Introduction of enhanced infection prevention and environmental cleaning workshops for hospital cleaning staff.

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Introduction

Contamination of hospital surfaces play a significant role in the transmission of Healthcare Associated Infections (HAI)^{1,2}. Organisms can persist in the environment for days, weeks and months³ posing risks for transmission and acquisition.

Cleaning by hand remains pivotal to breaking the chain of transmission. Studies indicate some members of environmental cleaning staff do not clean surfaces as recommended, and less than 50% of hospital room surfaces are adequately cleaned when manual cleaning techniques are used4.

Ongoing education to improve staff understanding and knowledge of their vital role are part of a multimodal strategy to promote and improve cleaning compliance and efficacy.

Cleaning staff have had limited exposure to topics such as HAIs, chain of infection, transmission of organisms and other infection prevention principles and therefore may have a limited understanding of 'how' or 'why' the effectiveness of their cleaning can directly impact on patient outcomes.

Method

A one-hour training module was developed by clinical specialist nurses to meet the specific needs of cleaning staff within the hospital setting. Mindful of the diverse range of experience and skills (including language barriers), workshops were tailored to benefit all levels of staff ability and understanding. Delivered in plain English and using easy to understand concepts, sessions were divided into theoretical and practical components, encouraging staff participation and questions throughout.

Topics included in Module 1:

- Why we clean
- HAIs
- Chain of infection & its role in microbial transmission
- High touch surfaces
- Basic infection prevention and cleaning principles
- Correct use of cleaning products

Hospital furniture was pre-marked with UV florescent gel, and participants given the opportunity to clean surfaces using the principles learned. Following cleaning, staff evaluated the efficiency of their cleaning using UV torch and discussed results with the trainer.

Following the success of our first module a second module was developed & initiated in 2018, targeting cleaning supervisors, managers and cleaning staff within high risk areas.

Module 2 covered more advanced infection prevention and cleaning. The practical component involved one-on-one coaching whilst cleaning, with a final assessment to confirm compliance with hospital/infection prevention policy.

Included in Module 2:

- Recap of Module 1
- An understanding of Standard 3 and Australian Infection Prevention Guidelines
- Understanding microbial growth and why frequent cleaning is important
- Basic knowledge of biofilm in the environment



A formal evaluation tool using a Likert scale was introduced to confirm the value of providing these comprehensive training sessions. A similar evaluation is offered to cleaning supervisors, managers and infection prevention staff responsible for organising training to assess ongoing organisational values.

Results

Feedback has been outstanding, with participants reporting a greater understanding of IP concepts, whilst enjoying and appreciating the opportunity to learn. The small interactive workshops provided participants with a safe forum to discuss areas of concern.

Common themes identified by staff included:

Clinical

- Mixed messages Poor communication from clinical staff regarding appropriate precautions and type of cleaning required for specific organisms.
- Time pressure "We need the bed now!" Pressure to have rooms cleaned in a short period of time may result in incomplete and thus ineffective discharge cleans.
- Discharge clean beds not stripped, sometimes patients still in the bed!

Management

- Confusion over who cleans what. What is classed as clinical or non-clinical equipment? May result in items such as IV poles or wall mounted equipment not being cleaned at all.
- English as a second language Staff may be unable to read directions on cleaning products or signage on patient rooms.
- Orientation for new starters Trained using a 'buddy' system, whereby the new employee works and learns side-by-side with an existing member of staff who may or may not understand current cleaning policy.

Other findings

- Glove use Not changed between rooms.
- Non-standardised chemical use / own cleaning agents. Incorrect re-constitution of chemical cleaning agents e.g. bleach.
- Inappropriate supplies for cleaning method e.g. re-using wipes/cloths/mops in multiple areas.

Feedback from participants (310 surveyed)	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Q1: learnt something new from the training	242	63	4	1	0
Q2: I enjoyed the training	239	69	2	0	0
Q3: The training will help me improve my practices	236	67	7	0	0
Q4: The training was well delivered	268	40	2	0	0

"EDUCATION WAS EXCELLENT AND INCLUSIVE, GOOD INFORMATION FOR USE OF PRODUCT AND INFECTION CONTROL WORK/PRACTICES. STAFF IMPROVED KNOWLEDGE WITH CLEAR CLEANING METHODS/PROCEDURES FOR STAFF TO FOLLOW. WELL PRESENTED. THANK YOU." Supervisor

"VERY EASILY UNDERSTOOD, FULL OF IMPORTANT INFORMATION AND FACTS BUT ALSO WITH HUMOUR. THANK YOU!"

Participant

Q: The best part of the training was...

"TEACHING THE USE OF CLEANING AND HOW TO IMPROVE IT."

"THE KNOWLEDGE ABOUT HOW TO USE CLINELL AND PRACTICE ON REAL EQUIPMENT."

"LEARNING ABOUT GERMS AND WHERE MOST PEOPLE MISS CLEANING ITEMS."

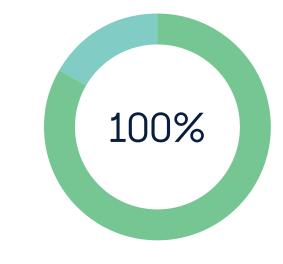
Participants



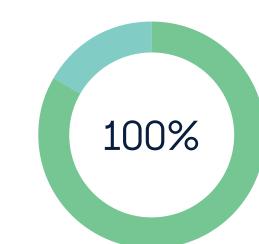
of participants surveyed agreed that they had learnt something new from the training.



of participants surveyed agreed that the training will help them improve their practice.



of supervisors surveyed agreed that the workshops were easy to understand.



of supervisors surveyed agreed that the workshops made their staff feel valued.

Conclusion

Patients and healthcare workers have a right to a safe and clean environment. Understanding the role of environmental contamination in healthcare settings may have a significant impact on staff attitude, beliefs and enthusiasm for cleaning - and in turn on the effectiveness of their efforts.

The workshops and associated feedback confirms that knowledge gained through education and support is empowering, enabling staff to apply a rationale to their duties and reinforcing the crucial role they play in reducing HAIs. The feedback demonstrated that 98% of staff felt that the training would improve their personal practice, helping to ensure that cleaning is recognised as relating directly to patient and staff safety.

References

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Disclosure

Kate Smith and Carla De Marco are employed as Clinical Nurse Specialists by GAMA Healthcare Ltd.