

NOCA National Office of
Clinical Audit

NOCA AUDIT DATA

EQUIPs Webinar 16 01 2025



www.noca.ie



[@noca_irl](https://www.instagram.com/noca_irl)



auditinfo@noca.ie

hello my name is...


Dr Fionnola Kelly PhD

Head of Data Analytics and Research

Marina Cronin

Head of Quality & Development,

About NOCA

Excellent healthcare for Ireland shaped by good information



Independent Voice



Largest National
Clinical Audit Portfolio



Rich repository of
data

CURRENT PORTFOLIO



Irish Heart Attack Audit (IHAA)



Irish National Orthopaedic Register (INOR)



Irish Hip Fracture Database (IHFD)



Irish Paediatric Critical Care Audit (IPCCA)



ICU Bed Information System (ICU-BIS)



Irish Potential Donor Audit (IPDA)



Irish National Audit of Stroke (INAS)



Major Trauma Audit (MTA)



Irish National ICU Audit (INICUA)



National Audit of Hospital Mortality (NAHM)



National Paediatric Mortality Register (NPMR)

TWO NEW AUDITS/ REGISTRIES UNDERWAY



**Paediatric
Diabetes**



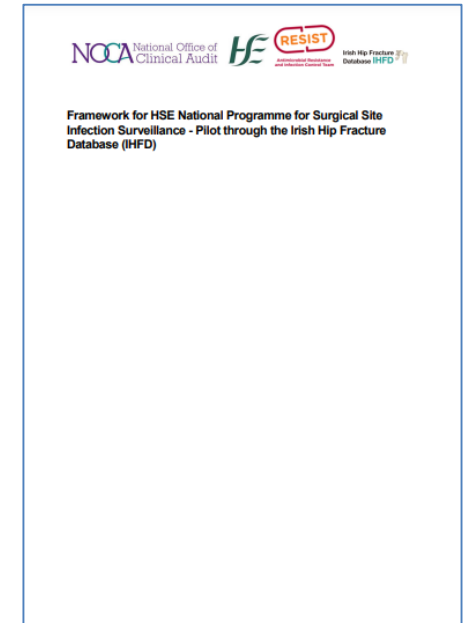
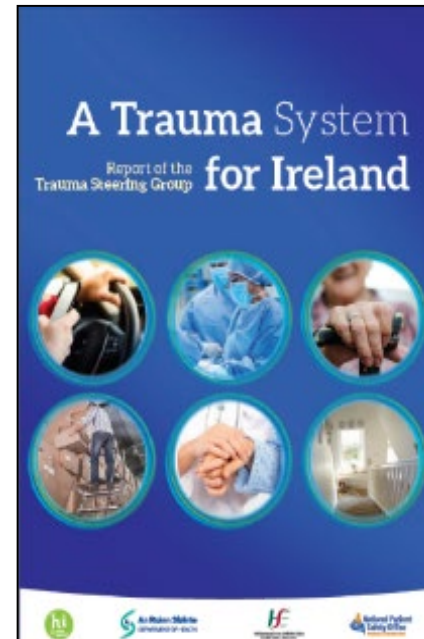
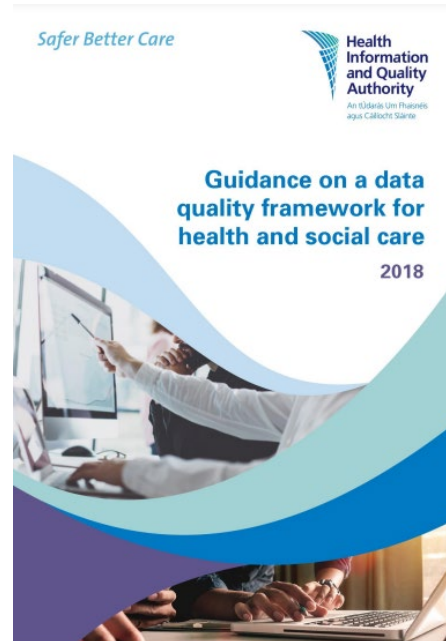
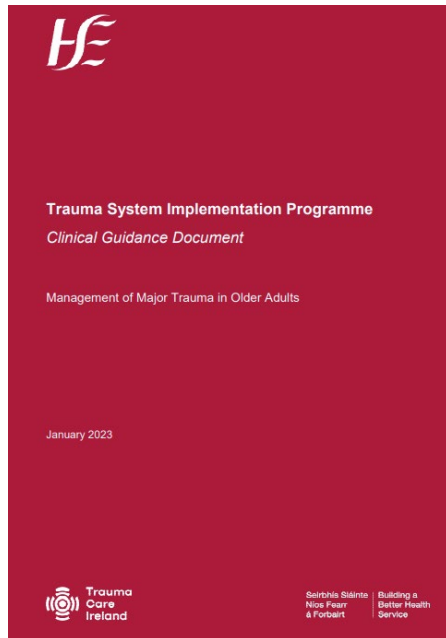
**Irish Breast
Implant
Registry
(IBIR)**



NOCA expertise – S² Standards and Skills



Alignment with national guidance/ strategies



National Committees & Workshops

- HSE Patient Safety Act Implementation Working Group
- HSE HIDS Working Group – IHI, Eircode
- HSE DAIM - Data Access and Information Management
- HSE Consent Policy and Research Consent Policy
- HSE Data Strategy
- HSE DSMP - Dataset Management Process
- HSE Chronic Disease Data Management Group - Diabetes/Renal/HSS
- HSE HPO - HIPE Governance
- HSE NCCA – National Steering Group for Clinical Audit
- DOH CSO Data Liaison group
- DOH NHQRS – National Health Quality Reporting System (DoH)
- DOH NCEC – National Clinical Effectiveness Committee
- HIQA - Advisory Group Information Standards
- RCPI – National SQL Steering Committee
- Future of Audits & Registries Working Group (FORT)

Audit & QI

IMPACT GROUP/
QI LEAD



QI BY
DESIGN



PARTNERSHIPS



RESEARCH A&F,
EQUIPs



NOCA Conference 2025

[Register here](#)

REGISTRATION OPEN NOCA ANNUAL CONFERENCE 2025

Data-Driven Healthcare:
Planning, Delivering, Improving

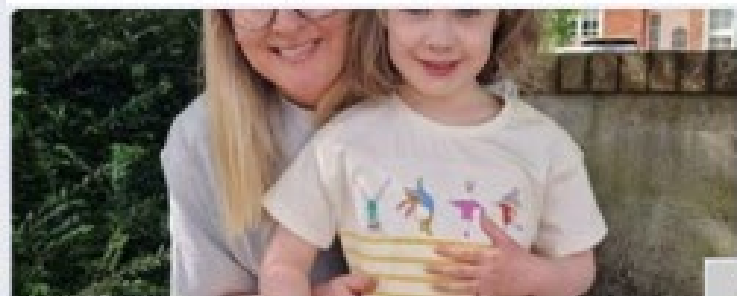
4th February 2025 from 9:45am - 4pm
RCSI, Dublin 2

IN
PERSON
EVENT



NOCA IN THE NEWS

Over 200 places across print, broadcast and digital media since the NOCA Strategy was Implemented



'We were told there was no more they could do for Sophie' - mother of girl (3) who had to be flown to Sweden f

Eilish O'Regan

The mother of a critically ill girl who had to be airlifted to Sweden for advanced life-support not available in Ireland is backing a new report calling...

Irish Independent



Extra ICU capacity critical to improve patient outcomes - report



NOCA Champions 2024 - Health Manager

'Thank David' - The Coloured Jug Hydration project, from HSE Midlands Louth Health-Community Healthcare...

healthmanager.ie



Ireland has fewer critical-care beds than European norm, report shows

Sharna Downes

Occupancy of intensive care units regularly exceed recommended levels

The Irish Times



New programme to encourage people to ...
Dr. Alan Gaffney, Consultant Anaesthesiologist in Intensive Care at Beaumont Hospital discusses the roll out of a new...

www.ite.ie



Ireland 'miles away' from having enough ICU...

The number of intensive care beds in Ireland is far below the OECD average.

www.thejournal.ie



What is the staff plan for the National Children's...

As the National Children's hospital faces further delays our reporter Josh Croxall asks what the staffing plan is or does...

www.getoutplayer.com



Admissions to children's critical care units up 14% on pre-pandemic levels

Sharna Downes

Occupancy rates regularly exceed recommended levels, audit finds



NOCA launches Irish potential donor audit...

The National Office of Clinical Audit (NOCA), in conjunction with HSE Organ Donation Transplant Ireland, has...

www.medicaldependent.ie



Watchdog raises 'urgent' need to plan staff...

Children's Health Ireland has carried out recruitment dips in India and the UAE. The Journal understands.

www.thejournal.ie



Professor RORY DWYER
Clinical Lead, Irish National ICU Audit



ICU audit identifies pressures on the system...

An audit of the country's intensive care units shows they're operating at near maximum capacity. The report also...

highlandradio.com

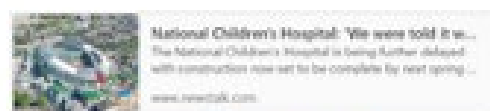


'I woke up from 17-day coma and was sure I'd lost my baby' - mum recalls Covid nightmare

Eilish O'Regan

Dublin mother Laura Curtis was plunged into a nightmare after she contracted Covid-19 while pregnant with her daughter - leaving her in an induced coma...

Irish Independent



National Children's Hospital: 'We were told it...

The National Children's Hospital is being further delayed with construction now set to be complete by next spring...

www.rte.ie



Extra ICU capacity critical to improve patient outcomes...



Extra ICU capacity critical to improve patient outcomes...

Occupancy of intensive care units regularly exceed recommended levels...

www.rte.ie



Lack of capacity and slow discharges lead...

One-in-four patients still in ICU 24 hours after decision made to discharge them.

www.rte.ie



Castlebar Local Election Candidate calls for...

Castlebar based local election candidate has called for additional intensive care beds to be made available at...

www.midwestradio.ie



Healthcare workers 'consumed' Children's Hosp...
Healthcare workers are 'quite consumed' the new National Children's Hospital will be under...

www.rte.ie

Why is the number of children admitted to critical care units rising?

CLIP - 10 NEWS - 27 MAY - MORNING EDITION

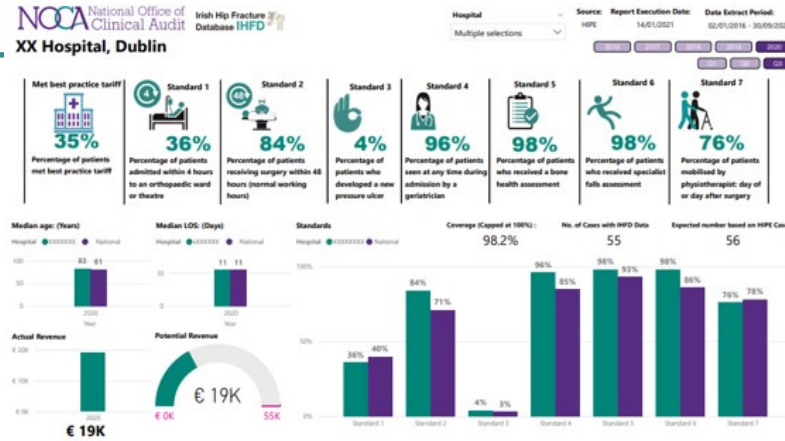
IRISH NATIONAL ICU AUDIT ANNUAL REPORT

Data from 1st January 2022 to 31st December 2022



NOCA Data

- National
- Summary
- Dashboards
- Research



NOCA National Office of Clinical Audit | NPMR National Paediatric Mortality Register

NATIONAL PAEDIATRIC MORTALITY REGISTER 2023

A REVIEW OF MORTALITY IN CHILDREN AND YOUNG PEOPLE IN IRELAND

IRISH PAEDIATRIC CRITICAL CARE AUDIT NATIONAL REPORT 2021-2022

including key trends from 2018 to 2022



MAJOR TRAUMA AUDIT REPORT FOCUSED ON OLDER ADULTS 2017-2021



IRISH NATIONAL AUDIT OF STROKE SUMMARY REPORT 2022

The Irish National Audit of Stroke measures the care for patients with a stroke in acute hospitals. This report looks at the key trends in acute stroke care for 4,999 cases across 21 hospitals in 2022.



WHAT IS A STROKE? TIME IS BRAIN



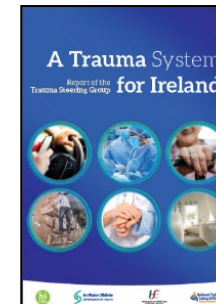
Clinical Leads: Professor Tara Coughlan, Mr Terence Murphy
Audit managers: Louise Brent, Pamela Hickey



First audit to have a best practice tariff

Embedded QI – Golden Hip Award

Established research programme



Informing and supporting trauma system reconfiguration



Developing the first national surgical site infection surveillance programme

Date Selection:

- Q1 2021
- Q2 2021
- Q3 2021
- Q4 2021

Met best practice tariff



15%

Percentage of patients met best practice tariff



Standard 1

34%

Percentage of patients admitted within 4 hours to an orthopaedic ward or theatre



Standard 2

69%

Percentage of patients receiving surgery within 48 hours (normal working hours)



Standard 3

2%

Percentage of patients who developed a new pressure ulcer

Standard 4



63%

Percentage of patients seen at any time during admission by a geriatrician

Standard 5



85%

Percentage of patients who received a bone health assessment

Standard 6



62%

Percentage of patients who received specialist falls assessment

Standard 7



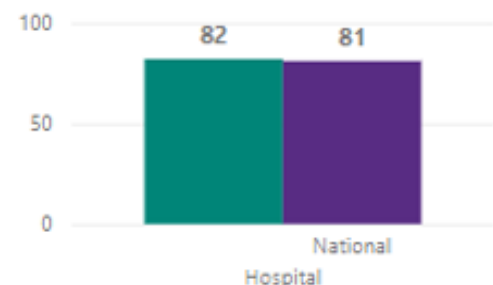
89%

Percentage of patients mobilised by physiotherapist: day of or day after surgery

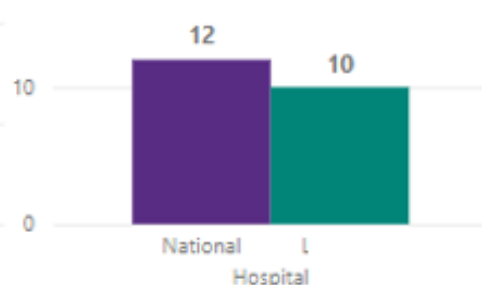
MENU

- Home
- Dashboard
- Standard 1-4
- Standard 5-7
- Standard 1-7 by year
- Median
- BPT
- Revenue
- Standards

Median age: (Years)

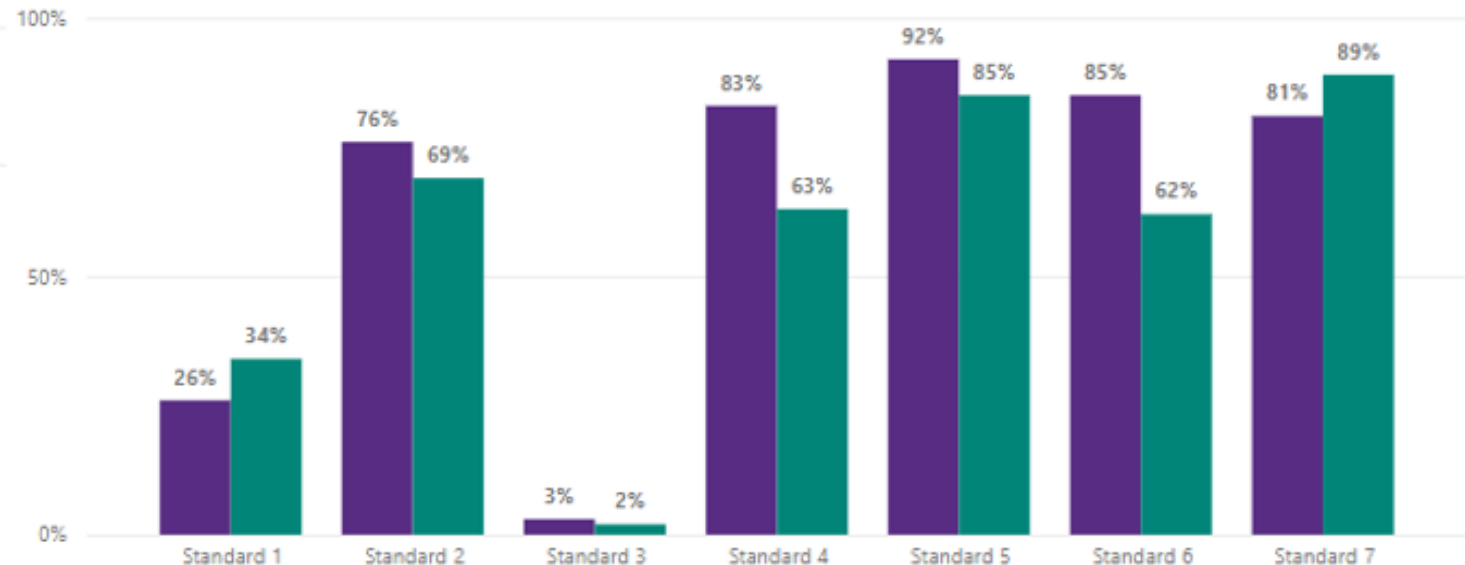


Median LOS: (Days)



Standards

● National% ● Hospital%



Coverage (Capped at 100%) : No. of Cases with IHFD Data Expected number based on HIPE Cases:

97.7%

506

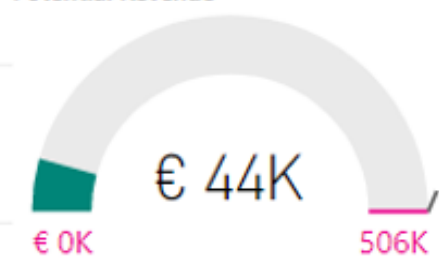
518

BPT (Best Performance Tariff):

Actual Revenue



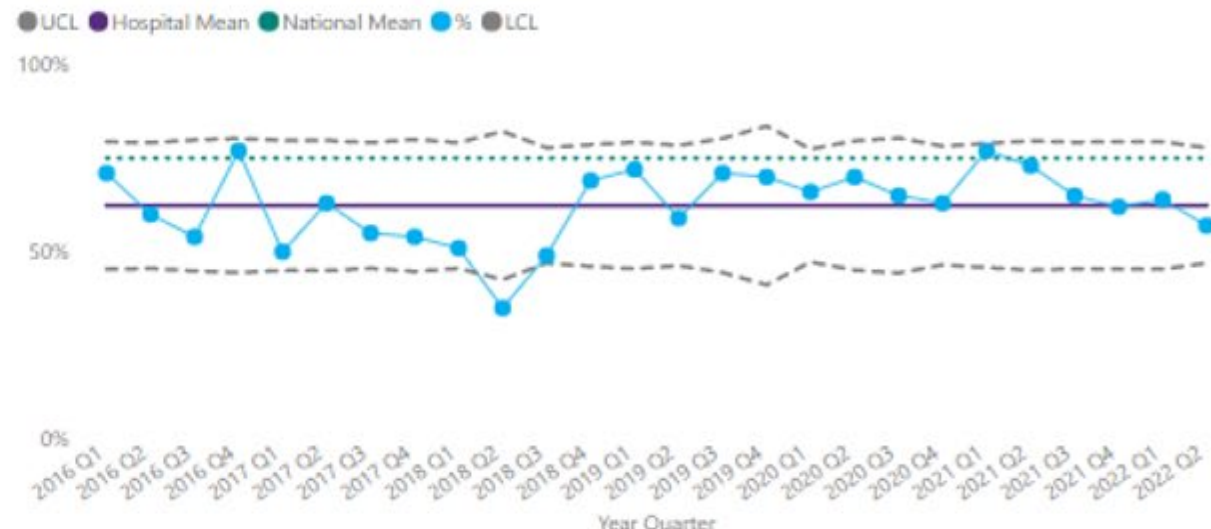
Potential Revenue



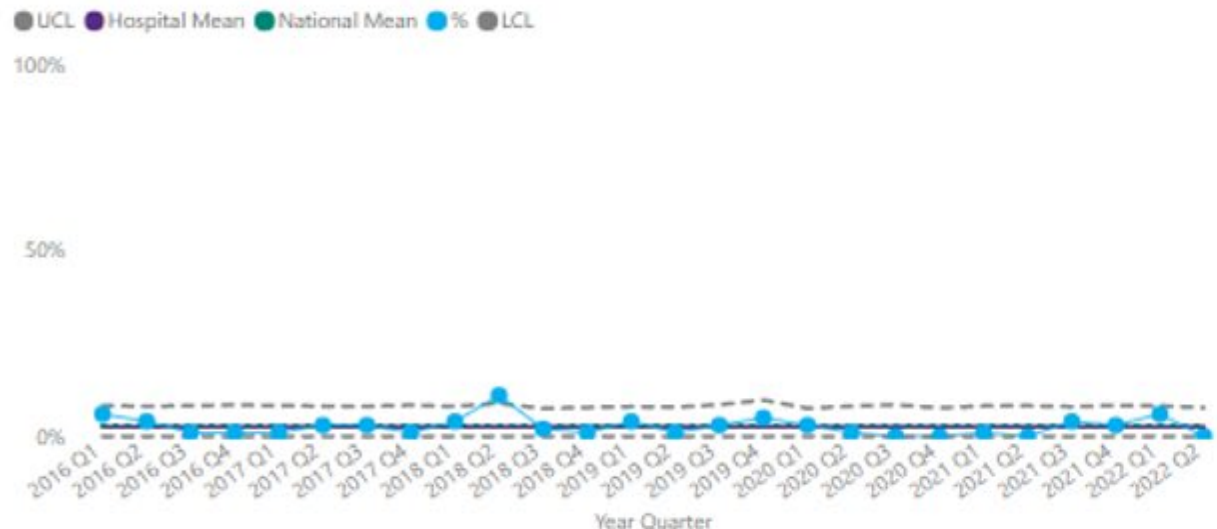
Standard 1: Percentage of patients admitted within 4 hours to an orthopaedic ward or theatre



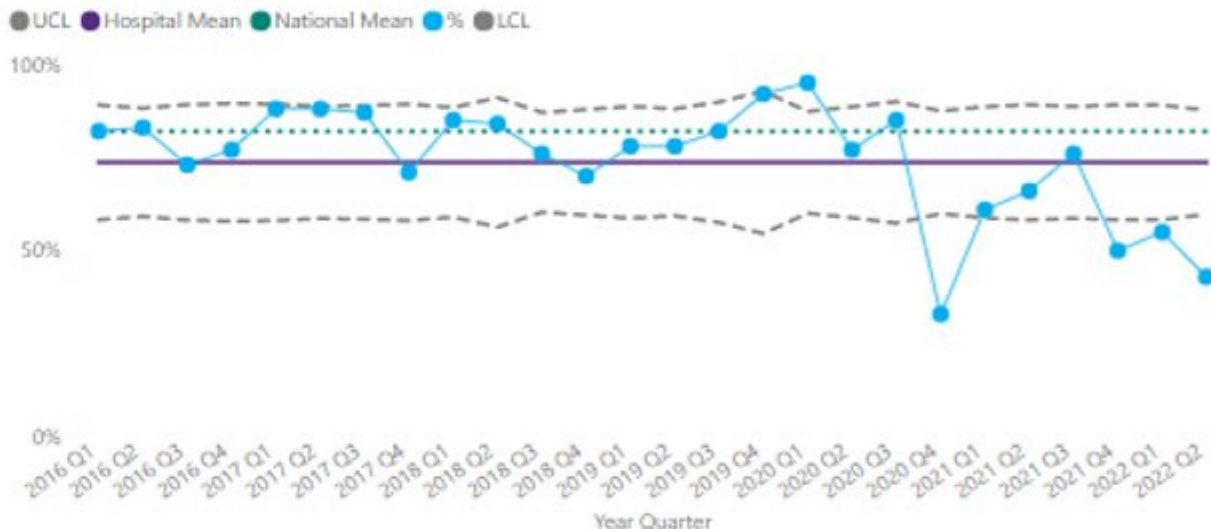
Standard 2: Percentage of patients undergone surgery within 48 hours (normal working hours)



Standard 3: Percentage of patients who developed a new pressure ulcer



Standard 4: Percentage of patients seen at any time during admission by a geriatrician

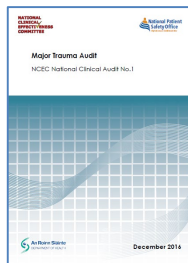


MENU

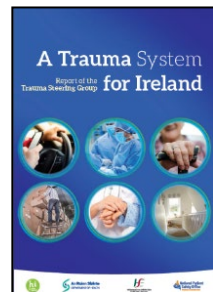
- Home
- Tools
- Standard 1-4
- Standard 5-7
- Median
- Print
- Refresh



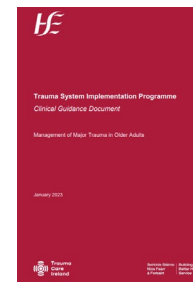
Clinical Lead: Professor Conor Deasy
Audit managers: Louise Brent, Pamela Hickey



1st Clinical Audit to receive NCEC approval

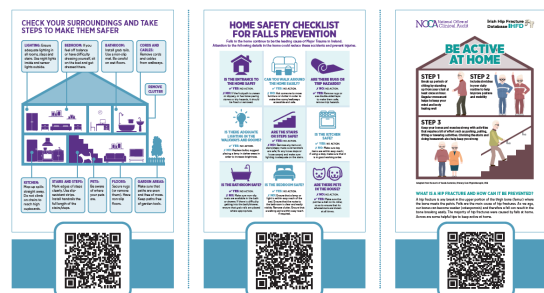


Informing and supporting trauma system reconfiguration



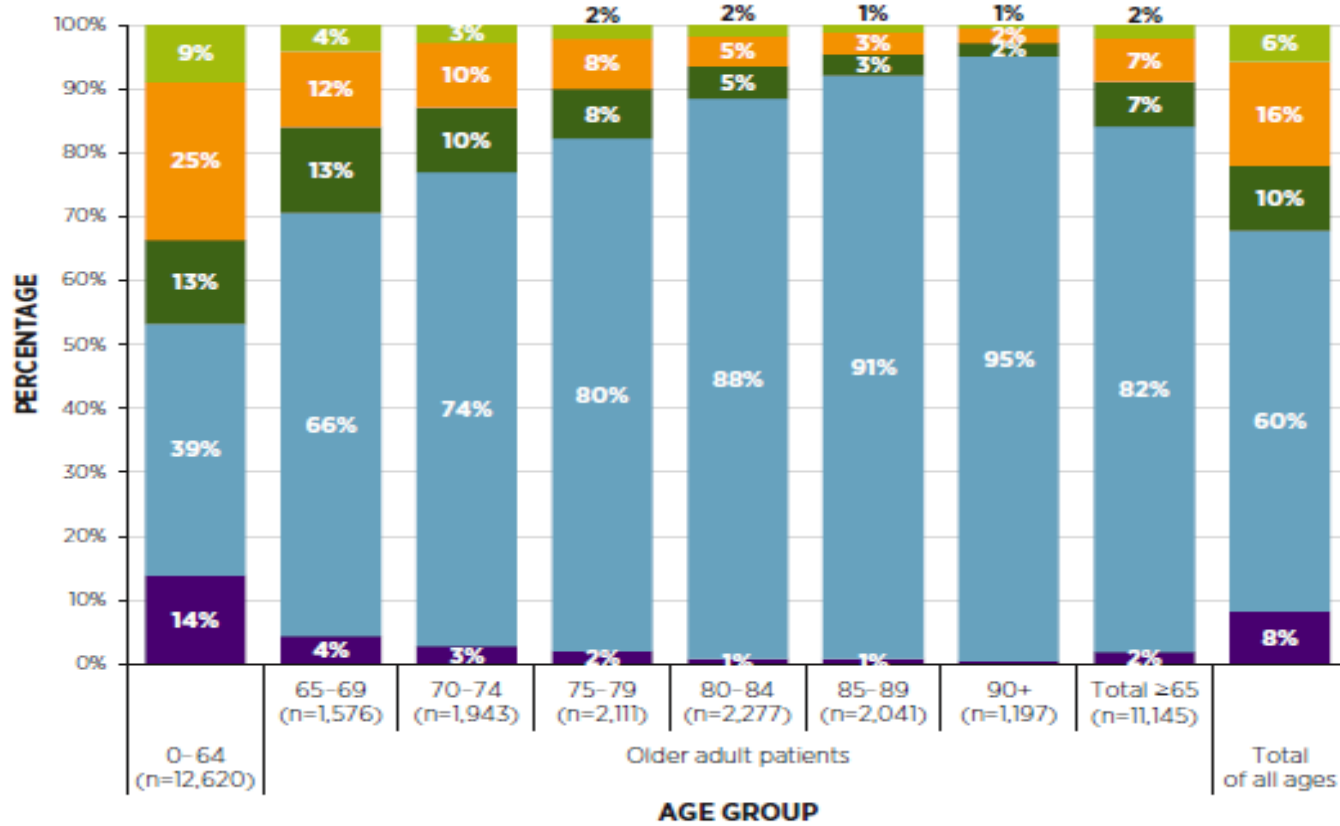
Supporting the development of national guidance

FALLS PREVENTION ADVICE CAN BE FOUND BELOW OR BY SCANNING THE QR CODE



Public health messaging

Major Trauma: Falls are the leading cause of serious injury in Ireland



LOW FALLS
Falls of less than 2 metres

39% UNDER 65 **82%** OVER 65

Median* length of stay

7 days UNDER 65 **12 days** OVER 65

* The median is the middle number in a sorted list of numbers.

Discharged home

73% UNDER 65 **44%** OVER 65



FIGURE 2.4: MECHANISM OF INJURY, BY AGE GROUP (2017-2021) (N=23765)⁴

Irish National ICU Audit (INICUA)

Clinical lead: Prof Rory Dwyer
Audit Managers: Mary O Dwyer Baggot & Fionnuala Treanor



Patient Centred- Inclusion of patient voice and insights in reports and conferences



2023

INICUA now live in 25 adult publicly funded hospitals (29Units)



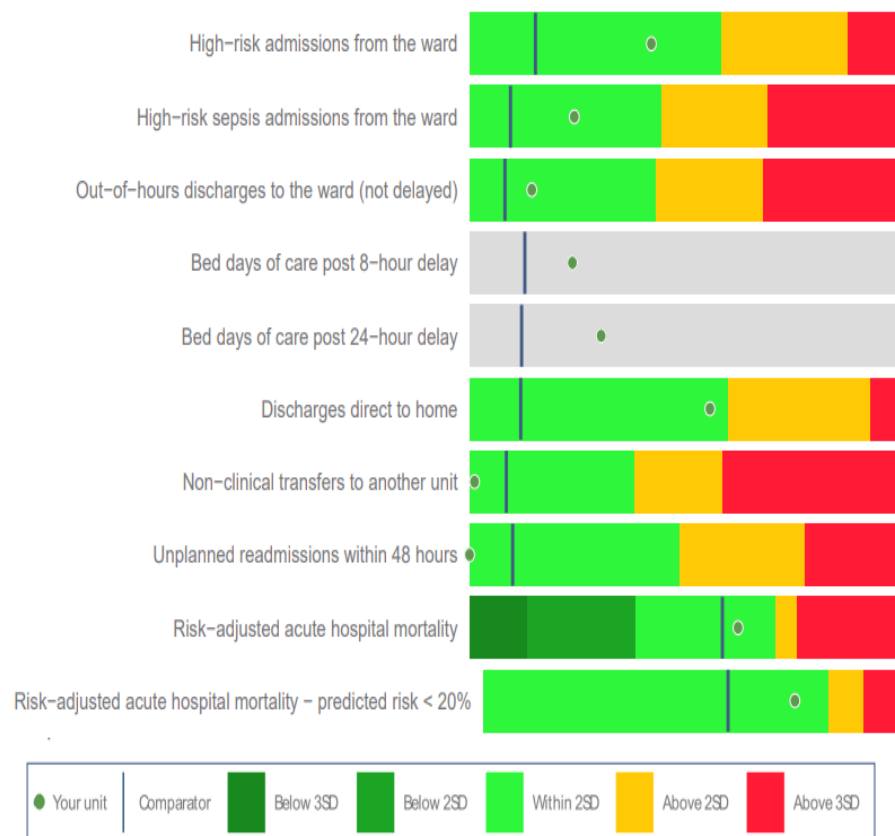
Learning and acting on statistical outlier audit findings

2018				
258 adult ICU beds	Zero Outreach service	Requirement for National ICU Bed Information system (ICU-BIS)	Mobile Intensive Care Ambulance Service (MICAS) 5 days/week 9-5pm based in Dublin	Requirement National Data Base (NDB)
COVID-19 Pandemic put spotlight on ICU bed capacity and			the vital role ICU staff in caring sickest patients in our hospitals	
2020- 2023				
300 adult ICU beds	ICU-BIS operational supported by NOCA 7 days/week	National KPI timely access to ICU	Activity Based Funding model commenced	MICAS 7 days/week Dublin 8-8pm with 2 hubs 5 days (Cork & Galway)
Quality Improvement projects nationally- Cardiac arrest audit, Potential Donor Audit , Outreach Service programme			Quality Improvement projects locally – Timely ICU access, admission and discharge policies,	
2024				
334 funded adult ICU beds	100% ICU Audit Coverage HSE hospitals	2 permanent Clinical Psychologists ICU	Outreach Service- 27 registered CCANPs in post	Private hospital ICU Audit Implementation begins

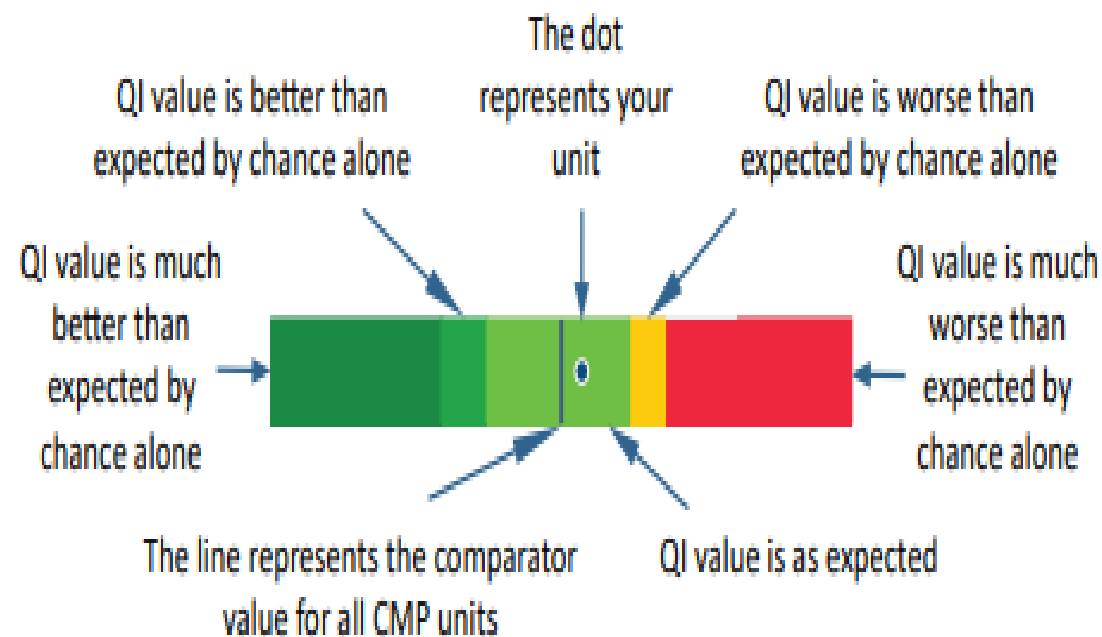
100% Coverage

ICU Audit Data

Quality indicator dashboard



The Case Mix Programme (CMP) Quality indicator (QI) dashboard summarises the results for each QI for a single adult, critical care unit.



ICU BIS - Strengths

NOCA provides clinical & data governance, expertise, relationships



Real-time; data collected daily 365 days by data collectors with clinical expertise



Patient-level data gives unique-granular insights, Covid, RSV, Influenza

Nimble; rapid adjustments to dataset and to reporting, responded to surge in RSV last year



Collecting RSV, Influenza & Covid data, winter season 24/25

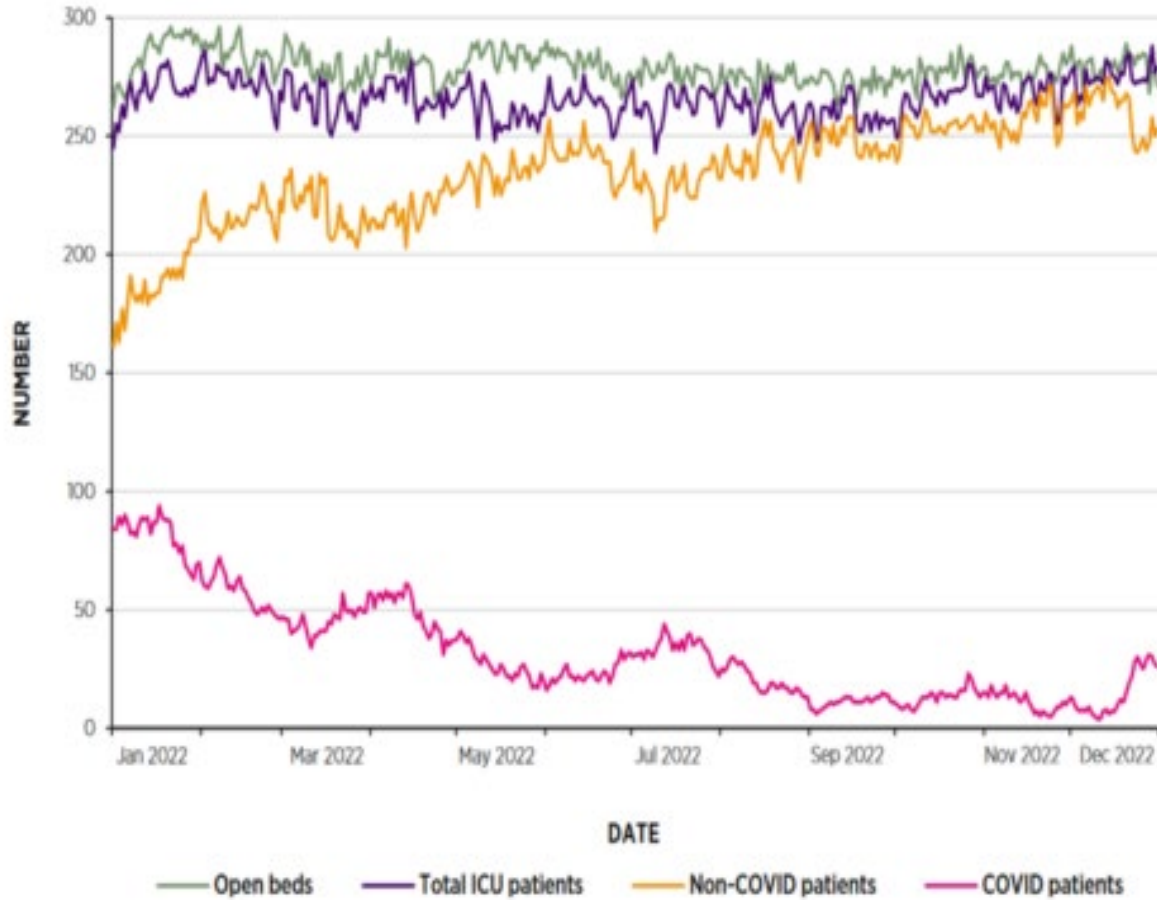
Public Hospitals - 26 Adult and 2 Paediatric

<table border="1"> <tr> <th>Adult</th> <th>Paediatric</th> </tr> <tr> <td>328</td> <td>32</td> </tr> </table> <p>Open Beds</p>	Adult	Paediatric	328	32	<table border="1"> <tr> <th>Adult</th> <th>Paediatric</th> </tr> <tr> <td>300</td> <td>25</td> </tr> </table> <p>Occupied Beds</p>	Adult	Paediatric	300	25	<table border="1"> <tr> <th>Adult</th> <th>Paediatric</th> </tr> <tr> <td>101</td> <td>17</td> </tr> </table> <p>Invasively Ventilated</p>	Adult	Paediatric	101	17
Adult	Paediatric													
328	32													
Adult	Paediatric													
300	25													
Adult	Paediatric													
101	17													
<table border="1"> <tr> <th>Adult</th> <th>Paediatric</th> </tr> <tr> <td>24</td> <td>2</td> </tr> </table> <p>Reserved Beds</p>	Adult	Paediatric	24	2	<table border="1"> <tr> <th>Adult</th> <th>Paediatric</th> </tr> <tr> <td>21</td> <td>7</td> </tr> </table> <p>Vacant Beds</p>	Adult	Paediatric	21	7	<table border="1"> <tr> <th>Adult</th> <th>Paediatric</th> </tr> <tr> <td>55</td> <td>2</td> </tr> </table> <p>Discharge Ready</p>	Adult	Paediatric	55	2
Adult	Paediatric													
24	2													
Adult	Paediatric													
21	7													
Adult	Paediatric													
55	2													

Potential for future development

- (i) Enhancements for regional health authorities,
- (ii) Automated data entry
- (iii) incorporate a system for referrals
- (iii) Adapt further for major disasters





Note: Data are from all ICUs and HDUs in all 26 adult HSE-funded public hospitals.
Source: ICU-BIS.

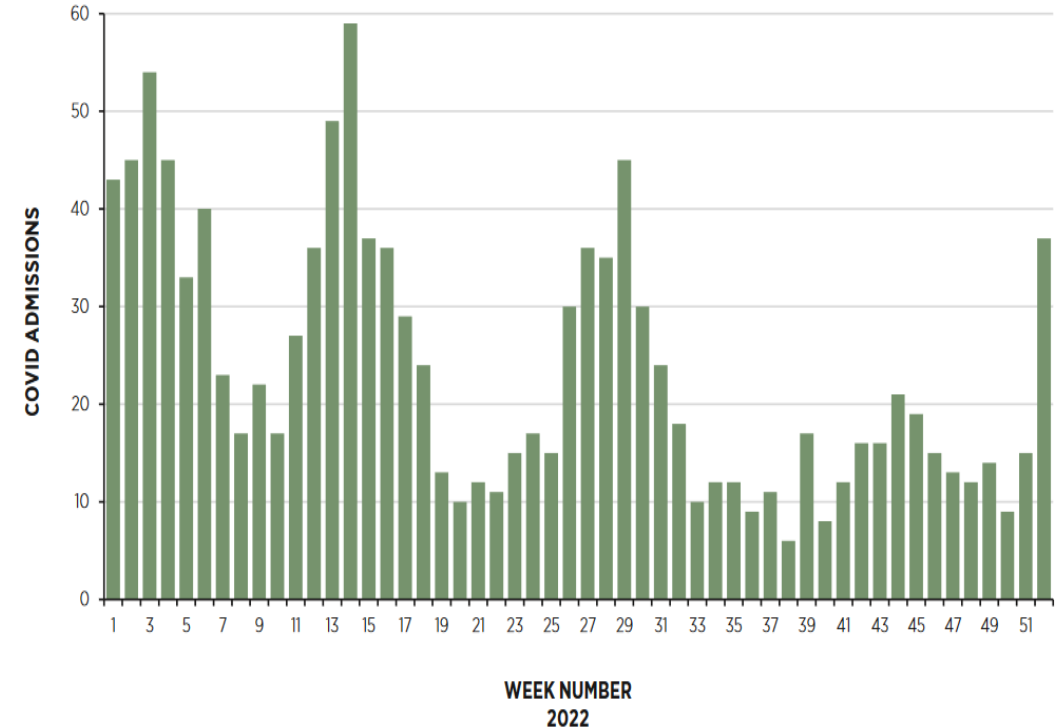


TABLE 9.1: CHARACTERISTICS OF PATIENTS ADMITTED TO ICU WITH COVID-19 IN ROI 2020-2022 AND UK 2022

	ROI 2020 Q1-2 (n=434)	ROI 2020 Q3-4 (n=268)	ROI 2021 (n=1671)	ROI 2022 (n=615)	UK 2022 (n=8300)
Age (years), mean	59	63	58	62	60
Sex (female)	31%	34%	39%	39%	40%
BMI greater than 40	10%	13%	12%	6%	7%
Currently or recently pregnant	0.5%	1.1%	4%	2%	1%
Fully independent living before hospital admission	91%	88%	88%	73%	73%
Very severe comorbidities	10%	12%	15%	37%	29%



Clinical Lead: Dr. Anne Dee
Audit manager: Deirdre Burke









NAHM uses a web-based tool developed by the National Quality Assurance Intelligence System (NQAIS) in the HSE and the data source is HIPE.

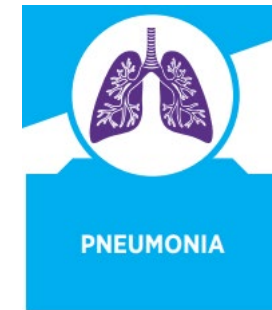
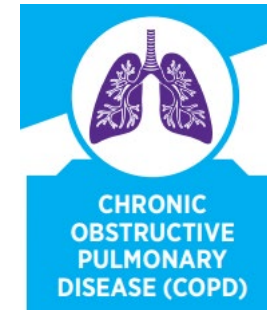
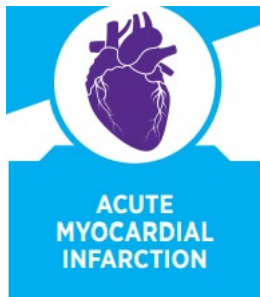


44

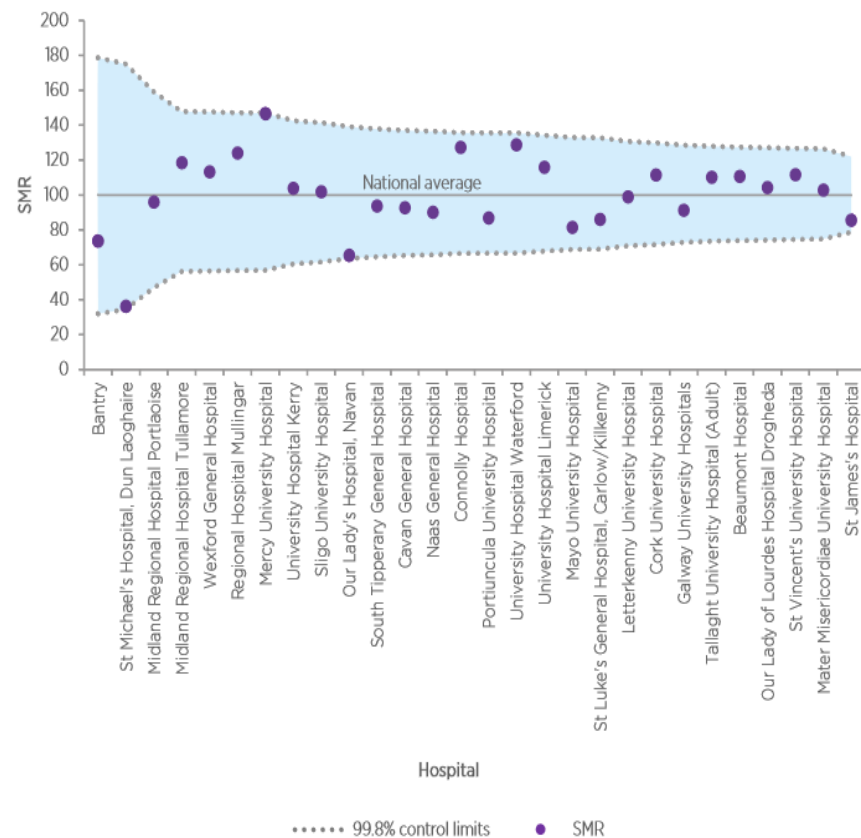
**PUBLICLY FUNDED
HOSPITALS**



 AGE	 SEX
 CO-MORBIDITIES (other existing medical conditions)	 TYPE OF ADMISSION (emergency or elective)
 SOURCE OF ADMISSION (from home, nursing home etc.)	 NO. OF EMERGENCY ADMISSIONS TO THE SAME HOSPITAL IN LAST 12 MONTHS
 PROXY LEVEL OF DEPRIVATION (medical card)	 PALLIATIVE CARE (receiving care and treatment for life threatening illness)



National Audit of Hospital Mortality



The National Audit of Hospital Mortality (NAHM) provides mortality data to 44 publicly funded acute hospitals, via a web-based tool called NQAIS NAHM. The SMR is calculated from the observed number of deaths divided by the expected number of deaths in a hospital for a particular diagnosis and time period, adjusted for the following factors:

- AGE**
- SEX**
- PRE-EXISTING CONDITIONS**
(Charlson Comorbidity Index (Charlson *et al.*, 1987))
- IN-HOSPITAL PALLIATIVE CARE TREATMENT**
- SOURCE OF ADMISSION**
(e.g., other acute hospital, home, nursing home)
- TYPE OF ADMISSION**
(e.g., elective, emergency)
- PREVIOUS EMERGENCY ADMISSIONS**
in the last 12 months to the same hospital
- MEDICAL CARD**
(proxy deprivation measure)

FIGURE 13: NATIONAL IN-HOSPITAL STANDARDISED MORTALITY RATIO FOLLOWING ADMISSION WITH A PRINCIPAL DIAGNOSIS OF PNEUMONIA, 2021



Current Live Sites

- South Infirmary Victoria University Hospital
- Midlands Regional Hospital, Tullamore
- Croom Hospital
- Kilcreene Orthopaedic Hospital
- Our Lady's Hospital, Navan
- Merlin Park University Hospital
- Cappagh National Orthopaedic Hospital
- University Hospital Kerry
- Letterkenny University Hospital
- Sligo University Hospital
- Blackrock Clinic
- Tallaght University Hospital
- Bon Secours Tralee
- Bon Secours Galway
- Bon Secours Dublin
- Bon Secours Limerick
- Bon Secours Cork



2022-2023

National Report 2021
Hospital Reports*



Q4 2023

Hospital Reports
Consultant Level Reports*



Q1 2024

Planning and Scope
for new INOR system



Q4 2024

INOR v2 progression to
**National Audit Platform
(NAP)**

* Early days

Validation Reports

NOCA National Office of Clinical Audit | INAS Irish National Audit of Stroke

IRISH NATIONAL AUDIT OF STROKE NATIONAL REPORT 2019

NOCA National Office of Clinical Audit | INAS Irish National Audit of Stroke



Irish National Audit of Stroke

Organisational Audit Report 2021

NOCA National Office of Clinical Audit | INAS Irish National Audit of Stroke

IRISH NATIONAL AUDIT OF STROKE NATIONAL REPORT 2020

NOCA National Office of Clinical Audit | INAS Irish National Audit of Stroke

IRISH NATIONAL AUDIT OF STROKE SUMMARY REPORT 2022

The Irish National Audit of Stroke measures the care for patients with a stroke in acute hospitals. This report looks at the key trends in acute stroke care for 4,999 cases across 21 hospitals in 2022.

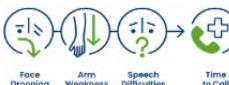
4,999 CASES
21 HOSPITALS
90% COVERAGE

WHAT IS A STROKE?

A stroke occurs when the blood supply to part of the brain is interrupted or reduced, preventing brain tissue from getting oxygen and nutrients. Brain cells begin to die in minutes. Stroke is a medical emergency and prompt treatment is crucial. Early action can reduce brain damage and other complications. There are two main types of stroke: a blocked artery (ischaemic stroke) or a blood vessel leaking or bursting (haemorrhagic stroke).

TIME IS BRAIN

STROKE IS A MEDICAL EMERGENCY WHICH REQUIRES URGENT TREATMENT. The sooner a person arrives to hospital, is assessed by a doctor and receives a tinnin scan, the less damage is likely to happen. This results in better outcomes and less disability.



What should I do if I or someone else has symptoms of a Stroke?
CALL 999 OR 112 IMMEDIATELY

NOCA National Office of Clinical Audit | INAS Irish National Audit of Stroke

IRISH NATIONAL AUDIT OF STROKE

A critical review of national stroke data for Ireland from 2013 to 2021

MINUTES CAN SAVE INDEPENDENCE



NOCA National Office of Clinical Audit | INAS Irish National Audit of Stroke

IRISH NATIONAL AUDIT OF STROKE NATIONAL REPORT 2022

7% FEMALE
Mean age 75 years
A STROKE
NO UNDER
OF FEMALES

NOCA National Office of Clinical Audit | INAS Irish National Audit of Stroke

COVID-19 STROKE RE ISSUE 1

IMPACT OF COVID-19 ON STROKE SERVICES: ANALYSIS BASED ON FROM THE HOSPITAL IN-PATIENT ENQUIRY (HIPE) AND THE IRISH NATIONAL AUDIT OF STROKE (I) MARCH 2018 - JUNE 2020

QUALITY IMPROVEMENT

- ✓ Quarterly dashboard reporting
- ✓ Annual reporting
- ✓ Data informs National and Local QI projects

- ✓ Organisational Audits
- ✓ Data access reports

SERVICE PLANNING

RESEARCH

- ✓ INAS data embedded into Irish stroke research projects.
- ✓ INAS team engaged in research projects.
- ✓ National Reporting Table

- ✓ National Stroke Strategy
- ✓ FAST Campaign

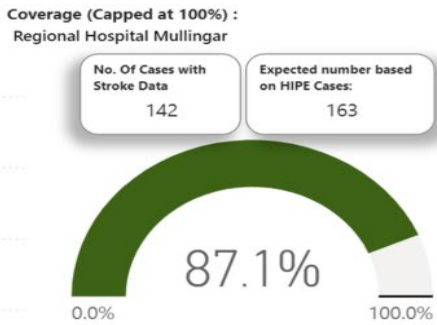
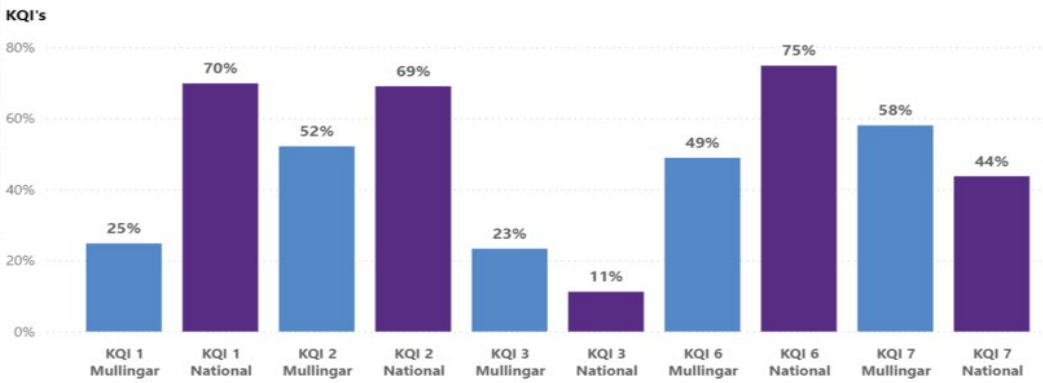
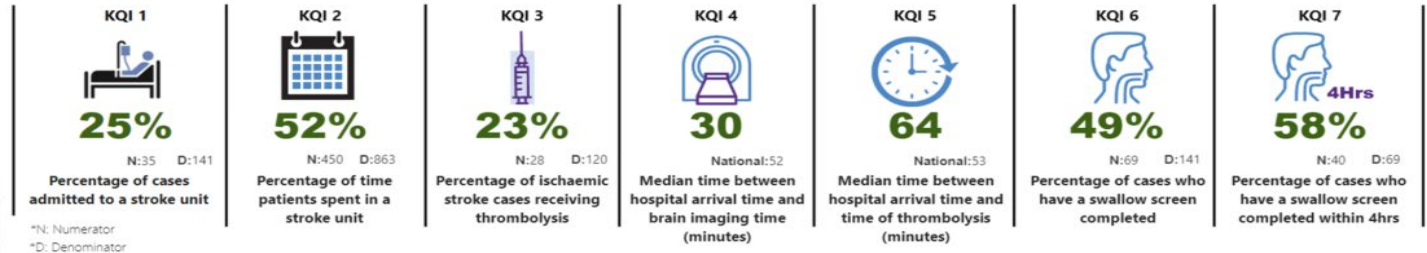
POLICY

Clinical Lead: Prof. Joe Harbison

Audit Manager: Joan McCormack

Web: <https://www.noca.ie/audits/irish-national-audit-of-stroke/>

KQI - Hospital Key Quality Indicator



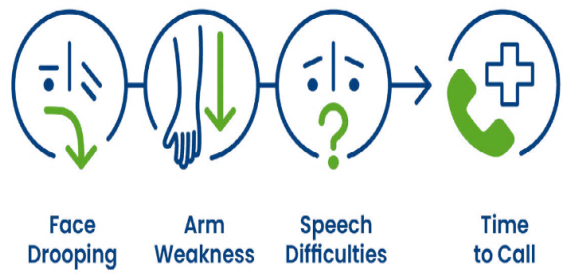
WHAT IS A STROKE?

A stroke occurs when the blood supply to part of the brain is interrupted or reduced, preventing brain tissue from getting oxygen and nutrients. Brain cells begin to die in minutes. Stroke is a medical emergency, and prompt treatment is crucial. Early action can reduce brain damage and other complications. There are two main types of stroke: a blocked artery (ischaemic stroke) or a blood vessel leaking or bursting (haemorrhagic stroke).

TIME IS BRAIN

STROKE IS A MEDICAL EMERGENCY WHICH REQUIRES URGENT TREATMENT.

The sooner a person arrives to hospital, is assessed by a doctor and receives a brain scan, the less damage is likely to happen. This results in better outcomes and less disability.

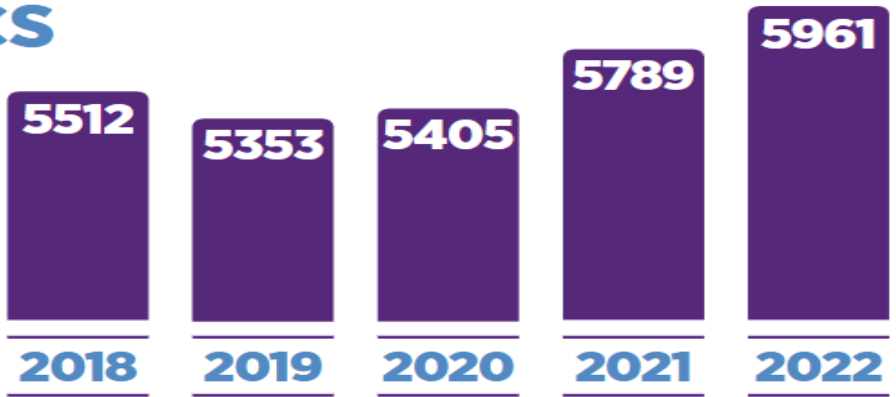


What should I do if I or someone else has symptoms of a Stroke?

CALL 999 OR 112 IMMEDIATELY

DEMOGRAPHICS

The number of patients admitted to hospital continued to increase in line with Ireland's aging population. The 2022 census showed that the highest increase in population was seen in the population aged 70 years and older.



NUMBERS ADMITTED WITH STROKE



57% MALE
Mean age 70 years



43% FEMALE
Mean age 75 years

33% OF MALES HAD A STROKE AGED 65 YEARS AND UNDER COMPARED WITH 22% OF FEMALES

KEY FINDINGS 2022 AND 2023



3102 confirmed STEMI recorded in 2022 & 2023.



77% Male with median* age **62** years.



23% Female with median* age **69** years.



GETTING TO THE SPECIALIST CARDIAC CENTRE

Only **47%** of patients who arrived at a PCI centre directly by ambulance called for help within 60 minutes of onset of symptoms.

55% of patients were brought directly by ambulance to the PCI centre.

32% of patients were transferred from a non-specialist hospital to the PCI centre.

In 2023, only **4%** of patients with a STEMI achieved the 30-minute 'door in door out' (DIDO) target.



DIDO time is the total time a patient with a heart attack spends at the first hospital, from arrival to departure to a PCI centre. The goal is to minimise this time to ensure patients receive life-saving treatment as quickly as possible.

ARE YOU AT RISK OF A HEART ATTACK?

Smoking damages the heart and blood vessels. **35%** of patients were smokers at the time of their heart attack, this is almost double the rate of smoking nationally (18%). Current smokers present with heart attack on average 10 years younger than those who have never smoked.



35%

Too much cholesterol in your blood, known as hypercholesterolaemia, increases your risk. **42%** of patients had a previous history of hypercholesterolaemia.



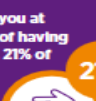
42%

High blood pressure, known as hypertension, increases your risk. **46%** of patients had a previous history of hypertension.



46%

Diabetes puts you at increased risk of having a heart attack. **21%** of patients had a diagnosis of diabetes, an increase from 18% in 2021.



21%

HEART ATTACK TREATMENT

78% of patients with a STEMI received treatment with primary PCI in 2023, an increase from **74%** in 2022.



78%

7% received treatment with thrombolysis, a medication to dissolve clots. This is an increase from **6%** in 2022.



7%

66% of patients received timely treatment to restore blood flow (known as reperfusion) in 2023, well below the target of **90%**.



66%

In 2023, timely primary PCI was higher in patients admitted directly by ambulance to a PCI centre (**79%**) compared to those transferred from a non-PCI centre (**45%**).



79%

PREVENTING ANOTHER HEART ATTACK

In 2023, **86%** of patients with a STEMI had appropriate secondary prevention medication prescribed, below the target of **90%**. This is an increase from **75%** in 2022.



86%

In 2023, **91%** of patients were referred to cardiac rehabilitation, which provides an exercise programme and educational classes. This is a notable increase from **57%** in 2022.



91%

OUTCOMES

Timely treatment was associated with reduced mortality - In 2022, patients who received timely primary PCI had a **2.7%** mortality rate compared to **7.8%** for patients who did not receive timely primary PCI (4.1% vs 5.3% in 2023).



2.7%

IRISH HEART ATTACK AUDIT NATIONAL REPORT 2017-2020



IRISH HEART ATTACK AUDIT SUMMARY REPORT 2021

The Irish Heart Attack Audit measures the care of patients who suffered a major heart attack in 2021 and were treated in one of 10 specialist cardiac hospitals.

WHAT IS A HEART ATTACK?

A heart attack is a life-threatening medical emergency where the blood supply to the heart is suddenly cut off, usually by a blood clot (thrombosis). In Europe, heart disease is the largest cause of death for both men and women.



SYMPTOMS OF A HEART ATTACK

COMMON/TYPICAL SYMPTOMS

Chest pain moving into the jaw, neck, arms or back

New shortness of breath

UNCOMMON/ATYPICAL SYMPTOMS

Unusual stomach pain

Confusion

Sweatiness

What should I do if I or someone else has symptoms of a heart attack?

CALL 999 OR 112 IMMEDIATELY

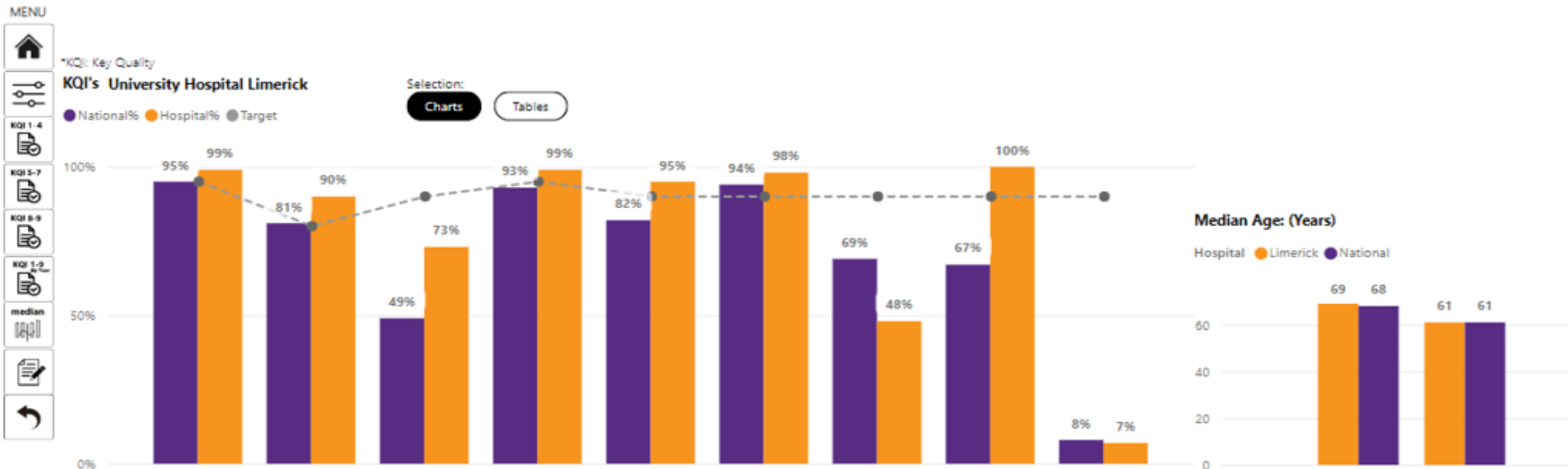
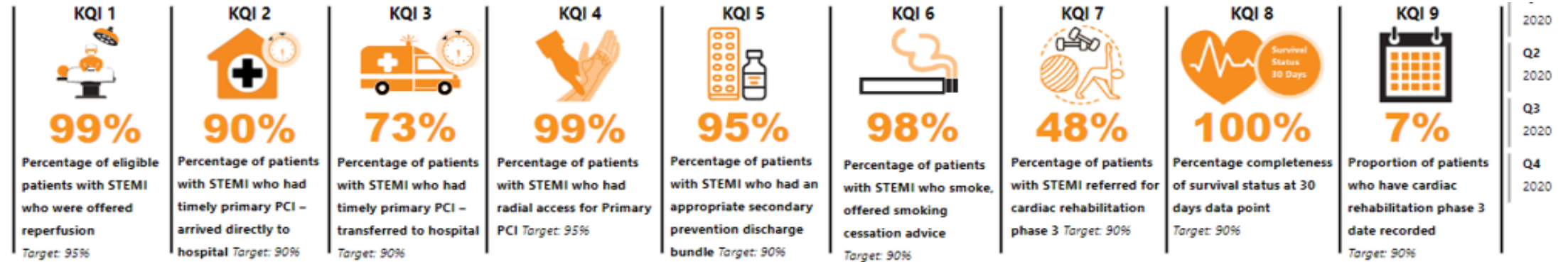
Why? Patients who call 999 or 112 are more likely to experience a timely diagnosis and treatment.

- Have the heart attack diagnosed in the ambulance by the paramedic using an ECG machine
- Are brought urgently to the specialist centre
- Arrive at the specialist centre within the recommended time
- Are twice as likely to be treated within the recommended time.

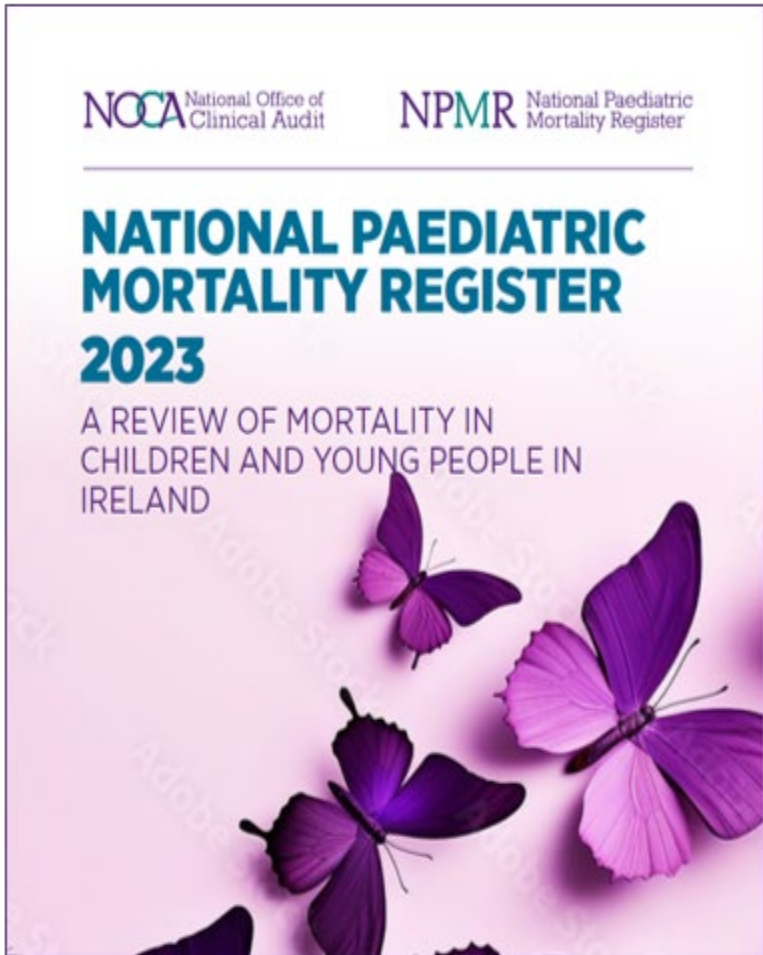


Patients who are treated within the recommended time are more likely to survive the heart attack.

IHAA Dashboard



Clinical Lead: Associate Professor Martina Healy
Audit manager: Cliona McGarvey



NATIONAL PAEDIATRIC MORTALITY REGISTER
KEY FINDINGS

There is currently no national database in Ireland that provides adequate data on deaths in children.



CHILD MORTALITY ESTIMATES 2019-2021*

* This data is based on the number of deaths registered by the CSO between 2019-2021. As registration of deaths can be a timely process, the number of deaths registered in a given year and the actual number of deaths in that year may differ.

542 INFANT DEATHS (BABIES UNDER 1 YEAR) WERE REGISTERED BETWEEN 2019-2021

This equates to an overall infant mortality rate of **3.1 per 1000** livebirths.

75% OF INFANT DEATHS OCCURRED IN BABIES AGED 28 DAYS OR UNDER

The most common causes of death in this age group were perinatal conditions (such as complications of extreme prematurity) at **55%** and genetic disorders at **40%**.

INFANT MORTALITY IN 2021 WAS 58% LOWER THAN THAT RECORDED IN THE LATE 1990s

This is due largely to a reduction in the number of deaths from sudden infant death syndrome (SIDS).

50% DECLINE IN CHILD MORTALITY RATES SINCE 2007

208 deaths in children aged 1-14 years and **142** deaths in young people aged 15-18 years were registered. Despite a decline in child mortality, many potentially avoidable deaths continue to occur across all ages.

THE GREATEST NUMBER OF DEATHS POST-INFANCY ARE DUE TO INJURY

One in five deaths in children aged 1-14 years, and **one in two** deaths in young people aged 15-18 years were due to accident or injury. Cancer was the second leading cause of death in both age groups.

24% OF INJURY-RELATED DEATHS IN CHILDREN AGED 1-14 YEARS WERE DUE TO ROAD TRAFFIC COLLISIONS (RTC'S)

This is a reduction from previous years (2007-2018) when RTCs accounted for **34%** (10 deaths per year) of all injury-related deaths in this age group.

58% OF INJURY RELATED DEATHS IN 15-18 YEAR OLDS WERE DUE TO LIGATURE STRANGULATION**

17% by road traffic collisions (RTCs) **9%** related to drugs and/or alcohol use **9%** from drownings.

** Ligature strangulation occurs when an object is placed around the neck and provides compression.

18% OF ALL INJURY DEATHS AMONG CHILDREN AGED 1-14 YEARS WERE REGISTERED AS HOMICIDE/FILICIDE

Homicide is the killing of one person by another. Filicide is the killing of a child by a parent.

DATA QUALITY ISSUES

- Current sources of child mortality data lack the detail to thoroughly describe the main causes of child deaths and factors that contribute to these deaths. Delays in the registration of some deaths mean that timely reporting of child mortality estimates is not possible.
- Linkage of hospital data with death registration information would permit a more meaningful analysis of child mortality data by allowing additional information on underlying causes and pre-existing medical conditions (co-morbidities) to be considered.
- A pilot of the NPMR Child Death Notification form demonstrated the potential for capturing timely, high-quality data on deaths in a specialised paediatric hospital. The learnings from this NPMR pilot study will be used to inform the development of a national child death notification process.



Clinical Lead: Associate Professor Martina Healy
Audit manager: Karina Hamilton

In Ireland, there are two dedicated PCCUs currently located in Dublin at Children's Health Ireland (CHI) at Crumlin, which has 23 beds and Children's Health Ireland (CHI) at Temple Street, which has 9 beds. These units accept patients from all counties in Ireland. Paediatric patients are defined as children aged under 16 years.

DRAWING BY SOPHIE SWAN



3329
2021 & 2022

3329 admissions in 2021 and 2022 – an increase of 14% when compared to 2018. This rise shows that more children have required critical care in recent years compared to the time before the pandemic.

1098 | **1092**
2021 | 2022

CHI at Crumlin had the third highest number of PCCU admissions of all units in the UK and Ireland in 2021, with 1098 admissions and 2022, with 1092 admissions.

65% | **69%**
2021 | 2022

Emergency admissions accounted for the majority of admissions to PCCUs – 65% in 2021 and 69% in 2022.



Coming soon
New National Children's Hospital
 42 bed PCCU/CCU – single occupancy cubicles and 18 bed NICU



2 HDU beds



Clinical Lead: Dr Alan Gaffney
Audit managers: Maria Messitt

IPDA Aim

The aim of the Irish Potential Donor Audit (IPDA) is to ensure that every person who is approaching the end of life in ICU and ED is offered the possibility of becoming an organ donor, where this is appropriate.



MARCH
2022

Feasibility Study

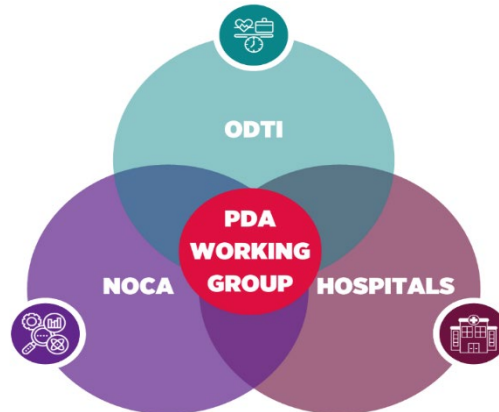
PDA Development Project Report

SEPTEMBER
2023



DECEMBER
2023

**Extended data
collection**



UHL- University Hospital Limerick
SJH- St James's Hospital
BH- Beaumont Hospital
CUH- Cork University Hospital
MUH- Mater University Hospital
GUH- Galway University Hospital



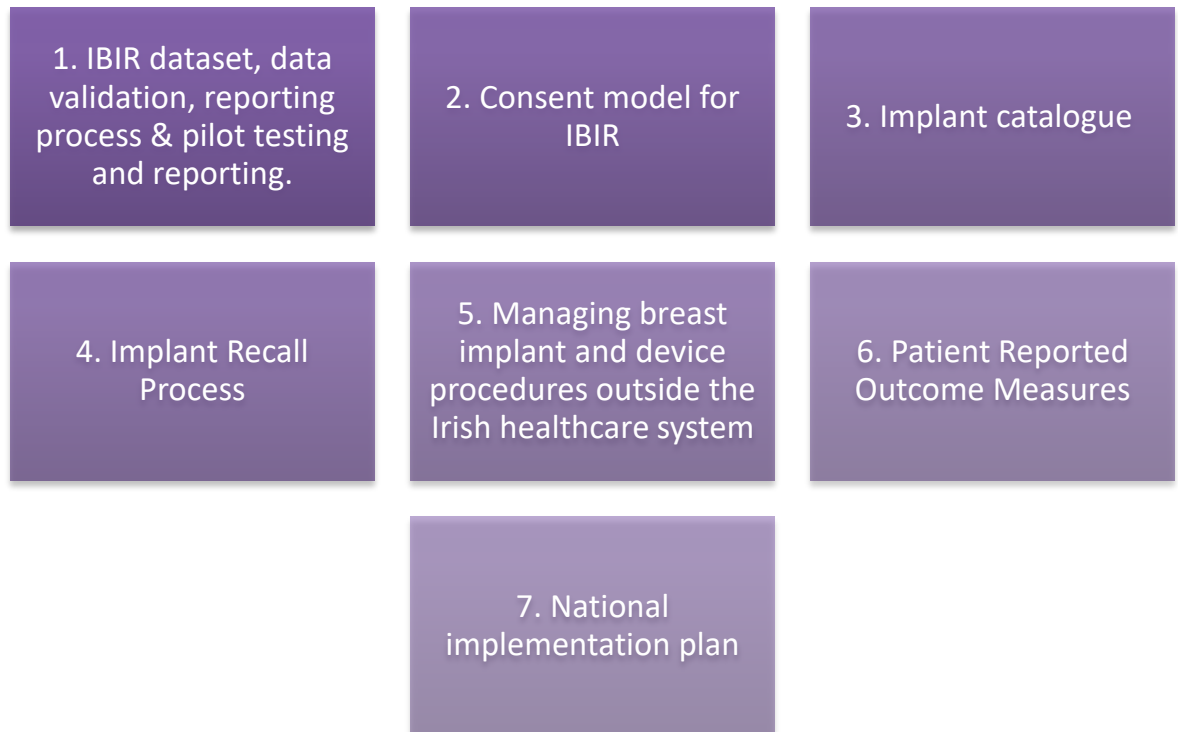
Clinical Lead: Vacant
Audit manager: Breda Horan



IBIR Objectives

The objectives of the IBIR are to;

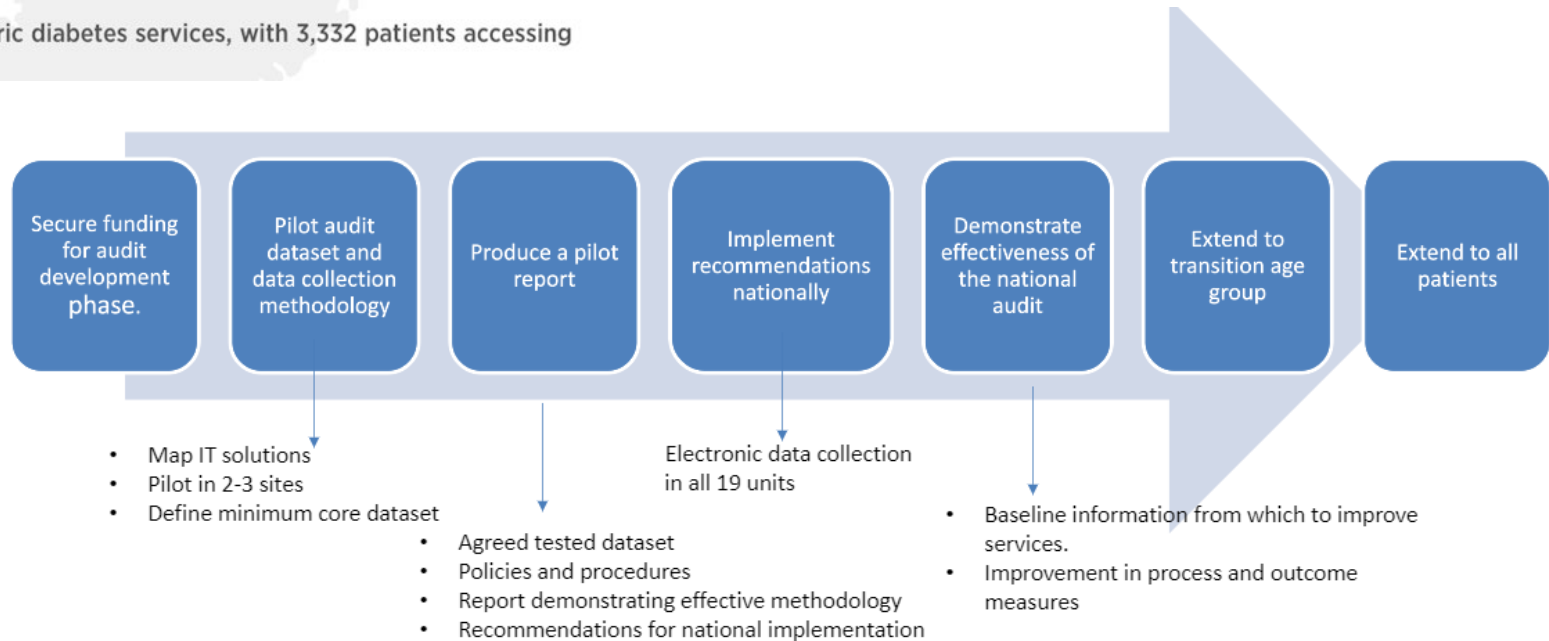
- provide for both short and long-term monitoring of breast implants and devices to inform patient safety.
- improve adherence to best practice standards by providing insights from reported data.
- improve awareness for the public of the national registry for breast implants and devices.
- collaborate with international breast implant registries within the International Collaboration of Breast Registration Activities (ICOBRA) to contribute towards research for greater understanding of risk factors associated with breast implants and devices.





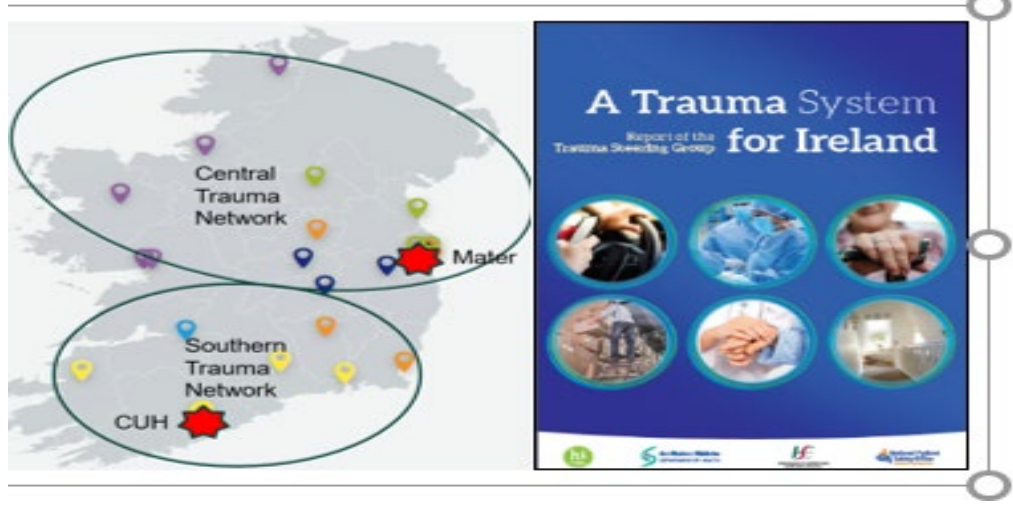
Clinical Lead: Professor Nuala Murphy
Audit manager: Lauren Churchill

- Ireland has a high incidence of type 1 diabetes mellitus (T1DM), with incidence rates in the top 25% worldwide.
- Increase from 16.3 cases per 100,000 population aged under 15 years in 1997 to 27.1 cases per 100,000 population in 2018.
- 19 hospitals providing paediatric diabetes services, with 3,332 patients accessing these services nationally.



Other uses of data

NOCA



Summary Reports – aimed at public

NOCA National Office of Clinical Audit

MTA Major Trauma Audit

MAJOR TRAUMA IN OLDER ADULTS SUMMARY REPORT 2017-2021

The Major Trauma Audit (MTA) was established by the National Office of Clinical Audit (NOCA) in 2013. This audit focuses on the care of the more seriously injured patients in our healthcare system, across 26 trauma receiving hospitals.

WHAT IS MAJOR TRAUMA?

Major trauma is any injury that has the potential to cause prolonged disability or death. There are many causes of major trauma. These injuries can be caused by blunt mechanisms such as falls and motor vehicle collisions, or penetrating mechanisms such as stab wounds and gunshot wounds (World Health Organization, 2018). In Ireland, 11,145 older adults suffered a major trauma between the years 2017 and 2021.

WHAT'S THE LEADING CAUSE OF MAJOR TRAUMA IN OLDER ADULTS?

Low falls, also known as a fall that occurs less than two meters from the ground, accounts for **82%** of major trauma in older adults.

84% of these falls happen in the home or institution e.g. a nursing home where the person is living.

The incidence of falls ranged from **66%** in those aged 65-70 to **95%** in those aged 90 years and older.

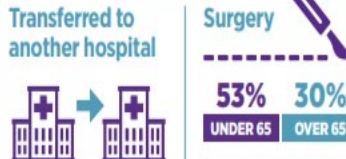
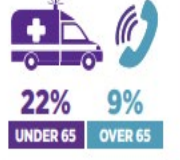
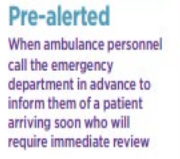
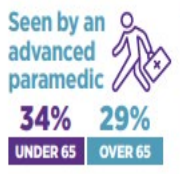
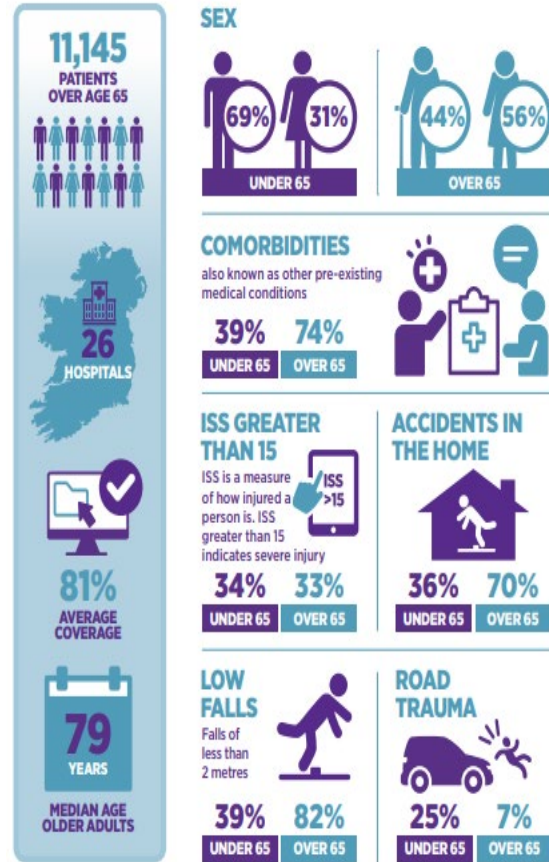
FALLS PREVENTION ADVICE CAN BE FOUND BELOW OR BY SCANNING THE QR CODE

CHECK YOUR SURROUNDINGS AND TAKE STEPS TO MAKE THEM SAFER

HOME SAFETY CHECKLIST FOR FALLS PREVENTION

BE ACTIVE AT HOME

KEY HIGHLIGHTS OF OLDER ADULTS FOLLOWING MAJOR TRAUMA 2017-2021



KEY COMMITMENTS FROM NOCA

This report highlights the continuing challenge to recognise and deliver the right care for older adult patients with major trauma. Its findings show that there are clear opportunities for NOCA to support the trauma system with the data from the MTA.

To do this, NOCA will:

Continue to support hospitals to enter high quality data.	Collaborate with key stakeholder groups, including for example Age Friendly Homes Ireland and Nursing Homes Ireland.
Promote the use of the national clinical guidelines for older adults with major trauma.	Work with patient and public interest groups (e.g. Age Action Ireland and Spinal Injuries Ireland) to raise awareness about the causes of major trauma (namely, low falls at home and in nursing homes) and to promote the circulation of this information to the patient and public interest organisations.

PATIENT AND PUBLIC INTEREST

As part of the Major Trauma Governance Committee and PPI representative, I welcome the opportunity to read the 2017-2021 older persons report. I found it surprising that the proportion of older adults with major trauma increased, and by 7% in the period. I know the population is aging and would have expected the absolute numbers with Major Trauma to increase but not necessarily the proportion. It stood out to me that "Mortality after a Spinal injury is around 12%, and 2% in younger age groups. I would also welcome mortality to quality and return to independent living. I realise that means something different from my circumstance to older adults but it still did strike me as a good idea generally to update the measure of outcomes to quality of life rather than death. I was glad to read of some potential for home safety education/assessments for older adults as all can benefit from the need for family/friends to be more cautious and aware of the risks of trauma in the home".

Richard Murray, Patient and Public Interest Representative, MTA Governance Committee

Bairbre O'Sullivan, Head of Services in the National Rehabilitation Hospital is also a member of the MTA Governance Committee. When asked to review this report, she found it "very interesting that older adult patients were more likely to be admitted to hospital with a spinal or head injury. Also "the impact that the pandemic might have had on the figures, it did impact for a number of months in 2020 in terms of admissions, staffing, people remaining at home and older people isolating and not having their usual supports. It is an excellent report and makes for interesting reading".

Bairbre O'Sullivan, Patient and Public Interest Representative, MTA Governance Committee

REFERENCES

World Health Organization (2018) Falls [internet]. Available from: <http://www.who.int/mediacentre/factsheets/fs344/en/> (Accessed 23 October 2019).

NOCA National Office of Clinical Audit

2ND FLOOR, BLOCK B, ARDLAUN, 111 ST STEPHENS GREEN, DUBLIN 2, D02 VN51

Tel: +353 1 402 8577

IF YOU WISH TO READ THE FULL REPORT LOG ONTO

www.noca.ie

IF YOU HAVE ANY QUERIES OR COMMENTS PLEASE FEEL FREE TO EMAIL

mta@noca.ie

FOLLOW US ON X AND INSTAGRAM

[@noca_irl](https://www.instagram.com/noca_irl)

Public Health Messaging



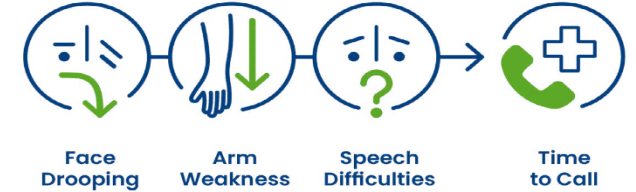
WHAT IS A STROKE?

A stroke occurs when the blood supply to part of the brain is interrupted or reduced, preventing brain tissue from getting oxygen and nutrients. Brain cells begin to die in minutes. Stroke is a medical emergency, and prompt treatment is crucial. Early action can reduce brain damage and other complications. There are two main types of stroke: a blocked artery (ischaemic stroke) or a blood vessel leaking or bursting (haemorrhagic stroke).

TIME IS BRAIN

STROKE IS A MEDICAL EMERGENCY WHICH REQUIRES URGENT TREATMENT.

The sooner a person arrives to hospital, is assessed by a doctor and receives a brain scan, the less damage is likely to happen. This results in better outcomes and less disability.



What should I do if I or someone else has symptoms of a Stroke?

CALL 999 OR 112 IMMEDIATELY

FALLS PREVENTION ADVICE CAN BE FOUND BELOW OR BY SCANNING THE QR CODE

CHECK YOUR SURROUNDINGS AND TAKE STEPS TO MAKE THEM SAFER

HOME SAFETY CHECKLIST FOR FALLS PREVENTION

BE ACTIVE AT HOME

SYMPTOMS OF A HEART ATTACK

COMMON/TYPICAL SYMPTOMS

- Chest pain moving into the jaw, neck, arms or back
- New shortness of breath

UNCOMMON/ATYPICAL SYMPTOMS

- Unusual stomach pain
- Confusion
- Sweatiness

What should I do if I or someone else has symptoms of a heart attack?

CALL 999 OR 112 IMMEDIATELY

Why? Patients who call 999 or 112 are more likely to experience a timely diagnosis and treatment.

- Have the heart attack diagnosed in the ambulance by the paramedic using an ECG machine
- Are brought urgently to the specialist centre
- Arrive at the specialist centre within the recommended time
- Are twice as likely to be treated within the recommended time.



Patients who are treated within the recommended time are more likely to survive the heart attack.

Research

NOCA

Current Research	Status
<p>HRB-funded APA “Maximising the quality of stroke care in Ireland – development of a national stroke audit” Review of dataset and PROMS”</p> <ul style="list-style-type: none"> • Lead Applicant/ Knowledge Users – RCSI, NOCA, HSE QI • HRB 2yr funded study 	Underway since Feb 2021
<p>HRB IHFD HipFORGE (Hip Fracture Outcome Recording for improved Geographic Equality)</p> <ul style="list-style-type: none"> • (3 years project) • NOCA Co applicant 	Commenced June 2021, update provided in the IHFD 2022 Report
<p>HRB MTA - TRAUMA (Targeted Review and Amalgamation of Unmapped Major trauma and Ambulance data in Ireland) study</p> <ul style="list-style-type: none"> • Lead Applicant – Dr Frank Doyle • Co applicant & Knowledge Users – National Trauma Office, NOCA & National Ambulance Service, MICAS, Spinal Injuries Ireland, Irish Road Victims Assoc. 	Underway
<p>HRB Applied Programme Grant ISTAR - Irish acTion plan for stRoke". NOCA Co-Applicant Lead Applicant: Professor David Williams / RCSI</p>	HRB Funding Application Stage
<p>SFI funding for new RCSI Converge: Centre for Chronic Disease and Population Health Research The Centre will transform the way that population-level data and research platforms are deployed in Ireland to make key decisions for the prevention and reduction of the burden of chronic diseases.</p>	Underway 2024

Future Developments

NOCA

❑ Dashboard

- Create A new *health region* view on the dashboard
- Expand access to the dashboard to relevant HSE teams so that they can have a national view
- Improve dashboards so that they have a more QI focus
- Include all NOCA audits on the NOCA dashboard

❑ Health equity focus in NOCA reporting

- IPDA first audit to include A suite of health equity stratifiers (ethnicity, religion, gender, etc.).

❑ Expand audits to new areas beyond acute care have a more prevention focus

❑ Consistency in NOCA datasets

- Core NOCA demographic dataset
- Core set of risk factor dataset e.g smoking, BMI,

❑ Dataset sharing

- Platform on NOCA website. In place for stroke: all variables reported on at national & individual hospital level for validated year
- Maximise use of audit data across the healthcare system

Opportunities **TO WORK WITH NOCA**

Some benefits of working with NOCA

- ❑ Availability of clinical advisory group and established governance structures
- ❑ Active public and patient involvement programme
- ❑ Data, Data, Data
- ❑ Translation of work into NOCA audit practice
- ❑ Publication through NOCA - reports, website

NOCA National Office of
Clinical Audit

Contact us: auditinfo@noca.ie

THANK YOU

