Lente, Thrive and with the steering committee of Social, Community and Therapeutic Horticulturalists Ireland. NRH Horticultural Therapist, Rachel, was interviewed for GIY's "Food Done Right – in care" podcast series. The Therapeutic Recreation service volunteers facilitated weekend gardening groups in the OT garden. Sincere thanks to our volunteers whose generous contribution to our garden cannot be overstated.

PRACTICE EDUCATION

The Practice Education team consists of two Senior OTs and in 2021 a staff grade OT joined the team for four hours a week to support with student development as part of their rotation. This also allowed a staff grade to develop their own skills and competence in the area of student education. In total NRH facilitated 36 OT student placements for students from Trinity College Dublin (TCD), National University of Ireland Galway (NUIG), and University of Limerick (UL). Both Practice Education OTs provided teaching sessions in the Universities. Resources were developed to support students with professional communication whilst on placement, with tutorials and the creation of modelling and simulation video clips. The senior OTs participated in the reaccreditation of TCD with the Association of Occupational Therapists Ireland (AOTI), and NUIG's CORU reaccreditation. They attended the HSCP PECNET and INHED conference and presented on 'New Student, New Hospital, New Pandemic; Challenges & Opportunities'.

SPLINTING CLINIC

This clinic is run jointly by Occupational Therapists and Physiotherapists who work with patients following SCI or illness to optimise their ability to participate in meaningful everyday activities ranging from personal care, home and community activities to vocational and leisure pursuits. OTs support patients in discharge planning arranging for assessment of the home environment and recommendation of equipment required to maximise independence and safety.

WOODWORK SERVICE

Due to recruitment challenges the woodwork service was unfortunately unavailable for much of 2021 however we were delighted to welcome our new Senior Woodwork Instructor in the latter part of the year. We look forward to seeing his influences on the woodwork service to best benefit the patients as he will work as part of the Interdisciplinary Teams across all Programmes.

WHEELCHAIR AND SEATING CLINIC

The NRH Wheelchair and Seating Clinic (WSC) is an interdisciplinary, cross-programmatic service, run jointly between the Occupational Therapy and Physiotherapy departments. Key developments for the clinic in 2021 included: Revision to scope of service and referral pathway to seating clinic and revision of the Referral Form; New pressure mapping equipment received; and staff presented at the Spinal Injuries Ireland conference. Key Issues included: Impact on staffing due to unplanned leave; Delays in equipment delivery due to Brexit

VOCATIONAL SERVICE

The Vocational Service provides vocational interview, assessment, review, advice and recommendations related to vocational needs of NRH Inpatients, Outpatients, clients from the Rehabilitation Training Unit (RTU) and older children in the Paediatric Programme. It includes ergonomic advice, work site visits and ongoing support on return to work. External referrals come through NRH Consultants and from other hospitals and facilities. In addition, the service undertakes medico-legal vocational assessment reports and reviews on behalf of the NRH.

Patients and Staff in a friendly wheelchair basketball competition in the new Sports Hall.



Summary of Key Issues for the OT Department during 2021

- **Staff Capacity:** We welcome the hospital's planned focus on examining further how staff capacity is used and reported to ensure we optimise patient care whilst allowing staff capacity to contribute and lead service developments. The NRH is an innovative environment, and we thrive to balance the potential for project developments with individuals capacity to contribute.
- **Supporting the Implementation of Max Rehab (Maximising Rehabilitation Opportunities):** The OT department has welcomed and contributed to the Max Rehab project which is studying the implementation of Monday – Saturday working, 8am-8pm. A lot has been learnt through 2021 and we look forward to influencing how this more flexible way of working can enhance the service for patients across all programmes.
- **Recruitment and Leave cover:** the lack of cover for planned or unplanned leave, including gaps with recruitment has been very challenging in terms of service continuity.
- **Manager capacity:** We welcome the uplift of 0.5 WTE OT Manager in Charge 1 and look forward to further discussions to ensure our complement of 46 staff in the OT department and related expanding services can be safely and effectively supported and managed by further uplifts in OT Management capacity.



Pharmacy

SHEENA CHEYNE
CHIEF II PHARMACIST

The Pharmacy Department continued to ensure a safe and efficient use of medications throughout the hospital, including the COVID-19 vaccines for staff.

Overview of the Comprehensive Pharmaceutical Service Provided

The Pharmacy Department:

- Provides Medication reconciliation of all admission and discharge prescriptions ensuring accurate medication list at transitions of care.
- Procures, stores, and supplies all medication in a safe, effective, economic, and timely manner.
- Provides medication review of all prescriptions to optimise medication therapy.
- Attends Consultant rounds to advise proactively on medications at point of prescribing with the patient.
- Many interventions were made to improve patient care and directly reduced harm to patients.
- Participates in a weekly antimicrobial stewardship round with the Consultant Microbiologist ensuring the appropriate use of antimicrobials.
- Negotiates with drug company representatives to obtain the best price for medications.
- Monitors the expenditure on medications, producing quarterly reports to the Units, Consultants, and Programme Managers.
- Completes annual stocktake of all medications and feeds.
- Dispenses medication for patients for therapeutic leave home – this service is increasing steadily as COVID-19 restrictions ease
- Dispenses individualised medication for in patients.
- Liaises with community pharmacies and other hospitals regarding supplies of unusual, 'high tech' and unlicensed medications.
- Presents an interactive workshop for all new doctors to help with safe prescribing.
- Answers medical information queries from all members of the staff.
- Closely liaises with other departments such as Nutrition and Dietetics, Speech & Language, Sexual Wellbeing, and Urology.
- Supports nurse prescribers.
- Educates patients and carers on their medications prior to discharge and provides patients with their individual medication list.
- Reports Incidents monthly to Risk Management for inclusion in NIMS (National Incident Management System).
- Dispenses prescriptions to staff for the convenience and cost savings to staff.

Milestones in 2021

Milestones achieved and Pharmacy Department Activity during 2021 included:

- Involvement in Covid 19 vaccination clinics ensuring safe medication practices including storage, supply, procedures and documentation for reconstitution and administration of vaccines.
- Planning and signing off of plans with the architects and the Health Planning Team for the new pharmacy department.
- Ensuring safe work practices were maintained throughout the cyber-attack on the national health system.
- Involvement in CRMS (Clinical Rehabilitation Management System) workshops for medication management and electronic healthcare record.
- The Drug and Therapeutics Committee produced and reviewed clinical procedures such as botulinum toxin intravesical administration and the Hypoglycaemic protocol. The Committee also produced newsletters about the Guide Doc app and staff prescriptions.
- Guide Doc maintenance, including review of all IV monographs was carried out. Guide Doc was also expanded to include Electrolytes- hypo/hyperkalaemia, hypocalcaemia, hypomagnesaemia, hypophosphataemia, Medication Safety, Emergency medications and Diabetes.
- Medication Safety Champions increased awareness and an information stand was hosted on World Medication Safety Day in September.
- Pharmacy staff participated in an Antimicrobial Awareness Day event and the production of the first NRH Antimicrobial newsletter, and participated in the National Antimicrobial Point prevalence audit.
- Meropenem usage data was provided for National Data consumption.
- Annual aggregation on medication incidents was reported to NIMS in collaboration with the Risk department – results show that all incidents were 'near miss' or 'no harm' due to the vigilance of the pharmacy department. All medication related incidents are reviewed and reported quarterly to the Quality and Safety and Risk Committee (QSR)
- Pharmacy staff presented a multidisciplinary session on Pain at the Spinal Injuries Ireland annual conference.
- As a medication safety initiative, a new Unit trolley process was implemented ensuring the Medication Prescription Administration Record (MPAR) is available on the Units. Medication storage areas and stock lists were introduced on the Units and the Unit Emergency medications replenishment process was streamlined.
- Development and training for a Clinical Pharmacy SOP and Trolley Top-Up SOP to improve services was undertaken, as well as training provided for Pharmacy HCA Cover.
- Audits of the medicinal fridges, 'out of hours' requests, VTE assessment, Opioid patches recording in MPAR and Unit MDA were completed.
- Therapeutic leave guides for nursing staff were produced. Education as a fundamental part of the Stroke Unit function was introduced and Pharmacy staff participated in the introduction of the Education Checklist and Theme of the Week.

I would like to thank all the pharmacy team for their enthusiasm, initiative, dedication, and commitment in providing the pharmaceutical care to all staff and patients in the NRH.



Physiotherapy

ROSIE KELLY
CATHY QUINN
PHYSIOTHERAPY MANAGERS

The Physiotherapy Department is driven to provide the best clinical practice and the highest standards of care based on national and international practice in rehabilitation. The Physiotherapy services are provided across the interdisciplinary teams (IDT) to provide a better patient experience and to maximise patient outcomes.

Specialist Physiotherapy rehabilitation is delivered by expert staff across core Clinical Programmes as follows:

- Brain Injury Programme including Prolonged Disorders of Consciousness (PDOC)
- Stroke Specialty Programme
- Spinal Cord System of Care including ventilated patients
- Prosthetic Orthotic and Limb Absence Rehabilitation (POLAR) Programme including Day-patients
- Paediatric Family-Centred Rehabilitation

Physiotherapy activity relating to the above programmes is detailed in the Programmatic Reports in Section 2 of the Annual Report.

Physiotherapy Services delivered across all Rehabilitation Programmes

The Physiotherapy Department provides specialist treatment across all programmes and adjunct services engaging with interdisciplinary teams which include:

- Respiratory
- Aquatic Physiotherapy and Sports & Exercise Physiotherapy
- Vestibular Rehabilitation
- Physiotherapy Outpatient Service
- Clinical Practice Tutor
- Therapeutic Recreation Service
- Wheelchair & Seating Clinic
- Splinting
- Patient and Non-Patient Handling Co-ordinator

RESPIRATORY SERVICE

High quality respiratory physiotherapy treatment was delivered to patients. Training delivered to physiotherapists, nursing, NCDHs and other IDT colleagues included: ventilator training, NIPPY 4+ competency training; on-call respiratory training for physiotherapists (including 8 new starters); cough assist training; tracheostomy training for new NCHDs in conjunction with the Tracheostomy Team, phrenic nerve stimulator (PNS) and carer training for those discharging back to the community. Due to Covid 19, training took a hybrid form with in-person and virtual sessions.

Respiratory physios were integral to the first successful discharge home of a ventilator dependent patient as part of the SCI Integrated Care Pathway. Treatment of patients with respiratory insufficiency on the Brain Injury Programme included review of patients with Prolonged Disorders of Consciousness (PDOC) and significant swallow and communication impairment. Respiratory physio, alongside the IDT facilitated the successful decannulation of a PDOC patient and continued to support SLT Fiberoptic Endoscopic Evaluation of Swallowing (FEES) clinics. The therapists also provided outreach as part of a pre-admission assessment to patients with complex needs.

A service development project was completed by staff grade physio to introduce professional development framework for respiratory rotation. The senior physiotherapist was involved in audit of tracheostomy patients in conjunction with Speech & Language Therapy (SLT) and completed updating the on-call SOP in conjunction with relevant stakeholders.

AQUATIC PHYSIOTHERAPY AND SPORTS & EXERCISE PHYSIOTHERAPY

Aquatic Physiotherapy and Sports & Exercise Physiotherapy provide a cross programmatic service including both adults and children from all clinical programmes, and a limited outpatient service. 2021 was a year of significant triumphs and change for the Sports Exercise and Aquatic Physiotherapy Department. Early in 2021, the new Aquatic Physiotherapy Department was opened. Patients can now avail of Aquatic physiotherapy sessions in a new state of the art Therapy pool, as well as swimming lessons.

2021 saw the welcome return to team sports and the 8th Annual NRH Sports Championship was held in November. The event was open to all NRH Adult Inpatients and RTU trainees for the first time in 2021. The event welcomed the involvement of new stakeholders from Acquired Brain Injury Ireland and Swim Ireland. The Prize giving was attended by Paralympians Athletes Kerrie Leonard (Archery), Gary O'Reilly (Para Cycling) and Nicole Turner (Swimming). Plans are already being made for 2022 which will see the inclusion of new activities such as virtual handcycling, which has been made possible by the generous fundraising of ex-patient Mark Rowan, who completed a 730km handcycling.

VESTIBULAR REHABILITATION

In 2021, we were delighted to appoint a permanent 0.5 Senior in Vestibular Rehabilitation, after a gap of several months in the service provision. As the NRH is a unique healthcare setting for rehabilitation of complex neurological cases, vestibular rehabilitation, education, and research is a core service component for this cohort of patients. It will contribute to the NRH specialist neuro-rehabilitation services to address the prevalence of vestibular dysfunction, particularly within the Brain Injured population. The ability to diagnose and manage vestibular dysfunction as a clinician is a specialist skill requiring specialist training and significant clinical experience which is available as part of the NRH 'Expert Staff' strategic pillar.

OUTPATIENT PHYSIOTHERAPY

Throughout 2021, the Outpatient physiotherapy service conducted a hybrid service with in-person and virtual appointments in light of ongoing COVID restrictions. An additional senior was temporarily allocated to OPD to manage IDT wait list for 5 months. The need was identified for patient access to online Pilates classes following their participation with therapist led classes at the NRH, and there was also a need identified for an MDT Brain Injury clinic in Outpatients. A milestone for the department included an Equipment Day organised in the Outpatient Programme to further therapist's knowledge of advances in rehabilitation technology. This led to the request for new equipment for the Outpatient Programme therapy services to enhance patient service.

CLINICAL PRACTICE TUTOR

The NRH is affiliated with Trinity College Dublin (TCD) and University College Dublin (UCD). The physiotherapy tutor works very closely with both universities to facilitate undergraduate physiotherapy placements. In conjunction with medical, occupational therapy, nursing and speech and language therapy tutors, interdisciplinary teaching is emphasised and regularly facilitated within the NRH. Many physiotherapy students comment on the positive learning environment that is cultivated in the NRH. This year the physiotherapy tutor has provided external lectures in TCD and UCD on spinal cord injuries and acquired brain injuries. The tutor has also assisted with teaching and assessing many neurological practical sessions in UCD. 42 student placements were taken on within the year. Challenges with Covid 19 were overcome by on-line teaching and devising creative solutions to teaching structures.

THERAPEUTIC RECREATION SERVICE

Therapeutic Recreation Service (TRS) focuses on intervention for all adult in-patients who face specific challenges engaging in recreational pursuits. The aim is to improve patients' functional independence, social participation and community integration.

2021 highlights include:

- Workforce planning resulted in securing and permanency for the 0.5 WTE temporary recreation therapy post.
- Extension of a 0.5 WTE Tús placement worker and Introduction of an additional 0.5 WTE Tús placement worker to assist with evening and weekend activities for patients.
- Increased group activities for patients on weekend evenings and bank holiday Mondays, in response to patients' feedback requesting more recreational activity around these time periods.
- The safe return of group activities previously suspended due to the pandemic including social sporting and music activities Boccia and the National Concert Hall Musicians' concerts.



WHEELCHAIR & SEATING CLINIC

The NRH Wheelchair and Seating Clinic (WSC) is an interdisciplinary, cross-programmatic service, run jointly between the Occupational Therapy and Physiotherapy departments.

Some challenges through the year were:

- Lack of cover for unplanned leave
- Increased delays in equipment delivery

Some key developments in 2021 were:

- Revision to scope of service and referral pathway to seating clinic
- Revision of Seating Clinic referral form
- Staffing uplift of OT staff grade from 9 hours per week to 0.5 WTE
- New pressure mapping equipment received
- Presented at Spinal Injuries Ireland conference
- Attended webinars and product training on moulded seating

SPLINTING

Splinting is a Cross-Programmatic Service which operates one morning a week, receiving referrals from inpatient and outpatient NRH services, Community Services and self-referrals from past patients. The team provide an interdisciplinary, cross-programmatic inpatient service. During the pandemic the team provided inpatient and outpatient services in separate buildings to comply with covid restrictions. Brexit brought challenges resulting in the clinic not receiving equipment in a timely manner causing intermittent shortages of available splinting products. Collaboration with external stakeholders was ongoing to achieve timely person-centred services including NRH Outpatient therapists, Peamount Hospital, Ability Matters Ltd and individual outpatients, and their families and carers.

PATIENT AND NON-PATIENT HANDLING

The Patient & Manual Handling Coordinator proved crucial in providing a consistent responsive service for the assessment of patients across all areas of the hospital in addition to the provision of statutory training each week. We continued to work closely with staff to ensure that all new nurses were provided with Patient Handling and Hoist and Sling training during their initial two-week induction period.

A priority goal for 2021 was to establish an in-house ergonomic assessment service in collaboration with our colleagues in Occupational Health and our Environmental Health & Safety Officer. This service began in Q2 and has worked well to provide assessment and recommendation to staff in relation to the use of Display Screen Equipment (DSE). In collaboration with the Environmental Health & Safety officer, a video was prepared for the Health Management Institute's Virtual Annual Conference in April 2021. This video sought to provide ergonomic tips and DSE guidance for healthcare workers who may be working from home during the pandemic.

The service also took on the Occupational Physiotherapy Service previously facilitated by outpatient staff but without dedicated hours. This has allowed for a more consistent service. Statutory Patient Handling & Manual Handling training continued throughout 2021 in person with strict adherence to COVID 19 control measures.

Milestones and Issues for the Physiotherapy Service 2021

The ongoing challenges of maintaining several large and dynamic services through the pandemic took a significant toll on staff and management in 2021. The physiotherapy staff were again, commendable in their dedication, commitment and flexibility throughout the year, continuously adapting to changing circumstances that were associated with COVID-19. The staff continued to work well in Unit teams using the IDT & programmatic models while continuing to explore ways to maintain professional autonomy.

The opening of our new, state of the art Aquatic Physiotherapy facility was an exciting development for the department and the hospital during such a difficult time. There was a great opportunity to showcase this fabulous facility during this year's NRH Sports Championships.

As we adapt within the new hospital environment, we continue to work on the brief for Phase 2 which will focus on therapy requirements, Outpatient Services and the remaining services required to move over from the Cedars building.

As part of the NRH strategic plan under the project of Max Rehab (Maximising Rehabilitation Opportunities), the extended working week was introduced with physiotherapists working across six days, including Saturdays.

There was a significant change in staffing throughout the year with some long-term leave that impacted on the physiotherapy service. The cancellation of planned social events and work celebrations has had a significant impact so we hope to engage in team socialising and celebration events in 2022.

The department continued to engage with the Electronic Patient Record project throughout the year and are excited to work with two colleagues, Kate Curtin and Paul Griffin, who have been seconded to the project.

We embarked on a very exciting collaboration with UCD resulting in a training module with the Ekso device (Exoskeleton) for three of our staff which was carried out on site. We currently have this device on loan and are using it with patient cohorts as appropriate. Training will continue in 2022 and it is hoped that this device will form an important part of our Clinical Modalities suite in Phase two of the hospital redevelopment.

We would like to extend our thanks to staff in the Department for their continued support and dedicated teamwork. Their commitment to the services, and to each other, helped us through in the face of some very challenging circumstances. We hope that 2022 will bring a renewed energy to us all and we look forward to a return to a more normal working environment.

Jane Lynch, Cathy Quinn and Rosie Kelly in the Aquatic Physiotherapy Pool which opened in April.





Psychiatry – Liaison Service

DR MARIA FRAMPTON
CONSULTANT PSYCHIATRIST

The Liaison Psychiatry service provides assessment, evaluation and treatment of mental health problems across all NRH adult programmes. Some patients have a previous history of mental illness, others develop mental illness as a direct consequence of their acquired injury. Patients may be referred as part of a risk assessment if there is a concern there is a risk to themselves or others. Others may be referred for a medication review or a capacity assessment.

The number of new referrals has almost doubled in the last 5 years, in part owing to an increasing awareness of mental health problems but also due to the increasing survival rate following complex trauma with subsequent ever more challenging physical and psychological sequelae.

Nature of psychiatric illness in rehabilitation

There is widespread evidence of increased prevalence of mental illness, ranging from 20-60% in patients who have sustained a brain or spinal cord injury. The most commonly treated conditions in this group are anxiety, depression and addiction, and personality and behaviour disturbance as a consequence of brain injury. It is well recognised that risk of suicide is increased up to four-fold in persons who have sustained a brain or spinal cord injury. The physical (loss of body function, dignity and personhood) and psychological (loss of future hopes and dreams for relationships, employment and being) consequences of brain and spinal cord injury can have a devastating impact not only on the individual themselves but also their extended family.

REFERRAL AND TREATMENT PROVIDED:

Reasons for referral to liaison psychiatry fall into two main categories: 1. Having a previous history of mental illness prior to rehabilitation and 2. Developing mental health difficulties, either as a direct result of trauma, or as a consequence of hugely altered life circumstances, following injury or trauma. Mental health issues may significantly affect a person's ability to engage in therapies, thus impacting on their rehabilitative outcome, hence the importance and value of early mental health intervention during the period of Inpatient rehabilitation.

INTERVENTIONS OFFERED

- One-to-one biopsychosocial assessment, diagnosis and a management plan for the duration of a person's Inpatient stay and beyond through consultation with GPs, community mental health teams, psychiatrist colleagues and voluntary organisations.
- Review of existing medication regime and supplementation, adjustment and monitoring when necessary.
- Gathering of collateral history from family members and health professionals.
- Joint assessments with members of the interdisciplinary team including speech and language therapists, psychologists, occupational therapists and social workers. Also, liaison with nursing staff, health care assistants, music and art therapists, physiotherapists and chaplaincy are very valuable components of 'whole person' care.

The care approach is patient-centred and evidence based with a strong commitment to best practice. Liaison psychiatry in the rehabilitation setting prioritises patient wellbeing, re-establishing a sense of self and autonomy and sometimes a cause beyond oneself, exploring what in the individual's new life has become most important. When the future is seen as uncertain, people's goals and motives for everyday life shift completely, sometimes simply becoming comfort and companionship.

The liaison psychiatrist has participated in the Patient Experience Project, the Annual Suicide Awareness Day and regular participation in teaching for staff, undergraduate and postgraduate students within the NRH. The liaison psychiatrist has developed a protocol for managing persons expressing suicidal thoughts.

Radiology

DR BRIAN MCGLONE
CONSULTANT RADIOLOGIST

In keeping with the mission of the NRH, the Radiology Department strived to ensure each person is treated with respect and dignity and is provided with high quality x-ray services in a warm, welcoming and caring environment. Service delivery was adapted to ensure adherence to local and national infection control guidelines during the ongoing Covid 19 pandemic.

Diagnostic imaging services were provided by an expanding team, comprising of a part-time Consultant Radiologist, Radiography Services Manager, a Clinical Specialist radiographer; one Senior radiographer and two part time Radiology HCAs.

The following services are provided to all Inpatient and Outpatient groups, including the Brain Injury Programme, Spinal Cord System of Care, Prosthetic, Orthotic and Limb Absence Rehabilitation (POLAR) Programme and the Paediatric Programme:

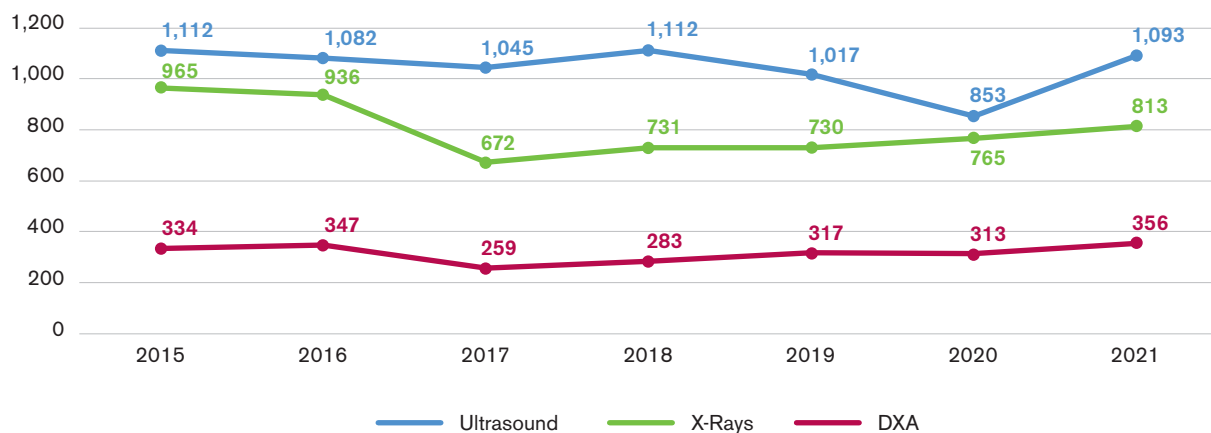
- General radiography, ultrasound (portable service also now available), mobile radiography, special procedures and Dual-energy X-ray Absorptiometry (DXA) scanning.
- CT scanning service available at St. Columcille's Hospital, Loughlinstown.
- MRI available locally at Blackrock Clinic.
- 24/7 On-call radiography service at the NRH.

Activity Data

Radiology activity data for 2021:

- **Ultrasound** – 1093 examinations were performed, a significant increase from 2020.
- **General X-Ray** – 813 examinations were performed, an increase from 2020.
- **DXA Scans** – 356 were performed, an increase from 2020.

RADIOLOGY ANNUAL STATISTICS 2015 – 2021





Services and New Developments

DXA – A locum Clinical Specialist DXA Nurse is employed one day per week. She is involved in DXA service development and planning at the NRH and has been invaluable in setting up further new scanning protocols. This experienced DXA practitioner is essential to maintain current DXA service levels and enable development and expansion of the Service for practitioners and patients at the NRH. The aim is to further develop the NRH DXA Service as a National Centre of Excellence in line with Irish DXA Society guidelines for accreditation and staff training.

Ultrasound – A new state of the art ultrasound machine was installed in October with additional probes, one of which allows provision of a welcome gynaecological ultrasound service at the NRH. The ultrasound service has continued to expand with a significant increase in the number of examinations performed compared to 2020. In addition, an increasing number of specialised interventional procedures were performed under ultrasound guidance such as intramuscular, joint injections and salivary gland botulinum toxin injections.

A portable Ultrasound machine is now in use for specific patients to deliver point of care diagnostics at the bedside where indicated. This is particularly advantageous in the main hospital and for those patients for whom it is more challenging to leave the ward environment.

X-ray – The state-of-the-art portable digital x-ray machine installed and operational in the new hospital has allowed an increased number of portable examinations as envisaged and required.

Nurse prescribing – Nurse prescribing of ionising radiation at the NRH continues successfully within the nurse-led Urology service.

NIMIS – is fully operational at the NRH. NIMIS is due a national upgrade to NIMIS 2.0 but was delayed unfortunately due to the pandemic. NIMIS 2.0 is now expected to be delivered in 2022. The NRH is live on BEAM, this is advantageous in that we can now send and receive images from non-NIMIS sites and Private Hospitals.

Research – Two research projects were facilitated by the Radiology Department for two UCD Medical students – the studies are:

- The value of renal tract imaging as part of annual GU review.
- Calcium supplementation and the formation of renal tract calculi.



Artist John Short with Ritika Callow and Mr Kieran Fleck Chairman viewing the art installation titled 'Forty Foot Entrance (No Dogs)' which was generously donated to the NRH by Mr Short and the Wilton Gallery.

Key Issues

Many of the recommendations from the radiographer staffing review have been implemented with further radiographer recruitment expected in 2022.

RADIOLOGY PROTOCOLS AND POLICIES

A review of department policies and procedures are ongoing. New procedures are being developed to reflect the scope of work undertaken by radiology.

RADIATION SAFETY

The Radiation Safety Committee (RSC) chaired by Dr Brian McGlone convened twice in 2021 as required, once via MS Teams and again, in-person and via Teams. The RSC advises hospital management in relation to the protection of patients (SI 256), workers and members of the public (SI 30) regarding the use of ionizing radiation in the hospital.

There were no significant additions to the Radiation Safety Procedures V2.6. A QA and an Optimisation Policy was developed and agreed at the November meeting outlining the processes and procedures for quality assurance and optimisation of ionising radiation equipment used at the NRH. The phrase Comforters and Carers was retired from NRH documentation and replaced with 'persons assisting the patient'.

New audits of our clinical practice were undertaken to fulfil HIQA requirements, including a 'Patient Safety Survey', 'Evidence of the Justification of Medical Exposures', 'NRH Portable Chest Quality' and 'PFA Referral Criteria'. Further ongoing clinical audits reviewed by the RSC included those on patient ID, staff doses, QA compliance and pregnancy declaration.

Radiation safety training for new NRH employees is delivered at NRH Induction and online radiation training continues for NCHDs.

Urology Nurse Edel Gormley received her certificate of completion of the Nurse Prescribing of Ionising Radiation course. The annual audit of nurse referrals for ionising radiation at the NRH confirmed excellent compliance with referral criteria.

Under the Service Level Agreement with SVUH, assistance and expertise were received from Dr Julie Lucey as Radiation Protection Adviser (RPA) and Eamon Loughman as MPE (Medical Physics Expert) up to September, after which Dr Lucey took over as acting MPE. Carmel Kelly, Clinical Specialist Radiographer continues as the Radiation Protection Officer (RPO) for the hospital.

The Orthotics Service operates across all of the specialist Rehabilitation Programmes and is delivery by the Consultant-led Interdisciplinary Team





Social Work

ANNE O'LOUGHLIN
PRINCIPAL SOCIAL WORKER

Service Provision

The services offered by the Social Work Department include: psychosocial assessment of the patient and family situation, counselling and support to patients and families, carer training programmes, care planning; complex discharge planning, advocacy and acting as the Designated Persons under both the Children First Legislation and the 'Safeguarding of Vulnerable Persons at Risk of Abuse' national policy.

Developments in 2021

A key focus in 2021 has been on induction of new Medical Social Work staff into the Social Work Department and Programmatic Units, as well as updating policies and systems to reflect the new ways of working following the move to the new hospital. The team has begun a series of planning meetings to restructure the Departmental processes around increased staffing and the move to staff being mainly based on the Units. The need to maintain supervision and peer learning and support while embracing enhanced IDT working is a key goal.

The continued development of the **Complex Discharge Co-ordinator** for the Brain Injury and Spinal Cord System of Care Programmes has been instrumental in supporting the Government policy shift towards getting patients home and increasing timely and appropriate discharge outcomes. The NRH is working in collaboration with Roisin Maguire, General Manager, Services for Older People and Community Operations, HSE to adopt a pathway approach to high complexity cases. This involves enhanced planning and engagement with service providers as early as possible in the rehabilitation journey, preferably from the pre-admission phase. The ongoing efforts of Roisin and Eugene Roe, Programme Manager for the SCSC Programme has led to an allocation of approximately €m nationally to support local areas to facilitate home discharges for patients with complex needs. The national shortage of professional carers has been a major challenge in 2021 as many workers have left the profession.

In a linked development, Peter Tyndall, Ombudsman for Ireland (now retired) and Sarah Cooney, Senior Investigator in the Office of the Ombudsman, presented at the November Grand Rounds. They discussed the contents of their landmark report, *Wasted Lives*, an investigation into the placement of people under 65 in nursing homes across Ireland. Medical Social Workers, Mary Regan, Renee Summers and Claire Convery, planned this session to be interactive and questions were raised on consent and supported decision-making, the implementation of the recommendations, and how the NRH can be a leader in embedding the Report's recommendations into everyday practice. Claire Convery and Anne O'Loughlin subsequently joined a HSE working group on decanting people under 65 years in Nursing Homes with a view to preventing further inappropriate referrals and admissions.

Safeguarding: The Department continues to offer Designated Person support and intervention in relation to child and adult safeguarding issues. The Safeguarding and Patient Rights Committee (SPRC) has continued to work towards promoting the safety and rights of all NRH patients. In 2021, there were 49 cases referred to the Safeguarding Officer. Of these, 38 were for adults while 11 referrals were in relation to child protection and welfare, including retrospective disclosures of abuse.

The SPRC is responsible for the implementation of safeguarding policies and procedures for children and vulnerable adults in the NRH. It promotes compliance with Children First legislation and the National Policy for Safeguarding of Vulnerable Adults. Committee membership is interdisciplinary with representation across disciplines and services in the hospital. Anne O' Loughlin, Principal Social Worker, and Phil Butler, Safeguarding Officer are the Chair and Vice-Chair respectively. A series of training sessions were facilitated on the Units to increase awareness of the policies. In 2021, an NRH information guide for staff named in a complaint was published as part of Safeguarding Awareness Day and there has been a lot of interest in the guide from other Hospitals.

The Assisted Decision-Making Act will have a major impact for our patient Cohort in 2022 when the Decision Support Service (DSS) will become operational. An Implementation Group chaired by the Safeguarding Officer and Dr Sarah Casey, Senior Neuro Psychologist, was set up in 2021 to prepare for this change. This group has developed training and is raising awareness of the Act before its expected implementation in June 2022. The Act underlines the presumption of capacity

and the requirement that assessments of capacity will be functional and time-specific using all possible supports to enhance decision making. The DSS will replace the Wards of Court process and facilitate three levels of support for adults who require assistance.

Research: A set of guidelines for family meetings in the NRH has been developed and is awaiting publication. This will involve input from patients and families as well as staff to co-create a model which is based on service user feedback. A second research project on how staff interact with distressed families with Dr Paul Carroll, Consultant in Rehabilitation Medicine is ongoing. It is hoped that this research will inform enhanced training and supports for staff.

Family Visiting in the COVID Pandemic: The restrictions on family visits since the onset of the pandemic continued to be a major stressor for patients and families throughout 2021, although the situation improved towards the second half of the year. Staff are very cognisant of how difficult this has been and have made huge efforts to facilitate online and telephone contact, family meetings via telehealth and onsite visits and carer training when permitted. As part of the Max Rehab (Maximising Rehabilitation Opportunities) project, more services were offered on Saturdays or in the evenings. We look forward to having families and carers back onsite and integrated into the rehabilitation programmes when it is safe to do so.

The housing crisis: The chronic undersupply of housing is impacting on the health system and on our individual patients who cannot afford to purchase their own home, are on very long council waiting lists or cannot afford to rent in the private rented sector. This is a source of stress and anxiety impacting on patients' mental health and requiring further input from the team. The housing adaptation grant process remains very lengthy and does not allow for patients to proceed with building and seek reimbursement which impacts greatly on discharge planning.

Supports for Child Relatives: Phil Butler's resource for child relatives of patients with a brain injury is now being used in several countries and the NRH gave permission for the accompanying child booklet to be translated into Swedish following a request from Social Work colleagues in Sweden. The final booklet in the resource pack, written for parents themselves, has been completed and awaiting publication. There is now a similar resource being developed for parents with a spinal cord injury and work is ongoing with our Psychology and Nursing colleagues.

Activity for 2021

The Social Work services provided to the clinical Rehabilitation Programmes (Brain Injury, Stroke Specialty, Spinal Cord Injury, Prosthetic, Orthotic and Limb Absence Rehabilitation (POLAR), and Paediatric Programmes are detailed in the Programmatic Reports in Section 2 of the Annual Report.

Consultation and submissions were made on the following areas:

- Irish Association of Social Workers (IASW) submission on proposed home care legislation
- Decision Support Service Draft Codes of Practice

Social Work representation and expertise was provided to the following national committees as well as to a wide variety of internal NRH committees:

- National Clinical Programme for Rehabilitation Medicine Working Group
- Irish Heart Foundation Council on Stroke
- Social Workers in Disability National Committee
- Irish Association of Social Workers (IASW) Special Interest Group for Adult Safeguarding
- Head Medical Social Work Forum
- International Social Workers in Acquired Brain Injury (INSWABI) Committee
- HSE Expert Advisory Group on the Disabled People on 65's in Nursing Home Project

Education and Training

The Social Work Department provides placements for Master's in Social Work students on four-month block placements per year and was involved in Online teaching to the Master's in Social Work Programme in both UCD and UCC.

I would like to thank all the Social Work Staff for all their hard work and dedication throughout another challenging year in 2021.



Speech and Language Therapy

CLARE HUDSON

SPEECH AND LANGUAGE THERAPY MANAGER

Service Provision

The Speech and Language Therapy (SLT) team is committed to providing high quality, evidence informed services for people with communication and or swallowing difficulties resulting from an acquired brain injury, spinal cord injury or limb absence that:

- **optimise** the person's recovery of communication and or swallowing skills
- **minimise** the impact of communication and or swallowing difficulties on the person's life
- **maximise** the person's potential to fulfil their life roles following communication and or swallowing, eating and drinking difficulties

The team of eighteen speech and language therapists, and assistants work in Unit Teams and Programmes through an interdisciplinary approach to deliver services at individual, group and family support levels. The services include comprehensive assessment and diagnosis, and provision of therapeutic programmes for a range of language, voice, speech and swallowing disorders, and management of tracheostomy. Speech and language therapy services are delivered in individual, group based, team based and family-centred ways for patients and their families or carers. The services are delivered across the Clinical Programmes and the Outpatient Department. In addition, the following services are provided across the NRH:

Audiology Screening Assessment: an instrumental screening assessment of hearing to identify the presence and severity of hearing difficulty.

Fiberoptic Endoscopic Evaluation of Swallow Service (FEES): an instrumental swallow evaluation service to patients with brain injury and spinal cord injury.

Electronic Assistive Technology: In collaboration with the Occupational Therapy Team, this service offers exploration of technology that can support a person to have greater independence or control in their environment. The equipment includes Alternative and Augmentative Communication (AAC), computers, phones and environmental control systems.

Clinical Education Service: The Clinical Practice Tutor supports the education of students in training from a variety of Irish universities to become Speech and Language Therapists.

Developments in 2021

The SLT team continued to adapt and innovate to provide quality effective person-centred services against the backdrop of changing restrictions resulting from the COVID-19 pandemic. In addition to more traditional individual and group therapy sessions as part of a comprehensive rehabilitation programme, highlights for 2021 included:

- Development and implementation of communication accessible 'Theme of the Week' Patient Education and Peer Support groups with unit team colleagues. The groups run in a six-week cycle and focus on a theme pertinent to the patient group on the unit at the time.
- A joint SLT and Music Therapy group was introduced to target specific speech difficulties using neurological music therapy techniques. An action learning approach has been used for the development and implementation of the group, with adjustments made in response to the implementation. A protocol is being developed based on the learning from the cycles, and research is being planned.

Aro Yanto, Lissy Augustine, Liz Croxon and Mary Feeney at the launch of 'Preventing Pressure Injuries in the Spinal Cord Population' and new information leaflet for healthcare professionals.



- The development of a communication accessible environment has continued to be a focus for the SLT Team during 2021. The next step following the introduction of the 'Accessible Communications Policy' which was developed in 2020, is to look at its implementation. On the Stroke Unit, the 'Communicative Access Measures for Stroke' (CAMS) is being implemented as a guide to the degree to which the unit is communicatively accessible for people with stroke and aphasia. Quality improvements will be initiated following the audit.
- The SLT team on the Brain Injury Programme have been involved in the adaptation and implementation of the CCARS programme. This programme is for people with cognitive, cognitive communication and affective difficulties (CCARS) resulting from an acquired brain injury.
- The FEES service successfully moved to a new endoscopy suite, shared with the Urology Department. The state-of-the-art facilities ensures compliance with all Infection Prevention & Control regulations, supports the service to run safely and effectively and provides much needed growth of the service.
- The Tracheostomy rounds on both the SCSC and Brain Injury Programmes are now well established and play an integral role in the rehabilitation of patients with a tracheostomy. Audit of practices is being planned to support continual improvement.
- The SLT team provides education, training and consultation to colleagues across the country working across the rehabilitation continuum of care, and also to undergraduate students of differing disciplines. In addition, many have shared their work at national and international conferences.
- The SLT team has engaged in the NRH strategy to deliver rehabilitation services over six days and extended working days.
- The SLTs within the Outpatient Service have been challenged due to COVID, but have maintained services through telehealth. Groups such as 'Open Mic' and 'No further chapter-by-chapter reading' have been innovative ways to engage people living in the community with communication difficulties to continue their rehabilitation journey and to connect with peers.



Interdisciplinary Team (IDT) Initiative

PROJECT LEADS:

CATHERINE CORNALL, TERESA WHYTE, AOIFE HENN, CLARE HUDSON, PROF. ÁINE CARROLL.

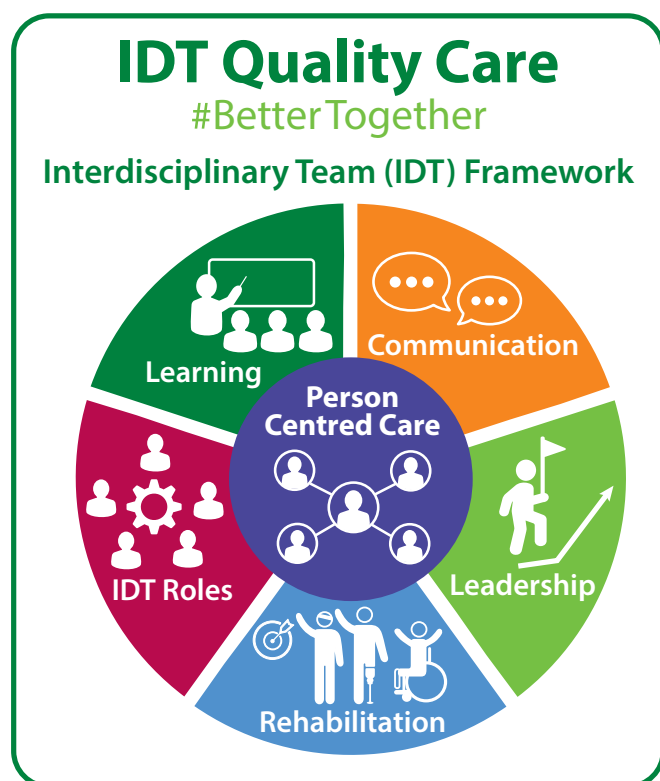
The commitment of the NRH to Interdisciplinary working and delivering high quality person-centred care is being realised through the ongoing support given to the IDT initiative 'Building a Framework and Culture of IDT working at the NRH'. This ambitious aim contributes to the development of the NRH into a learning organisation equipped to deal with the ever changing world that is modern healthcare.

The NRH IDT project has three strands:

- Strand 1: Development of the NRH Framework
- Strand 2: Test Team Training Intervention
- Strand 3: Implementation of the IDT Framework.

STRAND 1 – THE IDT FRAMEWORK

The NRH IDT Framework is based on the thoughts, opinions and views staff and the people receiving services of the NRH. Throughout 2021 the focus has been on using the framework to support teamworking in everyday practice. As the framework provides a shared language and understanding of the provision of rehabilitation services through IDT working, it supports the development of a culture of collaboration, communication, and cooperation. Details of strands 2 and 3 are outlined in the table on page 93.



Key Milestones in 2021

The Key milestones for 2021 for Strands 2 and 3 are summarised in the table below:

NRH IDT Initiative – Progress During 2021		
Test Team Training Intervention	Implementation of NRH IDT Framework: Goal Setting	Implementation of NRH IDT Framework: Unit Huddles
Quarter 1 Team training on Pine and Daisy Units	Quarter 1 <ul style="list-style-type: none"> Stakeholder feedback gathered from patients of the NRH on their experience of the goal setting process Feedback was collated 	Quarter 1 <ul style="list-style-type: none"> Unit Huddle working group formed
Quarter 2 Team Training on Pine Unit	Quarter 2 <ul style="list-style-type: none"> Stakeholder feedback - Staff Goal setting questionnaires were circulated Open sessions to collect feedback on experiences of the NRH goal setting process and experiences elsewhere 	Quarter 2 <ul style="list-style-type: none"> Unit Huddle audit completed 2nd meeting of Unit Huddle working group
Quarter 3 Team training on Pine, Daisy and Poppy Units	Quarter 3 <ul style="list-style-type: none"> Further interviews with staff and other stakeholders Feedback collated Review of evidence base 	Quarter 3 <ul style="list-style-type: none"> 3rd meeting of Unit Huddle working group Feedback is positive, Huddles are seen as creating opportunities for communication and collaboration
	Quarter 4 <ul style="list-style-type: none"> Dissemination of findings commenced through relevant committees and groups 	Quarter 4 <ul style="list-style-type: none"> Unit request support for huddles Tiered Huddle approach agreed by Daily Operational Safety Huddle (DOSH) Group

Future Plans

Plans for 2022 include:

- Creating a bank of resources for teams within the NRH to allow evaluation of team performance
- Providing support and resources to allow for further development of team skills
- The ongoing development and improvement of Unit Huddles.
- Collaboration with the DOSH Working group to progress toward an NRH Tiered Huddle system.
- Development of the NRH person-centred goal process in collaboration with the CRMS team and all stakeholders.
- An ongoing focus on research as part of the project. Two Research assistants will join the team to support data collection and ongoing dissemination of findings.



Section 4

Corporate and Support Services



June Stanley
Deputy Chief Executive



Liam Whitty
Catering Manager



John Fitzgerald
Materials Manager



Olive Keenan
Human Resources Manager



Liz Maume
Patient Services and Corporate
Data Manager



Elayne Taylor
Risk Manager



Rosemarie Nolan
Communications Manager



Alli McClean
Project Co-ordinator, ROSIA



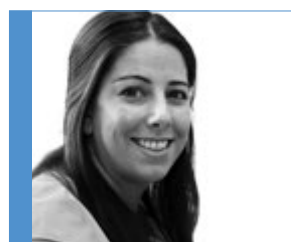
Dr Cara McDonagh
Chairperson, DDMBA
(to December)



Fr Michael Kennedy
Chaplaincy



Aoife Mac Giolla Rí
School Principal



Sarah Kearney
Interim Academic Lead
(from June)



John Maher
Information Management
and Technology Manager



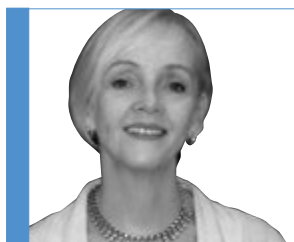
Rose Curtis
Occupational Health Nurse



Brendan Martin
Payroll and Superannuation
Manager



Peter Byrne
Technical Services Manager



Maeve Nolan
Academic Lead (to June)



Daragh Bolton
Head of Security
Services



Tara Lyons
Head of Health Planning
Team (from July)

Academic Department

SARAH KEARNEY
INTERIM ACADEMIC LEAD

2021 continued to be an exciting year of growth, progression, and development for the Academic Department. Working collaboratively with our colleagues from the Academic Steering Committee (ASC) we continued to achieve our priorities as set out in the Department's Strategic Plan 2020 – 2023, to support the positioning of the NRH as the acknowledged leader in the field of education, training, research and innovation in rehabilitation.

In June, Dr Maeve Nolan, Academic Lead retired after many years of service and dedication to the Hospital. While we were very sad to see Maeve go, she left behind a legacy upon which the Department continues to thrive. In July, we were delighted to welcome Janette Hamill as Administrative Support to the Department and Alli McClean as ROSIA Project Coordinator. I would like to place on record my thanks to them for their hard work and support.

The Ivy Building is a thriving hub providing staff and students with office space, teaching and training facilities, a quiet study room, changing and locker facilities. Further development of the facility is in progress.

Undergraduate student placements were significantly impacted by the Covid-19 pandemic in 2021, however the Academic Department assisted in facilitating over 100 placements (of varying durations) from our affiliated universities. In addition, we established and streamlined our processes including induction protocols, locker allocation system, Covid-19 protocols and a building orientation schedule. We also continued to advance and sign off Teaching and Research agreements with the Universities.

Despite continued restrictions being in place due to the pandemic, the Department successfully delivered a large number of virtual events including the Ernest Gouling lecture on Health Research and Law, and Patient and Family Experiences of living with a Spinal Cord Injury (SCI), monthly Researchers Lunch and Learn sessions and Grand Rounds, the annual Careers Event for 2nd level students, Research showcase, 'Let's Learn About' sessions on the Health Research Consent Declaration Committee, Research Stats and Literature Search Strategies, as well as training in Narrative Practice, GDPR and the Health Research Regulations.

In addition, the Department gave assistance to Clinical Tutor colleagues to deliver IDT tutorials, online teaching and training sessions, and RCSI stroke exams.

Led by Professor Áine Carroll, the Department continued to progress the development of formal links with the UCD Clinical Research Centre. The NRH is now formally part of the UCD Clinical Research Centre Network and will be able to avail of a range of services pertaining to research, educational, training and other resources available through the CRC.

Additional academic achievements for the Department in 2021 included:

- Launch of the Academic Department Portal
- In conjunction with the Educational Assistance Group, approval of funding support for 26 staff members for diplomas, postgraduate courses, MScs and PhDs.
- Establishment of Working Group for development of Practical Skills Lab & Training Space
- Establishment of ASC subgroups for Research (to develop Low risk form for ethical approval, template for data and GDPR threshold assessment) and Patient Education



Catering Department

LIAM WHITTY
CATERING MANAGER

The Catering Department provides catering services for the patients and also meets all catering requirements for staff, and visitors across the NRH campus. In addition, the Catering Department provide Meals on Wheels for people living in two areas close to the hospital; the meals are delivered by volunteers to people in the Community who are unable to cook their own meals for various reasons, for example, illness or disability.

The cost of providing catering services to the hospital in 2021 was €722,236 (excluding wages) and the income was €363,532.

Highlights in 2021

- Patients dining rooms were reopened on some Units – during the pandemic, meals were being served in patients' rooms to ensure patient safety.
- A click and collect system was introduced in the staff canteen - staff can now order online from the deli counter in advance.
- The opening hours in the staff canteen were extended to facilitate day and night shift breaks.
- Increased range of snacks and drinks made available to meet the diverse requirements of our patients and staff.
- Fundraising events for the NRH Foundation were facilitated by the Coffee Shop staff.
- Reduction in the use of plastics by changing from bottles drinks to cans.

During 2021, the Catering Team held a BBQ to celebrate the first-year anniversary of the move to the new hospital. The annual Christmas party was held at lunchtime. Festive refreshments were also served during Music Week and at other key dates during the year. All Covid regulations were met and these events were very successful and greatly appreciated by staff and patients.

A new Executive Chef was appointed in March 2021. Shane Loughlin brings a wealth of experience to the NRH and the catering team, management and staff warmly welcomed him to the NRH.

I am proud to say that the staff in the Catering Department met the challenges of the 2nd year of the COVID pandemic with professionalism and dedication to provide a high-quality service to our patients and colleagues who avail of the Catering service.

Central Supplies

JOHN FITZGERALD
CENTRAL SUPPLIES MANAGER

The Central Supplies Department purchases and maintains stock materials for the day-to-day running of the hospital. Purchases for hospital equipment, patients' aids and appliances, and special requirements are managed by Central Supplies, in addition to placing purchase orders for service and maintenance contracts.

The Supplies Manager assists in Tenders preparation and loading onto the e-tenders website for open competitive Tenders. Increased use of the e-tenders site is in line with the Hospital's objective to obtain value for money in all purchasing decisions.

During 2021, cost-saving initiatives included utilising HSE Framework agreements which are nationally negotiated, and continual evaluation of new products and services to reduce costs and improve efficiencies. Access to the HSE Pricing and Assisted Sourcing System (PASS) which shows listings of the Health Business Section (HBS) Framework Agreements and Contracts, and the Office of Government Procurement (OGP) current Contracts and Frameworks was maintained.

Central Supplies worked collaboratively with hospital departments to ensure compliance with HSE, HIQA and CARF accreditation standards. Sourced the most cost-efficient products for the Infection Prevention and Control Department, and all services across the hospital.

Chaplaincy

FR. MICHAEL KENNEDY

The Chaplaincy is a support service which responds to the needs of all members of the hospital community, the patients, their families and staff by means of offering them listening, spiritual and religious support. The Chaplaincy Department plays an important role in the overall aim of rehabilitation.

Fr Michael Kennedy is the full-time Chaplain. The Reverend John Tanner is the appointed chaplain from the Church of Ireland to the NRH. Ministers of other faiths can be contacted as requested. The Chaplaincy service has been greatly supported by the Chaplaincy Volunteers from the Legion of Mary. All volunteers services were suspended in 2021 due to the pandemic.

The Liturgy Team: The liturgy team, St. Vincent De Paul and others are a group of volunteers who work as Readers or Eucharistic Ministers, and in the organising and provision of liturgical music in the hospital chapel. Eileen Roberts is the Sacristan.

Visiting Patients: The Chaplain visits patients on the Units on a regular basis at times that don't impact on treatment schedules. Chaplaincy is also a round-the-clock on-call service. The Chaplain is available to meet with patients and relatives for private consultation as requested. All visits are controlled by the patients.

Chaplaincy Involvement: The Chaplain plays an important role in the pastoral care of staff and is available to meet with them on request. As far as possible, he also attends funeral services of family members of staff who have passed away. He is involved also in the following Committees: Ethics Committee, Heads of Departments, Liturgy Team, St. Vincent DePaul Conference, The Legion of Mary, Dublin Chaplain's Association, and the NRH Staff Induction Programme.

Holistic Approach: During the year, the Chaplaincy Department worked with various therapy departments to assist patients who wished to attend Mass in the chapel with their therapists. This formed an important therapeutic and holistic part of their individual rehabilitation.

Challenges: Due to the COVID-19 pandemic, the year has been spent very much in lockdown with visiting and volunteer activity suspended. The Chaplain has proposed to have live streaming of Mass from the Chapel to the TVs in patients' rooms, which is under consideration by management.

A special 'Thank You' to Reverend Fr Suresh Babu and Reverend Fr Michael Smith for their help at times when the Chaplain is on leave.

Clinics for Disabled Drivers Medical Board of Appeal

DR CARA MCDONAGH, CHAIRPERSON, DDMBA – TO NOVEMBER 2021

The Disabled Drivers Medical Board of Appeal (DDMBA) is a statutory independent body set up by the Department of Finance in 1990 to review individuals whose application for the Primary Medical Certificate is unsuccessful at local HSE level. It operates independently of the assessment process carried out by local HSE Community Medical Officers. The legal basis for its operation is the Disabled Drivers and Passengers' (Tax Concession) Regulations 1994, most recently amended in 2004, and a succession of Finance Bills. Board members are appointed by the Minister of Finance from a body of interested registered medical practitioners, on the recommendation of the Minister of Health. Dr Cara McDonagh resigned from the DDMBA in November 2021.

The DDMBA is a 'reviewable body' in accordance with the provisions of the Ombudsman (amendment) Act 2012.

¹ <http://www.revenue.ie/en/tax/vrt/leaflets/drivers-passengers-with-disabilities-tax-relief-scheme.html>



Communications

ROSEMARIE NOLAN
COMMUNICATIONS MANAGER

During 2021 demands continued for responses to the ever changing and unprecedented challenges for patients and staff, imposed by the COVID-19 global pandemic. The Communications Department worked closely with all Heads of Programmes, Departments and services to ensure that accurate and timely information was available to all staff and patients, in a range of accessible formats. As NRH Infection Prevention and Control and patient and staff guidance changed frequently in line with Public Health advice, the Department, working as part of the hospital's COVID-19 Response Group issued updates through a robust communications system. A range of information posters, leaflets and booklets for patients, staff and visitors were produced by the Communications Department. COVID-19 updates were issued to all staff, initially daily, and then as often as required. The Cascade system ensures that information is accessible to all staff across the hospital, including staff members who are not desk-based.

The Communications Department launched the hospital's new Website just before the pandemic began, and in collaboration with the IM&T Department and the Intranet Governance Group, the hospital Intranet also went live. The Department looks forward to returning to the development plan for digital communications now that the demands of the pandemic are beginning to lessen.

The move to the new hospital has necessitated a revision of all patient information leaflets and booklets and this project is ongoing.



The NRH Accessible Communications Policy has been completed and training workshops are being planned for its launch and rollout.

The Communications Department supported our colleagues from across the hospital in keeping staff informed about major projects, initiatives and events throughout the year. Some of these include:

- **Operational events involving issues that could impact services and staff:**
 - Broadband Infrastructure Upgrade
 - Planned temporary power outage
 - Relocation of Nurse Education Department
 - Construction Works affecting hospital egress and access from Pottery Road
 - New Pharmacy Department Pager System
 - New internal post system – decommissioning system in Cedars building and new mailroom in the new hospital
 - Staff Travel to Work Survey – results will be included in the case for submission to DLRCC for additional parking on the NRH Campus
 - New Changing Places Facility
 - Nurse Call System software update
 - Visitor Booking Policies and Information Leaflets for Staff, Patients and Visitors
- **Events including:**
 - Opening of the Aquatic Physiotherapy Facilities
 - Brain Awareness Week
 - National Workplace Wellbeing Day and promotion of NRH Staff Wellbeing Framework
 - Launch of 'Hello My Name Is....'
 - Opening of new Endoscopic Unit in the Urology Department
 - DXA Scanning Programme for NRH Staff
 - NRH Annual Sports Championships
 - Launch of NRH Human Resources Portal
 - National Safeguarding Awareness Day
 - Academic Department – promoting a range of educational events throughout the year
- **Major Project Updates in relation to:**
 - The ROSIA (Remote Rehabilitation Services for Isolated Areas) Project – Funded by the European Commission 'Horizon 2020' fund
 - Interdisciplinary Team (IDT) Quality Care Initiative
 - Max Rehab (Maximising Rehabilitation Opportunities) initiative
 - Clinical Rehabilitation Management System (CRMS) – Electronic Patient Record Project
 - Assistive Technology Service
- **Other Communications included:**
 - Announcement of NRH Links being formalised with the UCD Clinical Research Centre
 - Announcement of translation of 'Supporting Child Relatives of Adults with Acquired Brain Injury' workbook into Swedish
 - Launch of Pressure Injury Prevention Leaflet
 - Announcement of Donation of Art Installation titled 'Forty Foot Entrance (No Dogs)' – donated by artist John Short to Daisy Unit
 - Announcement of winning the RIAI 'Building for All' 2021 award for universal design in the new Hospital
 - World Patient Safety Day – with a focus on Medication Safety and Slips, Trips and Falls in 2021
 - Announcement of new Infection Prevention and Control Portal on the NRH Intranet
 - Messages of appreciation and support to all staff from the Board, Chief Executive, Clinical Director and Director of Nursing during the Pandemic
 - Details of the NRH Vaccination Programme
 - Updates in relation to the Cyber Attack

Future Developments

Action plans have been put in place to develop our communications systems and processes to ensure we can optimise our time, effectiveness and efficiency as a team in contributing towards the strategic objectives and mission of the NRH and to enhance the services we provide to our patients, their families, our colleagues and the management team across the hospital.



Health Planning Team

TARA LYONS

HEAD OF HEALTH PLANNING TEAM

One of the fundamental responsibilities of the NRH as an internationally accredited rehabilitation facility is to effect positive change in patients' functional ability, independence and self-reliance across environments, while protecting and promoting the rights of patients. The new hospital (Phase One) has been designed to create that specific environment to facilitate the delivery of rehabilitation by an integrated team, which includes the patient. The design of this development is patient-centred and based on the principles of empowerment, dignity, privacy, confidentiality and choice.

Phase 1 of the New Hospital Development

In June, 2021, Patients and Staff celebrated the first anniversary of the move into Phase One of the New NRH. All patient accommodation comprises specifically designed single ensuite bedrooms and integrated rehabilitation-specific treatment spaces, located in ten Units, over four levels. The building also includes the state-of-the-art Sports and Exercise Therapy Department and Aquatic Physiotherapy Facilities. Unfortunately, due to COVID-19 restrictions, it has not been possible to have an official opening event, however, in line with public health advice, we look forward to having a celebratory event when it is safe to do so. The new hospital building main structure links into the existing clinical and support services that will remain in the Cedars building pending completion of Phase Two.

Development of Phases 2 and 3

The NRH site development is conceived in three principle phases of which the current new 120 Bed development is Phase One. In 2021, the Health Planning Team commenced completing a brief and documentation for the appointment of a design team to commence the design development of Phase Two. Phase Two includes for the relocation of all existing therapies and support facilities to a new modern development, to serve the new 120 bed hospital. The completion of Phase Two will facilitate the demolition of the existing hospital buildings and the development of the Phase Three to increase the bed and service capacity of the hospital.



'Beyond the NRH' is an event where patients can gather information about support services in the community that are available to access following discharge from the NRH.

Human Resources

OLIVE KEENAN
DIRECTOR OF HUMAN RESOURCES

The HR Department provides a range of services, such as recruitment and selection, personnel administration, employee relations, industrial relations, policy development, staff development and ensuring compliance with legal, regulatory and Public Service Agreement requirements. The Human Resources (HR) Department endeavours to provide a professional and effective service to the NRH and support all staff through the lifecycle of their employment.

COVID-19

As the Organisation continued to battle with COVID-19 in 2021, we saw the best of our staff as they continued to respond and adapt with great agility to the challenges and unpredictability that the pandemic brought. The HR Department continued to support the Hospital in its efforts and actions to respond to the crisis. The department supported managers in a range of alternative work practices and agile working arrangements ensuring continuity of high quality services to our patients. HR participated in the Covid 19 Working Group and ensured that HR, Occupational Health, and employment related advice was up-to-date and accurate to assist managers and staff to respond to the constantly changing crisis.

Recruitment and Staffing

The biggest challenge for HR professionals continues to be the recruitment and retention of new talent. We continued with recruitment of our Workforce Planning posts as part of the HSE-approved additional staffing for the New Hospital facility. It has been challenging for the department to meet this significant increase in activity related to this recruitment, selection and onboarding of new staff, coupled with the increase in general recruitment and HR transactional activities across the hospital. However, the team have responded to these requirements, and we have welcomed a number of new staff to the NRH family during 2021, with our overall staffing ceiling significantly increasing to 607.53 WTEs.

HR Information Management System

The HR information management system assists us with managing HR information, business processes and data. It also provides valuable reports which assist decision-making and more streamlined HR processes. An effective HR System is a key tool for the Hospital in optimising resources by planning for current service demands as well as future resource planning. The system assists with rostering practices and has been helpful in providing better insights into how therapy resourcing translates into units of patient care. Our training information reports also help managers and staff to better manage compliance with the ever increasing demands of mandatory training.

The current HR System is in legacy support and running multiple releases behind current production software, therefore a project to upgrade or replace the HR System is one of the key strategic projects for the Department to undertake in 2022. Some work has been undertaken to date with scoping out our requirements.

Employee Relations and Change Initiatives

The HR Department has supported many changes across the hospital during 2021, many relating to the ongoing change initiatives associated with the move to the New Hospital environment.

The Department has also played a key role in supporting the introduction of the 'Maximising Rehabilitation' initiative during 2021. This is a hospital strategic project aimed at expanding rehabilitation opportunities for patients within a culture of 24-7 rehabilitation and Interdisciplinary Team working. The project is aimed at providing a more flexible therapy service by increasing opportunities for therapeutic and recreational activities over six days including Saturdays. The project is also supporting the implementation of an extended 8.00am to 8.00pm working day.

We have been working with the Project Leads, Managers, Staff and their Union to implement necessary changes required for a more flexible service delivery. It is acknowledged that this is a significant change for the staff involved and is coming on foot of the turbulent and challenging times of the pandemic. We continue to work together to embed new ways of working to use our NRH specialist resources in the most optimal way possible for patient benefit. I would like to take this opportunity of paying tribute to all involved in the project for their hard work, commitment and contributions to date.



Employee Engagement

The department works to support a positive working environment and culture within the hospital to encourage innovation, collaboration and partnership at all levels. Staff engagement is an organisational priority and helps to create an awareness of the challenges facing staff which ultimately can affect patient care and outcomes. It was another challenging year for all staff both personally and professionally and the Hospital offered a variety of supports to staff depending on their needs. There is a broad spectrum of health and wellbeing initiatives for staff available from our Occupational Health service, including additional COVID-19-related well-being resources and activities offered to all employees through various channels such as coaching and psychotherapy.

The Positive Working Environment Group (PWEG) continues to build on its foundation of promoting positive behaviour and support throughout the Organisation. PWEG has a cross representation of staff on its membership and has been able to monitor and respond to the needs of staff during a continued period of change and challenge in 2021.

Equality and inclusion in the NRH is fundamental to the hospital ethos and underpins our objectives for a positive and inclusive workplace. A number of subgroups under the umbrella of PWEG have been established; namely the LGBTQ+ group and the re-established Diversity, Equality and Inclusion Group. These groups continued their efforts, through various engagement measures and initiatives, to increase staff awareness and promote inclusivity and empowerment of staff.

PWEG launched its Workplace Wellbeing Framework in 2021. This framework provides an overarching structure and co-ordinated approach to accessing resources related to staff wellbeing in the NRH. The framework sets out 6 'Pillars' under which staff wellbeing is considered; namely Physical, Environmental, Psychological, Intellectual, Social and Spiritual.

PWEG are also progressing plans to implement a special memorial space in the NRH to remember and acknowledge the lives and efforts of all affected by the COVID-19 pandemic. It will offer a quiet and reflective space for all where they can go and 'just be'.

Key Department Developments and Achievements in 2021

The HR team engaged with the many opportunities to get involved hospital wide projects and departmental quality improvement initiatives.

Some of the departmental highlights includes:

- HR Team continued to attract and recruit highly talented professionals to the Hospital across the disciplines, despite the challenges encountered with shortages of healthcare professionals.
- The department have continued to endeavour to improve our recruitment processes and create efficiencies where possible.
- Two of HR Team are studying Process Improvement in Healthcare (Lean Green Belt) and are involved in an internal Joiners, Mover, Leavers project, collaborating with others to identify opportunities to lean out and automate some HR processes and HR forms.
- Development of the HR Portal:
The HR Department developed a HR Portal Site on the NRH Intranet site which launched in October. This Portal contains a variety of resources to best support staff with links to access Policies, Procedures and Guidelines to a wide range of employee resources, such as Leave Forms, Corporate Induction Training, Education and Training Courses, a link to Core HR for managing time and attendance, more useful information to guide staff when leaving or retiring, and Staff Wellbeing information. This Portal aims to connect HR with staff and vice versa in a more dynamic way by bringing resources closer to the staff and having them all centrally in one place.

I would like to take the opportunity to sincerely thank the HR team for all their hard work, support and commitment during the year. 2021 was another turbulent and unprecedented year and the team admirably rose to the many challenges with work demands and service pressures, organisational change and development, the Covid 19 pandemic, increased recruitment and service needs and all against the backdrop of a depleted HR team during periods of the year. Special appreciation also to our Occupational Health department who worked tirelessly to promote and protect the health, safety and wellbeing of all staff.

Information Management & Technology (IM&T)

JOHN MAHER

HEAD OF INFORMATION MANAGEMENT & TECHNOLOGY (IM&T)

The IM&T Department operates three separate but related functions covering IT Operations, Business Intelligence and latterly the hosting of the hospitals very significant Electronic Patient Record project. Our IT Operations team operate in a fully ITIL (Information Technology Infrastructure Library) environment which is designed to provide the hospital with best-in-class IT Service Management and IT Asset management while aligning IT services with the needs of the Hospital. In 2021 the Operations Support Desk resolved 4209 tickets, 98% of which were resolved within our SLA window with an average resolution time of 3.07hrs. 80.06% of support Desk incidents were resolved on first contact by the Operations team. It is worth noting that new smart building technology installed during the last quarter of 2021 automatically opened 3520 incidents and resolved 99.77% of these within 18 minutes. This technology is helping to ensure that potential IT Infrastructural incidents are resolved prior to affecting services and is doing so 24 x 7 x 365 days a year. These statistics highlight the departments commitment to providing exceptional Service Desk support. During 2021 the department welcomed an additional Systems Analyst to the team which reflects the growing needs for data analytics and insights.

The IM&T department delivered all Operational, Business Intelligence and Project related services without interruption and at a consistently high level throughout 2021 despite the pandemic. Stakeholder requirements continued to evolve which included substantial additional requests to support staff remote working, secure network access and hardware provisioning. Previous IM&T initiatives, such as our extensive Office 365 platform, and significant VPN and broadband infrastructure have proven vital during this time.

On the 14th of May at 05:30hrs the department was informed that the Health Service was suffering a serious "Conti Ransomware" cyber attack and therefore all external network and internet access was to be cut. This resulted in the loss of access to all external IT communications, cloud and hosted systems, and all shared services, which left the hospital in a potentially serious situation. The Department, with support from Senior Management and Heads of Departments, instigated a series of twice daily meetings where plans were developed, and actions assigned to manage the hospitals response to this crisis. Very quickly the team had limited Virtual Outpatient Clinics in operation, with work also starting to develop a copy of our 'Patient Master Index', a core requirement to enable the tracking of patient charts which is key to the delivery of services to patients. Thanks to our cybersecurity vigilance and network security, at no time during the cyber attack was the NRH, our Networks, Patient or Staff Data compromised, and the hospital was able to re-establish external communications early on during the National response to this incident.

Throughout 2021, the IM&T Department completed a diverse range of Data Analytics Projects, in addition to many significant Infrastructure, Application, Cybersecurity & Data Protection projects which enhanced hospital systems and access to vital data required to facilitate the delivery of quality patient care and administrative functions.

Clinical Rehabilitation Management System CRMS – Electronic Patient Record Project

The Clinical Rehabilitation Management System (CRMS) Project, is a whole hospital, clinically led change management project in collaboration with the HSEs Office of the Chief Information Office (OoCIO). The vision for this project is the deployment of a comprehensive and secure digital health record which is fully in line with Sláintecare. The small project team did however pivot plans and instigated an early project discovery phase designed to gather data and process information while contract negotiations were ongoing with the application vendor. Contracts should be signed in early 2022 after which configuration of the system will commence.

Finally, I would like to express my thanks to all members of the IM&T Departments' Operations, Business Intelligence and extended CRMS teams for their dedication, hard work and agility during this most difficult of years.



Occupational Health

DR JACINTHA MORE O'FERRALL
CONSULTANT IN OCCUPATIONAL HEALTH MEDICINE

Overview

In 2021, over 4660 contacts were made with the Occupational Health Department. It was a challenging year for all staff personally and professionally and the Occupational Health Department offered a variety of supports to staff depending on their needs. Clinical Nurse Manager in Occupational Health, Rose Curtis, worked closely with the ever diligent, conscientious, and hardworking senior staff nurse Florence Reambonanza. Dr Jacintha More O'Ferrall continued to carry out monthly on-site visits when COVID restrictions allowed and offered ongoing supports digitally. Referrals, when required, took place virtually or in Medmark, Baggot St, and several staff members attended there as part of a medical assessment for fitness to work or for absence management in 2021.

There were 1,300 COVID-related queries and follow-up consultations with staff, and in addition, 984 PCR tests were carried out. In addition to the extensive range of employment related assessments and reviews available to staff, the Occupational Health Department provides services including: Sharps Injury follow-up and Sharps Injury awareness training; Health Promotion events; Smoking Cessation support; Contact Support Person for 'Dignity in the workplace' programme; Vaccinations for Hepatitis B, Varicella, Measles, Mumps and Rubella; DXA Bone density programme and Staff Physiotherapy for work related issues

Committee Participation by Occupational Health Staff

- NRH COVID-19 Preparedness Group
- Behaviour Forum.
- Hygiene, Infection Prevention and Control Committee.
- Positive Working Environment Group.
- Suicide Awareness Group
- HSE National Workplace Wellbeing Unit weekly meetings
- COVID-19 vaccine planning group.

Key Milestones for Occupational Health in 2021

While Occupational Health continues to offer supports to everyone in the NRH, it receives on-going vital support from HR, Risk Management, Infection Prevention and Control, Executive Committee, Departmental Heads, Physiotherapy OPD, Radiology and staff throughout the organisation for which it is very grateful.

Occupational Health staff were very proud to be part of the Covid vaccination team which offered three rounds of covid vaccinations to all NRH staff. It was an exemplary project which ran efficiently and effectively under the leadership of June Stanley. The number of peer vaccinators rose to 10 this year very ably co-ordinated by Senior Staff Nurse Florence Reambonanza. These peer vaccinators were pivotal to the success of the covid vaccination programme and showed great flexibility and teamwork in their attendance at often long vaccination clinics.

Occupational Health continues to offer core support to all NRH staff through a wide variety of proactive and reactive strategies. Rose Curtis is part of the Positive Working Environment Group which continues to build on its solid foundations to promote positive behaviour and support for all stakeholders of the NRH throughout all levels of the organisation.

Patient Services and Corporate Data Management

LIZ MAUME

PATIENT SERVICES AND CORPORATE DATA MANAGER

The NRH aims to provide quality patient-centred care and stakeholder engagement is a vital part of this. Stakeholder feedback increased by 30% in 2021. Input From Stakeholders is received through various means, these include:

COMMENTS, SUGGESTIONS, COMPLIMENTS

Feedback is received and welcomed from suggestion boxes, letters, email or verbally submitted by patients, family members, carers, staff and volunteers. Positive feedback is shared with the team, and where necessary corrective action is taken.

USPEQ QUESTIONNAIRES

Questionnaires are dispatched to patients three months post discharge in line with CARF (Centre for Accreditation of Rehabilitation Facilities) accreditation standards. Responses enable Clinical Programmes to review satisfaction levels and outcomes for patients who have completed their rehabilitation programme, and to measure its effectiveness in terms of coping in day-to-day life beyond the NRH and transition into the community or new care setting.

PATIENTS FORUM

Patient Forum meetings are held weekly, with allows each Unit to have a Forum approximately every 8 weeks. These meetings provide an opportunity for patients to provide feedback on their experience of services within the hospital. All feedback received is shared with the Unit IDT team and to Heads of Services. Actions as a result of feedback received is made available to patients through subsequent Patient Forum meetings, via Patient Newsletter (a quarterly publication), or directly to the commenter. The Patient Forum Newsletter outlines the purpose of the Patient Forum and highlights ways in which feedback has resulted in changes in the organisation. The chair of the Patient Forum is Tim Rice – a former patient of NRH. In 2021 a total of 140 patients attended.

PARENTS FORUM

Meetings are held quarterly or at greater frequency depending on parents' needs, enabling them to engage with hospital management and give feedback on their child's experience in the hospital, or raise any concerns they have.

INTER-AGENCY FORUM

The Inter-agency forum members include representatives from hospital departments and external agencies who provide information, support and services for patients both in hospital and post discharge. Meetings are held Bi-monthly to discuss services available for patients and to plan events.

COMPLAINTS

The NRH values complaints both as a learning exercise to resolve issues and bring about corrective action, but also as an invaluable tool for planning future services. In line with the updated complaints policy, the NRH aims to resolve as many complaints as possible at point of contact. All complaints are reviewed, and the hospital seeks to meet complainants at an early stage to discuss the complaint, with a written response being issued for formal complaints following investigation.

Other Services Overseen by the Patient Services and Corporate Data Manager include:

Admissions Administration carried out in collaboration with Nursing and Medical teams.

Urology Administrative support provided for Consultant and Nurse-led Urology Clinics, including telephone support.

Healthcare Records (HCR) – the HCR Steering Group is working closely with the Electronic Patient Record Project Team.

CORPORATE DATA MANAGEMENT

Bed Occupancy and Delayed Transfers of Care are reported at Daily Operational Safety Huddle meetings. Activity levels compared with targets are monitored and a full monthly Patient Activity Report is provided for the Hospital Board and HSE. The department continues to review delays in transfers of care and highlight the number of bed days lost as a result. There has been an annual decrease in vacant bed days and an increase in occupancy from 92% two years ago, to 96% in 2021. Ongoing review of delays in transfer of care helps in managing waiting list numbers to ensure delivery of quality services to patients.



Risk Management

ELAYNE TAYLOR
QUALITY AND RISK MANAGER

Overview

The National Rehabilitation Hospital (NRH) is committed to providing effective and integrated care in an environment that is safe for our patients, staff and visitors. The Risk Management Department oversees the NRH risk management programme that aims to reduce risks within the organisation. Risk Management ensures that systems and processes are in place to identify and to manage these risks to an acceptable level. The Department provides advice with regards to best practice in risk management, patient safety and environmental health and safety issues, and is committed to managing risks in a proactive, integrated and accountable manner. All staff levels within the NRH support the effective risk management processes that are in place and we are kept informed regarding developments in the domain of risk management in the organisation. The Risk Management Department prepares monthly quality and risk reports for the Board of Management, Quality, Safety and Risk Committee and the Executive Management Committee. These reports are also made available to all staff.

The NRH promotes a proactive health and safety culture by encouraging the reporting of all adverse and near miss events. All incidents are recorded using the National Incident Report Forms (NIRF) and are recorded onto the NIMS database (National Incident Management System). All reported incidents (clinical and non-clinical) are managed in line with the NRH Incident Management Policy.

In 2021, a total of 1,075 incidents were reported. All reported incidents were reviewed by the Risk Management team. The review type selected was based on both the category of incident and the severity rating of the incident. The review processes facilitate the NRH to learn from incidents and initiate change that will ultimately facilitate improvements in our standards of care.

The department continued to support the organisational wide approach in the management of COVID-19 during 2021. This included the reporting of all COVID-19 related incidents in line with legislative requirements, the development of COVID-19 policies and the development of protocols to support staff working from home in line with public health requirements.

The Department also launched a number of quality initiatives during the year including the introduction of the 'Hello My Name Is' initiative for all staff. A number of external inspections took place during 2021 and quality improvement plans were developed in response to all recommendations made.



Joan Carthy and Dr Éimear Smith at the annual 'Beyond the NRH' event where patients can gather information about support services in the community that are available to access following discharge from the NRH.

The NRH is committed to providing effective and integrated care in an environment that is safe for our patients, staff and visitors.



Subject Access Requests

The Risk Management Department facilitates access to personal requests for information, such as Freedom of Information requests. The Department also responds to corporate requests for information. There was a total of 354 such requests in 2021, the number and type of these requests processed in 2021 include:

Type of Request	Number of Requests 2021
Freedom of Information	69
Data Protection-GDPR	38
Freedom of Information and Data Protection Access	9
Routine Administrative Access requests	238
Total Requests for Access to Records	354

Future plans

The Risk Management Department remains focused on identifying opportunities for improvement in our care standards and will continue to use information from numerous resources to support this including:

- Findings from investigations into reported adverse incidents
- Findings and recommendations from site visits or inspections undertaken by authorised agencies such as HIQA and the Health & Safety Authority
- Audits and safety rounds including Health & Safety Audits, COVID-19 audits and Dangerous Goods Safety Audits.

We will continue to develop and monitor key performance indicators relating to patient safety, incident reporting and health and safety standards, and will focus on providing ongoing support and advice to all hospital Departments as we navigate through the COVID-19 pandemic into 2022.



School Report

AOIFE MAC GIOLLA RÍ – PRINCIPAL

LOUSE KELLY – ACTING PRINCIPAL TO JUNE 2021

MARIE MARTIN – SCHOOL SECRETARY TO NOVEMBER 2021

Our Lady of Lourdes School is a registered Primary school which provides education to students of primary and second level (4 to 18 years old students) admitted to the National Rehabilitation Hospital (NRH).

School Management

Policies in Our Lady of Lourdes School include a Health & Safety Statement, Code of Behaviour, Child Protection, Acceptable Use Policy, Data Protection, Information and Technology Policies.

Philosophy and ethos of the Hospital School

The school promotes a child centred philosophy where the pupil is central in a context of significant rehabilitation and educational support provided to young people recovering from acquired spinal injury, brain injury or limb absence. The education provided for each child is customised and as far as possible follows the State curriculum while supporting pupils in their holistic development. The emotional, physical, and spiritual wellbeing of pupils is paramount, and every effort is made to nurture pupils' unique skills and interests.

The education provided in the NRH – On enrolment:

- contact is made with the student's base school to ensure that continuity of work is maximised.
- school sessions are planned in line with the Interdisciplinary Team (IDT) goals for each child or young person.

The school liaises with the student's base school and uses email and phone communication between the student and his or her Home-School Liaison Teacher, Career Guidance Teacher or Resource Teacher as appropriate, in consultation with the base school's Principal.

On discharge Our Lady of Lourdes School passes on the report-work and results of any educational diagnostic tests administered while in the NRH to the pupil's base school.

In November, School Secretary, Marie Martin retired after many years of dedicated service. Staff from the School and the NRH extended their best wishes to Marie on her retirement.

Innovations in the School

The school classroom is located in Daisy Unit, complete with interactive whiteboard, height adjustable and assistive classroom furniture to cater for students' various needs. The addition of the classroom at Daisy Unit has enabled the school to collaborate further with the Paediatric Interdisciplinary Team (IDT) and allows students to access school with ease and comfort. The original classroom in the Cedar's Building is open for pupils from other Units. The school's main focus has been on wellbeing, something that has been widely incorporated into group activities and sessions.

Security Report

DARAGH BOLTON
HEAD OF SECURITY

2021 was a quite challenging year for the front of house services and the combination of the three teams (Security, Porters, and Reception) has resulted in an efficient synergy bringing a professional service to all visitors. Each team operates independently but with a combined daily huddle to ensure clarity on the daily operations and interdepartmental support where required. Microsoft Teams and associated apps are used widely across the teams and 2022 will see further development aiming towards a paper-less department with an increased use of technology to enable simpler more effective procedures and metric tracking.

With over 3,375 visitors arriving onsite to be processed and managed in a timely manner in line with the restriction guidelines posing a unique challenge, the combination of the team's dedication, professionalism, and above all else patient care shone through.

Security Team

Security maintained and managed access control as best as possible under the circumstances ensuring ease of access for authorised persons aiming to create a positive visitor and contractor experience upon arrival. All new procedures were implemented and measured for the first operational year in the new hospital giving us a clear picture of the functionality of security and its performance.

Access control is one of the most important areas of security with a multitude of sub-sections which can facilitate a breach including asset management of keys and electronic devices or access control cards. Effective management of these is a crucial element of physical security operations.

Incident Response is a vital function that the security team carry out to ensure the safety and security of all persons on campus 24 hours per day 365 days per year. This is monitored and coordinated from our security operations centre or control room which monitors the cameras and access-controlled doors on site. The security team have responded to many calls throughout the year and regularly conduct live drills to test their response times and capability. To date the average response time to have security officer arrive at an incident is under two minutes from the call receipt.

Porter Team

2021 saw the launch of the eagerly awaited Porters Department, a team designed to support the staff and patients in assisting with patient transfers to and from therapy sessions and appointments on campus. Also supporting the facilities, medical records and clinical engineering departments, the team have quickly become a vital part of our day-to-day patient care. Operating on a task basis, the team have completed 5773 tasks to date, most of which were ensuring patients were transferred on time.

Reception Team

The reception team have transitioned to the new building with great ease and professionalism ensuring an efficient and pleasant front-of-house experience is received by all visitors to the hospital. A quite challenging year with some improvements to be made in the department including the development of the Telephonist workstation in the reception back office as per the original design plan. This will separate telephone answering from reception during peak times ensuring a more efficient front-of-house service.



Technical Services Department

PETER BYRNE, TECHNICAL SERVICES MANAGER

DAVID DONOGHUE, TECHNICAL SERVICES DEPARTMENT

2021 was a very busy, productive and disruptive year for the Technical Services Department (TSD), with many upgrades and developments carried out, many completed and many still in progress, throughout the hospital campus. With the continuation of COVID-19, the focus of the TSD Team was on adhering to all HSE and hospital COVID-19 guidelines, and ensuring the safety of patients and staff at all times.

The TSD team along with the Health Planning Team (HPT) continued working on the snagging list for Mechanical & Electrical and other outstanding snagging issues in the New Hospital.

The original aging hospital buildings (Cedars Building) and infrastructure proves to be a constant challenge for the TSD team in maintaining the facilities to the required standards. The team works closely with all Units, departments and services in the hospital and strive to provide a safe and comfortable environment for patients, staff and all stakeholders of the NRH.

Projects and Developments in 2021

COVID-19: Numerous projects and initiatives were completed by TSD across the Campus to ensure the safety and wellbeing of all NRH stakeholders. This included a drive-through PCR testing area and shelter provided for the Occupational Health Department.

Safety Signage: Installation of signage and wayfinding continued in 2021 in conjunction with the Accessibility Committee and Health Planning Team.

Relocation of Departments and Interdisciplinary Team (IDT) Work Spaces: TSD continued work on the upgrading and relocation of many Departments and Services for staff in conjunction with the 'New Ways of Working' initiative.

Pharmacy Relocation and Spinal Treatment Room Projects: Planning for the relocation of the Pharmacy Department and four new treatment rooms in the Spinal Gym was completed in preparation for the tendering process.

Fire Register: The TSD and Risk Management Department worked together to improve and update the Fire Register for both the Cedars building and the new Hospital.

The Ivy Building: Work continued on refurbishing the Ivy building which accommodates the Academic Department and the NRH Foundation Offices.



Lighting Upgrades: Lighting upgrades (internal and external) continued in the Cedars building in 2021. Low energy type fittings were installed.

Other projects completed in 2021: Covering of the concrete floor in the delivery corridor to the new hospital was completed. Ceiling roof access hatches were installed on three levels of the hospital for ease of access to mechanical isolation valves. Tool stations were installed in the service riser on each level of the hospital. This has reduced the time taken to carry out small repairs and installations in the new hospital.

TSD Support Desk: In 2021, 5240 tickets raised through the TSD ticketing system were closed.

In conclusion, I thank all the Technical Services team for their invaluable support and assistance which was vital in what was one of the busiest years we have experienced. A word of thanks to the Health Planning Team who have worked alongside the Technical Services team on many major projects, and senior management for their continued support to the team over the past year.

Unit Guide

Unit Name	Symbol	Programme	Floor Level
Daisy		Paediatric Family Centred Rehabilitation	-1
Pine		Brain Injury	-1
Willow		Stroke Programme	G
Poppy		Prosthetic, Orthotic and Limb Absence (POLAR)	G
Ash		Brain Injury	1
Rose		Brain Injury	1
Holly		Brain Injury	1
Lily		Spinal Cord System of Care	2
Oak		Spinal Cord System of Care	2
Fern		Spinal Cord System of Care	2



Rochestown Avenue
Dún Laoghaire
Co. Dublin
Ireland

Tel: +353 1 235 5000
Fax: +353 1 285 1053
Email: enquiries@nrh.ie
www.nrh.ie