Rural multidisciplinary sub-acute collaborative care. What matters most?

Tracey Drabsch
Western NSW Local Health District, NSW

Introduction
The increasing demand on rural facilities to provide care for older more frail inpatients with a decreasing skilled rural workforce is requiring rural health care services to consider new models of care. There is limited evidence on effective rural models of care for such inpatients.

Background
People living in rural towns who require acute specialist care are likely to receive this care in a regional facility which is often a long distance from their home town. If it is not safe for them to return home it is likely they will return to a rural facility for inpatient sub-acute care. The complex nature of such inpatients places pressure and expectation on a generalist rural workforce to provide their healthcare needs. Care delivered across long distances, within different facilities and by a number of different teams may jeopardise continuity of care.

During 2010 an innovative hub and spoke multidisciplinary team model of care was implemented in the Western New South Wales Local Health District (WNSWLHD) by establishing the Sub-Acute Care Team (SCT). This team had a particular focus on orthogeriatric inpatients admitted to a regional facility (hub site), with approximately 250 beds, for specialist care who were then transitioned to a neighbouring rural facility (spoke site), with between 20 and 50 bed, for sub-acute care. Orthogeriatric Model of Care clinical practice guidelines1 as well as handover guidelines2 were used by the SCT to inform orthogeriatric inpatient care through interprofessional and collaborative practices3.

During 2013 federal funding4 ceased. With locally reported benefits of the SCT and research evidence demonstrating an increase in the adherence to clinical practice guidelines in rural facilities5 the WNSWLHD continued to fund the SCT, however the membership was reduced by half from 8 to 4 team members. The SCT currently includes a: Clinical Nurse Consultant (CNC), Occupational Therapist (OT), Physiotherapist, Dietitian with a Rehabilitation Physician available at the hub site and for outreach clinics when required. The research evidence5 enabled this SCT to make an informed decision about the key mechanisms that contribute to the adherence to clinical practice guidelines. These key mechanisms include the:

- hub site holistic coordinated specialist multidisciplinary inpatient assessment and discharge planning
- provision of a comprehensive multidisciplinary handover to the rural facility staff
- spoke site follow up of the inpatient by the SCT to effect the inpatients’ plans and goals.

This paper reports on the key mechanisms that are effective in enabling and sustaining adherence to sub-acute clinical practice within rural sites.

Methods

Hub site leadership and collaborative care
All inpatients over the age of 65 years admitted with a fracture have an automatic referral and consultation by the SCT. The SCT provides clinical leadership and collaboratively provides multidisciplinary patient centred early assessment, treatment and discharge planning with the treating team. SCT case conferences occur twice weekly, for up to an hour, to confirm the inpatients’ current functional status, plans and goals. The outcomes of the case conference are then communicated with the hub site treating team.
Comprehensive multidisciplinary handover
The SCT have set the expectation that a comprehensive multidisciplinary handover is critical for the patients' continuity of care and is an essential part of their daily work. This includes one written multidisciplinary handover and at least one interprofessional verbal telephone handover with the available rural facility staff. When SCT members visit the rural facility on the same day as the patient being transitioned to that facility a face to face handover also occurs. Each handover is based on the ISBAR format with clear recommendations and goals and follow up appointment times.

Spoke site leadership and collaborative care
The SCT provides clinical leadership and works collaboratively with the existing rural facility and community health centre teams in each of the rural facilities. Collaborative practice includes SCT inpatient review with available rural clinicians to consider any changes to the inpatient's care needs and provide education for staff as required. Interprofessional education is also provided as required and is directly related to a specific inpatient’s care. The SCT visits at the rural facilities may include attendance at multidisciplinary team case conferences, inpatient assessment, treatment and documentation of patient centred care plans and goals in the medical record targeting the prevention of complications. These plans and goals were consistent with current evidence based practice and clinical guidelines.

Any SCT member could follow up the rural facility inpatient with a holistic view of the patient’s care needs. In the event of an inpatient requiring a specific discipline review, the appropriate referral is arranged with the SCT member or clinician within the facility.

When the SCT are off site there is the expectation that the existing teams provide the inpatient care. Specific strategies to maintain collaborative practice include telephone contact with inpatients and staff and e-mail communication with staff. The SCT case conference within the hub site mentioned earlier includes a once weekly discussion regarding the current rural facility inpatients’ progress and plans. Rural facility staff are also encouraged to seek advice from the SCT when required.

Sustaining Sub-Acute Care Priorities
The SCT priorities for inpatient care in both facilities are informed by the following:

- 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
- Agency for Clinical Innovation Orthogeriatric Model of Care
- Functional Independence Measure (FIM™)
- Annual Rural Facility Engagement Meetings
- Rural Inpatient Satisfaction Rounding
- National Safety and Quality in Health Service (NSQHS) Standards

In the context of providing governance for safety and quality within the rural facilities these tools are used by the team on a daily basis.

Results
2014-2015 Local SCT Data
The number of patients recorded on the SCT database that were transitioned from the hub site to the spoke sites during March 2014-March 2015 was 137.
The number of occasions of service recorded by the SCT members in IPM rural site clinics during March 2014-March 2015 was 383

The number of occasions of service recorded by the SCT members in IPM hub site clinics during March 2014-March 2015 was 1315

**Functional Independence Measure (FIM™) for Hip Fractures in Rural Facilities from the Australian Rehabilitation Outcome Centre (AROC) - Target Outcomes Report- SCT Rural Facilities- January -December 2014**

During January –December 2014 at least half of the 13 patients treated in the rural facilities, with valid FIM scores and completed episodes, achieved a FIM™ gain of 31 points or more. This is within the 2011 AROC functional outcome targets for Fractured Neck of Femur episodes within the set benchmark for “Target 3: FIM™ change”.

**Annual Rural Facility Engagement Meetings**

Three meetings were arranged by the SCT during Dec 2014-Feb 2015. Each meeting was with different neighbouring facility teams and based on a modified World Café Method10 and included the SCT and a neighbouring Rural Facility Team. Each meeting provided the opportunity for discussion regarding the following typical questions:

- In the last 12-18 months the Sub-Acute Care Team have implemented with your Rural Health Service multidisciplinary case conferencing on Mondays. What has this meant for your team?
- The Sub-Acute Care Team interfaces with your team throughout the inpatient’s stay. Describe how this impacts on patient care.
- In what ways can the Sub-Acute Care Team help to enhance inpatient care and support staff?

Following each meeting the recorded discussion and comments were identified as either operational or strategic. All follow up actions for either the SCT or Rural team were identified and documented. For example: “SCT to provide more information for rural facility staff and patient regarding the fracture clinic outcomes and potential rehabilitation unit admission”.

**Rural Inpatient Satisfaction Rounding**

Rural facility inpatient rounding occurs after at least 1 week of their admission to the rural facility. This rounding occurs either face to face or via telephone with questions including:

- Are you Happy with the care you are /have received in this facility?
- Have you had the opportunity to discuss your goals for your stay at this facility?
- Have you had the opportunity to discuss plans for on-going care or discharge from this facility?
- Do you have any other comments or concerns?

Nine rural facility inpatients were interviewed between December 2014 and April 2015. Nine out of nine reported they were happy with their care. Five out of nine patients reported they had discussed their goals for their stay within the facility and three out of nine reported they had the opportunity to discuss plans for on-going care or discharge from the facility.

**Conclusion**

The identification of key mechanisms to sustain sub-acute care management for complex rural facility inpatients, in the context of a hub and spoke model of rural multidisciplinary sub-acute collaborative care is likely to enable efficient and effective sub-acute care within rural facilities.

The key mechanisms, 'what matters most', identified by the SCT include:

- Hub and spoke site clinical leadership and collaborative care
• Comprehensive Multidisciplinary Handover
• Partnering with Patients and Carers
• Evaluation of the patient and staff experience to improve care
• Evaluation of inpatient functional gains to inform future care needs
• Implementation and evaluation of adherence to the sub-acute care type policy
• Ownership of local data systems to inform what care is provided

Policy recommendation
Hub and Spoke Multidisciplinary Specialist Clinical Care Coordination is to be provided for complex inpatient groups admitted to Rural Facilities for Sub-acute care

Acknowledgments
This paper regarding sub-acute care follows research made possible by the Western New South Wales Local Health District (WNSWLHD) and the New South Wales (NSW) Health Education and Training Institute- Rural and Remote Directorate (HETI), Rural Research Capacity Building Program (RRCBP). HETI financial assistance provided the author with access to clinical backfill and the opportunity to access academic education and support.

References
6. NSW Ministry of Health Policy Directive. Care Type Policy for Acute, Sub-Acute
Presenter

**Tracey Drabsch** is a senior physiotherapist in subacute care for the Western New South Wales Local Health District as well as an Adjunct Associate Lecturer at Charles Sturt University in Orange, New South Wales. She has extensive experience in the provision of evidence based sub-acute care for people in rural communities. Her most recently published original research, supported by the Health Education and Training Institute, provides insight into a hub and spoke model of care for orthogeriatric rural inpatients. With the challenge of reduced funding and resources Tracey has been required to consider "what matters most" to keep the delivery of inpatient sub-acute care happening in rural facilities.