

INTRODUCTION

Catheter-related bloodstream infection (CRBSI) is a significant complication in patients receiving parenteral nutrition (PN). Monitoring infection rates per 1,000 PN days provides a standardised measure of performance and supports quality improvement. Quality improvement initiatives included a PN bung for central lines and providing patient information leaflets. This study summarises PN activity, CRBSI incidence, and causative organisms over a 12-month period in 2025, with comparison to 2024 data.

METHODS

A retrospective review of prospectively collected surveillance data was undertaken for January–December 2025. Data included number of patients receiving PN, total PN days, number of CRBSI episodes, calculated infection rate (CRBSI per 1,000 PN days), and identified causative organisms.

Aggregate annual data from 2025 was compared with corresponding totals from 2024.

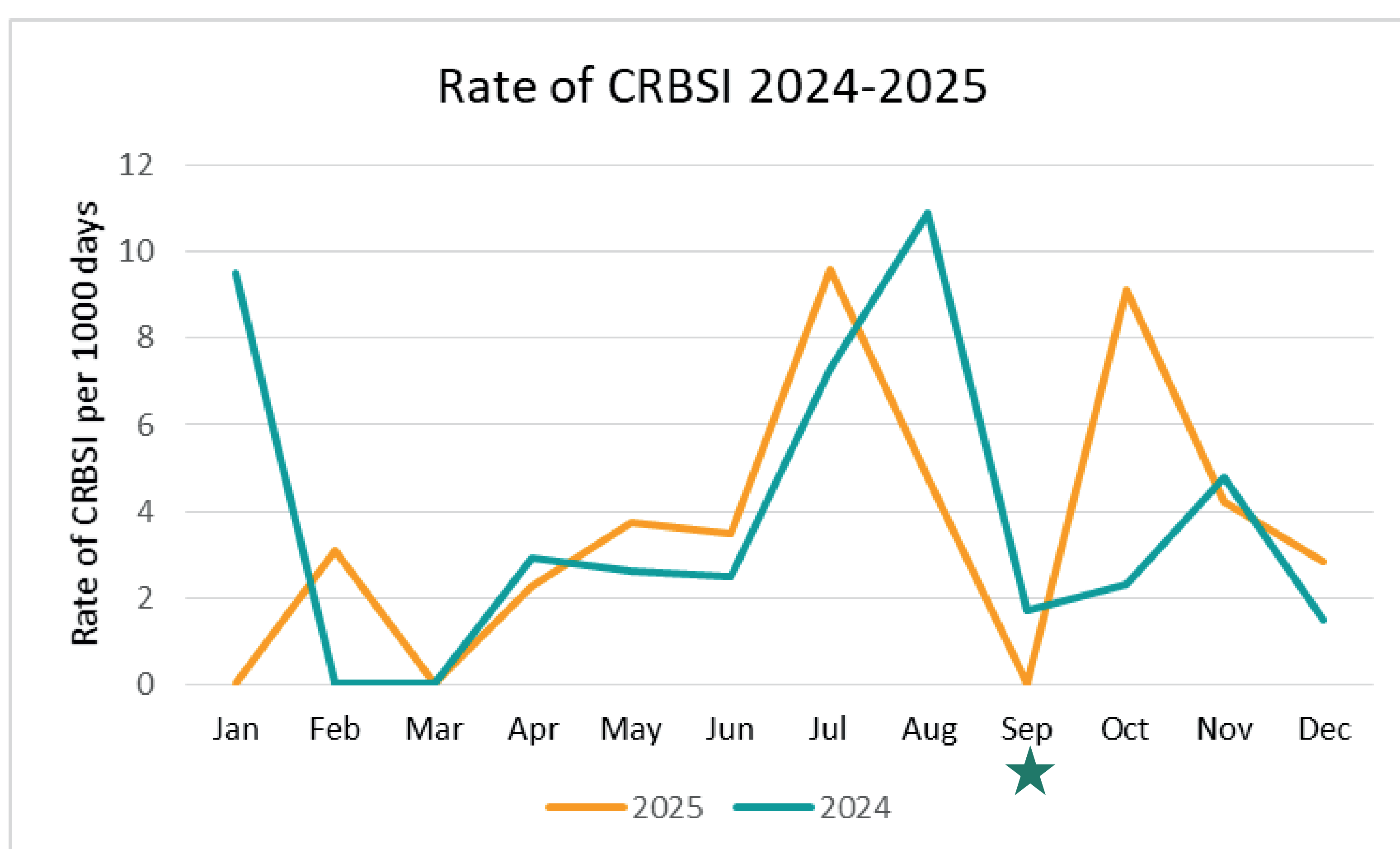


Key Figures

2024: 384 patients | 5,275 PN days | 21 CRBSIs | Rate: 3.9
2025: 355 patients | 4,162 PN days | 14 CRBSIs | Rate: 2.85

27% reduction in infection rate

RESULTS



★ PN bung introduced in Sept 2024.

- In 2025, 355 patients received PN compared with 384 in 2024. Total PN days decreased from 5,275 in 2024 to 4,162 in 2025.
- 14 CRBSI episodes were recorded in 2025, compared with 21 in 2024. The overall infection rate improved from 3.9 per 1,000 PN days in 2024 to 2.85 in 2025.
- In 2025, peak infection rates occurred in July (9.6) and October (9.1), while four months recorded zero infections.
- The most common causative organisms in 2025 were coagulase-negative staphylococci (CNS), with additional cases due to Kocuria and Candida species.

CONCLUSION

Compared with 2024, 2025 demonstrated reduced PN usage, fewer CRBSI episodes, and a lower overall infection rate, indicating improved performance. However, intermittent monthly spikes highlight the need for ongoing surveillance, targeted review of peak periods, and sustained infection prevention measures.