

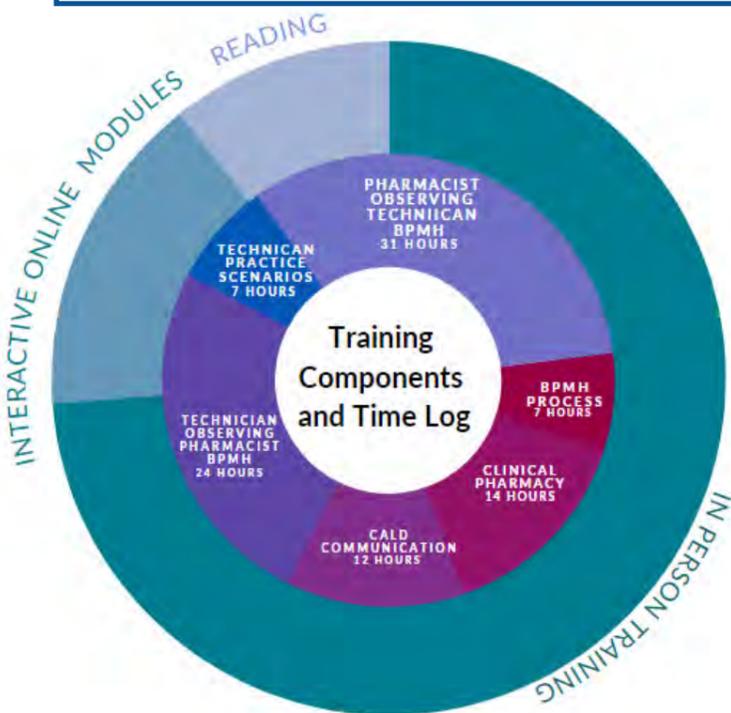
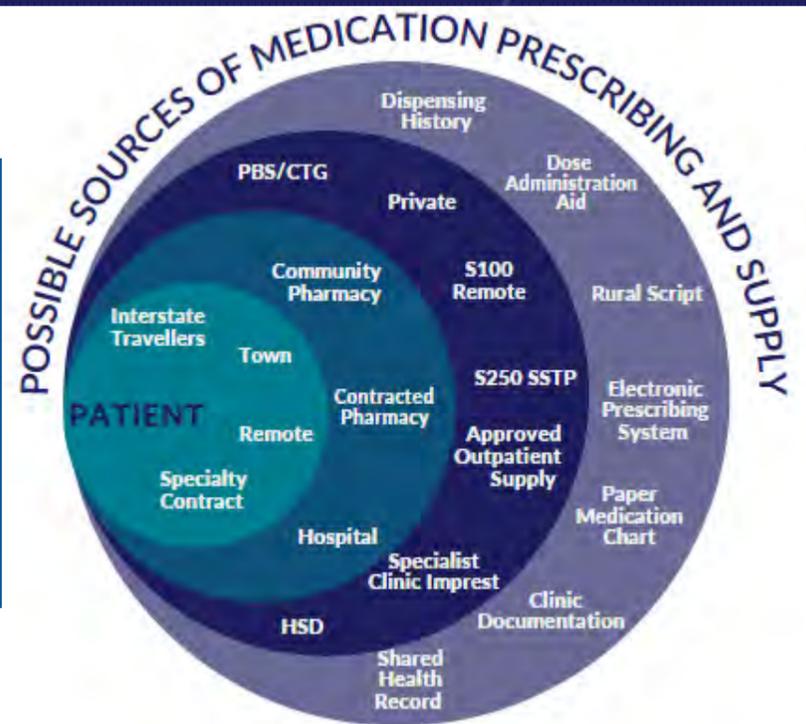
Evaluation of technician-led medication histories in a culturally diverse, rural Australian emergency department

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BACKGROUND

Performing a Best Possible Medication History (BPMH) as part of medication reconciliation early in a patient's presentation to hospital reduces errors and improves safety. However, completion within 24 hours can be stymied by limited staffing, short patient duration of stay, and cultural and language barriers. Expanded technician roles have been studied and implemented to support clinical pharmacy services, including completing medication histories, in a variety of settings both intentionally and within Australia. A quality improvement pilot commenced in a rural hospital emergency department (ED) in 2021 to explore the addition of a pharmacy technician completing medication histories. The technician was trained on performing BPMHs in context of the unique medication supply process within rural and remote health.



To retrospectively assess the appropriateness of the uniquely designed technician training program and the effect from the addition of a pharmacy technician in tandem with a pharmacist on ED medication history completion rates and workflow.

The training content and log were reviewed for appropriateness by comparing it to the interviewed population and pharmacist feedback. ED presentation data was compared with pharmacy interview data to calculate medication history completion rates. Surveys of pharmacist feedback also provided qualitative data on impacts on workflow outside of the ED.

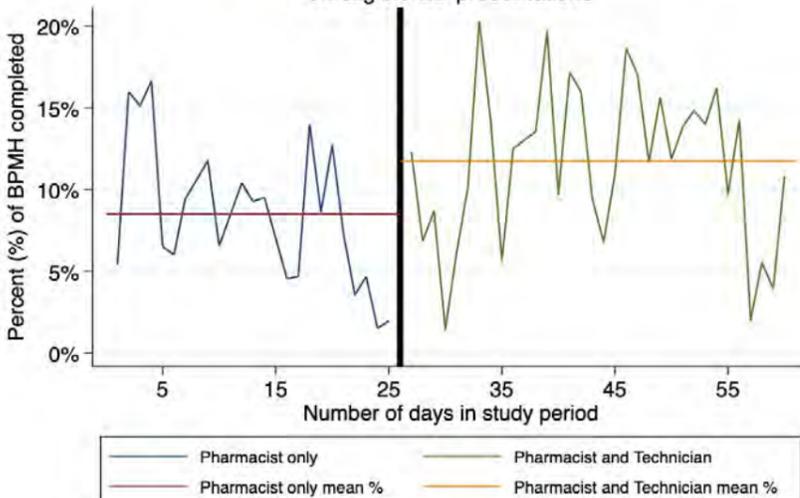
AIM METHOD

RESULTS

The 30 hours of introductory training, which included an emphasis on cultural competencies, was deemed suitable to address the eligible patients of which approximately half identified as Aboriginal and/or Torres Strait Islander. The addition of the technician to the ED pharmacist workflow increased the overall medication history completion rate of eligible patients by 26.3% (from 8.49-10.73%). Furthermore, the technician contributed to an increase in histories completed for patients admitted to the ward from 19% to 22.5%. Primary source interviews and secondary source information gathering also improved with the technician consistently documenting more direct interviews with patients and multiple sources than the pharmacist. Pharmacist feedback highlighted positive impacts and suggestions for improvement regarding their daily activities, technician performance and the overall pilot.



Daily percentage of completed BPMHs on eligible ED presentations



The pilot project succeeded in appropriately training a technician to improve completion rates of medication reconciliation with diverse patients in the ED with over half the eligible patients identifying as Aboriginal and or Torres Strait Islander. The technician remained within scope of practice by documenting as per professional standards. The addition of the technician in ED contributed to improved BPMH rates in an area which currently does not achieve the Society of Hospital Pharmacist of Australia (SHPA) recommendations for pharmacist to patient ratio. Pharmacists provided valuable feedback on the project and technician performance which can be used to build future research. Time in motion studies would be beneficial to assess the impact on pharmacist efficiency. Overall, such roles can contribute to improved patient care whilst supporting more sustainable pharmacy and rural workforces.

DISCUSSION