# Adult readmissions following sepsis: A prevocational trainee led clinical audit provides important insights into our increasingly complex patient community

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**Abstract**: The ageing and increasing complexity of patients is providing doctors an ever-growing challenge regarding patient management and triage. We undertook a retrospective audit of readmission rates following sepsis, demonstrating the high mortality of sepsis and high rate of readmission for patients with multiple comorbidities or those who are immunocompromised.

## Introduction

- Sepsis describes a life-threatening organ dysfunction due to a dysregulated host response to infection and is a major cause of morbidity and mortality.
- Trainee understanding of sepsis is essential, particularly in the setting of an increasingly complex patient environment.
- We undertook a prevocational trainee led audit to investigate the rates and predisposing factors for hospital readmission within 30 days of an admission involving sepsis.

# Methods

- Retrospective audit for readmission rates within 30 days for adult non-maternity patients admitted with sepsis or who developed sepsis during their admission within the Central Coast Local Health District (CCLHD) during June 2022-2023 (n=139)
- Readmitted patients were analysed for time to readmission; diagnosis at readmission; previous discharge destination; immunocompromised status; presence of four or more comorbidities; and source of sepsis.

# Results

- During the initial admission, 24/139 (17%) patients died. Of those discharged, 26/115 (23%) were readmitted to the CCLHD within 30 days, with 10/115 (9%) representing with sepsis.
- Mean time to readmission with sepsis was 14.6 days (standard deviation: 8.9).
- 8/10 (80%) patients readmitted with sepsis were considered immunocompromised, and 5/10 (50%) had four or more comorbidities.
- In those with an established source of initial sepsis (n=9), two represented with a different source, six with the same source, and in one patient the source was not confirmed during readmission.

# Results

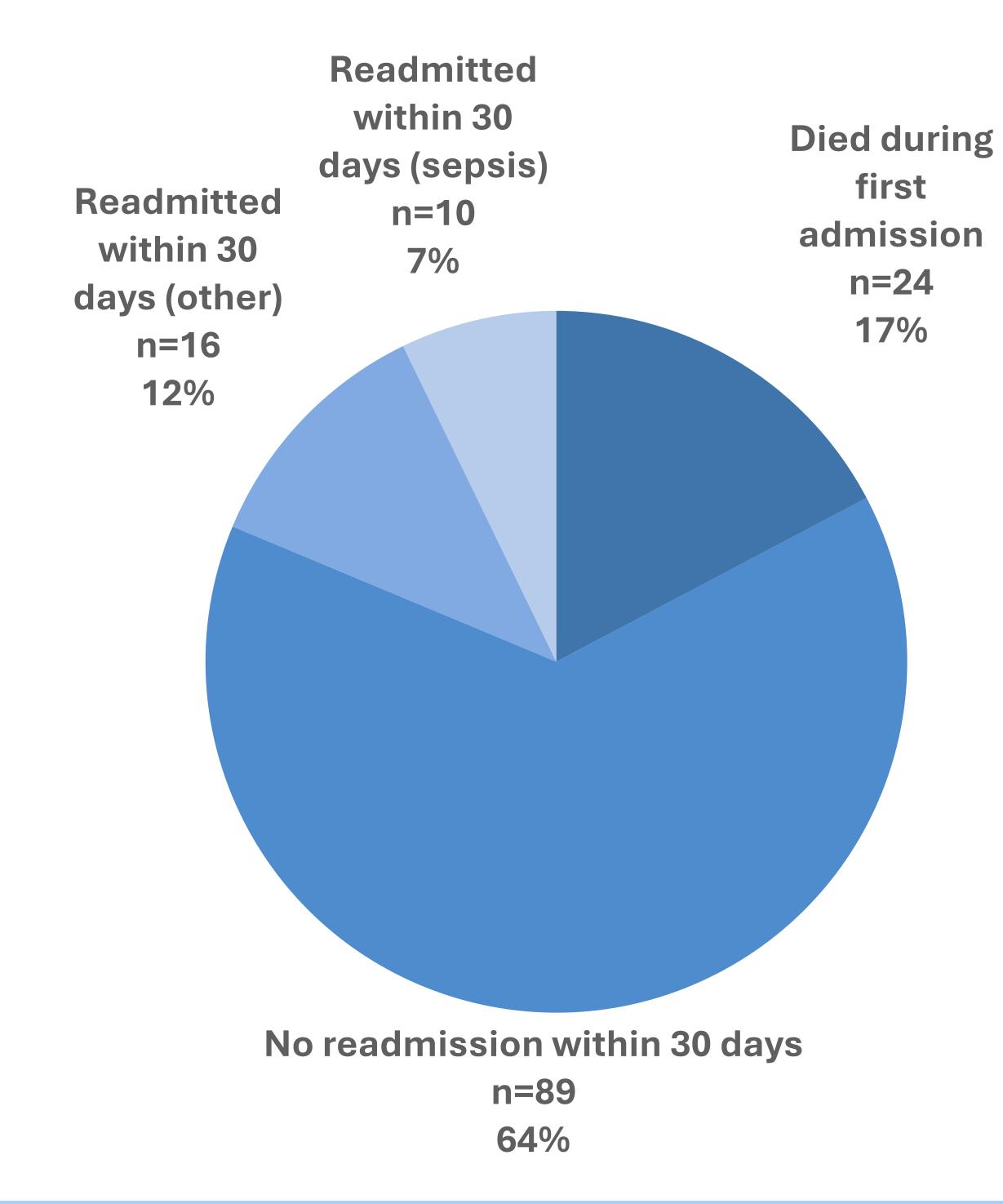


Figure 1. Outcomes of 139 patients who presented within the CCLHD with sepsis or who developed sepsis during their hospital admission. Reported as number of patients and percentage (n=139).

# Conclusions

- Admissions involving sepsis are associated with high mortality and a significant readmission rate particularly for immunocompromised patients or those with multiple comorbidities.
- Audits are a powerful tool for prevocational education and help to develop thoughtful clinicians who are attuned to the needs of their local community.

## References

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