

NOCA QUALITY IMPROVEMENT CHAMPION AWARD 2023



The NOCA 'Quality Improvement Champion Award' recognises an individual or team who has made best use of national or local clinical audit data to improve patient care in their hospital/hospital group/healthcare organisation

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NOCA QUALITY IMPROVEMENT CHAMPION AWARD – 2023 SUBMISSIONS

No particular order

	Title	Organisation	Team	Lead(s)
1	Quality Care Metrics in Tallaght University Hospital	Tallaght University Hospital	Daire Ward, Clinical Placement Co-ordinator, Deepthi Chakkittakandy, Clinical Facilitator in Delirium / Sepsis, Sinead Hickey, Clinical Facilitator	Cicily Regi, Nurse Practice Development Co-ordinator
2	A survey-based quality improvement project assessing parental views of the transition process from paediatric to adult metabolic services.	CHI at Temple Street	Yvonne Rogers, Olivia Walsh, Anne Clark, Meabh O'Shea	Yvonne Rogers
3	Critical Care out of hours discharges to the ward	University Hospital Galway	Anita McGlynn Dr Rachel Jooste Dr Peter Moran	Anita McGlynn Dr Rachel Jooste Dr Peter Moran
4	Establishing a PFO pathway for acute stroke patients with a positive bubble study	Connolly Hospital Blanchardstown	Ms. Lavanya Saiva, Prof. Ivan Casserly, Ms. Jamie Byrne, Dr. Patricia Guilfoyle, Dr. Orla Sheehan, Dr. Eamon Dolan	Lisa Donaghy
5	Digital management system for	Our lady of Lourdes Hospital	Murali Sayana Ortho Consultant, Eoin Sheehan	Ian McGovern Clinical Specialist Physiotherapist ,

	Trauma and Orthopaedics	Drogheda, Midlands Regional Hospital Tullamore	Ortho Consultant , Emma Poff Clinical Specialist Physiotherapist, Michelle Crowley Clinical Specialist Physiotherapist, EHealth Committee RCSI Group	Christopher Fenelon Specialist Registrar Orthopaedics
6	A Data Quality Initiative in Reducing Waiting Lists	Children's Health Ireland (CHI) Group	Christina Menelaou, Donna O Connor, Elayn Ryan, Vera Duggan and Michelle Stynes	Anita Little
7	Design and Implementation of a Bronchiolitis Care Package	Children's Health Ireland at Temple Street	Dr. Conal Cunningham, Dr. Sarah Kyne, Dr. Stevie Barry	Dr. John Fitzsimons, Ms. Jilu Jacob (CNM)
8	The effect of outsourcing in-house out of hours CT scans on the Door to Imaging time of suspected Stroke patients	Connolly Hospital Blanchardstown	Eamon Dolan, Patricia Guilfoyle	Rachel Joyce, Lisa Donaghy, Orla Sheehan
9	An audit of ongoing practices identified large gaps in the availability of appropriate services for autistic children.	CHI at Connolly		
10	Audit of the quality of documentation of patient's resuscitation	Mater Misericordiae University Hospital	Lorraine Kyne, Fran O'Keefe, Joseph Duggan, Ruth Buckley	Hannah Smyth, Johnny Walsh

	status and treatment escalation plans			
11	Improving detection of Aortic Dissection	Tallaght University Hospital Dublin	Emergency Department, Surgery, Radiology	Dr Victoria Meighan, Ms Amy Gillis, Dr Orla Buckley
12	Sips til section	The National Maternity Hospital, Dublin	Department of Anaesthesia, Clinical skills facilitators, Clinical risk department, Clinical Practice development midwives	Dr Nikki Higgins, Dr Sara Ahmed
13	Improving medicines management of inpatient Parkinson's disease patients by making pharmacy interventions		HSE,UCC	Mark Knipe, Elaine Conyard
14	Counting the days	Mater Hospital	Dr. Tomas Breslin/Dr. Fran O Keeffe	Marion Lynders
15	To examine pain management in patients on the orthopaedic ward in OLOL	Our Lady of Lourdes Hospital Drogheda	Dr Helen O'Brien & Dr Fauzia Sangani	Marie Richardson & Gwen Mahoko
16	Critical Care ANPs to reduce ICU admission delays	St James's Hospital	Critical Care CANP Team	Rachel Egan Karen Maher Triona Yearsley Oonagh Power Emma Morrissey

WINNER

Sips Til Section

The National Maternity Hospital Dublin

Project Team: Department of Anaesthesia, Clinical skills facilitators, Clinical risk department, Clinical Practice development midwives

Project Leads: Dr Nikki Higgins, Dr Sara Ahmed



Highly Commended

Improving detection of Aortic Dissection

Tallaght University Hospital Dublin

Project Team: Emergency Department, Surgery, Radiology

Project Leads: Dr Victoria Meighan, Ms Amy Gillis, Dr Orla Buckley

Highly Commended

Critical Care ANPs to reduce ICU admission delays

St James' Hospital

Project Team: Critical Care CANP Team

Project Leads: Rachel Egan, Karen Maher, Triona Yearsley, Oonagh Power & Emma Morrissey



Entry 1

QI PROJECT TITLE	Quality Care Metrics in Tallaght University Hospital
PROJECT LEAD(S)	Cicily Regi, Nurse Practice Development Co-ordinator
PROJECT TEAM	Daire Ward, Clinical Placement Co-ordinator, Deepthi Chakkittakandy, Clinical Facilitator in Delirium / Sepsis, Sinead Hickey, Clinical Facilitator
ORGANISATIONS	Tallaght University Hospital
CLINICAL AUDIT TYPE	Local & National

Objective of the QI Project

Nationally Quality Care Metrics were developed by the Health Service Executive (HSE) Office of Nursing and Midwifery Director and the process of national consensus was achieved in 2018. Prior to This implementation, TUH used the Nursing Instrument of Quality Assurance (NIQA) as metrics to measure the quality of care provided. In 2020 Tallaght University Hospital (TUH) adopted the national Quality Care Metrics (QCM) to provide a standardised system to measure the fundamentals of care and benchmark the quality of care we provide.

Currently:

- TUH theatre department implemented the Health Service Executive (HSE) 'Theatre' tool since November 2018.
- In 2020, TUH adult nursing service adopted the use of the national system and implemented the HSE 'Acute Care' tool.
- Local SharePoint Critical Care collection tool with excel analysis implemented to Intensive Care Unit (ICU) 2020 and Post Anaesthetic Critical Care Unit (PACCU) 2021.

QCM has also been implemented in step down clinical areas attached to TUH including the Transitional Care Unit, in St Luke's Hospital and the two clinical units at Tymon North.

TUH utilise QCM to audit clinical areas regularly. Action plans are developed and implemented, and any risks are actioned immediately.

TUH has embraced the implementation of this national standard in order to ensure the delivery of quality patient care.

Details of stakeholder engagement

A QCM Local Implementation Group was developed pre implementation of QCM in TUH. This committee has clear governance and accountability arrangements to ensure QCM was implemented in all acute services and led by the Nurse Practice Development Co-ordinator. This committee comprises of representatives from all grades of the nursing team in TUH.

Education and training of all nursing staff commenced pre-implementation of QCM in TUH. This included information on what is Quality Care Metrics, the thirteen indicators and its importance in quality patient care. A database of staff education was developed by our informatics nurse. QCM e-learning is mandatory for all new nursing staff to TUH. Once the probationary period has been completed, all nursing staff are invited to become trained auditors in QCM.

Nursing students are educated on QCMs at induction and involved in QCM data collection with their Clinical Placement Co-ordinators / preceptors. This early exposure to auditing of clinical practice promotes the delivery of quality patient care.

Details of changes implemented

A number of Quality Improvement Projects were developed following the implementation of QCM in TUH where gaps were identified; these include Mealtime Matters initiative, Delirium Prevention and Management strategies, Falls Prevention and Injury Management strategies.

In 2021, TUH implemented Delirium Prevention and Management strategies which saw the development of a delirium eLearning programme. This eLearning programme is aimed at all health care professionals, not solely nursing, as multidisciplinary response to delirium management and treatment is vital to ensure a holistic approach to patients functional, medical and physical outcomes are observed. In addition to this, TUH developed a delirium care bundle and guideline to support clinical staff. A clinical facilitator was appointed for a two year project lead for the implementation of Delirium and Sepsis hospital wide improvements.

Similarly, a permanent Falls Clinical Nurse Specialist role was appointed in TUH to manage and lead on our Falls and Injury Management indicator. A mandatory Falls eLearning programme for nursing staff was developed. In addition to this, a falls care bundle and guideline to support clinical staff was developed.









The patient is at the centre of all improvements made in TUH, and therefore as part of any new initiatives we ensure we have appropriate patient information leaflets designed to inform and empower our patients.

We truly value the feedback and evaluation we receive from our patients and encourage all of our patients to participate in the patient satisfaction survey. This vital feedback drives our continuous engagement in quality patient care.

Findings / Results of the QI Project-

QCM highlights exceptional care and areas of risk which require immediate attention. This enables targeting action planning for improvement and offers direction on educational needs for healthcare staff. QCM promotes staff education and accountability for the quality of care.

Below is a snapshot of results from our QCM audits in TUH which demonstrates an increase in compliance post the implementation of quality improvement initiatives in the indicators of Falls and Injury Management, and Delirium Prevention and Management.

Falls and Injury Management	 90%	 90%	 92%	 100%
Delirium Prevention and Management	 50%	 53%	 67%	 100%

Describe any structures or improvements that have helped to sustain improvement.

In TUH, QCM is an ongoing audit that monitors the improvements implemented and provides assurance that care standards are met and evaluated. Policies, Procedures, Protocols and Guidelines are in place to guide practices in line with national standards. All clinical areas have an ongoing programme of education and training on the use of care bundles, care plans and other nursing documentation.

The results of the QCM audits for each clinical area are displayed on our quality care boards for staff, patients and visitors. Information is also available on our “Patients are Partners in their Care” boards. There is evidence of internal sharing of learning and the Nurse Practice Development Department is instrumental in this continuous learning.

The results of the QCM audits for each clinical area are discussed in our quarterly QCM Local Implementation Group committee and are also discussed at daily ward huddles by clinical nurse managers, staff nurses and student nurses. This is captured in the ‘metric minute’ where one minute is used to remind staff about their current QCM findings and action plan. There are QCM champions in each clinical area who develop action plans and promote the use of the ‘metric minute’ at nursing huddles.

Nurse Practice Development in TUH annually implement multiple zero harm initiatives from a multi-disciplinary perspective. These initiatives provide information and education to staff, patients and visitors on specific areas of care and further ensure sustainability of changes implemented.

The Nurse Practice Development Department in TUH have close ties with our academic partners in Trinity College Dublin (TCD) and keep TCD informed on the new initiatives in clinical practice in TUH. This ensures our students are informed on the most up-to-date evidence based clinical practice.

Entry 2

QI PROJECT TITLE	A survey-based quality improvement project assessing parental views of the transition process from paediatric to adult metabolic services.
PROJECT LEAD(S)	Yvonne Rogers
PROJECT TEAM	Yvonne Rogers, Olivia Walsh, Anne Clark, Meabh O'Shea
ORGANISATIONS	CHI at Temple Street
CLINICAL AUDIT TYPE	Local

The National Centre for Inherited Metabolic Disorders (NCIMD) was opened in Temple Street hospital in 1994. The NCIMD treats patients with inherited metabolic disorders, often from birth onwards, and provides care to patients from all 26 counties of the Republic of Ireland.

An adult metabolic service was established in the nearby Mater hospital in 2012. The NCIMD has been gradually transferring patients to the destination adult hospital over the past number of years. However, formal transition clinics were only begun in July 2022. These clinics are held monthly at present and are co-led by staff from both the paediatric and adult services.

We undertook a quality improvement survey in the paediatric metabolic service during July to October 2022. Our benchmark document was the 'Model of Care for Transition from Paediatric to Adult Healthcare' published by the National Office for Rare Diseases.

Using a Plan Do Study Act (PDSA) cycle, our overall aim was to assess the views of parents of patients, aged between 12 years and 17 years, about the current transition process in our service. We were interested in what topics parents felt were important to include in a transition programme, whether they would feel comfortable for their child to be seen alone for

part of a transition consultation and what staff should be involved in transition appointments.

PLAN

The objectives of the quality improvement project were (1) to assess the needs of patients and families when transitioning from paediatric to adult care; (2) to obtain an overview of thoughts and opinions from parents concerning transition; (3) to use this information to resource-plan for transition clinics.

DO

We devised a 14-question survey using Survey Monkey. Ethical and DPO approval were obtained. Parents of patients in the relevant age-range were contacted by telephone by the project team to explain the purpose of the study and to give parents the opportunity to ask questions. One hundred and eight parents consented to receive the survey. These parents were sent a link to the online survey.

STUDY

There was a 53% return rate for the survey. Parents were very forthcoming in their opinions. Over 80% of parents selected managing the social challenges associated with their child's condition as being the most important transition topic. This is consistent with our clinical experience of the difficulties reported by our patients.

On the question about the most appropriate age to begin transition planning, 55% of the parents felt that the process should not begin before 15 to 16 years. This differs from that recommended by the Model of Care for Rare Diseases, which suggests beginning the process at 11 to 14 years.

A sizable minority (36%) of parents stated that they would be uncomfortable with their child being seen alone at any age.

ACT

Parents provided rich qualitative data in the open-text questions in the survey. Attachment to and affection for the paediatric service was widespread. Anxiety about the move to the adult service and fear of the 'unknown' were also common. Parents made some helpful suggestions about what would be useful for them, e.g. an information leaflet about the adult service. Our intention is to mine the data for further themes so we can optimize our approach to transition and incorporate parental views. We have also shared preliminary findings with our colleagues in the adult service.

Entry 3

QI PROJECT TITLE	Critical Care out of hours discharges to the ward
PROJECT LEAD(S)	Anita McGlynn Dr Rachel Jooste Dr Peter Moran
PROJECT TEAM	Anita McGlynn Dr Rachel Jooste Dr Peter Moran
ORGANISATIONS	University Hospital Galway
CLINICAL AUDIT TYPE	Local

Objective and Findings from clinical audit that led to this QI project:

OBJECTIVES:

1. Improve our discharge documentation (medical and nursing) to include:

Part A: Time declared medically fit for discharge 100% of the time
 Part B: Reason for out-of-hours discharge to ward 90% of the time
 Within a 6 month period by using Quality improvement methodology reviewing every 2 months.

2. Measure for improvement (Outcome, Process and Balancing)

Findings from clinical audit that led to this QI project:

Out of hours discharges to the ward (not delayed) quality indicator was a statistical outlier for Q4 2021 in ICU Audit data

FINDINGS/RESULTS Initial data review:

N = 28 patients Q4 2021 discharged out-of-hours (Discharged between 22:00 and 06:59, not delayed).

N = 15/28 [54%] no reason for out-of-hours discharge documented in notes (nursing or medical).

N = 4/28 [14%] patients were declared fit for discharge before 6pm on the day of discharge on review of submitted data.

It was challenging and time consuming to establish from medical and nursing notes the exact time that the patient was declared medically fit for discharge.

It was challenging and time consuming to establish from medical and nursing notes exact reason for out-of-hours discharge to ward.

Summary: Reason for large number of out-of-hours discharges to ward unclear based on second review of data submitted to ICNARC/NOCA

Drivers & PDSA cycles: Part A:

Improve our discharge documentation to include time declared medically fit for discharge 100% of the time.

All medical and nursing documentation in critical care is documented on our Clinical information system Metavision. In the nursing summary sheet there is a fit for discharge tab but the compliance to complete that on review was less than 50%. We met with the clinical information CNMII to explore our options, after some discussion between all parties (medical, nursing and CIS manager) we decided to add a mandatory field to the daily medical note indicating at time of morning ward round if a patient is declared medically fit for discharge to ward (time stamped).

Data review after first 2-month period:

First data review conducted 2 months after addition of mandatory fit for discharge tab to medical documentation on CIS, ongoing bedside education of nursing staff, Junior doctors updated during morning teaching sessions and consultant updated at consultant meeting.

N = 7 patients November/December 2022 discharged out-of-hours (Discharged between 22:00 and 06:59, not delayed).

N = 7/7 fit for discharge tab completed enabling a faster review of data to establish if patients were declared fit for medical discharge before 6pm

N= 3/7 (42%) no reason for out-of-hours discharge documented in notes (nursing or medical).

N=4/7 (58%) had documentation of reason for out of hours discharge to ward.

N=1/4 patient care was de-escalated and patient was transferred to ward for EOL care

N=3/4 patients were discharged to ward as bed was required for patients awaiting admission to critical care.

Describe any structures or improvements that have helped to sustain improvement:

The implementation of the mandatory fit for discharge tab on the daily medical shift summary has resulted in 100% completion of time fit of discharge, this was an expected improvement.

Unexpected was the level of staff turnover and medical staff rotation which has increased the need. Education is ongoing for both medical and nursing staff and feedback will continue at directorate meeting to sustain momentum until the next review is carried out in 2 months' time.

We will focus on improving our 'reason for out of hours discharge' documentation (part B) of the QIP by ongoing education and posters. We will conduct a staff survey as part of balancing measures acknowledging that nursing and doctor compliance is essential for improvement and to the success of our project.

Entry 4

QI PROJECT TITLE	Establishing a PFO pathway for acute stroke patients with a positive bubble study
PROJECT LEAD(S)	Lisa Donaghy (Registered Advanced Nurse Practitioner in Stroke)
PROJECT TEAM	Ms. Lavanya Saiva, Prof. Ivan Casserly, Ms. Jamie Byrne, Dr. Patricia Guilfoyle, Dr. Orla Sheehan, Dr. Eamon Dolan
ORGANISATIONS	Connolly Hospital Blanchardstown
CLINICAL AUDIT TYPE	Local

Background

A bubble study is performed routinely on patients under the age of 65 years of age with a confirmed diagnosis of either acute ischaemic stroke or TIA in order to assist with the presence of a PFO/ASD as an aetiology for the stroke event. Nationally, approximately 26% of stroke survivors are under the age of 65. However, in Connolly Hospital Blanchardstown (CHB), there is a 10% increase in younger patients presenting with stroke and represents 36% of all stroke cases. Prior to the QI, a TOE would be routinely performed on all positive bubble studies. Thereafter, a referral letter would be written to a hospital who specialises in cardiac structural surgeries, requesting a review of a patient with a positive bubble study and acute stroke. A RoPE score was not calculated and patients were not triaged. PFO closure would typically exceed 9 months.

Due to the higher cohort of under 65 year old stroke survivors and prolonged length of time to PFO closure, there was a requirement to assess current practice and introduce a referral pathway to streamline patient care.

Methods

The Stroke RANP led out on the project as she performs all bubble studies in stroke survivors. The QI project was initiated in September 2021. A

designated Cardiologist, who also works in a hospital where PFO closures takes place, is notified by the RANP or team about a positive bubble study and the images are reviewed. It is then decided if the patients requires a TOE or not. If the PFO anatomy is clear on TTE, there is no requirement for a TOE and the patient is referred for consideration for PFO closure. However, if the images are suboptimal, a TOE is favoured for further investigation. A 2 page PFO referral form was created which contains all relevant information, including stroke work up results, current medication and RoPE score. Furthermore, a "Patient Information Leaflet" was developed to assist patients and their relatives of the diagnosis and follow up plan of care.

Results

Stroke RANP performed 92 bubble studies between January 2021 and May 2022. There were 18 positive studies (20% positivity rate): 7 positive studies from January to August 2021 (pre-pathway) and 11 positive studies from September 2021 to May 2022 (post-pathway).

72% (5/7) of patients had a TOE performed following a positive bubble study result pre pathway, whereas only 1 TOE was performed out of 11 cases (9%) post pathway.

The time from positive bubble study to closure time reduced from 9months on average to 3 months.

Conclusion

There was a 63% reduction in the number of TOEs being performed for patients with a positive bubble study with the introduction of this PFO pathway. Additionally, there was a 6 month reduction time from the positive bubble study result to closure due to the introduction of this referral process and triage system. This pathway has improved patient outcomes for this young group of stroke survivors and assists with the reduction of further stroke events in the future.

Entry 5

QI PROJECT TITLE	Digital management system for Trauma and Orthopaedics
PROJECT LEAD(S)	Ian McGovern Clinical Specialist Physiotherapist , Christopher Fenelon Specialist Registrar Orthopaedics
PROJECT TEAM	Murali Sayana Ortho Consultant, Eoin Sheehan Ortho Consultant , Emma Poff Clinical Specialist Physiotherapist, Michelle Crowley Clinical Specialist Physiotherapist, EHealth Committee RCSI Group
ORGANISATIONS	Our lady of Lourdes Hospital Drogheda, Midlands Regional Hospital Tullamore
CLINICAL AUDIT TYPE	Local with national implications

Objective of the QI Project

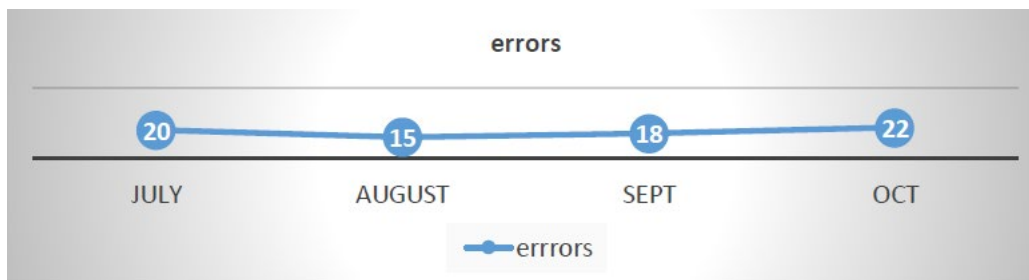
The goal of this project is to support the management of Trauma Orthopaedic Care in Our Lady of Lourdes Hospital Drogheda (OLOLH) and Midlands Regional Hospital Tullamore (MRHT). Annually trauma and orthopaedics accounts for 33% of all ED attendances, 20,000 procedures and 200,000 appointments across 18 hospital sites nationally. OLOLH is the trauma centre for the north east region with a population of 600,000 people. There are 9 fracture clinics per week and daily virtual fracture assessment clinics (VFAC). The service accepts referrals from 5 sites, Cavan, Monaghan, Dundalk, Navan and Drogheda emergency departments. A daily VFAC model of care is well established in OLOLH Drogheda and creates the opportunity for fractures to be remotely managed by the right person at the right time avoiding unnecessary hospital attendance. As a result of the VFAC model of care the average number of patients attending traditional clinics has reduced from 70 to 30 patients per clinic. Slaintecare implementation strategy 2021-2023 recommends the establishment and evaluation of VFAC across 18 hospital sites nationally with a national KPI of

reducing fracture clinic attendances by 30%. The following chart demonstrates the increase in VFAC demand in Drogheda.

Prior to the project the VFAC team had no safe and effective way of transferring information with a reliance on legacy paper based systems and excel sheets. It is imperative the VFAC team has coherent approach to managing patient care and associated clinical information. The proposed solution was to capture the clinical presentation information at source for all orthopaedic patients attending emergency departments, allowing for clear communication between clinicians and with patients. The administration of VFAC is a substantial duty for clinical staff, decreasing available time for direct patient care. A time log demonstrates the administrative workload on clinical members of the orthopaedic team.

Week	TAC CASES	TIME LOG	WTE
31/05/21-07/06/21	210	70 HRS	1.7

Legacy systems lead to information being lost with an overreliance on memory and excel sheets with no integration with other systems. Alarminglly at least two patients per month return to ED having not received any follow up from orthopaedics and minimal information on how to manage their condition. The following run chart tracks communication errors with the old system over a 4 month period in 2021.



The proposed solution was to implement a digital cloud based platform from a validated supplier with the following aims;

- 1.1. Track orthopaedic trauma patient care utilising a digital platform with real time notification for clinicians and patients.
- 1.2. Capture clinical presentation information in one place to coordinate our MDT clinical meetings using structured templates and coded data

(SNOMED CT) to ensure clinical safety and risk management of clinical cases.

1.3. Implement a database of activity to allow for auditing and workflow planning.

1.4. Ensure robust information governance and consistent customised communication to patients

Mitigate against the risks of the legacy system in place as outlined above.

Results of the QI Project

The project was undertaken with the guidance of the digital health transformation Masters programme in the University Of Limerick. Project management principles were utilised to identify key stakeholders and a work breakdowns structure to ensure all essential tasks were addressed by the project.

Project requirements documentation was shared with potential vendors and the digital solutions board assisted with the vendor selection process to trial a solution in OLOLH and MRHT. Approval of the trial was sought from the RCSI Hospital group E-health committee and RCSI Hospital group COO Shelia McGuinness. This led to the commencement of the trial on 21/04/22 in OLOLH Drogheda and 28/04/22 in MRHT with the aim of evaluation path point Etrauma as a potential digital solution to meet the needs of the project team.

Details of changes implemented.

Pathpoint etrauma is the only bespoke platform that meets the needs of the project team and at the best value for money. The solution is a digital cloud based platform from a validated supplier.

Clinical presentation information is captured in one place to coordinate our MDT clinical meetings using structured templates and coded data (SNOMED CT) ensuring consistent quality referral information. ED doctors and ANP's refer all orthopaedic patients utilising the platform. This information is captured once at source and utilised throughout the patient journey.

Screen shot of referral template with mandated fields.

Diagnosis*

× Fracture of ankle

Search for a clinical term (e.g [injury] of [region] of [bone]) and select the closest code. You can enter multiple values and choose "Right and Left" on the side field when both sides are involved.

Ankle Fractures

The following ankle fractures should be reduced and immobilised, then referred to the on-call Orthopaedic team:

- Weber B, with talar shift
- Weber C (with or without talar shift)
- Bimalleolar
- Trimalleolar
- Isolated displaced medial malleolus
- Distal / pilon
- All open fractures

Ankle fractures suitable for VFC:

- Weber A fibula fracture: Boot, full weight bearing, VFC referral
- Weber B fibula fracture, no talar shift: Boot, weight bearing as tolerated, VFC referral
- Isolated non-displaced medial malleolus fracture: Exclude associated proximal fibula fracture. Boot. Touch weight bearing, VFC referral.
- Paeds (0-12years): Minor ankle fractures (non-displaced fractures): Analgesia, Walking boot / Below

Separate multiple phone numbers with commas. Enter a valid email address.

Please verify the patient's current mobile number and email address for their outcome and care plan to be sent electronically.

Address
Country
- None -

Notes*

Give a concise summary of the problem and some brief notes of the history and examination findings...

Images

Screen shot example of patient information leaflet patient receives via sms or email link ensuring safe clear communication to patients



Your child has a
Buckle Fracture – Distal Radius
This is a specific type of fracture that occurs in children's bones.

Healing:
This normally takes approximately 3-4 weeks to heal.
It is normal for it to continue to ache a little for a few weeks after this. Younger children normally get better quicker.

Pain and swelling:
Taking pain medication and elevating their wrist will help. This is usually only needed in the first few days.

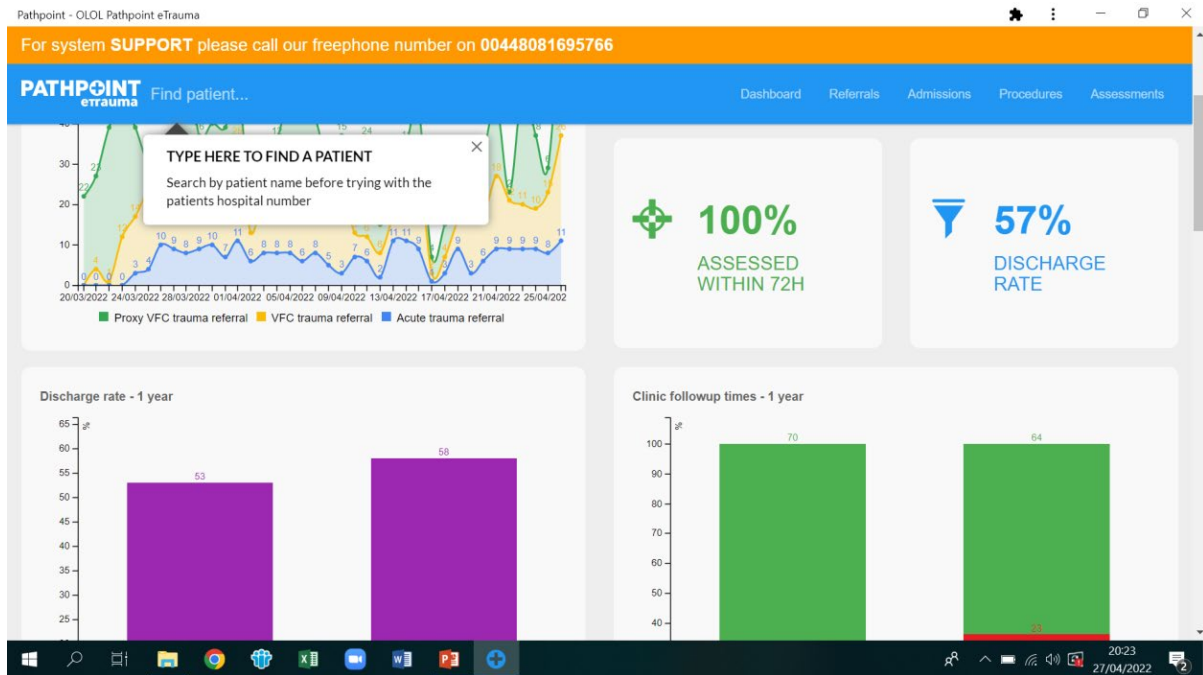
Using the arm:
It is ok to use and move the arm for normal tasks such as getting dressed and gentle play, writing etc. avoid any high impact activities where there is a chance of falling on it such as trampolining, scooters, football, bikes etc for 6 weeks.



The Splint:
The splint helps their pain by keeping the arm still. They can use the splint for 3-4 weeks as needed for pain relief. it doesn't need to be worn at night and can be taken off to wash hands or to give your child's skin a rest from the splint.

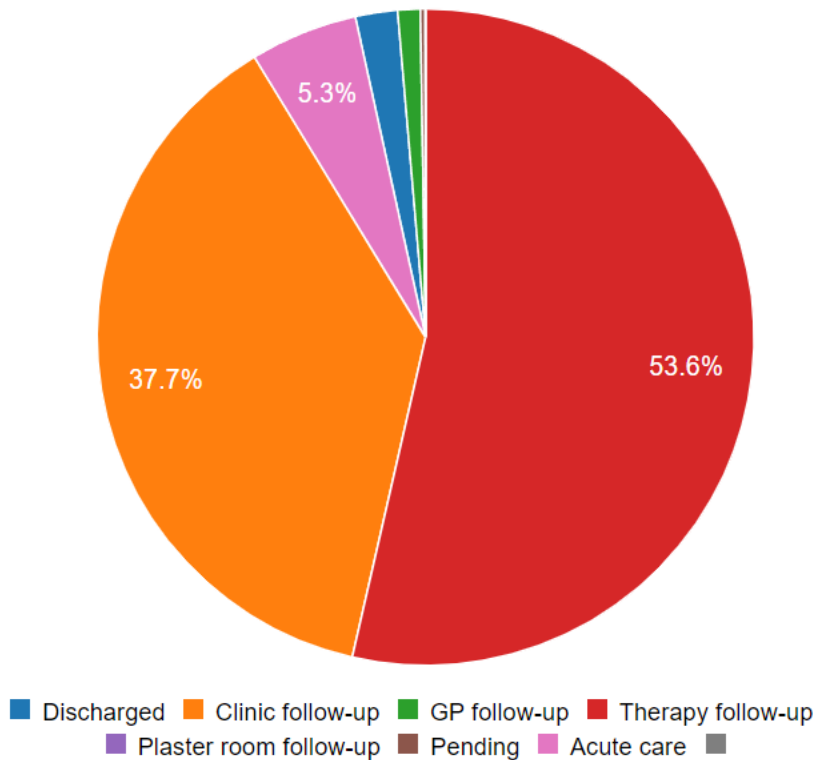


Screen shot of live data dashboard allowing the team to audit the service and plan.



Since commencing the trial 7,410 patients have been assessed using the platform with a 54% discharge rate direct to physiotherapy meaning that 4,000 patients have avoided at least one unnecessary visit to the fracture clinic in Drogheda. The average face to face fracture clinic appointment costs the HSE 150 euro as opposed to 60 euro for a remote appointment creating 260,000 in savings to the HSE for the duration of the trial phase to date for the RCSI Hospital Group.

Virtual outcomes 7410 in total



Details of stakeholder engagement, with particular focus on involving patients and/or carers

Project Management Team

- Ian McGovern, Project Lead OLOLH Drogheda
- Christopher Fenelon, Project Lead MRHT
- Martin Curley, Project Sponsor and Director of Digital Transformation
- Murali Sayana, Orthopaedic Clinical Lead OLOLH Drogheda
- Eoin Sheehan, Orthopaedic Clinical Lead MRHT, Clinical director MRHT & Programme Director of Orthopaedic Specialist Training
- Open Medical, Michael Shenouda, Medical Director
- Annette McElligott, Project Supervisor

Key stakeholders MRHT

NAME	ORG	DEPARTMENT	TITLE	ROLE
Caitriona McDonald	MRHT	Management	General Manager MRHT	Business Sponsorship and Support
Mr. Khalid Merghani	MRHT	Orthopaedic	Orthopaedic Consultant	Product requirements System use and feedback
Dr. Sean O'Rourke	MRHT	Emergency Department	Emergency Medicine Consultant	Product requirements System use and feedback
Dr. Anna Moore	MRHT	Emergency Department	Emergency Medicine Consultant	Product requirements System use and feedback
Sylvia Kearney	MRHT	Emergency Department	CNM2	Product requirements System use and feedback
Florence Osiadi	MRHT	Theatre	CNM3	Product requirements System use and feedback
Michella Wynne	MRHT	Orthopaedic Ward	CNM2	Product requirements System use and feedback
Breda Conlon	MRHT	Nursing & TAC	CNM2	Product requirements System use and feedback
Michelle Crowley	MRHT	Physiotherapy & TAC	Senior Physiotherapist	Product requirements System use and feedback
Lee Kearney	MRHT	ICT	IT Manager	Technical support and interoperability

Key Stakeholders OLOLH Drogheda

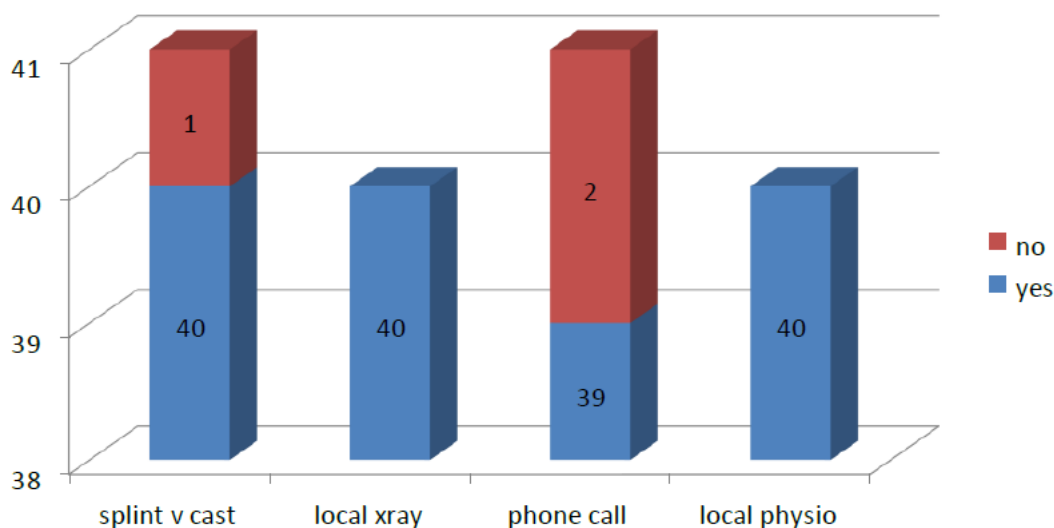
NAME	ORG	DEPARTMENT	TITLE	ROLE
Seamus Duigan	Lady's Hospital Navan	Emergency Dept.	ANP	
Niall Halliday	RCSI Hospitals	Digital Health	Project manager	Project management support and RCSI EHealth committee adviser
EHealth steering committee	OLOLH Drogheda	Various	Various	Project approval and support at local Hospital level
Mr Niall O Connor	OLOLH Drogheda	Emergency Dept.	Consultant	Product requirements System use and feedback
Pauline Butterly	OLOLH Drogheda	Fracture clinic	CNM Fracture clinic	Product requirements System use and feedback
Andrea McCabe	OLOLH Drogheda	Theatre	CNM Theatre	Product requirements System use and feedback
Mr Ashraf Butt	Cavan Monaghan	Emergency Dept.	Consultant	Product requirements System use and feedback
Margaret Mallen	Cavan Monaghan	Emergency Dept.	ANP	Product requirements System use and feedback
Paul Mulligan	RCSI Hospitals	Information technology	IT Lead for RCSI Group	Technical support and interoperability

Vincent Jordan	HSE	OoCIO	Director	Technical and leadership support , approval for pilot
Pathpoint e trauma	Open Medical	Various	Various	Software delivery and training
Alex fleming	OLOLH Drogheda	Information Technology	Manager	Technical support with interoperability with legacy systems

Patient engagement:

The project was presented to IPPOSI and received first place out of 60 potential projects for its impact on person centred care and improving the care experience. We conducted face to face interviews to capture the voice of the patient. A total of 41 patients were interviewed at the end point of the process in fracture clinic. The patient was asked some closed questions 1) would you prefer a local x-ray rather than travelling to Drogheda., 2) would you be happy if the consultant treated you with a splint rather than a cast 3) would you be agreeable to a phone call to explain management as opposed to physically attending the clinic, 4) would you prefer local physiotherapy.

Discussion was concluded by an open ended question to get general feedback on clinic.



Results were unanimous for local intervention with less need for travel time and unnecessary attendance.

Describe any structures or improvements that have helped to sustain improvement.

The trial of the solution has demonstrated the value of a digital cloud based solution to manage clinical information. The admin burden to staff has been significantly reduced and the errors associated with the legacy paper based system have been eliminated. As a result of the trial a procurement process is underway with EHealth and disruptive technologies to find a permanent solution for all 18 orthopaedic sites nationally. This process will be evaluated by key stakeholders including the national clinical care programme for Orthopaedics. Approval to integrate the solution with IPMS is approved by the national IPMS integration team.

Entry 6

QI PROJECT TITLE	DQI @ CHI: A Data Quality Initiative in Reducing Waiting Lists
PROJECT LEAD(S)	Anita Little Scheduled Care Manager, CHI
PROJECT TEAM	Christina Menelaou, Donna O Connor, Elayn Ryan, Vera Duggan and Michelle Stynes
ORGANISATIONS	Children's Health Ireland (CHI) Group
CLINICAL AUDIT TYPE	Local

Introduction / Overview

Background

Long Outpatient waiting lists (OWL) cross site in CHI leading to sub-optimal access for patients and their families. There was also a lack of timely follow up of outpatient clinical outcomes. The issue was compounded by poor data quality leading to inaccuracies, duplication and rework. There was non-compliance with chronological scheduling and the outpatient >18months Slaintecare targets. These Data quality issues were further enabled by multiple processes and systems, sub-optimal communications and lack of awareness, education and training.

Aims / Objectives

Goal Statement

The aim of the Data Quality initiative was to reduce over 18month outpatient waiting lists in line with Slaintecare targets as a first priority by improving data quality and removing non-value add. To develop improved data quality reporting, control and auditing to clearly define Data quality issues in real time and circulate for immediate action. The

project set out to create a person-centered culture to embed these data quality improvements by the development of education and training workshop program. Lean Six Sigma was used to break down cultural issues and silos and promote a more collaborative way of working.

Details of changes Implemented

Methods / Interventions

Lean Six Sigma Methodologies

- ▶ **SIPOC – Suppliers, Inputs, Process, Outputs and Customers**

This was to give a high level overview of the process and what inputs and outputs where required and all key stakeholders involved.

- ▶ **‘Ishikawa’ – Root Cause Analysis**

This was a full analysis of the Data Quality issues and clinical outpatient outcome process to find the root cause of each issue and identify where the processes and systems were breaking down under key categories ICT, Resources, Communications, Duplication, Variation and Culture.

Measurements for Improvement

Methods for Measurement

- ▶ **‘As Is’ Process Map**

A fully detailed process map was created of the Outpatient Clinical outcome process to identify non value add.

▶ **Data Analysis of OPD waiting list**

A full analysis was completed to assess the volume of data quality issues across 4 areas: OPD Hospital cancellations, Patient cancellations, DNAs and Outpatient Clinical outcome not specified or actioned.

▶ **Gemba 'In person mapping of the process'**

A four week pilot was carried out in the Outpatient department in Temple Street and data was collected and measured on the collection and reconciliation of clinical outcomes post OPD clinic attendance, Outcome source, outcome decision and action time frame and status of outcome

Details of stakeholder engagement, with particular focus on involving patients and/or carers

Silent Brainstorming

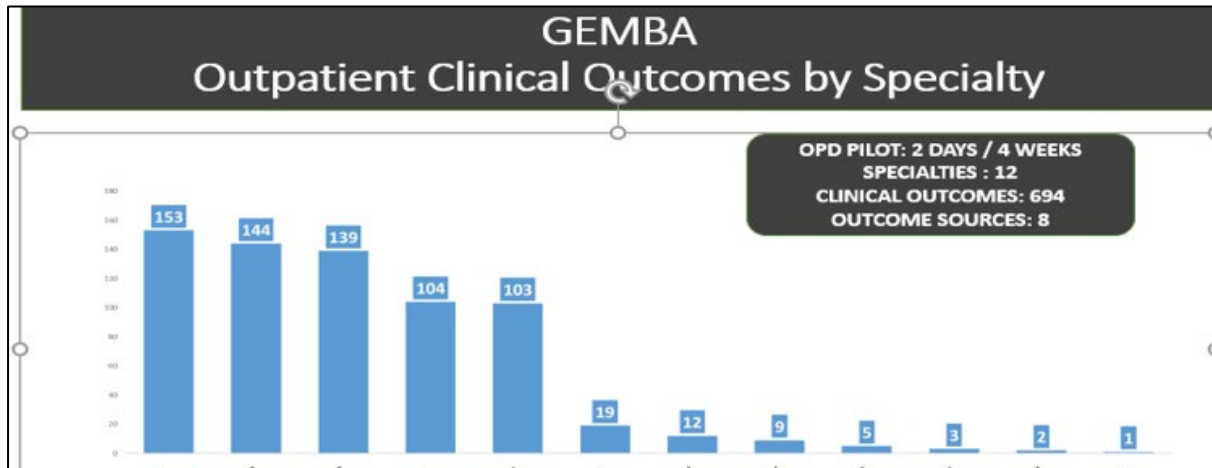
These sessions were attended by over 65 people across multiple disciplines and departments such as Outpatients, System Administration, ICT, HSCP, Central Referrals, Operations, Management, Wards and Health Records. There were hundreds of ideas generated and were then put into relational themes and prioritized by most impact on patients and their families, the staff and the organization as a whole.

Voice of Customer

The voice of the staff and patients were considered throughout this project and were captured pre and post the Gemba pilot.

Findings / Results of the QI Project

The Outpatient Outcome pilot collect 694 sources of data to measure outcomes over a 4 week period and identified 8 different sources to outcome an episode of care following an attendance across 12 different specialities.



A pre and post voice of the customer survey was completed to capture the voice of staff and patients which was used to implement any solutions.



Findings related to the Data Quality initiative to improve historic outcomes for DNAs / Cancellations showed a reduction of 1,117 (76% DNAs and 91%

Cancellations reduction) on the Outpatient waiting list from January to December 2022. It also showed a reduction in Outpatient outcomes not specified of 198 from September to December 2022.

These results directly created more capacity for our patients and allowed us to see those patients that actually needed to be seen earlier.

Describe any structures or improvements that have helped to sustain improvement.

Recommendations & Future Plans

- ▶ **Data Quality Weekly Huddles ‘Tidy Friday’ In progress since September 2022**
 - Data Quality huddles take place weekly between scheduled care and operational teams on site. These are known as ‘Tidy Fridays’ and each directorate has a 30minute huddle where DQ issues are discussed and plan made for action. The progress is discussed at the following meetings as are the challenges to reconcile same.
- ▶ **DQ Education Workshop**
 - This is a monthly workshop to go through DQ issues at a specialty level and complete a one on one with the admin team to go through the process that led to the DQ issue and ensure it does not recur.
- ▶ **DQ Admin Process Test Training workshop**
 - This is a monthly interactive IPIMS test workshop to go through DQ issues at a specialty level and complete a one on one with

the admin team to go through the process that led to the DQ issue and ensure it does not recur.

▶ **DQ & Waiting List Reporting workshop**

- This is an interactive workshop giving an overview of the DQ BI reports and the weekly NTPF extracts & Slaintecare OPD & IPDC monthly reports. It will demonstrate how to use pivots and filters to refine to a specific search criteria at a specialty or status level and how to generate the action log for updates.

▶ **Data Quality Outpatient Reports – Monitoring, Control and Auditing**

- Business Intelligence automated reports delivered weekly, monthly to email inbox
 - ▶ Outpatient Outcomes not specified post attendance in OPD clinic
 - ▶ Historic DNAs over 4 weeks old with no specified clinical outcome specified on IPIMS
 - ▶ Historic Cancellations both Patient and Hospital over 4 weeks old with no specified clinical outcome specified on IPIMS
 - ▶ Cross site duplicates for same specialty
 - ▶ Outpatients not on an OPD waiting list with an appointment
 - ▶ Incorrect Specialty against Waiting list episode created

▶ **Over 18mths Slaintecare OPD target report**

- This details all patients who will breach the Slaintecare target weekly and is automated to be sent to email inbox weekly

▶ **Data Quality Inpatient/Day case/GI Scope Reports**

- These reports are a work in progress and in development for 2023

This project has been a huge success and we are now in the planning stage for further engagement to all levels and disciplines of staff across CHI and new priorities such as Chronological Scheduling, Demand and Capacity planning and Data Quality Cross site duplicate project.

Entry 7

QI PROJECT TITLE	Design and Implementation of a Bronchiolitis Care Package in CHI at Temple Street
PROJECT LEAD(S)	Dr. John Fitzsimons, Ms. Jilu Jacob (CNM)
PROJECT TEAM	Dr. Conal Cunningham, Dr. Sarah Kyne, Dr. Stevie Barry
ORGANISATIONS	Children’s Health Ireland at Temple Street
CLINICAL AUDIT TYPE	Local

Objective:

Bronchiolitis is a viral respiratory illness involving the small airways with Respiratory Syncytial Virus (RSV) being the most common pathogen. It is the most common illness leading to admission to Irish Paediatric Hospitals and around the world. In recent years, a number of evidence-based recommendations have emerged for the safe and effective management of Bronchiolitis, particularly around discharge decision-making. These include Target Oxygen Saturations, Time spent off supplemental oxygen and definition of adequate feeding prior to discharge. Senior clinicians and experienced nursing staff had noticed that there was significant variation in how patients were being managed by individual clinicians and in different wards around Temple Street University Hospital.

Findings/Results:

We elected to undertake data collection on 49 infants admitted to our site and throughout their stay over an unprecedented 2022 Winter Season. We analysed key metrics including length of stay, need for respiratory support, documentation of targets and delay to discharge. We observed individual patient variability as it related to patient age and primary ward while an inpatient.

Adherence to established guidelines was poor with only 39% of infants having a documented target saturation in accordance with current evidence and decision to discharge was frequently delayed 12-24 hours beyond suggested criteria. Inpatient stays were frequently prolonged with a mean of 89 hours and there was very little uniformity across different clinical sites and across both NCHDs and senior clinicians.

Early in the 2022 Winter Season the international guidelines were discussed at a number of Departmental General Paediatric Meetings attended by senior and junior clinicians as well as between our team and senior nursing staff on St. Patrick's ward, where the majority of bronchiolitis nursing care at Temple Street had traditionally been based. Preliminary data was presented, and a set of targets and discharge criteria was agreed upon drawing on both UK (NICE) and US (American Academy of Paediatrics) guidelines. Informal education was delivered to both NCHDs who would frequently admit these infants and the nursing staff who would be asked to flag potential discharges according to these criteria.

Length of stay and delay to discharge was tracked over the winter period and significant reductions were observed as well as improved adherence to appropriate target saturations and overall closer collaboration between medical and nursing staff.

Change:

Inpatient Paediatric Hospitals have been under enormous pressure this Winter Period with Bronchiolitis due to RSV being a major contributing factor. We believe we have demonstrated that there are significant Quality Improvement opportunities in the management of this common condition and that simple education of staff around current best practices leads to change in a short period of time. This education cycle should not have to be started afresh in each viral epidemic period.

The strategy ahead of the 2023 viral epidemic period involves Departmental education sessions for any clinicians or nursing staff likely to

be involved in admission, management or discharge of infants with Bronchiolitis. We have also begun to display criteria and targets in easily-visible areas across the hospital. Data collection will begin again at the outset of the period and inform a fluid and constant re-evaluation of the guideline as new challenges emerge. This project aims to guide the management of the most common condition presenting to Children's Health Ireland as we relocate to the New Children's Hospital.

Stakeholder Engagement:

From the outset we liaised closely with parents around discharge decisions and safeguarding. We outlined explicitly from the beginning that these criteria were suggestions rather than prescriptive and that parental concern and comfort far outweighed variable and metrics when discussing potential discharge.

Nursing engagement was also crucial throughout and collaboration led to the removal of some elements of the guidance around nasal prongs, nasogastric tubes etc., as these were felt to require the devotion of significant nursing time without substantial benefit.

Sustained Improvement:

We found that frequent feedback of collected data to stakeholders demonstrated effectiveness of our strategy and encouraged adherence going forward. Clinicians were enthusiastic over the clarity and simplicity of the guidance which also improved parental engagement and ease of education.

Limitations:

We noted that the suggested guidelines were more difficult to safely apply to infants under 8 weeks of age and that they were more likely to have a less predictable clinical course. This will be factored into the 2023 strategy.

Conclusion:

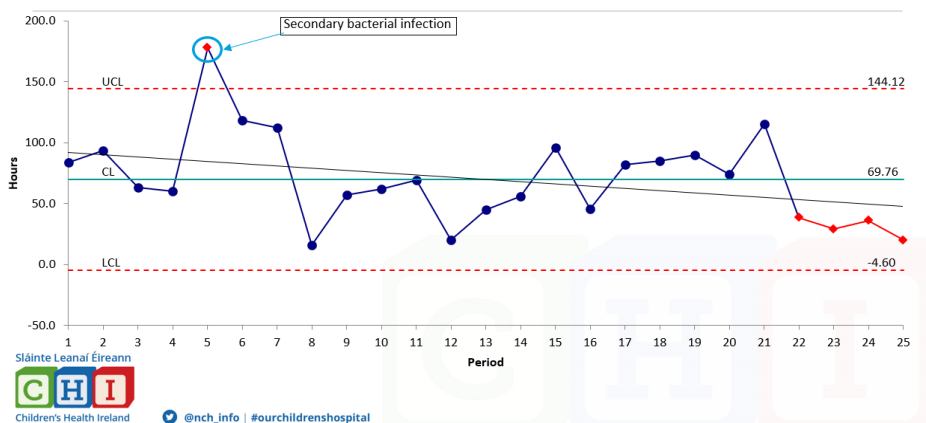
RSV Bronchiolitis has been front-page news across Ireland and internationally in 2022. We have demonstrated that a significant proportion of its impact on a Tertiary Paediatric Hospital is avoidable through simple and inexpensive strategies and intend to implement these in advance of the 2023 Epidemic Period and beyond. We hope this Quality Improvement project will lead to implementation of new guideline across Children’s Health Ireland and potentially at a national level.

“Those that fail to learn from history, are doomed to repeat it”-Churchill

Supplemental Graphs:

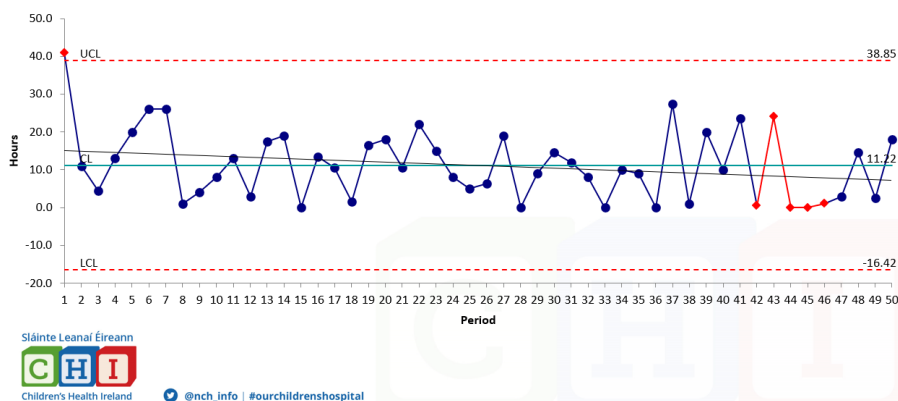
Results/Findings

Length of stay (hours) > 8 weeks of age



Results/Findings

Time to discharge after meeting suggested “discharge criteria”



Entry 8

QI PROJECT TITLE	The effect of outsourcing in-house out of hours CT scans on the Door to Imaging time of suspected Stroke patients presenting to Connolly Hospital, Blanchardstown
PROJECT LEAD(S)	Rachel Joyce, Lisa Donaghy, Orla Sheehan
PROJECT TEAM	Eamon Dolan, Patricia Guilfoyle
ORGANISATIONS	Connolly Hospital Blanchardstown
CLINICAL AUDIT TYPE	Local

INTRODUCTION

Stroke is a leading cause of mortality and disability worldwide with an increasing incidence as the population ages. 2 million brain cells die every minute increasing the risk of permanent brain damage, disability or death. Prompt imaging, allows for early intervention and commencement of secondary prevention with the aim of saving vulnerable cerebral tissue and improving functional and cognitive outcomes post stroke.

The National “Door to Imaging” (DTI) Key Performance Indicator (KPI) is that patients presenting with clinical symptoms of stroke undergo brain imaging within 1 hour of presentation to hospital. In May 2022 as a part of a series of quality improvement initiatives, Connolly Hospital Blanchardstown (CHB) outsourced out-of-hours radiologist vetting and reporting of emergency CT brain and CT angiogram studies to a private company.

METHODS

A search was performed of the CHB acute stroke registry to identify ischemic or haemorrhagic stroke cases discharged between January 1st 2021 and December 31st 2021 with a DTI time greater than 4 hours. CT orders for all cases with a DTI time greater than 4 hours over the same 1-year period were also reviewed. This was repeated for the first quarter following introduction of the intervention.

In order to further describe the reason for DTI times of greater than four hours, cases were categorised as following:

- Not recognised as stroke
- Clinical TIA, stroke on subsequent imaging
- Delay performing scan
- Delay ordering scan

RESULTS

In the pre-intervention cohort (158 patients), 45% had DTI >4 hours. This fell to 30% with DTI >4 hours in the post intervention cohort (40 patients). In the pre-intervention cohort the reasons for delayed DTI were not being recognised as a stroke in 14%, clinical TIA and not prioritised for early imaging in 24%, a delay performing the scan in 21% and a delay ordering the scan in 41%. After the introduction of outsourcing of overnight imaging, the reasons for delay in DTI were Clinical TIA in 67% and not recognised as stroke in 33%. No acute stroke cases with DTI longer than 4 hours were attributed to delays in ordering or performing CT scans.

CONCLUSION

The introduction of outsourcing of out of hours CT Brain vetting and reporting has contributed to a significant reduction in door to image time for suspected stroke in CHB, leading to earlier diagnosis of stroke and, in turn, earlier commencement of secondary preventative medications, earlier stroke specialist review, earlier stroke unit admission and earlier commencement of rehabilitation. We continue to evaluate the effectiveness of outsourcing in-house CT scans overnight. Our data

supports expanding outsourced imaging to include clinical presentation of TIA to identify ischaemia earlier and reduce the risk of subsequent stroke events by commencement of appropriate treatment. In order to meet our goal of providing the highest quality of care to stroke patients we will now focus on achieving a DTI time of less than 1 hour for 90% of stroke patients.

Entry 9

QI PROJECT TITLE	An audit of ongoing practices identified large gaps in the availability of appropriate services for autistic children
PROJECT LEAD(S)	
PROJECT TEAM	
ORGANISATIONS	CHI at Connolly
CLINICAL AUDIT TYPE	

An initial site visit in August 2019 led to discussions on how to best support children with ASD who require blood tests within Children’s Health Ireland (CHI). A new purpose built centre, CHI at Connolly, could be utilised to support base sites who have more difficulty in identifying quieter, sensory sensitive spaces.

Audit

An audit of ongoing practices identified large gaps in the availability of appropriate services for autistic children. This added stress to the child, parents and the staff who were trying to take bloods in a busy, time constrained environment.

One of the four sites were successfully using an online appointment based system. This allowed the parent to notify the staff of additional needs, however it did not allow any extra time for the children or support for the phlebotomist.

Children were identified who were waiting on inpatient day ward beds to access an area that could provide Nitrous Oxide or to go theatre for a general anaesthetic to have bloods taken, these waits were lengthy and the children could not access certain medications until the blood tests were completed.

It was hypothesized that evidence based practices could be used to help improve the experience for autistic children and children with intellectual disability and their families attending for blood testing at Children’s Health Ireland. Some such evidence based practices include the use of social stories, desensitising techniques prior to attendance at clinic, quiet atmosphere, distraction and visuals.

The initial stakeholder scoping group consisted of ASD Clinical Nurse Specialist, CNM2 OPD - CHI at Connolly, General Paediatric Consultant,

Neurodisability CNM2, Phlebotomy Nurse Manager CHI at Temple Street, the need for play specialist input was highlighted but unavailable at this time. Parents were invited to join the planning group however we were unsuccessful and finding a parent who could commit to the ongoing planning instead we held 2 focus groups to identify the needs of the child and the parent.

Aim

The goal of the service is to have equity of access to phlebotomy services for children with ASD to reduce trauma, aid diagnosis and support access to medications. A successful outcome is every positive step that a child takes towards the final outcome of blood sampling, for example: entering the building, coming upstairs, meeting the staff, touching the equipment leading to successful venepuncture with minimal trauma occurring.

A pilot study was carried out in CHI at Connolly which was quieter, brighter and less familiar to the children of CHI, to develop a service using Nitrous Oxide 50:50 to support autistic children to have their bloods taken supported by the ASD CNS. The use of tools found in the HSE Quality Improvement toolkit allowed the process to be communicated effectively, timelines met and barriers and risks overcome. Stakeholders were further identified through stakeholder mapping and identified as:

- parents to identify the need and structures
- staff nurses to administer Nitrous Oxide 50:50
- pain ANP's to support training of nurses
- play specialist to provide desensitisation
- medical team to prescribe Nitrous Oxide 50:50 and support service
- operations staff to check in patients
- phlebotomists to take the blood
- Child Health Information Centre (CHIC) Coordinator

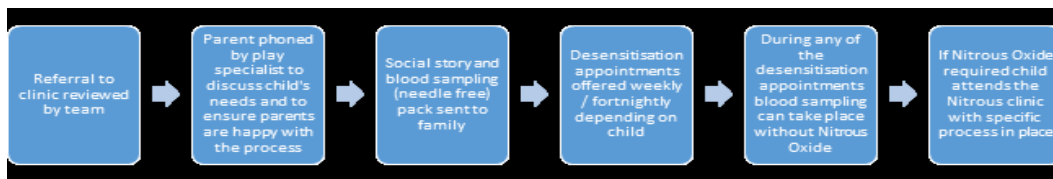
A series of focus groups were planned with all the stakeholders, the feedback reinforced our research and dictated the pathway forward.

Feedback from the parent focus group included:

- The use of a social story or video to explain the process of having a blood test (was already in progress)
- No waiting time as waiting was identified as a trigger
- The use of ear defenders
- A low arousal environment

- Staff knowing about and using the child's special interest to engage the child

Grant Advisory Panel (GAP) funding was sought through the Children's Health Foundation to provide a 0.25WTE play specialist to lead the desensitisation program for 1.5 years, all other staff absorbed the clinic into their existing roles. This allows the service to run a desensitisation clinic 1 day per week and Nitrous Oxide clinic monthly / bi monthly depending on demand. The structure of the clinic is defined as below but has to be child led.



An initial Project Risk Log was completed. Risks associated with the project included:

- Delays accessing funding
- Inability to recruit play specialist
- The use of Evolve for patient notes
- Access to education and training for staff
- Lack of referrals to the clinic

A RACI matrix was created to identify those who needed to be Responsible, Accountable, Consulted and Informed at all stages throughout the project. The RACI matrix allowed the team to assign responsibility for the creation and review of: referral pathways, SOPs for use of Nitrous Oxide 50:50, social stories, practice packs, reasonable adjustments documentation and mitigation of risks and barriers, ensuring clear communication pathways. PDSA cycles are carried out monthly and suggested improvements are trialled, maximising the efficiency and effectiveness of this service. Service users are involved at every stage of the development and planning of the clinic. We request feedback from every parent and child to allow the clinic to evolve and improve the quality and efficiency of the service.

As we approach the end of the 1.5 years our achievements to date are:

- Play specialist has gained training and experience in working with Autistic children

- 3 consultants and 3 nurses fully trained in administration of Nitrous Oxide and support clinic on rotation once a month
- 185 contact sessions either phone call, face to face desensitisation and blood tests
- 74 children have accessed the service
- 6 unsuitable referrals
- 55 successful clinical interventions, only 17 required Nitrous Oxide.

Time, experience and the correct surroundings have been shown to be the essential skills to support this cohort of children. This clinic aims to expand to support autistic children in the community as currently is only available to patients of CHI. This project is transferable to all children who have needle phobia, many of whom are referred to psychologists for therapeutic interventions. This could allow increased access to psychology for the correct cohort of children.

Entry 10

QI PROJECT TITLE	Audit of the quality of documentation of patient's resuscitation status and treatment escalation plans
PROJECT LEAD(S)	Hannah Smyth, Johnny Walsh
PROJECT TEAM	Lorraine Kyne, Fran O'Keefe, Joseph Duggan, Ruth Buckley
ORGANISATIONS	Mater Misericordiae University Hospital
CLINICAL AUDIT TYPE	Local

Background

On review of our mortality data, we noticed that there was a need for a systematic approach to the documentation of ceilings of care/treatment escalation plans.

Documentation of resuscitation status and ceilings of care has been identified as an issue amongst NCHDS. Currently in the MMUH, there is a document to be completed by registrars or consultants when a discussion and decision has been made regarding do not attempt cardiopulmonary resuscitation (DNAR).

However, there is no document or consistency in documentation around ceilings of care and treatment escalation plans (TEP). These TEPs include a spectrum of treatments, from comfort care to full resus with intubation and ICU. These decisions are often made at the time a patient deteriorates and cannot express their preferred care wishes, or it is left to the doctor on call to make decisions. When a doctor on call is not familiar with a patient and in an emergency situation, it can be difficult to find in the medical records any documentation about ceilings of care. This can then lead to inappropriate or futile escalation of care.

The National Consent Policy recommends we "develop specific mechanisms for the documentation and dissemination of decisions relating

to resuscitation" and the INEWS National Clinical Guideline state "the needs and wishes of patients where treatment-limiting decisions (ceilings of care) have been made and documented should be considered when escalating care."

Aim of the audit

To introduce a combined standardised cardiopulmonary and ceiling of care / treatment escalation plan document for MMUH inpatients

Objectives

Initial audit 21/10/22:

1. Assess the prevalence of DNAR and ceiling of care/TEP documentation amongst inpatients under a Geriatric service
2. Review the quality and timing of documentation of DNAR/TEP amongst patients under a Geriatric service
3. For patients in whom a TEP has been documented, to review what has been documented e.g. ICD, HDU, SCU, intubation, NIV, Inotropes, IV antibiotics/IV fluids, EOL, other.

QI Project:

A new pilot combined DNAR/TEP form was designed, and had a limited introductory trial period. This was done over the course of 3 weeks on patients admitted under the Medicine for the Elderly (MFTE) service on a single ward.

Re-audit 15/01/23:

1. Reassess the prevalence of DNAR/TEP amongst inpatients admitted to St Anne's ward under a consultant Geriatrician
2. Identify any potential issues/concerns from staff with regards the new DNAR/TEP form

Methods

Initial Audit: On a single day, all charts on Anne's and Brigid's wards were reviewed examining the documentation and discussion around DNAR and ceilings of care.

Trial of new DNAR/TEP form

Reaudit: On a single day all charts of patients on Anne's ward under the care of MFTE were reviewed to examine the use and uptake of this new DNAR/TEP form.

Results

Initial audit 21/10/22:

57 charts were reviewed. Average age 82 (range 58-96), 54% females. 60% (n=34) of patients were admitted under MFTE, 25% (n=14) were under a GIM team, 10% (n=6) under the stroke team, 3% (n=2) under oncology and 1 patient (2%) was under the care of the surgical team.

35% (n=20) of patients had a DNAR in place and 18% (n=10) a TEP. In relation to the TEP and goals of care, ICU, HDU and ward level care were mentioned in 5 patient's charts. Intubation, Non Invasive ventilation and inotropes were respectively documented in 4, 2 and 1 patient's charts. IV antibiotics / fluid and end of life care were documented in 2 and 1 patient's chart.

Reaudit 15/01/23:

23 charts were reviewed. Average age 86.5 (range 77-95), 56.5% females. By nature of the pilot, all patients were under the MFTE service.

60% (n=14) had a DNAR/TEP form in place. Of these 14 patients, consideration for NIV (and therefore consideration of SCU for same) was the ceiling of care for 12, IV antibiotics for 1, and comfort measures for 1.

Conclusion

Our baseline study of documentation of DNAR and ceilings of care reveals a lot of inconsistencies around documentation of goals of care. A high proportion of patients were older with significant co-morbidities and it is important to establish goals of care from the day of admission to avoid futile interventions. The current DNAR form is unidimensional and there is a need to focus on individual ceilings of care depending on patients' wishes, co-morbidities and functional status.

The new DNAR/TEP form allows clear and concise documentation around ceiling of care. This has the benefit of both prompting the clinician to discuss such aspects of care with the patient, as well as making these decisions easily accessible in the patient's notes.

It also allows for patients to be clearly documented as For Resuscitation. This could be valuable to healthcare staff who may not know the patient, as it shows this decision has been purposely considered by the primary team, and is not just "For full Resuscitation" by virtue of not having a DNAR form.

As the reaudit demonstrated, the introduction of the new form clearly resulted in an increase of ceiling of care documentation - 18% initially, up to 60% on the reaudit.

Feedback and response to the form from healthcare staff has been positive, but there are some adjustments still to be made to the form to optimise it prior to hospital-wide rollout.

We presented this form at the recent Medical Morbidity & Mortality meeting, and received good feedback about the layout of the form.

Next Steps / Plan of improvement

- Presentation of results to Clinical Audit and Effectiveness committee
- Obtain further feedback from doctors and nursing staff
- Discuss at the Resuscitation Council meeting
- Consider an extended pilot programme – i.e. to further wards and more specialties
- Investigate addition of form to patient centre (Mater patient IT system)
- Re-audit (PDSA cycles)
- Widespread education of hospital staff and enrolment of combined DNAR/TEP form to all hospital inpatient wards

Entry 11 – Highly Commended

QI PROJECT TITLE	Improving detection of Aortic Dissection
PROJECT LEAD(S)	Dr Victoria Meighan, Ms Amy Gillis, Dr Orla Buckley
PROJECT TEAM	Emergency Department, Surgery, Radiology
ORGANISATIONS	Tallaght University Hospital Dublin
CLINICAL AUDIT TYPE	Local

Aortic Dissection is an uncommon, time critical, cardiovascular emergency that can be difficult to diagnose. Mortality rate increases by 1% per hour in the first 48 hours from symptom onset. If recognised and diagnosed, survival to discharge is quoted at 85-90%. Lack of awareness, atypical presentations and poor interdisciplinary communication and documentation contribute to missed diagnosis. Tragically, at our institution, a patient died as a result of a 'missed' Aortic Dissection. Following a serious incident review, it was concluded there was a failure to recognise the symptoms and signs of aortic dissection, multiple failures of communication within the multidisciplinary team and multiple delays to definitive diagnosis. The objective of our quality improvement project was to increase awareness and detection of Aortic Dissection via improved triage recognition, multidisciplinary communication and trigger diagnostic imaging quickly and more regularly.

Pre intervention data

Audit of angiogram aorta scans performed September 2019-September 2020: 83 scans requested and performed

1 definite missed case

Intervention

Introduction of a multi-disciplinary in situ simulation based medical education training programme involving the Emergency Department doctors, nurses and porters and Radiology colleagues. Standardised

multidisciplinary in situ simulation training programme with the aim of increasing the number of scans performed per month (to a minimum of 8 per month as per international standards on guidance on population based scanning).

Deliberate practice, in our real working environment, with members of our real team, using a standardised simulated patient (actor) who presents to triage. Practice of technical and non-technical skills including history taking, ordering investigations including point of care ultrasound, blood tests, ECG and chest x-ray and immediate and urgent diagnostic imaging with CT angiogram. Practice of the communication required between individuals involved in the patients care including reception staff, triage nurse, resus nurse, emergency doctor, radiology doctors, porters, radiographers and cardiothoracic surgeons. And on the basis of a presentation with 'aortic type pain' which was introduced to the triage criteria and mandating a triage category of 2.

Multidisciplinary deliberate practice, in our real working environment, with members of our real team, using a standardised simulated patient (actor) who presents to triage. Practice of the skills of history taking, ordering investigations including point of care ultrasound, blood tests, ECG and chest x-ray and immediate and urgent diagnostic imaging with CT angiogram. Practice of the communication required between individuals involved in the patient's care including reception staff, triage nurse, resus nurse, emergency doctor, radiology doctors, porters, radiographers and cardiothoracic surgeons.

Training performed three monthly and a culture of communication of 'aortic type pain' and early triggered diagnostic imaging with CT angiogram aorta embedded via simulation based medical education.

Post Intervention

December 2020-December 2021:170 scans

4 de novo cases of aortic dissection diagnosed and survived to discharge

3 other emergencies diagnosed

0 missed cases

Our multidisciplinary simulation based medical education programme improved technical and non-technical skills performance and increased detection of aortic dissection. Most importantly, we have had no further missed cases.

There was extensive multidisciplinary key stakeholder involvement (the Emergency Department medical, nursing and clerical staff and Radiology doctors and radiographers) to encourage early detection and documentation of 'aortic type pain' at triage, to trigger an immediate request for diagnostic imaging with CT angiogram and a no refusal policy when the scan was requested. Feedback from the stakeholders was invited and MDT learning included appropriate size cannula placement for contrast delivery and adequate rate control prior to the scan.

The simulation training was instituted, reviewed, revised and embedded according to a plan study do act (PDSA) model for quality improvement and change implementation.

The family of the patient who died in our ED created a charitable organisation to raise awareness of Aortic Dissection. They have invited us to present our findings at national and international meetings and have provided the opportunity to disseminate our training. We have recorded our simulation practice, from door to definitive care, and designed an MCQ to accompany the video educational material. It is our intention to disseminate this package via HSEland to make it easily accessible for all health care professionals and drive it as mandatory training for Emergency Medicine doctors and nurses as well as Radiologists and Radiographers.

Entry 12 - Winner

QI PROJECT TITLE	Sips til section
PROJECT LEAD(S)	Dr Nikki Higgins, Dr Sara Ahmed, Dr D O'Reilly and Dr C Joyce
PROJECT TEAM	Department of Anaesthesia, Clinical skills facilitators, Clinical risk department, Clinical Practice development midwives
ORGANISATIONS	The National Maternity Hospital, Dublin
CLINICAL AUDIT TYPE	Local

Objective

The aim of this project was to humanise theatre births for women, starting with ending the inhumane fasting times that women are subjected to while awaiting their elective Caesarean section surgery. As obstetric theatre lists are notoriously unpredictable, with constant interruptions by emergency cases, women can be left waiting hours for their surgery. The 2 hour fasting advice from the NICE guidelines is almost always impossible to achieve, and in reality translates into dangerously longer fasting times instead. Our initial audit of fasting times looked at how many hours these term pregnant women were without water while awaiting their surgery at our institution. We took a snapshot of 30 patients scheduled for elective Caesarean section. The average fasting time was just over 11 hours, with the longest fasting time being 19 hours. We were seeing women experiencing dizziness, headaches and dehydration causing haemodynamic instability under anaesthesia after fasting for many hours. Metabolic acidosis is also much more common, and can be extremely serious, in pregnant women subjected to even short periods of starvation. We decided to introduce a policy of liberalisation of water consumption up until the time women are called to theatre for their surgery. We called it 'sips til section'. I had seen this policy work well in the UK, with no ill effects on patients, and an overwhelming increase in satisfaction among women. The idea was also gaining traction worldwide for those patients listed for general

anaesthesia. 97% of our elective Caesarean section patients are operated on under regional anaesthesia, so we knew that 'sips til section' would pose minimal (if any) increased risk of aspiration in our patient group. We set about educating staff about the benefits of hydrating women appropriately prior to surgery. Women would be happier, recovery would be faster, staff morale is increased, and some evidence even suggests a positive effect on the PH of the cord blood taken from the foetus at delivery. Patients also tolerate the inevitable delays to their theatre slots much better, as they are more comfortable with their hydration. The policy itself was written with optimal patient safety and comfort goals in mind. Women were encouraged to drink up to one glass (160ml) of water per hour while waiting to be called to theatre. Exceptions to this were patients with a BMI of 45kg/m² or above, and those listed for Caesarean section under general anaesthesia. The next stage involved altering the antenatal information leaflets to publicise this change in policy, spreading the word to all departments of the hospital and printing posters (figure 1) to help empower women to change the way they prepare for surgery. The mantra of 'NPO from midnight' is deeply engrained in society, and was a difficult one to combat. There was an element of fear amongst women and staff, that surgeries would be postponed or cancelled if patients admitted to drinking anything prior to coming to theatre. We persevered with our message, and conducted multiple education sessions to reinforce it.

Findings

We reaudited our fasting times (n=30) after the introduction of the policy and were delighted to see that the average fasting time had dropped to 1 hour and 14 minutes, with the minimum fasting time now 17 minutes. The policy was warmly welcomed by staff and patients alike, with one woman describing it as 'the best thing for pregnant women since the epidural'. Unfortunately after some weeks our documentation of fasting times became less accurate, as the nursing and midwifery staff struggled to keep up with the extra paperwork. To combat this we introduced fasting cards (figure 2) which are given to women on their arrival to the day ward. They are encouraged to fill in their time of arrival, and what time they took their last sip of water on being called to the theatre. The cards also act as a

visual cue to remind women that they are permitted under the new policy to refill their glass of water every hour for continued hydration.

Stakeholder involvement

The clinical facilitators and clinical practise development team have been instrumental in the education of new staff as they arrive in the hospital on an ongoing basis, with regard to the implementation of the policy. Patients themselves are regularly questioned about how they feel the policy has impacted them, any impediments to the policy they feel they have encountered, and the patient voice group was consulted about the layout and content of the posters used to publicise the policy.

Sustained improvement tools

Any adverse incidents that could be related to the policy change, such as aspiration, will be reported to the clinical risk team on an ongoing basis, and fed back to the project team. We have a dedicated email address which is publicised on our website, and in the posters in clinical areas, to encourage feedback about the policy. 'Sips til section' is regularly presented at grand rounds, and induction talks, to ensure doctors joining the anaesthesia and obstetric departments are on board with the policy. We will also continually re-audit our fasting times to ensure we are getting the message to our women that it is not only safe to continue to drink water until being called to the theatre; but it is in fact beneficial to mum and to baby.

To date almost 350 women have benefitted from our liberalisation of oral fluids policy, since its introduction on September 26th 2022. No adverse incidents have been reported, and we have received lots of positive feedback from staff and patients alike.

Entry 13

QI PROJECT TITLE	Improving medicines management of inpatient Parkinson's disease patients by making pharmacy interventions
PROJECT LEAD(S)	Mark Knipe, Elaine Conyard
PROJECT TEAM	
ORGANISATIONS	HSE,UCC
CLINICAL AUDIT TYPE	Local

This study sets out to assess if pharmacy-led interventions will result in an improvement in PD patient care. The study will address the questions:

- What is the current situation with Parkinson's disease (PD) patient care in Our Lady of Lourdes hospital, Drogheda?
- What issues are identified that prevent adequate PD patient care?
- What interventions can be taken to address these issues?
- Can these interventions bring about the desired improvement in PD patient care?
- Following interventions, has PD patient care improved and by how much?
- What further interventions or studies could be done to improve PD patient care?

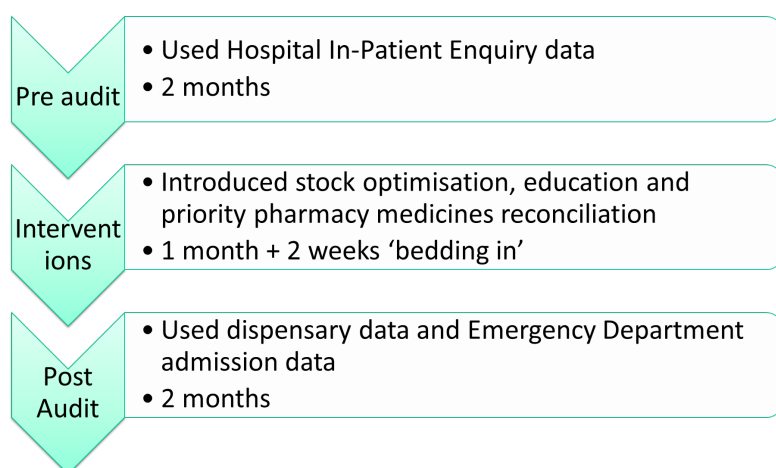
The aim of this study is to assess the impact of interventions on PD patient outcomes.

This aim will be achieved with the following objectives:

- Assess the current standard of medicines management for inpatient PD patients ('baseline').

- Introduce education sessions, begin priority medicines reconciliations (med rec) and optimise PD medicines stock on wards.
- Re-assess the medicines management of PD patients by recording medication errors, contraindicated (CI) medicines administration, length of stay and patient outcome in regards to falls, delirium, rigidity and whether 'nil by mouth' (NPO) patients are correctly treated.

AUDIT AND QI STRUCTURE:



FINDINGS:

Table 1	Pre-audit group n = 24	Post-audit group n = 30	p-value
Mean age (years)	81	80	0.727
Gender (M/F%)	71/29%	47/53%	
PD medicines prescribed	59	58	
Total doses due	1611	1840	
Mean length of admission (days)	19	15	0.475
Mean delay in 1 st dose following admission (hours)	13.5	4.4	<0.001

p-values are present for all data that underwent Mann-Whitney tests. P-values with * represent the use of Chi-square tests.

M = Male F = Female

Figure 1

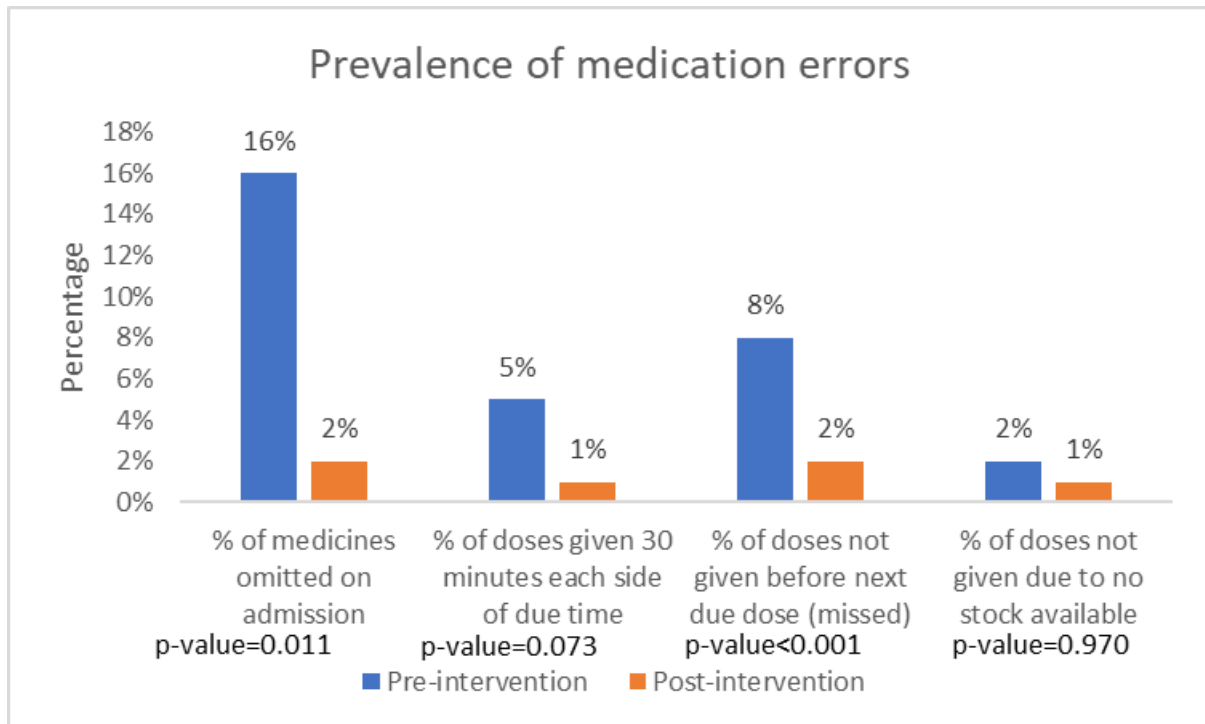


Figure 1 shows a reduction in medication errors following interventions.

An increase in CI medicines prescribed was observed but there was a reduction in CI medicines administered in post-intervention group

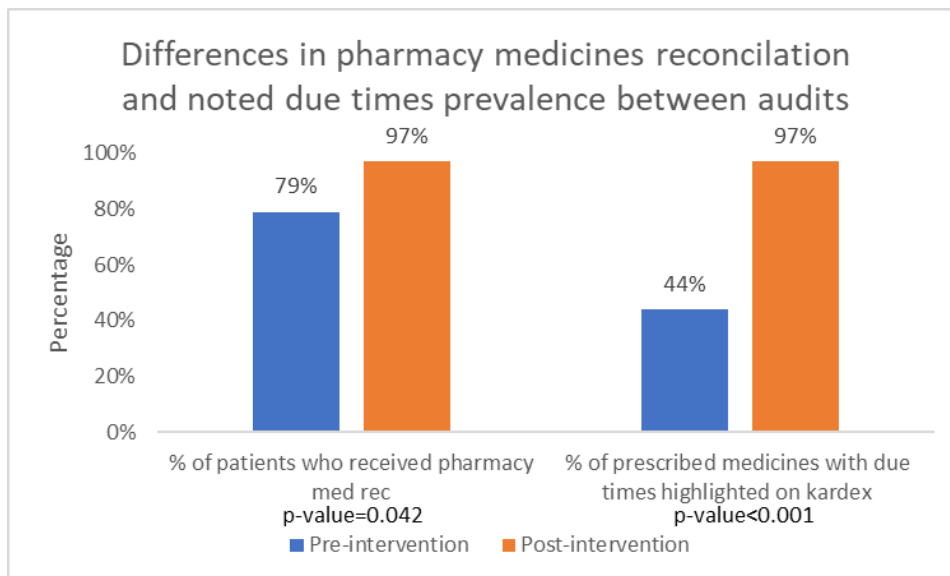
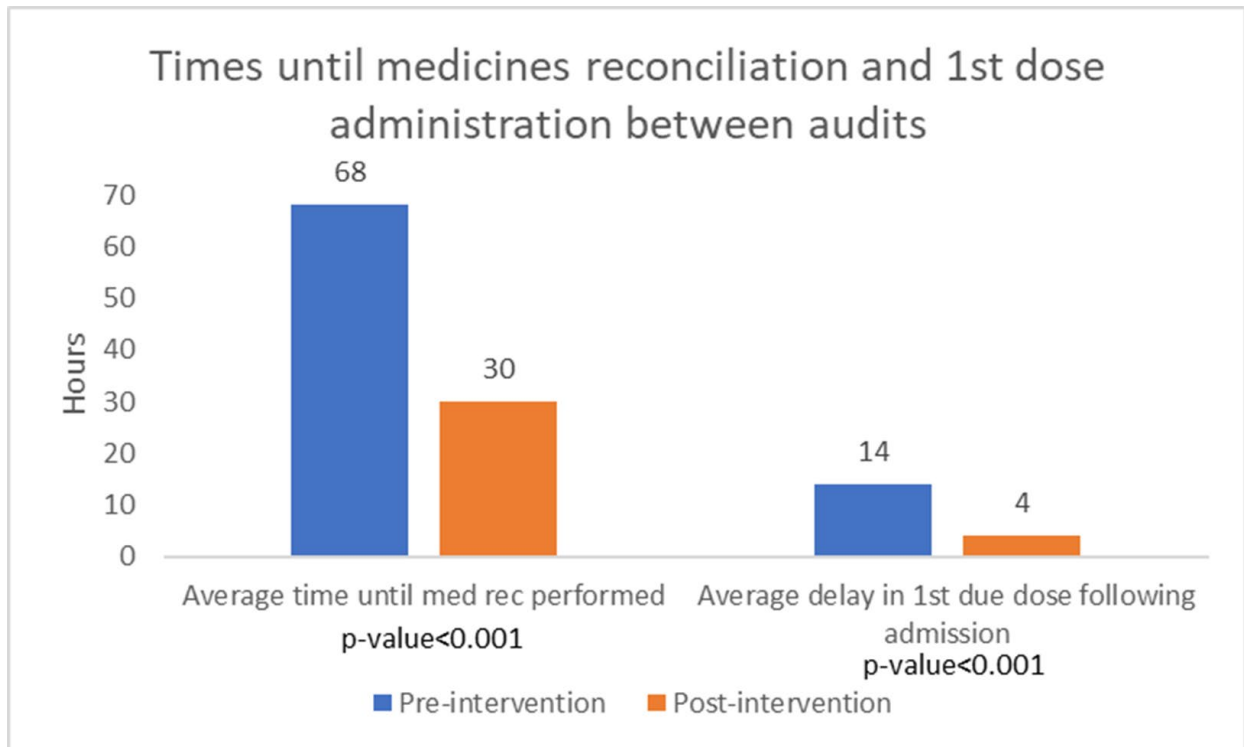


Figure 2

Figure 3



Figures 2 and 3 show an increase in patients who received a med rec. These happened quicker and resulted in a reduction in 1st dose delays and an increase in correct times being highlighted on drug charts.

Figure 4

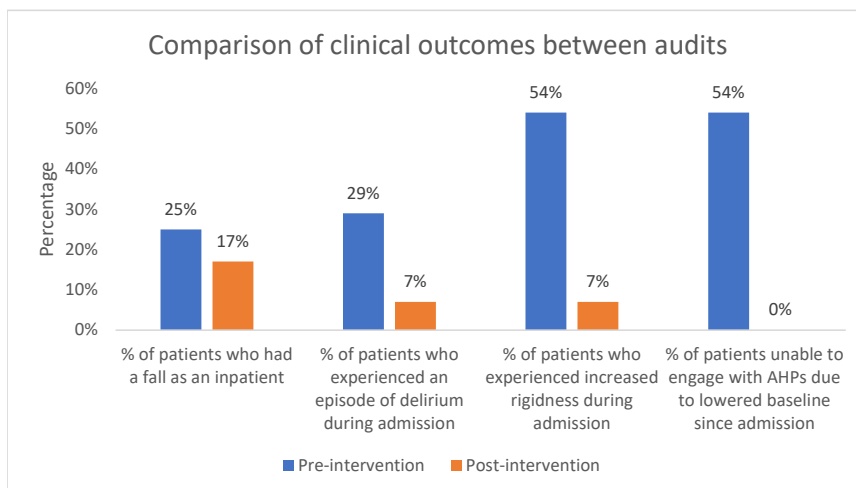


Figure 4 shows that patient outcomes was improved following pharmacist interventions.

This study showed that the introduction of the pharmacist-led interventions, can improve PD patient outcomes of inpatients, by reducing medication errors, decreasing the administration of contraindicated medicines and preventing delays in the administration of PD drugs. There is the possibility of cost-saving potential by reducing the length of admission of patients.

STAKEHOLDER ENGAGEMENT:

Input from practice development nurses and geriatric consultants was used to guide the types of interventions in this study and was prevalent during the teaching and education aspect of the interventions. Patient care and outcome is at the centre of this research in that the improvement of inpatient care was seen following the audits and interventions.

SUSTAINED IMPROVEMENT:

Guidance posters are still used on every ward and in the emergency department to help staff make medicines management decisions for PD patients. Stock optimisation of PD medicines is present in the hospital with emergency supplies available on many wards for out of hours use. This is to ensure no PD patients do not receive their medicines due to pharmacy dispensary closure.

Entry 14

QI PROJECT TITLE	Counting the days
PROJECT LEAD(S)	Marion Lynders
PROJECT TEAM	Dr. Tomas Breslin/Dr. Fran O Keeffe
ORGANISATIONS	Mater Hospital
CLINICAL AUDIT TYPE	Local

In 2017, TARN published the Irish Major Trauma dashboard. From July 2016 through December 2016, the key indicator measuring the proportion of all TARN eligible patients submitted within 90 days of discharge or death was reported to be 15.5% for the Mater Hospital. The national mean for the same time period was 25.8%.

When I took over the role of Major Trauma Audit Coordinator in the Mater Hospital in 2016, only 151 major trauma cases had been submitted to TARN. This data was not captured in any electronic format within the hospital so I started recording and capturing basic patient details in an excel spreadsheet. However, Excel is a flat file and is not a relational database so as the number of TARN submissions increased it soon became obvious that I needed a more powerful application that could help me organize and keep track of large amounts of data that was also GDPR compliant.

I escalated the situation to my line manager who agreed to fund an external IT consultant to train me to operate a Microsoft Access Database to collate the major trauma data in the Mater Hospital. MS Access is a database management system that combines the relational Access database engine with a graphical user interface and software-development

tools. As such, I was able to create customised tables and queries to meet my data needs for storage and analytics and display the information in datasheet view that resembles an Excel worksheet. A query is defined as any question that users can ask of the data stored in the tables to obtain information.

Once I imported data from my existing excel spreadsheet into the newly created Access database, I was able to merge simple tables into multiple tables of related data. I was also able to create queries, structure the data and define data types to help ensure data integrity. One critical query I created is titled the ‘TARN 90 day submission’.

A demographics table listing the patients full name, their date of birth, their medical record number as well as the corresponding TARN’s unique submission number is now linked with the TARN 90 day submission table. When the patient’s date of discharge is entered into the 90 day submission table, the number of remaining days to deadline submission is automatically generated in the ‘days to deadline’ column.

The graphic below offers a screen shot view of this:

ARN90DaySubmissions																	
	Last Name	First Name	90 day deadline	DaysToDeadline	TARN date Submission	Admitting Service	Transfer In Hospital	Transfer Out Hospital	Earliest GCS	First Hospital Arrival date	First hospital arrival time	Referral in Date	Referral in time	Mechanism of Injury	Discharge Date	RIP	Post Mort
999	Over	Gladys	19/12/22	22		Geriatric	SJH	SJH	14	14/09/22	10.30	19/09/22	None	Fall<2M	20/09/2022	No	

This simple step of linking both tables has enabled me to see the number of cases in chronological order that need to be submitted to meet the 90 day

deadline. This quality improvement initiative has resulted in a major improvement for this particular data quality indicator. In July 2022, TARN issued its bi annual dashboard for the period July 2021 through December 2021. The key indicator measuring the proportion of all TARN eligible patients submitted within 90 days of discharge or death was reported as 98.1% for the Mater Hospital while the national average remains at 27.1%.

Microsoft Access is easy to use and provides users with the basic analytic tools for grouping and viewing data. Tables are the core primary building blocks of any database so even though we currently use a basic version of MS Access database, the application has the potential to expand and build upon to create more complex structures which will result in more powerful ways to use the data.

Entry 15

QI PROJECT TITLE	To examine pain management in patients on the orthopaedic ward in OLOL
PROJECT LEAD(S)	Marie Richardson & Gwen Mahoko
PROJECT TEAM	Dr Helen O'Brien & Dr Fauzia Sangani
ORGANISATIONS	Our Lady of Lourdes Hospital Drogheda
CLINICAL AUDIT TYPE	Local

BACKGROUND

A Clinical Audit of analgesia and associated prescribing was undertaken on the orthopaedic ward of Our Lady of Lourdes Hospital Drogheda in July 2022.

In January 2022 the HSE issued 2GUIDANCE FOR OPIOD PRESCRIBING FOR ACUTE NONCANCER PAIN, POSTOPERATIVE PAIN AND POST-PROCEDURE PAIN.” The purpose of the guidance is to: “provide best evidence and expert opinion to help improve quality and safety of opioid prescribing in the acute hospital setting and reduce harm from their use.”

New guidance documents were developed by a multidisciplinary team consisting of: consultant orthogeriatrician, consultant anaesthetist, clinical pharmacist and special pain management ANP with the aim of addressing and meeting the objectives of the HSE guidance document referenced above. The documents were presented to and approved by the local Drugs and Therapeutics Committee, introduced, and education provided to staff on the orthopaedic ward.

The documents included:

- Post-Operative Opioid Conversion Table
- Orthopaedic Analgesia Pathway
- Patient information leaflet for opioids

Prescribing was re-audited in November 2022

AIM

To improve analgesia and associated prescribing on the orthopaedic ward and to improve patient pain and side effect management.

OBJECTIVES

1. Examine if the baseline prescribing on the ward was in line with best practice.
2. Develop and introduce guidance documents
3. Re-audit prescribing and determine if prescribing has improved
4. Patient input into their pain management and review of the Opioid Patient Information Leaflet

1: July Audit Findings:

An audit was undertaken on the analgesia and associated prescribing for all patients on the orthopaedic ward on July 4th 2022. The focus was on the classes of medicines as outlined in the orthopaedic analgesia pathway: paracetamol, NSAIDs, opioids, laxatives, gabapentinoids and antiemetics. The main findings were:

- NSAIDs: 75% of prescriptions were inappropriate including one patient prescribed regular diclofenac & apixaban
- Opioids: 15% of opioid prescriptions included long acting opioids prescribed to opioid naïve patient's >65 years
- Opioids: 35% of patients prescribed opioids were >4 days post op and not prescribed a regular opioid
- Laxatives: 27% of all patients prescribed opioids were not prescribed a laxative
- Laxatives: 25% of Lactulose charted as PRN

Based on the findings of the audit the following goals were set:

- A. Only short acting opioids regular and PRN for patients >65
- B. Prescribe at least one regular laxative to all patients prescribed opioids
- C. Lactulose to always be prescribed as regular
- D. Avoid NSAIDs in patients >65 years

2: Actions

Meetings were held with ward staff, orthopaedic teams and anaesthetics team and a presentation was given to feedback on the findings of the initial audit from July 2022. The goals for improvement were shared with all relevant stakeholders.

The Post-Operative Opioid Conversion Table and the Orthopaedic Analgesia Pathway were shown to the teams and intensive education was provided at team meetings, journal clubs, team education sessions and on the ward at set times on a daily basis

Posters of the Post-Operative Opioid Conversion Table and the Orthopaedic Analgesia Pathway were printed in A3 format and were prominently displayed in clinical areas throughout the ward to facilitate ease of access for staff.

3: November Re-audit Findings:

A re-audit using the same pro forma audit form as the original audit was undertaken on November 15th 2022. The notable findings were:

- Patients <50kg not being dosed reduced
- Patients with increased LFT's not being dose reduced
- One duplicate prescription; a risk of over administration of Paracetamol to the patient
- One patient with an increased QTc was prescribed an inappropriate antiemetic
- One duplicate prescription for Ondansetron
- One patient who needed an antiemetic was not prescribed any

Prescribing of opioids improved significantly:

- Reduction of long acting oral opioid prescribing from 15% of all opioid prescriptions to zero. This fully meets one of our goals from July 2022 audit
- Prescribing of PRN and regular short acting opioid prescribing for <4 days post-op improved from 65% to 93% of all opioids prescribed. Improvement on prescribing from July 2022

NSAID prescribing improved with a reduction of 75% inappropriate prescribing to 17% inappropriate prescribing. Improvement from July 2022

Laxatives:

- Reduction from 27% to 8% of patients who were on an opioid not having any laxative prescribed. Improvement on prescribing from July 2022
- Reduction from 25% to 9% of PRN Lactulose prescriptions. Improvement on prescribing from July 2022

4: Patient Survey

In December 2022 a separate audit of patient perception of pain management and information was undertaken using a patient survey to collect data. An initial survey was undertaken to get patients baseline perceptions. The survey incorporated questions from the National Inpatient Experience Survey relevant to pain management and provision of patient information.

A separate survey was undertaken giving patients time to read and review the opioid patient information leaflet when their feedback and thoughts on its content were encouraged, noted and will be used to update the leaflet before circulation.

Challenges

There were 2 medical staff rotations on the ward between the initial July Audit and the November re-audit

Learning Points

Due to medical staff rotations at regular points throughout the year, education on these documents must be intensified at these times.

The documents must be readily accessible in the clinical areas and they will be added to QPulse, the online electronic format for accessing local documents and policies.

Feedback on audit results to all stakeholders on the orthopaedic ward at regular intervals is vital and to set clear goals for improvement of patient care.

The audit should be repeated at regular intervals to monitor the impact of the documents and to ensure it is embedded in the management of pain on the ward.

Patient engagement highlighted some issues that we had not considered such as patients with literacy issues and how we provide them with information. Furthermore, patients had suggestions and were happy to help

Future Development

The documents will spread to other surgical areas, with planned development of a general surgery analgesia pathway.

Entry 16 – Highly Commended

QI PROJECT TITLE	Critical Care ANPs to reduce ICU admission delays
PROJECT LEAD(S)	Rachel Egan Karen Maher Triona Yearsley Oonagh Power Emma Morrissey
PROJECT TEAM	Critical Care CANP Team
ORGANISATIONS	St James's Hospital
CLINICAL AUDIT TYPE	Local

Objective of the QI Project:

The Critical Care ANP (CCANP) service was established in 2020 with the overall aim to improve access and egress for critically ill patients requiring ICU intervention. The service was introduced in direct response to a number of audits, reports and initiatives outlined below. One objective of the CCANP service is to minimise inappropriate delays in unplanned ICU admissions and ensure timely safe transfer of patients into ICU. The CCANP team initially set a key performance indicator (KPI) of admitted 50% of patients accepted to ICU within one hour and 80% within four hours, in line with the national standards (NOCA, 2020). In 2022, on review of the 2021 service audit results, the CCANP team increased this KPI to 80% within one hour and 100% within four hours.

Critical Care Outreach Audit 2018: A six-month internal audit was done using a pre-prepared audit tool. This audit reviewed ICU admission delays & ICU Registrar time spent outside the ICU. Key findings:

- The average time spent by the ICU doctor per patient outside the ICU was 69 minutes (n=536).
- ICU admission delay ranged from 15min-17hours with an average of 4.11hrs (n=197). Lack of critical care bed availability was identified as the main reason for prolonged delays.
- ICU bed occupancy was 106%.
- In ward areas, 60% of deteriorating patients needed prolonged periods of close monitoring (15min-1hr) (n=280). Only 31% of patients with EWS > 7 were reviewed initially by senior medical personnel.
- Patients who had unplanned ICU admission (n=112) had higher ICU LOS, hospital LOS & ICU death compared to overall ICU figures.

Recommendations following the audit included a need for CCANP support for deteriorating patients and the nurses caring for them.

NOCA 2019 report:

Key findings:

- Mean APACHE score SJH ICU 17.4 V national average 16.2
- 50% of SJH ICU patients required 3 or more organ support V 40% average nationally
- 90% bed occupancy, higher than recommended level of 75%.
- 20% of patients were admitted within one hour, 79% within four hours

The Critical Care Strategic Plan (GOI, 2020):

This Government plan was introduced in response to the recommendations of the Health Service Capacity Review to address existing deficits and allow for expansion of capacity into the future. The strategy included increasing the number of critical care outreach services.

Sláintecare Implementation Strategy:

In 2019 the Government identified the nursing and midwifery profession as critical importance in implementing the Sláintecare health reform programme. A new policy on Advanced Nursing and Midwifery Practice was released which outlined an aim to have 2% of the workforce (~750 posts) working as ANPs by 2021.

Findings/results of QI project:

- In 2020, prior to the implementation of the CCANP service, only 28% of patients were admitted to ICU within one hour, 89% were admitted within four hours (NOCA, 2021).
- In 2021 the total percentage of patients admitted to ICU within one hour increased to 39% (NOCA, 2022), following the implementation of the CCANP service. Improvements were also seen with patients admitted within four hours, as this increased to 98% (NOCA, 2022). The CCANPs reviewed 21% (N=105) of the total unplanned ICU admissions (N=502) recorded by NOCA*. Of these patients, 88% (78% of the total number** of patients reviewed by the CCANPs) admitted within one hour and 100% were admitted within four hours.

- In 2022 64% (N =79) of patients reviewed by the CCANP were admitted within one hour, 97% were admitted within four hours. NOCA data for the year 2022 is pending.
- Documented admission delays were: ANP not informed of admission by ICU medical team, ICU bed not available, ICU nurse not available, procedure required, or other.

* NOCA does not record patients admitted from the cardiac catheterisation laboratory (cath lab) as unplanned ICU admissions, however the CCANP team reviews this patient and recognises them as emergency admissions.

** Total number of patients seen by the CCANP team, including patients admitted from cath lab.

Details of changes implemented:

- The CCANP service was introduced clinically in November 2020 and covered weekdays, from 8am to 8pm. The CCANP reviewed and transferred patients accepted for admission to the ICU and communicates with the Clinical Nurse Manager (CNM) in ICU to facilitate rapid ICU admission as safely as possible.
- Inclusion criteria for CCANP review: patients from ward areas, from cath lab and post cardiac arrest accepted by an ICU consultant for admission.
- Exclusion criteria for CCANP review: Patients admitted from the emergency department and from operating theatres or recovery.
- If the patient required intervention, such as CT scan, the CCANP liaised with various hospital teams to facilitate this. Communication with the ICU CNM team and implementation of the ICU "emergency bed" has been vital in successfully reducing ICU admission delays.
- Weekend cover by registered ANPs was commenced in November 2022.
- The CCANP service began reviewing patients for transfer to ICU from the emergency department in December 2022.
- The role is now covered by 7 CCANPs in various stages of ANP registration.

- Details of stakeholder engagement, with particular focus on involving patients and/or carers -

The Local Governance Committee (LGC) is an identified group of key stakeholders across nursing and medical disciplines which review the activities of the CCANP service. The CCANP team are reportable and answerable to this committee. Prior to the commencement of the service, the key stakeholders were informed of the service development to ensure clear lines of communication and CCANP referral pathways. Data is presented at LGC by the CCANP team and plans for further service improvement are made. This group consists of three ICU consultants, one medical consultant, one surgical consultant, the resuscitation officers, the Director of Nursing (DON), the Assistant Director of Nursing (ADON) for the medical directorate, the ADONs for the medical, surgical, critical care, oncology & haematology and Nursing Practice Development Unit (NPDU) directorates, and the CNM III for ICU.

The CCANP team have engaged with the Patients Representation Group (PRG) and ICU Steps, a charity that supports ICU survivors, in regards to the post ICU service delivered by the team.

-Describe any structures or improvements that have helped to sustain improvement.

- Regular meetings with ICU doctors to explain our role and when to contact us.
- Meetings with the NOCA team to ensure accurate data collection and identify patterns.
- Meetings with CNM colleagues to ensure availability of the emergency bed.
- The service has expanded to cover patients admitted to ICU from ED in December 2022 to further reduce delays in unplanned admissions to ICU.