Introduction:
Decisions when to refer and to admit patients to the intensive care unit (ICU) care are very challenging. Demand typically exceeds supply in ICU beds, which results in a constant need for evaluation of the processes involved in ICU referral and admission with a view to optimising resource allocation and patient outcomes. The aim of this study was to evaluate the theoretical impact of a newly designed triage tool for ICU referrals on a cohort of patients referred to ICU.

Methods:
We reviewed all patients consecutively referred to our ICU, whether admitted or not, in February 2017. Demographics, referring speciality, role of the referrer, comorbidities, the presence of advanced disease or terminal illness, the presence of acute organ failure, DNR status, reason for not admitting, and ICU mortality were recorded. A retrospective analysis of ICU referrals using a pilot triage tool was carried out independently by three authors.

Results:
Forty-six patients were referred to our ICU over the study period. Of these, 34 (74%) were admitted. Patients were declined ICU if their admission was deemed unnecessary (50%), futile (33%), or were transferred due to bed shortage (16%). Of the patients referred, 25 (54%) had an advanced disease or a terminal illness. Of those, 18 (72%) were admitted, DNR status was unclear in 22 (88%), family was involved in 12 (48%) and their ICU mortality was 48%.

By analysing retrospectively these referrals with the aid of a triage tool, we propose that the overall referrals could have decreased from 46 to 30 (42% percentage difference). DNR status and family involvement would have been clarified in all patients with advanced disease or terminal illness before ICU referral. Kappa score for inter-rater agreement was 0.78.

Conclusion:
Adopting a triage tool for ICU referrals could reduce the overall proportion of inappropriate referrals and admissions. End-of-life discussion would also be proactively clarified prior to ICU admission.
Triage tool for ICU referral

**ADVANCED DISEASE / TERMINAL ILLNESS?**

- **YES**
  - Glasgow Coma Scale < 8
  - or
  - STATUS EPILEPTICUS?

- **NO**
  - HAEMODYNAMIC INSTABILITY?

- **NO**
  - RESPIRATORY FAILURE?

- **NO**
  - STAGE 3 ACUTE KIDNEY INJURY?

- **NO**
  - ACUTE LIVER FAILURE?

- **NO**
  - HELLP SYNDROME?

- **YES**
  - CONSIDER CARDIOLOGIST

- **NO**
  - INVOLVE RENAL TEAM

- **NO**
  - INVOLVE OBSTETRICIAN

**DECISION FOR ICU ADMISSION IS UP TO ICU CONSULTANT**

**REFER TO ICU NHCP BLEEP 298**

- **YES**
  - INVOLVE FAMILY & CLARIFY DHIR

- **NO**
  - INVOLVE PRIMARY CONSULTANT BEFORE ICU REFERRAL

*Triage tool for ICU referral*