

Tamasin Burch, John Carroll, Shane Delves, Annie Williams, Wendy Cox
Murrumbidgee Local Health District

Case for change

A "Best Possible Medication History" (BPMH) is the first step of the medication reconciliation process and should be undertaken as soon as possible after presentation or admission to hospital.

The process involves the collection of at least 2 medication sources and the appropriate documentation of the medication history. This can be conducted by a pharmacist, or nurse when no onsite pharmacist available.

Within the **Finley Cluster** over a 6 month period;

1. Less than **5%** of patients that either presented to the emergency department or were admitted to a ward had a documented BPMH.
2. There were **33** documented incidents related to the documentation of medications, and
3. A **29.5%** 28-day readmission rate

Inadequate collection of the BPMH and subsequent documentation are direct causes of adverse patient outcomes related to medication safety.

Method

The MediREACH project followed the Agency for Clinical Innovation (ACI) Resign methodology. This included;

- Diagnostics
- Solution Design
- Implementation
- Evaluation (underway)

A number of diagnostic and solution design tools were utilised including;

- Patient and Staff Interviews
- Process Mapping
- Data Analysis
- Literature Review

Planning and implementing solutions

- Development of Steering Committee to support change.
- General Manager and Cluster manager engagement to support change.
- Interviews and tag-alongs with targets.

- Remove paper based documentation source and use only electronic forms in eMR.
- Development and delivery of a BPMH education package, including Intranet resource page.
- Development of quick reference guides to support nurses on how to document the BPMH in eMR.
- Clinical Governance support during implementation of solutions.
- Communication with stakeholders vital to process.

Sustaining change

- National Standard 4
- Executive Support
- Evaluation and feedback provided to facility managers and staff
- Delivery of onsite education with nurses including the completion of BPMH by a nurse
- BPMH training included in clinical staff orientation package
- Regular onsite visits by outreach pharmacist to support sustainability
- Staff access to online education and support material
- Development of an audit tool to evaluate accuracy and quality of the BPMH

Acknowledgements

Dr Wendy Cox (Executive Sponsor), Ms Annie Williams (MLHD Redesign Leader), Ms Karen Solah, Mr Andrew Elliott, Ms Rosemary Garthwaite, Ms Rebecca Broadbent, Mr Ken Hampson,

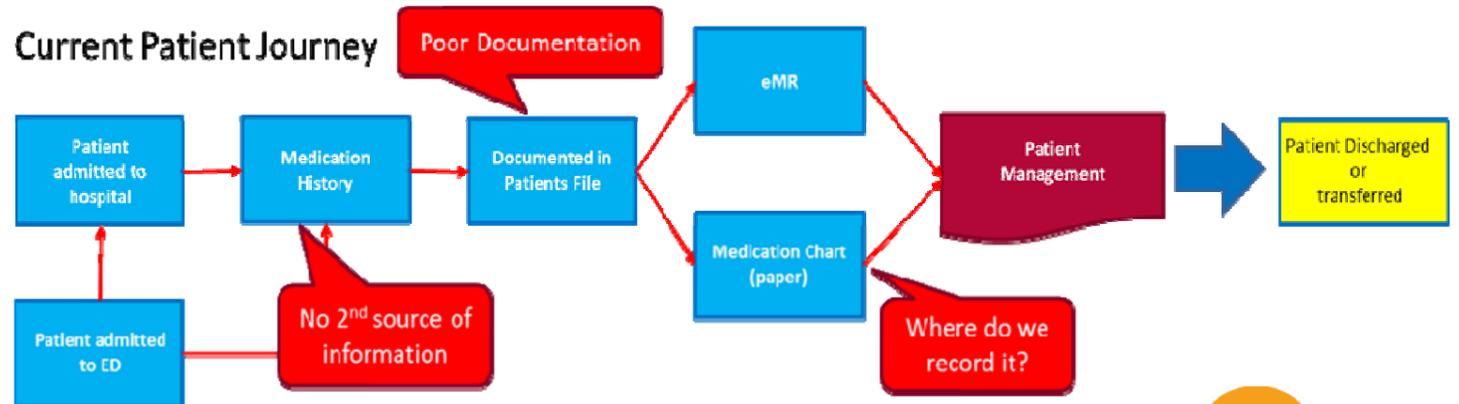
Goal

Ensure 100% of acutely admitted patients have their medications reviewed within 24hrs of admission, and upon discharge or transfer within the Finley Cluster (MLHD).

Objectives

- To achieve an 80% reduction in patient medication incidents related to documentation (from 33 to 6) within the Finley Cluster by 31st December 2017.
- To decrease the number of patient readmissions within 28 days from 29.5% to 10% which are due to medication management issues within the Finley Cluster by 31st December 2017.
- To ensure that 100% of admitted patients have a documented "Best Possible Medication History (BPMH)" within 24hrs of admission within the Finley Cluster by 31st December 2017.

Diagnostics



What the PATIENTS say



"I think I had my Webster Pack with me...I cant remember if the if the nurse or doctor asked me about my medications."

"I think I had my Webster Pack with me...I cant remember if the if the nurse or doctor asked me about my medications."

What the STAFF say

"There are 2 systems for documentation and eMR takes too long" Nurse

"The doctor knows the patients history...they just go and record it in their own notes" Nurse

"If you don't update the medication list in eMR, it will auto populate the discharge summary and be wrong" Pharmacist



Results (to date)

The below graphs highlight the increase in the number of patients receiving a BPMH in their respective sites within the Finley Cluster. However this was followed by a decline in numbers at some sites.

- To achieve an 80% reduction in patient medication incidents related to documentation (from 33 to 6) within the Finley Cluster by 31st December 2017.
- To decrease the number of patient readmissions within 28 days from 29.5% to 10% which are due to medication management issues within the Finley Cluster by 31st December 2017.
- To ensure that 100% of admitted patients have a documented "Best Possible Medication History (BPMH)" within 24hrs of admission within the Finley Cluster by 31st December 2017.

Results to date

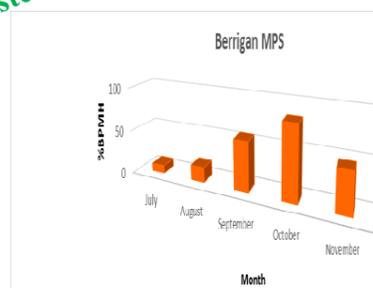
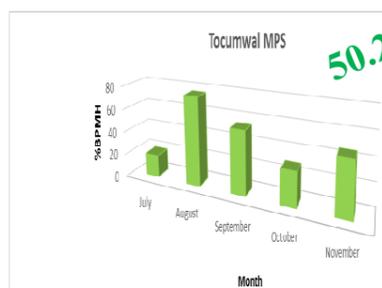
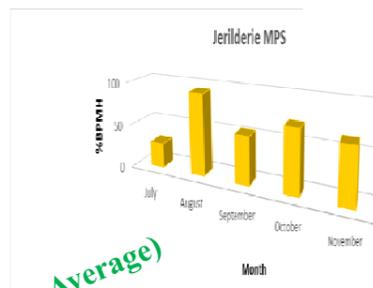
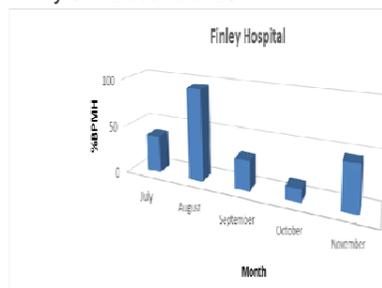
1 ★

Data Analysis Underway

50.2%

Objective Met

Improving



50.2% (Cluster Average)



Conclusion

This project confirms that completing a fully documented BPMH can minimise patients risk to medication errors at rural hospitals without onsite pharmacists. It also demonstrates that patients who have had a BPMH completed are less likely to be readmitted to hospital thereby reducing healthcare costs associated with hospital readmission.

The project identified that documentation of the BPMH in a single electronic system can improve the transfer of patients accurate medicines information during the patient journey.

The results also indicate that it is achievable to appropriately train nurses at small rural hospitals (without onsite pharmacists) to complete a BPMH to improve medication safety. Training should be supported by pharmacists, evaluated and include onsite training sessions to support effective implementation.

Contact

Ms Tamasin Burch
Outreach Pharmacist
Murrumbidgee LHD
Tamasin.Burch@health.nsw.gov.au

Mr John Carroll
Chief Pharmacist
Murrumbidgee LHD
John.Carroll@health.nsw.gov.au

Mr Shane Delves
Telehealth Manager
Murrumbidgee LHD
Shane.Delves@health.nsw.gov.au