



AB229. An audit of surgical requirements and outcomes of an intensive care unit in a model three hospital

Granit Ismaili, Michael Devine, Lauren Crone, Osama Elfaedy, Faisal Awan, Paul Balfe, Frederick Pretorius

Department of Surgery, St. Lukes Hospital Kilkenny, Kilkenny, Ireland

Background: While variations exist in the economic burden of intensive care unit (ICU) patients, various micro-costing studies have led to more informative data regarding these. However, to date, little research has been completed on the service requirements and outcomes of Model Three hospital's ICUs. As almost 50% of surgical activity and bed days are provided by and utilized in the setting of a model three hospital nationally, we felt this required further exploration.

Methods: The Hospital InPatient Enquiry System and ICU records were used to identify all surgical admissions to the ICU between 01/01/2018 and 31/12/2019. Patient charts and electronic records were reviewed, and the data analysed to assess mortality, complications rate, return to

theatre, economic burden, physiological derangement, length of stay; and any cardiovascular and respiratory supports needed.

Results: Over the aforementioned one year period, there was 107 surgical admissions (63 males, 44 females) to the ICU. The average duration of time admitted to ICU was 3.48 days. All-cause mortality was 13% (n=14). Thirty-two of the 107 patients were managed conservatively. Twenty-three percent of patients required haemodynamic support in the form of inotropes and/or vasopressors. Twenty-seven percent (n=29) of this cohort required continued intubation or respiratory support to maintain ventilation and adequate respiratory function. Overall financial burden associated with the surgical departments requirements of ICU was approximately €828,727.

Conclusions: Given the length of stay and large financial cost associated with surgical care provided in a model three hospital this requires further exploration to attempt mitigation of needless expenditure and improve overall outcomes, including the use of other critical care units and the establishment of a post-operative care unit.

Keywords: intensive care unit (ICU); general surgery; model three

doi: 10.21037/map.2020.AB229

Cite this abstract as: Ismaili G, Devine M, Crone L, Elfaedy O, Awan F, Balfe P, Pretorius F. An audit of surgical requirements and outcomes of an intensive care unit in a model three hospital. *Mesentery Peritoneum* 2020;4:AB229.