Rural Multidisciplinary Sub-Acute Collaborative Care

What Matters Most?

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Introduction

In Rural and Remote districts there is an:

- increasing demand on rural facilities to provide care for older more frail inpatients
- decreasing skilled rural workforce
- limited evidence on effective rural models of care for such inpatients

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Background

2010

Hub and Spoke Multidisciplinary Team

Model of Collaborative Care

The Sub-Acute Care Team (SCT)

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Clinical Handover

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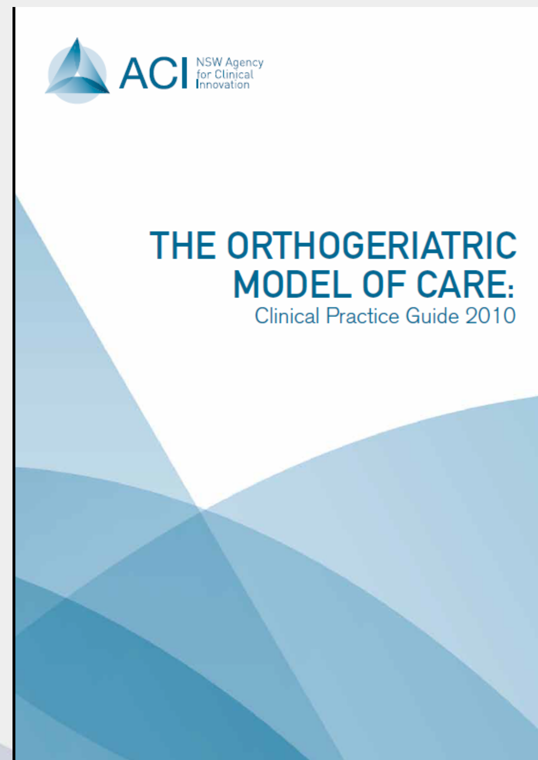
Clinical Guidelines



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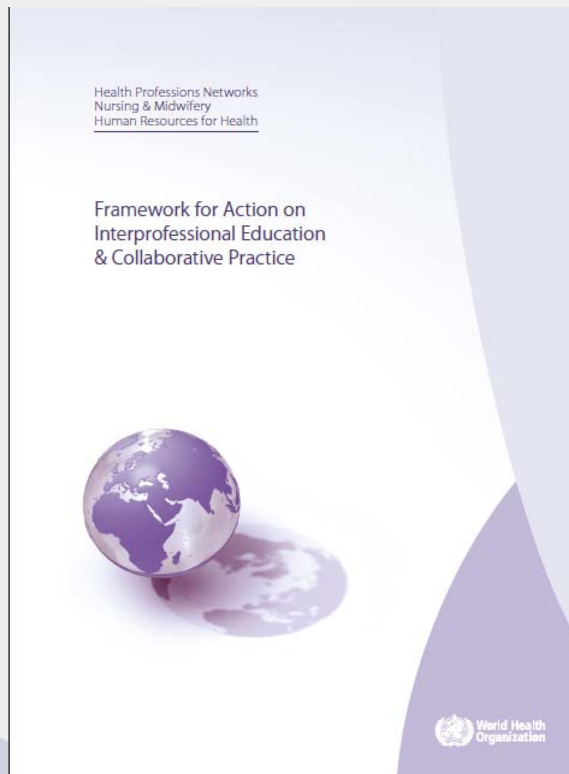
Collaborative Practice



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Research Evidence

AJRH The Australian Journal of Rural Health

Aust. J. Rural Health (2015) ••, ••–••

Original Research

Rural collaborative guideline implementation: Evaluation of a hub and spoke multidisciplinary team model of care for orthogeriatric inpatients – A before and after study of adherence to clinical practice guidelines

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Abstract

Objective: *To evaluate whether adherence to orthogeriatric inpatient clinical practice guidelines increased after the implementation of an innovative hub and spoke multidisciplinary team, the Sub-Acute Care Team (SCT).*

Design: *This study used a before and after design and describes a medical record audit.*

Setting: *Rural inpatient facilities with 20–50 inpatient beds.*

Participants: *Inpatients aged 65 years and older who sustained a lower limb fracture from a fall were admitted to a regional facility and subsequent rural facility. The audit included 42 inpatients admitted before the SCT (April 2009–April 2010) and 35 inpatients admitted after the SCT (April 2011–April 2012).*

Interventions: *The SCT used interprofessional collaborative practice and orthogeriatric clinical practice guidelines to inform inpatient care.*

Main outcome measure(s): *Adherence was measured by answering 10 questions representative of the guidelines. Chi-square or Fisher's exact tests were used for each question to identify if the proportion of inpatients receiving guideline-based care changed significantly after SCT implementation.*

Results: *After SCT implementation, an increase in the adherence to guidelines was statistically significant ($P < 0.05$) for handover, nutrition support, falls prevention, bladder management and more than five guideline-based care questions.*

Conclusions: *Adherence to orthogeriatric inpatient clinical practice guidelines increased after the implementation of the SCT. The mechanisms likely to have contributed include the comprehensive multidisciplinary handover and the opportunity for rural inpatient clinical follow-up. This model is likely to be effective in improving care for other frail rural inpatient populations.*

KEY WORDS: *clinical practice guidelines, interprofessional, models of care, multidisciplinary, orthogeriatric.*

Introduction

The increasing demand on rural facilities to provide care for older subacute inpatients with complex care needs, together with a decreasing skilled rural workforce, is requiring rural health care services to consider new models of care. There is no definitive evidence regarding the most effective model of care delivery for such inpatient populations in rural health care settings. In metropolitan specialist health services, there is some evidence that collaborative orthogeriatric care reduces inpatient complications and mortality.[1–3] The mechanisms enabling this improvement remain unclear. However, some components that appear to be effective for older inpatients admitted for acute care include a multidisciplinary aged care team, targeted assessment to prevent complications and discharge planning with communication between care providers across the care continuum.[4]

For rural health services, clinical practice guidelines can help direct quality care; however, their implementation requires clinicians to consider the most relevant guidelines to follow for the inpatient's care needs, as well as the processes and procedures that will enable sustainable implementation. This is usually beyond the domain of practice of the available rural facility clinicians. The aim of this study was to evaluate whether the introduction of a senior multidisciplinary team called the Sub-Acute Care Team (SCT) was associated with

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Key Mechanisms

- Hub site holistic coordinated specialist multidisciplinary inpatient assessment and discharge planning
- Comprehensive multidisciplinary handover
- Spoke site follow up of the inpatient by the SCT to effect the inpatients’ plans and goals.

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Current Team

Membership reduced by half from 8 to 4 members

Clinical Nurse Consultant (Rehab/Sub-acute care)

Occupational Therapist (level 4)

Physiotherapist (level 4)

Dietitian 0.5.FTE (level 4)

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Methods

- *Hub site leadership and collaborative care*
- *Comprehensive multidisciplinary handover*
- *Spoke site leadership and collaborative care*

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Sustaining Sub-Acute Care Priorities

- Care Type Policy for Sub-Acute Care
- Minimum Standards for the Management of Hip Fracture in the Older Person
- Agency for Clinical Innovation Rehabilitation Model of Care and Orthogeriatric Model of Care
- Functional Independence Measure (FIM™)
- Annual Rural Facility Engagement Meetings
- Rural Inpatient Satisfaction Rounding
- National Safety and Quality in Health Service Standards(NSQHS)

Results

2014- 2015 Local SCT Data

The number of patients

transitioned from the hub site to the spoke sites

137

The number of SCT occasions of service in IPM

rural clinics =**383**

hub clinics =**1315**

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Functional Independence Measure (FIM™) for Hip Fractures
SCT Rural Facilities
AROC Target Outcomes Report
January -December 2014

At least half of the 13 hip fracture inpatients treated in the rural facilities, with valid FIM scores and completed episodes, achieved a FIM™ gain of 31 points or more

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Annual Rural Facility Engagement Meetings

Identified Operational or Strategic follow up actions for either the SCT or Rural Team

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Rural Inpatient Satisfaction Rounding

- 9/9 reported they were happy with their care.
- 5/9 patients reported they had discussed their goals for their stay within the facility
- 3/9 reported they had the opportunity to discuss plans for on-going care or discharge from the facility

What Matters Most?

- Hub and Spoke site clinical leadership and collaborative care
- Comprehensive Multidisciplinary Handover
- Partnering with Patients and Carers
- Implementation and Evaluation of adherence to the "sub-acute care type policy"

What Matters Most?

- Evaluation of the inpatient and staff experience
- Evaluation of inpatient functional gains
- Ownership of local data systems

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Recommendation

Hub and Spoke Multidisciplinary

Specialist Clinical Care Coordination

be provided for

complex inpatient groups

admitted to

Rural and Remote Facilities for Sub-acute Care

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