

Vocational Intervention Program (VIP)

The Agency for Clinical Innovation (ACI) works with clinicians, consumers and managers to design and promote better healthcare for NSW. It does this by:

- **service redesign and evaluation** – applying redesign methodology to assist healthcare providers and consumers to review and improve the quality, effectiveness and efficiency of services
- **specialist advice on healthcare innovation** – advising on the development, evaluation and adoption of healthcare innovations from optimal use through to disinvestment
- **initiatives including guidelines and models of care** – developing a range of evidence-based healthcare improvement initiatives to benefit the NSW health system
- **implementation support** – working with ACI Networks, consumers and healthcare providers to assist delivery of healthcare innovations into practice across metropolitan and rural NSW
- **knowledge sharing** – partnering with healthcare providers to support collaboration, learning capability and knowledge sharing on healthcare innovation and improvement
- **continuous capability building** – working with healthcare providers to build capability in redesign, project management and change management through the Centre for Healthcare Redesign.

ACI Clinical Networks, Taskforces and Institutes provide a unique forum for people to collaborate across clinical specialties and regional and service boundaries to develop successful healthcare innovations.

A priority for the ACI is identifying unwarranted variation in clinical practice and working in partnership with healthcare providers to develop mechanisms to improve clinical practice and patient care.

aci.health.nsw.gov.au

Agency for Clinical Innovation

67 Albert Avenue
Chatswood NSW 2067

PO Box 699 Chatswood NSW 2057

T +61 2 9464 4666 | **F** +61 2 9464 4728

E aci-info@health.nsw.gov.au | aci.health.nsw.gov.au

(ACI) 180663

ISBN 978-1-76000-982-3(o)

ISBN 978-1-76000-983-0(p)

Produced by: Brain Injury Rehabilitation Directorate (BIRD)

Further copies of this publication can be obtained from the Agency for Clinical Innovation website at aci.health.nsw.gov.au

Disclaimer: Content within this publication was accurate at the time of publication. This work is copyright. It may be reproduced in whole or part for study or training purposes subject to the inclusion of an acknowledgment of the source. It may not be reproduced for commercial usage or sale. Reproduction for purposes other than those indicated above, requires written permission from the Agency for Clinical Innovation.

Version: 2

Date Amended: September 2018

Trim: ACI/D18/4389

ACI_0108 [09/18]

© **Agency for Clinical Innovation 2018**

Glossary

ABI	Acquired Brain Injury (refers to any damage to the brain that occurs after birth)
ACI	NSW Agency for Clinical Innovation
ADE	Australian Disability Enterprise – organisations funded within the NDIS to provide supported employment
Aphasia/dysphasia	Difficulty understanding or expressing language as result of damage to the brain
Apraxia/dyspraxia	An inability to coordinate movements that is not due to damage to the muscles needed for the movement
Ataxia	Abnormal uncontrolled movements due to loss of muscle co-ordination.
BIRD	Brain Injury Rehabilitation Directorate, ACI
Brain stem	The bottom part of the brain that sits on top of the spinal cord and controls basic life support systems. Sometimes damaged in severe brain injury
CANS	Care and Needs Scale
Cerebellum	Part of the brain that controls coordination
Cerebral	To do with the brain
Cerebrovascular	Relating to blood vessels of the brain. A stroke is a cerebrovascular accident (CVA)
Coma	The deepest level of unconsciousness
Contusions	Bruising
Cranioplasty	Repair of damage to the bone in the skull
Craniotomy	Removal of part of the bone in skull
CTP	Compulsory Third Party insurance scheme (in NSW)
CT scan	Computerised Tomography – an X-ray of the brain shown in slices
DES	Disability Employment Services
Diplopia	Double vision
Disinhibition	Loss of control of emotions and or actions
DSP	Disability Support Pension
Dysarthria	Difficulty speaking because of weakness and lack of coordination of the muscles of speech
Dysphagia	Difficulty swallowing
Epilepsy	Seizures resulting from abnormal electrical activity in the brain
GCS	Glasgow Coma Scale – a measure of severity of brain injury
Haematoma	Blood clot
Haemorrhage	Bleeding from a blood vessel
Hemianopia	An inability to see things from the left or right side of both visual fields
Hemiplegia	Paralysis on one side of the body
Hemispheres	The two major halves of the brain, which have largely different functions
icare	Insurance & Care, NSW. State government insurance body, comprising six schemes providing cover, treatment and care to the people of NSW
icare Lifetime Care	Scheme of icare, providing treatment, rehabilitation and care to people severely injured in motor vehicle accidents or at the workplace in NSW

Initiation	The ability to start an activity
JCA	Job Capacity Assessment (conducted by Centrelink)
Lobes	Sections of each cerebral hemisphere: frontal, temporal, parietal and occipital
Memory	The storage and recollection of information
NDIA	National Disability Insurance Agency
NDIS	National Disability Insurance Scheme
Neglect	Decreased awareness of one half of the body and the objects placed to that side of the body
OSI	Occupational Search Inventory
PTA	Post traumatic amnesia – the period of confusion and inability to consistently remember recent events after brain injury
Problem solving	The process of getting all the information, thinking about it and picking the best solution
QoL	Quality of life
RTW	Return to work
Rigidity of thinking	Decreased ability to consider alternative points of view
Self monitoring	The ability to judge and control your own actions and emotional reactions
SIRA	State Insurance Regulatory Authority – the government regulator of motor accidents, CTP insurance, workers compensation insurance and the home building compensation scheme in NSW
Spasticity	Abnormally high muscle tone, with increased resistance to passive movement
TBI	Traumatic brain injury (acquired Brain Injury incurred through trauma)
Tracheostomy	An opening made in the neck for breathing purposes. A tube may be inserted
Tinnitus	A ringing or buzzing noise in the ears
Verbosity	Excessive talking
VIP	Vocational Intervention Program
VPP	Vocational Participation Project
VR	Vocational rehabilitation
Workers Care	Program within the icare Lifetime Care scheme for people severely injured at work, following the same injury criteria and approach to treatment, rehabilitation and care
Workers Insurance	icare scheme covering people injured at work
Work Options Plan (WOP)	A New Track report form completed by VIP providers

Introduction

This manual is an educational resource and central source of operational resources for the Vocational Intervention Program.

The Vocational Intervention Program aims to improve employment opportunities and outcomes for people with traumatic brain injury in NSW, through an integrated model of specialised health and vocational rehabilitation service delivery.

The NSW Agency for Clinical Innovation (ACI) is responsible for statewide implementation of the VIP, through collaboration between the treating teams of the NSW Brain Injury Rehabilitation Program (BIRP) and a network of selected vocational rehabilitation providers.

Acknowledgements

The ACI acknowledges the icare Foundation as Vocational Intervention Program sponsor, and the ongoing guidance and dedication of the following partners:

- icare Lifetime Care
- Brain Injury Australia
- Ingham Institute of Applied Medical Research
- SIRA (State Insurance Regulatory Authority).

Some material appearing in this manual was sourced from the TBI staff training website (www.tbistafftraining.info). See this website for further information about working with people with TBI.



Contents

Glossary	3	Section 6	
Introduction	5	VIP pathways for icare Lifetime Care and Workers Care participants	47
Acknowledgements	5	icare Lifetime Care	48
Section 1		Lifetime Care Fast Track pathway	49
Background to vocational rehabilitation provision	8	Lifetime Care New Track pathway	51
Employment services for people with TBI	9	icare Workers Care	53
Compensation schemes in NSW	13	Workers Care Fast Track pathway	54
The Vocational Participation Project	14	Workers Care New Track pathway	56
The VIP trial	16	Section 7	
Section 2		Program governance and communication	58
Overview of brain injury	20	Section 8	
Brain anatomy	21	Program evaluation	61
Brain injury	22	Section 9	
Effects of TBI	23	Case studies	64
Recovery from brain injury	24	Case study 1 – Fast Track	65
Section 3		Case study 2 – New Track	66
Vocational rehabilitation for brain injury	26	Section 10	
Assessment methodology	27	Assessment tools, forms and reports	67
Goal setting	28	Assessment tool: City of Toronto	68
Return to work (RTW) planning: pre-injury employment	31	VIP Client Summary Tool	69
Section 4		Forms and reports	70
The VIP model	34	References	71
Section 5			
VIP intervention pathways	36		
Pathway delineation and determination of provider	37		
The Fast Track pathway	38		
The New Track pathway	42		

SECTION 1

Background to vocational rehabilitation provision

This section provides information about the key service systems involved in rehabilitation and employment services for people with TBI, to provide context for the role of the VIP.

It also outlines the underpinning research (Vocational Participation Project) and VIP trial, which provided 'proof of concept' for the current service model.

In Australia, provision of employment services is the responsibility of the Commonwealth Government, whilst provision of health, rehabilitation and accident compensation reside with the state government.

People with severe traumatic brain injury (TBI) may interact with an array of state health, rehabilitation and insurance bodies, and Commonwealth welfare and employment service agencies, depending on their needs and how their injury was sustained. This complex array of service systems traverses public and private sectors.

Despite the maturity of rehabilitation services and insurance schemes in NSW, there is no systematic management of return to work (RTW) for people with severe TBI.

ACI and the BIRP

In 2002, NSW Health funded the establishment of clinical networks to improve the involvement of clinicians and consumers in health planning and service delivery to better manage service quality and healthcare costs, improve health outcomes and ensure equity of access. The Brain Injury Rehabilitation Directorate (BIRD) is one of more than 30 clinical networks of the ACI.

The BIRD engages consumers, clinicians and managers of the Brain Injury Rehabilitation Program (BIRP) sites to address identified rehabilitation priorities for children, young people and adults with TBI. The BIRP is a statewide network of 15 specialist rehabilitation services for people with severe TBI.

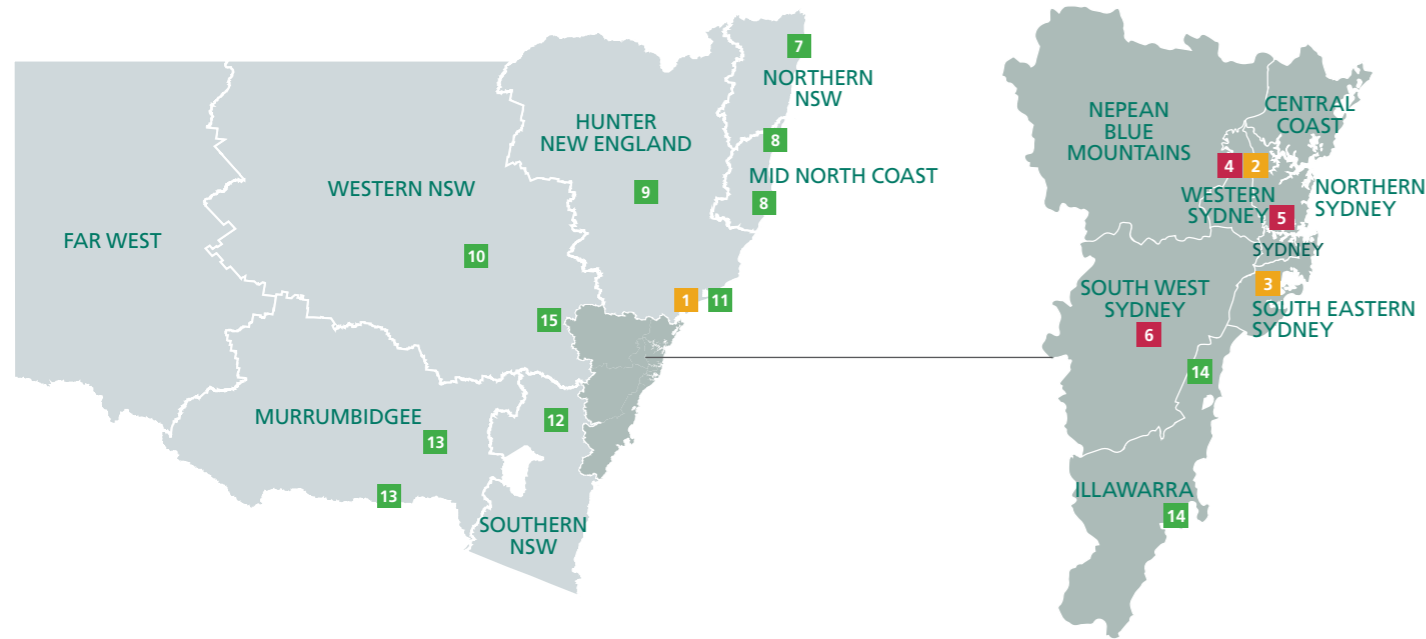
BIRP locations and services

Figure 1 (page 9) is a map of the BIRP service locations and a complete list of sites is outlined in Table 1 (page 10).

- Paediatric services provide inpatient and community/outpatient rehabilitation programs
- Adult metropolitan services provide inpatient rehabilitation services as well as community/outpatient programs and transitional living (Liverpool and Ryde)
- Adult non-metropolitan (rural) services provide community programs centring around case management and therapy, with medical oversight.

Transitional living programs are also available at seven sites.

Figure 1: Specialised Brain Injury Rehabilitation Services in NSW



Metropolitan paediatric BIRP

- 1 John Hunter Kids, Newcastle
- 2 Sydney Children’s Hospital Network, Westmead
- 3 Sydney Children’s Hospital Network, Randwick

Metropolitan adult BIRP

- 4 Westmead
- 5 Royal Rehab, Ryde
- 6 Liverpool

Rural BIRP

- 7 Northern, Ballina
- 8 Mid North Coast, Coffs Harbour and Port Macquarie
- 9 New England, Tamworth
- 10 Dubbo, Lourdes Hospital
- 11 Hunter, Newcastle
- 12 Southern Area, Goulburn
- 13 South West, Wagga Wagga and Albury
- 14 Illawarra, Port Kembla and Nowra
- 15 Mid Western, Bathurst

Table 1: BIRP sites

BIRP site	Site location/s	Contact details	Major towns/suburbs serviced
Ryde	Royal Rehab	235 Morrison Road (02) 9809 9000	Sydney city, Northern Sydney, Eastern suburbs, Inner western Sydney
Liverpool	Liverpool Hospital	(02) 8738 9269	Southern Sydney, South-western Sydney, Southern Highlands
Westmead	Westmead Hospital	(02) 8890 7941	Western Sydney, Nepean, Blue Mountains, North-western Sydney
Northern NSW	Ballina	Ballina District Hospital (02) 66 206 361	Ballina, Byron Bay, Casino, Grafton, Lismore, Maclean, Mullumbimby, Murwillumbah, Tweed Heads, Yamba
Mid North Coast	Coffs Harbour Port Macquarie	39 Victoria Street, (02) 6659 2300 20 Kemp Street (02) 5525 0585	Coffs Harbour, Bellingen, Bowraville, Coramba, Dorrigo, Macksville, Nambucca Heads, Nana Glen, Sawtell, Urunga, Woolgoolga, Crescent Head, Kempsey, Laurieton, Port Macquarie, South West Rocks, Wauchope
New England	Tamworth	Tamworth Rural Referral Hospital (02) 6767 8350	Armidale, Barraba, Bingara, Boggabri, Glen Innes, Gunnedah, Inverell, Manilla, Moree, Narrabri, Quirindi, Tamworth, Tenterfield, Walcha, Wyallda, Wee Waa
Hunter	Newcastle	313 Darby Street, Bar Beach (02) 4924 5600	Cessnock, Gosford and surrounds, Maitland, Merriwa, Murrurundi, Muswellbrook, Newcastle, Scone, Singleton, Taree
Southern NSW	Goulburn	104 Bradley Street (02) 4823 7911	Bateman’s Bay, Bega, Bombala, Braidwood, Cooma, Crookwell, Eden, Goulburn, Moruya, Murrumburrah-Harden, Pambula, Queanbeyan, Young, Yass, Jindabyne
Mid Western NSW	Bathurst	Ground Floor, Heritage Building, Bathurst Health Service (02) 6330 5114	Lithgow, Wallerawang, Portland, Kandos, Rylstone, Oberon, Bathurst, Hill End, Blayney, Orange, Molong, Yeoval, Cowra, Canowindra, Grenfell, Forbes, Parkes, Peak Hill, Condobolin, Trundle, Tullamore, Tottenham
Dubbo	Dubbo	Lourdes Hospital (02) 6841 8559	Barradine, Bourke, Brewarrina, Cobar, Coonabarabran, Coonamble, Dubbo, Dunedoo, Gilgandra, Goodooga, Gulgong, Lightning Ridge, Mudgee, Narromine, Nyngan, Trangie, Walgett, Warren, Wellington
South Western NSW	Albury Wagga Wagga	335 Reservoir Rd, Lavington NSW 2641 (02) 6041 9902	Albury, Ardlethan, Batlow / Adelong, Berrigan, Boorowa, Coolamon, Cootamundra, Corowa, Culcairn, Deniliquin, Finley, Ganmain, Griffith, Gundagai, Hay, Henty, Hillston, Holbrook, Jerilderie, Leeton, Lockhart, Harden, Narrandera, Temora, Tocumwal, Tumbarumba, Tumut, Wagga Wagga, West Wyalong, Wyalong, Young
Illawarra	Port Kembla Nowra	Port Kembla Hospital (02) 4223 8470 Shoalhaven Hospital 4421 3111	Stanwell Park, Wollongong, Port Kembla, Kiama, Nowra, Jervis Bay, Milton, Ulladulla

BIRP – key facts

- There are approximately 1000 admissions per year across all programs.
- Clients are 70% male and 30% female.
- More than 60% of the total client intake were injured in a motor vehicle related injury, fall or assault.
- Almost 70% of the total client intake is under 34 years of age at the time of injury.
- The ratio of TBI to non-TBI clients varies, but is on average is about 4:1.

Facilitating vocational rehabilitation within BIRP

Historically, provision of employment services has not been a core rehabilitation service provided within the NSW Health setting. Service relationships with CRS Australia existed for many BIRP units prior to the closure of this national provider in 2015.

At the time of publication, only one of the 12 adult units (Liverpool) has a dedicated in-house VR Provider (Head2work). All other adult BIRP teams facilitate RTW for their clients with differing levels of direct service provision. Some community teams have allocated resources to manage RTW to the same employer for individual clients, but generally this is only applicable in uncomplicated cases without compensation.

Two service systems exist in NSW for this client population:

1. **Disability Employment Services (DES)** – operated by the Commonwealth government, for all Australian residents with a disability. The majority of DES providers offer employment across all disability types, and acquired brain injury (ABI) comprises only 1.3% of the DES client population.
2. **Private rehabilitation providers** – Clients with compensation may be referred to a private vocational rehabilitation provider, working under plans approved by the funding insurer/scheme agent. There about 110 SIRA-approved providers in NSW to service people with a work-related injury, including TBI. The icare Workers Care program has only a small proportion of claimants with TBI. More commonly people sustain a TBI in a motor vehicle accident, covered by the CTP and icare lifetime care schemes, in which there is no provider approval system. A range of vocational rehabilitation providers (some also holding SIRA approval) provide RTW services funded by icare Lifetime Care and the CTP insurers.

Note that clients may be eligible for more than one scheme, particularly those injured in motor vehicle accidents with compensation, while also receiving welfare payments through Centrelink.

Compensation schemes in NSW

People with TBI in NSW may have compensation claims if their brain injury resulted from an accident at work or in a motor vehicle accident. An individual may have a single, or multiple claim types.

There are four primary schemes concerned with the provision of rehabilitation services for people with TBI.

icare Lifetime Care

- No-fault scheme that provides treatment, rehabilitation and care services for people severely injured in a motor accident in NSW
- Commenced in October 2006 for children and in October 2007 for adults with severe injuries sustained in motor accidents. To be eligible, people must have been injured by a car on a NSW road and sustained one of the following severe injuries: TBI, spinal cord injury, burns, amputation or permanent blindness
- Funded by a levy on NSW Green Slip insurance policies
- No loss of wages or income support is paid to scheme participants
- Eligible Lifetime Care participants may also claim a period of weekly benefits and compensation settlement through the CTP scheme.

icare Workers Care

- Lifetime Care also manages treatment, rehabilitation and care for people with severe injuries sustained in a workplace accident, applying the same admission criteria and approach as for icare Lifetime Care participants
- The workers compensation legislation still applies for these workers, including income support entitlements and RTW obligations.

Compulsory Third Party (CTP) scheme

- SIRA regulates the Compulsory Third Party (CTP) insurance scheme
- Funded by NSW motorists through CTP (Green Slip) insurance policies
- Following scheme reforms, for injuries sustained after 1 December 2017:
 - All injured people regardless of fault are entitled to up to six months of weekly income payments, medical and treatment expenses
 - Medical treatment and care benefits can continue as required, regardless of fault
 - Income benefits can continue for up to two years for people who were not at fault in the accident, and up to three years depending on assessed level of whole person impairment and time taken to settle the claim
- For people injured prior to 1 December 2017:
 - The scheme continues to be fault based. Only people able to prove fault of another vehicle can claim compensation
 - No income support provisions in the old scheme, until claim settlement
- As stated above, people with severe injury have treatment, rehabilitation and care provided under the icare Lifetime Care scheme and may claim compensation related to economic and non-economic loss through the CTP scheme, depending on eligibility.

icare Workers Insurance

- Insurance coverage for employees in NSW, funded by employers' annual workers compensation premiums
- Currently three scheme agents plus self and specialised-insurers
- Covers TBI sustained in an accident at work, or as a driver/passenger/pedestrian travelling as a core component of work duties
- Where the TBI was sustained in an MVA, workers may have additional Lifetime Care and/or CTP claims.
- Responsible for: wages, compensation, treatment, care and RTW services.

The Vocational Participation Project

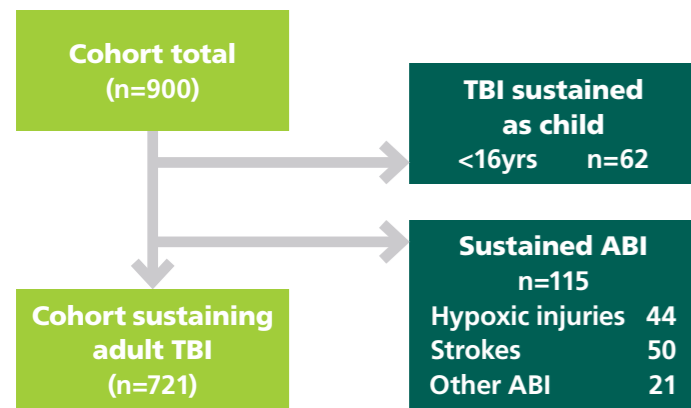
The Vocational Participation Project (VPP) was conducted by the ACI from 2011-2013 to measure the level of participation in employment following TBI in NSW. This was the first piece of work sponsored by icare and SIRA (former government entities of Lifetime Care & Support Authority and Motor Accidents Authority), exploring the rates of RTW and the issues in accessing suitable vocational rehabilitation services and supports.

The VPP study took place within the BIRP, involving data collection, case studies and clinician focus groups at all 12 adult BIRP sites. The results of this study informed the VIP model.

Methodology

There were quantitative reviews for all active community BIRP clients (n=900), and qualitative case studies (n=33) and focus groups (n=18).

Figure 2: VPP study flow



Quantitative results

Employment rates

- Employment rates differed across BIRP units, ranging from 16.7% to 42.9% (average 29%).
- The aggregated employment rate of 29% was consistent with comparable studies (31-33%).
- The majority of clients currently working were doing so at part-time hours and with long-term restrictions and additional supports in place.
- Achieving employment following TBI was found to be complicated by pre-injury factors (educational and work history), injury factors (injury severity) and post-injury factors (including substance abuse, emotional disturbance and challenging behaviours).
- Returning to a pre-injury employer provided the best opportunity to negotiate ongoing supports and achieved greater outcomes. 70% of clients were currently working with their pre-injury employer.
- About half (54%) of the participants (386 individuals) were not engaged in any productive activity.

- Only nine of 721 clients were in supported employment placements, highlighting the lack of appropriate supported employment options for TBI clients in NSW.
- Sustaining employment was a significant issue with this client group; 98 individuals dropped out of employment, suggesting the need to address longer-term VR supports.

RTW timeframes

- Fewer than 20% of clients had returned to work by three months post-injury, with 70% of clients returning to work by 12 months.
- The median timeframe for first work placement was 7 months post-injury (ranging from <1 month to >10 years).
- Clients returning to their pre-injury employment commenced earlier than those undertaking job seeking (median of five months versus 13 months)
- Injury severity, employment pathway and employer type all had a significant impact on the timing of RTW.

Provision of vocational rehabilitation

- 294 clients (41%) participated in a VR program, with 140 still currently engaged in a program.
- The median timeframe from injury to referral to VR services was eight months post-injury, with a range of less than one month to just under 22 years post-injury. The average VR program duration was 13 months (ranging from less than one month to eight years).
- VR programs achieved particularly good results for people resuming pre-injury employment (73% RTW outcome).
- Job-seeking outcomes were less favourable, with only 36% of clients undertaking job seeking currently working (median timeframe for placement 17 months post-injury), supporting the need for more effective job seeking/job placement methods.
- Overall, clients who did not participate in VR (n=419) or who dropped out before program completion (n=52) were significantly less likely to be employed (p < .000).

Compensation status

- A total of 376 clients (52%) had compensation claims relating to their injury.
- Across the three compensation schemes the total number of claims included: 209 Lifetime Care participants (44% of total claims); 112 Workers Compensation claims (24% of total claims); and 151 CTP claims in NSW (32% of total claims).
- A higher proportion of clients with Workers Compensation claims were in current employment than clients with other compensation claims
- Across all compensation schemes, clients took significantly longer to return to work than those clients without a claim (p < 0.000).

VPP qualitative results

Table 2: Client and BIRP clinician perspectives on enablers and barriers to RTW

	Client perspective	BIRP clinician perspective
Enablers to RTW	<ul style="list-style-type: none"> • The work role is vitally important in clients' lives, promoting health, shaping their self-identity and signifying achievement of normality. If mainstream employment is not possible, then a replacement for the work role is required, such as voluntary work. • Central to the success of all case studies was a high degree of motivation and resilience. • All clients highly valued the continuous specialised support available to them through the BIRP. • Positive aspects of VR programs identified by clients included: work trial and voluntary work placements, access to wage subsidies, on-job training and assistance with written documents (e.g. resume). • Clients endorsed the benefit of a long-term steady program, working one step at a time (e.g. training course to voluntary placement to paid work stages). 	<ul style="list-style-type: none"> • Strong relationships with VR providers are retained in some regions, allowing effective co-case management.
Barriers to RTW	<ul style="list-style-type: none"> • The number and severity of impairments (particularly fatigue), the interaction of multiple impairments and the length of recovery time were all identified as central issues. • Clients living in rural locations faced additional barriers of limited job vacancies and poor public transport options. • There was a lack of understanding about ABI by VR providers and employers. • Those clients dissatisfied by their VR program cited issues around the timing of intervention, level of input from providers, understanding of their needs and attending to goals linked with funding rather than client goals. • Employers may not be in a position to 'take a risk' in re-employing clients and providing the necessary accommodations, which impacts greatly on outcome. 	<ul style="list-style-type: none"> • Sometimes there was difficulty in navigating the employment services systems due to the complex array of different options and funding arrangements, which is a deterrent to making referrals. • The referral process to VR is seen as more direct and efficient for compensable clients than for those accessing the Commonwealth system. • Some non-compensable clients are not eligible for Commonwealth funded programs. • VR providers often deem a client to be 'not ready for work', yet clinicians believe the client is fit to start a workplace training program with additional supports in place. • Confusion is created when two vocational providers are involved (one funded by an insurer and the other the Commonwealth system). • There are no suitable supported employment options for clients unable to 'make the grade' for mainstream work, as segregated disability employment is rejected by the majority of clients. • Lack of ABI knowledge and skills across the VR/employment services sector. It is evident that the skill base has reduced, following the loss of the ABI specialist units previously operated by CRS Australia. • Clinicians did not observe effective job seeking methods by VR providers for people who have severe injury and are not competitive in mainstream employment. • Lack of pre-vocational programs.

VPP recommendations

1. Implement an early intervention RTW program using a case coordination model for 'return to same employer'.
2. Implement a trial of an 'individual place and train' model of work placement for people commencing the process of securing new employment.
3. Implement a trial of a 'group-based place and train' model of work placement.
4. Address the vocational rehabilitation gap for adolescents by trialling a school-leaver vocational transition program.
5. Continue consultation with Commonwealth Government agencies to advocate for employment models more suited to people with complex, acquired conditions and improved access to programs.

With finalisation of the VPP, funding was provided by icare and SIRA (then NSW government agencies of Lifetime Care & Support Authority, Motor Accidents Authority and WorkCover NSW) to address VPP recommendations 1 and 2:

- Implement an early intervention RTW program using a case coordination model for 'return to same employer'.
- Implement a trial of an 'individual place and train' model of work placement for people commencing the process of securing new employment.

The VIP was initially designed as a three-year multicentre trial (2014-17) of two employment pathways within six BIRP sites, in partnership with three selected vocational providers.

In total, 75 BIRP clients participated within two program pathways:

- **Fast Track** – return to pre-injury employment, focusing on early referral, assessment and negotiation of RTW plans (29 clients)
- **New Track** – completion of 12-week work training placements to explore work potential and preferences (46 clients).

Rollout of the VIP

The VIP trial informed the upscaling and statewide roll-out of the program across all BIRP sites, occurring from 2018.

Geographical distribution

- **Metro Sydney:** Ryde and Westmead BIRPs were partnered with Break Thru Employment Solutions (New Track) and Keystone Professionals (Fast Track)
- **Western NSW:** Mid-western BIRP (Bathurst) and Dubbo BIRP were partnered with Break Thru Employment Solutions.
- **NSW North coast:** Mid-north coast BIRP (Coffs Harbour and Port Macquarie) and Northern BIRP (Ballina) were partnered with CHESS Employment for both interventions

Model of funding

All client services were funded by the project grant using a milestone funding formulae for Fast Track and New Track pathways. Within this arrangement there was no utilisation of the available funding avenues of Disability Employment Services (DES) or insurance schemes.

Participant profile

The participant profile closely follows that expected of a severe brain injury population: the majority of participants were males with an average age of 40 years. However, a number of factors significantly differed between Fast Track and New Track participants (see Table 3).

- Participants undertaking the New Track program were significantly younger than those in Fast Track.
- Most participants had sustained a TBI (78%); however there was a significant over-representation of people with ABI in the New Track compared to the Fast Track intervention.
- Time post injury was also significantly different, with a mean of 62 months for New Track participants and only 5 months for Fast Track participants.
- By definition, everyone in Fast Track was employed prior to injury, compared with around two-thirds of those in the New Track intervention.
- There was also a significant difference in education level between Fast Track and New Track, with a greater proportion of participants in Fast Track having completed a university degree.

Table 3: Comparison of Fast Track and New Track participant attributes

	Total sample (n=75)	Fast Track (n=29)	New Track (n=46)	Test
Sex (n, %)				
Male	60 (80.0)	21 (72.4)	39 (84.8)	—
Female	15 (20.0)	8 (27.6)	7 (15.2)	
Country of Birth (n, %)				
Australia	66 (88.0)	23 (79.3)	43 (93.5)	—
Other*	9 (12.0)	6 (20.7)	3 (6.5)	
Age at referral (years)				
mean, SD	39.0±13.1	42.9±13.0	36.5±12.6	U=483.000, p=.045
median, IQR	38.8, 23.1	45.3, 22.2	35.9, 24.2	
min-max	16.5-66.0	19.3-66.0	16.5-61.2	
Marital Status (n, %; n=74)				
Married/ De Facto	34 (45.9)	16 (55.2)	18 (40.0)	—
Single	37 (50.0)	12 (41.4)	25 (55.6)	
Separated/Divorced	3 (4.1)	1 (3.4)	2 (4.4)	
Highest Education (n=74)				
Year 10 or less	21 (28.4)	1 (3.4)	20 (44.4)	X2=19.912, p<.001
Year 12	13 (17.6)	6 (20.7)	7 (15.6)	
TAFE	19 (25.7)	7 (24.1)	12 (26.7)	
University	21 (28.4)	15 (51.7)	6 (13.3)	
Time post injury (months)				
mean, SD	39.9±69.0	5.1±3.1	61.8±80.9	U=115.500, p<.001
median, IQR	10.1, 39.3	4.1, 2.9	29.5, 58.2	
min-max	0.9-362.3	.9-13.1	2.6-362.3	
Type of Injury				
TBI	56 (74.7)	26 (89.7)	30 (65.2)	X2=5.616, p=.018
ABI	19 (25.3)	3 (10.3)	16 (34.8)	
If TBI, Injury Severity, PTA (n=53)**				
Moderate (1-24 hours)	1 (1.9)	0 (0.0)	1 (3.6)	—
Severe (1-7 days)	7 (13.2)	4 (16.0)	3 (10.7)	
Very Severe (8-28 days)	22 (41.5)	13 (52.0)	9 (32.1)	
Extremely severe (>28 days)	23 (43.4)	8 (32.0)	15 (53.6)	
Pre Injury Employment				
Employed	58 (77.3)	29 (100.0)	29 (63.0)	NA
Not Employed	17 (22.7)	0 (0.0)	17 (37.0)	

Outcomes of VIP trial

The outcomes for Fast Track and New Track were measured and reported separately.

Table 4: VIP – Fast Track and New Track outcomes

Fast Track outcomes	New Track outcomes
<ul style="list-style-type: none"> 29 clients commenced Fast Track; 6 dropped out during the RTW process and 23 completed the program. For all 23 clients who completed Fast Track, their job titles remained unchanged. There was only one participant who was allocated to a different job role within the pre-injury workplace (though dropped out of the program prior to completion) At the point of case closure (6 months after commencing RTW), 22 participants were working, constituting a RTW rate of 76% (22/29). Compared with pre-injury status, there was a notable shift from full-time to part-time work at case closure, with full-time work reducing from 23/27 (85%) to 6/27 (22%). This is likely to increase over the ensuing 6-12 months. 	<ul style="list-style-type: none"> 46 clients commenced New Track; 24 did not complete the program and 22 completed the program. Some participants ceased participation either during the phase of canvassing a work trial or during the phase of undertaking the work trial. This degree of program separation is reflective of the level of disability for New Track participants, length of time separated from the workforce, psychosocial sequelae of severe TBI and goal of the pathway (to assess work potential and options). The New Track pathway was not intended to achieve paid work outcomes, but rather serve as a stepping stone within the process of seeking new employment. 22 clients completed work trial placements in a range of industries, such as hospitality, aged care, warehousing, retail and garden maintenance.

Table 5: Outcomes for participants who completed New Track

Outcome category	Case closure (n=22)
Paid work with host employer	6 (27%)
Volunteer with host employer	2 (9%)
Volunteer with alternate organisation	3 (14%)
Not working	11 (50%)

Several program elements of the VIP enhanced practise and outcomes:

- Local service partnerships between BIRP and vocational provider teams created referral channels, sharing of information and effective case co-ordination.
- ABI specific resources (service protocols, assessment tools, report formats, etc.) contributed to the development of expertise.
- VIP offered tailored service delivery, with a client-centred and flexible approach.
- The steering committee provided unique opportunity for knowledge sharing across organisations and agencies.

Learnings from the VIP trial

In consideration of upscaling the VIP service integration model to a state-wide program, a number of advantages and changes were identified.

Advantages of the model for BIRP clients

Client centred

Vocational goals were in line with the preferences of each client and programs delivered with great flexibility, including the hours and timing of activities, the ability to place a client's program on hold to accommodate changes in circumstances, extending the duration of a work training placement and providing more than one placement per client if necessary.

Employer commitment

The structured program and support of the providers was well received by employers.

Visible service partnership

The visibility of the partnership between BIRP and vocational provider parties (e.g., holding joint assessment sessions) assisted clients to understand the roles of each partner and engage with the new service.

Opportunity for self-assessment

The VIP provided practical opportunity for clients to assess their own work abilities and interests.

Equity

VIP services were available for all clients regardless of their compensable status, cause of injury, factors relating to income source or personal finances or level of disability.

Targeted program interventions

Fast Track and New Track interventions were clearly defined with specific eligibility criteria, goals, program protocols and expectations, which assisted in identifying suitable participants, steering progress and maintaining motivation.

Changes to the model in upscaling to a sustainable statewide program

Two key changes will be made to the VIP model to support sustainable statewide rollout:

1. Transition to existing funding schemes/programs

All client services for the VIP trial were funded via the VIP grant monies. Such project funding is not available long term and for the program to be sustainable, client services need to be funded within existing schemes: DES, insurance schemes and NDIS. This will require each BIRP team partnering with multiple vocational providers to access funding for all compensable and non-compensable clients.

2. Expansion of the New Track pathway

Inclusion of all activities related to obtaining new employment, such as undertaking retraining, work trials and job seeking for paid work.

SECTION 2

Overview of brain injury

This section has information on TBI, which is a leading cause of death and disability. The duration of post traumatic amnesia (PTA) is a measure of initial injury severity and the best predictor of long-term outcome after a TBI.

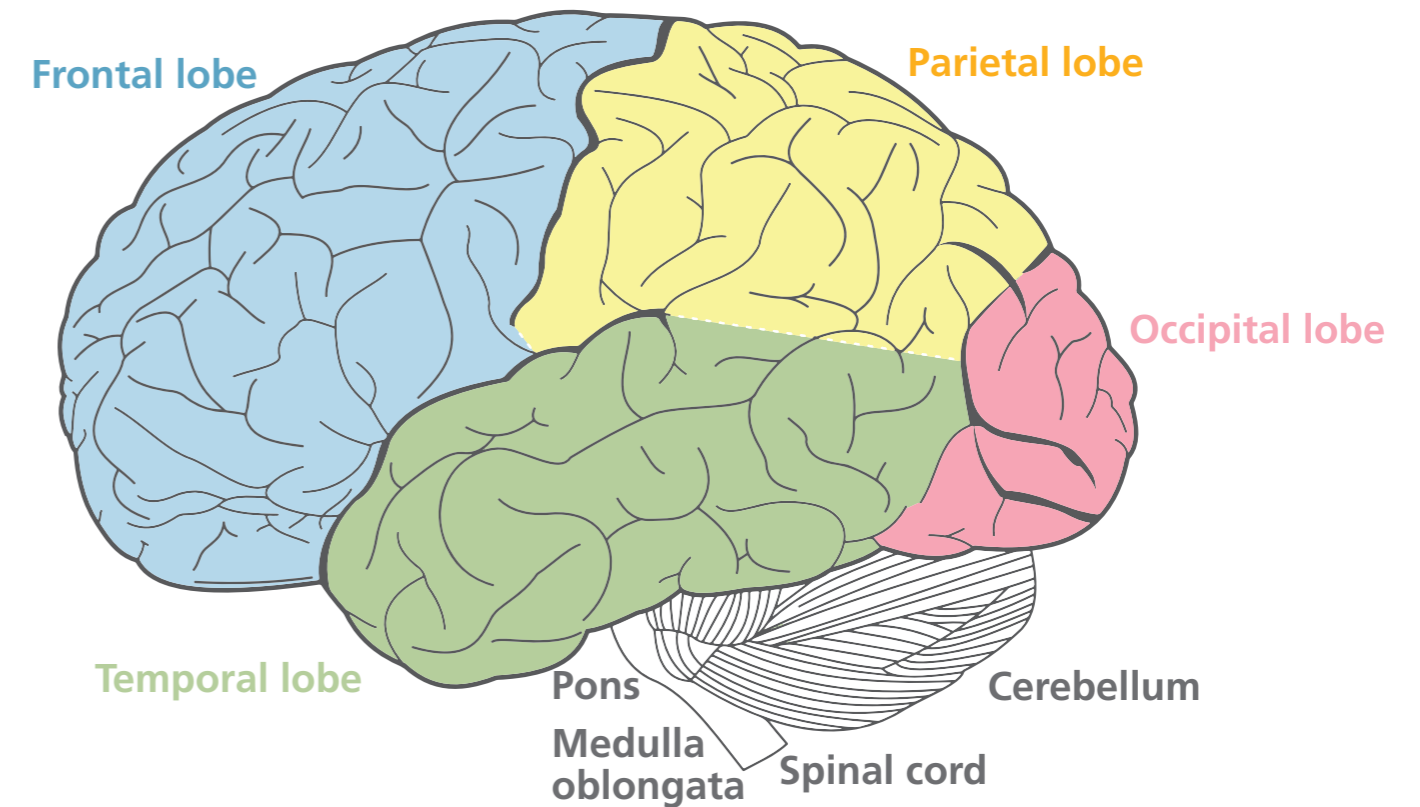
The brain has some capacity to repair, though the degree and rate of recovery varies considerably from one person to the next. The more severe the injury, the longer the recovery period, and the more impairment a person will have once recovery has plateaued.

Brain anatomy

The brain controls everything we do, from the most basic bodily functions such as breathing to our most complex functions. All physical movement, sensation, cognition, emotions, behaviour and bodily functions are controlled by the brain and nervous system.

The largest part of the brain is divided into two halves called the left hemisphere (mainly involved with speech and language) and the right hemisphere (mainly involved with visual perception and interpretation of nonverbal information, such as drawing and spatial analysis). There are four lobes of the brain, responsible for different functions.

Figure 3: The human brain



Acquired brain injury (ABI) refers to any injury to the brain that occurs after birth. Causes include stroke, hypoxia, infection, trauma, tumour and degenerative neurological disease. ABI can result in temporary or permanent physical, cognitive, psychosocial, and sensory impairments, which may lead to restrictions in various areas of life.

Traumatic brain injury (TBI) is a form of acquired brain injury, caused by external force being applied to the brain. There are different mechanisms of injury:

- **closed head injury** – direct damage (bruising, lacerations and bleeding) caused by hitting the rough bony lining
- **diffuse axonal injury** – twisting and shearing of the nerve fibres (axons) connecting the different areas of the brain.
- **open or penetrating head injury** – the outer layer of the brain is injured, usually caused by a penetrating object, but the remainder of the brain is usually not damaged unless it is from secondary injury complications.

Causes of severe TBI

Table 6: Severe TBI injury circumstances

Injury circumstances	% (n=721)
Road	61.2
Fall	17.8
Assault	14.1
Sport related	1.5
Gunshot	1.0
Other cause	4.3
Unknown	0.1

Source: VPP 2012

Injury severity

Post-traumatic amnesia

As a person emerges from a coma, there may be a period of post-traumatic amnesia (PTA), during which the person is not orientated to time, place and people, and is unable to create new memories.

During a period of PTA, a person may display disinhibition, irritable or agitated behaviour.

The period of coma and/or PTA, can range from a matter of minutes, through to days, weeks or even months. The duration of PTA is measured (in days) until continuous memory is restored.

PTA: injury marker

PTA duration, as a measure of initial injury severity, is the best predictor of long term outcome after a TBI.

Table 7: Injury severity and PTA

Injury severity	PTA duration
Mild/Very Mild	Less than 60 minutes
Moderate	1 to 24 hours
Severe	1 to 7 days
Very Severe	1 to 4 weeks
Extremely Severe	Greater than 4 weeks
Other cause	4.3
Unknown	0.1

Source: Jennett, B. & Teasdale, G. (1981) Management of head injuries. Philadelphia: F.A. Davis Company

Physical changes

Virtually all parts of the brain participate directly and indirectly in the control of purposeful movement. People who sustain a brain injury may experience physical problems, such as:

- weakness, primarily from damage to the brain affecting relay of messages to the muscle systems and general deconditioning from hospitalisation and periods of inactivity
- changes to high or low muscle tone, causing joints and movement to appear very stiff or alternatively floppy
- incoordination and difficulty controlling movements
- problems with balance and instability of standing/walking, impacting on safety in a work context
- fatigue and a lack of physical energy.

In most cases, this occurs during the acute phase and will progressively improve. Approximately 25% of people with brain injury experience long-term physical impairments.

Cognitive changes

TBI commonly causes changes to a person's cognitive functioning. These changes can be subtle or dramatic, temporary or permanent, but at some stage will likely affect an individual's ability to manage day-to-day tasks independently.

The impact cognitive difficulties will have for an individual's functioning, particularly in a work context, is dependent on the cognitive demands they face. For instance, the impact of cognitive difficulties for a person with only mild level of impairments but high cognitive demands (e.g. a company general manager) may be greater than for a person who has severe cognitive impairments but low demands at work (e.g. a spray painter).

The most common changes to cognition after TBI include:

- reduced speed of thinking
- impaired concentration, distractibility
- working memory/multi-tasking problems
- short term memory and new learning, use of feedback
- planning and organising
- reasoning, problem-solving, decision making
- rigidity, concrete thinking, limited adaptability
- communication-receptive and/or expressive language difficulties, impacting on social interaction, conversation
- fatigue
- lack of insight into cognitive changes.

Not all of these difficulties are experienced by every person with brain injury.

Sensory changes

Sensory changes include changes to vision (e.g. a reduction in visual field, impacting on navigating around the environment, reading and driving a car) and changes to smell and/or taste.

Behavioural and emotional changes

Changes in behaviour and personality can pose a significant challenge to the individual, family members and service providers. The incidence of behavioural changes varies according to the severity and nature of the injury, pre-injury temperament/behavioural functioning, and their situation post-injury (sources of frustrations, environmental elements).

Some commonly experienced changes in behaviour include:

- disinhibition, impulsivity
- irritability, anger
- adynamia/lack of initiative or drive
- egocentricity
- reduced self-awareness, poor self-monitoring
- emotional lability (rapid, often exaggerated changes in mood).

Psychological changes

Up to 40% of people who have experienced brain injury develop psychological problems, particularly mood disorders, and this can impact significantly on cognitive performance and participation in rehabilitation.

The most commonly experienced psychological problems include:

- depression, especially if insight improves
- suicidal thoughts
- anxiety and/or panic attacks
- reduced self-confidence
- increased vulnerability to stress
- difficulty with regulating emotions
- grief and loss, and difficulty with adjustment and new sense of self.

Medical complications

The person may experience seizures as a result of temporary abnormal electrical activity of a group of brain cells. A seizure can be categorised as absence (also known as petit mal) or tonic-clonic (grand mal).

Seizures affect about 25% of people with moderate to severe TBI. They occur more commonly for those who have undergone neurosurgery and the primary risk factors following discharge home tend to be fatigue and use of alcohol and drugs.

Recovery following brain injury is a dynamic process, characterised by stages of observable improvement and plateau. The process and degree of recovery varies from person to person and does not follow a neat, linear trajectory.

The most rapid recovery is in the first six months post-injury, as swelling and bruising of the brain subside. After two years, most of the natural recovery has stabilised. After this time, the person can still make improvement, but this will be through a process of adjustment, making optimum use of intact abilities and developing strategies to compensate for residual disabilities.

Rehabilitation principles to enhance recovery

1. **Seek a suitable level of challenge** – The challenge posed by routine and activities should not be higher or lower than the person is able to manage.
2. **Continually upgrade** – Increase the range of tasks and degree of challenge as the person's abilities improve.
3. **Build goals on each other** – Walking can proceed to running; driving a car can proceed to driving a truck.
4. **Set meaningful goals and activities** – Greater progress can be achieved when a person is engaged in activities of interest, particularly in linking with pre-injury interests.
5. **Be socially integrated** – Choose activities and venues that allow for meaningful engagement with the local community.
6. **Manage choice and risk** – Clients may choose activities or make plans that appear risky, either from the perspective of safety or risk of failure. Families and other support people are often negotiating the scenario of supported risk taking with the person with brain injury.

The rehabilitation journey

Typically following trauma, the person will be admitted to a trauma hospital through retrieval/emergency, often transferring to the Intensive Care Unit for a period of time. In NSW, people with severe TBI may then transfer to an inpatient brain injury rehabilitation unit in Sydney, where they remain until medically stable, until they no longer have PTA and discharge plans (including destination) are in place.

An inpatient stay can range from two weeks to two years, with an average duration of about six weeks. The client will usually be referred for case management and therapy in the community following their discharge home. The client may also participate in a range of ongoing therapies that may be provided within the BIRP or by private therapists:

- **physiotherapy** – attending to mobility, physical function and fitness.
- **speech pathology** – attending to swallowing and language/communication skills
- **social work** – providing support to the client and family and facilitating social and legal services, welfare payments, etc.
- **clinical psychology** – therapeutic counselling, focusing on adjustment to injury, mood, anger management and other psychological issues
- **neuropsychology** – perform cognitive assessments to establish the nature and degree of cognitive impairment and develop compensatory strategies and therapy (such information is crucial in RTW planning)
- **occupational therapy** – addressing functional independence, both in the home and community, including work-related goals such as public transport training and driving assessments
- **medical management** – rehabilitation specialists are the primary medical specialists overseeing clients' rehabilitation. Clients may see additional specialists to manage complications, such as a neurologist, orthopaedic specialist, diversional therapist or psychiatrist.

Population distribution of TBI

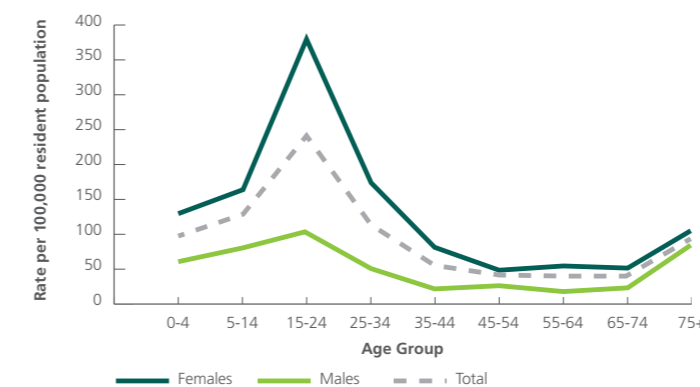
Brain injury is a 'prime of life' disability. It most often occurs when people are actively engaged in work or study, social activities, family, leisure pursuits, etc, and with a positive future outlook.

Figure 4 shows the incidence of TBI by age group and sex. The peak incidence age group (15–25 years of age) comprises 40% of people with TBI. The male:female ratio is 3:1.

A second peak is observed after 75 years, primarily resulting from falls.

If medically stable, a person with TBI can expect to live a normal lifespan. However brain injury can have devastating effects on the individual, family, friends and workplace, and the health and welfare costs borne by society as whole.

Figure 4: Population distribution of TBI



Traumatic Brain Injury Training Kit: Module 1 Introduction to Traumatic Brain Injury

Impact on families

The vast majority of people with brain injury (90%) are discharged from an acute rehabilitation unit to return to their home environment, usually requiring support from their family. This can involve a degree of adjustment within the family unit and can cause stress. For instance, a longitudinal study found that at six years post-injury, 55% of marriages had broken down. (Tate, Lulham, et al., 1989)

Some challenges include:

- family members having to give up work, reducing income
- increased conflict due to temper control problems
- family members (especially partners) may take on new roles if the person with TBI is no longer able to play these roles (e.g. financial manager, home maintenance, disciplinarian with children, etc.)
- family members can lose touch with their own social networks, becoming more socially isolated
- family members experience grief or depression mourning for the person "they knew before" the TBI
- family members can experience post-traumatic stress if they witnessed or were involved in the accident that caused the injury.

Long-term outcomes

Beyond the period of active neurological repair and adaptation, long-term recovery is a dynamic interaction involving the characteristics of the individual, the environment and features of the service delivery system.

The ability of an individual to cope with the effects of injury and therefore the functional long-term outcomes are influenced by a number of factors:

- personal circumstances and assets before the injury, including age, personality, level of education, use of alcohol and drugs, family circumstances, general health and employment status
- the nature and severity of the injury
- the person's reaction to the injury, including self-awareness, motivation, goal setting, coping strategies (use of memory aids etc.) and management of emotions
- the support of family, friends and employer
- access to appropriate rehabilitation
- access to compensation and other sources of income
- involvement of litigation.

SECTION 3

Vocational rehabilitation for brain injury

This section outlines key vocational rehabilitation practices, including assessment methodology, goal setting with clients, RTW planning, compensatory strategies, and job placement and training methods.

Assessment methodology

Gathering information during the assessment phase is done in three ways: speaking with people (interviews), observation and measurement.

Interview

Data gathering in this way includes structured interviews and informal discussions involving:

- the client
- the employer (current, previous and prospective, where relevant)
- family members
- clinicians.

Observation

Observation of task performance is a key component of client assessment in brain injury rehabilitation.

Observing a client performing work tasks on the job site during the planning stage of RTW may help to understand the tasks and demands of the job and refine the RTW plan (tasks and strategies). However, it may be more appropriate to observe a client in clinical assessment or simulated task.

Manual job roles are readily observable, while management and professional job roles are less amenable to observation. Alternate ways of gaining task performance feedback will need to be considered in such cases. For instance, the client can complete a 'work sample', which is then reviewed by the employer.

Consider assessing known versus unfamiliar tasks, depending on the goal of assessment. Observation may demonstrate whether clients with good communication skills have commensurate task performance (i.e. can they do what they say they can do?) or vice versa.

This type of assessment has high ecological validity, meaning that it is generalisable to real-life settings.

Measurement

To quantify client's performance, aspects of the client and environment can be measured.

Measurement of the individual's functioning includes things such as:

- lifting capacity
- hand function
- balance
- work posture tolerance
- activity tolerance
- cognition (test scores)
- communication abilities.

Measurement of workplace factors includes things such as:

- physical environment (noise, light, number of stairs, etc.)
- pace of work/productivity performance indicators
- cognitive task demands
- physical task demands.

Goal setting

In the context of rehabilitation, a goal is an intended future state. It is not merely a prediction of what will happen, but the result of concerted effort.

The central idea may be known as the global goal, and associated ideas (sub-goals) may be added.

Client-centred practise and shared decision making

Goals are a key element of client-centred practise, which places the person at the centre of their own care (Victorian Department of Human Services 2003).

Table 8: Client-centred health practise

Key principles	Facilitators	Main barriers
<ul style="list-style-type: none"> Getting to know the client as a person Sharing of power and responsibility Accessibility and flexibility Coordination and integration A conducive environment 	<ul style="list-style-type: none"> Skilled, knowledgeable and enthusiastic staff Involving the service user, their carer/s, family and community An organisational culture that supports mutual respect and trust and reflects on own values and beliefs Staff training and education, including feedback from service users Being in the client's own environments (work and home) 	<ul style="list-style-type: none"> Time Dissolution of professional power Staff lacking the autonomy to practice in this way Lack of clarity about what constitutes person-centre care Clients with communication difficulties The constraining nature of institutions and funding models

Source: National Ageing Research Institute (2006)

Goal ownership

The client owns the goal but others will contribute to goal development (such as the VR provider, family, employer and clinicians).

It's important that everyone is working towards the same goal.

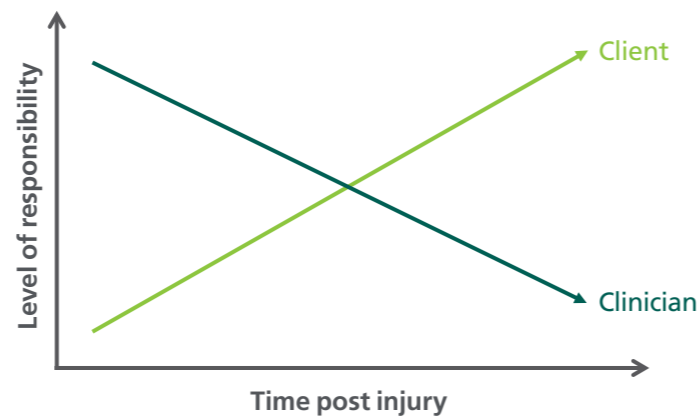
Figure 5. Benefits of client-focused goals



Goal setting vs state of recovery

The participation of the client in goal setting post brain injury varies according to the stage of rehabilitation:

Figure 6. Perceived control over involvement in decision making



Source: Adapted from Glover 2006

Goal uncertainty

Often in vocational rehabilitation, the achievable end point is unknown. For instance, it may be clear that there is scope for the person to return to their pre-injury employer, but it may be unclear whether they will upgrade to pre-injury status. Similarly, for clients with no pre-injury employer option, it is often uncertain what they are able to do.

When faced with uncertainty, be cautious of stating ambitious goals and managing expectations.

Setting goals within funding scheme parameters

In addition to considering the interests of the client and the feasibility of a job goal (for instance, labour market opportunities), another parameter influencing vocational goals and plans is the government legislation or guidelines set by the relevant funding bodies. For instance, within workers compensation, injured workers are obliged to RTW (where possible) and to their pre-injury employer in the first instance. Similarly, clients receiving welfare payments may have 'participation requirements' directing the activities they can pursue.

Within the icare Lifetime Care scheme, vocational services are funded with reasonable and necessary guidelines applied. A client may pursue a vocational direction that does not meet the guidelines (e.g. undertaking a university degree), but this activity is not funded by icare Lifetime Care.

Strength-based goal setting

The more meaningful or relevant the selected activities are to the individual, the greater the chance of success. Identifying and harnessing personal strengths is most likely to engage the client and optimise performance.

The client might need an explanation of what goals are, and time and support to identify personal priorities and goals.

Goal setting with limited insight

One of the biggest challenges in client-centred goal setting arises when the client has limited insight into the changes caused by the brain injury. This may lead the person to suggest goals that are unrealistic or unachievable.

Seek the input of the family and therapy team about establishing achievable goals.

If a client suggests a goal that seems unrealistic:

- explore why that goal is of interest – this may present the opportunity to identify alternate goals with common elements to the original goal

- focus on steps to get there – if the identified goal is too big or too far away, a goal that is a milestone or step along the way can address what needs to be achieved first

Prompts for clients to generate goal ideas

If a client needs help thinking of possible goals, it may be that they cannot relate to the language and terminology being used. For example, a client may not respond to the question, 'what are your goals?', but they may respond to other prompting questions:

- What do you want to achieve?
- Where do you see yourself in a year?
- What are the most important things for you in a job?
- What aspects of your previous jobs kept you working there?
- Where were you heading before you had your accident?
- What are you good at?
- What obstacles are in the way of you working?
- Who can help you to get back to where you were before the injury?

Vocational assessment inventories

Vocational assessment inventories rate a client's interests, preferences and skills. They are widely used in vocational rehabilitation (e.g. the Occupational Search Inventory, or OSI).

These tools have the advantage of generating a range of new job options that may interest the client. However, self-rated questionnaires need to be used cautiously with this population. Without the opportunity to test their abilities in a work setting post-injury, clients may complete the inventory based on their pre-injury skills (which is often not reflective of current abilities), thereby arriving at potentially unsuitable and/or unsafe vocational goals.

Risking an unsuccessful outcome

Learned experiences are often the only effective approach to inform longer term adjustment. Client feedback has indicated that it is better to have the opportunity to try to reach their desired goal and fail, than to not be given an opportunity to try.

In such cases, the provider finds itself in a situation of 'supported' or 'responsible' risk taking.

Brainstorming through mind mapping

A mind map is a diagram used to visually organise information, starting with a central idea (global goal), to which associated ideas (sub-goals) are added. The major ideas are connected directly to the central concept, and other ideas (actions) branch out from those.

- Mind mapping can be a useful activity for brainstorming goals with clients. Some advantages are that:
- it may appeal to people with strong visual (but not verbal) skills
- the map organises information into levels of goals and actions (aids sequencing)
- the map helps in making decisions clearer
- it provides a visual prompt to help with memory retention and ownership of goals.

In some cases clients can identify the global vocational goal, but not the sub-goals or actions to achieve it. In other cases, clients are unable to identify a global goal but can identify strengths and interests that can then be used to formulate the global goal.

In the example below, the client identified the global goal of returning to work as a trainee jockey, but this goal was incomplete. She was unable to identify the sub-goals or activities required to progress this goal.

Mind mapping

Mind mapping can be a creative exercise, using colours, pictures and symbols, and emphasising key ideas by size of font, etc. Mind maps can be drawn by hand or using software packages.

Figure 7. Example mind map

Strength and fitness

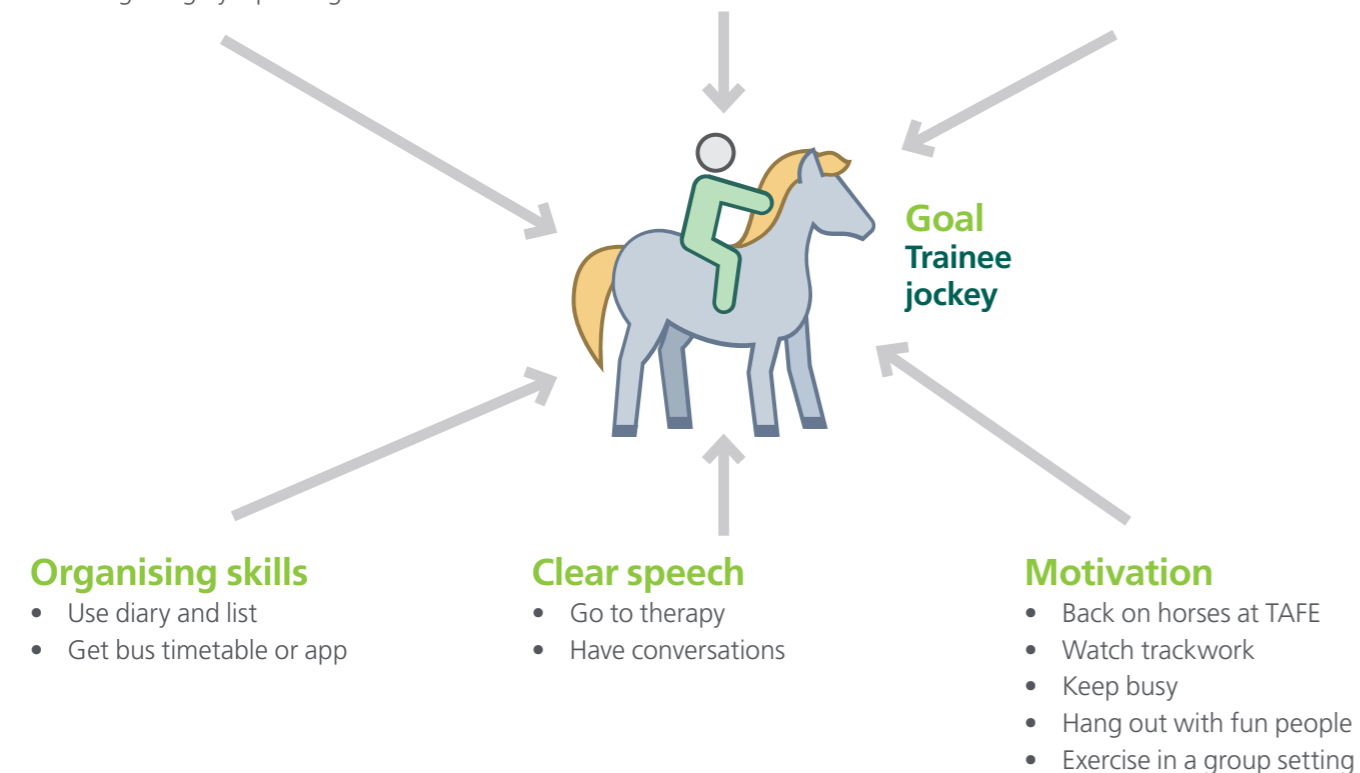
- Exercise program at gym
- Ride horses
- Fix right leg by squatting

Focus on safety

- Take note of decisions in stable and workshop

Concentration

- Do jobs in workshop



Timeframe of RTW commencement

It is important to start discussions with the pre-injury employer at an early stage post-injury to preserve the job opportunity and gather details regarding the client's job and workplace culture. However, the timing of work re-commencement requires careful consideration. Commencing work too early (or with insufficient planning) can be just as problematic as delaying the return to work, because the impact of cognitive and personality changes may take some time to become apparent.

Although a newly injured BIRP client's attendance at work (even for assessment and meetings) awaits their discharge and re-settlement at home, discussions about RTW may commence while the client is in hospital. In the VIP trial, Fast Track clients were referred to commence RTW planning at an average of five months post injury.

Graduated RTW programs

Employers do not commonly encounter TBI and will therefore require guidance about accommodating the client. For instance, a written plan would specify the schedule of upgrading tasks and hours, specific restrictions and compensatory strategies.

Hours

Generally, clients go back to work part-time and gradually increase hours over time. This is to pre-empt fatigue.

The process of increasing hours (or transitioning to full-time work, if appropriate) may take months or years, and may plateau for some periods before further upgrading is possible.

Compensatory strategies

Compensatory strategies allow clients with cognitive impairment to operate more independently. General strategies for the RTW program may include:

- scheduling more demanding tasks when alert (usually in the morning)
- increasing the level of structure within tasks and routine
- reducing distractions
- double checking work
- focusing on more routine and familiar work
- scheduling regular feedback
- allowing extra time to complete tasks
- reducing the scope of responsibilities
- using a diary, checklists and written notes.

Tailored strategies need to be devised for each client, taking into account the specific workplace factors and client abilities. Workplace personnel are often able to suggest strategies if they have a good understanding of the problem.

Internal and external compensatory strategies

Internal compensatory strategies involve different mental strategies that a client can do, such as repeating, counting, face-name associations.

External compensatory strategies involve assistance outside oneself, such as using a diary, notebooks, to-do lists, smartphone, labels. They can be managed by the client or suggested/put in place by someone else.

Example approaches or strategies

Executive functioning (planning, problem solving, reasoning, etc.)

- Divide large assignments into smaller steps
- Schedule weekly meetings with supervisor to track task progress
- Provide written instructions
- Set task-specific routines (via task analysis and instructions/checklist)
- Use organisational aids (e.g. written calendars, smartphones)
- Train the client to systematically problem solve (identify the problem, identify possible solutions, eliminate unsuitable solutions) to address impulsivity

Psychological issues

- Establish long- and short-term goals
- Allow flexible scheduling (accommodate appointment needs)
- Provide education/sensitivity training to co-workers
- Schedule weekly meetings with supervisor to encourage open communication and feedback

Attention/concentration

- Work when most alert
- Schedule multiple short breaks
- Use headphones to cancel out background noise
- Go to a private office or quiet workplace
- Reduce clutter in the work environment
- Do only one thing at a time, wearing earplugs and using the answering machine to avoid interruptions

Memory

Episodic memory (recall of events, experiences) and metamemory (belief about one's own memory) are most often affected by TBI. However, procedural and semantic memory (knowledge, learned facts) is often not affected.

Trying to restore memory through games and exercises does not appear to generalise to other situations, and there is limited empirical evidence of effectiveness.

- Record meetings on an audio device
- Use word associations or other internal compensatory strategies
- Use external compensatory strategies, such as posted lists, labelled file cabinets, calendars, alarms, timers, beeping watches, computer-based reminders, mobile phones and medication organisers

Clients with limited insight

If someone has little insight into the changes resulting from injury, then it is unlikely that he or she will see the need to apply compensatory strategies. External strategies that are managed by others (i.e. environmental modification) are more likely to succeed in these situations.

Interpersonal/ behaviour changes (e.g. disinhibition, impulsivity, socially inappropriate behaviour, and lack of initiation)

- Identify antecedents or triggers and modify the environment
- Establish clear expectations of conduct
- Provide direct and immediate feedback
- Use strategies such as alarms and structured work plans
- Have a structured routine and clearly defined work tasks
- Limit collaborative work with internal and external stakeholders

New employment

Generally speaking, people with severe brain injury require intensive assistance in job seeking, job placement, job-training and longer-term support. There is a tendency to underestimate the required level of support (particularly where the person's impairments are not 'visible'), which can contribute to job failure.

The following training techniques are commonly used for people with brain injury seeking new employment. The support will be tailored to the client's individual needs.

Training techniques

Errorless learning

The client is taught information in a way that does not allow mistakes. Using this approach, the trainer demonstrates a task to be performed in the correct way and closely observes the client, preventing him or her from straying from the instructed technique in order to prevent errors.

This is useful for those with more severe cognitive impairments impacting on memory and planning/problem solving abilities, as it prevents repeating an incorrect learned response.

Scaffold learning

Focuses on the core, underlying knowledge or skills prior to layering on a new task.

Cues and prompts

Visual cues (e.g. flowcharts) are pictures that trigger learning and can be used in conjunction with verbal prompts (e.g., single word reminders). The least restrictive (i.e. minimal) amount of cues and prompts should be used to maximise independence.

Chaining

This involves step-by-step instruction following a task analysis, via either forward or backward task instruction. With forward chaining, the client performs the first step of the task and further steps are gradually added as each step is mastered. With backwards chaining, the trainer provides substantial assistance with the initial steps and allows the client to independently complete the final steps of the task.

Repetition

Repeating a task several times can be helpful.

Make training specific

Train using the actual task resources and in the real task environment to reduce the need for the client to generalise learning to different environments.

SECTION 4

The VIP model

The VIP model of service integration allows healthcare and VR to occur concurrently, not sequentially, achieving greater responsiveness to RTW opportunities.

Service integration

The VIP is a model of collaborative service integration, joining health and vocational rehabilitation providers, with the support of the NSW government agencies of the ACI and icare.

Service integration aims to achieve efficient coordination of rehabilitation services so that clients have access to the required expertise within the one rehabilitation system. This requires effective communication, cooperation, coordination and achieving the right mix of skills/expertise to add value and avoid duplication. It goes beyond working in a multidisciplinary team or focusing solely on continuity of care (client journey of transitioning across health settings).

This service integration model has been successfully implemented in other health and vocational rehabilitation partnerships in NSW, including mental health and spinal cord injury services.

The VIP will operate primarily within the community rehabilitation setting – it is not an inpatient-based rehabilitation intervention. Metropolitan BIRPs with an inpatient rehabilitation program may identify a client suited for the VIP (particularly the Fast Track pathway), but formal assessment and work placement will await the client's discharge from hospital and re-settlement into the community. Nonetheless, it may be appropriate for the VIP provider to meet the client in the inpatient ward and have some early liaison with the treatment providers and the employer to prepare for RTW commencement at the appropriate stage.

The VIP providers will not be located at the BIRP sites, however they will attend the BIRPs for case conferences and relevant client discussions and appointments. Planning and RTW meetings may take place at their own local offices, in the community or at the workplace, as appropriate.

The appointed VR providers will have experience in delivering employment services, industry knowledge of RTW processes, local employer contacts and access to employer incentives for people with disabilities

Public and private systems of case management

In the context of brain injury rehabilitation, clients may be case managed within the BIRPs (clients with and without compensation) or externally by a private case manager (clients with compensation).

In the icare Lifetime Care scheme, some clients may no longer have active case management, and instead their services will be coordinated directly by Lifetime Care Coordinators.

VIP key principles

1. The VIP follows a rehabilitation paradigm and is integrated with other aspects of treatment, case management, care and therapy.
2. The VIP follows a strength-based approach, aiming for the highest attainable level of employment participation for each client.
3. Programs are responsive and conducted in a timely manner.
4. Vocational goals and activities are based on client choice and needs.
5. Service relationships foster the sharing of knowledge and expertise.
6. BIRP teams and VR providers are engaged in the VIP at all levels of their organisations.

Goals

- Improved system of support for people with ABI in NSW.
- Increased employment participation for people with ABI in NSW.
- Improved health and wellbeing of people with ABI.

Outcomes

- Pathways available for people with ABI to gain suitable employment across NSW.
- Program participants achieve sustainable paid employment.
- Improved quality of life for program participants.

Objectives

- Increase local collaboration between BIRP and VR provider teams to achieve better understanding of the impact of ABI on return to pre-injury employment and new employment.
- Increase the capacity of the VR sector to tailor service provision to the ABI population to achieve better outcomes for individuals.
- Establish a sustainable state-wide specialist network of clinicians and vocational rehabilitation providers, working with people with ABI.

Service coordination

The coordination of a particular client's program with a VIP provider may involve either a BIRP, private case manager or Lifetime Care Coordinator.

SECTION 5

VIP intervention pathways

The two prescribed pathways of the VIP are Fast Track and New Track.

Fast Track is an early intervention providing graduated RTW programs for clients with the opportunity and capacity to resume work with their pre-injury employer.

New Track is for those seeking new employment, focused on intensive job seeking and with provision for pre-vocational activities for those not ready for open employment.

Pathway delineation and determination of provider

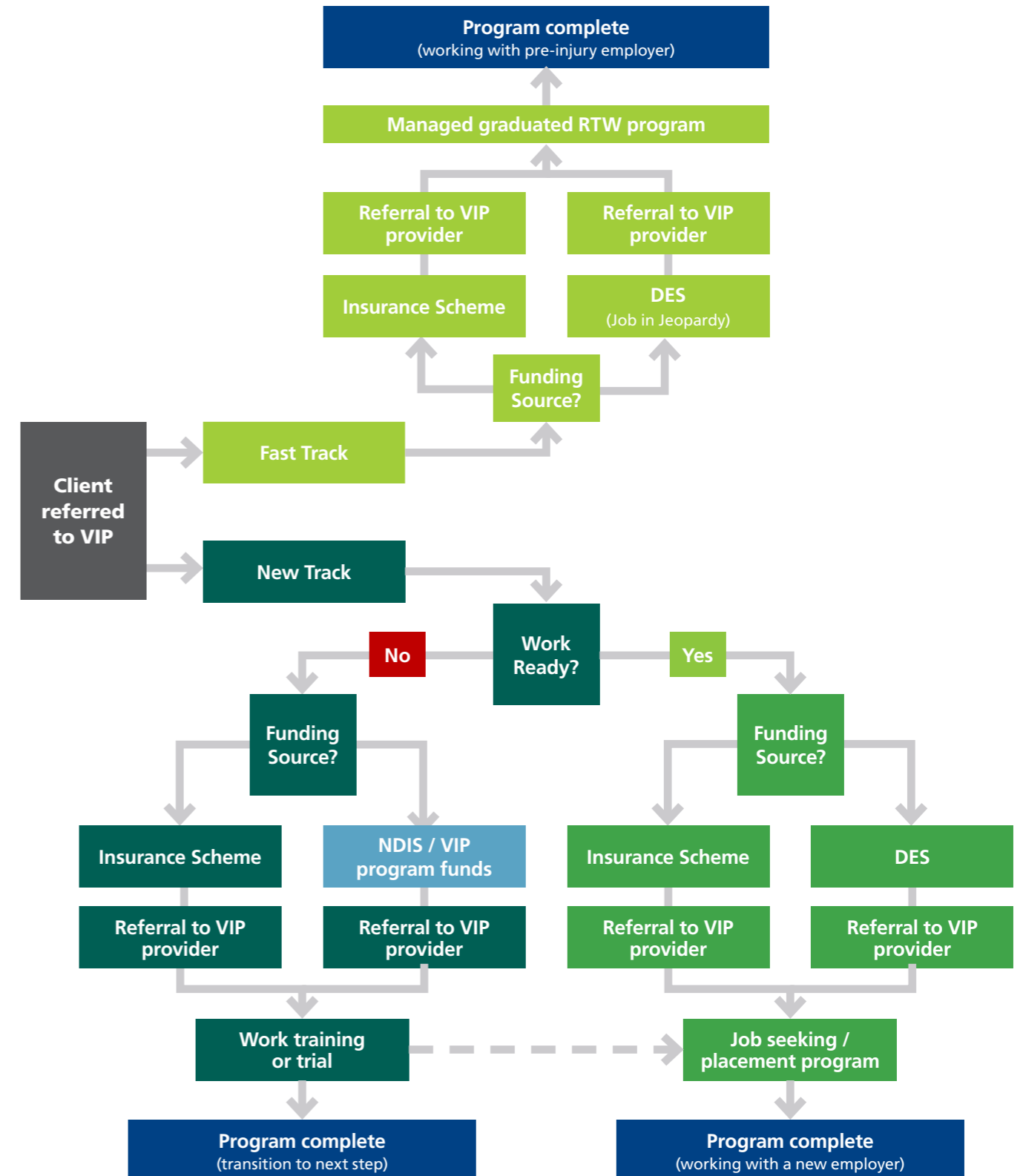
It is usually during the client's inpatient or community rehabilitation program that their candidacy for vocational rehabilitation is identified, including whether Fast Track or New Track is the applicable pathway.

In some cases, the opportunity to return to previous employment needs to firstly be clarified with the pre-injury employer.

Once the case manager is satisfied that the client meets the eligibility criteria, he/she considers the most suitable provider based on the client's compensation status and vocational needs. One or more VIP provider may be engaged in this process of considering the best approach for the client.

Figure 8 outlines the process of provider selection and access to vocational pathways.

Figure 8. VIP Fast Track and New Track pathways



The Fast Track pathway

The Fast Track pathway targets people with the opportunity and work capacity to return to their pre-injury place of employment. The 'pre-injury employer' is defined as the employer engaged in a contract of employment with the client at the time of injury.

RTW programs follow a graduated approach that is tailored to the needs of each client and employer and includes strategies to manage physical and cognitive effects of injury. Clients usually work either suitable duties within their pre-injury position or full duties on reduced hours. If this position is not available, then all familiar roles within their pre-injury employer organisation should be considered ahead of new or unfamiliar roles.

Clients will be referred to the VIP by their case manager at the earliest suitable time to allow assessment, employer liaison, education and development of the RTW plan. Programs will be continuous, including longer term follow-up, to assist all parties in responding to change and prevent breakdown of the employment relationship.

Fast Track pathway for icare clients

If the client is funded through icare (Lifetime Care or Workers Care), there are some differences in terminology and the involvement of icare coordinators in the case management process. See Section 5.

Eligibility criteria

To be considered for referral to the VIP, all criteria must be satisfied.

Employment circumstances

- Client was employed at the time of injury
- Client has indicated willingness to return to work with their pre-injury employer; and
- Employer indicates they are able to provide a graded RTW program

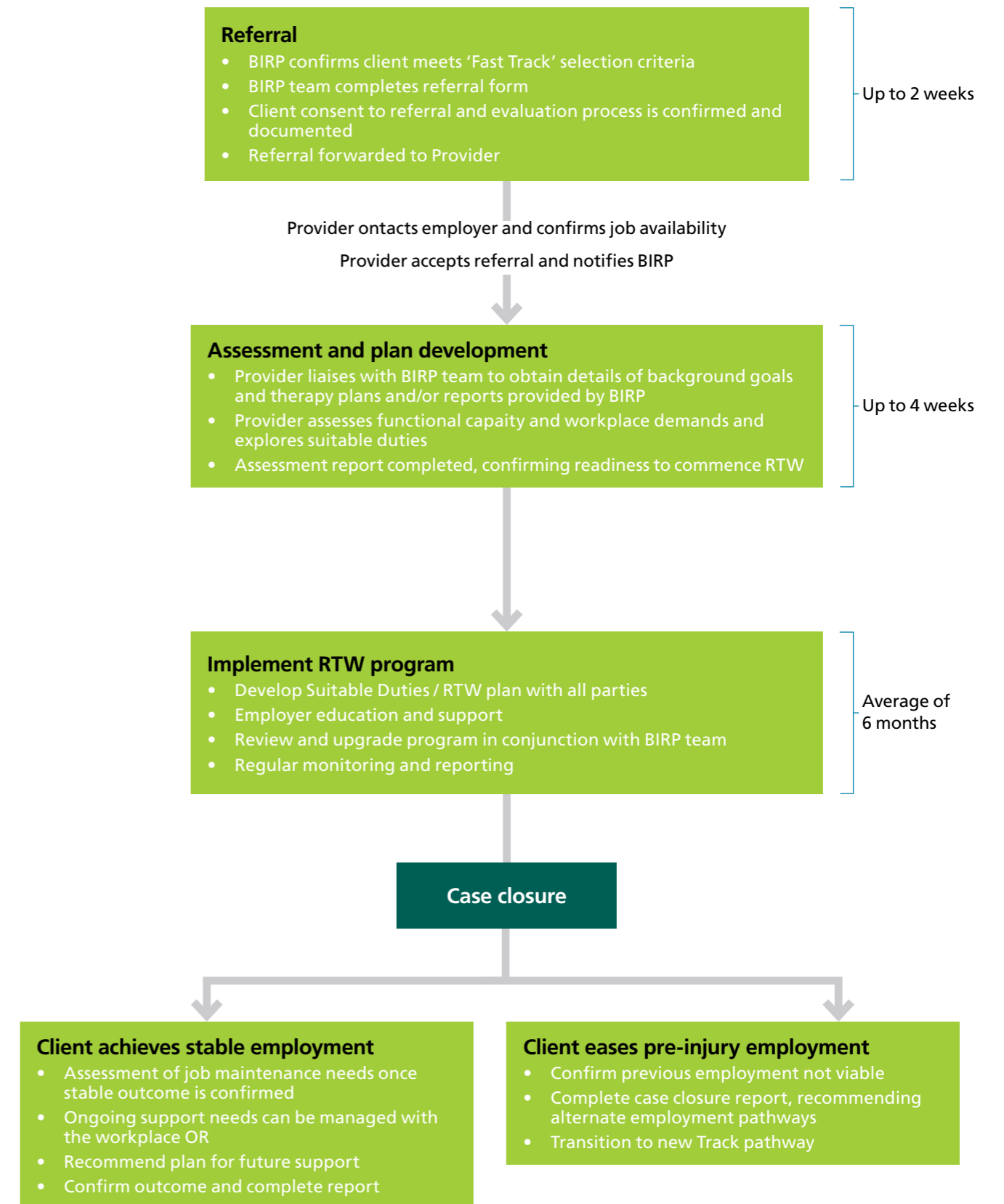
Diagnosis

- Primary condition is TBI or non-traumatic ABI

Readiness for RTW

- Medical clearance to commence vocational rehabilitation
- Accommodation is stable and enables the client to reliably engage in community activities
- Sufficient cognitive capacity to apply new information in everyday situations, such that the level of support can reduce over time
- Ability to attend to own personal care needs in a community setting
- Ability to mobilise independently in the community and workplace (with or without aids)
- Appropriate social behaviour or behaviour that can be managed with support and strategies in the workplace; and
- No current alcohol or drug use that compromises program engagement.

Figure 9. Fast Track stages and timeline



Fast Track pathway activities

Stage 1: Referral

Steps	BIRP/case manager activity	VIP provider activity
1	Confirm suitability of referral through discussion with the treating team and the client and consideration of eligibility criteria	
2	Gain client's consent to participate and for employer to be contacted and discuss VIP provider options	
3	Notify insurer/scheme agents (where applicable) of intent to refer client to VIP and discuss VIP provider options	
4	Contact VIP provider to initiate referral, discuss details of client's background, injury and current capacity	Contact employer to confirm capacity to offer a suitable duties program
5	Complete referral form and transmit to VIP provider, with reports	Review reports and confirm acceptance of referral

Stage 2: Assessment and plan development

Steps	BIRP/case manager activity	VIP provider activity
1	Meet with client to provide information about the program, gather initial information, establish goals and form a plan	
2		Physical and cognitive screening, if required
3		Workplace assessment, including identification of suitable duties with employer
4	Finalise assessment and recommendations in discussion with all parties	
5		Submit initial assessment report to all parties outlining RTW recommendations.
6	Facilitate any short-term pre-vocational training to address barriers delaying RTW, if applicable	
7		Develop a RTW (suitable duties) plan with input from all parties and disseminate

Stage 3: Implementation of RTW program

Steps	BIRP/case manager activity	VIP provider activity
1	Continuous case coordination and liaison	
2		Provide employer education
3		Implement cognitive strategies and support in the workplace
4		Monitor and upgrade RTW plan
5		Submit progress reports (two-monthly)

Stage 4: Case closure

Steps	BIRP/case manager activity	VIP provider activity
1		Confirm stability of placement and discuss case closure with all parties. Assess and communicate job maintenance needs and plan future support
2		Disseminate closure report

Expected outcomes

Vocational status will be measured by the research team at six months and 12 months after Fast Track program commencement. The vocational outcome may also be captured in the the case closure report if the client is discharged from the program within this period.

The outcome categories established for the Fast Track pathway are set out in the case closure report:

Paid work with pre-injury employer

- Working full pre-injury duties and hours with no ongoing requirement for support from the workplace or vocational provider
- Working full pre-injury duties and hours and requires some ongoing support from the workplace and/or vocational provider
- Working less than full duties and/or hours but with no ongoing requirement for support from the workplace or vocational provider
- Working less than full duties and/or hours and requires some ongoing support from the workplace and/or vocational provider

Not working with pre-injury employer

- Obtained employment with alternate employer
- Not working due to injury-related reasons
- Not working and no longer interested in finding work
- Not working but involved in an alternate vocational program to Fast Track
- Not working for other reasons (details)

The New Track pathway targets participants with a brain injury who do not have the opportunity to resume employment with their pre-injury employer, and require assistance to identify new opportunities and pathways to return to employment.

The long term goal of New Track is to obtain new paid employment. However, individual goals, services and support will vary. For example some participants may have identified job goals, but others will require assistance to identify goals, consider any RTW obligations they may have and to plan and undertake job seeking and/or retraining.

Some clients have an identified goal and even a preferred employer, but the majority require assistance to identify goals, plan and undertake job seeking and/or retraining.

Some clients will require a 'stepping stone' approach, with a number of activities required to gain skills and work capacity required to achieve their employment goal. It may require supporting participants to commence a pre-vocational activity if their capacity to work is not clear. Pre-vocational activities could assist a participant to develop or confirm a vocational goal. These activities along with vocational counselling will often assist to clarify with the person their capacity, explore realistic opportunities and determine future pathways.

Requests for pre-vocational services need to clearly identify the specific purpose of the activity and the activity needs to be monitored to enable its effectiveness to be measured. The request needs to include time to review what the next steps of the return to work process will be on completion of the activity.

New Track pathway for icare clients

If the client is funded through icare (Lifetime Care or Workers Care), there are some differences in terminology and the involvement of icare coordinators in the case management process. See Section 5.

Eligibility criteria

To be considered for referral, all criteria must be satisfied:

Employment circumstances

- Client does not have an identified employer; and
- Client has an active rehabilitation goal to participate in employment

Diagnosis

Primary condition is TBI or non-traumatic ABI

Readiness for work

- Medical clearance/support where applicable
- Accommodation is stable and enables the client to reliably engage in community activities
- Client has sufficient cognitive capacity to apply new information in everyday situations, such that the level of support can reduce over time
- Client has the capacity to attend a work program at least eight hours per week or work towards this within the first plan period.
- Ability to independently attend to own personal care needs in a community setting
- Ability to mobilise independently in the community (with or without aids), though may require support to access new locations
- Appropriate social behaviour or behaviour that can be managed with support in a work or training environment; and
- No current alcohol or drug use that compromises program engagement.

Vocational assessment

Vocational assessment is the first step to establishing the vocational goal. This assessment will also identify the activities to be undertaken in the initial phase following the assessment. The activities will depend on the interests and needs of the client as well as the obligations and options available within their funding scheme/s.

The Work Options Plan (WOP) is an assessment tool developed by icare Lifetime Care suited to this population. The WOP is used in each New Track case funded by Lifetime Care (including icare Workers Care) and also available for use across other streams (refer to Section 8).

New Track pathway activities

New Track encompasses all activities to obtain and keep new employment, including those considered 'pre-vocational'.

The main activities are outlined in Table 9. Please note this is not an exhaustive list.

Table 9: Main activities of New Track pathway

	Job seeking for paid work	Work trial placement	Vocational training	Supported employment	Volunteer work
Description	The primary activity in New Track, supported by all government and insurance funding schemes	Participation in an unpaid work trial allows for practical assessment, the development of work fitness and skills, establishing new references plus the possibility of transitioning to a paid role.	This may include TAFE courses or specific trade certificates (e.g. Responsible Service of Alcohol, Forklift licence, construction white card)	Participating in employment with an Australian Disability Enterprise (ADE), either as a transitional or longer term placement Supported employment needs to be approached sensitively, as clients who worked pre-injury, may find the environment and supported wage levels confronting	Includes unpaid work with charities or community enterprises. This is an alternative option to a work trial or ADE placement
Client	Suitable for clients with identified job goal and capacity to commence paid work	Suitable for clients whose work capacity is unclear and/or who need a graduated approach to upskilling and building work fitness.	Suitable for clients requiring new vocational qualifications for the identified job goal	Clients eligible for NDIS who have higher support needs precluding their current participation in open employment For non-NDIS clients, funding could be sourced from their funding provider (e.g., Lifetime Care) to meet the fees of the ADE provider	Clients unsuited or not ready for open employment
Duration	Dependent on client and local labour market opportunities	Recommended to be 12 weeks	Dependent on client, but generally short-term vocational courses/certificates (one day to one semester)	Dependent on client. May be transitional (3-12 months) or longer-term option	The placement can be viewed as short term (transitional) or longer term options
Objective	Obtain paid work in mainstream workforce at the award rate of pay. Employer incentives/wage subsidies and/or supported wages may be considered in securing paid work	Complete a work trial placement in view of transitioning to paid work with the host employer or another employer	Completion of a short course to meet skill/certificate requirements for an identified and (where applicable) approved job goal	Meaningful participation at a workplace providing routine, skill development and a supported wage	
Role of the VR provider	Design a job seeking plan, support job seeking activities (include direct canvassing), negotiate with the employer, access incentives (where applicable), on-job training and employer support, monitor progress and report to all parties, consider longer-term retention strategies and supports	Establish job goal/s, source a host employer, conduct workplace assessment to identify suitable duties, develop a plan for the placement (including graduated hours and duties), arrange/provide insurance coverage, provide on-site training/support/monitoring of placement, report progress to all parties, negotiate paid work where available and complete closure report	Source a suitable training course, arrange course funding through relevant funding body, support client's attendance and participation, monitor progress, report progress to all parties	Identify ADEs in the client's local area, support the client in choosing the most suitable ADE, support their application and negotiate a plan of hours/tasks, provide on-site support in transitioning to workplace supports, report progress to all parties.	Support the client to source local charity, community and business enterprises in their local area, set up the placement, support their attendance and participation, monitor progress and report to all parties, consider longer-term plans and support requirements and convey the plan accordingly

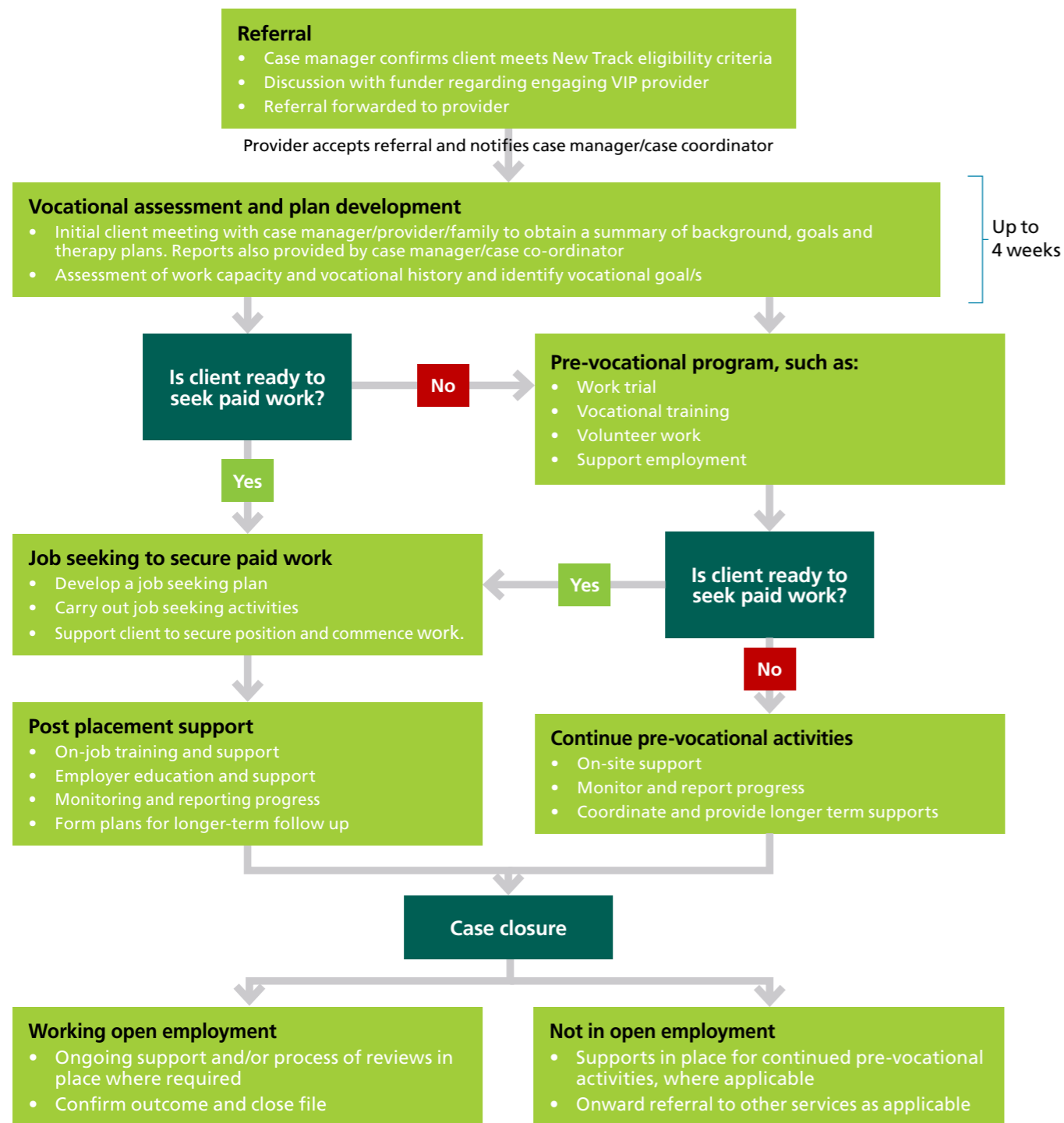
Service funding

Funding for New Track activities is sourced through the insurance schemes (e.g., icare Lifetime care, Workers Insurance or CTP insurer), NDIS and/or DES stream for which the client is eligible. Those clients eligible for more than one scheme may benefit from the options supported within each.

The majority of clients are eligible to be funded through a scheme, however in cases where there is no alternate funding scheme available, the ACI may be able to fund some placements.

To apply for this funding, providers complete the 'work trial request form'. Once approved, the funding is payable on a set milestone schedule.

Figure 10: New Track stages and timeline



New Track pathway activities

Stage 1: Referral

Steps	BIRP/case manager activity	VIP provider activity
1	Confirm suitability of referral through discussion with the treating team and the client	
2	Notify insurer/scheme agents (where applicable) of intent to refer client to VIP and discuss vocational provider options	
3	Contact VR provider to initiate referral, discuss details of client's background, injury, current capacity and goals	
4	Complete referral form and transmit to VR provider, with reports	Review reports, confirm acceptance of referral, arrange approval of funding to commence services (including Centrelink assessments as applicable), and allocate client to consultant

Stage 2: Assessment and plan development

Steps	BIRP/case manager activity	VIP provider activity
1	Meet with client for team/family meeting to gather initial information, discuss goals and form a plan	
2		Physical and cognitive screening, if required
3		Vocational assessment/work options plan to establish vocational goal/s
4		Finalise assessment and recommendations in discussion with all parties and obtain agreement for job goal with funder as appropriate
5		Submit Vocational assessment report/WOP outlining goals, recommendations and plans

Stage 3: Intervention (implement work preparation program)

Steps	BIRP/case manager activity	VIP provider activity
1	Continuous case coordination and liaison	
2	Provision of medical, therapy and case coordination services	Develop a plan for selected vocational activity Implement plan, including on-site support and monitoring
3	Discuss client's progress in selected activity	
4		Form plans for continued support and review of progress

Stage 4: Case closure

Steps	BIRP/case manager activity	VIP provider activity
1		Confirm stability of placement and discuss case closure with all parties and put ongoing supports in place for referral to alternative services as applicable
2		Disseminate closure report

Expected outcomes

Vocational status will be measured at three time points after program admission:

- six months
- 12 months; and
- 18 months.

Status categories established for the New Track pathway are set out in the case closure report as follows:

Paid work with new employer

- a. Working in mainstream employment with no ongoing support from vocational provider
- b. Working in mainstream employment with provider support and/or employer incentives, supported wages etc.
- c. Client working in supported employment (ADE)

Not in paid work

- a. Client engaged in job seeking within VIP
- b. Client engaged in pre-vocational activities within VIP (includes work trial, volunteer work, re-training)
- c. Client not working and not engaged in a vocational program.
- d. Client engaged in a vocational program outside of VIP
- e. Other

Report proformas

There are a number of report proformas that have been developed for the VIP and are available for use by all providers. The referral form and closure report should be used by all providers, as these reports provide important program data.

For Lifetime Care participants, the WOP is used rather than the vocational assessment report proforma available. WOPs need to be completed by Rehabilitation Counsellors or Psychologists experienced in RTW.

SECTION 6

VIP pathways for icare Lifetime Care and Workers Care participants

Funding for client services will primarily be obtained by VIP providers through the existing government and insurance programs (DES, NDIS, icare, CTP, life insurance etc).

If the client is funded through icare (Lifetime Care or Workers Care), there are some differences in terminology and the involvement of icare coordinators in the case management process.

Lifetime Care is committed to supporting its participants to actively participate in the community through returning to meaningful employment. Lifetime Care participants have complex needs and VR programs need to ensure that all needs, such as cognitive and physical aspects of job options, are explored and addressed.

Lifetime Care's legislation and guidelines do not require a participant to RTW. Some participants may choose not to return or to retire.

Although there is no obligation for participants to return to work, for many people returning to work is an important part of rehabilitation and can bring a range of benefits to the individual, their family and the community, so it should be encouraged and facilitated.

Lifetime Care does not follow a structured hierarchy for RTW. However, RTW goals should be realistic and commensurate with a person's skills, abilities and pre-injury employment. Returning to work after severe injury may take a long time. The initial stages of thinking about work involve encouraging and supporting participants to explore what future work may be possible.

Consideration of RTW obligations

Lifetime Care participants may be receiving additional benefits, such as those through compulsory third party (CTP) or workers compensation insurance, or Centrelink entitlements, all of which may have some RTW obligations.

There will be a small number of Lifetime Care participants who have a compensation claim through either CTP or workers compensation, and they are referred to as co-shared participants. For co-shared participants, the Lifetime Care Coordinator and VIP provider need to clarify if the participant has any RTW obligations, and ensure that a RTW program has not been initiated by the CTP or workers compensation insurance agent. These participants may be able to access SIRA vocational programs, and may benefit from being linked to a SIRA accredited vocational provider who is experienced in the CTP or workers compensation legislation. It is important to be aware that these participants need to notify the CTP or workers compensation insurance agent about any changes in their circumstances as this may affect payments they are entitled to.

Many Lifetime Care participants do not receive any weekly benefits through an insurance scheme but receive weekly benefits through Centrelink in the form of a disability support pension (which may have participation requirements) or the Newstart Allowance (which has the obligation requirement of actively looking for work). These obligations need to be explored and considered as part of any vocational rehabilitation program.

The Lifetime Care Fast Track pathway targets people with the opportunity and work capacity to return to their pre-injury place of employment in the same or a different role. The 'pre-injury employer' is the employer engaged in a contract of employment with the person at the time of injury.

RTW programs typically follow a graduated approach that is tailored to the needs of each participant and employer and includes strategies to manage physical and cognitive effects of injury. Participants will often initially return to work on reduced hours and performing suitable duties. If this is not available, all familiar roles within their pre-injury employer organisation should be considered before new or unfamiliar roles.

Participants may be referred to a VIP provider from either the BIRP, icare coordinator or private case manager at the earliest suitable time to allow assessment, employer liaison, education, development of a RTW strategy and RTW plan. Programs may require longer term follow-up, to assist all parties in responding to change and ensure sustainability of return to work due to the severe nature of the participant's injuries.

Lifetime Care Fast Track eligibility criteria

The following criteria apply to people who are Lifetime Care participants only:

Employment circumstances

- Participant was employed at the time of injury;
- Participant has indicated willingness to return to work with their pre-injury employer;
- Employer indicates they are able to provide a graded RTW program; and
- Treating team are supportive of exploring RTW

Diagnosis

- Primary condition is TBI

Readiness for RTW

- Participant has the capacity to participate in RTW work program and support from treating team to do so;
- Participant has sufficient cognitive capacity to apply new information in everyday situations, such that the level of support can reduce over time;
- Ability to attend to own personal care needs in a community setting;
- Ability to mobilise independently in the community and workplace (with or without aids);
- Accommodation is stable and enables the client to reliably engage in community activities;
- Appropriate social behaviour or behaviour that can be managed with support and strategies in the workplace;
- No current alcohol or drug use that compromises program engagement; and
- Any mental health conditions are well controlled by treatment.

Lifetime Care Fast Track activities

Stage 1: Referral

Steps	BIRP/icare/case manager activity	VIP provider activity
1	Confirm suitability of participating in RTW program through discussion with the treating team including the person and coordinator Obtain the person's consent to participate and for the employer to be contacted Discuss VR provider options with person and icare, and confirm if any RTW obligations Obtain approval for an initial needs assessment with a VR provider (up to four hours plus travel). A work options plan is not required when a person is returning to work with their pre-injury employer	
2	Contact VR provider to initiate referral, discuss details of person's background, injury and current capacity	
3	Complete referral form and provide relevant reports to VR provider	Review referral and reports and confirm acceptance of referral

Stage 2: Assessment and plan development

Steps	icare/case manager activity	VIP provider activity
1		Complete initial vocational needs assessment including meeting the person and case manager. Contact the employer, gather information and develop a RTW strategy and plan A workplace meeting is recommended and a workplace assessment may be required
2	Finalise assessment and recommendations in discussion with all parties	
3		Prepare initial assessment report for Lifetime Care outlining the goal, RTW strategy and plan. The services and support that will be needed to commence a return to work are to be included in a service request. Forward this to case manager/referrer Recommendations could include: physical and cognitive screening; workplace assessment; development of suitable duties with employer; development of suitable physical and cognitive strategies for the workplace; development of a graduated RTW plan.
4	Submit initial assessment report and Service Request to Lifetime Care outlining the services and support needed OR incorporate into My Plan if the timing of my plan allows.	
5	Facilitate approval of recommendations with icare coordinator	

Stage 3: Implementation of RTW program

Steps	icare/case manager activity	VIP provider activity
1	Continuous case coordination and liaison	
2	Provision of medical, case management and therapy services	Provide employer education
		Monitor and upgrade RTW plan
3		Provide monthly updates to case manager or as issues arise. Attend case conferences if appropriate
4	Incorporate progress into My Plan	

Stage 4: Case closure

Steps	icare/case manager activity	VIP provider activity
1		Confirm stability of placement and discuss case closure with all parties. Assess and communicate job maintenance needs and plan future support
2		Discuss with case manager any additional support needs to maintain employment, and identify who could provide it. Facilitate request for additional supports
3		Disseminate closure report/provide information to case manager.
4	Incorporate information on progress into My Plan. Request any additional support services to maintain employment	

Lifetime Care New Track pathway

The Lifetime Care New Track pathway targets participants with a brain injury who do not have the opportunity to resume employment with their pre-injury employer, and require assistance to identify new opportunities and pathways to return to employment.

The long term goal of New Track is to obtain new paid employment. However, individual goals, services and support will vary. For example some participants may have identified job goals, but others will require assistance to identify goals, consider any RTW obligations they may have and to plan and undertake job seeking and/or retraining.

Some clients will require a 'stepping stone' approach, with a number of activities required to gain skills and work capacity required to achieve their employment goal. It may require supporting participants to commence a pre-vocational activity if their capacity to work is not clear. Pre-vocational activities could assist a participant to develop or confirm a vocational goal. These activities along with vocational counselling will often assist to clarify with the person their capacity, explore realistic opportunities and determine future pathways.

Requests for pre-vocational services need to clearly identify the specific purpose of the activity and the activity needs to be monitored to enable its effectiveness to be measured. The request needs to include time to review what the next steps of the return to work process will be on completion of the activity.

Lifetime Care New Track eligibility criteria

The following criteria apply to people who are Lifetime Care participants only:

Employment circumstances

- Participant does not have a suitable pre-injury job or employer to return to work
- Has indicated willingness to explore options to return to work; and
- Treating team is supportive of exploring RTW.

Diagnosis

- Primary condition is TBI.

Readiness for RTW

- Participant has the capacity to participate in RTW work program and support from treating team to do so;
- Participant has sufficient cognitive capacity to apply new information in everyday situations, such that the level of support can reduce over time;
- Ability to attend to own personal care needs in a community setting;
- Ability to mobilise independently in the community and workplace (with or without aids);
- Accommodation is stable and enables the client to reliably engage in community activities;
- Appropriate social behaviour or behaviour that can be managed with support and strategies in the workplace;
- No current alcohol or drug use that compromises program engagement; and
- Any mental health conditions are well controlled by treatment.

Lifetime Care New Track pathway activities

Stage 1: Referral

Steps	BIRP/icare/case manager activity	VIP provider activity
1	Confirm suitability of referral through discussion with the treating team, coordinator and the client Obtain the participant's consent to participate. Discuss VR provider options with participant and icare, and confirm if any RTW obligations	
2	Approval for referral to a VR provider to complete a Work Options Plan (WOP) to explore RTW possibilities	
3	Contact VR provider to initiate referral, discuss details of participant's background, injury, current capacity and goals.	
4	Complete referral form and provide relevant reports to VR provider	Review reports, confirm acceptance of referral, and allocate participant to consultant suitably qualified to complete a WOP

Stage 2: Assessment and plan development

Steps	BIRP/icare/case manager activity	VIP provider activity
1	Meet with participant for team/family meeting to gather initial information, discuss goals and form a plan	
2		WOP to establish goal/s. The goal may be related to obtaining work or preparing for work
3		Finalise assessment and recommendations in discussion with all parties
4		Submit WOP outlining goals, RTW strategy, recommendations and plans to case manager/referrer
5	Submit WOP or incorporate recommendations into My Plan if timing allows, and facilitate approval of recommendations with icare coordinator	

Stage 3: Implementation of RTW program

Steps	BIRP/icare/case manager activity	VIP provider activity
1	Continuous case coordination and liaison	
2		Implementation of WOP recommendations Activities may include job seeking for paid work; work trial placement; vocational training; supported employment; volunteer work; pre-vocational activities; employer education and support; monitoring employment and/or training; and upgrading suitable duties plan if appropriate
3	Provision of medical, case management and therapy services	Provide monthly updates to case manager or as issues arise
4	Incorporate progress into My Plan	

Stage 4: Case closure

Steps	BIRP/icare/case manager activity	VIP provider activity
1		Confirm stability of placement/achievement of goals outlined in WOP and discuss case closure with all parties Discuss with case manager any additional support needs to maintain employment and identify who could provide support. Facilitate request for additional supports
2		Disseminate closure report/provide information to case manager
3	Incorporate information on progress into My Plan Request any additional support services to maintain employment	

icare Workers Care

The icare Workers Care Program supports workers who sustained severe injuries whilst at work. Workers in this program have their treatment and care managed by the Workers Care Program, while their weekly benefits and all other types of compensation are managed by their employer's workers compensation insurance agent.

Many workers will still be engaged with their pre-injury employer. The worker's capacity to RTW and the availability of suitable employment needs to be explored as the first step in the process. Some employers may also have a preferred VR provider and this may mean that the rehabilitation is provided outside the VIP.

VR providers who work with Workers Care need to be approved by SIRA to work with Workers Care Participants. The worker's RTW obligations need to be considered and adhered to so as to not impact on weekly benefits. Consideration should be given to utilising SIRA vocational support programs.

Report proformas

There are a number of report proformas that have been developed for the VIP and are available for use by all providers. The referral form and closure report should be used by all providers, as these reports provide important program data.

Workers Care Fast Track pathway

The Workers Care Fast Track pathway targets people with the opportunity and work capacity to return to their pre-injury place of employment in the same or a different role.

People in the Workers Care program have sustained their injury at work and the workers compensation legislation, processes and procedures must be followed. Individuals and employers have obligations as part of their claim, and expectations around returning to work needs to be discussed with the worker, employer and icare.

A SIRA approved vocational rehabilitation provider must be used.

RTW programs typically follow a graduated approach that is tailored to the needs of each person and employer and includes strategies to manage physical and cognitive effects of injury. People will often initially return to work on reduced hours and/or performing suitable duties. If this is not available, all familiar roles within their pre-injury employer organisation should be considered before new or unfamiliar roles.

People may be referred to a VIP provider from the BIRP, icare coordinator or private case managers at the earliest suitable time to allow assessment, employer liaison, education and development of a RTW strategy and RTW plan. Programs may require longer term follow-up, to assist all parties in responding to change and ensure sustainability of return to work due to the severe nature of the worker's injuries.

Workers Care Fast Track eligibility criteria

The following criteria apply to people who are part of the Workers Care program:

Employment circumstances

- Worker was employed at the time of injury;
- Worker has indicated willingness to return to work with their pre-injury employer;
- A RTW provider has not been engaged by the employer or insurer; and
- Employer indicates they are able to support a graded RTW program.

Diagnosis

- Primary condition is TBI

Readiness for RTW

- Worker has the capacity to commence a RTW work program and support from treating team to do so;
- Certificate of capacity supports commencing in RTW program;
- Worker has sufficient cognitive capacity to apply new information in everyday situations, such that the level of support can reduce over time;
- Ability to attend to own personal care needs in a community setting;
- Ability to mobilise independently in the community and workplace (with or without aids);
- Accommodation is stable and enables the client to reliably engage in community activities;
- Appropriate social behaviour or behaviour that can be managed with support and strategies in the workplace;
- No current alcohol or drug use that compromises program engagement; and
- Any mental health conditions are well controlled by treatment.

Workers Care Fast Track activities

Stage 1: Referral

Steps	BIRP/icare/case manager activity	VIP provider activity
1	Confirm suitability of participating in RTW program through discussion with the treating team including the person and icare workers care coordinator Obtain the person's consent to participate and for the employer to be contacted Discuss VR provider options with person and icare, and confirm if any RTW obligations or if a RTW program has been initiated by workers compensation insurance agent Obtain approval for an initial assessment with a VR provider	
2	Contact SIRA approved VR provider to initiate referral, discuss details of client's background, injury and current capacity	
3	Complete referral form and provide relevant reports to VIP provider	Review reports and confirm acceptance of referral

Stage 2: Assessment and plan development

Steps	icare/case manager activity	VIP provider activity
1		Complete initial needs assessment including meeting the client and case manager. Contact the employer, gathering information and develop a plan. A workplace meeting is recommended and a workplace assessment may be required.
2	Finalise assessment and recommendations in discussion with all parties	
3		Prepare initial vocational assessment report (could be in the format of an initial needs assessment or a work place assessment report (as appropriate) for Workers Care outlining the goal, RTW strategy and plan. The services and support that will be needed to commence a return to work are to be included in a service request. Recommendations could include physical and cognitive screening; workplace assessment; development of suitable duties with employer; development of a graduated RTW plan or provision of codes
4	Submit initial needs vocational assessment report to Workers Care outlining the services and support needed OR incorporate into My Plan if the timing of My Plan allows	
5	Facilitate approval of recommendations with icare coordinator	

Stage 3: Implementation of RTW program

Steps	icare/case manager activity	VIP provider activity
1	Continuous case coordination and liaison	
2		Provide employer education
3		Implementation of cognitive strategies and support in the workplace and support the resolution of any issues.
4	Provision of medical, case management and therapy services	Monitor and upgrade RTW plan
5		Provide monthly updates to case manager/icare coordinator or as issues arise. Attend case conferences if appropriate
6	Incorporate progress into My Plan	

Stage 4: Case closure

Steps	icare/case manager activity	VIP provider activity
1		Confirm stability of placement. The length of monitoring will vary depending on the individuals circumstances and discuss case closure with all parties Assess and communicate job maintenance needs and plan for future support
2		Discuss with case manager any additional support needs to maintain employment, and identify who could provide. Facilitate request for additional supports
3		Disseminate closure report/provide information to case manager.
4	Incorporate information on progress into My Plan. Request any additional support services to maintain employment	

Workers Care New Track pathway

The Workers Care New Track pathway targets workers with a brain injury who are part of the icare Workers Care Program and unable to return to their pre-injury role and detached from this employer.

Workers in Workers Care Program have sustained their injury at work and the Workers compensation insurance legislation, processes and procedures must be followed. The injured workers and employers have obligations as part of their claim.

A SIRA accredited provider must be used.

The long term goal of New Track is to obtain new paid employment. However, individual goals, services and support will vary. For example some workers may have identified goals, but others will require assistance to identify goals, consider any RTW obligations they have and plan and undertake job seeking and/or retraining.

Some workers will require a 'stepping stone' approach, with a number of activities required to gain skills and work capacity required to achieve their employment goal. It may require supporting the worker to commence a pre-vocational activity if their capacity to work is not clear. Pre-vocational activities could assist a worker to develop or confirm a vocational goal. These activities will often assist to clarify the workers' capacity and determine future pathways.

Requests for pre-vocational services need to clearly identify the specific purpose of the activity and the activity needs to be monitored to enable its effectiveness to be measured. The request needs to include time to review what the next steps of the return to work process will be on completion of the activity.

Participating in a work trial placement is a proven activity to increase work capacity, learn new skills and obtain recent work experience. Additionally, formal training may also be required to formalise skills required for new employment. Requests for all training services need to meet SIRA requirements.

Workers Care New Track eligibility criteria

The following criteria apply to people who are part of the Workers Care program:

Employment circumstances

- Worker does not have a suitable pre-injury job or employer to return to;
- Worker has indicated willingness to explore options to return to work; and
- The treating team is supportive of exploring RTW.

Diagnosis

- Primary condition is TBI

Readiness for RTW

- Worker has the capacity to participate in RTW program and support from treating team to do so;
- Certificate of capacity supports engaging in RTW program. Pre-vocational activities do not require work capacity as engaging in the program will lead to increased capacity for work;
- The worker has sufficient cognitive capacity to apply new information in everyday situations, such that the level of support can reduce over time;
- Ability to attend to own personal care needs in a community setting;
- Ability to mobilise independently in the community and workplace (with or without aids);
- Accommodation is stable and enables the client to reliably engage in community activities ;
- Appropriate social behaviour or behaviour that can be managed with support and strategies in the workplace;
- No current alcohol or drug use that compromises program engagement; and
- Any mental health conditions is well controlled by treatment.

Workers Care New Track activities

Stage 1: Referral

Steps	BIRP/icare/case manager activity	VIP provider activity
1	Confirm suitability of participating in RTW program through discussion with the treating team including the worker and icare Workers Care coordinator Obtain the worker's consent to participate and for the employer to be contacted Discuss vocational provider options with person and icare, and confirm if any RTW obligations or if a RTW program has been initiated by workers compensation insurance agent	
2	Obtain approval for a vocational assessment with a SIRA approved vocational provider	
3	Contact SIRA approved VIP provider to initiate referral, discuss details of client's background, injury and current capacity	
4	Complete referral form and provide relevant reports to VIP provider	Review reports, confirm acceptance of referral and allocate worker to a suitably qualified consultant

Stage 2: Assessment and plan development

Steps	BIRP/icare/case manager activity	VIP provider activity
1	Meet with worker and team/family meeting to gather initial information, discuss goals and form a plan	
2		Vocational assessment undertaken to establish goal/s. The goal may be obtaining work or preparing for work Finalise assessment and recommendations in discussion with all parties
3		Submit vocational assessment outlining goals, RTW strategy, recommendations and plan to case manager/referrer
4	Submit vocational assessment to Workers Care or incorporate into My Plan if timing allows	
5	Facilitate approval of recommendations with icare coordinator	

Stage 3: Implementation of RTW program

Steps	BIRP/case manager activity	VIP provider activity
1	Continuous case coordination and liaison	
2		Implementation of vocational assessment recommendations Activities may include: <ul style="list-style-type: none"> • job seeking for paid work • work trial placement • vocational training • supported employment • pre-vocational activities • utilisation of SIRA vocational support programs
3	Provision of medical, case management and therapy services	Provide monthly updates to case manager/icare coordinator or as issues arise
4	Incorporate progress into My Plan	

Stage 4: Case closure

Steps	icare/case manager activity	VIP provider activity
1		Confirm stability of placement/achievement of goals outlined in vocational assessment and discuss case closure with all parties The length of monitoring and review will vary with each individual worker Assess and communicate job maintenance needs and plan future support Discuss with case manager/icare coordinator any additional support needs to maintain employment, and identify who could provide Facilitate request for additional supports
2	Incorporate information on progress into My Plan. Request any additional support services to maintain employment	Disseminate closure report/incorporate into My Plan

SECTION 7

Program governance and communication

This section provides more detail about the Management and Steering Committees overseeing the VIP, as well as the channels of communication.

The Management Committee is chaired by the ACI and is responsible for governance, overseeing the VIP model development, contracting of providers, service delivery and program evaluation. It comprises personnel from the ACI, Brain Injury Australia, SIRA and icare Lifetime Care.

The Regional Steering Committees are chaired by the ACI, and are responsible for guiding the implementation of the VIP at a local level.

The Regional Steering Committees comprise personnel from ACI, icare Lifetime Care, VIP providers, BIRP staff and consumer representatives.

Three committees will provide a forum for all parties involved in the provision of the VIP trial interventions to provide feedback, share experiences, implement solutions, track progress and the achievement of program milestones. The channels of communication between partnering teams is outlined in Table 10. Communication can be facilitated through a web-based collaboration tool, allowing partners to schedule tasks, share resources and post messages.

Table 10: Channels of communication

	BIRP staff/case managers	VIP provider staff	ACI project managers	icare Lifetime Care	Consumer representatives
BIRP staff/case managers		Case conferencing Forms and reports Phone and email Training sessions Client appointments Steering committee Online	Phone and email Site visits and reviews Training sessions Reports Meetings Steering committee Online	Steering committee Meetings and project activities (e.g. training)	Steering committee meetings Special projects
VIP provider staff	Case conferences Forms & reports Phone and email Training sessions Client appointments Steering committee Online		Phone & email Site visits and reviews Training sessions Reports Meetings Steering committee Online	Forms and reports Steering committee Meetings and project activities (e.g. training)	Steering committee meetings
ACI project managers	Phone & email Site visits Training sessions Reports Online	Phone & email Site visits Training sessions Reports Meetings Steering committee Online		Phone & email Committee meetings Face to face Reports	Steering committee meetings Phone and email Face to face
icare Lifetime Care	Steering committee Meetings and project activities (e.g., training)	Forms & reports Steering committee Meetings and project activities (e.g., training)	Phone & email Meetings Face to face Reports		Steering committee meetings
Consumer representatives	Steering committee meetings Special projects	Steering committee meetings	Steering committee meetings Phone and email Face to face	Steering committee meetings	

Table 11: Service partner roles

BIRP team/case managers/icare coordinators	VIP providers	Agency for Clinical Innovation	icare Foundation	icare Lifetime Care
<ul style="list-style-type: none"> Allocate a site representative as a central point of contact to manage queries and partnership activities Assess the impact of injury on the individual and their capacity to engage in paid work Make referrals to VR providers Provide relevant medical and therapy reports Coordinate service requests/funding plans for VIP services (particularly icare Lifetime Care) Provide or coordinate required therapies, including activities supporting vocational participation, such as driving assessment, transport training, etc. Coordinate attendant care if required, including supports to attend VIP activities Ongoing case coordination/case management Coordinate medical services (generally with rehabilitation specialists) 	<ul style="list-style-type: none"> Allocate a regional representative as a single point of contact for referrals, queries and partner activities Accept and allocate referrals Arrange registration/approval to commence services, including attending Centrelink assessments Conduct all vocational services, from assessment, goal development, planning, placement to post placement support, within the guidelines of the approved funding source Coordinate and support client activities related to the vocational goals, such as training courses Liaise with BIRP teams/case managers throughout service provision, including input into goal setting/planning and progress feedback (verbal and written reports) 	<ul style="list-style-type: none"> Program governance functions Deliver training, educational materials and service protocols to assist in the implementation of the program and building expertise within the VIP provider network Evaluate the efficacy of the implementation will be managed in conjunction with the Brain Injury Rehabilitation Research Group (Ingham Institute of Applied Medical Research, Liverpool) 	<p>The funding partner for VIP 2.0, including resourcing requirements of ACI and the 90 allocated work trial placements within the New Track pathway</p>	<p>The primary scheme engaged in VIP, joining with ACI for program governance functions</p>

SECTION 8

Program evaluation

This section outlines the VIP evaluation framework and strategy, including the primary research questions, sub-questions and sources of data.

The VIP evaluation will be conducted by Professor Grahame Simpson, Team Leader of the Brain Injury Rehabilitation Research Group, Ingham Institute of Applied Medical Research.

The evaluation strategy is aligned with the RE-AIM framework (Reach, Effectiveness, Adoption, Implementation and Maintenance). RE-AIM was first

published in 1999 (Glasgow, Vogt & Boles, 1999) and is a widely used planning and implementation model used in health implementation research.

Table 12 sets out the primary research questions, sub-questions and sources of data to address the primary research questions.

Table 12: VIP2 evaluation framework

Criteria	Key evaluation question	Sub-questions	Indicators	Tools	Who?
Reach	To what extent did the VIP2 cover its intended population?	<ul style="list-style-type: none"> What proportion of BIRP clients are suited to VR? What proportion of BIRP clients suited to VR were referred to VIP? 	<ul style="list-style-type: none"> VIP participants as % of BIRP caseload VIP participants as % of identified clients 	<ul style="list-style-type: none"> BIRP caseload lists Referral registers 	<ul style="list-style-type: none"> BIRP staff Research team
Effectiveness	How effective was VIP2 at achieving its intended outcomes?	<ul style="list-style-type: none"> How many VIP participants completed the program? What were the factors and characteristics contributing to program separation? How many FT participants achieved sustainable employment? (6 and 12 month status) What employment outcomes were achieved by NT participants? (6, 12 and 18 month status) How many VIP participants achieved employment versus a control sample? How did program participation impact quality of life? 	<ul style="list-style-type: none"> Central client data record Client demographics RTW rates Vocational outcomes QOL and self-efficacy changes pre-post 	<ul style="list-style-type: none"> Vocational status module Provider forms and reports Client measures 	<ul style="list-style-type: none"> Provider data Research team Provider data Client
Adoption	Are pathways available across NSW for people with ABI to gain suitable employment	<ul style="list-style-type: none"> How many providers engaged in EOI process and applied for partnerships? How many partnerships commenced and with whom? What proportion of commencing partners were engaged for duration of program How well did partnerships develop across the program? 	<ul style="list-style-type: none"> Number attended information sessions Number of applications received Provider lists Partnership analysis ratings (3 and 12 months) 	<ul style="list-style-type: none"> EOI records Vic Health Partnership Analysis 	<ul style="list-style-type: none"> Project team Provider and BIRP staff
Implementation	To what extent was the program implemented as planned?	<ul style="list-style-type: none"> How consistent was the implementation across all sites? How were ABI resources used and specialist skills developed? How efficient were processes within the service pathways? What were the experiences of participants, providers and clinicians? 	<ul style="list-style-type: none"> Fidelity scores Time recording data Milestone durations Qualitative semi-structured interviews 	<ul style="list-style-type: none"> Supported Employment Fidelity Scale _VIP Case Management taxonomy Provider forms and reports Interview measures Client films 	<ul style="list-style-type: none"> Provider and BIRP staff Provider data Clients
Maintenance	To what extent are the program processes and outcomes likely to be sustainable?	<ul style="list-style-type: none"> Are BIRPs using the VIP model as "business as usual"? Are existing funding schemes meeting the needs of BIRP clients? Are VIP providers receiving referrals for non-BIRP clients? What resources will be required for this to continue, and are these accessible? 	<ul style="list-style-type: none"> Referral rates Profile of participants by scheme type Referral numbers Project demand (project staff) 	<ul style="list-style-type: none"> Referral registers Sub-group analysis Referral data (non BIRP) Time in motion study (project staff using case management taxonomy) 	<ul style="list-style-type: none"> BIRPs Research team Providers Project staff

Data sources and contribution of service partners

Program evaluation activities are embedded within the operation of the VIP and will extend across the duration of the VIP, informing progress and highlighting issues along the way. All service partners will contribute evaluation data, both quantitative and qualitative:

Reach

To measure the extent that the VIP covered its intended population:

- Each BIRP provides a list of current active caseload at the commencement of VIP2 which will be used to calculate the proportion of the active caseload that participates in the VIP.
- Each BIRP keeps a VIP referral registry that lists all clients identified as suitable for vocational rehabilitation, even if they are not yet ready. This from is used to calculate the proportion of clients identified as candidates for RTW that do participate in VIP2. This register is also a reference point for case meetings with Providers to track upcoming referrals.

Effectiveness

To measure how effective the VIP is in achieving the intended outcomes:

- Referral forms and provider reports provide data to describe the population (demographics, injury data, etc) and examine differing factors.
- Employment status is recorded at six and 12 months post commencement and at case closure for Fast Track clients using the 'vocational status module'.
- Employment status recorded at six, 12 and 18 months post commencement and at case closure for New Track clients using the 'vocational status module'.
- Client surveys will be administered to all participants at intake, case closure and follow up to measure impact on quality of life. This is estimated to take approximately 15 minutes and can be completed either electronically (via RedCap) or paper, often assisted by the BIRP clinician/ case manager.

Table 13: Contribution towards program evaluation

	Quality of life measures	Population data	Referral register	Client reports	Time recording data	Qualitative interviews	Satisfaction surveys	Program fidelity	Partnership development	Reporting client status
BIRP		✓	✓			✓		✓	✓	
Provider				✓	✓	✓		✓	✓	✓
Client	✓					✓	✓			

Adoption

To measure the availability of pathways for people with ABI to gain employment, the VIP Provider EOI Selection report documents the establishment of partnerships.

Site reviews at three months post commencement and 12-monthly thereafter will capture the development of service relationships using the VicHealth Partnership Analysis Tool.

Implementation

To measure the extent to which the VIP was implemented as planned:

- Fidelity evaluations will be conducted annually to gauge the consistency of implementation across sites
- The incorporation of VIP tools and principles into service delivery will be captured through the client reports.
- The provider time recording data will allow for a fine grained analysis of interventions. This data will be collected using an online survey tool based on the Case Management Taxonomy (Lukersmith, Fernandez, Millington & Salvador-Carulla, 2016).
- Feedback from clients about their experiences in participating in the VIP will be obtained via exit interviews using satisfaction measures. These will be administered by research staff at the completion of a client's VIP program. Additionally, in-depth client stories will be captured by 'most significant change' methodology, including by film.
- Feedback from providers and BIRP clinicians about their experiences in working within the VIP will be obtained at the site reviews conducted 12 monthly. This will contribute information about the developments in service provision resulting from the VIP.

Maintenance

Provider data contribute information about the rates of referral for both BIRP and non-BIRP client groups. Review of the BIRP referral registers will indicate the level of program uptake and changes to the referral patterns over time.

Sub-group analysis of data pertaining to the DES versus insurance funded programs will identify any discrepancy in incorporating the VIP within the different funding schemes.

SECTION 9

Case studies

Read through the following two case studies and identify the person's strengths and barriers, either for returning to pre-injury employment (case study 1), or commencing vocational rehabilitation (case study 2).

As a VR provider, what further information what you require to complete initial assessment and how would you seek this information?

Pranish is a 49 year old man living in Sydney who sustained a brain injury when he was hit by a car travelling 60 km/hour, whilst crossing the road. He was intubated at the scene and retrieved by helicopter to St George Hospital.

Injuries

- Severe traumatic brain injury: left fronto-parietal lobe sub-arachnoid haemorrhage
- Right ulna and radius fractures
- Multiple rib fractures
- Bilateral pneumothorax
- L5 undisplaced spinal fracture
- Right fibula head fracture
- Right tibial fracture with lateral collateral ligament disruption

Hospital journey

- ICU – 7 days
- Surgical ward – further 2 weeks
- Transferred to Brain Injury Unit (inpatient ward) after three weeks for multidisciplinary team rehabilitation admission. At this stage Pranish was cooperative and alert. PTA was assessed to be 17 days. There was evidence of mild right-sided weakness and restricted range of motion in right knee and right elbow
- Discharged home following 8 weeks rehabilitation admission

Social and family history

- Living with his wife and daughter in their own home
- Migrated from India 20 years ago and has good level of English
- Worked full time as database operator for a company repairing aircraft components, with technical training (network engineer diploma through TAFE)
- Non-smoker
- Social drinker (about eight schooners per week).

Status at discharge

- Physiotherapy – independent and safe in mobilising
- Occupational therapy – independent and safe in activities of daily living (ADLs)
- Speech pathology – intact expressive and receptive communication in English. Noted to be verbose but not significantly different from his pre-injury manner
- Neuropsychology
 - Impairment in executive skills characterised by poor planning, organisation, monitoring, conceptual reasoning and a tendency toward concreteness of thought.
 - Pronounced reduction in speed of information processing.
 - Attention is reduced and is most noticeable when having to alternate attention.
 - Whilst he has difficulties with memory of new visual material, his new learning and memory skills for verbal information is relatively well preserved.
 - Problem with regulation of emotions, specifically frustration, which also has been a problem noticed by Pranish's wife.
 - A demonstrated lack of awareness of any ongoing issues pertaining to his brain injury.

Supports arranged at discharge

- BIRP case manager assigned
- Therapy program of weekly physiotherapy appointments at the BIRP and home-based strategies and activities devised occupational therapist
- Family will provide transport

Follow-up plan

- Brain injury outpatient clinic appointments
 - Review clearance for driving
 - Review clearance for RTW
 - Review therapy program and goals
- Agreed to refrain from drinking alcohol for >12 months

Tony is a 32 year old man living in Bellingen who sustained a brain injury when he lost control of his car travelling 60 km/hour and hit a tree. He was intubated at the scene and taken by ambulance to John Hunter Hospital. He had high range blood alcohol at time of accident and a subsequent licence suspension for two years.

Injuries

- Severe traumatic brain injury – left fronto-parietal lobe sub-arachnoid haemorrhage
- Right ulna and radius fractures
- Multiple rib fractures
- Bilateral pneumothorax
- L5 undisplaced spinal fracture
- Right Fibula head fracture
- Right tibial fracture with lateral collateral ligament disruption

Hospital journey

- ICU – 7 days
- Surgical ward – 2 weeks
- Transferred to Brain Injury Unit (inpatient ward) after three weeks for multidisciplinary team program. At this stage Tony was cooperative and alert. PTA assessed to be 17 days. Evidence of mild right-sided weakness and restricted ROM right knee and right elbow.
- Discharged home following 8 weeks rehabilitation admission

Social and family history

- Lives in Housing NSW property with his defacto, their three-year-old daughter and his two children from a previous relationship (son 12 years, daughter 14 years).
- Finished school to Year 10. No formal qualifications
- On parole at time of accident after three years in prison due to participating in an armed robbery, and still needs to report to probation and parole regularly
- Heavy drinker and past user of intravenous drugs. Probable resumption of occasional cannabis use since prison release
- Unstable relationship with partner. She was going to leave him at the time of the accident, but has stayed to help him get back on his feet as the house is in her name
- Prior to his time in prison, worked sporadically as a labourer doing road resurfacing in the construction industry
- Does not hold a current driver's licence

Status at discharge

- Physiotherapy – independent and safe in mobilising
- Occupational therapy – independent and safe in personal care. Supervision required for domestic chores for safety
- Speech pathology – intact expressive and receptive high language skills. Noted to be verbose but apparently this was a pre-injury trait
- Neuropsychology
 - Impairment in executive skills characterised by poor planning, organisation, monitoring, conceptual reasoning and a tendency toward concreteness of thought
 - Pronounced reduction in speed of information processing
 - Attention is reduced and is most noticeable when having to alternate attention
 - Whilst he has difficulties with memory of new visual material, his new learning and memory skills for verbal information is relatively well preserved
 - Problem with irritability and frustration control, which also has been a problem noticed by Tony's partner. Note he had pre-existing anger-management problems
 - A demonstrated lack of awareness of any ongoing issues pertaining to his brain injury

Supports arranged at discharge

- BIRP case manager assigned
- Therapy program: weekly physiotherapy (private physiotherapist in Coffs Harbour – 30 minute journey)
- Home-based strategies and activities devised by occupational therapist from BIRP (phone/home visits)
- Social work referral to assist with family and legal issues
- Partner has committed to providing transport, though the team suspects this may prove problematic. The partner has a lot of other stresses/commitments with the children, the car is unreliable and the relationship is difficult

Follow-up plan

- Local GP to oversee medical issues
- BIRP to provide case management, therapy program, family support and coordinate referrals for vocational rehabilitation and driving assessment as appropriate
- Strongly advised to refrain from drinking alcohol for >12 months

SECTION 10

Assessment tools, forms and reports

This section provides information about the City of Toronto Behavioural/Cognitive Job Demands Analysis, the VIP client summary tool and report forms.

Behavioural/Cognitive Job Demands Analysis

The City of Toronto Behavioural/Cognitive Job Demands Analysis was developed in 2003 by the City of Toronto (Canada) to provide consistent and reliable information about the demands of the positions within the Toronto municipality. A Physical Job Demands Analysis component was also devised, but only the Cognitive/Behavioural checklist is used within VIP2.

The City of Toronto’s Ergonomists and Human Resource personnel identified 16 behavioural/cognitive job demands based on their observations of functional limitations stemming from various mental health issues and/or mild cognitive impairment of their municipal employees. Whilst this tool was not developed specifically for people with severe TBI, the 16 items are considered relevant to the VIP client population. An additional demand pertaining to executive functioning (‘planning work tasks and routines’) was added to the initial 16 job demands items to be used in the VIP.

Through the use of the Toronto Behavioural/Cognitive Job Demands Analysis, the functional abilities of the injured worker can be compared against the demands of their job (either pre-injury or proposed position), to identify areas of mismatch. As part of the initial workplace assessment, this will inform the need for job restrictions, supports and strategies.

Table 14: Example rating scale

Jobs demands definition	Rating		Functional abilities definition
Little responsibility/demand	1		Little ability
Moderately low demand	2	✓	Moderately low ability
Moderately high demand	3	✓	Moderately high ability

Administration of the checklist

Two forms have been provided to VIP VR providers:

1. ‘Employer Rating Form’ – It is recommended that providers use this form to obtain the job demand ratings from the client’s supervisor and/or client themselves during the initial assessment phase of the VIP. This could be emailed to the employer prior to the initial workplace meeting.
2. ‘Complete Rating Form’ – The provider copies the job demands ratings onto this form and then rates the client’s functional abilities relative to each demand. Those items identified as mismatches through this process are then highlighted in the assessment report and strategies identified to address the mismatch.

Rating scale

The Toronto Behavioural/Cognitive Job Demands Analysis uses a four-point scale (a rating of 1 indicating a low level of demand and a rating of 4 indicating a high level of demand).

Table 14 illustrates the rating scale used in the Toronto scale, with the job demand on the left and functional ability on the right of the table. In this example, the job demand exceeds the person’s level of ability.

The VIP Client Summary Tool is a web-based resource developed for use in the VIP. It is available to both BIRP clinicians and VIP Providers, though the intent is for the primary user of the tool to be BIRP clinicians.

Accessing the client summary tool

The tool is available on the TBI Staff Training website (password protected), chiefly operated by BIRP clinicians at the time of referring a client to program.

Purpose

The Client Summary Tool generates a tailored summary of information into a word document, for BIRP clinicians to provide to VIP Providers at the time of referral. This tool serves the following functions:

- systematically identifies the client’s key strengths and difficulties expected to impact on task performance
- provides a common language between the two service partners to discuss functional issues
- suggests strategies to manage the difficulties that will assist with developing the suitable duties plan
- provides information in a word document in user-friendly language that transfers to an employment context
- enables the VIP provider to relay relevant and specific information to the employer.

Development

The client summary tool was developed specifically for the VIP, containing 38 skill areas across nine categories, derived from the overlapping core sets of TBI and VR (International Classification of Function, World Health Organization).

Reflecting the common sequelae of TBI, the skill areas include cognitive, physical, sensory and interpersonal functioning. Each skill can be selected as either a particular strength or difficulty for the client, or not selected at all. Inclusion of strengths ensures the information being conveyed to the VIP provider, and in turn, the employer, is not solely problem-based information.

Some examples of skills (which can be strengths or difficulties), their definitions and strategies for managing difficulties are outlined in Table 15.

Table 15: Skill types and definitions

Skills	Definitions	Strategies
General concentration	Ability to focus on the relevant aspects of the task at hand	Minimise distractions. Guide the person back to task, present verbal information one point at a time
Plan/organise	Set goals, plan appropriate steps and organisational skills, including starting and stopping actions appropriately	Divide large assignments into smaller steps; use to-do lists; follow a set routine; hold weekly planning meetings, use picture diagrams of problem solving techniques

Steps

1. Select skills areas as ‘strengths’ or ‘difficulties’ for the particular client. Many skills will remain unselected, as the aim is to highlight just the main issues. A long summary document will result if all 38 skills are selected.
2. The second screen lists only the selected strengths and difficulties, along with the matching strategies. Consider ‘unchecking’ any items that appear unnecessary and strategies that are duplicated.
3. The third screen again displays the selected strengths, difficulties and strategies though the labels have been replaced with the descriptive definitions of skills. Again, there is the opportunity to review the updated list of the items and uncheck any items that are, on reflection, not relevant, or that you do not want to include in the Word document for download.
4. The final screen presents the summary of information in a Word document. This document is also editable. Review and finalise changes to adapt the content, ready to send to the VIP provider.

Forms and reports

Uniform report forms were developed for the VIP to provide some consistency of information sharing/reporting across providers and regions. Additionally, the developed forms target the aspects of function and work participation most relevant to the ABI client population, thereby guiding clinical reasoning and planning. The report forms are designed to be user-friendly, adaptable and brief.

List of report forms

Referral forms

Completed by BIRP clinicians

- Fast track referral form
- New track referral form

Fast Track report forms

Completed by VIP providers

- Fast Track RTW Assessment Report
- Fast Track Suitable Duties Plan
- Fast Track Progress Report
- Fast Track Closure Report

New Track report forms

Completed by VIP providers

- New Track Vocational Assessment Report
- Work Options Plan
- New Track Host Employer Workplace Assessment Report
- New Track Work Trial Placement Plan
- New Track Progress Report
- New Track Closure Report

Implementation

- All report forms are available via the TBI Staff Training website (<http://www.tbistafftraining.info>). Each service engaged in the VIP will be provided a password to access the forms and can retain these forms on their own system.
- Guideline documents have also been developed for each report form to guide providers in completing the forms. The guideline documents also outline which parties should receive each of the forms. The ACI Project Manager will monitor use of the forms with the BIRP clinicians and VIP providers to achieve consistency in completion and address any usability issues.

References

- Dodson, M.B. (2010). *A model to guide the rehabilitation of high-functioning employees after mild brain injury*. *Work*, 36: 449-457.
- Wade, D. T. (2009). *Goal setting in rehabilitation: an overview of what, why and how*. *Clinical Rehabilitation*, 23, 291-295.
- Glasgow, R.E., Vogt, T.M., and Boles, S.M. (1999). *Evaluating the public health impact of health promotion interventions: the RE-AIM framework*. *American Journal of Public Health*, 89(9), 1322-1327.
- Glover, H. (2006) *Care Planning Processes, Auseinet Recovery Online Toolkit*: <http://www.auseinet.com>
- Jennett, B. & Teasdale, G. (1981) *Management of head injuries*. Philadelphia: F.A. Davis Company
- Lukersmith, S., Fernandez, A., Millington, M., & Salvador-Carulla, L. (2016). *The brain injury case management taxonomy (BICM-T); a classification of community-based case management interventions for a common language*. *Disability and Health Journal*, 9(2), 272-280.
- Mateer, C. A., & Sira, C. S. (2006). *Cognitive and emotional consequences of TBI: intervention strategies for vocational rehabilitation*. *NeuroRehabilitation*, 21(4), 315-326.
- Tate, R.L., Lulham, J.M., Broe, G.A., Strettles, B. & Pfaff, A. (1989). *Psychosocial outcome for the survivors of severe blunt head injury: the results from a consecutive series of 100 patients*. *Journal of Neurology, Neurosurgery and Psychiatry*, 52, 1128-1134.