

A Model for Optimising Return to Work Outcomes after Traumatic Brain Injury



TAC Return to Work Support

- Supported employment enhances outcomes (Wehman, 1990)
- Wage subsidy paid to employer
- Amount paid is based on productivity
- Compensates employer for reduced productivity and reduces pressure on clients
- TAC provides workcover insurance for duration of program

Early Intervention

- Malec et al (1993) found early intervention improved RTW outcomes
- RTW input can occur during inpatient stay
- Streamlined approach from inpatient to community integration team and vocational rehabilitation
- Regular review process with multi disciplinary team at one site

3 stages of RTW after TBI

1. Planning the program
2. Monitoring the program
3. Ongoing support



Stage 1 –Planning the RTW program

Involves:

- timing of RTW
- initial interview
- employer contact
- worksite assessment
- duty selection

Factors Affecting Timing of RTW

- Severity of TBI including physical issues
- Occupation & cognitive and physical demands
- Client's motivation to RTW
- Medical and therapy commitments
- Employer co-operation & availability of suitable duties

Referrals for Vocational Rehabilitation

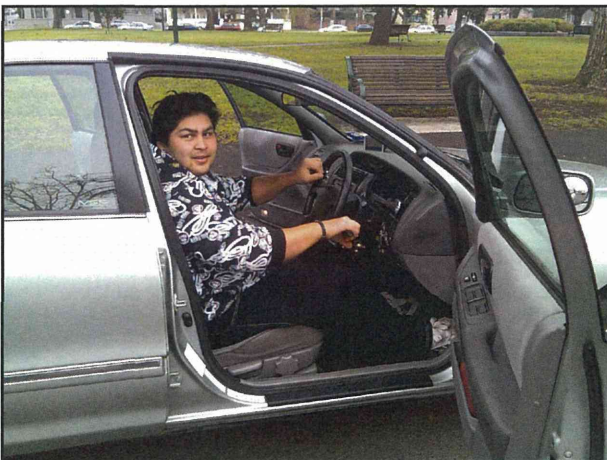
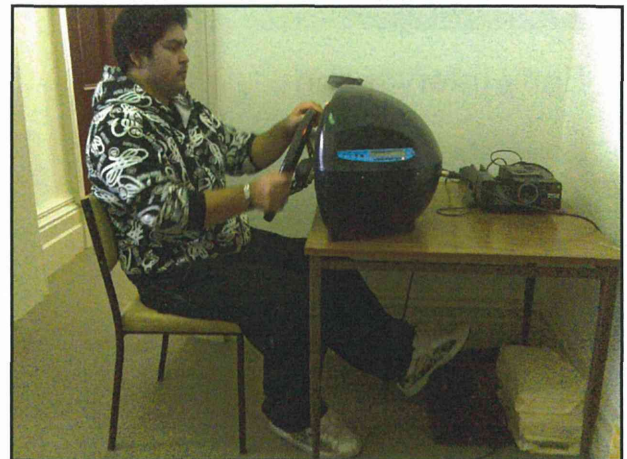
- Employed prior to injury
- Unemployed as a result of injury
- Adolescents/Students with minimal work experience

Initial Interview

- Current physical and cognitive issues
- Pre-injury duties, hours of work
- Brief work history
- Current daily routine
- Client perception of return to work process
- Client education about RTW process & timelines
- Employer contact
- Transport to and from work

Transport to Work

- Public transport
- Taxi transport
- Return to driving may occur after 3 months
- Occupational Therapy driver assessment
 - off road
 - on road



Employer Contact

- Discuss with client what will be disclosed
- Mild TBI – discuss in general terms
- Severe TBI – provide more detail, consider safety issues
- Education of co workers

Worksite Assessment

- Assess physical demands of work
- Assess cognitive demands of work
- Identify potential safety issues
- Hours of work & duty selection
- Employer education re common problems
- Medical clearance

Physical Demands

- Access and layout of workplace
- Equipment used
- Physical demands of job
 - visual requirements
 - lifting, bending, standing, walking, ladder use
 - speed of work
 - sense of smell

Cognitive Demands of Work

- How much new information is to be retained?
- Is prolonged concentration required?
- Is accuracy and attention to detail required?
- Is the ability to multi-task required?
- What communication skills are required?
- Is the work self paced or is it driven by demand ?
- Is planning and problem solving required?
- Is supervision of others required?
- What are the ramifications of any mistakes?
- What hours are appropriate ?

Duty Selection

- Return to familiar work if possible
- Identify least demanding and most structured tasks
- Minimise distractions and need to multi task
- Reduce responsibilities
- Ensure duties are realistic for planned hours
- Is supervision required?
- Identify safety concerns

Review Process & Report Writing

- How will feedback be obtained?
- Who will be involved in reviews?
- Plan first 4 weeks.
- Keep report simple!
- Include hours, restrictions, recommendations
- Provide report to client, employer, treating team and insurer.

Stage 2 - Monitoring the Program

4 areas to consider:

1. Hours and duties
2. Develop compensatory strategies
3. Emotional issues
4. Employer and client education

Upgrading hours & duties

- Consider fatigue, cognitive issues
- Therapy & medical commitments
- Work/life balance
- Employer requirements



Develop compensatory strategies

The 3 most common cognitive issues affecting work:

- Fatigue – grade hours and days of work
- Memory- checklists, organiser
- Speed of thinking – one task at a time

Emotional monitoring

- As insight develops, anxiety and depression may increase
- Ensure psychological support is available

Employer and Client Education

- Normalising fatigue and cognitive effects
- Reinforce RTW as a step by step process

Case Study 1

- 36 year old pedestrian with TBI, # L tib/fib
- PTA of 49 days
- Biochemist – research role
- Cognitive issues included fatigue, poor memory, reduced self monitoring, impulsivity, poor planning & dysarthria
- No physical issues

Return to Work Plan

Assessed cognitive demands and safety concerns

- Commenced on 12 hours per week, 7 months post injury
- Computer based tasks, familiarise with project
- No lab work due to dangerous chemicals
- 100% vocational subsidy to employer for 4 weeks

Monitoring of Program

- Reviewed every 4 weeks
- Hours gradually increased
- Duties upgraded to lab work but with restrictions
- Difficult to obtain feedback – used a ‘buddy’
- Vocational allowance reduced to 80% of hours worked
- Workcover helpful for employer

Progress

- Week 14, colleagues noted problems with memory, disorganisation, reluctance to use strategies
- Feedback given
- Week 20, development of insight and started to use compensatory strategies
- Vocational allowance gradually reduced
- Monitored for 14 months

3 year review

- New employer, disclosed condition
- Ongoing issues with memory, fatigue, organisation, speech and irritability
- Developed more strategies
- Maintained reputation
- Changed work habits

Case Study 2

- Mild TBI
- 29 year old, LOC 10 minutes, PTA 1 day
- Issues with fatigue, concentration, diplopia, word finding
- Team leader in IT industry
- Multi tasking, meeting deadlines, supervision, long hours
- Keen to be back at work

Return to work plan

- RTW 4 months post accident
- No driving due to vision – taxis
- 3 half days
- Alternate role, one project, self paced
- No phone calls, no supervision, no deadlines
- 100% wage subsidy for 4 weeks to reduce pressure

Monitoring of Program

- Week 4 - fatigue, slowness in thinking, poor memory, anxiety and depression
- Referred to psychologist
- Week 8 – Endurance improved, using strategies for fatigue, memory & word finding
- Week 10 – cleared to drive
- Vocational allowance gradually reduced
- Monitored for 21 weeks

2 year review

- Working full time
- Team leader
- Continues to report memory issues, fatigues more quickly and slower speed of thinking. Still uses strategies

Stage 3 - completion

- Insight continues to develop and client needs to consolidate use of strategies
- Support required if job demands change
- Need for occasional long term follow up



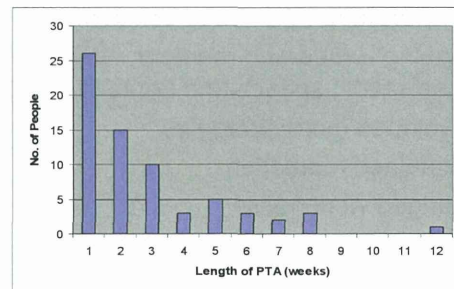
TBI Outcome Data for Model

- Pilot Study - 69 clients with TBI
 - 54 men, 15 women
- MVA or work injury
- All employed prior to injury
- All participated in RTW program
- Those with physical limitations affecting work were excluded



Injury Severity measured by PTA

Mean length of PTA – 17 days
Range of 1 – 90 days

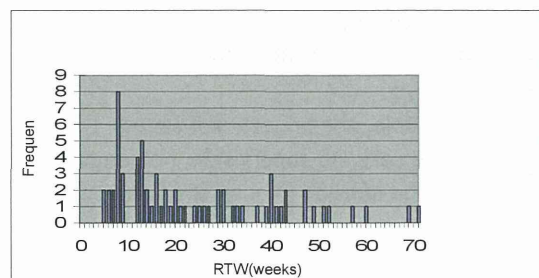


TBI Vocational Data

- Average commencement of RTW post injury was 23 weeks, but range was 8 to 47 weeks
- Mean duration of program was 24 weeks.
 - Shortest program – 5 weeks
 - Longest program – 117 weeks

Duration of Program

Mean duration was 24 weeks



Comparison of TBI & Orthopaedic Vocational Outcomes

- Orthopaedic group had physical issues, no TBI, access to same RTW program
- Mean duration of RTW program was 33 weeks compared to 25 weeks in TBI group
- Presence of orthopaedic injury contributed significantly to time taken to RTW

Comparison of TBI & Orthopaedic Vocational Outcomes

- 97% of TBI group returned to work compared to 91% of orthopaedic group
- 74% of TBI returned to pre injury hours compared to 80% of orthopaedic group
- 23% of TBI returned to modified hours or duties compared to 11% of ortho group

Return To Work Results

Of the 2 unsuccessful TBI clients:

- One was 70 and chose to retire.
- The other was working full time at a 2 year review)

Other Results

- No correlation between PTA and length of program
- Skill levels of subjects were measured using ASCO
(Australian Standard Classification of Occupations)
- 9% returned to work at a lower skill level following TBI
- Many report ongoing cognitive issues at work

2 & 3 year reviews

- 45 of the 69 subjects responded to MERRC Longitudinal Follow-up
- 16 of group were 2 years post injury - All were still working
- 29 were 3 years post injury -23 were still working
- 6 not working due to retirement, maternity leave, left the country and 2 due to cognitive and behavioural issues. One unknown.

Costs of Model

- 'Top up pay' in addition to employer contribution – capped at \$880 per week
- Fees for RTW specialist – 3 to 4 hours per review. 30 hours over average program length of 6 months = \$2000.00
- Allowance to employer varies
- Workcover insurance

Benefits of Model

Enables:

- early return to work
- real life work conditioning
- maintenance of employment
- time for adjustment to cognitive changes
- allows an individual approach
- applies to mild and severe TBI and early or later interventions post injury

Return to work specialist

- Important for RTW specialist to have knowledge of brain injury
- And to understand the specific challenges in RTW after TBI



表1 これまでの主な若年性認知症実態調査

調査地域	調査年	実施主体	調査方法の概要	主な調査項目	調査対象
全国	2006～2008年	厚生労働科学研究費補助金「若年性認知症の実態と対応の基盤整備に関する研究」班	<ul style="list-style-type: none"> ●保険・医療・福祉関係施設へのアンケート調査 ●介護家族に対する生活実態調査(アンケート調査) 	<ul style="list-style-type: none"> ●保険・医療・福祉関係施設へのアンケート調査:若年性認知症患者数、原因疾患名等 ●介護家族に対する生活実態調査:患者の症状、介護者の抑うつ及び介護負担度、経済負担、雇用等 	<ul style="list-style-type: none"> ●保険・医療・福祉関係施設へのアンケート調査:熊本県、愛媛県、富山県、群馬県、茨城県の全域における認知症の者が利用する可能性がある全ての保健・医療・福祉関係施設・機関、横浜市港北区と徳島市においても類似の方法 ●介護家族に対する生活実態調査:全国の若年性認知症の家族会会員等
北海道	2012年	北海道、北海道認知症の人を支える家族の会	<ul style="list-style-type: none"> ●第1次調査(医療機関・介護事業所へのアンケート調査) ●第2次調査(本人・家族へのアンケート調査) ●第3次調査(本人・家族へのヒアリング調査) 	<ul style="list-style-type: none"> ●第1次調査:若年性認知症患者数、原因疾患名等 ●第2次調査:本人の症状、治療状況、本人及び家族の生活実態等についての集計 ●第3次調査:生活実態のニーズについて詳細に把握 	<ul style="list-style-type: none"> ●第1次調査:道内の医療機関447か所、在宅系事業所1,888か所、施設・居住系事業所1,760か所 ●第2次調査:第1次調査で若年性認知症の人がいると回答した496の医療機関・事業のうち重複を除く786人及び北海道若年性認知症の人の家族の会12人の、計780人 ●第3次調査:第2次調査で回答を得た196件のうち同意書の提出のあった53組中の25世帯

札幌市	2007年	札幌市、北海道若年認知症の人と家族の会	<ul style="list-style-type: none"> ●第1次調査(保健医療福祉機関へのアンケート調査) ●第2次調査(本人・家族へのアンケート調査) ●第3次調査(本人・家族へのグループインタビュー・個別インタビュー) 	<ul style="list-style-type: none"> ●第1次調査:若年性認知症患者の有無、疾患名等 ●第2次調査:日常生活や介護の実態 ●第3次調査:生活上の思いや困難、ニーズの詳細 	<ul style="list-style-type: none"> ●第1次調査:市内の保健医療福祉機関 ●第2次調査:第1次調査で回答があった在宅の若年認知症の人と家族 ●第3次調査:第2次調査で同意を得た本人および家族
青森県	2013年	青森県	<ul style="list-style-type: none"> ●1次調査(医療機関・介護事業所・障害福祉サービス事業所・精神障害者の受け入れ可能な障害福祉サービス事業所・相談サービス事業所を対象としたアンケート調査) ●2次調査(本人・家族・介護者へのアンケート調査) 	<ul style="list-style-type: none"> ●一次調査:【医療機関】若年性認知症の利用者の有無・人数・認知症疾患名等、認知症専門外来開設の有無、認知症への積極的な対応の有無、認知症の診療や専門医療機関との連携体制に関する意見等【介護保険事業所、障害福祉サービス事業所、相談サービス事業所】若年性認知症の利用者の有無・人数、認知症疾患名等、利用者の紹介元、利用者への支援状況、若年性認知症者受入れの可否・個別対応の可否、受入困難な理由、サービス提供にあたっての課題・支援等 ●二次調査:本人の状況(現在の年齢、性別、主な生活場所、診断名等)、異変の気づき～受診・診断～現在の通院・サービス利用状況等、就労状況(就労の有無、就労形態、現在の就労状況等)、経済状況、介護者の状況、現在に至るまでに最もほしいと感じた情報、要望など 	<ul style="list-style-type: none"> ●一次調査:県内の医療機関・介護事業所・障害福祉サービス事業所・精神障害者の受け入れ可能な障害福祉サービス事業所・相談サービス事業所、計2,826か所 ●二次調査:若年性認知症の本人(一次調査の対象医療機関、事業所を平成24年4月1日から平成25年3月31日までの1年間に利用した者)・家族・介護者