



AB168. 121. Utilisation of intensive care unit (ICU) beds for surgical care in a model three hospital setting

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Background: The demand for intensive care unit (ICU) beds in the surgical population has multiplied in recent years. This is due to increased complexity of operative interventions, development of critical care services and improved availability of technologies. The number of beds available in ICUs nationwide remains limited. In the model three hospital setting, this is augmented by a lack of high dependency facilities and difficulty with transfer of patients to tertiary centres. This study aims to assess utilisation of ICU resources amongst general surgical patients admitted for elective and emergency procedures to Mayo University Hospital

Methods: A prospective study was conducted between

31/10/2016 and 01/11/2017 on general surgical patients admitted to the intensive care unit. The ICU register and ICU database were used to collect data regarding patient demographics, admission by specialty, ICU length of stay, interventions performed, level of care, infection status and antimicrobial usage.

Results: A total of 873 patients were admitted to the ICU. Among them, 134 (15.3%) were surgical admissions of which, 55 were elective and 79 were emergency. The most common cause for emergency admission to ICU was sepsis. Mean ICU length of stay (LOS) for surgical patients was 3.5 days. Three (2.2%) patients were transferred to model four hospitals.

Conclusions: A recent HSE audit of critical care units demonstrated that difficulty with transfers, inappropriate use of ICU beds and a lack of adequate staffing levels were adding pressure to critical care services. This study demonstrates the need to protect sufficient numbers of ICU beds for surgical care in model three hospitals.

Keywords: Intensive care unit (ICU); surgical; care; bed; access

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