

# The Power of Innovation

A health care system to meet our needs  
**NSW Health**  
 Symposium Oct 2012

## Collaboration for Rural Access to Specialised Care Category 5 - Working as a Team

### Introduction

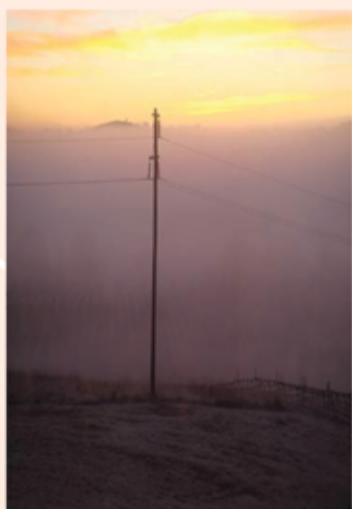
Timely access to specialized health services are more difficult for people with spinal cord injury (SCI) living in rural communities than for those in metropolitan areas. Additional to general workforce shortages of health practitioners, few rural health professionals are resourced to address the unique, complex needs of the SCI population.

### Aim

To improve access to health services and the quality of care provided to people with SCI living in rural and remote regions of NSW through collaboration, communication, network development and capacity-building.



Resources developed by RSCIS to treat Autonomic Dysreflexia, a potentially life-threatening medical condition in SCI, including NSW Health Alert, Treatment Algorithm, wallet-sized Z-card & DVD.



Sunrise in Orange in the Central West, of NSW. One of 46 centres visited by RSCIS.

### Method

- Rural Spinal Cord Injury Service (RSCIS) developed based on results of a pilot study (Middleton et al, 2008).

*Pilot study recommendations upon which RSCIS was developed are summarised in Table below*

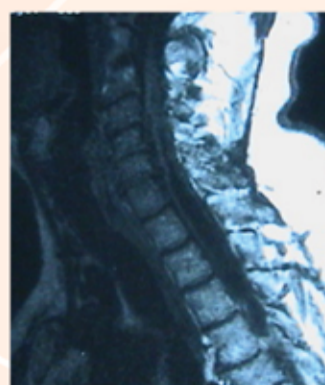
- Establish a **dedicated visiting specialist rural team**.
- Expand role of the local project workers (from 1 day/week in pilot study) to **full-time clinical coordination role**.
- Establish a **central coordination role**.
- Create a **medical specialist and multi-disciplinary rural clinic and education model** to build capacity in rural areas.

- Funded by NSW Health, comprising: Metropolitan multidisciplinary team, supporting 4 Rural SCI Coordinators within each rural Health Service, (now Local Health Districts).
- Hub and spoke model developed with coordinators based within local Brain Injury Rehabilitation Programs.



A simplistic representation of the 'hub and spoke' model providing connected and collaborative care between Spinal Outreach Service, Rural Coordinators and their local health subnetworks.

- Model articulated through service agreements, with SCI specific support provided by the Spinal Outreach Service Sydney.



MRI showing late development of a post-traumatic syrinx that if not detected can result in neurological deterioration with ascending sensory loss, increased weakness, increased pain and spasticity.

### Results

- Between 2007 and May 2012, 564 rural patients with SCI had comprehensive specialised medical and multidisciplinary assessments.
- 46 clinics (in 21 locations) were conducted across rural NSW, covering all rural LHDs.
- 6562 health issues identified and managed (example shown below).
- 46-59% of SCI patients new to service annually.
- 42 hospital admissions (8 locally, 34 to SCI units) coordinated for serious and potentially life-threatening secondary complications.
- Medical/multidisciplinary education sessions to 500 rural clinicians.
- More effective discharge planning with single local contact (rural spinal coordinator).
- Integrated network linking rural health professionals with metropolitan specialist SCI services for education, support, consultation and referral.
- Improved patient health, well-being and psychosocial outcomes.

- Adjustment counselling & support
- Stress & pain management
- Carer support
- Relationships, sexuality & intimacy
- Mental health disorders (depression, anxiety, post-traumatic stress)
- Financial advice and benefits

*Psychosocial interventions (n=481) addressed a range of issues, including those listed opposite.*



Clinics are held in hospitals or health facilities where possible.

### Conclusion

Promoting local expertise, knowledge and ownership of issues and solutions is crucial for creating successful and sustainable networks.

Clear linkages established between the rural sector, Spinal Outreach Service and NSW Spinal Cord Injury Units which promote a model of integrated care, with recurrent funding for rural spinal coordinators supported locally.

### Reference:

Middleton JW, McCormick M, Engel S, Rutkowski SB, Cameron ID, Harradine P, Johnson JL, Andrews D. Issues and challenges for development of a sustainable service model for people with spinal cord injury living in rural regions. *Arch Phys Med Rehabil* 2008; 89: 1941-7.



### Acknowledgements

Staff of the Spinal Outreach Service.  
 Rural Spinal Cord Injury Coordinators and BIRP Managers.  
 Spinal Specialists of the NSW State SCI Service.  
 Motor Accidents Authority of NSW  
 Our Host Organisation, the Royal Rehabilitation Centre, Sydney