



THE UNIVERSITY OF
NEWCASTLE
AUSTRALIA

FACULTY OF HEALTH



www.newcastle.edu.au

Evaluation of the 48 Hour Follow Up Program

Amanda Jayakody*[^], Erin Passmore[^], Christopher Oldmeadow, Jamie Bryant,
Mariko Carey, Eunice Simons, Aaron Cashmore*, Louise Maher, Kiel Hennessey,
Jacinta Bunfield, Maurice Terare, Andrew Milat and Rob Sanson-Fisher.

*Presenting authors

[^] Equal contributors

Background

Improving chronic disease management and reducing unplanned hospital readmissions among Aboriginal patients are NSW Health priorities

Program

- The 48 Hour Follow Up Program aims to:
 - improve coordination and management of care for Aboriginal people with chronic diseases
 - Reduce avoidable readmissions
 - Improve health outcomes of Aboriginal people
- Post-discharge telephone follow up of Aboriginal people who are hospitalised with a chronic condition

Evaluation methods

- Three components:
 - Component A: Literature review
 - Component B: Implementation review
 - Component C: Reach and impact evaluation
- Ethics:
 - Aboriginal Health and Medical Research Council Ethics Committee
 - University of Newcastle Human Research Ethics Committee

Component B: Implementation Review

Aims

To :

1. Describe how 48 Hour Follow Up has been implemented across LHDs, with a focus on how enhancement funding has been utilised
2. Identify achievements and challenges in the implementation of 48 Hour Follow Up

Method

- In-depth telephone interviews with 48 Hour Follow Up Program Managers (n=23)
- In-depth telephone interviews with staff who implement 48 Hour Follow Up (n=17)
- Review of available program documentation

Results

- Most interviewees perceived that the program has value
- Ten LHDs conduct the program at every in-patient facility
- Ten LHDs had integrated the program with Connecting Care
- Enhancement funds used to recruit Aboriginal-identified roles
- Four main models of implementation identified: a centralised model (4 LHDs); an integrated model (3 LHDs); a localised model (6 LHDs); a mixed LHD/ACCHS model
- Additional follow up provided in some LHDs

Results

Implementation challenges:

- No standardised training for program staff in some LHDs
- No standard call script in some LHDs
- Few LHDs have streamlined processes to identify eligible patients, with most LHDs using a combination of systems
- Some felt that the central eligibility criteria was difficult to apply in real time
- Challenges in recruiting to Aboriginal-identified positions
- Intermittent feedback on performance

Component C: Reach and impact evaluation

Aims

To determine:

1. The proportion of eligible patients who receive 48 Hour Follow Up
2. The factors that predict whether someone receives 48 Hour Follow Up
3. Whether patients who receive 48 Hour Follow Up have lower rates of unplanned readmission and other adverse events

Method

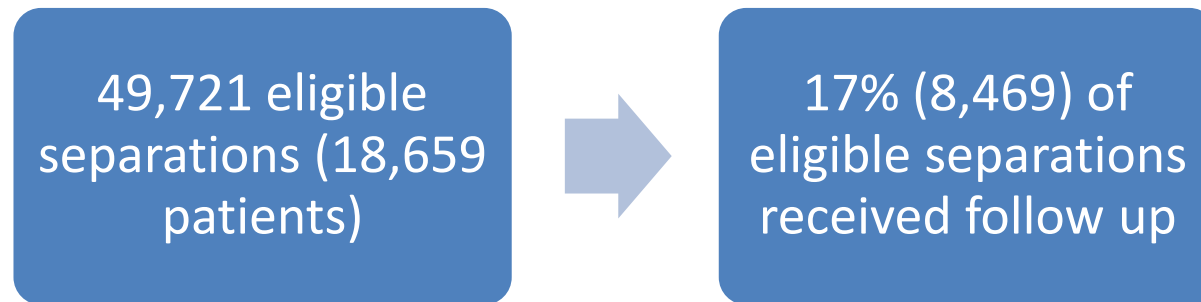
- **Study design:** A retrospective cohort was obtained through audit of medical records and administrative data linkage.
- **Study population:** Patients eligible to receive 48 Hour Follow Up in the period May 2009 to December 2014.
- **Health outcomes:** Unplanned hospital readmissions, ED presentations and mortality within 28 days of discharge from hospital.

Method

- **Data Sources:** 48 Hour Follow Up Register established –
 - 48 Hour Follow Up Program Dataset
 - NSW Admitted Patient Data Collection (APDC)
 - NSW Registry of Births, Deaths and Marriages (RBDM) Death Registrations
 - NSW Emergency Department Data Collection (EDDC)
 - Chronic Disease Management Program (CDMP) Minimum Dataset

Results

1. Reach



- **The odds of receiving 48 Hour Follow Up were increased by:**
 - The utilisation of a centralised model of implementation
 - Length of stay in hospital greater than 1 day
 - Increasing social disadvantage
 - Fewer comorbidities

Results

2. Outcomes

Comparison of those who did and did not receive 48 hour follow up showed:

- No significant differences in **unplanned 28 day readmissions**
- Patients who received 48 Hour Follow Up were 8% less likely to experience an **unplanned ED presentation** within 28 days of discharge (p=0.0312)
- No significant differences in **rates of death** within 28 days
- Patients who received 48 Hour Follow Up were 9% less likely to experience **at least one adverse event**, compared to eligible patients who did not receive follow up (p=0.0136)

48 Hour Follow Up Evaluation limitations

- Perspectives of some key stakeholders not explored
- Non-random design introduces potential of bias in findings
- Missing or inaccurate data, especially in patient lists provided by LHDs

Some implications

- Program should form part of a coordinated approach to chronic disease management in NSW
- Improve identification of eligible patients
- Establish standardised, evidence informed call scripts
- Provide standardised training of program staff
- Strengthen quality of monitoring and feedback systems
- Engage Aboriginal staff in program delivery
- Consider extending follow up period
- Improve engagement with primary care

Summary

- Implementers felt that 48 Hour Follow Up delivers a benefit
- Implementation varies by LHD, with four key models identified
- Broad implementation, with good integration with other programs
- Several implementation challenges identified
- Program reach is sub-optimal primarily because many eligible patients are not being invited to participate
- Centralised model and fewer comorbidities associated with receiving the program
- Improvements across all measures (but only significant for reduced ED visits and composite measure of adverse events)

Acknowledgments

- Evaluation participants for their time and contributions to Component B
- 48 Hour Follow Up coordinating staff for the provision of participant data for Component C
- NSW Ministry of Health, Centre for Aboriginal Health and the 48 Hour Follow Up Program Evaluation Advisory Committee members for their advice and guidance throughout evaluation design and implementation