



# AB083. SOH23ABS\_015. Red cell transfusion in an Irish tertiary level intensive care unit—a 6-year practice audit

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**Background:** Transfusion is a common intervention in the intensive care unit (ICU), with 26.3% of ICU patients worldwide receiving a transfusion during their admission. This audit was carried out to outline the red cell transfusion rate (proportion of patients who were transfused) in University Hospital Limerick (UHL) ICU and the trend of this rate over a six-and-a-half-year period.

**Methods:** The total number of patients transfused, the number of units transfused and the total ICU admissions from January 2016 to August 2022 were collected retrospectively, using hospital laboratory and ICU electronic records. The transfusion rate and mean number of units transfused per patient for each year were calculated from these data sets. A trimmed mean was used to minimise the impact of outliers.

**Results:** In total, 3,259 patients were included over the study period, of whom 744 received at least one red cell unit during their ICU admission. The yearly transfusion rate has risen from 22% in 2016 to 31% in 2022. The mean number of units transfused per patient has decreased from 3.6 in 2016 to 2.9 in 2022.

**Conclusions:** The current transfusion rate in UHL ICU is above the global mean. As blood is a costly and scarce

resource, a prospective trial of an intervention to reduce the ICU transfusion rate is warranted. The downtrend in the number of units transfused per patient is likely due to the adoption of a single unit transfusion policy.

**Keywords:** Anaemia; critical care; intensive care; quality improvement; transfusion

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## Footnote

*Conflicts of Interest:* The authors have no conflicts of interest to declare.

*Ethical Statement:* The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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