

# EFFECTIVELY REDUCING CATHETER-ASSOCIATED BLOOD STREAM INFECTIONS (CABSI) IN A HAEMATOLOGY WARD OF A TERTIARY CARE CENTRE

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MEDICAL CENTRE®**  
Sunway City Kuala Lumpur

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## OBJECTIVES

This study aimed to effectively reduce the prevalence of Catheter-Associated Bloodstream Infections (CABSI) in Sunway Medical Centre, with a focus on the haematology ward where prevalence was notably high.

High prevalence of CABSI in Haematology



### Patient

- Immunocompromised and multiple comorbidities
- Prolonged hospital stay and frequent access of IV catheters



### Policy

- Lack of visual reminders for hand hygiene and catheter care practices
- No audit checklists to check compliance on catheter care



### Practices

- Non-adherence to catheter care practices
- Non-compliance to hand hygiene practices



### People

- Inadequate knowledge and awareness
- Failure to adhere to infection control practices



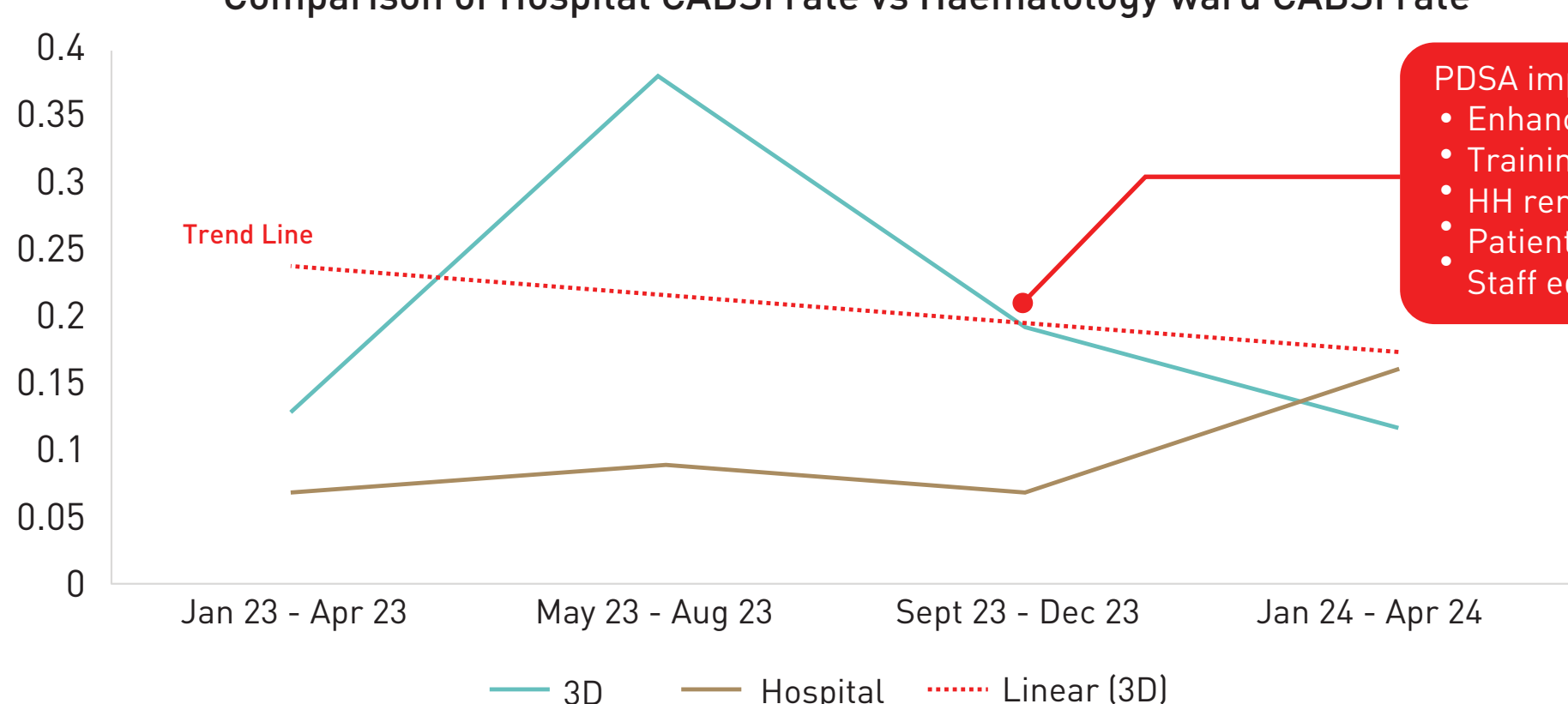
## METHOD

A comprehensive 3-month evidence-based intervention strategy was implemented, centred around a revamped hand hygiene program involving all key stakeholders and emphasizing scrubbing the hub practices. The program included increased visual reminders, enhanced audit methods, patient education initiatives, quizzes, bedside teaching for staff, and extensive training for doctors. Nurses in the haematology ward were also audited and trained in enhanced scrubbing practices for catheter hubs.

## RESULTS

Pre-intervention analysis in 2023 revealed that 73% of CABSI cases originated from the haematology ward, with a certain percentage facing higher morbidity and mortality risk. Following the intervention, the prevalence of CABSI reduced significantly, decreasing from 73% to 20% up to April 2024 with zero mortality.

Comparison of Hospital CABSI rate vs Haematology ward CABSI rate



PDSA implemented:

- Enhanced HH & STH audits
- Training for doctors
- HH reminders for HCWs and public
- Patient education and bedside teaching
- Staff education and quizzes

## CONCLUSION

The implementation of a multifaceted intervention targeting hand hygiene and hub scrubbing practices effectively reduced the prevalence of CABSI in the haematology ward of the tertiary care centre. These findings underscore the importance of comprehensive infection control measures involving all relevant stakeholders in healthcare settings to mitigate the risk of bloodstream infections associated with catheter use.

