

Treatment limitations in the ICU at three Swedish University Hospitals

Lisa Wiltz¹, Tobias Siöland^{1,2}, Johan Cederqvist², Sanna Olausson², Fredrik Hessulf^{1,2}

¹ Sahlgrenska Universitetssjukhuset, ² University of Gothenburg, the Sahlgrenska Academy

Background: Treatment limitations are used with large regional and hospital related differences. The aim of the study was to investigate the prevalence, documentation and patient/next of kin involvement regarding treatment limitations in the three intensive care units (ICUs).

Methods: In this retrospective cohort study data was collected from the Swedish intensive care registry from January to April 14th 2022. Patient characteristics were also gathered from hospital charts. Uni- and multivariable logistic regression was used investigating associations with the presence of treatment limitations.

Results: 618 patients were included in this study, 42 % women and mean age 63. 23% had a treatment limitation. Higher age, higher Simplified Acute Physiology Score (SAPS3 score) and longer length of stay (LOS) were associated with higher odds of a treatment limitation. After adjusting for covariates there were differences in the odds of receiving a treatment limitation based on in which ICU the patient was cared for. Patient involvement was possible in 19% and next of kin were involved in 84%. In 12% neither were informed.

Conclusions: Treatment limitations were common in all three ICUs, but with a large unexpected difference between the ICUs even after adjusting for known confounders. Treatment limitations was associated with age, SAPS3 score and ICU LOS. As expected, patients with treatment limitations had higher mortality compared to patients with full care. Compared to other ICUs in Sweden, a high proportion of next of kin were involved or informed.