

PRESS RELEASE

NOCA LAUNCH REPORT ON ICU ACTIVITY DURING COVID-19 PANDEMIC

Today, Thursday, 4th November 2021, the National Office of Clinical Audit (NOCA) published the NOCA Report on ICU Activity during COVID-19 pandemic.

This report summarises data which has been collected on a daily basis on activity in Intensive Care Units (ICUs) in Ireland since the beginning of the COVID-19 pandemic in March 2020. Data include ICU bed capacity, bed occupancy and numbers of patients with COVID-19. The report also includes data from other sources which provide further insights into the course of the pandemic in ICU.

ICUs provide complex and labour-intensive care to treat the sickest patients. ICUs have been central to the care of patients with COVID-19 in hospital. COVID-19 has presented a huge challenge to ICU resources in all countries because of the large number of patients who require this level of care. The majority of COVID-19 patients make a full recovery, although this is less true of those with serious underlying conditions or advanced age.

Professor Rory Dwyer, Clinical Lead for the Irish National ICU Audit (INICUA) and ICU-Bed Information System (ICU-BIS) commented *"This report documents how dedicated and professional staff in the Irish healthcare system adapted to the demands of the COVID-19 pandemic to save as many lives as possible. ICU beds were found for those who needed them, despite unprecedented levels of demand. Outcomes compared well with international comparators. At-risk groups were identified leading to initiatives to protect these cohorts. Lessons from the report will guide responses to pandemics or major incidents in the future."*

The key findings below indicate that the national network of ICUs was able to meet the clinical needs of patients.

KEY FINDINGS

- ICU beds were made available for patients who required one and who were clinically assessed as likely to benefit. This is based on the NOCA reports on activity in ICU, daily contact with each hospital to collect data on ICU numbers and daily NOCA participation in the HSE Acute Surge Management Committee.
- The highest peak in numbers of COVID-19 patients in ICU in adult public hospitals was 215 patients in January 2021. The largest total number of patients in ICU at any one time was 330 on 26th January 2021. Surges in numbers of COVID-19 patients in ICU were accommodated by expansion in the numbers of ICU beds open, from a baseline of 256 beds in March 2020 to a peak of 348 ICU beds open.
- COVID-19 patients occupied 22% of all patient days in ICU over the period March 2020 to October 2021. This increased to 55% of all patient days in ICU for the peak surge period in January-February 2021.
- 53 patients who were pregnant or recently pregnant were admitted to ICU with COVID-19 up to October 31st 2021. 58% of these admissions were since August 1st 2021. Only one patient was fully vaccinated. All have survived to date (October 31st 2021).

- An unvaccinated person was much more likely to be admitted to ICU with COVID-19 than a vaccinated person. Unvaccinated patients continue to make up the majority of patients admitted to ICU with COVID-19 each month but this has declined from a high of 75% in June 2021 to 51% in October 2021 as more of the population has been vaccinated.
- Fully vaccinated patients who required ICU admission because of COVID-19 were older and had pre-existing medical conditions; these factors are likely to have contributed to their need for ICU admission. As would be predicted from their older age and higher rate of pre-existing conditions, ICU mortality was higher in this group.
- Numbers of COVID-19 patients in paediatric and private hospitals ICUs were small. Activity levels remained high in private hospitals, with large numbers of non-COVID-19 patients cared for.
- One hundred and fifty-eight critically ill patients were transferred by the Mobile Intensive Care Ambulance Service (MICAS) in Quarter 1 2021 - 129% more than in the same quarter in 2019, showing how transfers between hospitals contributed to managing the pandemic .
- Overall mortality for patients in ICU with COVID-19 since March 2020 was 28.3%. This is comparable to ICU mortality rates in other developed countries.
- ICU mortality (unadjusted for risk factors such as severity of illness, existing co-morbidities) in patients admitted with COVID-19 increased during winter 2020-2021, decreased in summer 2021 and has shown an upward trend in recent months. The reasons for this variability are not yet known and will require further analysis, which will be provided by future reports from the NOCA Irish National ICU Audit.
- Irish National ICU Audit data which is available to date on overall (COVID-19 plus non-COVID-19) patient outcomes showed risk-adjusted mortality was within the expected range.
- Benchmarking outcomes of COVID-19 patients between Ireland and the UK showed lower mortality in Ireland during Wave 1 (March – July 2020). Mortality in Ireland increased to similar levels as the UK during Wave 3 (November 2020 – June 2021).
- The patterns of admissions, interventions and outcomes in Northern Ireland closely paralleled those in the Republic of Ireland rather than the UK.

Copies of the report are available to download from the [NOCA website here](#).

ENDS

NOTES TO THE EDITOR:**About NOCA**

NOCA was established in 2012 to create sustainable clinical audit programmes at national level. NOCA enables those who manage and deliver healthcare to improve the quality of care through national clinical audit. NOCA is funded by the Health Service Executive Office of the Chief Clinical Officer, governed by an independent voluntary board and operationally supported by the Royal College of Surgeons in Ireland.

SPOKESPERSONS

Professor Rory Dwyer

Clinical Lead

Irish National ICU Audit (INICUA) and ICU-Bed Information System (ICU-BIS)

For further information contact:

Aisling Connolly

NOCA Communications & Events Lead

aislingconnolly@noca.ie / +353 86 4083687