

Pharmacy technicians' perception of strategies to mitigate repetitive strain injury risks associated with sterile compounding.

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Background

Eastern Health is a metropolitan public health network in Melbourne, Australia. It consists of more than twenty sites including seven hospitals. Eastern Health Pharmacy department provides sterile compounding services from two sites.

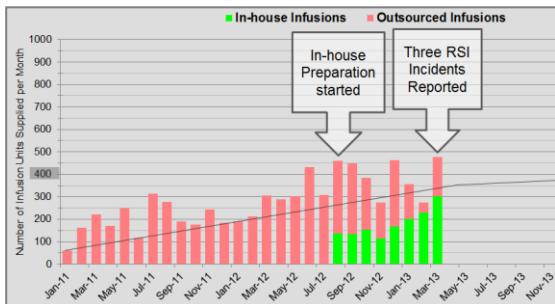


Figure 1. Increase in the number of HITH antimicrobial infusions prepared in house in 2012-3

In 2012, three-site based Hospital In The Home (HITH) services at Eastern Health integrated and expanded which resulted in an increase in the number of antimicrobial infusions compounded by Pharmacy. Following this sudden increase in compounded sterile preparations, three pharmacy technicians reported hand-related RSI in 2013.

Results

Five (out of eight) pharmacy technicians who had worked in the aseptic compounding rotations at the study site over the past two years responded to the survey. Two of the non-respondents were on prolonged leave.

The five domains of 'equipment and consumables', 'training and assessment', 'Lean waste reduction', 'roster and shift limits' and 'workload allocation score' were rated effective or very effective by 100%, 100%, 100%, 80% and 80% of the technicians, respectively. Overall effectiveness of all strategies combined was rated effective or very effective by 100% of the participants.

Conclusions

A range of risk reduction initiatives were implemented over a five-year period to reduce the risk of RSI associated with sterile compounding. Pharmacy technicians' anonymous feedback has revealed the majority find these strategies effective or very effective.

Implications for practice

To effectively reduce RSI risk associated with aseptic compounding, a range of strategies needs to be implemented.

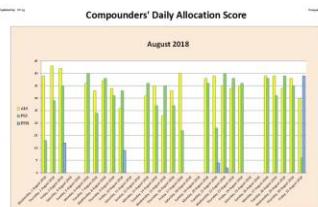
Staff who routinely participate in aseptic compounding activities must be included in the risk assessment and risk reduction planning.

Acknowledgments

Special thanks to Eastern Health Pharmacy technicians who participated in this survey.

Special thanks to the Eastern Health Pharmacy Research Governance Committee for providing feedback on the abstract and poster.

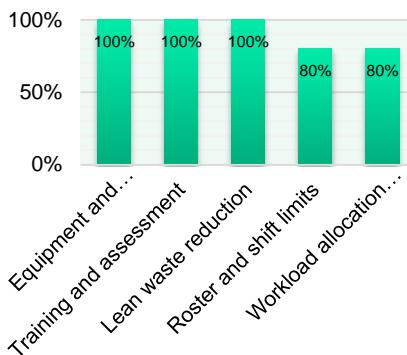
Workload allocation score



Equipment and consumables



Perception of effectiveness



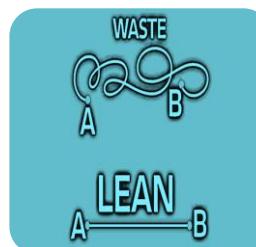
Training and assessment



Roster and shift limits

Team	Days 1-5	Days 6-10	Day
Team 1	█	█	1
Team 2	█	█	2
Team 3	█	█	3
Team 4	█	█	4
Team 5	█	█	5
Total Hours	150.00	150.00	

Lean waste reduction



Aim

To report pharmacy technicians' attitudes about the effectiveness of safety measures implemented over a five-year period in order to reduce risk of repetitive strain injuries (RSI) associated with sterile compounding and aseptic manipulation at a large metropolitan public hospital.

Method

The risk control strategies implemented between 2013 and 2018 were categorised by the authors into five domains of 'equipment and consumables', 'training and assessment', 'lean waste reduction', 'roster and shift limits' and 'workload allocation score'. The authors were directly involved in all the improvement activities since 2013.

This study collected pharmacy technicians' feedback through an anonymous survey. Hard copy paper forms were used to collect feedback. Responders rated their perceived effectiveness of each domain of strategies using a five point Likert Scale. Technicians who have been regularly undertaking aseptic compounding activities over the last two years were included in the audit. Technicians consented by participation.

Conflict of Interest

None to declare.

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