

ABI TRS Service Update

The ABI Transitional Rehabilitation Service (ABI TRS) will provide adults with Acquired Brain Injury and their families with a co-ordinated post-discharge clinical pathway and improved access to intensive rehabilitation beyond the hospital setting. It will also contribute to improving longer-term community outcomes for people with ABI and their families.

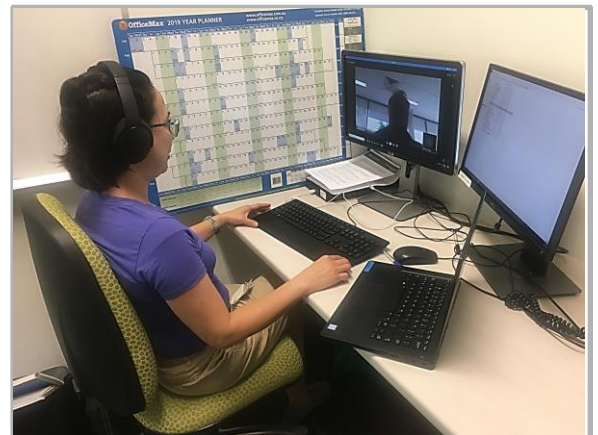
Three years on and a time of change

This edition of the ABI TRS Service Update marks three years since we were first established. When we began preparing this month's edition much earlier in the year, we thought our first page would outline our progress to date. Whilst the focus of this page is now on our COVID-19 response, the following pages still outline our progress. We felt this information is just as important now, as it was before the pandemic, to ensure our colleagues, clients and families are aware of support and intervention they will continue to receive during this difficult time.

Like all health services across the country, we have had to rapidly alter how we deliver our service. We are fortunate that in the past three years we have been building our telehealth capacity and so have been able to scale up this method of delivery quickly. In fact in this last week alone 70% of our clients received interventions via phone or telehealth.

Given some clients have difficulties with communication and access to technology, we are continuing to treat those most in need in person. In line with current government guidelines we have stringent protocols in place for these situations. As this is a changing situation we will continue to respond to advice about face-to-face contact as it is released by Queensland Health.

ABI TRS was established to ensure better delivery of services and enable long term outcomes for those with ABI and their families. Three-years on we are fortunate to have the programs and structure in place to be able to respond to the current environment but also to be able to support clients and families moving home from hospital and equip them with therapy for long term success.



ABI TRS clinician, Gay Florentino ready for teletherapy. Clients who have difficulty with technology are being supported by Allied Health Assistants to set up these sessions.

COVID-19 ABI TRS response key points

- ABI TRS is continuing service delivery with increased use of telehealth and phone interventions.
- Vulnerable clients are continuing to be treated face to face. Strict measures are in place to ensure safety of ABI TRS clinicians, clients and family members.
- ABI TRS is continuing to provide in-reach to PAH Brain Injury Rehabilitation (BIRU) clients to ensure they are adequately supported before discharge. Where possible in-reach is via telehealth and phone. A focus of in-reach also now aims to ensure clients and families are equipped for telehealth services.



Ground Floor, B2 Burke Street Centre
Burke Street / WOOLLOONGABBA QLD 4102
Phone: 07 3176 1159

Three years on, what clinical service looks like for clients

Five key program areas drive ABI TRS clinical activity and provide a focus for program enhancement. These areas have emerged from reflection on clinical activity and developing an understanding of our client perspectives of their treatment. A snapshot of this activity can be found below.



Family and Community

Central to ABI TRS is the client's family and community. ABI TRS therapists work one-on-one with both the client and the family/support unit to develop interventions to maximise a client's ability to participate in their community and relationships.

Group programs are also integral to this program area and include: *The Moving Ahead Program*, a three-part group program that clients attend once a week and includes psychosocial, leisure and cognitive communication sessions. Medical education for families and friends is also provided.

Conversation Partner Training assists clients and families with their communication skills and strategies. Participants take part in either a group or individual format. *Strength to Strength* is program specifically aimed at supporting families. It is run by ABI TRS social workers.



Vocational Rehabilitation

About 60% of ABI TRS clients have return to work, study or volunteering goals. To address these goals ABI TRS has established an interdisciplinary vocational rehabilitation framework with associated processes, tools and pathways. It is overseen by Occupational Therapists and ensures a team-based approach to intensive vocational skill rehabilitation.



Health and Wellbeing

Improving client health and wellbeing as they return to their home and community is an important part of the ABI TRS. The team has a dedicated Exercise Physiologist, Psychologists and other clinicians who look at all aspects of health and wellbeing. The *Adapted Physical Activity Program (APAP)* has been adapted to support the activity of Exercise Physiology within ABI rehabilitation, and work also continues around service provision to best support multicultural clients, sexuality and return to driving.



Research

Research underpins the ABI TRS Model of Care. It has been rolled out in two phases.

Phase one looked at protocol development, ethics, beginning of data collection, reporting requirements and building partnerships with key stakeholders.

Phase two has involved the mixed-method research design which has included: a prospective longitudinal study of clinical outcomes; retrospective comparative analysis with historical datasets; mixed method process evaluation of the ABI TRS within the BIRS continuum and community referral pathways; impact evaluation to examine service outputs; & cost-effectiveness analysis of the model.



Technology in Rehabilitation

Technology underpins much of our work. It helps us deliver more intensive services across a large geographical area. We have established a suite of telehealth resources that help both clinicians and clients to undertake telehealth. Where clients and families have difficulties Allied Health Assistants provide specific training and set-up assistance.

ABI TRS Research Activity

Early results from an embedded mixed-method evaluation research study indicate ABI TRS is having a significant impact on individuals with ABI, their families, and the broader community. Client and family outcomes on health, function and psychological measures were investigated pre- and post- ABI TRS rehabilitation, and compared with historical quasi-control ABI data, collected in the BIRS service continuum prior to the introduction of ABI-TRS. Preliminary findings are outlined below.

Improved clinical outcomes:

In comparison to historical controls, at 3 months post- hospital discharge, clients from ABI TRS have shown:

- ✓ increased perceived health status;
- ✓ improved functional ability, community participation, living skills;
- ✓ reduced care and support needs;
- ✓ stability in depression and stress, compared to worsening for historical control;
- ✓ improved occupational activity, compared to worsening for historical control.

These results have also been maintained for up to 12 months.

Improved health care experience:

Qualitative outcomes indicate ABI TRS is a post-hospital service valued by clients and family members in:

- facilitating earlier hospital discharge with the support of in-home therapy;
- provision of specialised ABI therapy in the home environment, using tailored individual programs;
- co-ordination of post-hospital services;
- improved access to specialised intensive therapy for rural clients; and
- individualised tools to use and resources to access post-ABI TRS discharge.

ABI service providers, both internal and external to PAH, also identified the value of ABI-TRS as:

- effective transitional service for a complex population, extending the scope and depth of rehabilitation provided to people with ABI in Queensland;
- improved patient flow within PAH via responsive inter-service communication and handover; and
- access to needed person-centred patient services, including a range and intensity of therapy not previously available to rural clients.

In summary early research findings show that ABI-TRS is directly helping to:

- Assist clients to maximise their health state, with an end-goal of equipping clients and families to self-manage with skills and strategies now and in the future. Following ABI TRS, individuals with ABI show improvements in functional ability, community participation, living skills, and perceived health status.
- Early results show that ABI-TRS clients experience stable rates of depression and stress (unlike the historical group which had increased rates), and that carer burden reduced following the program.
- Improving client occupational outcomes, compared to worsening for historical controls. This reflects the intensive vocational skill rehabilitation focus within ABI TRS, including development of specific vocational rehabilitation processes, tools and pathways, with the potential for long-term improved vocational outcomes and return to work for individuals with ABI who access ABI TRS.

It is anticipated that these improvements in health outcomes and psychological function will result in individuals with ABI and their family members maintaining improved health outcomes, having reduced future health-system access, and capacity to contribute actively to the Queensland economy – results exploring these factors are currently under investigation.

Grants, awards and contribution to research

ABI TRS have achieved a number of awards, formed important partnerships and contributed to sharing evidence across all of our program areas. Below is a snapshot of some of these milestones from the past three years. ABI TRS also achieved Highly Commended in the Premier's Award for Excellence in 2019 in the "Keeping Queenslanders Healthy" category.

Research

- **International Brain Injury Association (IBIA):** (2019 conference, Toronto) "Responding to a transitional care gap: First year outcomes of the Acquired Brain Injury Transitional Rehabilitation Service Pilot project."
- **Awards:** (2018) The Hopkins Centre Bold Ideas, Better Solutions Symposium Translational Research Award.
- **Sharing research:** Research outcomes have been presented at: ASSBI in 2017/18/19; System Performance Branch Conference; IBIA Conference, Toronto; 5th and 6th National ABI Conferences: and 10th Health Services and Policy Research Conference; RMSANZ scientific meeting; and other local / national conferences and events.

Vocational rehabilitation

- **Clinical Fellowship Grant:** The Hopkins Centre (2020), Communication tools for the job: Supporting people with ABI related communication impairments with return to work goals.
- **Seed Grant:** The Hopkins Centre (2018), Developing a Framework for vocational rehabilitation in early TBI services.
- **Awards:** Awards were achieved at the 2018 PAH Symposium for Research Excellence and at the 2018 Bold Ideas, Better Solutions Symposium for People's choice best presentation.
- **Sharing research:** ABI TRS has presented evidence on our vocational rehabilitation framework and other initiatives at: ASSBI; Speech Pathology National Conference; OT National Conference; other local conferences.

Health and wellbeing

- **Grant:** The Hopkins Centre (2018): Evaluating the translation of the Adapted Physical Activity Program into the Acquired Brain Injury Transitional Rehabilitation Service: Application of the RE-AIM Framework.
- **Grant:** The Hopkins Centre (2017): Integrating an evidence-based clinical exercise physiology service model into a comprehensive multi-professional rehabilitation service for people with brain impairment: An integrated knowledge translation approach.
- **Conference participation:** ABI TRS have presented health and wellbeing initiatives and projects at ASSBI, The Hopkins Centre Symposium; PAH Symposium and other local events and conferences.

Partnerships, awards and contribution to research

- **Seed Grant: Healthcare Improvement Unit, Qld Health** (2018) ABI SCI Connect Telehealth Project to develop new service processes, training packages and improve telehealth services.
- **Awards:** 2018 Bold Ideas Better Solutions Symposium Translational People's Choice Best Poster.
- **Conference participation:** ABI TRS has presented telerehabilitation initiatives at ASSBI; The 19th Successes and Failures in Telehealth Conference; Clinical College of Neuropsychology Conference and other local conferences.

Family and community

- **Partnerships:** ABI TRS has formed a partnership with The University of Queensland to undertake research into the ABI TRS Moving Ahead Program. Outcomes are due to be presented this year.