Upskilling pharmacists to assist with bedside IV infusion preparation during surges in workforce demand

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Introduction

In response to the COVID-19 pandemic, the Victorian state government funded the integration of pharmacists into extended team-based models of care in critical care areas during surges in demand. One of the most practical ways for pharmacists to assist in relieving nursing workforce pressures was to support nurses with preparing intravenous (IV) medications.

Aim

To develop a credentialing process, incorporating an electronic training module and in person competency assessment, to equip pharmacists to assist with infusion preparation at the bedside in our intensive care unit.

Methods

Following a process of stakeholder engagement, a protocol was developed and pharmacist pre requisites established. The pre requisites were:

- Local cytotoxic & hazardous medicines handling training,
- Review of local IV therapy procedure, completion of local medication administration training,
- Completion of local Aseptic Non Touch Technique training.
- Up to date sterile room training.
- ICU trained
- Discussion about any medicines that may not be appropriate for the individual to prepare.

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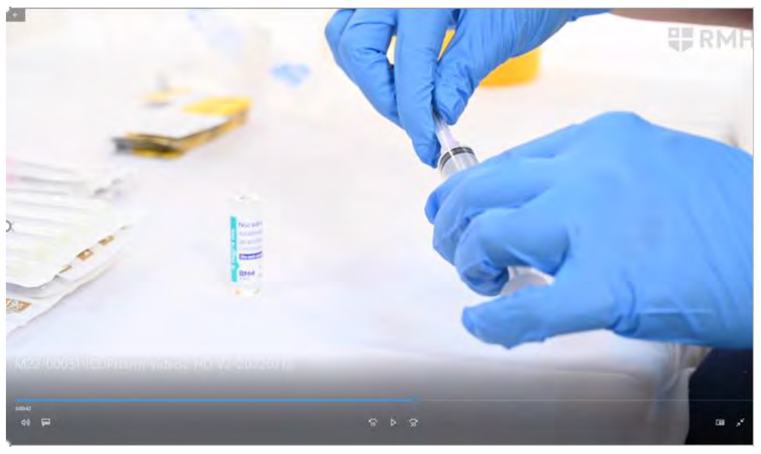
Consideration was given in the protocol to timing of preparation, storage and processes around controlled drugs.

The responsibility for medication administration remained with the bedside nurse.

The training package was developed, covering bedside processes for:

- Reconstituting a vial,
- Drawing up from a vial,
- Adding to a bag
- Preparing a syringe driver

The training package illustrated each process in a separate video, incorporating a voiceover explaining the steps for each process, as well as outlining EMR (electronic medical record) workflow and labelling requirements.



Screenshot from video learning package.

Following the completion of the electronic training package, an in person credentialing session took place. This involved the pharmacist completing two items not for patient use and then five items for patient use. The initial senior pharmacist was credentialed by a clinical nurse manager, and subsequent pharmacists by the senior pharmacist.

The training was evaluated by questioning pharmacists about their perceived competence before and after the training using a five point Likert scale.

Credentialing is planned to be maintained by an annual re-credential.

Results

The evaluation results indicated that participating pharmacists improved in confidence to prepare medications at the bedside following the completion of the training package (mean Likert scores for relevant questions improved from 4.25 and 4 in pre evaluation to 5 and 5 post evaluation).

Participants universally strongly agreed (all results 5) that the mode of training was suitable for the content.

Conclusion

The evaluation results indicate that an electronic training module together with an in person competency assessment was successful in improving pharmacists confidence in bedside IV medication preparation.

These results will enable pharmacists to utilise these skills to assist with relieving nursing workforce pressures during future periods of peak demand.

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Image sources:

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