

IRISH NATIONAL ICU AUDIT SUMMARY REPORT 2017

The Irish National ICU Audit was established by the National Office of Clinical Audit (NOCA) in 2013 and focuses on the care of patients in adult Intensive Care Units (ICUs) and Paediatric Intensive Care Units (PICUs). Patients cared for in these Units are the very sickest patients in the hospital.

The Irish National ICU Audit (INICUA) is reporting on 58% of ICU activity in adult hospitals (12 Units in 9 hospitals) and all ICU activity in both specialist paediatric hospitals in the Republic of Ireland (ROI).

NOCA works with the Intensive Care National Audit and Research Centre (ICNARC) for adult reporting and with the Paediatric Intensive Care Audit Network (PICANet) for paediatric reporting. These organisations monitor and analyse the data. They advise NOCA and provide reports on the quality of care and activity in ICUs and PICUs. NOCA provides guidance to participating hospitals in interpreting these reports in order to improve the quality of care in their Units.

WHAT INFORMATION IS COLLECTED?

ADULT

The adult audit collects information on:

- ➔ Age
- ➔ Gender
- ➔ Pre-ICU admission data
 - Source of admission to hospital (e.g. home, Emergency Department, referring hospital)
- ➔ Pre-existing medical conditions
- ➔ Clinical diagnoses
- ➔ Physiological details
- ➔ Organs supported during the ICU stay
- ➔ Interventions such as ventilation, invasive monitoring, dialysis, nutrition, transfers to theatre, infection in ICU
- ➔ Discharge details

PAEDIATRIC

The paediatric audit collects information on:

- ➔ Age
- ➔ Gender
- ➔ Transfers of critically ill infants or children
- ➔ Transport team
- ➔ Journey times
- ➔ Referring hospital and destination
- ➔ Clinical diagnoses
- ➔ Physiological details
- ➔ Interventions such as ventilation
- ➔ Discharge details
- ➔ Unit staffing levels

The Irish National ICU Audit Annual Report 2017 reports on:

12 ADULT UNITS



6,186 PATIENTS
58% OF ICU ACTIVITY

2 PAEDIATRIC UNITS



1,463 PATIENTS
100% OF PICU ACTIVITY



IRELAND
ADULT MEAN* AGE 60

*mean = average

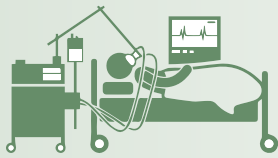
PICU



CHILDREN UNDER THE AGE OF ONE

OLCHC 57%
TSCUH 38%

Paediatric patients under the age of one made up the largest proportion of paediatric ICU admissions, with 57% of patients in Our Lady's Children's Hospital, Crumlin (OLCHC), and 38% of patients in Temple Street Children's University Hospital (TSCUH) in this age group.



91%

Overall bed occupancy in adult ICU (recommended levels are 70-80%): Irish Units are very busy



94%

The overall bed occupancy in paediatric ICU



5
DAYS

The mean length of stay in adult ICU is the same as in the UK



6%
IRELAND
2%
UK

Unplanned discharges out of hours from adult ICU; 6% in Ireland v 2% in UK



24
IRELAND
15
UK

Mean length of stay in hospital after adult ICU discharge for hospital survivors was 24 days in Ireland v 15 days in UK



2.9
OLCHC
1.9
TSCUH

Paediatric median length of stay in ICU - 2.9 days in OLCHC, 1.9 days in TSCUH



Illness severity and requirements for organ support were greater in adult ICU in Ireland than the UK, but mean length of stay was the same in both. Irish ICUs provide a high quality of care; risk adjusted mortality rates were similar in Ireland and the UK*

* Risk adjusted mortality rates are quality measures that compare actual deaths to expected deaths.

KEY RECOMMENDATIONS



- The HSE should identify Units operating at or above capacity and resource Units to deal with peak demands.
- The HSE should increase bed capacity across both PICUs. This could be best achieved by retention and recruitment of staff to open all of the 31 available beds already in the system.
- The HSE should support the ICU Bed Information System, which is linked to the INICUA database, to optimise the use of adult critical care beds, and allow for more efficient referrals.



- The Mobile Intensive Care Ambulance Service for adult transport should be resourced to provide a 24 hour service, 365 days a year.
- The HSE should prioritise the expansion of the Irish Paediatric Acute Transport Service to a 24 hour, 7 day a week centralised transport service to ensure safe and timely transfer of critically ill children.



- Doctors should clearly identify patients for Unit discharge and managers should expedite these discharges and minimise discharge from ICU during night-time hours.
- Clinicians and managers should use INICUA data to identify variance in their own activity and use it to promote improvements in their local practice.
- Hospital managers should ensure adequate resources are in place to collect INICUA data for continuous and complete reporting.
- Doctors should ensure that the “Time of decision to admit to ICU” is documented to meet the new HSE key performance indicator for time to access an ICU bed.



- NOCA should consider ways to introduce patient reported outcome measures into ICU audit and to capture more information on patients who die after ICU discharge.
- NOCA should promote the development of national surveillance of catheter-related bloodstream infection in adult ICUs.
- NOCA should prioritise a national database of adult ICUs, which will facilitate data collection and reporting on all children who are cared for in adult critical care and consider developing a dataset for rates of medical staff per ICU bed for Ireland in consultation with PICANet.

COMMENT FROM PUBLIC AND PATIENT INTEREST (PPI) REPRESENTATIVE

“As a former ICU patient, an advocate for improving ICU aftercare, and chairperson of ICUsteps Dublin, I welcome being a PPI representative on the Irish National ICU Audit Governance Committee. I trust that clinical audit will lead to improvements in clinical care and ultimately better outcomes for patients and I am fully committed to this process.”

*Barbara Egan, Public and Patient Interest (PPI) Representative,
Irish National ICU Audit Governance Committee*



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