



The challenges of hand hygiene auditing in the operating room

Elizabeth Orr
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Austin
HEALTH

Conflict of interest

- I am no longer an employee of Austin Health
- I am an employee of Melbourne Health



Introduction

Introduction

- The HHA NHHI is well embedded in Australian hospitals
- Applying this methodology in non acute ward settings can be challenging – especially in the OR
- Difficulty defining the zones
- Excess equipment
- Anaesthetists perform a large number of moments in a short period of time requiring frequent hand hygiene



Setting

▪ Austin Hospital

- 400 acute beds with a 30-bed intensive care unit
- one of the state's largest adult emergency departments and a specialist six-bed unit for children
- a purpose-built, 26-bed high-tech spinal unit to serve all of Victoria and Tasmania
- isolation rooms in each ward
- almost a quarter of rooms as single-bed rooms with en-suite
- 11 operating theatres



Setting

Heidelberg Repatriation Hospital

- Originally built in 1941 the Heidelberg Repatriation Hospital has a proud history of caring for Veterans and War Widows
- 8 Operating theatres
- Services provided include:
 - day surgery
 - palliative care
 - mental health services
 - sub acute care
 - rehabilitation
 - radiotherapy
 - nuclear medicine
 - radiation oncology
 - radiology



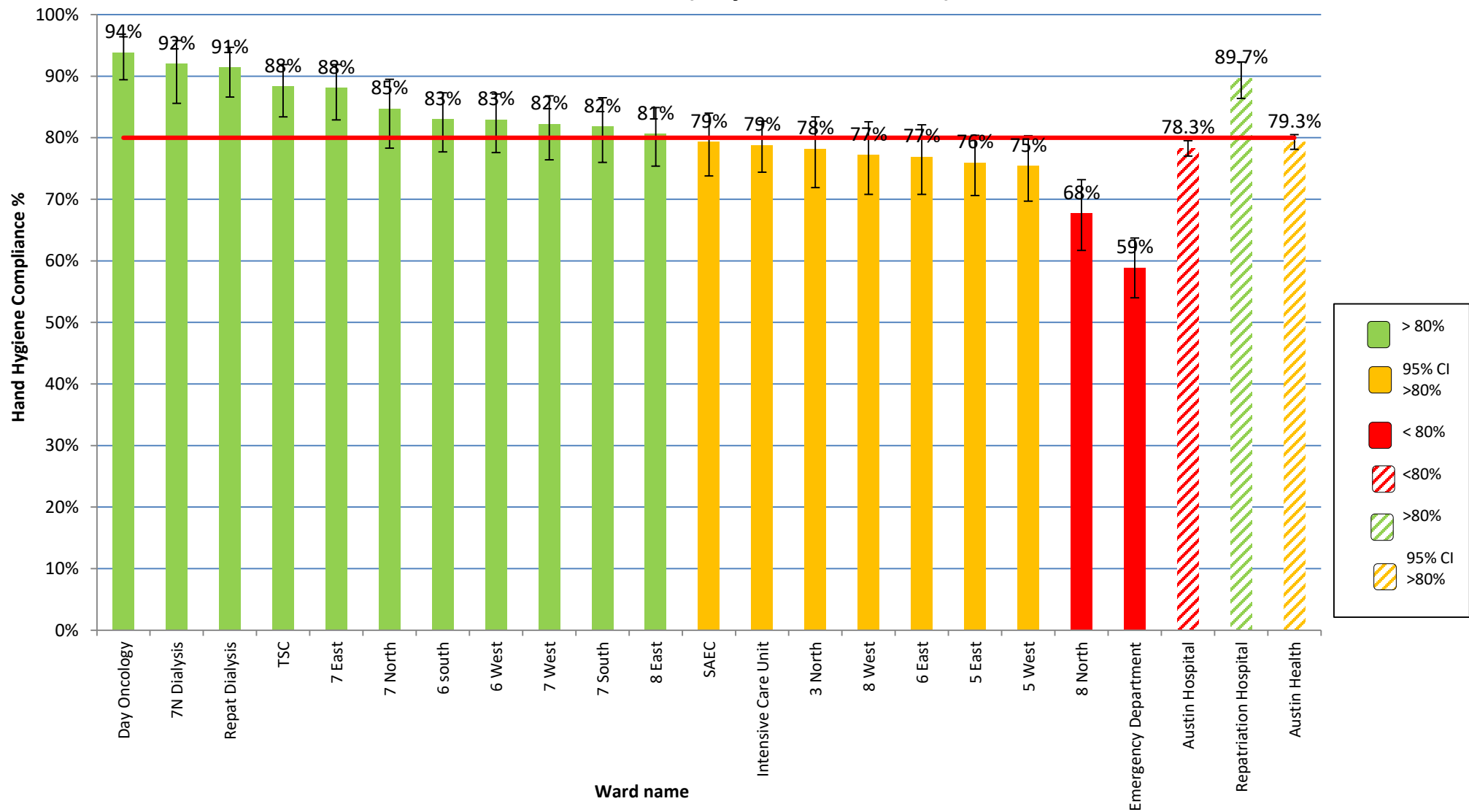
Background

National Data Reporting – Prior to Audit 1 2018

- NUMs, auditors and Divisional Directors and Managers
 - HHA Poster Report
 - National Departmental Report (included Austin Health overall compliance)
- Infection Control Committee, Executives and the Board
 - National Departmental Report
 - Overall HHC by
 - > HCW
 - > Moment
 - > Compared Austin Health to Victoria and Australia



Austin Health - Hand Hygiene Compliance NHHI Audit 3 (July - October 2017)



Local Data Reporting – Prior to Audit 1 2018

- NUMs and auditors
 - HHA Poster Report
- Infection Control Committee, Executives and the Board
 - ?Nothing



Local Data Reporting – Prior to Audit 1 2018

Graph...



What changed in 2018?



What changed in 2018?

- HHA guidelines ‘single option’ approved by the NHHI Advisory Committee in May 2017
 - Includes all eligible wards to be audited at a minimum of once a year
 - Or ideally all eligible wards to be audited every audit period
- Austin Health moved to including all wards every audit period (Audit 3 2018)
- Reasons for including all wards
 - Already submitting data locally
 - Increase awareness and engagement
 - Improve ownership in difficult areas
 - Reduce reporting time

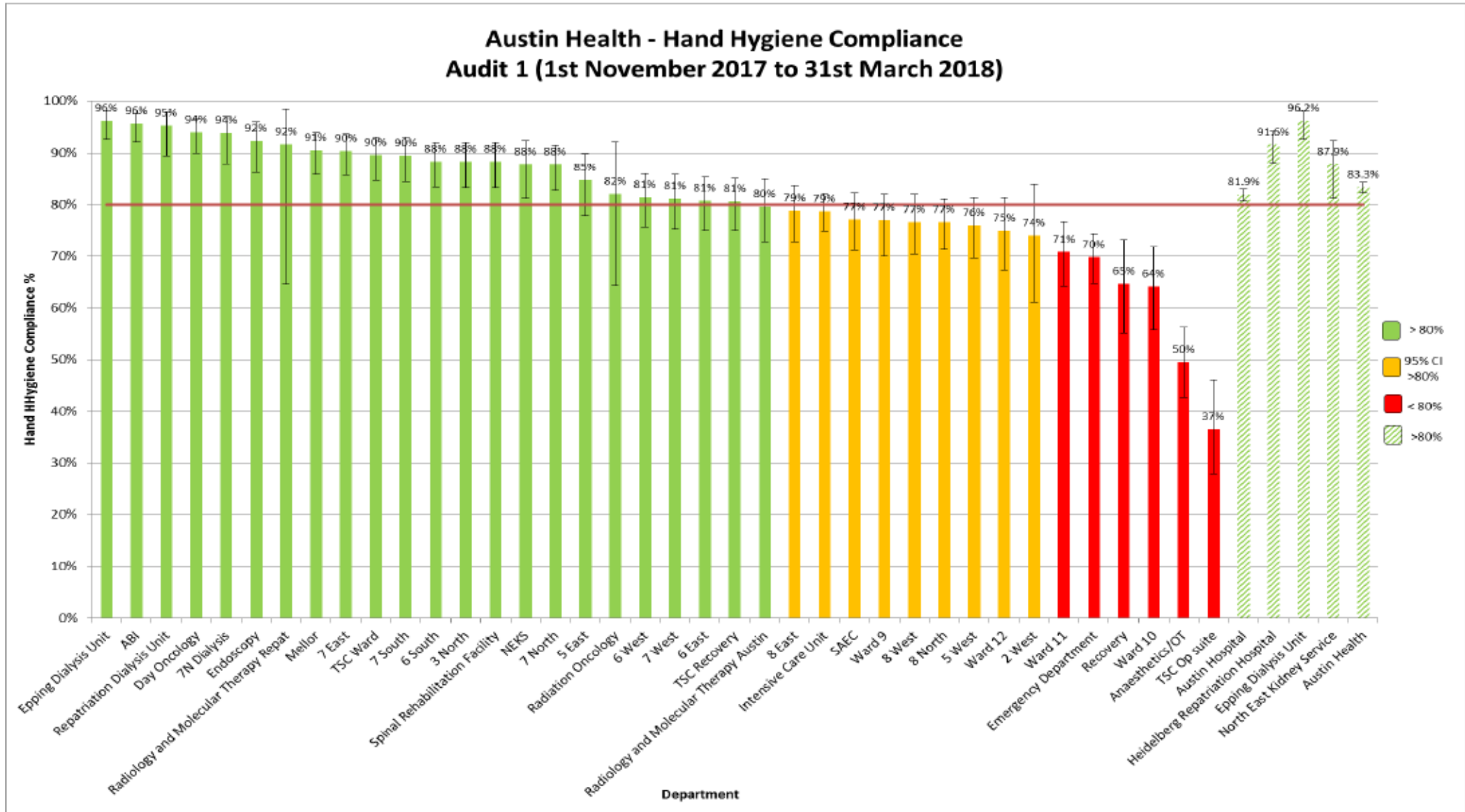


What did this involve?

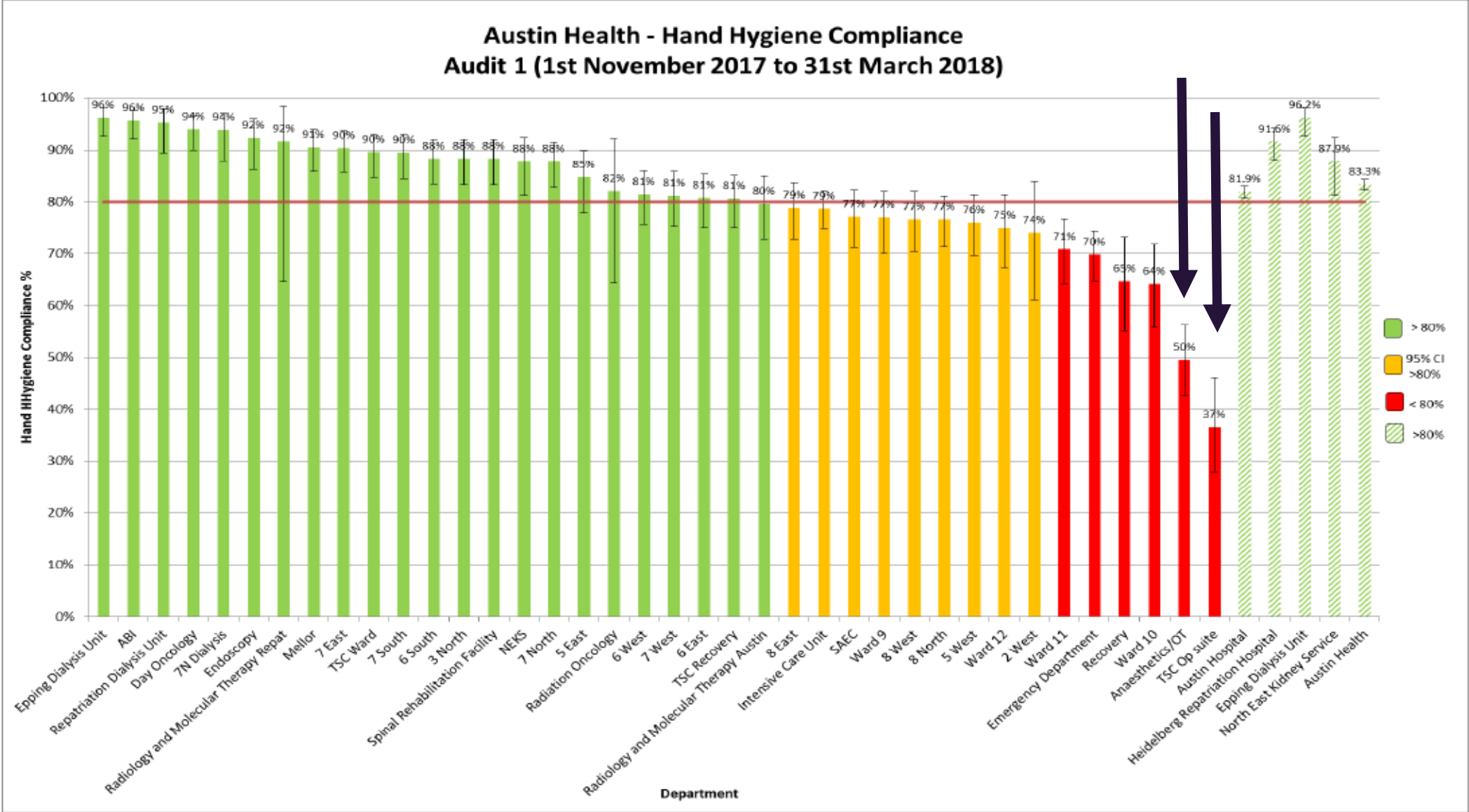
- NUMs, auditors and Divisional Directors and Managers
 - Austin Health Department Report
 - > Included all 40 audited wards/department overall HHC
 - HHA Poster Report
- Infection Control Committee and Executives
 - Austin Health Department Report
 - Overall HHC by
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Austin Health Department Report

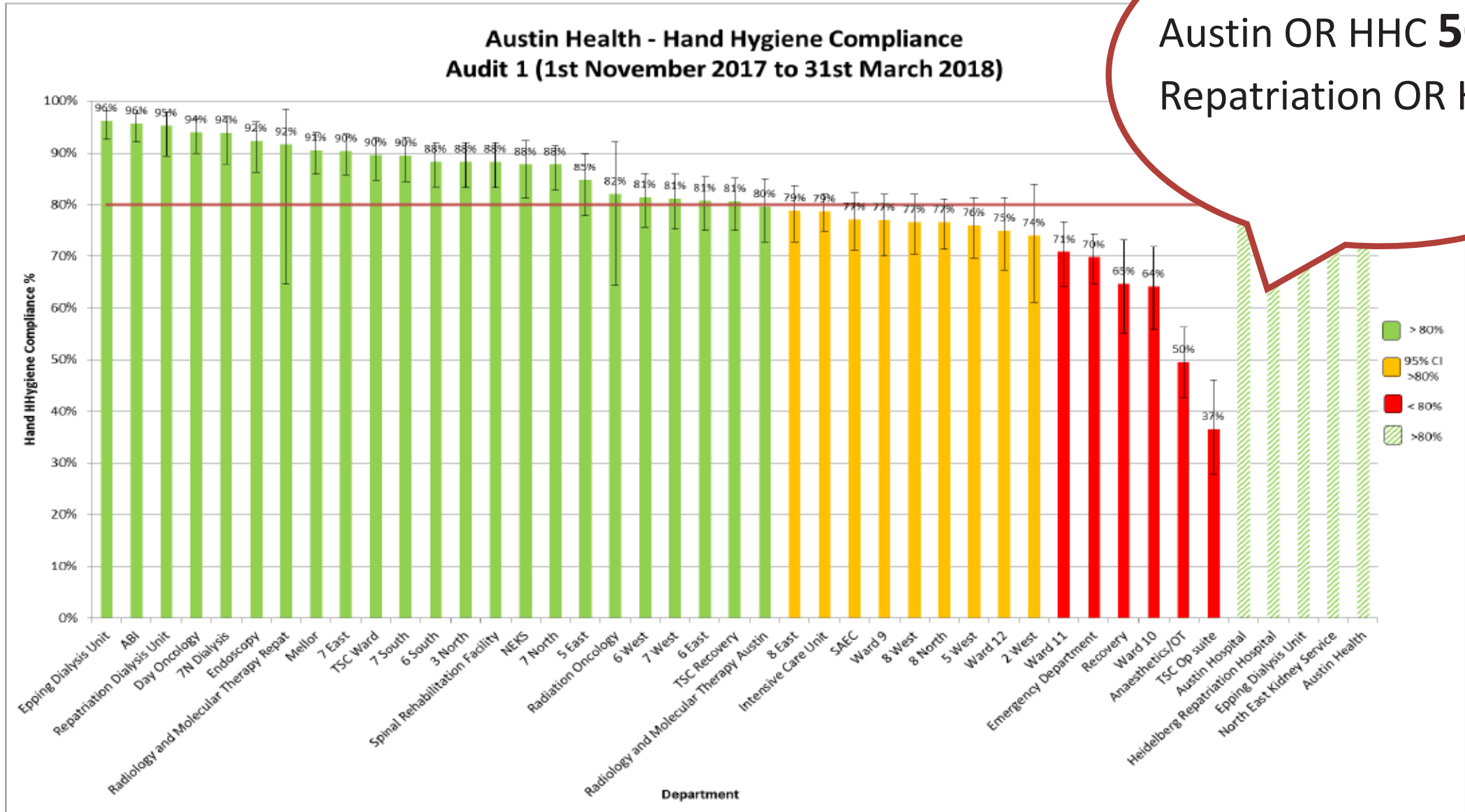


Austin Health Department Report



Austin Health Department Report

Austin OR HHC **50%**
 Repatriation OR HHC **37%**



Audit 1 2018 Local Data

- Increased awareness of the ‘local departments’
- Especially apparent as we moved towards an all in approach
- Poor compliance in some areas, especially OR

Audit 1 2018	HH Compliance	95% CI
Austin OR	49.5%	42.7 – 56.3%
Repatriation OR (TSC Op Suite)	36.5%	27.9 – 46.1%



What changed in 2018?

- Improved reporting to departments with low compliance
 - Snapshot report in HHCApp
 - Breakdown of HCW by moment
 - > Surgeon
 - > Anaesthetist
 - > Theatre Technician
 - > Glove use



What changed in 2018?

- Meetings with
 - > NUMs and DON at Repatriation Hospital
 - > Allied Health Quality Manager
 - > Medical Director at Repatriation Hospital
 - > Deputy Director of Anaesthetics



What changed in 2018?

- Increased engagement from Divisional Directors
- Meeting with OR Divisional Director and NUMs
 - Consistently low compliance
 - Poor culture
 - Auditors felt bullied
 - Education
 - OR Hand Hygiene Working Group
 - Communication



What changed in 2018?

- Divisional Director email to all staff
 - Thanked the auditors
 - Outlined key areas for improvement
 - Attached the local department graphs and poster reports for the previous 3 audit periods
- Actions
 - “This is not Infection Control’s problem. This is our problem”



OR Hand Hygiene Working Group

- Membership
 - Auditors from both campuses
 - Anaesthetic nurses, recovery nurses and scrub/scout nurses
 - Infection Control
- Meet bi monthly (ad hoc at times)
- Discuss
 - auditing issues
 - patient zone
 - product placement etc



Methods

Methods

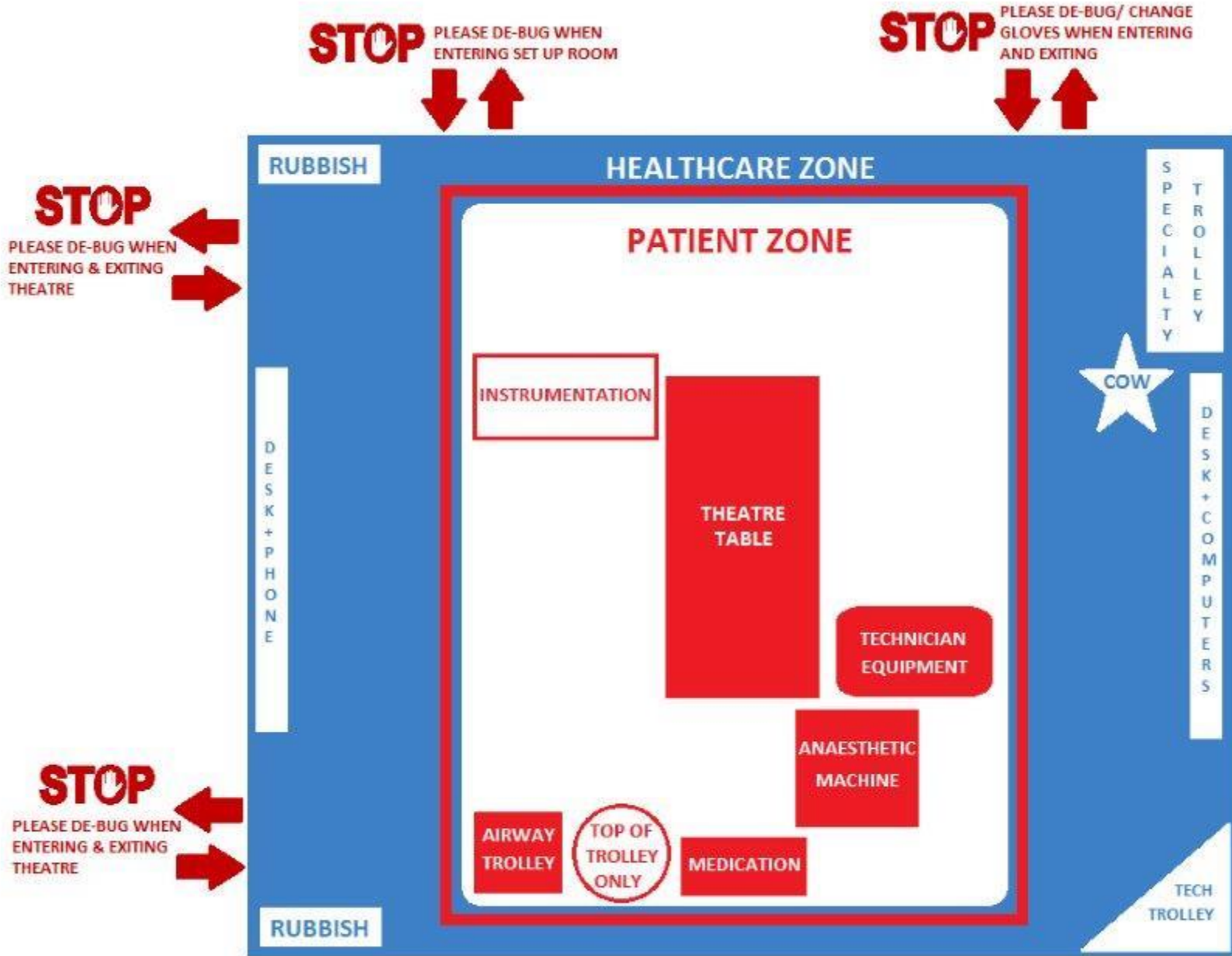
- HHA standardised auditing program was modified for use in the anaesthetic and OR setting
- This included redefining the patient and healthcare zones
 - Patient zone:
 - > the top of the airway and medication trolleys
 - > anaesthetic machine
 - > technician equipment
 - > theatre table



Methods

- The healthcare zone
 - > inside the airway and medication trolleys
 - > desk/computer area/computer on wheels
 - > speciality trolleys in the outskirts of the room
- Auditing was conducted as per the HHA methodology using these defined zones
- Education was given to OR staff including appropriate use of gloves, handwashing education, extra signage at every theatre entrance and explanation of the patient and healthcare zones





Methods

- Meetings were held by the OR Hand Hygiene Working Group
- Infection Control were liaising with the NUMs of OR



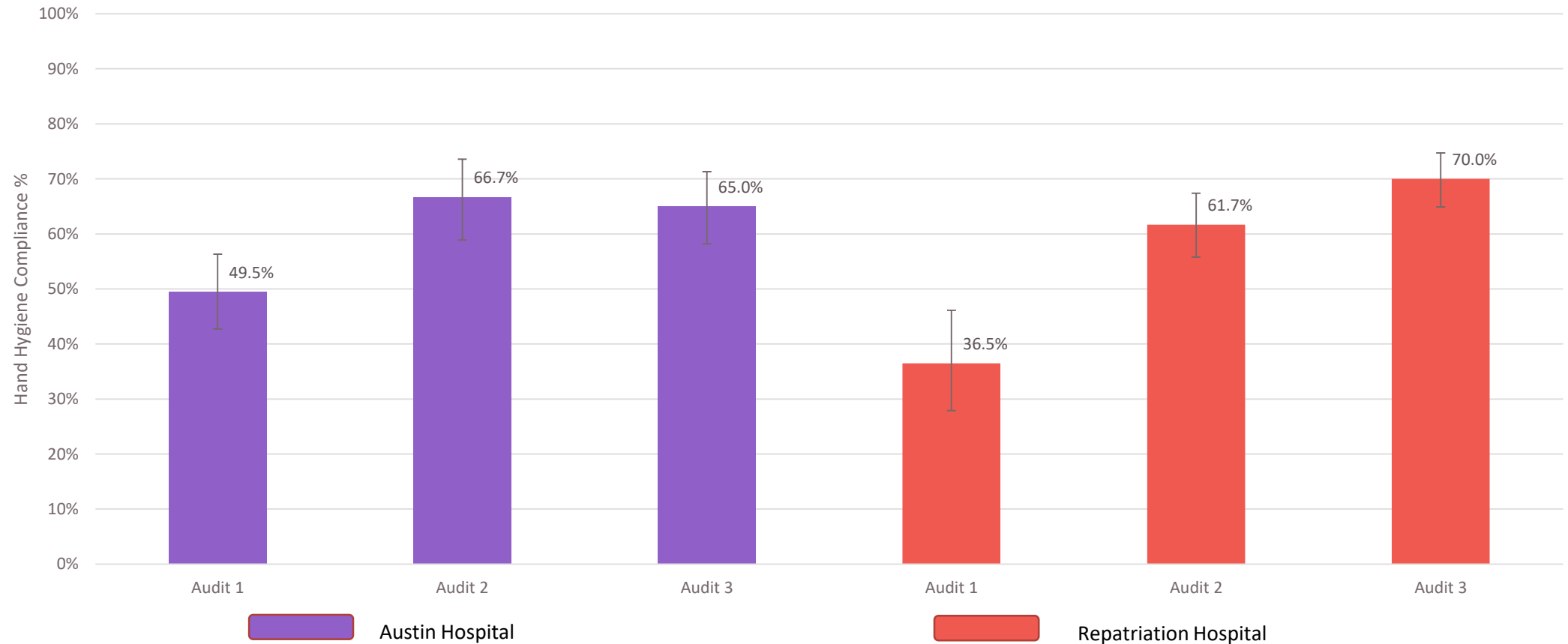
Results

Results

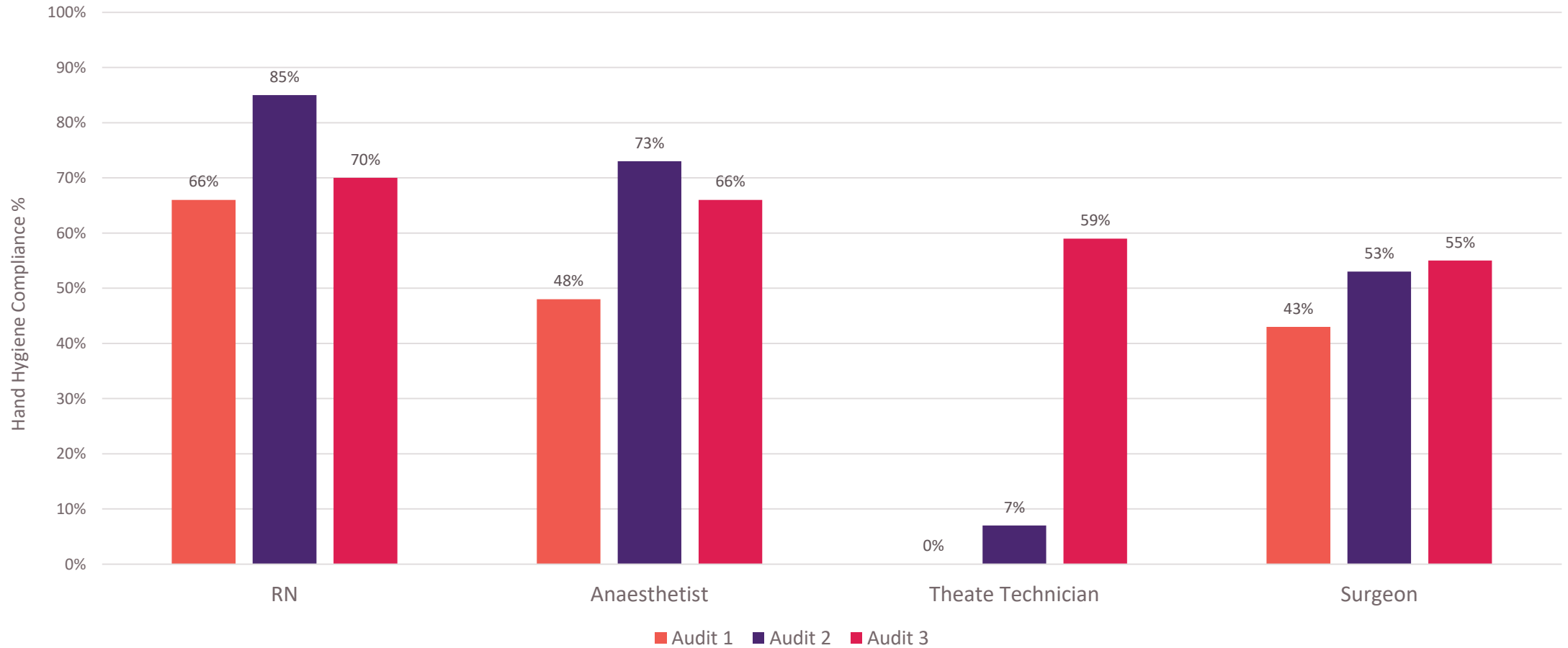
Campus	Audit Period 2018	Hand Hygiene Compliance %	95% CI
Austin Hospital	Audit 1	49.5%	42.7 – 56.3%
	Audit 2	66.7%	58.9 – 73.6%
	Audit 3	65.0%	58.2 – 71.3%
Repatriation Hospital	Audit 1	36.5%	27.9 – 46.1%
	Audit 2	61.7%	55.8 – 67.4%
	Audit 3	70.0%	64.9 – 74.7%



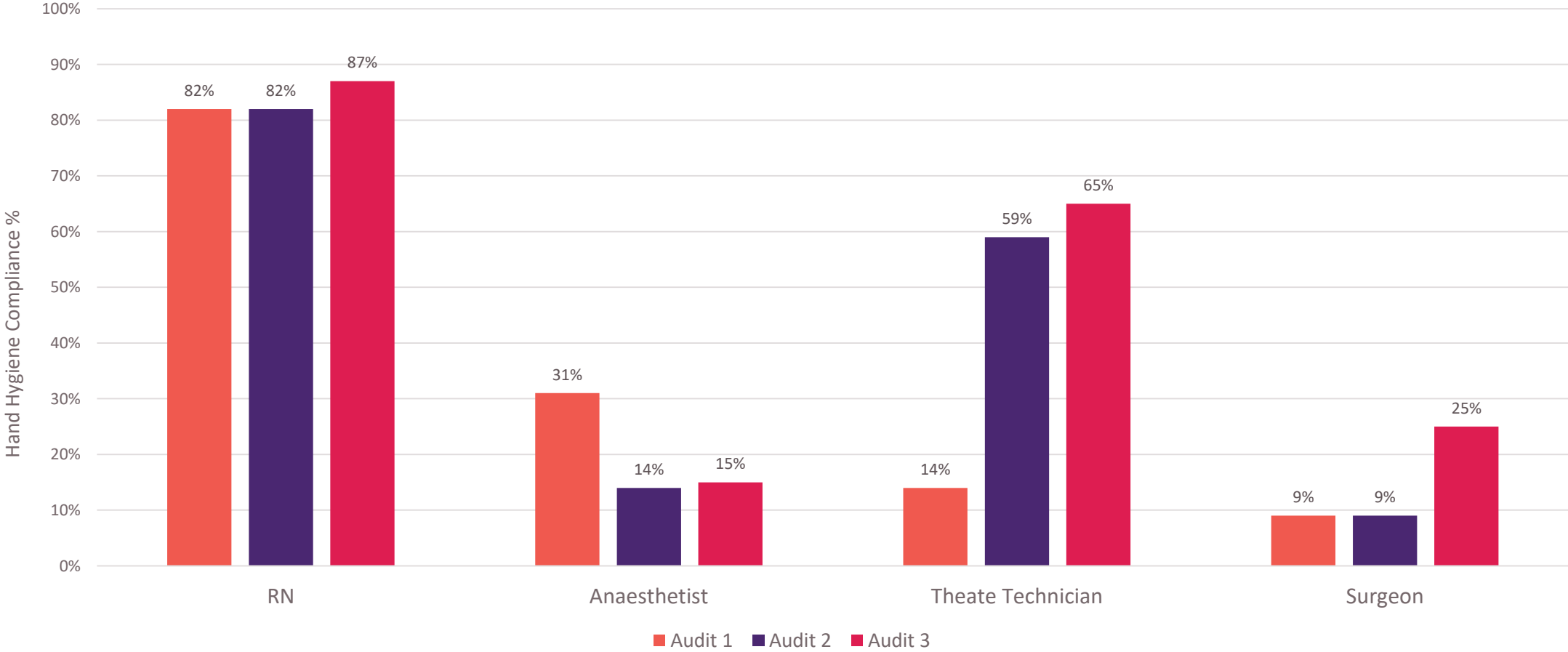
Austin Hospital and Repatriation Hospital Hand Hygiene Compliance for 2018 by Audit Period



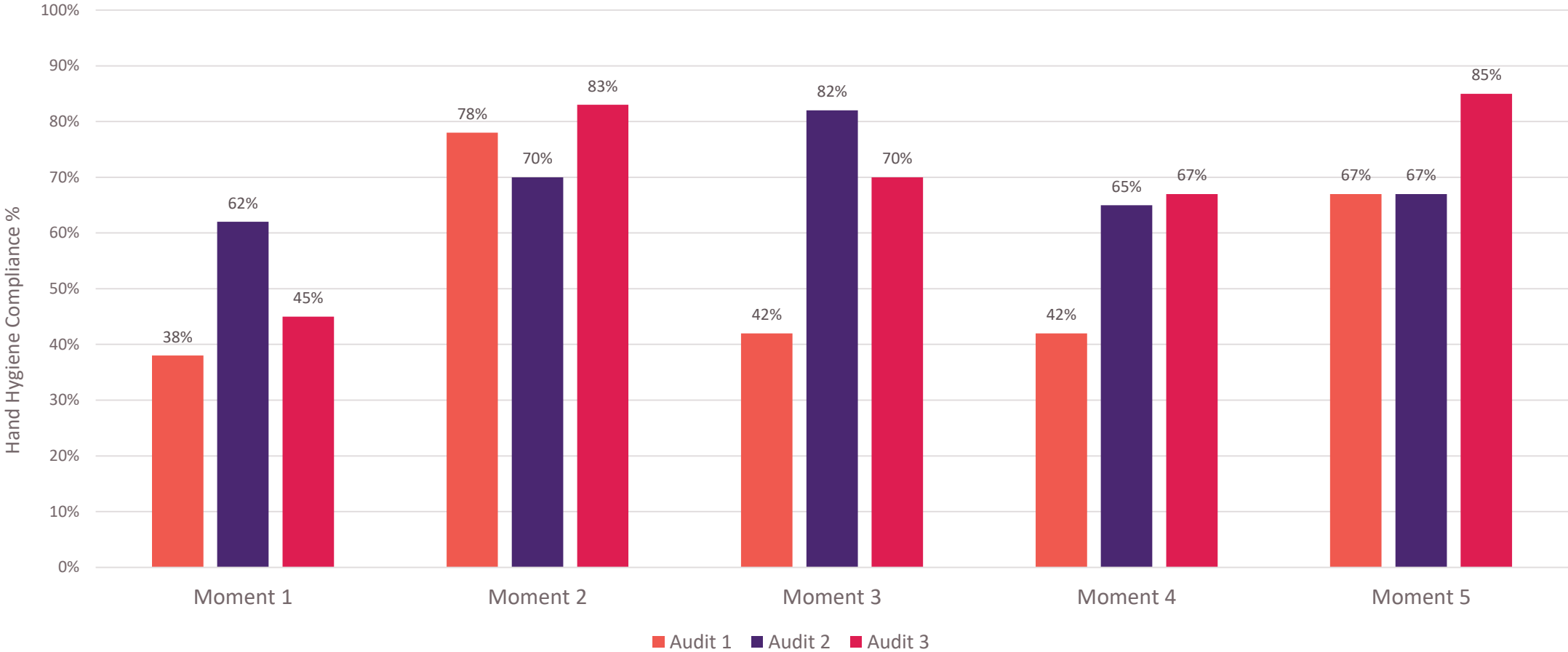
Austin OR Hand Hygiene Compliance by Occupation



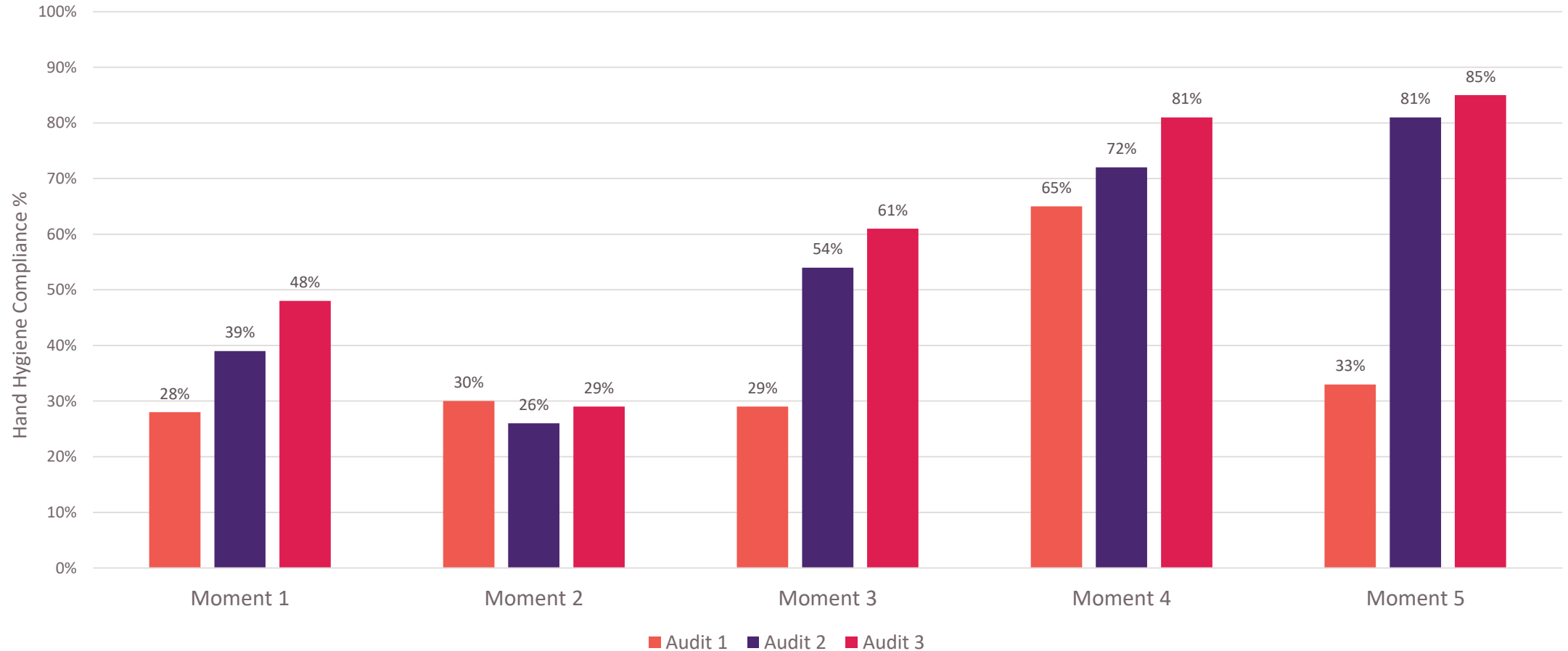
Repatriation OR Hand Hygiene Compliance by Occupation



Austin OR Hand Hygiene Compliance by Moment



Repatriation OR Hand Hygiene Compliance by Moment



What worked?

What worked?

- Increased engagement from key stakeholders
- Recognition that this was their problem and not Infection Control's problem
- Increased awareness
- Auditors were supported
- Merit to the theatre specific patient zone



What didn't work?

- Resistance from HCW groups
- Anaesthetists saying
 - “It's all too much”
 - “You cant expect us to perform hand hygiene that many times”
- Theatre technicians
 - “I have been doing this job for 25 years don't tell me what to do”
- Auditor and NUM leave during Audit 3
- Unable to audit Anaesthetists separately



Conclusions

Conclusion

- Moving to an all in hospital wide approach works well
- Improves awareness and engagement
- Involve key stakeholders
- Identify the patient zone and communicate this to staff
- Need some recommendations from HHA for OR
- Never give up

