

POLICY OPTIONS

Implementing care coordination plus early rehabilitation in high-risk COPD patients in transition from hospital to primary care

July 2014

Johnston K, Young M, McEvoy C, Grimmer K, Seiboth C, Teakle J, Yeo A

Policy context

Background to the problem

Hospital admissions due to worsening of symptoms in people with chronic obstructive pulmonary disease (COPD) are associated with poor outcomes, high costs and frequent re-admission.

Care coordination at the time of transition has demonstrated reduced hospital readmissions and improved QOL for people with heart failure but there is minimal evidence in people with COPD. In addition, early rehabilitation in people with COPD after hospital admission with an exacerbation of symptoms is safe and effective, but implementation is low due to barriers associated with attending centre-based programs during this challenging early period. The combination of care coordination and early rehabilitation has the capacity to directly address the costly problems associated with transition from hospital to home in people with COPD.

Aim of this project

To pilot the implementation of care coordination plus early rehabilitation in a COPD population in transition from hospital to primary care. We examined the effect of care coordination plus early rehabilitation on

- Patient and carer experience of transition
- Progress toward agreed patient health goals
- Collaboration with patient's general practitioner/primary care
- Hospital readmission and physical activity levels compared with a control group

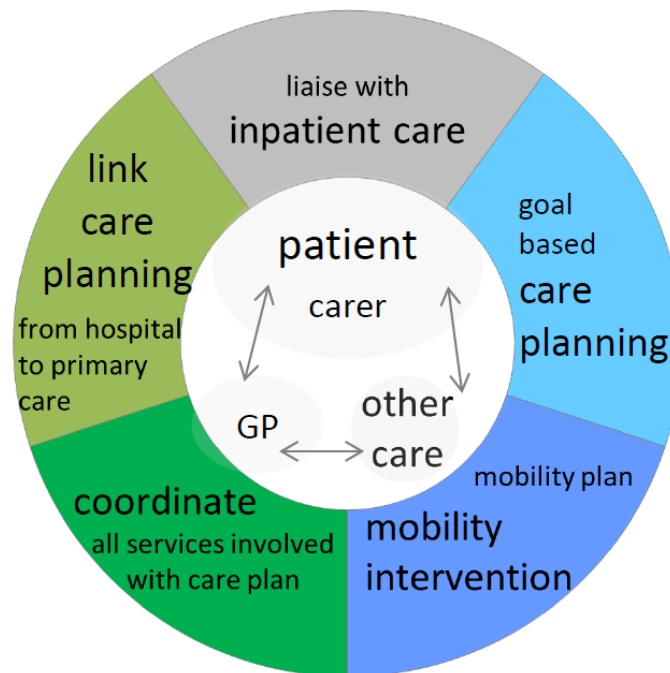
The care coordination plus early rehabilitation intervention

The intervention was home-based and flexible, usually 1 visit/week by each practitioner for 4-6 weeks. The intervention incorporated patient-centred care coordination plus early pulmonary rehabilitation with two unique and innovative foci: (1) patient and carer goals, and (2) effective transition to primary and community care, by use of existing Medicare Benefits Schedule (MBS) items.

Policy options

This pilot data suggests that care coordination and early rehabilitation provides a positive and effective transition from acute care in people with COPD, with benefits for the patient and carer, for primary and community care and for acute care services. Based on the positive results of this pilot project:

- > Care coordination plus early rehabilitation in people with COPD at the time of transition from hospital to home should be implemented in a larger controlled study that is adequately powered to determine a difference in readmission rates between the intervention and usual care.



Key elements of the care coordination plus early rehabilitation intervention

- > The team of specialist respiratory nurse practitioner and physiotherapist demonstrated ability to implement all planned components of care coordination and early rehabilitation in this population and also to expand scope to meet further identified and previously un-addressed needs
- > Implementation of early rehabilitation could take place utilising physiotherapy workforce in “rehabilitation in the home” services that currently exist to facilitate discharge from acute care. However capacity of service would need to be increased to meet current need.
- > Implementation of the specialist respiratory nurse practitioner role, with ability to work across acute and community care is essential to coordinate care in transition, facilitate access to specialist services and to hand care over to general practice/community care.

Key findings

Results achieved by this pilot project:

1. A positive patient and carer experience of transition.

The intervention was perceived as highly valuable to participants and their carers, delivering a positive experience of both the process and outcomes of their transition from acute to community-based care.

“It’s really helped me along, step by step” patient
“You can really sort it out with one another and work on it” carer

2. Significant progress toward achieving patient goals in transition

The intervention created opportunity for patients to articulate goals. In the intervention group overall, a significant reduction in perceived severity of patient problems, and significant progress toward their self-selected goals was achieved between 4 – 6 weeks at home after discharge from hospital.

3. Effectively linked transition care planning to primary and other care

The intervention enabled collaboration with the patients’ general practitioner or practice nurse, resulting in the review or generation of a GPMP and/or TCA in all cases. General practitioners reported a positive experience of the program for both themselves and their patients.

“I think it is a fantastic initiative and would definitely recommend it for other patients” GP

4. Increased physical activity and reduced sedentary time

Patients who participated in the intervention demonstrated significant changes in their patterns of physical activity at 4 weeks after discharge from hospital compared with during their admission, including:

- > % of awake time spent in prolonged sitting (sitting 30 mins or more without interruption) reduced by 31%, from 81% during hospital admission to 50% at 4 weeks after discharge
- > % of awake time spent standing increased by 12%, from 6% during hospital admission to 18% at 4 weeks after discharge. This represents an average improvement for the patient of 200% on their standing time in this period.
- > % of awake time spent stepping increased by 3%, from 1% during hospital admission to 4% at 4 weeks after discharge.

No significant changes occurred in activity patterns between hospital admission and 4 weeks later in the control group.

5. Trend toward fewer readmissions for respiratory reasons in 28 days after discharge

Although this study was not powered to detect a significant difference, readmission within 28 days for a respiratory condition occurred in 32% in the control group and only 10% of the intervention group.

The research reported in this paper is a project of the Australian Primary Health Care Research Institute, which is supported by a grant from the Australian Government Department of Health under the Primary Health Care Research, Evaluation and Development Strategy. The information and opinions contained in it do not necessarily reflect the views or policies of the Australian Government Department of Health.