



abi

Rehabilitation Specialists
Ngā Kaituku Mātūtū



ABI REHABILITATION / INTENSIVE INPATIENT REHABILITATION

2021

Annual Report

Reporting period: 1 July 2020 to 30 June 2021

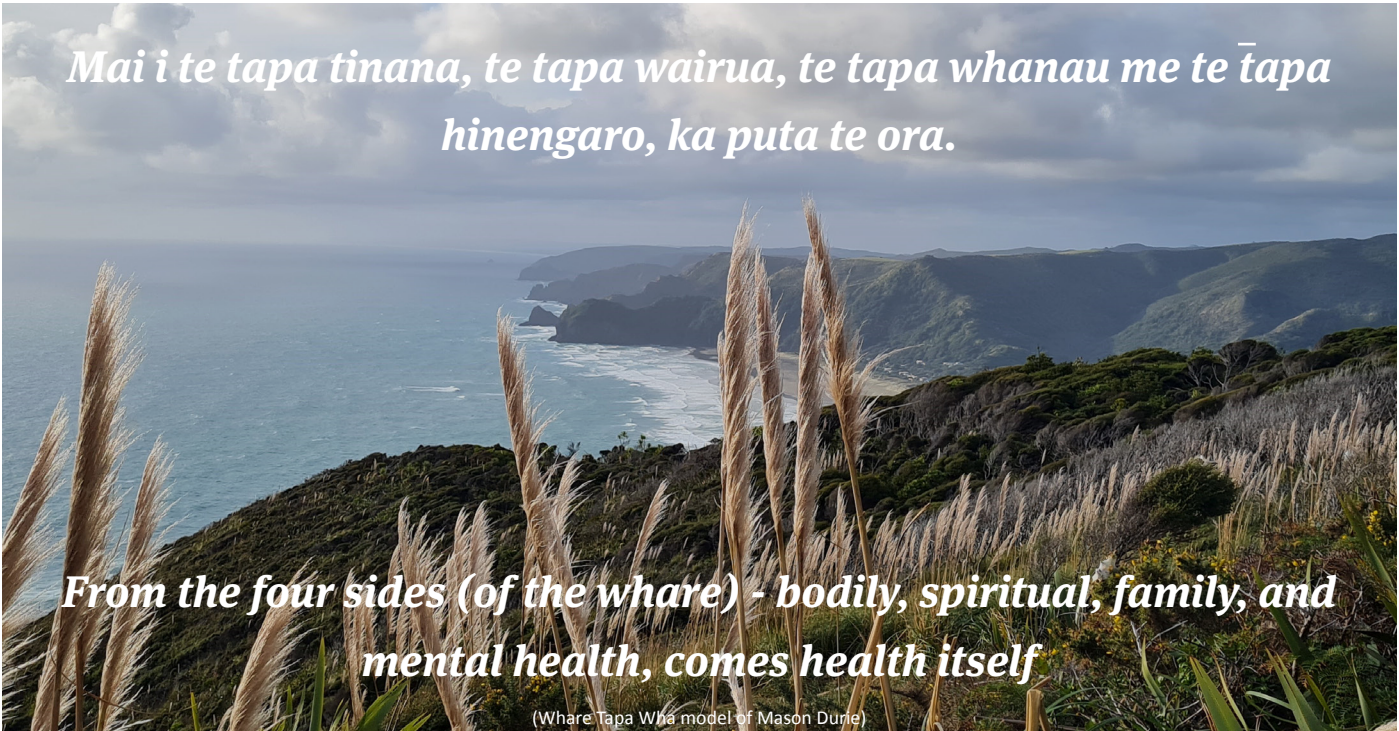
ABI Rehabilitation is a leading New Zealand provider of comprehensive, specialised rehabilitation services for people with an acquired brain injury (ABI) resulting from a traumatic brain injury or stroke.

**Kia mau ki te tūmanako,
Te whakapono me te aroha**

**Hold fast to hope,
faith and love**

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Mai i te tapa tinana, te tapa wairua, te tapa whanau me te tapa hinengaro, ka puta te ora.

From the four sides (of the whare) - bodily, spiritual, family, and mental health, comes health itself

(Whare Tapa Wha model of Mason Durie)

About ABI Rehabilitation



Tena koutou,

There is danger in living in the past; but the past can sometimes teach us something useful. My family and I started ABI in 1996 in a small broken down rest home, because of a passion to do something about the lack of rehabilitation for people with brain injury in Aotearoa New Zealand at that time. I am immensely grateful to those who still share that passion and the energy; particularly those who do the face-to-face mahi every day with compassion and love.

The history of ABI teaches us that dogged persistence based on a clear kaupapa, that is not based on self-interest, alongside an amazing team culture and a willingness to learn, can change anything. The positive change in the way neuro-rehabilitation is provided now, compared to 1996 is tino pai - amazing!

Is the work of building the field of rehabilitation completed? Absolutely not! There are areas where services are poor and access to rehabilitation is not good. Children with neuro-disability sometimes go undiagnosed and therefore untreated. Kids often fail at school because of a neuro disability; many end up in trouble. Our prisons are full of people with cognitive disability. We are still far from perfect in working alongside Māori in a way that meets their needs and expectations and inspires trust and confidence. The rehabilitation journey from hospital admission, discharge home, and throughout the community rehab pathway is fragmented and uncoordinated for many clients, particularly outside of the main centres. These are some areas where we are focusing our energy and passion.

From the safe distance of the Board table now, I want to acknowledge and thank all of the leadership and management team throughout ABI. Particular thanks to our CEO Christine Howard-Brown and our GM Rehabilitation Tony Young. Especially, and from the bottom of my heart, I thank our RA teams, our nursing teams, those who work behind the scenes in household support, the admin team, our wonderfully skilled therapy staff both community and inpatient, and the great medical team that carries the burden of clinical responsibility.

The privilege we have every single day is to witness miracles of courage, hope and recovery. It is the people we work with, clients, whānau and ABI team that keep the passion alive. He aha te mea nui o te ao; he tangata, he tangata, he tangata. What is the greatest thing in the world? It is people, it is people, it is people.

Thank you!

ABI's values are to **ASPIRE**

A

Accountability
Rangatiratanga

We believe that access to quality rehabilitation services is a right for children and adults in New Zealand.

S

Supportive
Manaaki

We commit ourselves to a culture of aroha; generous service, care, hospitality and support.

P

Passion
Matapaki

We have a passion for learning and sharing knowledge.

I

Integrity
Mana

We aspire to earn trust by being honest, reliable and accountable.

R

Respect
Manaaki

We will recognise and value the mana, strengths, goals and aspirations of our partners – Clients, whānau and funders.

E

Excellence
Hiranga

We commit to good practice and the science of rehabilitation.

Executive Summary

This annual report provides information on the services provided by ABI intensive inpatient rehabilitation in both the Auckland and Wellington services from 1 July 2020 through to 30 June 2021. The focus of information shared is on the Accident Compensation Corporation (ACC) Traumatic Brain Injury Residential Rehabilitation (TBIRR) contracted clients but additional information is provided via the 'Quick Facts' pages on clients entering ABI on other funding contracts.

The total number of clients discharged during this period (277) was represented by 73% male and 27% female. Such male to female ratios are typical across international trauma injury data¹ and similar to data collected by ABI in previous years.

The District Health Board (DHB), Ministry of Health (MOH) and privately funded client volume has reduced over this reporting period when compared to last year. This cohort typically presents with longer rehabilitation trajectory and significant impairments on admission explaining why we see a longer length of stay in rehabilitation and a higher percentage unable to be discharged back to their homes when compared to the ACC group.

The ACC client volume for this period has increased when compared to last year's reporting period, making it more comparable with trends across the last five years. We have also seen the average age increase from 45 years of age to 51. There has been a significant change to the mechanism of injury, with falls representing the highest cause at 38% and motor vehicle accidents (MVA) related injuries dropping from 46% to 30% this year.

The percentage of people requiring our service as a result of an assault increased by over 2% last year. This represents 36 (increase of 12) people requiring rehabilitation due to a moderate to severe brain injury following an assault.

As with previous years, we see over representation of Māori requiring brain injury rehabilitation. Māori entering our service are typically younger than the non-Māori population. Based on the length of stay and discharge destination, Maori have more severe injuries.

The ACC intensive rehabilitation stay at ABI is similar to that of last year, with a medium stay duration of 27 days. Although down 5% on last year, those discharged home remain high at 83%. The reduction in return to home is believed to be reflective of the increase in clients over 50 admitted over this period.

The Emerging Consciousness Service (ECS) is a service for those clients presenting with a profound brain injury. Assessments in hospital and on admission to ABI deem them to be in a minimally conscious state (MCS) with little to no ability to engage with their surroundings. During this reporting period there were 16 clients discharged from ABI who had entered the ECS. Of the 16, all but 3 progressed to emerge from an MCS, with 50% being discharged home.

Clients and whānau responding to satisfaction surveys indicate a high level of satisfaction. Over 93% indicated they were satisfied or very satisfied with the service.

1 A. Mikolic et al., Differences between Men and Women in Treatment and Outcome after Traumatic Brain Injury. *Journal of Neurotrauma* Vol. 38, No. 2 2021



Message from the Chief Executive



I'm proud of the ABI team's commitment to supporting clients in their rehabilitation journeys. Our work demands dedication, commitment, expertise and an x-factor. We see people who are facing enormous challenges under difficult circumstances and didn't ask for us to be in their lives.

It constantly amazes me how well people with TBI's can do, often when their initial prognosis was poor. It is a testament not only to the fortitude of clients and their whānau but of our staff, their expertise, teamwork and drive for great outcomes.

As part of ABI's leadership in brain injury rehabilitation, there has been a busy work programme over the last year. Alongside intensive inpatient rehabilitation services, ABI provides a continuum of services by its multi-disciplinary teams. ABI has been working closely with AUT, ACC, HQSC, the National Trauma Network, Ministry of Justice and Corrections on a range of projects, all aimed at improving outcomes for people with brain injuries. Of high interest, is ABI's participation in a joint project with ACC, The Clinician and AUT to develop client reported outcome and experience measures which are electronically reported. This project links closely with the ACC outcomes framework and will ultimately help guide rehabilitation programmes.

Staff at ABI continue to work on a range of research projects, support undergraduate and postgraduate education and contribute on several expert groups. Many are completing their own post graduate programmes. A highlight this year has been an increased focus on strengthening and growing our Māori cultural capability that now includes key roles within governance, strategy, policy and service delivery. With new roles established, ABI has more direction and support for further change. ABI has worked on its website, resources and social media profiles, improving awareness and access to information about TBI and the important work we do. ABI has also been hosting regular meetings by the Brain Injury Association providing more opportunities for peer support.

The year has had its challenges. COVID-19 is the most notable challenge which staff have risen to with many new and changing measures taken to keep us all safe. With borders essentially closed, there have been workforce pressures which deserve to be acknowledged. In amidst this, ACC has made a number of changes to its personnel, structure and systems. ABI continues to actively work with ACC to try to improve services for our mutual clients. Some progress has been made but there is so much more to do, especially as ABI would like to regularly follow-up clients who have been in the intensive inpatient rehabilitation service for at least two years. In addition, ABI now takes more clients from the South Island to its Auckland and Wellington intensive inpatient rehabilitation services when the Christchurch provider stopped providing these services late last year. ABI has been very happy to support these clients, working closely with ACC, Canterbury and Southern DHBs. Although occupancy fluctuates, this has also led ABI to increase its bed capacity at both its sites. This will help ensure clients with TBIs anywhere in NZ can receive the intensive inpatient rehabilitation they need.

Thank you to our team, I truly appreciate your mahi and expertise you bring to work each day guiding and supporting clients and whānau in their rehabilitation journey. I am looking forward to seeing what this next year brings as we begin to see the outcomes of many of the exciting projects we are participating in.

Dr Christine Howard-Brown

Chief Executive Officer
ABI Rehabilitation

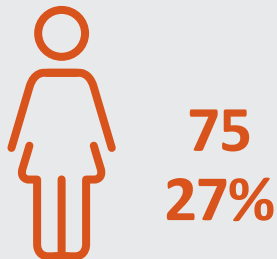
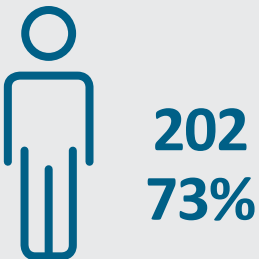
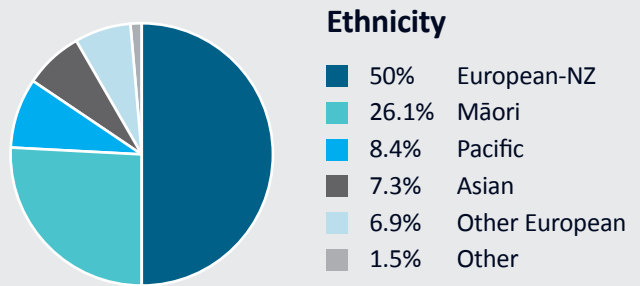
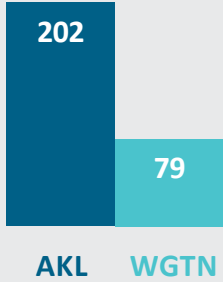
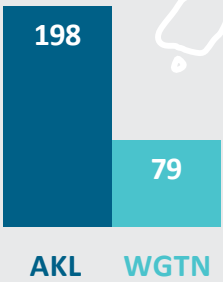
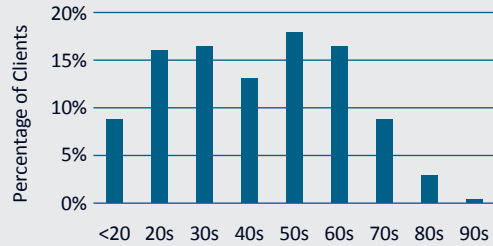
The Year in Review - Quick Facts

All Intensive Clients

277
CLIENTS

281
EPISODES

Average Age = 46 years old
Range = 15-90 years old



Median length of stay:

46 days

Average length of stay:

52 days

(range: 1-217 days)

Note: The difference in client and episodes indicates 4 clients had 2 separate episodes.



DHB/MOH/Private Clients

15 CLIENTS

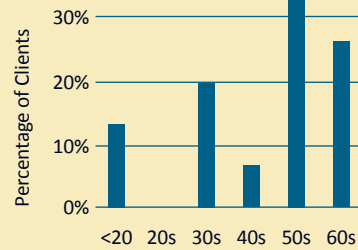
Average Age = 47 years old
Range = 16-65 years old



11
73.3%



4
26.7%



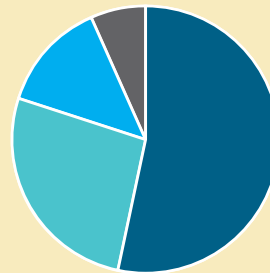
Median length of stay:

46 days

(range: 1-177 days)

Average length of stay:

69 days

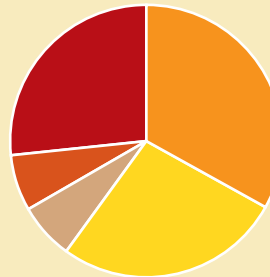


Ethnicity

- 53.3% European-NZ
- 26.7% Māori
- 13.3% Pacific
- 6.7% Asian

Discharged home

7
46.7%



Mechanism of Injury

- 33.3% Hypoxic
- 26.7% Stroke - Haemorrhagic
- 6.7% Stroke - Ischemic
- 6.7% MVA (Outside NZ)
- 26.6% Other



ACC Clients

FUNDED BY THE TRAUMATIC BRAIN INJURY RESIDENTIAL REHABILITATION (TBIRR) CONTRACT

Who are our Clients?

262 CLIENTS SERVED



185 IN AUCKLAND **77** IN WELLINGTON

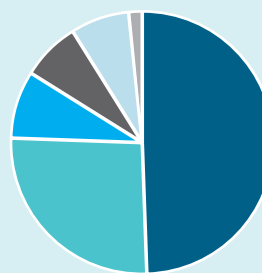
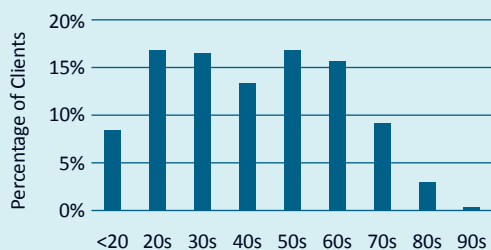


191
72.6%



71
27.4%

Average Age = 51 years old
Range = 15-90 years old



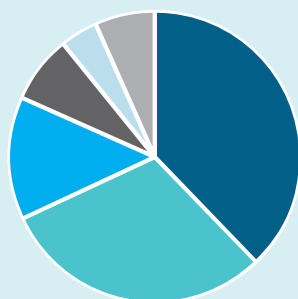
Ethnicity

- 49.6% European-NZ
- 26% Māori
- 8.4% Pacific
- 7.3% Asian
- 7.3% Other European
- 1.5% Other

About their Injuries

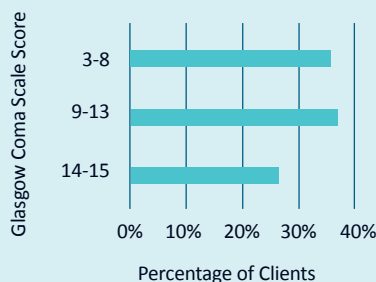
98% OF CLIENTS HAD A TRAUMATIC BRAIN INJURY

Mechanism of Injury



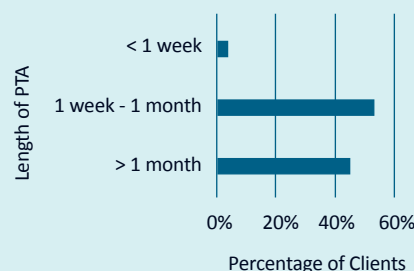
- 38% Fall
- 30% Vehicle
- 13.7% Assault
- 7.6% Bicycle & Sports Injury
- 4.2% Pedestrian
- 6.5% Other

Glasgow coma scale scores in emergency department



Average duration of post-traumatic amnesia*:

33 days
Median: 14 days
(range: 3-158 days)



*of those who were out of PTA prior to discharge from ABI

Outcomes

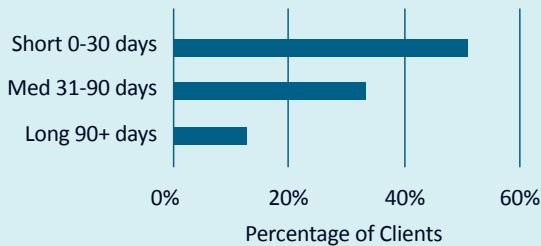
Intensive Rehabilitation

Median length of stay: Average length of stay:

27 days **45 days**

(range: 1-194 days)

Length of stay at ABI



Percent of clients who were discharged to home:

83%



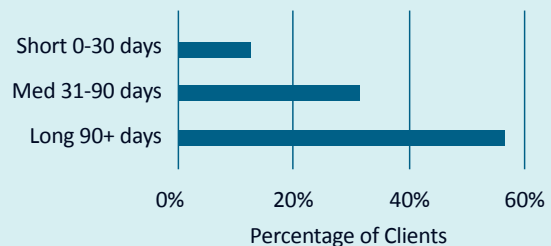
Emerging Consciousness Service

Median length of stay: Average length of stay:

97 days **130 days**

(range: 9-212)

Length of stay at ABI



Percent of clients who were discharged to home:

50%



“Overall, how satisfied were you with the service we provided?”

93%

of clients

98%

of whānau

...answered satisfied or very satisfied



Key Events for this Year

This section of the report provides a summary of highlights across ABI intensive services over the past year:

- Speech - Language Therapy Week
- Wellington Summer Fun Day
- Chinese New Year
- International Nurses Day
- National Aotearoa Psychology Week: May 2021
- ABI Wellington Hospital Drive turned one
- Beanie up for Stroke Awareness



Speech-language Therapy Week of Connection Aotearoa

Whanaungatanga

Connecting through relationships

Get connected, Be connected, Stay connected



Speech - Language Therapy Week : September 2020

Each year there is one week dedicated to building awareness about the discipline of speech - language therapy. Last year the Speech and Language Therapy (SLT) team within Auckland intensive site created a video to capture the theme of Whanaungatanga – connecting through relationships. The Covid restrictions made 2020 a challenging year for connecting and building relationships. It made us realise that whanaungatanga is the real driving force for all treatment of clients. The SLT team asked people onsite what connections mean to them, and what was created was a wonderful video demonstrating the shared meaning of whanaungatanga.

If you have not already seen this please do at <https://www.abi-rehab.co.nz/speech-and-language-week-what-connection-means-to-abi/>





Wellington Summer Fun Day: 11 February 2021

On 11th February 2021, Wellington ABI held its inaugural summer fun day, and it was a blast! Staff had planned activities for clients and whānau to engage in our beautiful courtyard and areas surrounding our building. Clients' whānau were invited & staff wore summer themed mufti.

The activities consisted of: Manicures & nail painting, bowls, giant Jenga, pool, table tennis, water bomb toss, corn toss, croquet, giant connect four and the most popular game of magnet fishing. Whilst the activities were in progress, our music group entertained. Following the morning's activities we had a shared barbecue lunch where staff, clients and whānau sat together and shared kai.

We had planned a staff vs client obstacle race, pin the coconut on the palm tree and staff three legged race for after lunch, however, our clients were worn out from all the fun and games (and delicious food) so rested instead.

This was such a success, we will definitely be holding another summer fun day in 2022!



Chinese New Year: February 2021

The Auckland ABI team, clients and their whānau celebrated Chinese New Year in February this year. The event was led by Clinical Nurse Leader Jun Tao who graciously supported the making of many dumplings, lanterns and shared with the group the concept of celebrating luck, health and connecting with whānau. Jun shared with us that Chinese New Year is a time of new beginnings, good health and gathering together.

The team along with the clients who were at the site and their whānau all shared lunch together which were made by many of the therapy team and clients (practising those cooking skills). Colourful gluten free dumplings were also made, so this year we made dumplings that met all the dietary needs.

ABI recognises a range of cultural events and the diversity of our clients and the ABI team who work with us. We appreciate our team and clients sharing their cultural customs and knowledge with us to ensure we are continually growing as a culturally confident organisation.



International Nurses Day: 12 May 2021

ABI has a team of almost 50 nurses who are integral to ABI’s leadership and service delivery.

ABI celebrated International Nurses Day this year. Our teams of nurses took the opportunity to reflect on why they love nursing and sharing kai together. We really appreciate our nurses and the valuable work they do leading ABI, leading teams and most importantly supporting clients and whānau in their rehabilitation journey.

ABI has strong leadership by nurses. Our CEO Dr Christine Howard-Brown has a nursing background, and two other members of the Executive Leadership Team are nurses, Donna Gordon who recently joined ABI as our Quality Manager and Dr Angela Davenport, ABI’s Rehabilitation Nurse Advisor and manager of the Brain Injury Nurse Specialists.

Abi wishes to acknowledge Dr Angela who recently graduated with a Doctorate in Nursing in the area of Rehabilitation Nursing and Shalini Vij who is working through the Nurse Practitioner Pathway via Victoria University of Wellington.

We have two Nursing Services Managers in Intensive Rehabilitation; Louise Kelly in Auckland and Christine Hill in Wellington who lead and manage the nurse educators, nursing teams and rehab assistants.

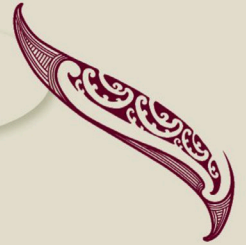
Louise says “Our nurses are strong, dynamic, clever, caring and compassionate professionals. As individuals, each brings a unique contribution to the nursing team allowing the team to grow and develop.”

ABI works with nursing schools and offers student placements. We have a wide range of experience in our nurses, including enrolled nurses and registered nurses, new graduates, senior nurses and nurse specialists with many years of experience. We are also working closely with Capital and Coast, Hutt Valley and Waitemata DHBs with the Nurse Entry to Practice Programme for new graduates.



Psychology Week 10 – 16 May 2021

Peoples using psychology to flourish



National Aotearoa Psychology Week: May 2021

ABI celebrated our psychologists for all their mahi during the National Aotearoa Psychology week. ABI has a team of about 25 psychologists with varied specialist skill sets and roles. Psychologists are in the unique position as rehabilitation professionals as they fill the space in supporting people and their whānau to cope and adjust with mental and physical challenges faced with their injury. To showcase the profession of psychology at ABI we asked our psychologists for their thoughts on working in TBI rehab.

Victoria one of our behavioural psychologists says: “Working as part of the multidisciplinary team has really enhanced my practice. There are so many opportunities to share what you know while gaining insight into other disciplines. Working in this way builds a stronger team and we see how the client and their whānau reap the rewards.”

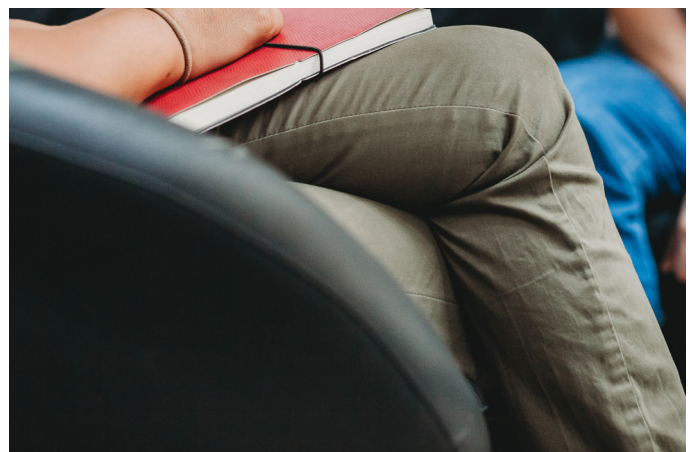
Viv one of our clinical psychologists says “Clients quite often have no previous experiences with this kind of injury, and do not know what to expect in terms of their recovery. The psychologist is able to guide and support them through their individual journey. It can be a scary process for many clients, however, the outcomes we can achieve when working together is hugely rewarding.”

Dr Angela, a behavioural psychologist, says: “The best thing about working with clients is the privilege of being a part of someone’s life and seeing the changes that contribute to a person being able to live/participate in their life to the fullest extent possible. For example, the

young man who used to have a behavioural outburst whenever he was invited to participate in rehabilitation activities, is now looking forward to and asking for therapy”.

Dr Chris, clinical psychologist and neuropsychologist shares his insights in his role as a neuropsychologist for ABI. “Often people think of neuropsychologists as psychologists who just do that big test following a brain injury. Neuropsychology is no more about tests than being a mechanic is about having a spanner. The tests are just tools that we use to help understand what is going on. We could probably do the job without them, but they do add another layer of information, and make the job easier.

Neuropsychology sits at the cusp of mind and body, and of scientist and practitioner. Scientist, because I think my job is to understand (and try to keep up with!) what neuroscience is telling us about our brains, how they work, and how they shape what we do; and clinician/practitioner because I need to figure out how that is relevant to a particular client or situation; then help them understand what is happening, and how they can manage it better. This is really rewarding because knowledge is power, right? So translating scientific papers into everyday ideas and language empowers people to understand themselves and their brains, and gives them more control over lives that might have seemed to be heading out of control.”





ABI Wellington Hospital Drive turned one: June 2021



June 2021 saw the new building at Hospital Drive, Porirua turn one. The site provides Intensive Inpatient Rehabilitation for newly injured clients with moderate and severe brain Injury and residential support for a smaller number of clients who are not able to live in the community. Most clients within the Wellington service are from the lower half of the North Island and upper South Island. The site takes 25 clients and has a full team of rehabilitation clinicians (rehab medicine physicians, psychiatrists, OTs, PTs, SLTs, psychologists, neuropsychologists, nurses, rehab assistants, social workers) together with administration and support services. This site was purpose built for ABI with design input from the ABI team, clients and whānau. The ABI team and clients love the open spaces and treatment areas and enjoyed sharing kai to celebrate the first year.



Beanie up for Stroke Awareness: June 2021

Members of the ABI team wore their beanies to work recently in support of stroke awareness and provided a donation to the Stroke Foundation NZ to support their fundraising efforts. Over 11,000 strokes are experienced each year in New Zealand. According to the Ministry of Health, stroke is New Zealand's second single biggest killer and the leading cause of serious adult disability.

ABI receives referrals for stroke rehabilitation from a variety of sources including private paying individuals. Stroke rehabilitation and TBI rehabilitation come under the wider umbrella of neuro-rehabilitation which the staff are passionate about and have significant expertise in delivering.

The ABI team enjoyed wearing their beanies during the cold winter at both Auckland and Wellington sites in order to show their support and raise awareness of stroke.



Operational Updates

Health and Safety

We continue to analyse and trend our reported incidents. We are particularly interested in those incidents that have a direct impact on our client's wellbeing such as falls. In last year's annual report we noted that a further piece of work would be undertaken to determine if we were taking all preventative measures to prevent client falls.

It was reassuring to learn that our falls rate benchmarks positively with similar international TBI services. Through ongoing assessment and review, staff are pro-active in the management of those clients who are more vulnerable to falling.

This coming year, ABI will put the microscope on medication incidents. While medication incidents are not seen in significant numbers, ABI is interested in reducing these incidents to zero.

Audits

As part of ABI's commitment to continuous quality improvement, we have an active internal audit programme. As well as completing audits that ensure we meet our regulatory requirements such as hazard inspection audits, we also monitor clinical aspects of our work such as medication practices. Internal auditing is one mechanism that supports us to implement systems that support us in meeting international standards such as those prescribed by CARF.

CARF stands for the Commission on Accreditation of Rehabilitation Facilities. ABI has held CARF accreditation since 2012 and has a recertification survey booked for November this year. In addition to the CARF survey, ABI will be having a midpoint audit as required by the Ministry of Health in August. ABI currently holds a four year certification with the Ministry of Health.





Self-directed Rehabilitation

Since the Auckland workshop opened in October 2018, it has expanded and is now a popular part of client self-directed rehab. The clients are able to manage small or large projects of their choice.

Examples of projects that have been completed include: a park bench, a bird house and kitchen steps, all of which clients could then take home.

In July 2021 the workshop in Auckland was moved to a purpose built space on site. The clients have taken part in setting up the space building the workbenches and placing castor wheels on the centre bench so it can be easily moved.

The new workshop has opened more opportunities for our clients. Part of the workshop will be sectioned off as an arts and crafts area for clients to use as part of their self-directed rehab.

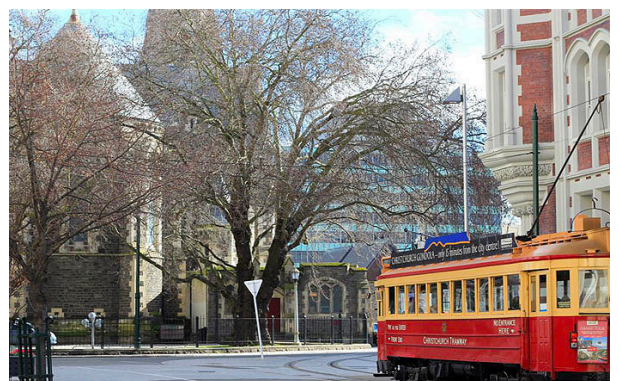
Another area of self-directed rehab that has become very popular is a social outing to the bowling alley to bowl or play pool. This has improved clients over well-being and social interaction outside ABI facilities to assist with their transition home.

Clients have also selected baking which can be undertaken by any client in any house or our occupational therapy kitchen, with assistance from the ABI team if needed. Baking helps with client attention skills, problem solving and improved upper limb recovery.

Christchurch based Clients needing inpatient rehabilitation

Because Laura Fergusson in Christchurch is no longer admitting clients needing intensive inpatient rehabilitation, ABI now offers rehabilitation beds to clients from this region. We have been working closely with colleagues in Christchurch Hospital to create efficient processes for referral, assessment and coordination of clients who need TBI rehabilitation after their public hospital stay. Our Brain Injury Nurse Specialist team commute to Christchurch to review clients and meet their whānau, once a referral from the hospital is received. This enables discussion between the client and our specialist nurses about rehab processes and allows time to answer questions. This ABI team brings skills in working with DHB acutes services and managing the transition to rehabilitation.

Over the past 12 months, we have had 7 clients transfer to ABI from Canterbury DHB, two to Wellington and five to Auckland.



Relationship with ACC

As part of the monitoring performance, early joint problem solving and identifying opportunities for developing services, ABI and ACC meet regularly. These forums have been helpful in facilitating changes at both a service and individual client level. One example is where difficulties are being experienced waiting for approvals that relate to a client’s rehabilitation. Another example is at the service level and how clients transition from one service to another. During the past year, ABI has been successful in obtaining ACC agreement to allow direct referrals from Intensive Services to Community Services which had until recently only been possible for discharges to the Auckland and Waikato regions. This is a good example of an improvement that helps reduce delays to accessing community rehabilitation when a client is ready to leave Intensive Services. Recently, ACC also agreed to pay for services provided by ABI on the day of discharge which had previously been unfunded.



ABI values the opportunity to collaborate with ACC in order to continuously improve neuro-rehabilitation in New Zealand.

ABI Website and Social Media Platforms are being upgraded

Since late 2020, ABI has embarked on a programme to gradually update and modernise its website and increase its presence on social media via Facebook and LinkedIn pages. The new pages of the website are accessible on all devices and are being designed with clients and other visitor’s needs to find accurate information quickly. There is still some work to do, but doing this gradually has meant there have been no days with the website being offline or links not working.

The landing page of the website has ABI’s new logo that has been translated into Te Reo. Te Reo is being used throughout the website (with support from ABI’s Kaumātua and Urihaumate). ABI colours and branding is used consistently and the imagery reflects typical clients and whānau, with large font, and clear navigation. A news section is also available where stories are posted (concurrently to Facebook and LinkedIn). Content in these stories includes events at ABI, client stories, media about TBI including concussion and updates on what is happening at ABI. These stories have had positive responses from viewers and ABI is gathering more followers and likes on social media pages each week.

Considerable time has been spent over the last 3 months in upgrading the community rehabilitation pages, one for adults and one for paediatrics highlighting ABI’s expertise in community rehabilitations well as intensive inpatient rehabilitation.

Tiny Whares

ABI has welcomed two new tiny whares to the intensive site at Auckland this year. These cabins are designed for mobile, independent clients who are nearing the end of their intensive rehabilitation stay, enabling them to practice the living skills they have learned before going home. The whares house a client each. They have a kitchenette, lounge, bedroom and bathroom. One feature is a keypad lock that enables clients to personalise their code to enter (therefore not requiring keys) and enables staff to change the access codes when the whare is to be used for someone else. The whares are located on the main intensive site in Auckland, allowing continued easy access to the gym and meeting rooms for individual and group based rehabilitation.

The two tiny whares were formally opened and blessed by the ABI Chaplain, Bruce Drysdale, with many of the Auckland ABI team getting to see and walk through the whares for the first time. A particular karakia was used to signify the new whares and celebrate their arrival at Matariki. The team joined in with a karakia, blessing, waiata and shared celebratory kai after the opening.

Leigh, a client commented: - “Day to day living is a bit more relaxed because you are basically looking after yourself, it’s a great transition before leaving and moving back home.”

James, another client also had a great experience, saying: - “It was great to have my own space and gave a feeling of freedom. The house has everything in it, I feel very comfortable and enjoy having independence.”

ABI’s GM Rehabilitation, Tony Young added another string to his bow working with the Tiny Homes team on the concept plans, design, build, delivery and fit out of the two whares. This was all completed within a 3 month timeframe and already the tiny whares are proving to be a great hit with the clients in improving their confidence and readiness to transition home.



Cultural Capability

Ethnicity of Clients

A key priority at ABI is to improve its cultural capability. Discharge data continues to show an over representation of Māori requiring brain injury rehabilitation services. The data suggests the age of Māori is typically younger than non-Māori with over 55% of Māori being younger than 40 years of age. This compares to 37% of non-Maori who are younger than 40 years of age.

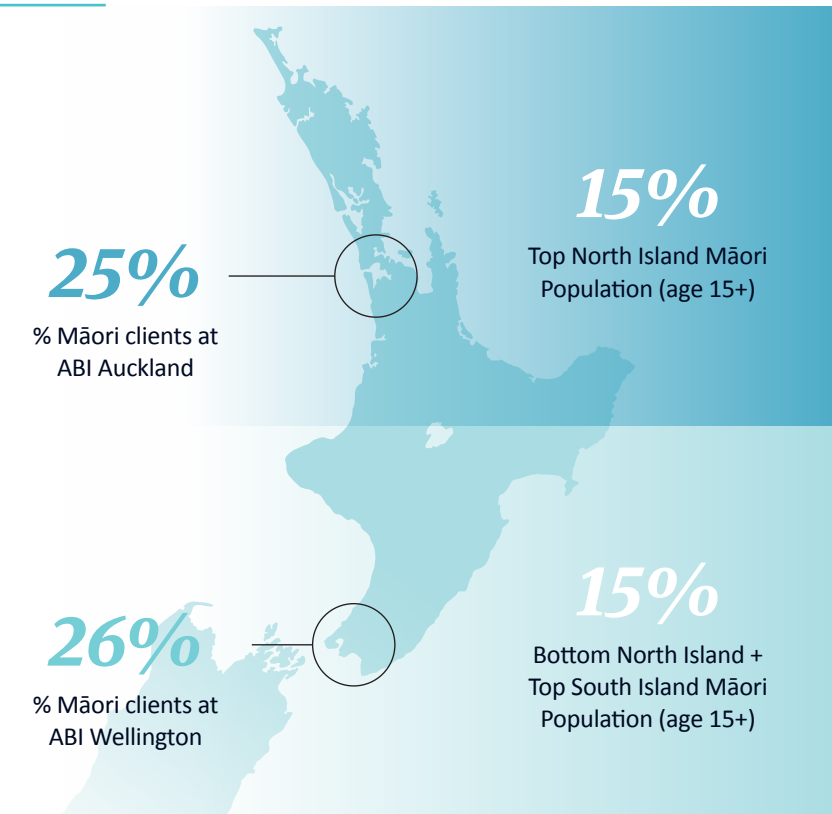
ABI has a number of roles supporting the development of organisational cultural confidence and capability. This includes our own kaumātua, urihaumate and whānau advisor and Kaiārahi Kaupapa Māori. ABI places a high value on these roles.

The Kaiārahi Kaupapa Māori role is specific to the intensive rehabilitation service and has been extremely valuable in assisting to identify client and whānau needs and help create a relationship where knowledge sharing is embraced.

Unfortunately this role has been vacant over the last few months and our kaumātua has been providing some of this support, however we are very excited that we have now filled this position.

As well as ensuring a safe cultural environment and Tikanga Maori training for staff, the Kaiārahi Kaupapa Māori role involves visiting clients and whānau whilst they are in hospital, welcoming clients and whānau on site, facilitating hui, incorporating kaupapa Māori into rehabilitation plans and supporting discharge planning.

The ACC TBIRR data shows:



Average age on admission

Māori	Non-Māori
39	48

Younger than 40 at admission to ABI

Māori	Non-Māori
55%	37%

Length of stay (days)

Māori	Non-Māori
57	48

Discharged Home

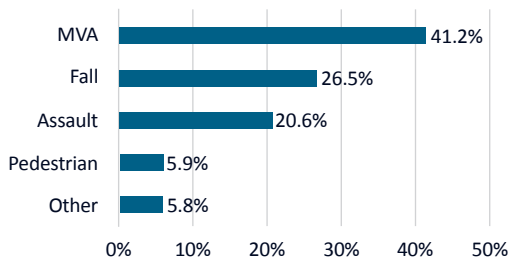
Māori	Non-Māori
75%	84%

Self discharges

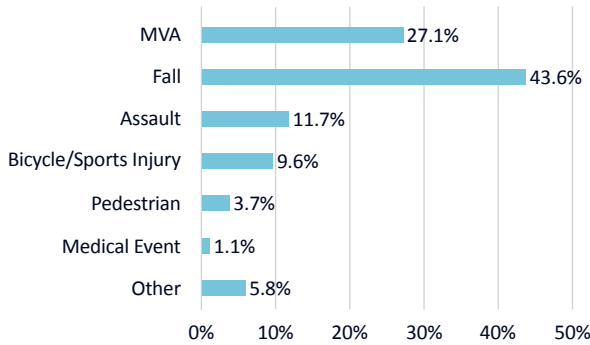
Māori	Non-Māori
8.7%	9.7%

*based on number within ethnicity cohorts

Mechanism of Injury: Māori



Mechanism of Injury: Non-Māori



Our data suggests that Māori clients entering ABI's service are typically younger than non-Māori, with the majority being under the age of 40. Māori clients typically have a longer length of stay at ABI and are slightly less likely to be discharged home (when compared to non-Māori). One explanation for this may be that the average Māori client is presenting with a more severe brain injury and therefore rehabilitation time and outcomes (discharge home) are likely to differ. We know high velocity brain injuries, such as those caused by vehicle accidents, tend to result in greater injury to the brain. This mechanism of injury for Māori is about 14% higher than non-Māori. Of interest, the data on mechanism of injury also suggests a significant difference across assaults (high for Māori), falls (lower for Māori) and sporting related injuries (lower for Māori).

A recent review of ABI's data over the past five years for the minimally conscious clients coming through our service was conducted. Although the numbers are relatively low, with only 51 clients, the representation of young Māori females was significantly over represented. Of the 51, 37% (19) were female and 58% (11) of the females were Māori with a median age of 23.



Whānau centred rehabilitation

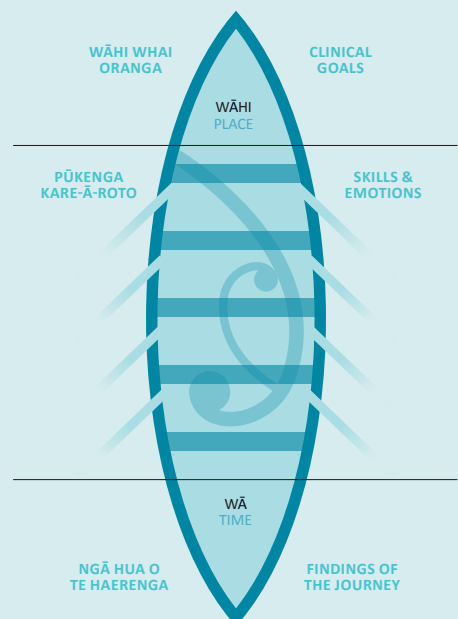
The role of whānau (extended families) is deemed an essential aspect of hauora (wellbeing) by Māori, who are overrepresented in populations where there is an injury to the brain. Whānau knowledge systems can greatly improve recovery outcomes for those with such injuries.

Two Māori rehabilitation tools are now in use at ABI: Te Waka Oranga¹ and Te Waka Kuaka².

Using the metaphor of a waka, Te Waka Oranga describes the process of bringing together whānau and health workers so they can share their knowledge, skills and feelings to improve the ABI recovery experience and the outcomes for whānau.

Te Waka Kuaka is a Māori bilingual cultural needs assessment tool that has been developed to further guide this work and uses the metaphor of a flock of godwits.

These two tools, with whānau at the centre, create a holistic approach to recovery. Resources and activities are created and introduced to whānau alongside both of these tools.



1 Elder, H. (2015). Te Waka Oranga, bringing indigenous knowledge forward, in K. McPherson, B.E. Gibson, & A. Leplege (Eds.), *Rethinking Rehabilitation Theory and Practice* (pp. 227–247). Boca Raton: CRC Press Taylor and Francis.

2 Elder, H., & Kersten, P. (2015). Whakawhiti kōrero, a method for the development of a cultural assessment tool, Te Waka Kuaka, in Māori traumatic brain injury. *Behavioural Neurology*, 2015, 8. doi:10.1155/2015/137402.

Introducing ABI's Kaumātua and Urihaumate & Whānau Advisor

Ray Ahipene-Mercer

ABI has the support of a Kaumātua. ABI's Kaumātua is Ray Ahipene-Mercer. Ray (Ngāi Tara, Ngāti Ira, Ngāi Tahu) is of Māori, Welsh, Swedish and Scot descent. Ray grew up in Wellington where he continues to live.

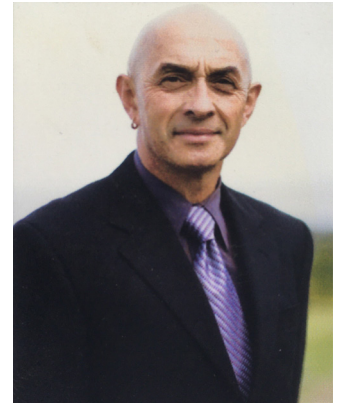
Ray has been described as a tireless environmentalist and has been involved in many environmental campaigns in Wellington. Ray regularly works with Wellington schools and other groups around environmental and Mātauranga Māori issues and sharing knowledge. Ray is an advocate of reforestation in Wellington City and has been an active organiser of community tree-planting events. He has sought to reintroduce a number of Māori names to Wellington.

Ray's work in environmental and Mātauranga Māori issues often brought him in contact with Wellington City Council. Ray was elected to the Council for five terms (sixteen years), being the second Māori to be elected to the Wellington City Council and the first Maori to be elected since 1962. Ray held various roles in the Arts when at the Council.

Currently Ray is Chair of Orchestra Wellington, a role he has held since 2018. Ray was the first Māori to chair an Orchestra in New Zealand.

ABI values having Ray and his knowledge, experience, wisdom as part of the team to support ABI genuinely navigating and implementing kaupapa Māori approaches to rehabilitation and service delivery. Examples of the work Ray has been providing includes:

- Refining the job description for the Kaiārahi role and suggesting places to advertise and networks to link in with
- Te Reo translations for signage and logo at the ABI sites
- Content and priorities within the ABI Māori Work Programme, mentoring, advice and support to those involved in implementing this programme
- Connecting ABI with key community organisations and leaders locally
- Use of Te Reo and Te Ao Māori concepts within the ABI website, Annual Plan, Strategic Plan, Social Media and Brochures
- Blessing ABI new sites and participating in these celebrations as ABI's Kaumātua
- Cultural support to some ABI staff and clients and whānau as required.



Te Rina Ruru-Pelasio

Te Rina is an Urihaumate (Māori Consumer) and Whānau advisor for ABI. Alongside being a member of ABI's clinical governance team, Te Rina has lived whānau experiences with her older brother who sustained a severe traumatic brain injury from a motor vehicle accident in 2007. This coupled with the experiences of others she has met on their journey, has increased her awareness of the quality, safety and cultural issues people face on a day-to-day basis. Te Rina co-founded Camp Unity, a Charitable Trust that provides advocacy, support and holistic healing to young people who provide care to a whānau, or aiga member with a disability, illness, or injury requiring daily support. Te Rina has also been a member of national and local advisory groups such as, Royal Australasian College of Physicians Consumer Board, ACC Whole Pathways Collaborative, Health Quality and Safety Commissions Consumer Network, Te Roopū Māori group, and Medication Safety group.

Te Rina is passionate about sharing the experiences of her whānau to influence positive change within crown agencies, providers, and community organisations and ABI is so grateful to have her as part of the team.

Examples of work Te Rina has been assisting ABI with includes:

- Refining the kaiārahi role and being part of the interview and recruitment panel for this role
- Content setting and priorities within the ABI Māori Work Programme
- Mentoring, advice and support to those involved in implementing the ABI Māori Work Programme
- Being part of ABI's Clinical Governance team supporting ABI with Māori best practice approaches.



Workforce Development

Staff Working on and Completing Higher Education

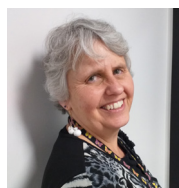
In this reporting period, Dr Angela Davenport has completed her DHSc, Shona Lees has completed her Postgraduate Certificate (PGCert) in Health Science in Leadership and Management, Julia Averill has completed her PGCert in Health Science in Rehabilitation and Maegan VanSolkema continues to make great progress towards her PhD. Our congratulations to them all. It's a major milestone and achievement that has taken a lot of hard work and determination.



Christal de Bruyn / Physiotherapist

Christal is currently enrolled at UCOL (Universal College of Learning) aiming to achieve a Certificate in Business (First line Management) – Level 4. She is to complete the course by 22 October 2021.

Christal told us: - "I have enjoyed challenging myself to think differently in a non-clinical way. I have learned techniques to assist me with managing workplace relationships, dealing with conflict in a professional and ethical way and it has given me the skills to assist with planning future projects. It is great to see things from an organisational perspective and not just from a therapist perspective."



Lee Edney / Keyworker/ Social Worker

Lee has completed a Postgraduate Diploma in Social Service Supervision (PGDipSSS) from Massey University – completed in March 2021

Lee told us "Completing this degree has honed my passion in developing skills around professional supervision particularly in the field of Social Work. I understand in greater depth how clinical supervision helps people develop in their professional practice. There were challenges in completing this degree during the height of Covid-19 lockdown – one of which is shifting mode of practice from face-to-face to virtual supervision."

Careerforce

ABI has partnered with Careerforce for a number of years, enabling the ABI team to complete NZRA qualifications at levels 2, 3 and 4. The apprenticeship program (level 4) is a specialist program for staff already experienced in working with clients with TBI. The course builds on their TBI knowledge and clinical skills. The level 3 program enhances experienced staff members general skills and knowledge. We also have staff enrolled in a level 2 Certificate in Cleaning, which develops skills relating specifically to healthcare situations.



In the last 12 months, we have had four staff complete level 4 and one complete a level 3 qualification. We currently have two staff enrolled in the Certificate in Cleaning; two staff in the Certificate in Health and Wellbeing; and seventeen in the Apprenticeship in Health and Wellbeing qualification.

This is an enormous achievement, given the extra stress in the healthcare system over the last 12 months. ABI wishes to congratulate the staff for the extra time they have put into completing these qualifications.

New Members to the Leadership Team



Michelle Wilkinson

Michelle joined ABI in a new role as ABI's Service Development Manager. Michelle has 20 years experience in rehabilitation, service design, development and leadership. She has worked for a large funder (ACC) in practitioner and at strategic leadership levels.

Michelle has an undergraduate degree in Psychology and Education and post graduate qualifications in Special Education and Business Management.

She is passionate about evidence based practice, equity, client voice and loves collaborating with like minded people to improve rehabilitation service delivery approaches in New Zealand.



Donna Gordon

Donna joined ABI in June 2021 as the Quality Manager. She is responsible for supporting teams to implement continuous quality improvements across the continuum of services provided.

Donna is a registered nurse with a career across health services most recently working at the Ministry of Health supporting the review of the Health and Disability Services Standards. She is committed to strengthening quality systems with the passionate belief that in doing so outcomes for our clients, their families and whānau will be optimized.

Clinical Nurse Educator – Shalini Vij

Shalini is one of our Clinical Nurse Educators and is currently enrolled in the Nurse Practitioner Training Programme. Here she talks about her experiences and what drives her.

Over the past 25 years of my nursing, a passion of mine has been mentoring nurses to upskill their standards to enable more autonomous work. A pathway to the nurse practitioner role was like a dream come true as this enables a registered nurse, like me, to practice at the level of advanced nurse clinician and offer leadership to improve service delivery to the clients. In New Zealand, nurse practitioners work autonomously to assess the patients, diagnose health conditions, order and interpret diagnostic tests and treat patients having the legal authority to prescribe medications. Besides this, the role involves educating nurses to achieve post graduate qualifications in speciality areas.

My journey to the nurse practitioner pathway began with an ordinary day when I was checking my work emails and came across an email sent from a nurse leader regarding the Ministry of Health awarding scholarships for the Nurse Practitioner Training Programme (NPTP) to the eligible candidates under the provision of three leading universities of New Zealand. Being a candidate with a completed Masters in Nursing with distinction, my existing qualification was cross credited by one of the approved leading universities and I was advised to complete two post graduate papers (Advanced Assessment & Clinical Reasoning; and Diagnostics & Therapeutics) as an eligibility criteria to apply for the NPTP scholarship. Many thanks to the ABI Management team who approved my above mentioned career plan and agreed to support me to pursue the Nurse Practitioner pathway under the leadership of ABI Medical Director, Wellington. With the letter of support from ABI, funding for the two post graduate papers was approved by Health Workforce NZ via the local DHB. Recently, I successfully completed my first post graduate paper and will complete the second one by the end of November 2021. At the same time, I am looking forward to applying for the Ministry of Health NPTP scholarship 2022 to achieve my goal to be ABI's first Nurse Practitioner to serve our clients and their families.



Research Activity

Key Presentations, Workshops, Interviews and Courses

2020

July

Dr Tanya Harris

Auckland intensive team started hosting on-site teaching rounds for Auckland University's Neurology Registrars

Julia Averill

Completed Postgraduate Certificate in health sciences in rehabilitation through AUT

Sarah Robinson

ADHB, OT Department – ABI update and referral information

August

Angela Davenport

Presented at Injury 2019 Conference

September

Sian Stevenson and Clodagh Fitzpatrick

Talk to MDT - Criteria and Admission Process for ABI and Role of Brain Injury Nurse Specialist

Sian Stevenson

Talk to trauma Study team - ABI, Criteria, Admission Process and Role of Brain Injury Nurse Specialist

Dr Tanya Harris

Training on TBI for AUT researchers and volunteers for peer mentoring

Amado Torres

"TheraCON 2020: Resilience and Solidarity Amidst this Pandemic" - Professional Speaker

October

Angela Davenport

International Association of Critical Realism Warsaw (presentation online)

Soo Yin Chew

Fatigue management post TBI - Resource person

November

Angela Davenport

Stroke Data & Quality Meeting, Otago University & Wellington Campus

Amado Torres

"Tracheostomy post-TBI and Dysphagia, IDDSI (International Dysphagia Diet Standardisation Initiative) Framework"; VFSS Analysis and Reporting - Guest Lecturer

Soo Yin Chew

Brain Injury Association (BIA) Wellington – Liaison

December

Soo Yin Chew

ABI whānau interview Form - Resource person

Soo Yin Chew

"Boom & Bust" (Fatigue after a Brain Injury) – Feature writer

2021

January

Angela Davenport

Contribution to textbook Critical realism for health and illness research - Priscilla Alderson: Policy Press

February

Sarah Robinson

ADHB Physio Dept - ABI update and referral information

Angela Davenport

Stroke Nurses Study day - Kenepuru Hospital

April

Louise Blackwell

Education to Wellington DHB OT dept

Angela Davenport

Neurosurgery & ORL House Surgeon Orientation ADHB

Amado Torres

Collaborative and Inclusive Communication post TBI – Practical and Functional Strategies - Resource person

Amado Torres

"Assessment and management of swallowing (Dysphagia) and feeding problems in Older Persons" - Presenter

May

Amy Honeysett

Presented to the National rehabilitation registrars group on swallowing and cognitive communication disorders

Angela Davenport

The Auckland Intensive OT team completed a series of in-service training sessions via Zoom titled "Assessment and Rehabilitation of Traumatic Brain Injury in the Acute Setting"

Amy Honeysett

ADHB neuro nurses, ABI update and referral information

Michelle Wilkinson

"Corrections – Ara Poutama TBI Pathway and across agency collaboration" to members of the TBI Network

June

Michelle Wilkinson

"TBI Trauma Pathway from Counties Manukau DHB to Community Rehabilitation" to Members of the Rehab Collaborative, National Trauma Network and Health Quality Safety Commission (HQSC)

Research Projects

The following research projects relate to ABI Intensive Services. ABI is also involved in other research projects within its other services and has joint applications for research under consideration.



Summary of Admissions

Bed Days

As with previous years there continues to be variation in the demand for beds at different times of the year. This is true across both the Auckland and Wellington services. The Auckland service had some changes to the bed numbers with the introduction of House 6, a four bedroom house, over the very busy Christmas period, and the loss of House 10, a two bedroom house. House 10 has been replaced by the two one bedroom units to allow for an improved staff area and kitchen for the site to be built. The Wellington service has also seen some changes to the beds available for the intensive service. Some of the longer-term residential clients have found more suitable residential settings to move to enable these beds to be re-purposed for the intensive service.

BREAK DOWN FOR ACC TBIRR CONTRACT

FACILITIES	NO. BEDS*	DAYS PER YEAR	AVAILABLE BED DAYS	DAYS OCCUPIED* (EXCL. ALL ABSENCES)	% OCCUPIED TBIRR	FUNDED ABSENCES** TBIRR	TOTAL FUNDED TBIRR DAYS	% FUNDED TBIRR
ABI Auckland	33	365	12,045	7,200	60%	247	7,447	62%
ABI Wellington	20	365	7,300	3,827	52%	155	3,982	55%
Total	53	730	19,345	11,027	57%	402	11,429	59%

* incl. day rehab, admission day, only TBIRR contract (ACC and private insurance funded)

** fully funded and bed retention days for hospital, short notice and planned leave, AWOL and Day rehab DNA



Referring Hospitals for ACC TBIRR Contract

The table below represents the DHB clients were at prior to their admission to ABI. Of note, admissions from the larger DHBs may not be that persons domicile DHB as they may have been transferred there to provide the required support and management. In addition to the admissions from DHBs, we have a small volume of admissions from home or other residential settings.



REFERRING HOSPITALS	TO ABI AKL	TO ABI WGTN	TOTAL EPISODES
1) Whangārei Hospital	7	0	7
2) North Shore Hospital	6	1	7
3) Waitākere Hospital	3	0	3
4) Auckland Hospital	100	0	100
5) Middlemore Hospital	15	0	15
6) Waikato Hospital	41	5	46
7) Tauranga Hospital	1	1	2
8) Rotorua Hospital	3	0	3
9) Hawkes Bay Hospital	0	1	1
10) Taranaki Base Hospital	0	1	1
11) Whanganui Hospital	1	1	2
12) Palmerston North Hospital	1	3	4
13) Wellington Hospital	0	61	61
14) Hutt Hospital	0	6	6
15) Wairarapa Hospital	0	1	1
16) Christchurch Hospital	5	2	7
17) Dunedin Hospital	0	1	1

Emerging Consciousness

Within the ACC TBIRR contract there is the ability to admit clients who meet the clinical criteria of minimally conscious (MC) into the Emerging Consciousness Service (ECS). Clients admitted into this contract represent those survivors of very severe brain injuries. They present in a state of severely altered consciousness, which is separated from a coma diagnosis by having sleep-wake cycles and a range of reflexive and spontaneous behaviours.¹ Should they emerge from an MC state, they are progressed to the intensive rehabilitation aspect of the ACC TBIRR contract.

EMERGING CONSCIOUSNESS DATA			TOTAL	DISCHARGED HOME
Number of Clients	Total		16	8
	Gender	M	11	6
		F	5	2
	Mechanism of Injury	MVA	9	3
		Fall	3	2
		Other	4	4
	Emerged from minimally conscious		13	8
Cleared PTA		9	7	
Age range	Age range		15 - 69	15 - 69
Average number of days	Length of hospital stay		39	25
	Length minimally conscious*		62	34
	Length of ECS contract*		27	15
	Length of intensive contract*		93	93

With overall admissions to ABI, we typically see a 25/75 split of female to male. Over the past 5 years, we have noticed a higher portion of females being represented in our very severe brain injury data. This year continues this trend with 31% of the clients entering the Emerging Conscious Service (ECS) being female.

It is of little surprise that the predominant cause (56%) for these brain injuries is motor vehicle accidents (MVA). Those entering the ECS contract as a result of an MVA had a significantly lower likelihood of being discharged home when compared to the other mechanisms of injury (33% compared to 86%).

It is again of no surprise that this population have longer lengths of stay both in hospital and in rehabilitation. It is, however, very encouraging to see that of the 16 Clients admitted under the ECS, 13 emerged from a minimally conscious state and 9 went on to emerge from post-traumatic amnesia (PTA) indicating they are orientated and able to hold on to new memories.

¹ Royal college of Physicians 2020

Client Story

Aaron

Aaron's perspective:

My recovery has been rather miraculous, and for that a lot of credit should go to the various therapy and rehabilitation staff that have helped me along the way. Initially it was more intensive with progress towards things like being able to walk and wash/groom myself without assistance.

I am back to work now and I can see many opportunities ahead so I feel very lucky that my recovery has lead me to where I am now. All this, of course, was made possible by the support I have received along the way from friends, family and obviously all the ABI staff who were involved in my rehabilitation, who I cannot thank enough.



Parents' perspective: Phil & Liesel Hanson

Our son Aaron (19 at the time) went dirt-biking with his mates in the Muriwai beach area on July 19, 2020. In a freak accident, a 4WD vehicle collided with him, and in the process, Aaron sustained a life-threatening traumatic brain injury, as well as some broken bones. He required emergency medical attention at the scene, and the Westpac Rescue Helicopter was called taking him to Auckland Hospital. He remained on life support for 2-3 days and was in a coma for a total of 35 days. Whilst we were well supported by many friends and family, for much of the time he was in a coma, Auckland was in a COVID-19 lockdown, and so it was impossible for anyone but us to be by Aaron's side.

The long days and nights at the hospital were very harrowing. His prognosis was very uncertain, and for what seemed like the longest time, Aaron was minimally conscious, showing no signs of a deliberate response. It was so hard to stay hopeful during those agonising weeks. Many stories we had heard were of people who were in a coma for 2 or 3 weeks, but after four weeks, we started to doubt whether he was ever going to improve. His agitated thrashing, weight loss and tachycardia all added to the agony of seeing him unresponsive.

Then, on day 33, Aaron showed the first clear sign of deliberate responsiveness. After calling for him to wiggle his toes, or stick out his tongue, or touch our hand for nearly 5 weeks with no response, I asked him to give me a high five. To our astonishment, Aaron reached up and touched my hand. Tears of joy flowed, and we could scarcely believe what we had seen. Within 3 days, Aaron was talking in a whisper, and the following week, he was discharged from hospital to be admitted to ABI's in-patient rehab program.

At ABI he learned to walk again, use the bathroom, and regain speech and language functions. We were amazed at his progress each week. It seemed like passing his Westmead PTA (post traumatic amnesia) test was a huge milestone, and his recovery seemed to accelerate from there. When he first arrived, he was unable to stand by himself, let alone walk. He seemed determined to work hard though, and after overcoming his initial loneliness (we were still in a lockdown and so reduced visiting hours meant more time alone), he seemed to connect well with his rehab team. On his first day, he walked heavily assisted by his wonderful physio team, and within a few weeks he progressed to walking with a walker, and eventually walked without it. In total, Aaron spent two months at ABI, and walked out of there independently in early November 2020; nearly four months after his accident.

This was an incredibly traumatic experience for us as a family, but we are also so humbled by and grateful for the amazing work done by the Auckland Rescue Helicopter Trust and ABI. Both organisations help to ensure that people like Aaron have a fighting chance of surviving ordeals like he has, and then rebuilding their lives. There have been so many moments of gratitude for us since Aaron's discharge from ABI; like celebrating his 20th birthday together as a family or watching him walk up the stairs at his workplace to be welcomed by his colleagues. Aaron has returned to work and works four days per week, 8 hours per day in a busy retail environment, with little to no sign that he has had a severe traumatic brain injury. For this, we have inexpressible gratitude.



Evaluation of Client Outcomes

AROC Data

The Australasian Rehabilitation Outcome Centre (AROC) is the National Rehabilitation Medicine Integrated Outcomes Centre in Australia and New Zealand. The key outcome measure used by AROC is the Functional Independent Measure (FIM) which is completed on admission and discharge for all clients entering ABI. AROC also collects information on client demographics, post-traumatic amnesia duration, length of stay in hospital and rehabilitation units, and discharge destination.

ABI sends completed data sets to AROC. The information is collated, classified, compared to similar services and reported on. Clients are grouped together based on their impairment code (e.g. open or closed brain injury) and their FIM score on admission to the rehabilitation service. This will place them into an 'AN-SNAP' group to enable comparison of clients with similar presentations across services and establish benchmarking.

There continues to be biannual quality forums where representation from providers (ABI and Southern DHB), ACC and AROC meet to discuss the data being presented, share quality initiatives and discuss areas for continued improvement. One key issue AROC is currently reviewing is how the discharge date is being captured and reported. There remains inconsistency with the recording of the date a client is

clinically ready to leave rehab and their actual discharge date. It has been suggested to AROC that reporting for purposes of length of stay and FIM efficiency (FIM gain over length of stay) the clinically ready-for-discharge date should be used (not currently the case) and the actual discharge date should be collected and used for reporting the reasons for delays to discharge.

As illustrated in the AROC data table, ABI continues to deliver well when benchmarked against other providers. You will notice there are differences in the case-mix adjusted average length of stay when comparing the services across different time periods (financial year and calendar year) and there are also differences between the Auckland and Wellington Services. For example, the financial year data suggests the Auckland service is having a 2 ½ day, on average, shorter stay than the Wellington Service and Wellington is achieving a 5 point, on average, higher FIM gain over this same period.

The services receive a full breakdown of the information and are able to see differences and identify areas for improvement across the different impairment codes and AN-SNAP groups. ABI recognizes the value in regularly coming together to review the data and share learnings between providers within the AROC quality forum.

VARIABLE	AROC REPORT	FACILITY OR BENCHMARK	FINANCIAL YEAR 2020	CALENDAR YEAR 2020
Number of TBIs	Impairment specific report	ABI Auckland	133	135
		ABI Wellington	56	50
		Benchmark (AU & NZ specialists, TBI only)	900	887
All TBI episodes, case-mix adjusted average length of stay	Impairment specific report	ABI Auckland	- 4.2 days	2.6 days
		ABI Wellington	- 1.7 days	- 3.1 days
		Benchmark (AU & NZ specialists, TBI only)	0 days	0 days
All TBI episodes, case-mix adjusted average FIM gain	Impairment specific report	ABI Auckland	- 5.2 points	- 4.8 points
		ABI Wellington	- 0.1 points	- 1.4 points
		Benchmark (AU & NZ specialists, TBI only)	0 points	0 points
% of clients discharged to private residence	Impairment specific report	ABI Auckland	96.4%	96.4%
		ABI Wellington	98.3%	96%
		Benchmark (AU & NZ specialists, TBI only)	87.2%	87%



Client Experience

Clients and whānau rate their experience at ABI highly. ACC also rate their experience as exceptional. Response rates have traditionally been low and this year is no exception with only 30% of the total number of discharged clients providing survey feedback.

There were very few community providers who responded to our survey which means results are not representative. ABI continues to encourage feedback in order to continually improve the services provided.

SATISFACTION SURVEY	PERCENTAGE OF SATISFIED AND VERY SATISFIED
Client	93%
Whānau	98%
ACC Case Owners	100%
Community providers	40%

Five community providers responded to the survey across the period, with less than half (3) being satisfied or very satisfied with the service provided by ABI, reporting communication as being challenging.



Closing Words



The human brain is very complex. It is responsible for our thinking, emotions, memories, movements and personalities - it is what makes us who we are. Unfortunately, it is also poorly protected, making it very vulnerable to damage.

ABI, over this reporting period, has supported 277 people in need of our inpatient services. For most, coming to ABI is the start of their rehabilitation journey. I would like to acknowledge the efforts we see every day from our clients and staff as they work together to maximize rehabilitation potential. The 'ripple effect' is a term often referred to in brain injury. This relates to the effects of a brain injury not only impacting the individual concerned but also the whānau, friends and those around them. The impact of a brain injury will differ from person to person depending on a number of factors as will the ripple effect on others. To those clients and whānau who have passed through our service, we recognise the brain injury rehabilitation journey is one that you were unlikely to be expecting. It is sudden and life changing. I trust the ABI team have given you a positive experience and the tools you need to continue your rehabilitation.

Success for our clients and whānau comes in many different forms. For some this may be establishing communication, others may improve their thinking or movement skills. For ABI staff, having the opportunity to play an active role in these successes is incredibly rewarding. Thank you to all the ABI team who work to create a professional, positive environment and use your skills to maximise the rehabilitation potential for our clients.

The impact of COVID continues to be felt. Although we have managed to avoid further lengthy lockdowns, the closing of our borders has resulted in challenges with staff recruitment. This particularly relates to overseas trained nursing staff. Thank you to our nursing service managers and HR team for securing some amazing new team members during this difficult time. We have also seen some changes to the mechanism of injuries with less motor vehicle accidents and a higher ratio of injuries due to falls. It is, however, hard to say if this is fully related to COVID changes in travel freedom or the fact we have also seen an increase to the average age of the people requiring our services.

ABI has been in the privileged position to help hundreds of people in need of brain injury rehabilitation over the past year. Again, thank you to all the ABI team for the passion and dedication you bring to your roles in supporting our clients and whānau during their time of need.

Tony Young

General Manager
Rehabilitation Services
ABI Rehabilitation

ABI is the leading provider of intensive rehabilitation in New Zealand with specialist centres in Auckland and Wellington. ABI provides comprehensive services for people with traumatic brain injury (TBI) and stroke.

For more information visit www.abi-rehab.co.nz



ABI Rehabilitation was the first Australasian rehabilitation organisation to achieve CARF accreditation. We first achieved this distinction in 2012 and have maintained it continuously through demonstration of ongoing commitment to continuous quality improvement. Our next CARF survey is planned for November 2021.



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