



NSW Ambulance Environmental Cleaning



Case for change

- The NSW Ambulance Environmental Cleaning project aims to build on organisational processes to develop a streamlined approach to reduce risk of Healthcare Acquired Infections (HAI's) in transport ambulances
- The overarching ethos of the project is to improve the provision of safer clinical care for patients, whilst also improving paramedic safety
- HAIs are the **most common complication** affecting patients in hospital
- They not only cause great suffering to **patients**, but also impact healthcare **resources**
- It is estimated that HAIs account for **two million hospital bed days** in Australia each year
- There are around **200,000 HAIs** in Australian health facilities each year
- There are no dedicated cleaning facilities for Paramedics at hospitals
- There is currently varied and ad-hoc cleaning practices of ambulances with no benchmarked and routine cleaning standards.

Goal

- ✓ By June 2019, the project aims to improve both the patient and paramedic experience by providing environmentally clean ambulances to a consistent standard.
- ✓ This important project aligns with improving patient care and paramedic safety, which are paramount pillars of the organisation, as defined in the NSW Ambulance 2018-2019 Strategic Priorities.

Objectives

Objective 1: By February 2019, we will improve our visual auditing rate from 24.95% to meet the Clinical Excellence Commission standard of 88% for environmental cleaning.

Objective 2: Improve the paramedic experience by delivering patient care in environmentally cleaner ambulances by December 2019 and improve cleaning between patients from 14.9% to 50%.

Results

- ✓ Reduced risk of HAI acquisition and transmission for patients
- ✓ Reduced risk of Occupational HAI transmission and acquisition for paramedics
- ✓ Reduce the risk of HAI's in the broader NSW Healthcare system
- ✓ Improve the patient journey by providing safer provision of care
- ✓ Attain benchmarked standards



- ✓ Provide safer working environment for paramedics
- ✓ Creation of new employment opportunities
- ✓ NSW Ambulance leadership in environmental cleaning
- ✓ Creation of positive workplace culture
- ✓ Leaner Environmental Cleaning model
- ✓ National and International Scalability
- ✓ Improved patient outcomes and reduced adverse events
- ✓ Partnerships and creation of academic literature to create a body of knowledge

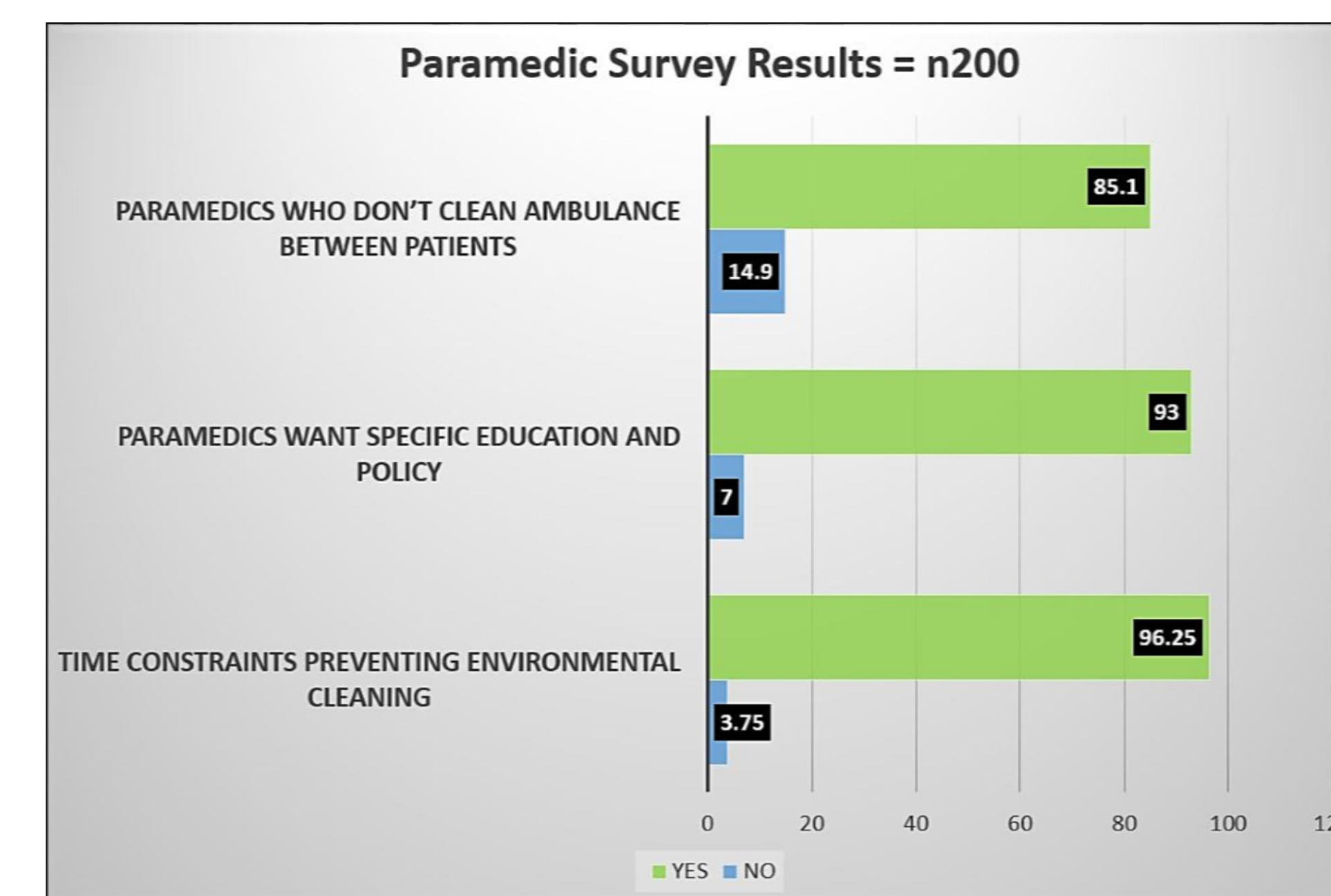
Acknowledgements

- Clinical Excellence Commission
- HealthShare NSW
- All NSW Ambulance paramedics, who all provide a vital service in providing health care to the NSW communities.

Diagnostics

Activity	Participants	Findings
Two Workshops	Paramedics =n40	Two regional workshops held in regional NSW. These comprised of 20 paramedics each bringing various clinical skills and knowledge from different geographical locations.
Brainstorming	Paramedics =n40	200 issues identified by paramedics as currently challenging for environmental cleaning pre, post and between patients.
Dotmocracy/Boston Matrix	Paramedics =n40	Paramedics voted on 45 key issues for progression and further workshoping with the dotmocracy. Paramedics graphed 3 main areas as solutions that are identified as 'High Influence' & 'Log Cost' using the Boston matrix
Literature Review	Academic evidence based practice search from domestic and international journal databases =n60	Environmental Cleaning in Ambulance operations provided minimal academic literature. Education and research is mainly focused on the hospital setting.
Domestic / International Ambulance Service Operations	SA Ambulance, London & South East Ambulance UK, Scottish Ambulance Service, St John Auckland.	SA and St John WA Ambulance are both looking at areas to explore for improving Environmental Cleaning. Internationally some other ambulance service providers have explored different methods in out of hospital care.
Environmental cleaning expert consultant / EAST Framework	Health environmental cleaning subject matter expert HealthShare NSW	Validation of solutions generated. Risk assessment conducted of current state and multiple solutions proposed for NSW Ambulance.

- Diagnostic activity occurred which identified overwhelming evidence that paramedics have limited dedicated time, resources and products to clean between patients.
- Opportunity to improve the patient care experience
- Opportunity to improve systems performance of environmental cleaning
- Opportunity to reduce the risk of HAI's and OHAI's in NSW Ambulance.



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Method

- ✓ Dedicated resources to clean between patients at hospital
- ✓ Change of product: Provide pre-soaked wipes
- ✓ Development of policy with greater computability for ambulance environment
- ✓ Educational package specific for paramedics
- ✓ Risk stratification to identify risk of transmission and acquisition



Sustaining change

- ✓ Introduction of environmental cleaning organisational KPI's
- ✓ Introduction of ambulance specific education
- ✓ Change of product to improve compliance rate and better integration with operational requirements
- ✓ Evaluation will occur from two of the four endorsed methods of environmental cleaning auditing endorsed by the CEC:
 - ✓ ATP Swabbing (adenosine triphosphate assessment)
 - ✓ Visual audit assessment

Conclusion

- To potentially reduce the risk of HAI's in NSW Ambulance to provide safer provision of care for patients and improve the working environment for paramedics
- Significant potential for broader application for other Australian mobile healthcare providers.

