

Expanding and Sustaining a Rural Hospital's Clinical Medication Management Services

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Background

- Benalla Health (BENH) is our rural city's public hospital & health service, providing healthcare to a local population of approx. 14,000 (within a wider catchment of 20,000) in northeast Victoria.
- Benalla's rurality is defined as a Modified Monash Model (MMM) 4 "Rural location" and its wider catchment = MMM 5.⁽¹⁾
- BENH's medical workforce comprises local General Practitioners, Rural Generalists, Medical Specialists and Surgeons – a Visiting Medical Officer (VMO) workforce model.
- BENH provides urgent care, acute medical, surgical & maternity services, community health and aged care.⁽²⁾
- The on-site hospital Pharmacy Department provides services Mon-Fri only.

Objective

- To enhance the pharmacy department's capacity to perform Best Possible Medication History & Medication Reconciliation on Admission, during existing business hours of Mon-Fri, while continuing to routinely provide Medication Information at Transfer of Care.

Actions

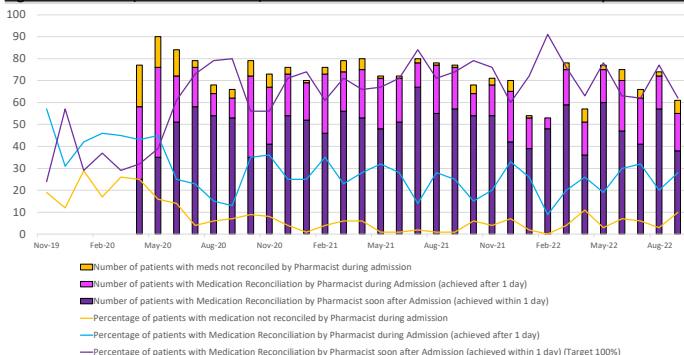
- BENH began collaboration with NHW's (MMM 3)⁽¹⁾ Pharmacy Department.
- External review of medication management services early 2020:
 - Recommended re-prioritisation of pharmacist workload towards admission-related clinical pharmacy activities;
 - Recommended uplift in pharmacist & technician workforce.
- Expression Of Interest to Vic Department of Health for a Pharmacy Intern training position was successful -> BENH's first Intern embedded a Pharmacy presence in Acute Ward's multidisciplinary team through 2021.
- Pharmacy Intern tasked with undertaking Admission History & Medication Reconciliation for Acute Ward patients, under supervision.
 - 4 days/week Pharmacy Intern usually present in Acute Ward during crucial time – during morning VMO visits/rounds.
 - Triaged urgency of medication-related problems with supervisor.
 - VMOs encouraged to resolve medication-related problems while on site, as soon as possible after admission, to reduce later phone calls to their GP practices, seeking resolution of medication problems.

Evaluation

Table 1: Percentage of patients whose current medications are documented & reconciled at admission (From ACHS Clinical Indicator Peer Comparison Reports)

Date	BENH Numerator	BENH Denominator	BENH Rate (Outlier)	BENH Rate - 99% Confidence Interval	Australian Public Facilities Submitting Data	Aggregate Rate for These Organisations	Graphs: benchmarking -> Aggregate rate for Public Facilities submitting data (Green Rectangle); BENH rate (Red Square) (★ denotes ACHS positive outlier amongst organisations reporting data); Confidence Interval (Blue Line)
2020 (Second Half)	298	443	67.3 % ★	61.5-73.0 %	26	56.5 %	
2021 (First Half)	306	449	68.2 % ★	62.5-73.8 %	68	38.3 %	
2021 (Second Half)	329	444	74.1 % ★	68.8-79.4 %	18	45.4 %	

Figure 1: Patients (admitted > 24hrs) with Medication Reconciliation on Admission by Pharmacist



- Three consecutive Australian Council on Healthcare Standards (ACHS) "Clinical Indicator Peer Comparison Reports" have shown BENH's exemplar status in Admission Medication Reconciliation compared with Australian public facilities submitting data to ACHS (Table 1).
- Percentage of patients with Best Possible Medication History & Medication Reconciliation on Admission performed by Pharmacy team doubled (approx) from ~30-40 % in early 2020, up to ~60-80 % throughout 2021 (Fig 1), whilst other organisations reported a decrease in rates of Admission Medication Reconciliation (Table 1).
- A significant reduction in reported medication incident reports where "harm" occurred has been observed (& low rates sustained).
- Further work is needed to explore the feasibility of extending Pharmacy business hours beyond Mon-Fri, in order to achieve the stated target of 100% Admission Medication Reconciliation.

Discussion

- Admission Medication Reconciliation rates climbed throughout 2020, in the setting of increased utilisation of experienced casual employee pharmacists to support (& provide leave cover for) the sole pharmacist.
- Admission Medication Reconciliation rates continued to improve while we trained our first Pharmacy Intern in 2021, with exemplar levels sustained following the addition of a full-time Grade 1 Clinical Pharmacist in 2022.
- For more on how BENH has grown its Pharmacy workforce over recent years, see #MM2022SHPA Poster 181.

References

- Health Workforce Locator, *Modified Monash Model*. Australian Government, Department of Health and Aged Care. (Jul 2022) Available at <https://www.health.gov.au/resources/apps-and-tools/health-workforce-locator/health-workforce-locator> [Accessed 7 Nov 2022].
- Benalla Health <https://www.benallahealth.org.au> [Accessed 10 Nov 2022].

Acknowledgements

- BENH's Pharmacy Team, Executive Team, Performance Improvement Team, Acute Ward staff, VMOs.
- Northeast Health Wangaratta Pharmacy Team and Executive Team.