

# Identifying issues with poor hand hygiene compliance in the Emergency Department using a self-assessment framework

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# Declarations

- No conflicts of interest to declare



# Background

- Hand hygiene compliance (HHC) at Austin Health Emergency Department (ED) was continuing to decline and was significantly lower than the rest of Austin Health at 59% (95% CI 54.0-63.7%) compared to 79.3% (95%CI 78.1-80.5%) in Audit 3, 2017.
- Reasons for the decline were unknown.



# Background

- Further investigation identified numerous issues, including-
  - limited access to alcohol based hand rub (ABHR)
  - erratic workflow in the department
  - a lack of understanding on when to perform hand hygiene and
  - frequent closing of curtains.
- Overall there was a lack of engagement from ED staff - “5 moments didn’t apply to them” and they were “too busy”



# Background

**This prompted a review that was undertaken by Infection Control in October 2017.**



# What We Did

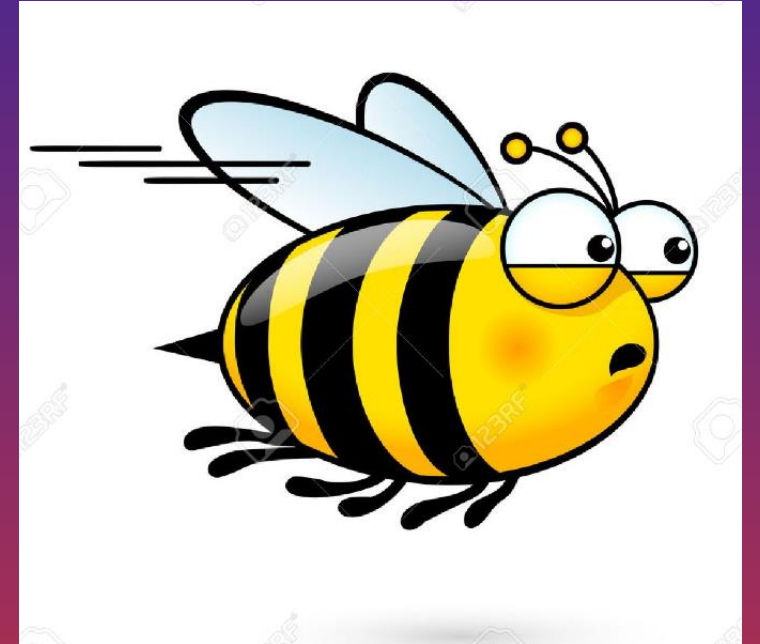
- We used the Hand Hygiene Australia Self Assessment Framework to review practises in the ED
- We reviewed :
  1. Workflow
  2. Product placement
  3. Hand Hygiene practices
  4. Practices in the patient zone
- Findings of this review were fed back to ED NUM and ED Medical Director



# What We Found

## 1. Workflow

- Erratic
- Busy
- High movement between different areas of ED
- Short care activities with patients
- Activities predominately occurred outside the patient zone
- Staff predominately located in staff areas/corridors



# What We Found

## 2. Product Placement

- No ABHR present in corridors
- Staff must actively *FIND* ABHR within high flow areas
- ABHR available in cubicles, however most times in difficult locations (behind visitor chairs)





# What We Found

## 3. Hand Hygiene practices

- During the review, compliance with HH was poor
- Staff appeared not to have awareness on when to perform HH
- Staff may “know” the 5 moments but were unable to integrate them into their hectic short sharp workflow



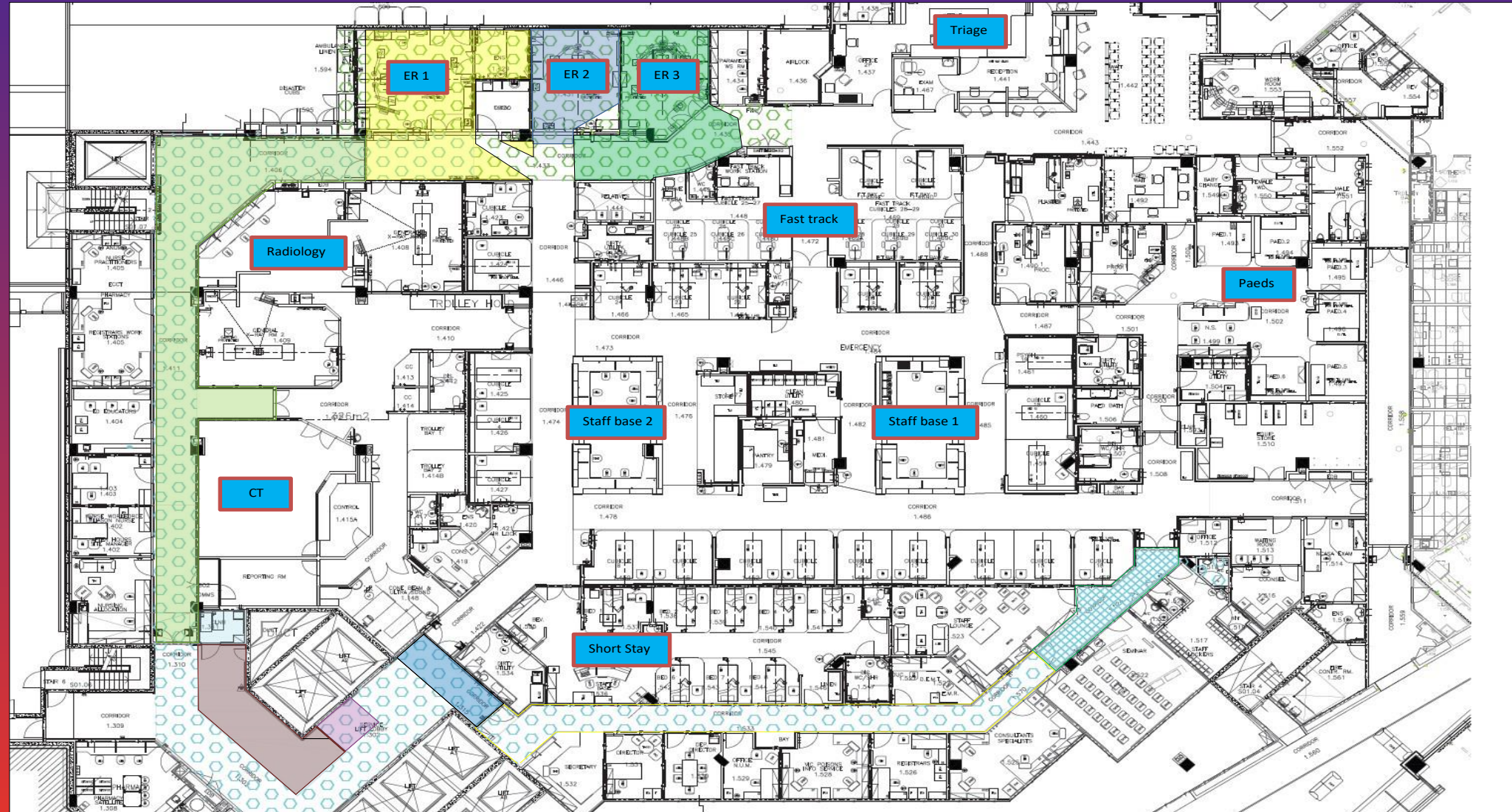
# What We Found

## 4. Practices in the patient zone

- Hand Hygiene compliance was impacted on by curtain use
- Curtains frequently closed attributed to poor compliance
- Staff did not always perform HH between the curtain and patient activities
- Having curtains closed affected hand hygiene being incorporated into workflow
- Access to ABHR was often hindered because it was placed behind curtains



# Map of the Emergency Department





# Map of the Emergency Department





# Map of the Emergency Department







# Post Review Recommendations

## Recommendation 1:

- Increase product placement, relocation of already existing product to make it more accessible e.g. behind visitors chair, behind curtains

**Time frame- within 1 month**



# Post Review Recommendations

## Recommendation 2:

- Conduct HH in-services covering the following topics:
  - feedback of the review findings with a key focus on issues contributing to poor HH performance e.g. overuse of gloves, frequent touching curtains, products behind curtains, poor product placement, lack of knowledge of the 5 moments

**Time frame- alignment with installation of new brackets**





# End of Review Recommendations

## Recommendation 3:

- Engaging the Emergency Department educators to help facilitate improved staff knowledge and practise of HH

**Time frame- within 3 months**



# Outcome

And then this happened from all the hard work.....



# Outcome

And then this happened from all the hard work.....

**NOTHING**

This was communicated to the Board which prompted another review and engagement from the Emergency Department.



# Two Months Post Recommendations

On review, only one of the three recommendations had been completed.

## Recommendation Completed:

- Infection Control had conducted HH in services.

## Recommendations Not Completed:

- No new brackets had been installed and relocation of some existing brackets had not occurred
- Educators had not yet conducted any HH education sessions



# What Happened Next

ED were invited to the Infection Control Committee Meeting to explain their action plan.

Please explain



# Outcome

**And then this happened from all the hard work.....**



# Outcome

And then this happened from all the hard work.....

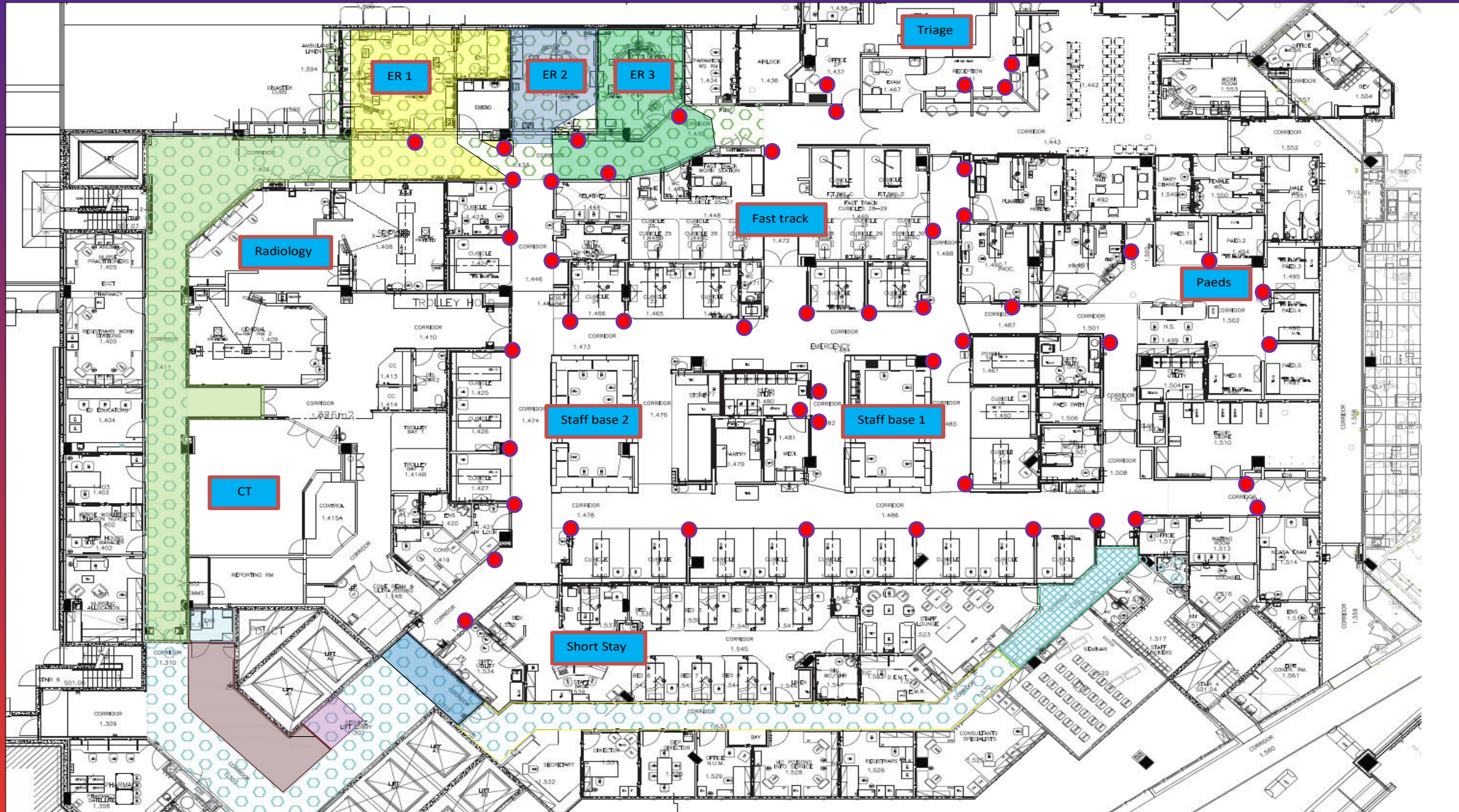
**DONE** 

Key improvements included:

- Purposeful ABHR placement with >50 additional brackets
- Focused education and simulation sessions targeting inappropriate glove and curtain use
- Improved governance to Executive



# Map of the Emergency Department

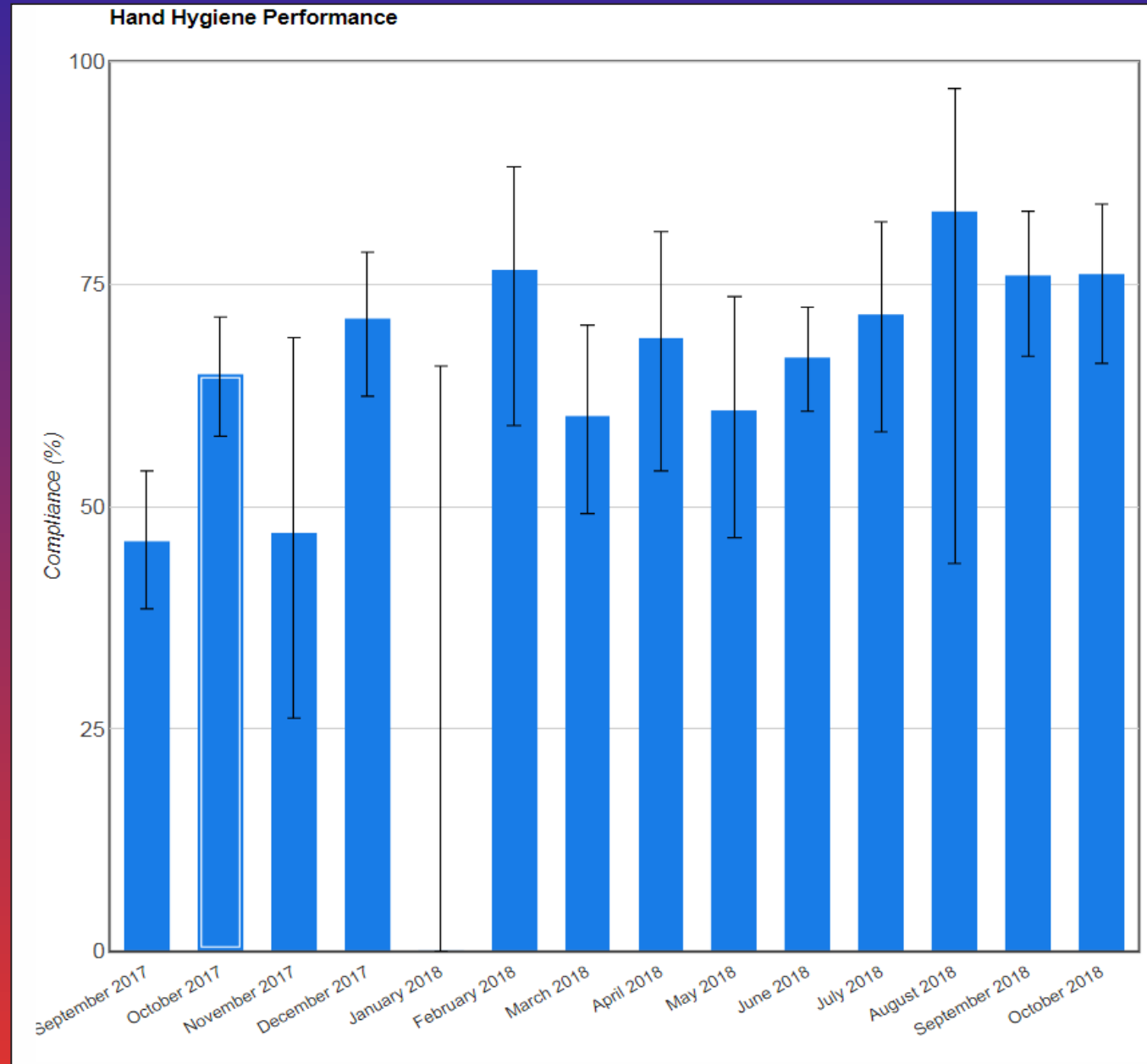






# Results

AUDIT PERIOD	COMPLIANCE	95%CI
Audit 3 2017	<b>58.9%</b>	54.0 - 63.7%
Audit 1 2018	<b>69.8%</b>	64.8 - 74.4%
Audit 2 2018	<b>66.1%</b>	64.8 - 74.4%
Audit 3 2018	<b>79.4%</b>	74.9 - 83.2%



# Conclusion

- ED is a challenging environment for hand hygiene compliance improvement
- The department is:
  - Busy
  - Activities occur outside the patient zone
  - 5 Moments do not translate well generically



# Conclusion

Hand hygiene Australia Self Assessment Framework helped to identify actual problems in the ED:

- Workflow
- Lack of availability of ABHR
- Lack of understanding on when to perform hand hygiene
- Frequent closing of curtains



# Acknowledgements

- Liz Orr
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