

The Back2Work Project

**Early intervention for people with
spinal cord injury:**

**Creating a bridge from injury to
employment**

Today's session:

1. Introducing the Back2Work Project – our service model
2. Why early intervention?
3. Results... so far...
4. Spinal cord injury (SCI) “101”
5. Functional impact of SCI on work
6. Applying our learning and research – suggested engagement and support strategies for providers
7. Meet my participants

Introducing Back2Work

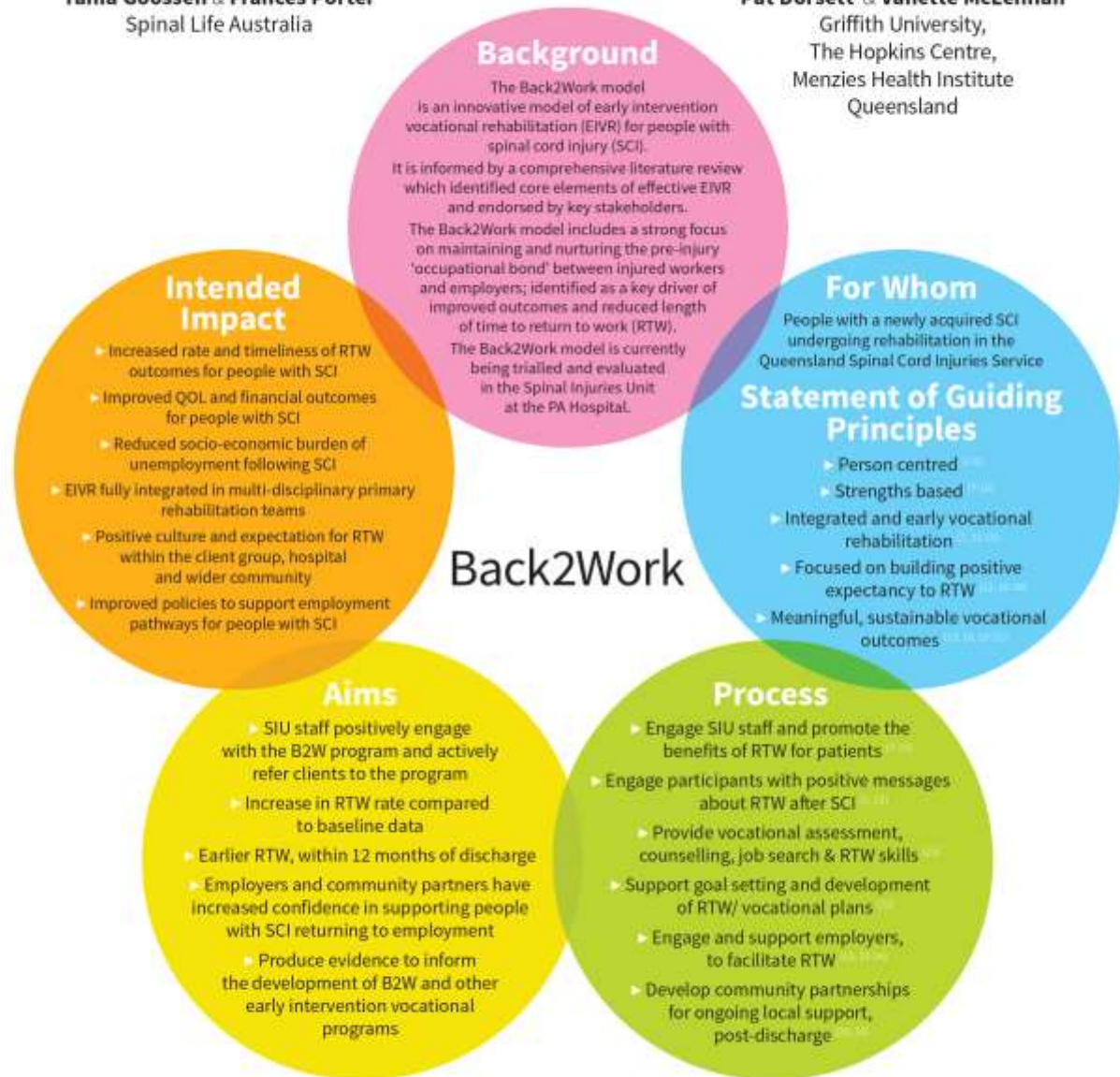
- Official commencement February 2017
- Pilot Project, funded for 3 years of active program
- Located in Qld Spinal Injuries Unit – PA Hospital (40 beds)
- Tertiary qualified Vocational Rehabilitation Counsellor (+1)
- Free to participants, employers, and insurers
- Collaboration between Spinal Life Australia, Griffith University, Metro South Health and Motor Accident Insurance Commission

Service model

Queensland's first evidence-based early intervention vocational rehabilitation model for people with spinal cord injury

Tania Goossen & Frances Porter
Spinal Life Australia

Pat Dorsett & Vanette McLennan
Griffith University,
The Hopkins Centre,
Menzies Health Institute
Queensland



Who is Back2Work for?

- People with newly acquired spinal cord injury only
- Inpatients of Qld Spinal Injuries Unit or TRP only
- Want to discuss “work” – very broad definition

Guiding principles

- Person-centred, strengths based assistance – choice & control
- VRC role integrated into multidisciplinary clinical team – not just a visiting service
- Increasing positive expectations about RTW for people with SCI – hope and motivation
- Meaningful, sustainable, timely outcomes - thinking outside the square, do what you love, when you're ready
- Developing community capacity – including training
- Good work is good for us – in a huge range of ways

Process - what do we do?

- Engage with and educate hospital staff – all disciplines
- Meeting people “where they’re at”
- Positive assistance – promote RTW, education, broader vocational engagement (sharing stories, health benefits)
- Vocational/career counselling
- Plan pathways to work (future goals), and RTW
- Engage, educate and support employers – every retention option – pre-injury occupational bond and window
- EAF funding assistance
- Links to local providers for ongoing support (you!) – full training
- Liaison with stakeholders – insurer / NDIS / family / others

Aims & Impact

- ✓ Acceptance in the hospital – staff, patients, management – positive culture about the place of work in rehab process
- ✓ More people returning to work, at an earlier point
- ✓ Improved quality of life and financial , reduced unemployment
- ✓ Confident employers & community partners
- ✓ Evidence supports Back2Work and other potential EIVR programs

- ✓ Watch this space!!!!

Quick participant demographics:

- Injury levels vary from C3(A) to L2(D)
- Roughly 50% cervical injuries (quadriplegia)
- Hospital stay 6 weeks -15 months

- Approximately 40% lived in Brisbane at time of injury
- “Inclusive” – co/premorbid ADHD, dyslexia, epilepsy, bipolar, PTSD, CP, CALD, indigenous, LTUE, A&D, VLSE, vision loss

- Pre-injury – 65% employed, 15% self employed, 15% unemployed, 5% not looking for work (study / retired / parents / carers)

- Wide range of pre-injury jobs
- Majority (over 40%) have no formal qualifications; trade (30%); Bachelor or higher (15%)

Research and results so far...

- 18 months in... strong findings for effectiveness, research tracking individual outcomes (up to 2 yrs post-discharge)
- 50 participants in research (voluntary)
- Over 100 patients have “received the message” about Back2Work
- 75 people engaged in full voc rehab program – (12 still in hospital)
- 24 people returned to work so far - 4-40 hpw
- Hugely diverse jobs (cattle station hand, welder, IT manager, self employed electrician, youth worker)
- 9 people engaged in study (Cert III – University)
- 5 people engaged with DES, 3 with private VR providers
- ~50% outcome rate – and nowhere near 2 year window
- Huge increase in positive RTW expectations hope is so important!!!!

Why early intervention?

Meet Rick:

- 58 year old, self employed horse whisperer (trainer)
- Also runs cattle on 400 acre property, 40mins from nearest small town in Central Qld
- Complete paraplegia (L1) from fall
- Uses manual wheelchair for all mobility
- 6 months in Spinal Unit (Brisbane)
- Never used computers, labouring / farming work only
- Horse training is his passion, “lives for the land”

1 min partner discussion:

One year after his injury, what do you think Rick's life would look like?

Rick's journey with Back2Work

– 12 months post-injury



Credit – Channel 7 News

Why early intervention?

Rick:

- Back at work less than 6 months post-injury
- Independently running farm by 12 months
- >\$100,000 of EAF equipment – incl Action Trackstander, custom work boots, modified saddle, cooling vests, Kubota ATV with hand controls, ride-on mower with hand controls, emergency call system

Alternatives?

Loss of farm; lifetime on benefits; mental and physical health costs; other farm workers' jobs – community impact

- *Cost of Back2Work program met in 1 participant!*

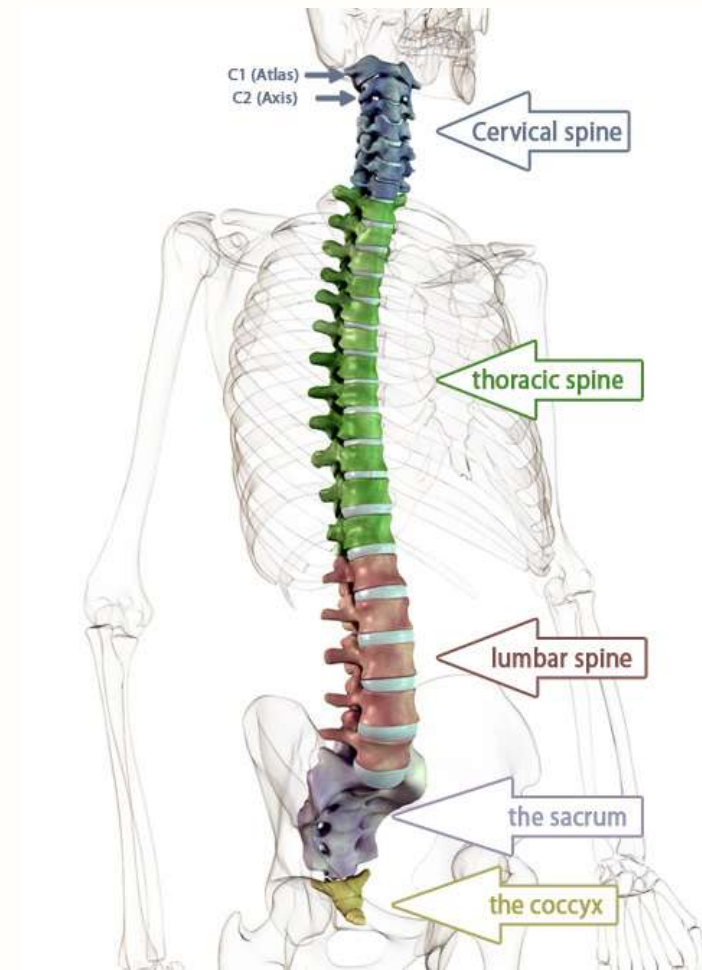
Spinal Cord Injury...

The basics

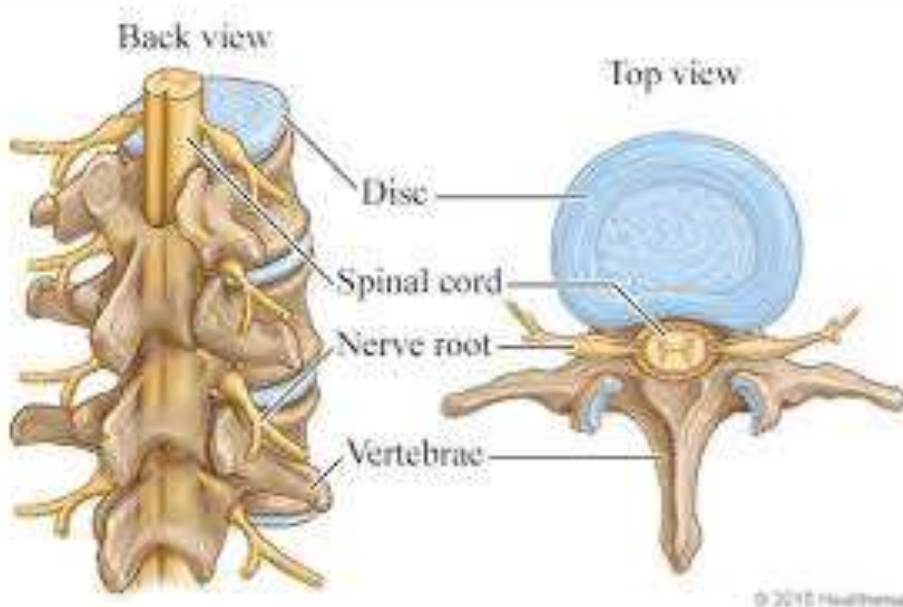


The spine:

- 33 individual bones (vertebrae)
- Spinal cord passes through a central opening in each vertebra
- Protects the spinal cord, supports the head and provides flexibility



The spinal cord



- Extension of brain – central nervous system
- Extremely fragile (banana)
- Thousands of nerve cells & fibres, like a wiring harness – little finger
- Send messages to muscles & other body structures, and transmit back to brain
- Once cord cells die, they do not regenerate

Spinal cord injury:

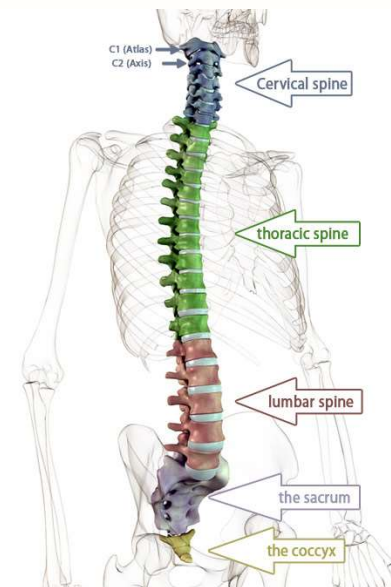
- Compression or trauma to cord – usually vertebral dislocation
- “Sever” is very rare.
- All function below the level of injury could be affected
- Complete / incomplete injuries
- Recovery trajectory still ~2 years – things can change dramatically
- **EVERY INJURY IS DIFFERENT**

Quadriplegia / tetraplegia - cervical cord damage, potential paralysis & loss of sensation in all four extremities

- Eg injury between 5th & 6th cervical vertebrae is **C5/6**

Paraplegia - thoracic / lumbar cord damage, potential paralysis & loss of sensation from the pelvis down

- Eg injury at the first lumbar vertebrae = **L1/2 (L1)**



Quick facts about SCI:

Quick SCI facts:

- 90 people a year in Qld (~400 nationally)
- 75% aged 15-65
- 80% male, 20% female
- Average LOS in hospital is 5 months (range 6 weeks – 1 year+)
- ~50% regional and rural – travel and access to services

- 80% traumatic, 20% non-traumatic
- Road trauma (45%), falls (25%), water related (10%), sports (10%)
- 50% quadriplegia, 50% paraplegia

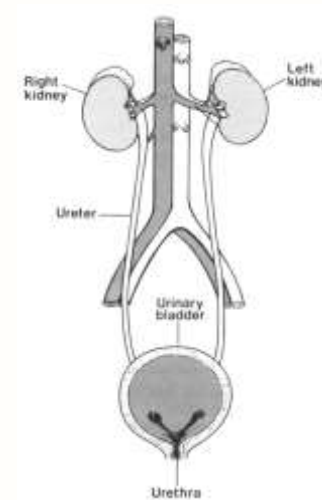
- Young men aged 16 – 30 are at greatest risk of SCI. **Why?**
- Increasing rates of older adults (specifically older men)
- Older adults at greater risk of complications, are generally hospitalised for longer

Functional impact

- Bladder, bowel & sexual function – almost everyone
- Paralysis
- Sensation
- Fatigue
- Respiration
- Temperature regulation
- Impact on other body parts
- Autonomic dysreflexia
- Pressure injury / sores
- Psychological adjustment

Bladder management

- Sufficient hydration essential
- Access to drinking water at work / camelbak
- It's gotta come out! Regularly!!
- Sterile equipment - clean place to catheterise
- Shelf is ideal, esp if hand function impaired
- UTI – work impact



Bowel Management

- Involuntary, very individual
- Probably single most important thing for confident RTW
- Well established routine is essential (weeks of practice)
- Changes to routine (eg early start) - weeks to adjust
- Plan for accident at work – mobile phone; designated buddy; pre-packed bag with change of clothes and essentials; place to clean up (shower)
- Discuss plan sensitively with employer - leave work station at short notice

Sexual function

- Technically no direct impact on work, but often biggest source of emotional distress, esp given demographic
- May be very difficult for the person to discuss
- Sexuality is important to everyone – specialist counselling and assistance available (NDIS?!), youtube, Peer Support programs and specialist closed online forums

Paralysis – loss of voluntary movement

- Equipment solutions
- Built environment and equipment is key – workplace mods
- Transfer ability – has a huge impact on independence
- TRANSPORT – self drive, public transport or taxis – reliability.
- Return to driving doubles chance of successful RTW rate
- Car parking – keeping dry from car to office; heat (shaded area?)

Sensation

- Loss or altered sensation – pain, hot/cold, hypersensitivity, touch
- Impacts on pressure management
- A body map can help understand sensory changes

Chronic pain

- Affects cognition, concentration, memory, and emotional lability
- Medication may also affect or compound the above
- Can be extremely debilitating – more likely with more incomplete injuries (the down side of sensation) – esp neurogenic pain
- CBT, mindfulness & meditation – MHCP from GP
- Pain clinics; or review with Spinal Unit specialists

Fatigue

- From the SCI itself, medication, pain, and increased general effort required for everyday tasks
- May need flexibility of meeting times – early morning not usually great (+b&b)
- Exercise can help - balance
- Stepped introduction of new activities
- Gradual RTW to build tolerance – work is different!
- Energy conservation strategies – more demanding tasks in morning or after rest
- Equipment to reduce fatigue – power assist devices, limiting transfers, work area setup (eg printer)
- Part time hours may also help

Respiration

- T12 up - ability to breathe deeply and cough affected
- C4 up – involuntary respiration may be affected – ventilation
- Exposure to colds or flu – significant risk of pneumonia / other respiratory complications – CAN BE FATAL
- Flu season – reduce exposure. If you're unwell, stay away!
- May impact ability to attend regular appointments away from home

Temperature regulation

- Reduced ability to regulate body temperature below level of injury – sweat / shiver
- Risk of hypothermia / heatstroke if not managed
- Excessive changes may trigger autonomic dysreflexia (>T6) – eg getting in & out of car, air-con office to outside (Qld!)
- Air conditioning, heating, cooling vests, fan/spray, covered car park - EAF
- Employer – dress code (beanie), assistance to remove jacket or jumper

Strain on other body parts

- Human body not designed to be propelled by arms or constantly lifting body weight
- Shoulders, elbows and wrists – pushing & transferring
- Manual wheelchair users – balance incidental exercise with possible overuse and fatigue
- Reduce number of transfers wherever possible (also fatigue – incid ex)
- Task design and adaptive equipment - EAF

Autonomic Dysreflexia – T6 & above

A LIFE THREATENING MEDICAL EMERGENCY

Cause:

- Autonomic system overdrive – kinked catheter tube, ingrown toenail, skin or UT infection, constipation
- Sudden, extreme increase in blood pressure

Symptoms:

- Severe pounding headache, altered vision, flushing / blotching of skin, sweating, chest tightness, breathing difficulty

Treatment:

- Check for trigger and relieve if possible
- Assist person to sit upright, loosen tight clothing, monitor blood pressure every 5 mins if possible
- If symptoms do not resolve or you cannot find a trigger – call 000 and advise of a potential episode of Autonomic Dysreflexia.
- Keep card handy!

Pressure Injuries

Causes:

- Sensation = unconscious position adjustment
- Unrelieved pressure – cell death

Treatment:

- Best treatment is **prevention!**
- Regular skin checks are essential (blanching)
- Once a pressure area develops, all pressure must be removed until completely healed
- Buttocks are common areas – no sitting!
- Can require surgical intervention and years of healing
- Huge potential impact on work
- Stage 1 pressure injury:
- **If you are at all squeamish, please look away now**



Severe pressure injuries

Stage 4 pressure injury:



Poorly treated pressure injuries can result in permanent scarring, gangrene, septicaemia (blood poisoning) and if untreated, even death.

Psychological and emotional adjustment

- Higher prevalence of PTSD, anxiety & depression. **Individual!**
- Resilience and coping – some just get on with it, others never do
- Grief process - can take time – watch for emerging patterns of poor coping behaviour, and address early and honestly
- Big service gap. Mental health care plan / EPC – GP, mindfulness, peer support networks.
- Allow time to develop trust, limit staff changes / numbers, give clear information, treat as a partner, explain your role and what is required or expected of the person – esp new to disability world
- Anniversary dates and other triggers – discuss sensitively
- Suicide is small but real risk – ambulant, nerve pain, UE, male, labour intensive work history, low education, limited support

Strategies - engagement

New to system. And disability. It can be scary & overwhelming!

- Centrelink is a huge barrier by itself
- DES model is complicated – can be difficult for people to see that the benefits outweigh the barriers
- Take time to talk before registration – WIIFM? “Sell it” & explain your role
- Readiness - may want to re-engage at later time

- Positive attitude towards exploring what’s possible
- Partner – you are on their side, to support them
- Recognise their experience and expertise – adult learners
- Be flexible with appointments
- Don’t assume family / partner involvement - independence
- Ask questions!! People may not offer information – coping / assumption
- Newly injured people often still working out how to do things and get around – anxiety in new situations / places is common
- People with SCI can be great employer advocates - themselves & others 😊

Strategies – job search & prep

- Involve them – explain, don't unconsciously patronise
- Voc counselling – transferable skills, focus on knowledge or interest – real results 😊
- Function can change dramatically post-discharge - FCE
- Ensure personal care routine is solid – tactful questions
- Be alert to changes in behaviour – window of high motivation / hope / engagement
- Train job search skills (really!) - self marketing can be v successful
- Provide resources to explain your service / support to employers
- Personal / professional networks often still intact – leverage

- Thinking outside the square – **don't let preconceptions get in the way of a great job match!!**
- Smaller communities (industries) can be great innovators

- This is a group to focus on for intense support > quick placement

Strategies – placement

- “Emergency plans” – transport / bowel accident / pressure area / Autonomic Dysreflexia
- Ideally be able to demonstrate adaptive equipment (Dragon)
- Negotiate flexible hours, extra time (eg +10mins on break), some work from home, more demanding tasks in mornings
- If job has been self-sourced, ask before assuming employer involvement is ok - protective
- Employer education – person to deliver, or 3rd party?
- Content check – what do they want you to share / not?

EAF – huge benefit, often critical to success for this group

- Identify 1+ barrier – WSA. You don't need all the answers!!
- Google / ask the person for their ideas
- Know the guidelines & prepare your justification 😊

Strategies – post-placement

- Once access and equipment are sorted, people often become independent quickly
- Rapport and relationship is crucial – impact of staff changes
- Often difficult to engage – working!!!
- Let them know your requirements / expectations in advance – eg evidence for hours worked
- Check if ok to contact through employer / partner – early & reasons

- Provide **written info** on future supports you can offer (WorkAssist, EAF triggers, post-placement support etc)
- Include how / when to initiate re-engagement (eg change of duties/job, pressure area req hospitalisation, any big increase in pain / fatigue at work)

Strategies - employer support

- Don't assume it's wanted... but...
-
- Modifications & high level injuries - higher involvement
- Some no employer contact at all... and that's ok
- Examples of amazing employers!!!
- Reasonable adjustment – it's ok to ask
- Practical – continue engagement pre-RTW (cake!), social / xmas parties – suggest local accessible team activities
- Education could cover sensitive issues – continence & accidents (plan), UTIs, pressure areas, AD, chest infections (cold & flu), hypersensitivity, facing people.
- Behaviour / coping / mental health – adjustment questions – what is due to injury and what's performance / bad attitude?
- Emotional responses (“normal” grief) vs emerging mental health issue
- If your support likely to be short, advise employer of how / when to contact

Meet Josh....

- Has a complete T11 (ASIA A) injury, from bilharzia infection in Africa
- Youth Pastor – camping, beach activities, school visits, fun stuff!!!!
- Very supportive employer – GRTW within a week of discharge
- EAF funded X8, trailer, transfer bench, portable toilet/shower chair
- Now working full time – “more effective than before”



Meet John....

- Has incomplete L1 (ASIA B) injury, fall from a hay bale
- Self employed, 3rd generation cane farmer - 2 properties near Townsville
- Highly motivated to return to work – young family, elderly parents
- EAF funding for 4WD power wheelchair, digital 2-way, custom safety boots, work vehicle mods, access to tractors & forklift, cooling vests
- Partial return to work on arrival home – full hours within 6 months (equipment)



Meet Chris....

- Has complete C4 (ASIA A) injury from a motor vehicle accident
- Literacy facilitator in remote Aboriginal community
- Highly motivated to return to work – model for his mob
- NIISQ funding - Cert III in Business; full suite of adaptive computer equipment
- Job offer with local Council while still in hospital - guiding role, potential Liaison Officer



Thanks:

The Back2Work Project is proudly supported by the Motor Accident Insurance Commission (Qld), and delivered by Spinal Life Australia in partnership with Griffith University and Metro South Health (Princess Alexandra Hospital).

And thanks DEA for having me today 😊

Stay in touch!

Queensland or Northern NSW providers?

I'd love to get your contact details, as I have people returning home all over the state. Back2Work can provide free staff training and a full handover when a Back2Work participant registers.

My details: Tania Goossen, Senior Vocational Rehabilitation Counsellor
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