



Government of Western Australia  
North Metropolitan Health Service  
Mental Health, Public Health and Dental Services

# State Head Injury Unit

## Annual Report 2022/23



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**One** team, **many** dreams.

Care / Respect / Innovation / Teamwork / Integrity



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**We are proud to be a smoke-free site.**

Thank you for not smoking or vaping in any buildings or on our grounds.

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# Abbreviations

ABI	Acquired brain injury
ABI:RECOVER	Acquired brain injury Recover, Engagement, and Community Outcomes Via Evidence-based Rehabilitation
ACT	Acceptance and commitment therapy
AHA	Allied Health Assistant
AHLO	Aboriginal Health Liaison Officer
ANZCPG	Australian and New Zealand Clinical Practice Guidelines
ASSBI	Australiasian Society for the Study of Brain Impairment
CC	Case Coordinator
CISS	Catastrophic Injury Support Scheme
CP	Clinical Psychology
CUT	Curtin University of Technology
DoJ	Department of Justice
ECU	Edith Cowan University
EMHS	East Metropolitan Health Service
ER-ABI	Emotional regulation – acquired brain injury
FOGO	Food organics and garden organics
FSH	Fiona Stanley Hospital
GP	General Practitioner
ICWA	Insurance Commission of Western Australia
JHC	Joondalup Health Campus
KPI	Key Performance Indicator
LWWABI	Living well with acquired brain injury
MHFA	Mental Health First Aid
NDIS	National Disability Insurance Scheme
NMHS	North Metropolitan Health Service
NP	Neuropsychology
OT	Occupational Therapy
PCH	Perth Childrens Hospital
PHI	Public Health Intelligence
PM	Program Manager
PT	Physiotherapy
QI	Quality Improvement
RITH	Rehabilitation in the Home
RPH	Royal Perth Hospital
SARC	Sexual Assault Resource Centre
SCC	Senior Clinical Coordinator
SCGOPHCG	Sir Charles Gairdner Osborne Park Health Care Group
SHIU	State Head Injury Unit
SJOGM	St John of God Midland
SME	Subject Matter Expert
SMHS	South Metropolitan Health Service
SP	Speech Pathology
SW	Social Work
SWaT	Sustainability, Wellbeing and Teamwork
TPIF	Third Party Insurance Fund
TO	Therapy Only



TBI	Traumatic Brain Injury
UABI	Understanding acquired brain injury
UQ	University of Queensland
UWA	University of Western Australia
WA	Western Australia
WACHS	Western Australian Country Health Service
WAPHA	Western Australian Primary Health Alliance
WO	Welfare Officer
YVIH	Your Voice in Health



# State Head Injury Unit Overview

The State Head Injury Unit (SHIU) is a state-wide community rehabilitation program for people aged 16 – 65 years who have sustained an acquired brain injury (ABI).

For the SHIU, 2022-2023 has been a year of growth and development as our specialist team expands to cater for the needs of our clients. SHIU continues to be one of the leading providers of specialist multi-disciplinary ABI rehabilitation and community education within Western Australia (WA). This year has seen the SHIU:

- Expand our team through increasing existing FTE for neuropsychology and speech pathology; and securing a new permanent P1 physiotherapy position;
- Provide two presentations and two posters at the Australasian Society for the Study of Brain Impairment (ASSBI) conference in Darwin;
- Strengthen research partnerships with Edith Cowan University (ECU), the University of WA (UWA), and Curtin University of Technology (CUT);
- Partner with Perth Children’s Hospital (PCH) to improve pathways of transition from paediatric to adult services;
- Contribute to the Australian and New Zealand Clinical Practice Guidelines (ANZCPG) for concussion with the University of Queensland (UQ);
- Provide new group programs for patients and family / carers;
- Provide opportunities for staff to upskill through undertaking higher duties roles;
- Complete quality improvement (QI) projects focussed on improvement in service delivery; Aboriginal Health and ABI; and education programs;
- Commence QI projects in ABI education to the Department of Justice (DoJ) medical and nursing teams;
- Host students from both occupational therapy and neuropsychology; and
- Celebrate our staff achievements both in and out of the office.

This past year has focussed on unit promotion and ABI education to increase the profile of ABI within health and the community. The SHIU has provided 18714 occasions of service to WA clients with ABI in this financial year, an increase of 321 on 2021-2022. Additionally, the SHIU has provided education regarding service delivery and ABI to 12 WA health services.

The SHIU remain active members of the WA ABI Advisory Group where the focus is on education (for patients, families, the community and health staff), gathering data regarding prevalence of ABI and services accessed within WA, and exploring how to improve the management of ABI within the justice system. These are all long term projects.

Finally, this year has, from a team perspective, focussed on staff well being and maintaining a warm, welcoming, professional and supportive environment. This is evidenced through supporting and funding professional development opportunities; encouraging use of flexible working hours and taking leave (and providing backfill support where able) to assist with a healthy work/life balance; developing and providing clinical/professional supervision and evidence/processes for successful implementation; inclusion of all staff in SHIU operational planning, promoting innovation and QI ideas; and streamlining of documentation and clinical reports to reduce the administrative load on clinical staff. The SHIU has become increasingly sophisticated through use of data from our electronic medical records, which in turn informs service delivery, unit promotion, quality improvement, and client care. As a unit, we look forward to what the future will bring as we grow and develop through evidence-based practice.



## Staffing and Recruitment

The SHIU has experienced further growth in 2022-2023 with creation of a new physiotherapy P1 position and increases in FTE for neuropsychology and speech pathology. The unit has seen permanent filling of positions as roles become available, providing job security and opportunities for contracted staff.

The profile of the SHIU being a specialist ABI rehabilitation service with a positive, welcoming culture where opportunities for learning, growth and development occur, has assisted with recruitment this financial year.

- Allied Health Assistant (0.6FTE) – permanent recruitment in November 2022
- Case Coordinator (0.6FTE) – permanent recruitment in January 2023 and May 2023
- Rehabilitation Consultant (0.1FTE) – 5 year contract commenced August 2022
- Senior Social Worker (1.0FTE) – transition from contract to permanent in October 2022
- P1 Occupational Therapist (1.0FTE) – 2 year backfill contract commenced January 2023
- Senior Occupational Therapist (0.5FTE) – 10 month backfill contract commenced January 2023
- Neuropsychologist (1.0FTE) – successful permanent increase from 0.2 to 1.0FTE in February 2023
- Senior Speech Pathologist (0.4FTE) – successful permanent increase from 0.2 to 0.4FTE in February 2023
- Clinical Psychologist (1.4FTE) – permanent recruitment to 0.6FTE and parental leave contract to 0.8FTE from March 2023
- P1 Physiotherapist (1.0FTE) – 6 month trial for new position was successful with transition to permanent role April 2023

The increases in FTE for physiotherapy, neuropsychology and speech pathology, have enabled more timely access to service, however, have also demonstrated that with increased supply comes increased demand, with staff across the unit maintaining high caseload numbers with a complex patient cohort.

Acknowledgement goes to staff who have taken on higher duty opportunities whilst maintaining a caseload to allow managerial staff periods of leave. We thank you for your ongoing support, willingness to learn and take on a challenge, and provide a positive working culture.



State Head Injury Unit team representatives



At the end of the 2022-2023 financial year, the SHIU staffing profile comprises (17.0FTE):

1.0FTE	Program Manager (PM)	
1.0FTE	Senior Clinical Coordinator (SCC)	
0.1FTE	Rehabilitation Medicine Consultant	
4.0FTE	Case Coordination (CC)	(1 fulltime and 5 part-time)
1.4FTE	Clinical Psychology (CP)	(0.6 and 0.8FTE)
1.0FTE	Neuropsychologist (NP)	
2.0FTE	Occupational Therapy (OT)	(1.0 senior job-share; 1.0 OT)
2.0FTE	Physiotherapy (PT)	(1.0 senior; 1.0 physiotherapist)
1.0FTE	Senior Social Work (SW)	
0.4FTE	Senior Speech Pathologist (SP)	
0.6FTE	Welfare Officer (WO)	
0.5FTE	Aboriginal Health Liaison Officer (AHLO)	(2 part-time staff)
1.0FTE	Allied Health Assistant (AHA)	(2 part-time staff)
1.0FTE	Administration Assistant	





# Achievements

Our specialist ABI rehabilitation team is highly committed to helping clients achieve their goals, improve long term outcomes, and do this in a supportive environment within the unit, at home or in the community. The SHIU has a strong commitment to exploring opportunities through partnerships and QI which aim to improve service delivery and client outcomes. The SHIU continues to provide tailored, evidence-based rehabilitation programs for clients following ABI.

## SHIU Planning Day

The annual SHIU planning day occurred on 7 June 2023. This day brings the team together to review previous projects and QI achievements; plan for continuing and future opportunities; and getting to know each other better through team building activities. This year's planning day was developed around feedback from staff regarding their current priorities and allowing dedicated time to progress existing projects. This year's planning day involved:

- Emotional Regulation training session by Natalie Pepping from the School of Psychological Science at UWA
  - Natalie is a PhD candidate from UWA. Her research focuses on emotion dysregulation in people with moderate-severe acquired brain injury. Since 2020, with the help of funding from the Neurotrauma Research Program, Natalie has been adapting and piloting the Emotion Regulation after Acquired Brain Injury Group Therapy Program (ER-ABI) which will be commencing at the SHIU from August 2023 (ethics approved) under the neuropsychology banner. Natalie presented on changes in emotional functioning after brain injury, the theory and research behind the ER-ABI program, what the ER-ABI therapy sessions include, and some of the results of the pilot study.
- Reviewing the 2022-2023 operational plan and working party outcomes;
- Discipline updates and goal progression
- Afternoon session to focus on development and progression of existing projects:
  - Children's resources
  - Carer's group
  - Aboriginal Health and ABI
  - Groups included a focus on consumer engagement and how this can continue to be incorporated into project development.

Through encouraging staff to take an active role in operational and service planning, our staff are able to take ownership of projects within areas of interest and at times, step out of their comfort zone and take on challenges. Through undertaking activities which speak to the individual, we foster an environment where staff are heard and supported, which can be carried through professional supervision and staff development.

## Aboriginal Health

Recruitment of two Aboriginal Health Liaison Officers (AHLO) in March 2022 has allowed the SHIU to increase its profile of providing culturally safe and secure care for Aboriginal people following ABI. Initially, the AHLO role had an active caseload however this was not sustainable due to employment rosters. As such, the role has focused on:

- Increasing the profile of ABI within the Aboriginal community;
- Engagement with metropolitan, rural and remote Aboriginal and non-Aboriginal support services (medical and non-medical) to increase the profile of the service; and
- Developing a network of referral services and resources.



Through this approach, the AHLO's have met with 11 different services across public and private health, including community Aboriginal services, to educate regarding ABI and the SHIU services available.

In July 2022, SHIU PM presented to the Strategic Aboriginal Health Group on initiatives within SHIU to improve access to culturally safe ABI rehabilitation services. Support was gained for SHIU to roll out the QI project across health which provides education and early access for Aboriginal clients.

In 2022-2023, 20 Aboriginal clients have been admitted to the service.

Currently: 22 engaged with SHIU services (includes those still on program from previous years)

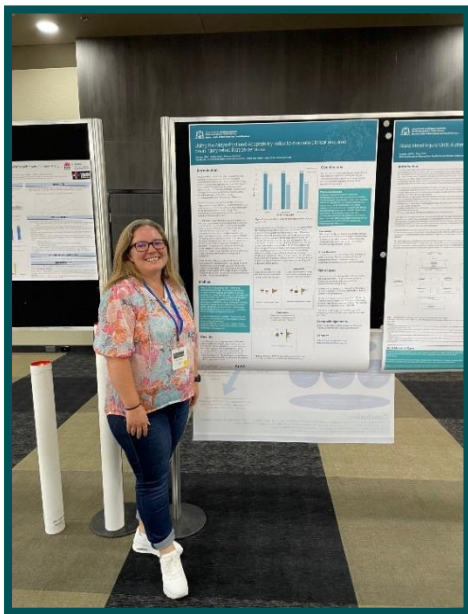
- 17 case management only
- 5 comprehensive rehabilitation program

Seven discharged in 2022-2023

- Two linked by SHIU with either outpatient or local services
- Three successful program completion with one returning to work
- Two unable to contact

## ASSBI Conference 4-6 May 2023

The SHIU submitted four abstracts for consideration to the ASSBI conference in Darwin in May 2023 and were fortunate to have all four accepted. The submissions consisted of:



SHIU Program Manager at ASSBI

Two presentations:

- Client engagement towards better outcomes post-concussion – by SHIU CC
- Improving access to ABI services for Aboriginal clients – by SHIU PM

Two posters:

- Using the Mayo-Portland Adaptability Index to evaluate clinical acquired brain injury rehabilitation services – by SHIU NP
- State Head Injury Unit: A client-centred community rehabilitation pathway – by SHIU PM and senior OT

The conference was attended by SHIU PM and provided an excellent opportunity to showcase SHIU services and link with like-minded professionals nationally and internationally to continue to improve our service delivery and patient outcomes.

## Partnering with ECU Research

The SHIU remain partnered with ECU as investigators for the ENLightTIND study *“The effectiveness of 12-week remote-delivered green-blue light therapy intervention on daytime sleepiness, fatigue, work productivity and quality of life outcomes in individuals following traumatic brain injury”*.

SHIU staff have been actively involved in co-design opportunities for ECU projects which has allowed staff to learn about co-design and be involved in new initiatives as they come to fruition.



## Partnering with the UWA School of Psychology

The SHIU remain partnered with UWA's "ABI: Recover, Engagement, and Community Outcomes Via Evidence-based Rehabilitation (RECOVER)" program, which enables SHIU patients to engage in cognitive assessment through UWA which can then be used to inform rehabilitation.

Additionally, the SHIU has applied for ethics to commence the "Emotional Regulation after Brain Injury" group in August 2023, with the support of UWA psychology students. This program aims to teach clients how to regulate their emotions after brain injury – understanding what emotions are, what they are for, and how they can put in place proven techniques and strategies to help regulate how emotions are experienced and expressed.

## Partnering with Brightwater Care Group

Utilisation of the Brightwater "Families Study", which focusses on the children and young people of a parent with an injury or illness that impacts their brain, and subsequent resources for children and professionals, has enabled the progression of a program of support for children whose parents have an ABI. The SHIU children's working group focussed on development of resource packs this financial year, which will be trialled with families in 2023-2024.

## Partnering with the University of Queensland

The UQ are developing the ANZCPG for concussion and the SHIU was approached to provide expert opinion, in particular, from an OT perspective. This role has been undertaken by SHIU PM. This project is still in its infancy with reviewing existing research and best-practice guidelines however is expected to be a valuable resource in the future.

## Students

SHIU OT continues to support CUT OT students, hosting two fourth year students who commenced 25 July 2022 for eight weeks; and four OT Honours students who commenced on 11 August 2022 on an 18 month placement (limited unit contact time).

As part of their placement, the fourth year students updated information sheets on fatigue, returning to work post-ABI and developed instruction sheets for using 'Fit Lights' as a therapeutic intervention.

The OT Honours students are undertaking a QI project titled: "An exploration of the interventions that clients with ABI and the workplace rehabilitation consultant perceive as effective when assisting ABI clients in returning to work with their previous employer".

SHIU psychology continue to support the UWA neuropsychology program, providing a rolling co-supervised placement for final year students. In 2022-2023 the SHIU has welcomed two final year UWA neuropsychology students, the first commencing 20 September 2022 and the second commencing 4 April 2023, both for ~20 weeks.

During the neuropsychology placement, students:

- Co-facilitate the SHIU Living Well with ABI (LWWABI) group with Clinical Psychology.
- Completing neuropsychological assessments – interview, testing, report, feedback and 1-3 intervention sessions
- Completing psycho-education

These opportunities help to increase the profile of ABI within the student cohorts and introduce them to a complex demographic with the support of a specialist team.



## Award winning team

The SHIU AHLO's are to be congratulated on being recipients of the "Outstanding Achievement in Injury Prevention or Recovery Support within Aboriginal and Torres Strait Islander Communities" at the Injury Prevention and Safety Promotion Awards, 11 May 2023 for their previous work on the ECU "Enhancing Rehabilitation Services for Aboriginal Australians after Brain Injury: Healing Right Way" project.

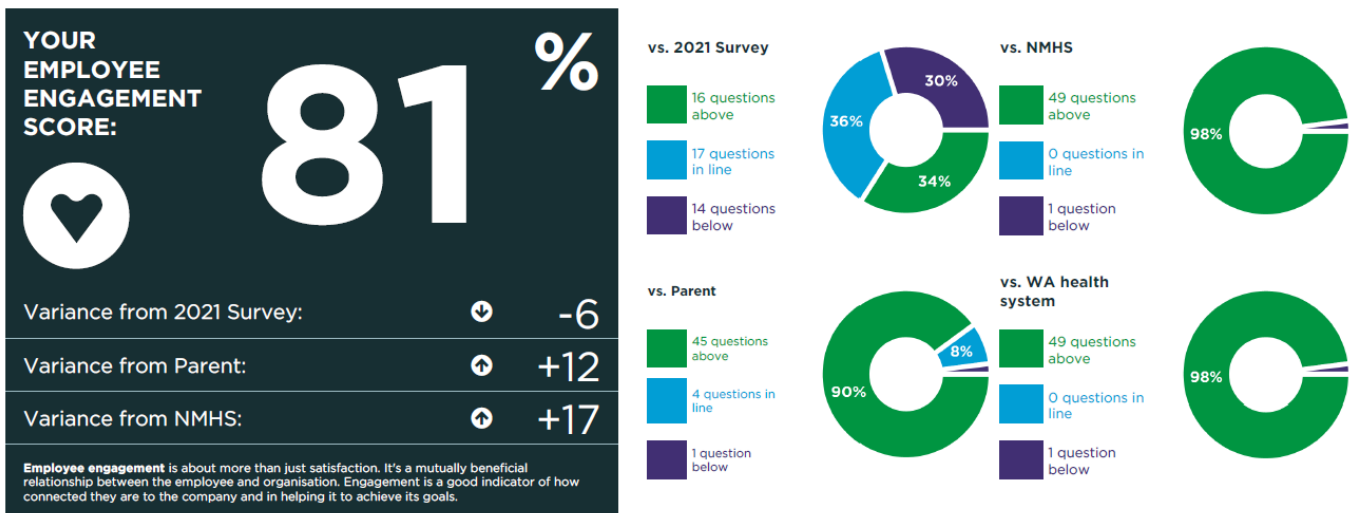


SHIU AHLOs with ECU researchers

## Presentation of the WAPHA Concussion Pathway

2021-2022 saw the redevelopment of the WAPHA concussion pathway with Dr Gill Cowen (GP and Senior Lecturer, CUT Medical School) and the SHIU identified as subject matter experts (SMEs). The final pathway was accepted and went live on 8 June 2022. The finalisation of this pathway provided a fantastic opportunity for SHIU to streamline concussion management, and provide education to GPs on best practice for concussion management and recovery on 6 September 2023. By promoting this early and effective management of concussion, long term client outcomes within WA can be maximised.

## Your Voice in Health (YVIH) – Minister for Health Staff Survey



The YVIH 2023 survey results again proved to be excellent, with little room for improvement to be found. Ensuring that all staff are aware and know how to access the various health and well-being options throughout NMHS will be the priority outcome from this survey.



## Environmental Sustainability

The SHIU sustainability has been successful in implementing sustainable options at SHIU which include:

- Change of printing paper to recycled options
- Change of printing practices – i.e. utilising “old paper” from paper file days for non-formal documents
- Where possible, using electronic options (reducing printing all together)
- Various recycling bins: paper/cardboard; plastic bottle lids; recyclable drink bottles/can; batteries and a Food Organics Garden Organics (FOGO) bin
- Ensuring lights are turned off in rooms not in use; and reducing the number of lights turned on in each room (i.e. turning on only one bank when option of 2 available)
- Provision of spare reusable coffee cups for staff.

We thank one of SHIU CC’s for her role as sustainability champion.

## WA ABI Advisory Group

The WA ABI Advisory Group continues to meet on a bi-monthly basis to progress network ideas and projects relevant to the ABI community.

The plans for the first 12 months of the group have largely been achieved in the education and justice spaces, with changes occurring to the psychological intervention group.

- ABI education across the lifespan and post-ABI pathways – exploration of what is already readily available, where the gaps lie and how we address the gaps has occurred with 2023-2024 focussing on raising awareness of ABI through ‘campaigns’ for which the group will seek funding. The aim is for the education process to start on admission to hospital and continue through to reintegrating into the community.
- Data collection and analysis (formerly psychological intervention) – this group has changed focus to a broader approach of exploring the data available on ABI admissions within WA and utilising said data to inform service delivery
- High risk groups – whereby ABI is not the primary issue but a significant contributing factor. How do we improve access to and engagement with services? The focus for 2022-2023 has been in the justice space with significant progress made on exploring services / supports available, gaps in service, and commencing work on bridging the gaps.

A challenge for the next 12 months will be supporting ECU on the development of ‘NeuroHub’ – a centralised repository for personal health and research information for the WA neurological community.

## Accreditation Champions

September 2023 will see the accreditation cycle for the SHIU come around again. Through staff volunteering as ‘Accreditation Champions’, the unit is strongly positioned for success with:

- All local procedures and guidelines up-to-date and available on the Hub
- 96% compliance for all staff with mandatory training requirements
- All audits up-to-date and lodged with the Safety, Quality and Performance Unit
- Thorough understanding by all staff of the SHIU Model of Care and Patient Journey map
- Quality improvement projects registered and progressing well

We would like to thank the Accreditation Champions and all staff for their efforts in bringing together the information required for success.



## Long Service Award recipients:

Congratulations to SHIU senior physiotherapist and SHIU senior occupational therapist who were recipients of MHPHDS Long Service Awards in 2022-2023.

The SHIU management also acknowledged SHIU CC who has been with WA health for over 20 years (and with SHIU for most of that time), and SHIU SCC who has been with WA Health for 10 years (and with SHIU for ~7 years).

All staff were presented with certificates and long service award pins at a celebratory lunch with the SHIU team. These awards demonstrate excellence in staff retention for NMHS, MHPHDS and the SHIU, creating a rich environment of ABI rehabilitation experience for new staff and clients admitted to the unit.

## Winners of Public Health SWAT 100km walking challenge

The SHIU were proud winners of the inaugural MHPHDS Public Health Sustainability, Wellbeing and Teamwork (SWaT) 100km walking challenge over April 2023 to encourage staff to spend time outdoors and increase their daily steps.

17 public health teams signed up for the challenge to walk 100km per person over the month, with double points awarded for walks taken together as a team.

The 'Lord of the SHIUs' who walked an incredible combined total of 1,540km taking out the win from the Public Health Intelligence (PHI) team 'PHI-tness PHI-natics' (1,191km) and the Health Promotion 'Salvado Sprinters' (884km).

Congrats to the team and well done to everybody that took part!

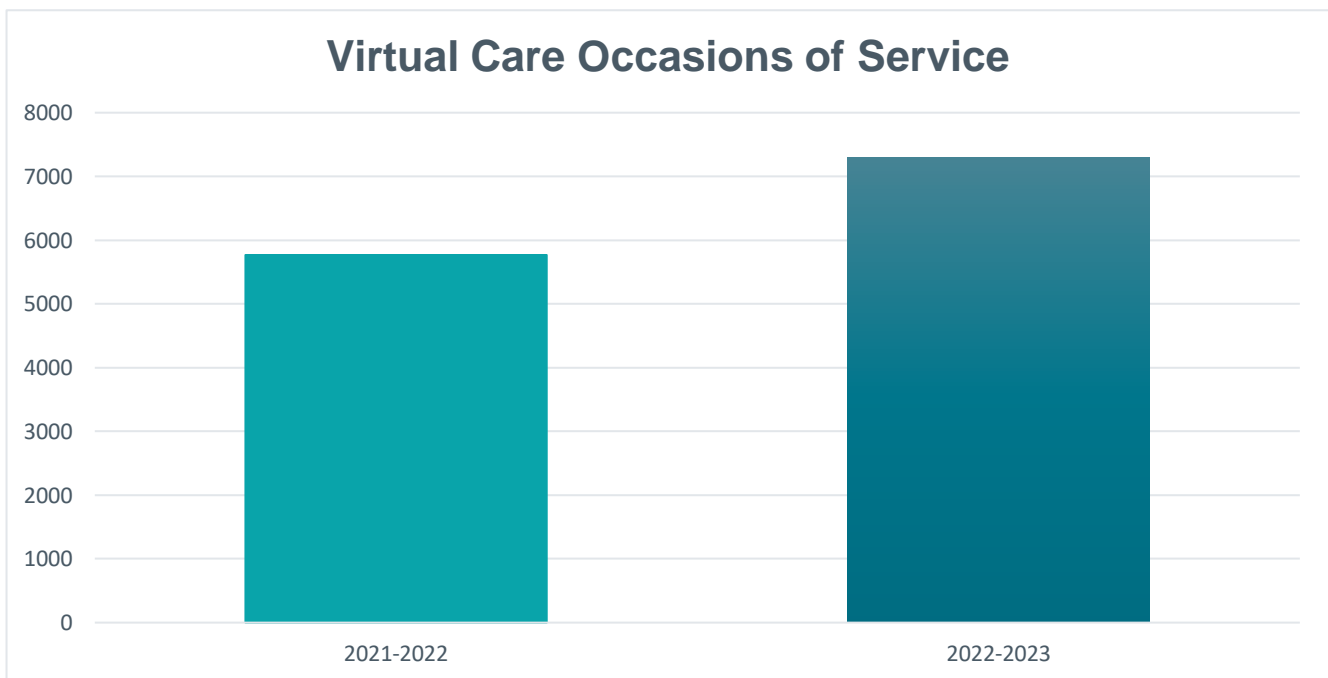


# Snapshot of Activity 2022-2023 – A comparison

The following provides a comparison of SHIU data from 2021-2022 and 2022-2023, specifically virtual care occasions of service, admission and referral data (geographical regions, reasons for referral to SHIU; redirected referrals), diagnoses, gender, referral sources, the senior clinical coordinator (SCC) role and mild ABI packages. This year there is a dedicated section to the various therapy services provided exploring reasons for referral, discharge outcomes and a summary of achievements.

The SHIU received 758 referrals in 2022-2023, which is an increase on 2021-2022 of 73 referrals. The increase is attributed to recommencing SHIU unit promotion to public and private health services following relaxing of COVID-19 restrictions. The unit again experiences an increase in occasions of service of 321 (current year 18714) as the team has grown and capacity for engagement has increased.

## Virtual care



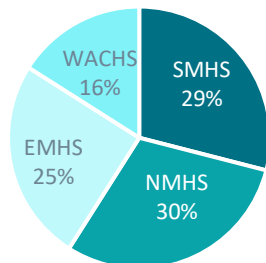
Within the SHIU, virtual care is considered any appointment held via phone or telehealth. In 2021-2022, 31% of occasions of service could be attributed to virtual care. 2022-2023 experienced an increase in virtual care with 39% of occasions of service held via this medium. This includes 174 occasions of service attributed to group programs (increase of 90 on previous year) and demonstrates how the SHIU has integrated virtual care into ongoing service delivery.

Online options continue to be utilised for professional development opportunities within and external to the unit; inter-agency liaison; and client review meetings as it allows review of electronic files, information sharing, and recording of professional development.

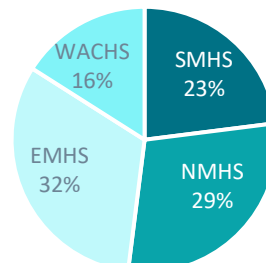


## Providing rehabilitation services to clients following ABI state-wide: referral and admission by geographical region

2021-2022  
685 Referrals



2022-2023  
758 Referrals



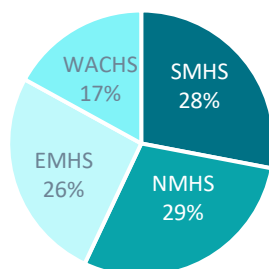
(South Metropolitan Health Service SMHS, North Metropolitan Health Service NMHS, East Metropolitan Health Service EMHS, WA Country Health Service WACHS)

The geographical distribution of the 758 referrals received within 2022-2023 demonstrates an increase in referrals for clients within the EMHS catchment and a reduction for clients in the SMHS catchment, with NMHS and WACHS remaining steady. This correlates with admissions across geographical regions. In 2022-2023, regions have changed slightly from 2021-2022 with clients located in NMHS and EMHS catchments increasing and a decrease from SMHS. Such changes can be attributed to unit promotion in the eastern and northern corridors, and early NDIS access to therapy services in the southern corridor (an exclusion criteria for SHIU).

Despite an increase in referrals for 2022-2023, admissions to the unit have decreased which can be attributed to extensive management leave backfilled by clinicians and limited backfill options for clinicians impacting on their capacity to take new clients. Despite this, all eligible patients are invited to the Understanding ABI seminar and are encouraged to contact the SHIU should their referral need to be escalated.

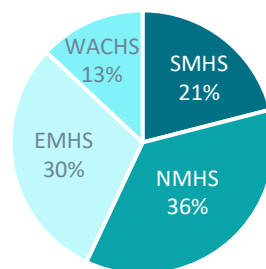
Noting the difference in number of referrals versus admissions, it must be stated that not all clients referred are eligible for services and are thus, redirected back to the referrer with suggestions for ongoing care. Additionally, the SHIU receives 'early' referrals whereby clients are referred to SHIU and outpatient services concurrently, therefore SHIU carries the referral on the waitlist until completion of outpatient program.

2021-2022  
391 Admissions



\*790 patients received services

2022-2023  
355 Admissions



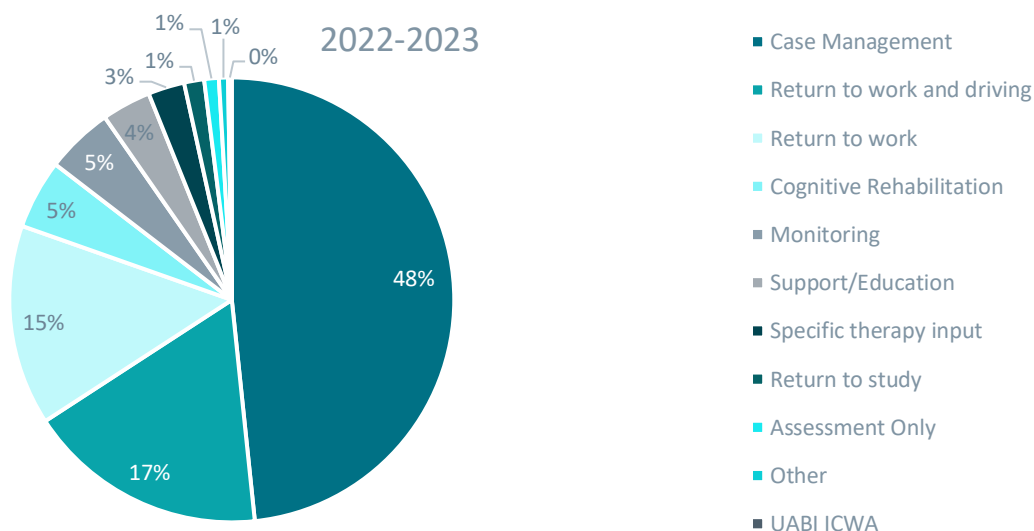
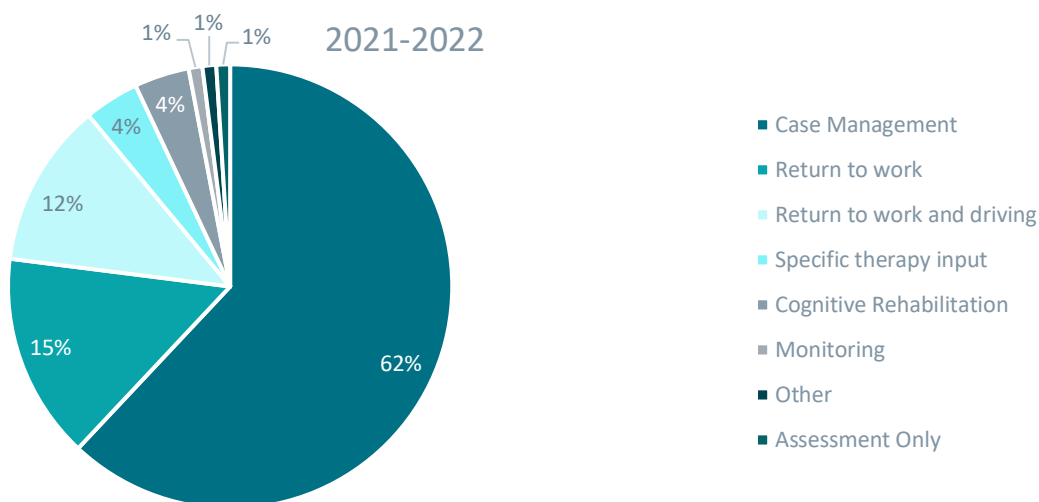
\*794 patients received services

(\*Clients receiving services includes clients carried over from previous financial year)





## Reason for referral to SHIU services – 2022-2023



Case management continues to be the primary reason for referral to the SHIU, however in 2022-2023 referrals have been received for support and education and return to study which can primarily be attributed to the concussion referrals – these referrals would have traditionally fallen under case management. Case management (or coordination) encompasses a full needs assessment and potential referral to therapy services. All referrals to the SHIU have a CC who undertakes this role either with the SHIU multi-disciplinary team or through linking with local therapy services and providers.

Returning to work and driving are the second most common reason for referral, combined 32%, which is an increase of 5% on the previous year. Whilst return to work and/or driving may be identified by referrers as the primary referral reason and by patients as their primary goals, following comprehensive needs assessment these goals often require extensive cognitive, physical and emotional recovery and rehabilitation to ensure readiness to pursue. Consistent with this, the SHIU provides excellent education, insight and awareness building in a supportive environment to assist clients to achieve realistic goals and optimise their overall recovery.



Like return to work and driving, referrals for cognitive rehabilitation usually require further exploration and often result in programs for awareness and insight building in addition to pure cognitive rehabilitation.

Specific therapy input – i.e. TO referrals – experienced a minor reduction of 1% to 3%. These referrals generally occur where challenges exist with CC staffing or CC's caseloads being at capacity, thus therapy staff are able to accept direct discrete referrals. Should issues arise outside of their discipline, the patient is brought back through CC as capacity allows.

Monitoring and 'other' referrals are sent the mild ABI education package and are offered to contact SHIU should difficulties persist. This cohort of patients have been deemed by referrers to be 'back to baseline with no persisting difficulties' but are flagged to SHIU should difficulties arise.

Assessment only referrals are rare, however, are considered if the SHIU can assist with informing client care outside of the SHIU program; or if an assessment will assist in determining eligibility for SHIU services.

This financial year saw the SHIU extending invitation to the Understanding ABI education seminar to the Insurance Commission of WA (ICWA) to assist with their patient engagement and understanding of ABI.

### **Senior Clinical Coordinator role – referral triaging and redirections**

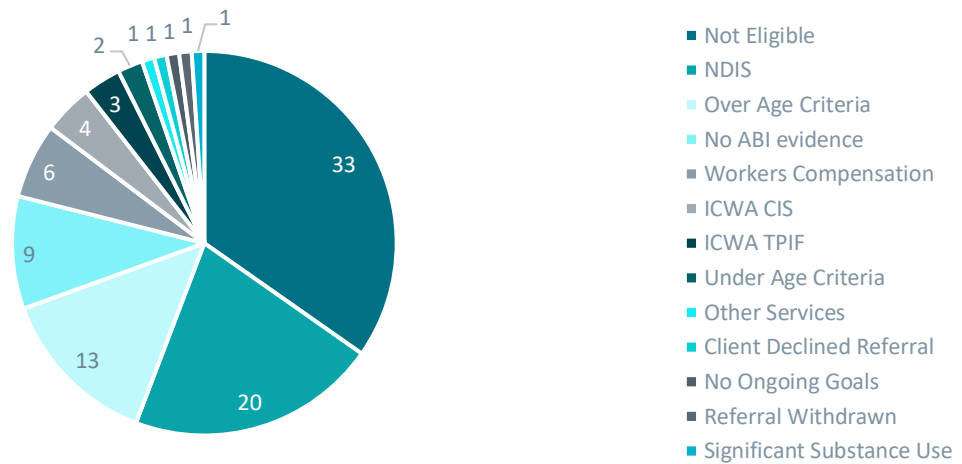
The SCC triages all referrals through the SHIU to determine eligibility for service and waitlist priority. With 758 referrals this past year alone, this is a time intensive yet essential part of this role. Additionally, any referrals deemed not eligible for service are advised of alternate options, provided education and/or on-referred where required, in which case the referrer, client and GP are notified. Thus, every referral to the SHIU receives some level of clinical intervention to ensure ongoing needs are addressed.

In 2022-2023, 106 referrals were redirected (increase of 11 on 2021-2022), with reasons varying between:

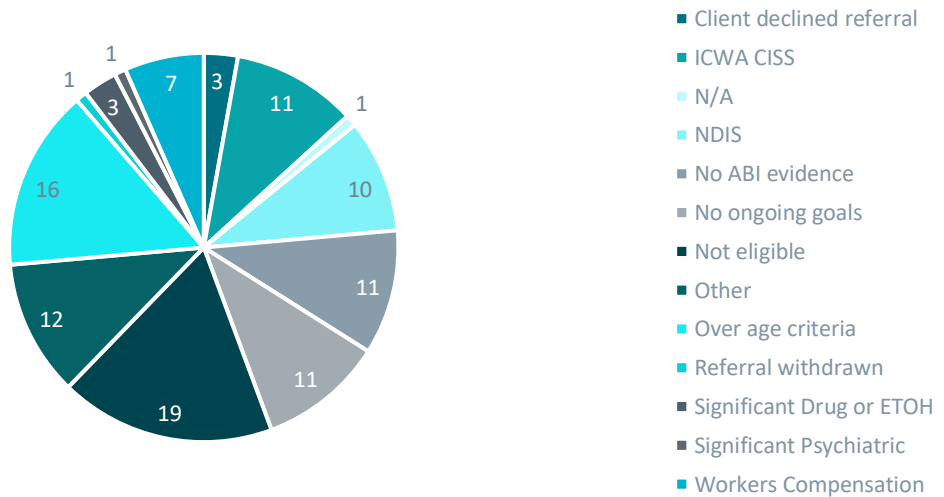
- Not eligible (e.g. change of medical circumstances / prognosis; nil response to further information to inform referral eligibility etc.)
- The client already had access to core supports and therapy services through NDIS
- The client was either over 65 or under 16
- No evidence of an ABI was provided or able to be found following gaining of consent to request records
- The client was deemed eligible or was already receiving therapy services through Workers Compensation, ICWA Catastrophic Injuries Support Scheme (CISS)
- The client was receiving appropriate services through local services – nil need for SHIU support
- The client declined the referral; the referral was withdrawn; or no rehabilitation goals could be identified
- The client's referral indicated significant current substance use or psychiatric concerns which would require engagement with either Alcohol and Other Drugs services or mental health services prior to SHIU accepting the referral. The reason for this criteria is the barrier that these concerns can present to engagement in rehabilitation and challenges in determining difficulties related to ABI versus substance use.



### Reasons for Redirection 2021-2022



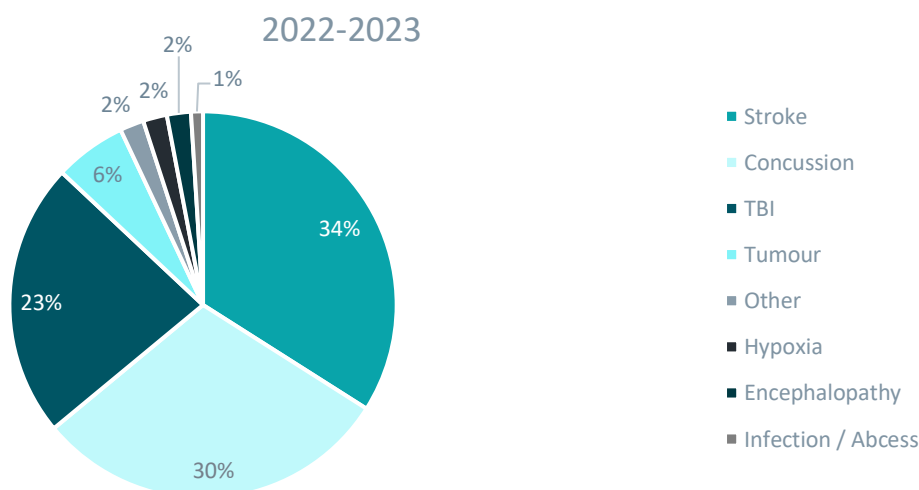
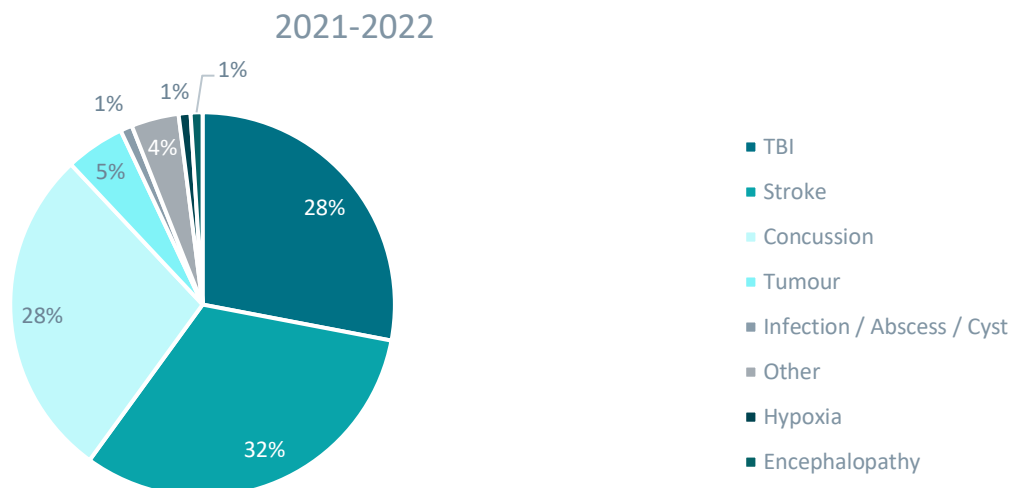
### Reasons for Redirection 2022-2023



Introduced in 2021-2022, the SHIU continues to send the ‘mild ABI Package’ to those clients who have been referred for ‘monitoring only’. That is, clients who have experienced a mild ABI, had less than one week hospital stay, and are reported to have no ongoing deficits. The package provides education resources pertinent to the early recovery phase and invites clients to contact SHIU if they experience ongoing, or develop new, symptoms. The aim is to assist in waitlist management and reduce the need for comprehensive assessment. In 2022-2023 the SCC sent 61 mild ABI packages to assist clients/referrers, an increase of 24 on the previous year.



## Providing rehabilitation services to clients\* with diverse diagnoses



(\*Clients admitted to service in the financial year – does not include all referrals)

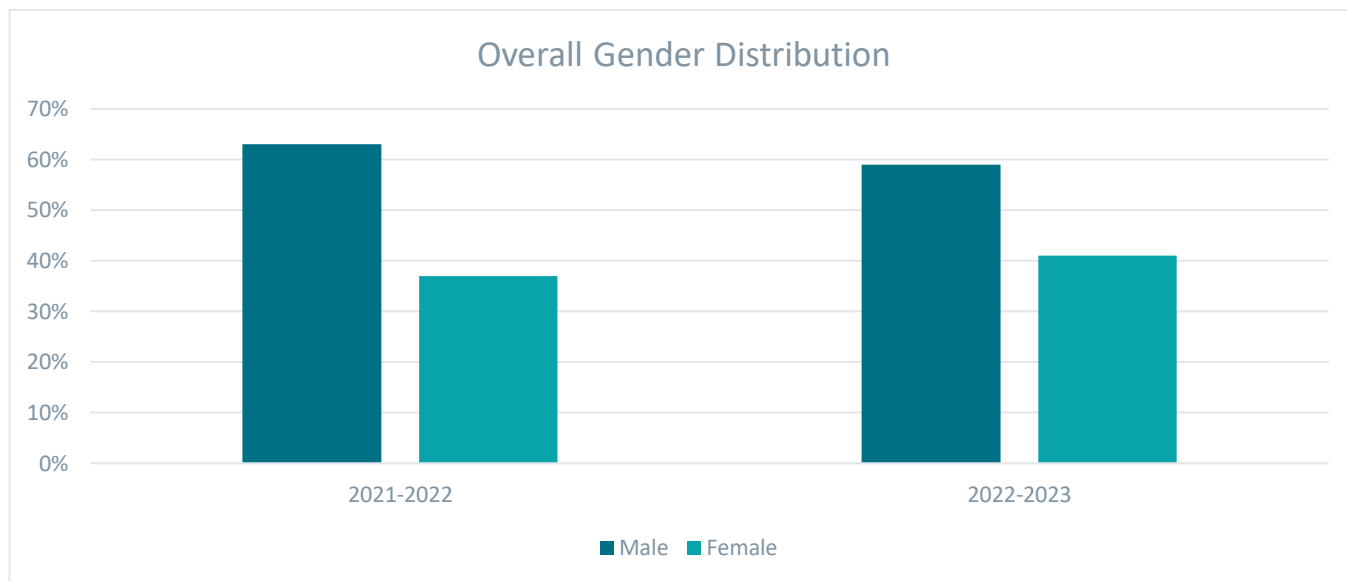
ABI refers to any brain injury sustained after birth, which encompasses a vast number of neurological conditions. At the SHIU, our eligibility criteria reduces the diagnostic categories to those that are non-degenerative, primarily recent (within last 2 years) and to clients aged 16-65.

2022-2023 has stroke, concussion and traumatic brain injury (TBI) remaining the 3 main diagnostic categories seen within the SHIU accounting for 34%, 30% and 23% respectively. Stroke includes both ischaemic stroke (66% of stroke admissions) and haemorrhagic stroke (34%).

The primary causes of TBI include: falls (36%); assault (19%); motor vehicle or motorbike accident (16%); and cycling (11%). With primary causes of concussion: falls (30%); motor vehicle or motorbike accident (19%); sports-related (16%); and assault (16). Of note, the SHIU had 6% of TBI referrals and 2% of concussion referrals where the cause was e-scooter accident.



## Referral percentage by gender and diagnosis of admitted patients



Overall, referrals for males aged 16-65 continue to remain higher than that for females.

Significant differences in gender bias for TBI with referral for males being ~60% higher in 2022-2023 than females. This is an increase of ~10% on the previous year. The difference between genders for stroke has narrowed to ~10% in favour of males versus females for both ischaemic and haemorrhagic stroke as opposed to >25% in 2021-2022.

The gender bias for males with TBI remains consistent with literature reporting higher rates of TBI in males largely based on lifestyle factors and risk-taking behaviour. Additionally, very few referrals to SHIU for TBI as a result of domestic violence may reduce the number of potential female clients. Education and upskilling regarding post-concussion management has been provided to the Sexual Assault Resource Centre (SARC) to assist with early intervention within their program.

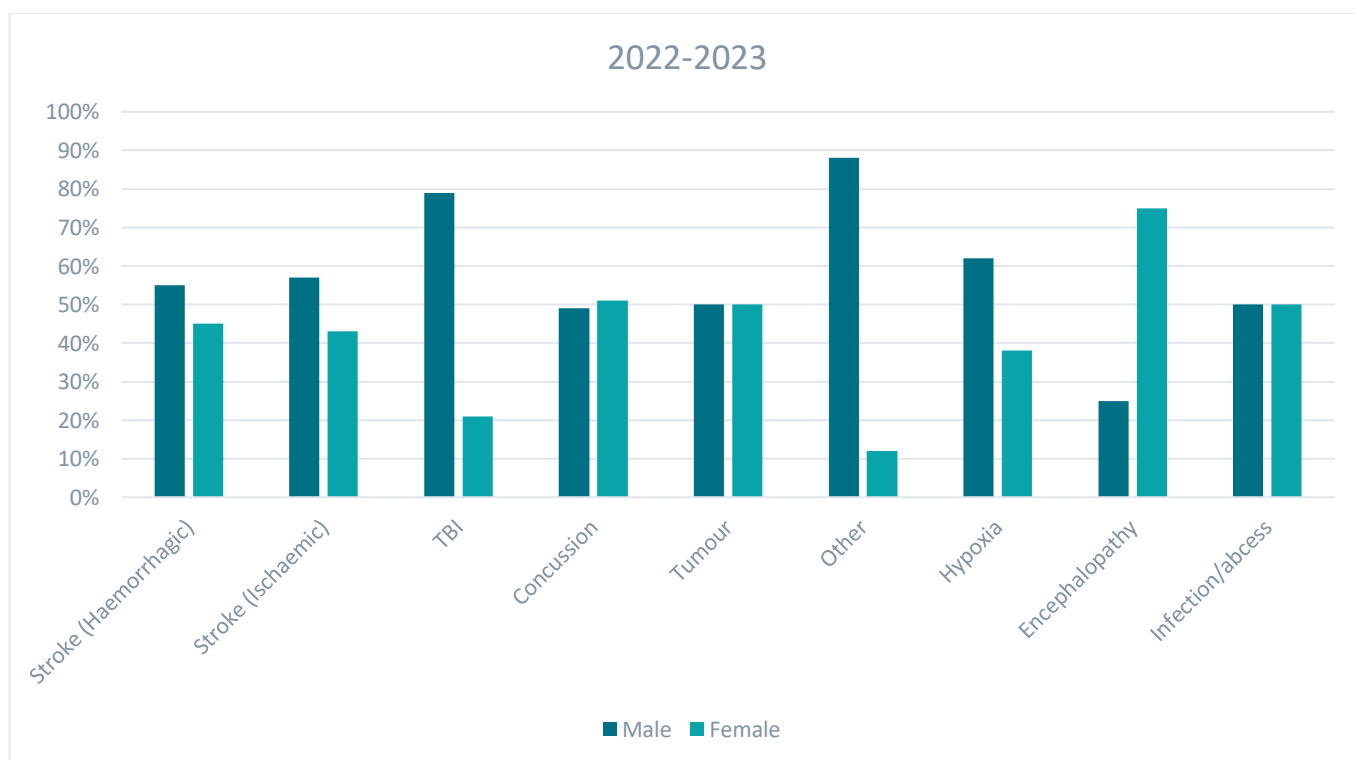
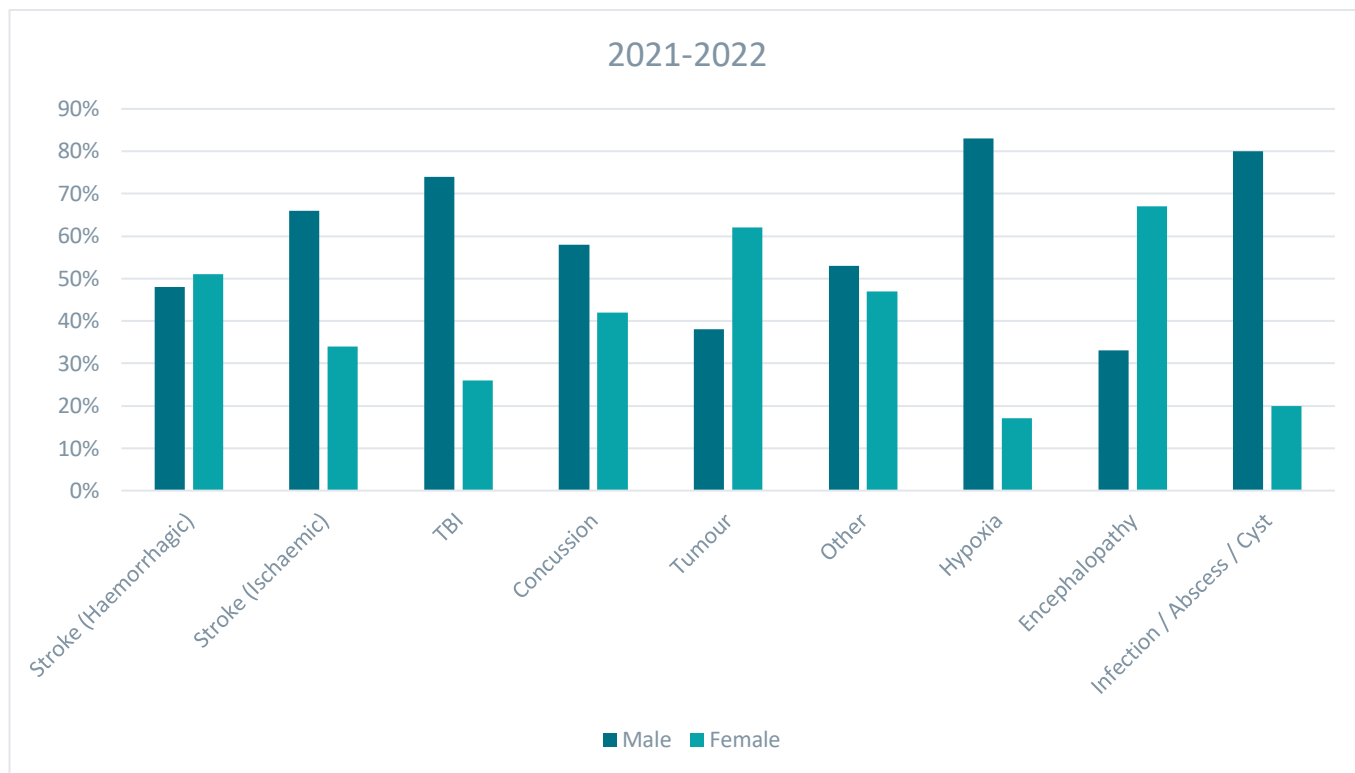
Referrals for concussion see a shift towards females, with a ~10% increase in referrals for females resulting in just over 50% of referrals. Further review of the data shows more females sustaining injury as a result of a fall (33% females; 24% males) and motor vehicle / motorbike accident (24% females; 14% males). For males, the primary reasons for concussion are falls and assaults (both 24%). Concussion is explored further within this report.

Whilst there is significant jump in 2022-2023 for males presenting with 'other' diagnoses and females for encephalopathy, the difference is likely attributed to the lower overall referral numbers.

Overall, the profile of gender distribution across diagnostic groups remains relatively unchanged from the previous year.

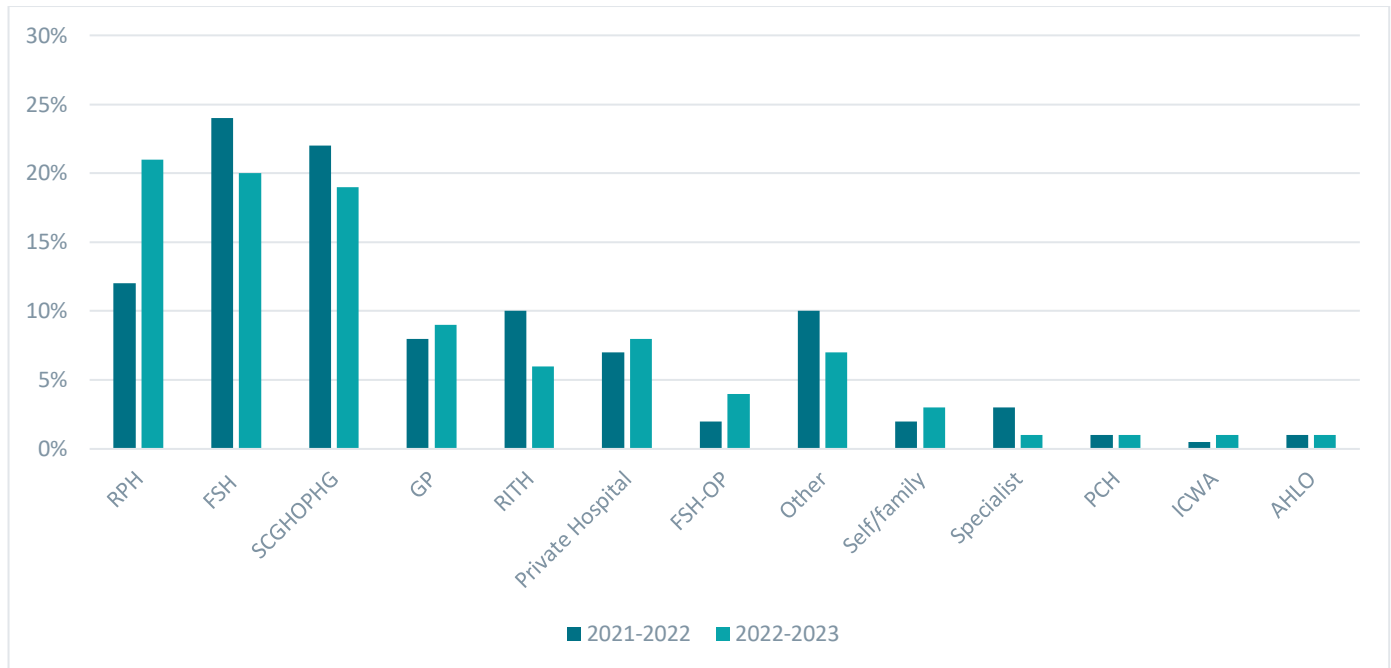


## Referral percentage by gender per diagnosis of admitted patients cont...



## Referral sources (of admitted patients)

(Royal Perth Hospital RPH, Fiona Stanley Hospital FSH, Sir Charles Gairdner Hospital Osborne Park Health Group SCGHOPHG, General Practitioner GP, Rehabilitation in the Home RITH, Perth Children's Hospital PCH, Insurance Commission of WA ICWA, Aboriginal Health Liaison Officer AHLO)



- Other includes WACHS and other outpatient
- Private Hospital includes Joondalup Health Campus (JHC) and St John of God Midland (SJOGM)
- Specialist includes Rehabilitation Medicine
- AHLO referrals commenced this financial year

Movement in distribution of referral sources has occurred in 2022-2023 from tertiary services, in particular a significant jump of ~10% from RPH. This corresponds to an RPH quality improvement activity whereby RPH were exploring long term outcomes for their patient cohort.

The slight decrease in referrals from FSH (~4%), SCGHOPH (3%) and other (3%) is potentially attributable to SHIU eligibility criteria around early access to therapy services through NDIS capacity building funding; and several long term allied health referrers with ABI experience have left the public sector to embark on private practice opportunities. A reduction in referrals from RITH (4%) requires further exploration as extensive education and unit promotion has been provided to RITH services this financial year.



# SHIU Therapy Services

## Discipline referrals – 2022-2023

The distribution of discipline referrals is indicative of the number of referrals to the SHIU for return to work (productivity goals) and driving, and cognitive rehabilitation with 28% of referrals for OT (reduction of 7%).

Psychosocial services of social work and welfare officer received a combined 20% of referrals demonstrating the need for financial supports (Centrelink; income protection; total and permanent disability claims); carer support and education; and referral to long term disability services (NDIS).

Physiotherapy (PT) has received 14% of referrals, a slight increase on 2021-2022.

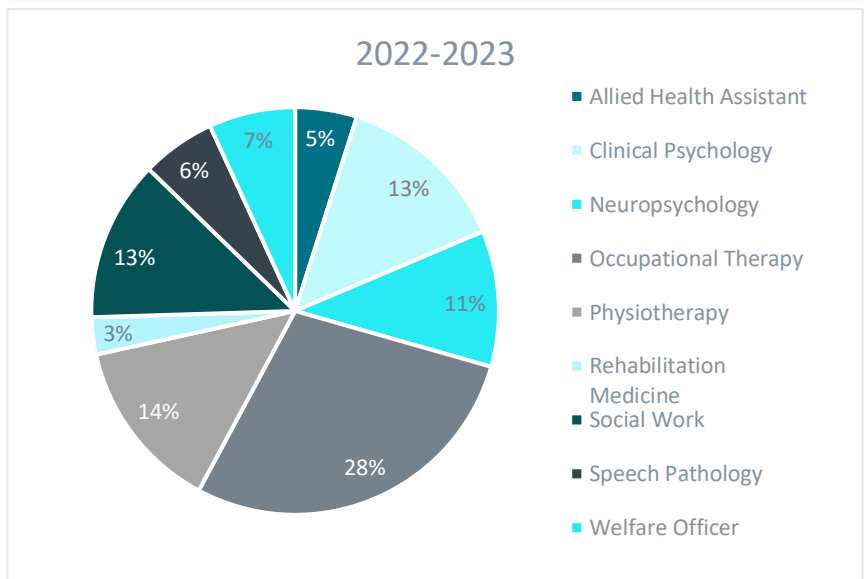
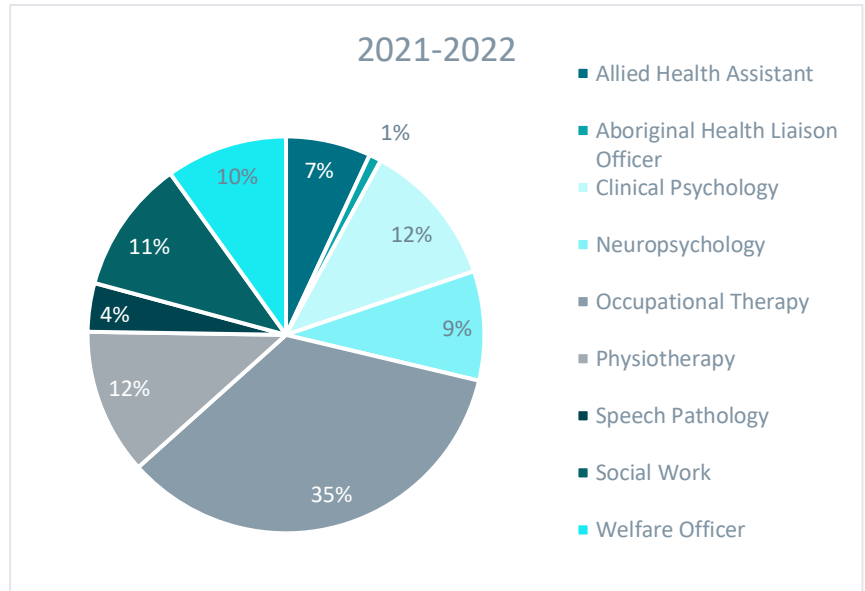
Psychological services received a combined 24% of referrals (13% clinical psychology [CP]; 11% neuropsychology [NP]), noting that CP services were down 0.8FTE for at least 9 months creating a significant waitlist for this service.

With 5% of referrals, the SHIU allied health assistant (AHA) role provides support to therapy staff to implement rehabilitation programs within the home and community.

SHIU speech pathology (SP) received 6% of referrals for

2022-2023 which is a significant amount for a 0.4FTE position and demonstrates ongoing need for this service.

Staff have embraced the new Rehabilitation Medicine Consultant role within SHIU, with 7% of referrals for medical review and support. At 0.1FTE, this role primarily provides consultative services for SHIU clients with assessment and review occurring only where active input is identified.





## Discipline achievements and summaries – 2022-2023

### Case Coordination

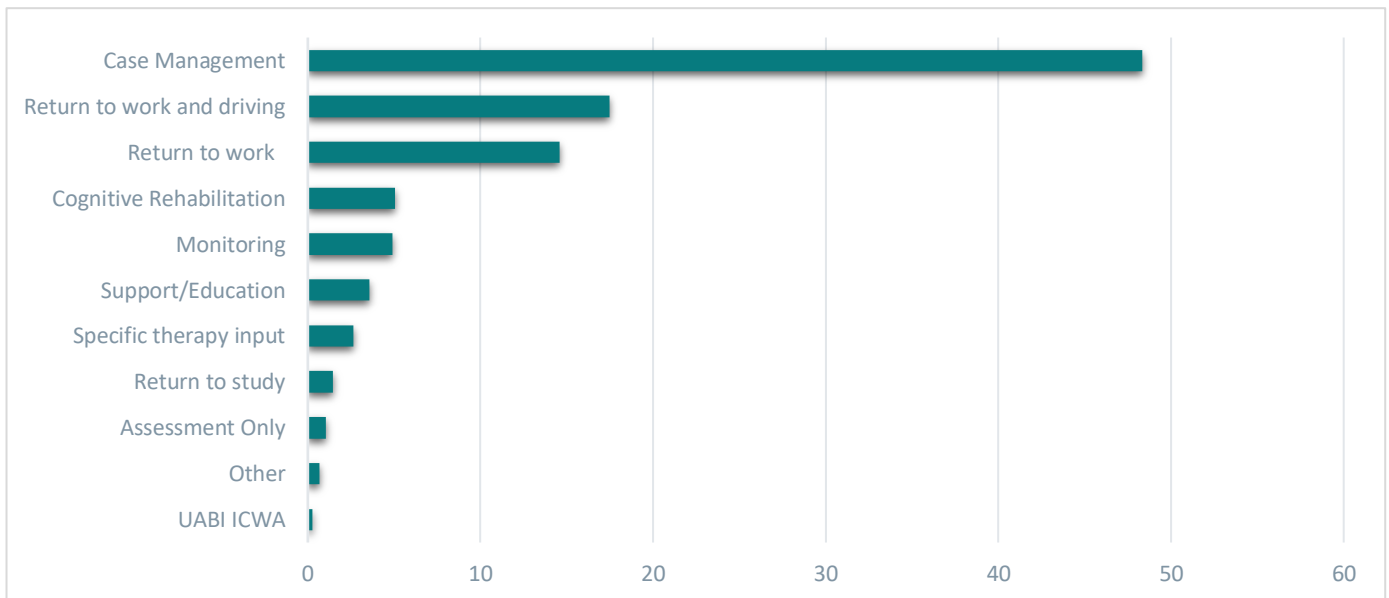
#### Achievements for 2022-2023:

- Consistently managing high caseloads with a complex client cohort.
- Upskilling regarding Acceptance and Commitment Therapy (ACT) for CC's to assist with increased demands of emotional support for clients with service delivery gaps during the year for Clinical Psychology.
- Opportunities for CC staff to backfill Senior Clinical Coordinator role allowing upskilling.
- Contributors to SHIU unit promotion to health service providers, support workers and carers.
- Active involvement in unit quality improvement activities such as development of resources for children who's parent has been diagnosed with an ABI; and ensuring the SHIU concussion website is updated with latest evidence.

#### Challenges in 2022-2023:

- Staffing – gaps in CC service provision occurred with staff resignation/s requiring recruitment to role.
- Providing backfill to Senior Clinical Coordinator role in addition to continuing management of own caseload. The SHIU is a specialised service making short-term backfill for clinical roles difficult to fill.
- Such opportunities have resulted in less CC FTE available which then impacts on service delivery through reduced allocations; or directing clients to therapy only allocations.

#### Reason for referral to SHIU CC services by percentage:



Case Management is, as to be expected, the primary reason for referral to SHIU case coordination services at 48%. Case management is determine by either referral request, or if the referrer is requesting multiple therapy services to be involved. Return to work and driving are frequently reason for referral, with a combined 32%, however both of these processes often involve rehabilitation for cognitive, physical and emotional recovery to support successful outcomes.



## Occupational Therapy

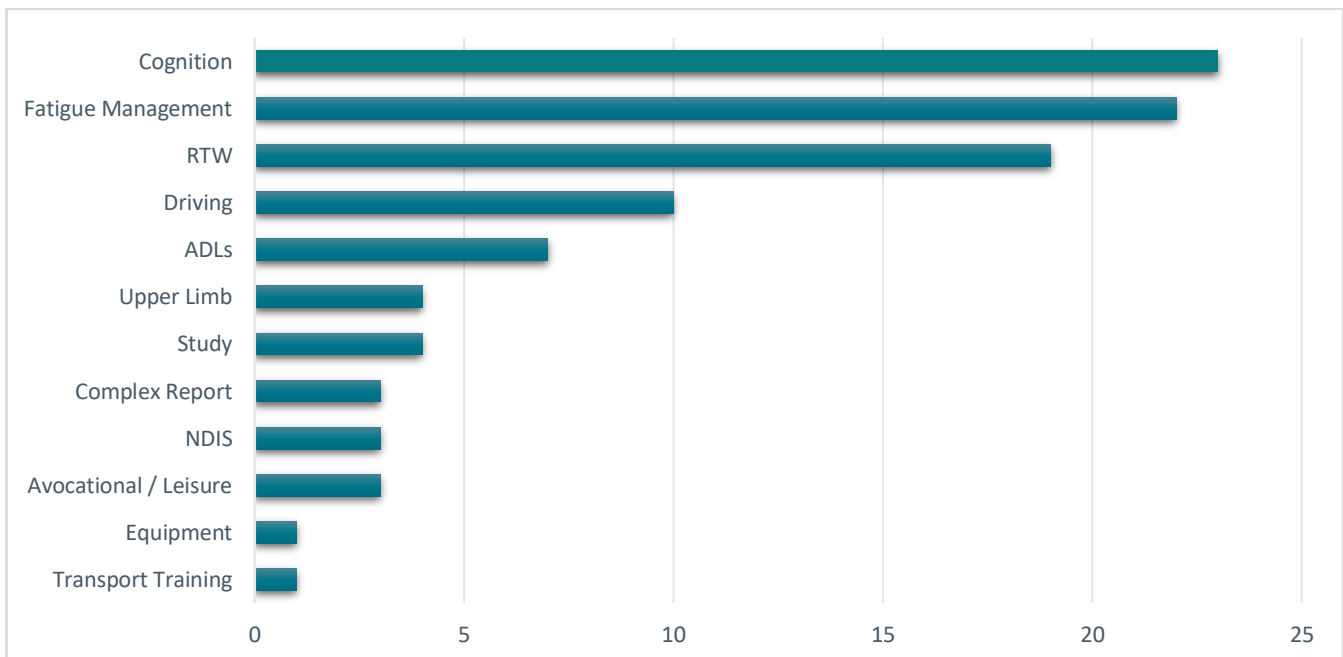
### Achievements for 2022-2023:

- Consolidation of upper limb assessment report sheet to improve efficiency and ease of use.
- Commenced clinical guideline development for return to work post-ABI.
- Completion of GEKO to finalise OT outcome measures however will be reviewed in 2023-2024 to determine if meeting the needs of the service.
- Commencement of CUT OT Honours project with ethics approval – factors affecting RTW outcomes.
- Development and joint facilitation with neuropsychology of a return to study group.
- Hosted two 4<sup>th</sup> year OT students.
- Ongoing involvement and presentation at UABI.
- Development of revised OT content for support worker training for both the full and short courses.

### Challenges in 2022-2023:

- Staffing – gaps in OT service provision occurred with extended staff leave requiring recruitment to role and Senior OT undertaking higher duty opportunities.
- Managing waitlist (January – June 2023) and high numbers of referrals to the unit and OT services.

### Reason for referral to SHIU OT services by percentage:



Cognitive rehabilitation and fatigue management are the primary reasons for referral to SHIU OT services with >20% of referral reason each. Cognitive rehabilitation and recovery in line with management of fatigue are precursors to clients being successful return to work, activity, driving and improving independence. Assistance with return to work follows closely with ~18% of referrals, with driving next at 10% - these are significant goal areas for clients post-ABI as those roles contribute to the client's identity, assist with adjustment post-ABI and are tangible outcomes for clients who have sustained an ABI which can often be a hidden disability.



## Clinical Psychology

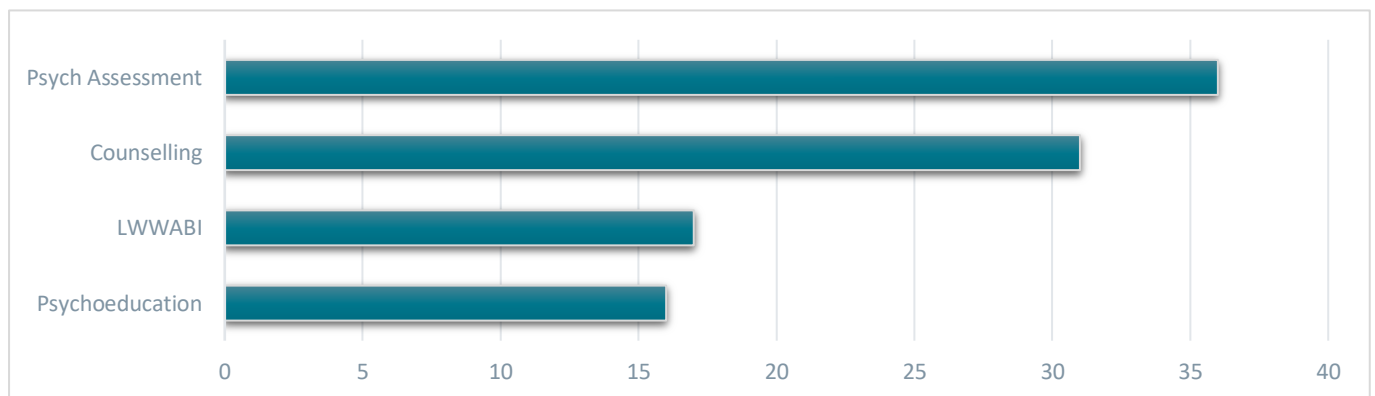
### Achievements for 2022-2023:

- Successful recruitment to 0.8FTE commencing March 2023. This FTE had been vacant for ~12mths, placing significant pressure on the 0.6FTE CP position and creating an extensive waitlist. Filling the position has resulted in reducing the waitlist, sharing of resources, peer supervision and a less-stressed service.
- Facilitation of the Living Well with ABI group – two programs completed with neuropsychology students. Conducted this past year in an online small group format.
- Co-supervision of two UWA neuropsychology students with a third commencing towards end of financial year.
- Ongoing involvement and presentation in the SHIU Support Worker and Carer Training.

### Challenges in 2022-2023

- Extensive waitlist due to prolonged reduced FTE and limited capacity – when service at 0.6FTE only, working on one in / one out system.
- Nature of clients presenting with complex adjustment in presence of ABI and how to manage this effectively.
- Developing the SHIU clinical psychology model of care and building the service as a clinical psychology registrar.

### Reason for referral to SHIU CP services by percentage:



Request for psychological assessment and counselling are the primary reasons for referral to SHIU CP services. Due to reduced FTE in 2022-2023 (and the year prior), a psychology referral pathway was introduced as below:

- Prior to CP referral ensuring the client has attended a UABI session if appropriate.
- CP referral must have the Patient Health Questionnaire – Somatic anxiety and depressive symptoms (PHQ-SADS) completed and dated to assist with referral prioritisation.
- Referrals are screened and directed to a pathway as per below:
  - Referred for ABI adjustment – considered for LWWABI group first
  - Referred for mental health disturbance following ABI – considered for 1:1 CP (if not ABI related or concerns are long term, can be directed to private services via GP mental health care plan)
  - Referred for ABI education – redirected to neuropsychology services

The aim of this pathway was to ensure clients are accessing a service in a timely manner from point of referral.



## Neuropsychology

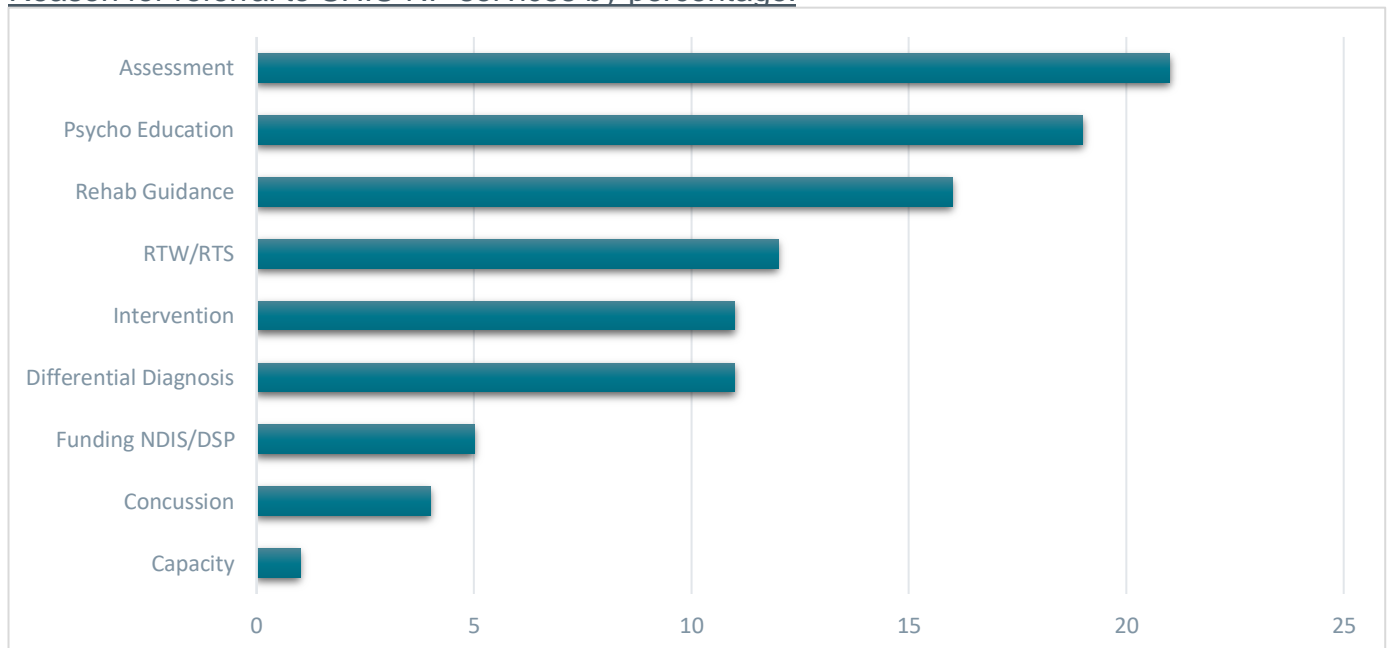
### Achievements for 2022-2023:

- Development of this new role within the SHIU including provision of ABI education and neuropsychological intervention in addition to traditional assessment.
- Development of the SHIU neuropsychology model of care.
- Successful increase in FTE from original 0.2FTE to 1.0FTE demonstrating need for service
- Ongoing involvement and presentation at the UABI.
- Presenting to support worker organisations regarding the brain and ABI.
- Submission and presentation of Mayo-Portland Assessment Inventory outcome measures for SHIU at the ASSBI conference in May 2023 (poster presentation).
- Contributing to the WAPHA concussion pathway development and education to GPs.
- Presenting to the Sexual Assault Resource Centre (SARC) with Dr Gill Cowen regarding management of concussion (upskilling SARC medical staff).
- Management of new psychology pathway to assist with streaming of services and waitlist.
- Collaboration with UWA to run the Emotional Regulation group within SHIU in 2023-2024.
- Development and joint facilitation with OT of a return to study group.
- Completion of neuropsychology registrar program.

### Challenges in 2022-2023:

- Developing the SHIU neuropsychology model of care and building the new service as a neuropsychology registrar.

### Reason for referral to SHIU NP services by percentage:



As can be seen above, the primary reasons for referral to neuropsychology are for assessment, psycho-education and rehabilitation guidance. This role has proven to be invaluable as the assessment and intervention inform the client's rehabilitation program, identifying areas of strength and areas for improvement and strategies to assist in addition to providing client-specific education about their specific injury, which helps with client understanding and adjustment.



## Social Work and Welfare Officer

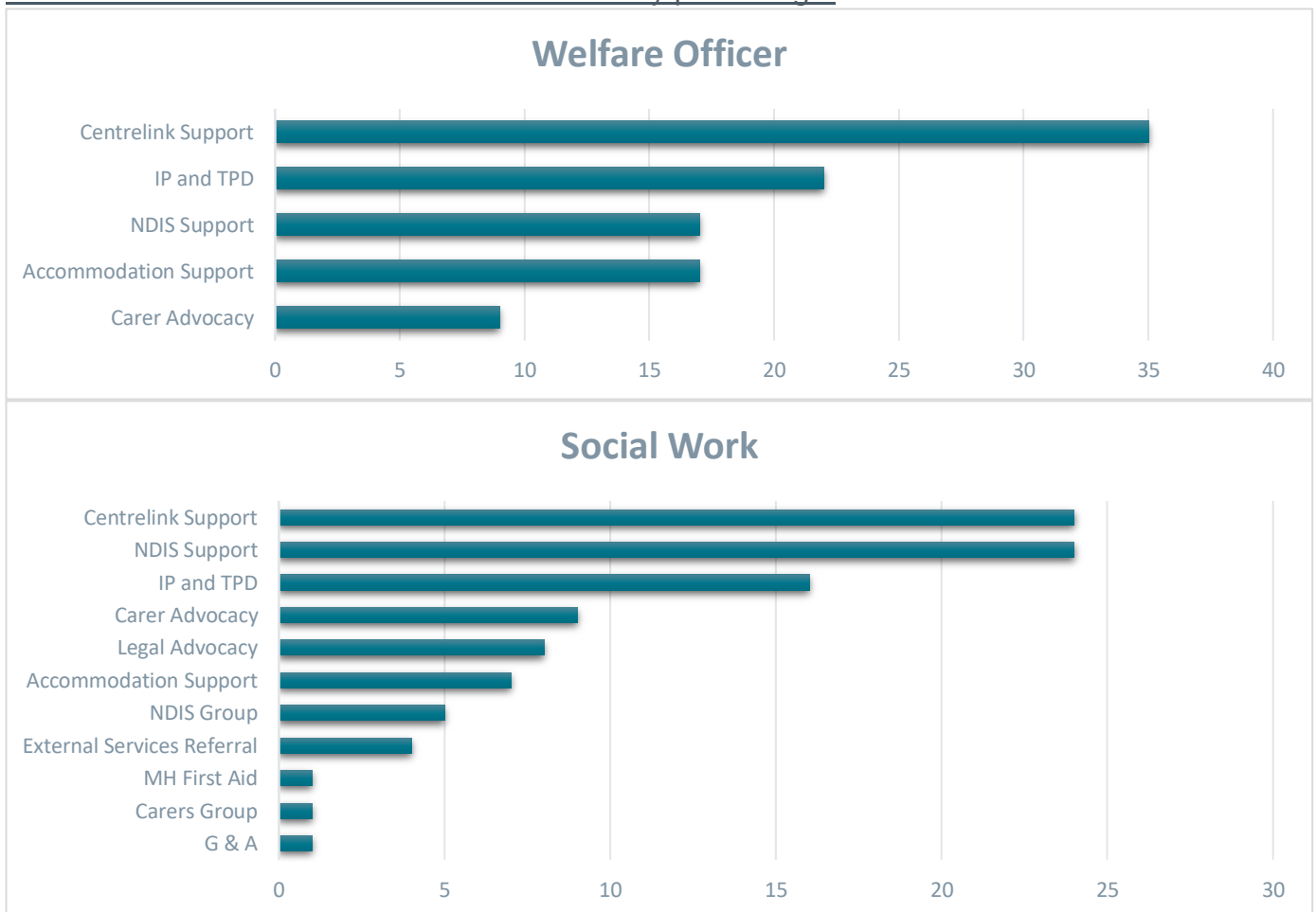
### Achievements for 2022 – 2023

- Senior SW organised and facilitated two Mental Health First Aid courses – one for SHIU clients / family (six attendees) and one for SHIU staff (15 attendees).
- Developed and facilitated first carer education and support group (six weeks) in April 2023.
- Increased knowledge and expertise in NDIS applications and planning process for clients with ABI, leading to improved service delivery and outcomes for those needing NDIS.
- Developed and facilitated education groups for NDIS and financial assistance options.
- Facilitated short-term changes in FTE between Senior SW and Welfare Officer which enabled exploration of other opportunities for staff.
- Development of revised SW content for support worker training for both the full and short courses.

### Challenges in 2022-2023:

- Creation of the WO position to assist clients with financial support, Centrelink applications, insurance applications and housing has demonstrated that 0.6FTE is inadequate for this role, given the volume of the referrals for this intervention.

### Reasons for referral to SHIU SW/WO services by percentage:



Referral data for SW / WO services demonstrates the volume of support required by the ABI client cohort for Centrelink, financial and NDIS assistance. For these services, this involves gathering of evidence to support claims; support letters; and assistance with application completion. NDIS, in particular, requires significant support for the application, planning, approval and implementation of plans by Senior SW.



## Speech Pathology

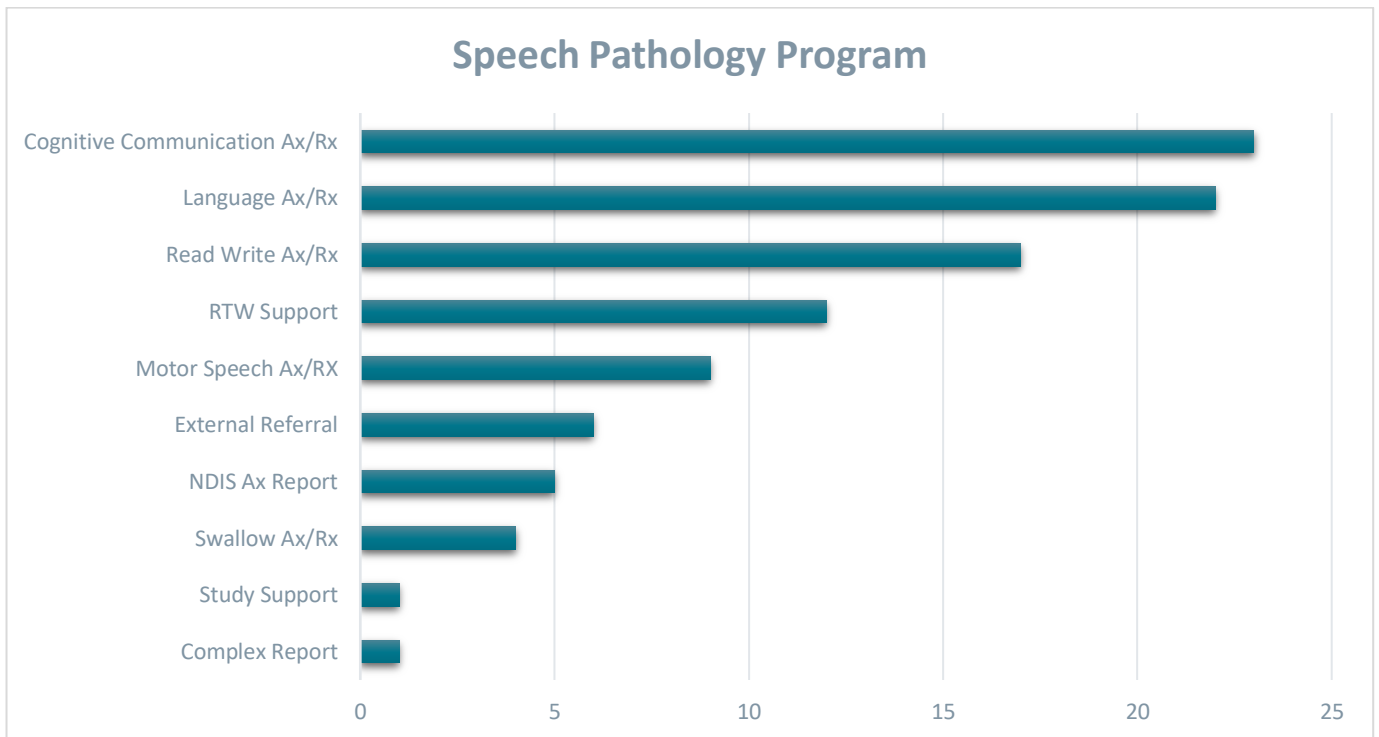
### Achievements for 2022 – 2023

- Increase in FTE from 0.2 to 0.4 on a permanent basis.
- Commenced trial of small group format with SP clients to assist with high-level social communication goals.
- Condensed trial of project-based intervention with SP clients with aphasia targeting communication skills in a functional context.
- Presentation on working with Cognitive Communication Disorders to 'CommSIG', the WA SP Special Interest Group for communication disorders and treatment.
- Assisted with the development of the return to study group with SHIU OT and NP.
- Supported the Understanding ABI client presenter to prepare for public speaking, development of their presentations and finalising the client rehabilitation contract which is a part of presenting.
- Development of SP content for support worker training for both the full and short courses.

### Challenges in 2022-2023:

- Increased FTE has seen increased demand and challenges managing a waitlist.

### Reason for referral to SHIU PT services by percentage:



Cognitive communication and language assessment and treatment are the primary reasons for referral for SHIU SP (>20%), with reading and writing and return to work support close behind (>15% and >10% respectively). As a result, SHIU SP commenced trials in small-group format to address cognitive communication and language difficulties, within the context of skill building and application to productivity and work roles, to improve transferability of skills post-rehabilitation.



## Physiotherapy

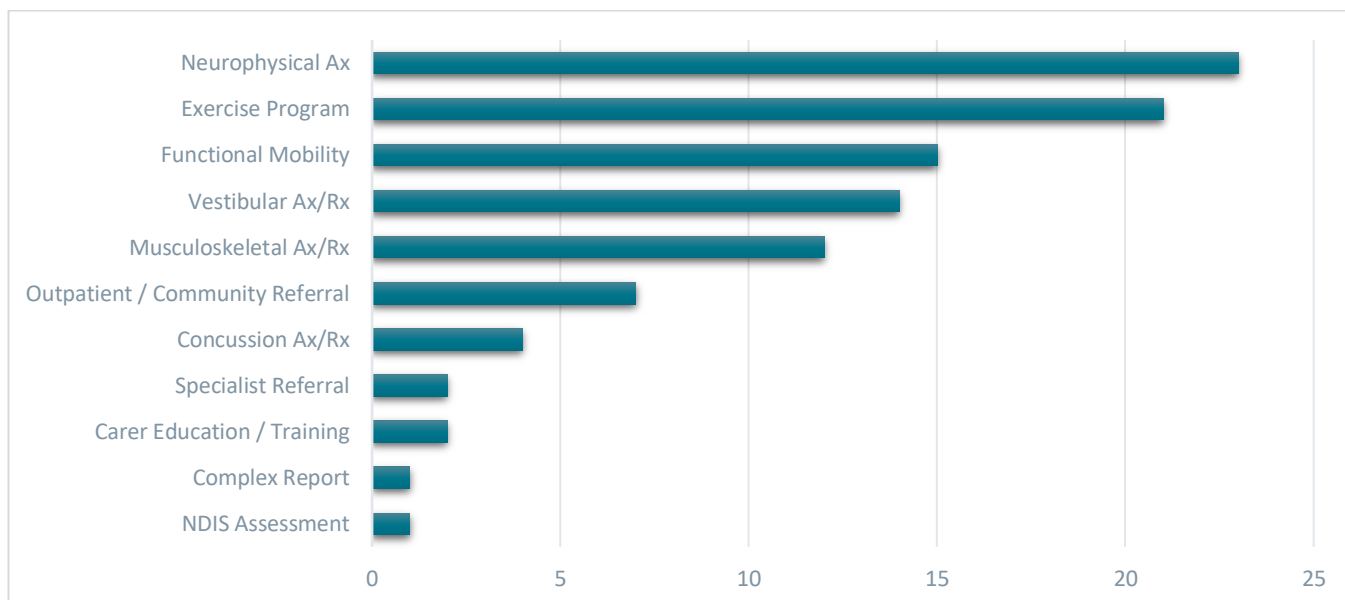
### Achievements for 2022 – 2023

- Increase in FTE from 1.0 to 2.0 through creation of a permanent P1 physiotherapy position.
- Recruitment and upskilling of P1 physiotherapist (vestibular treatment, return to running and concussion management) and AHA (working with clients with ABI in the community).
- Upskilling opportunities for P2 physiotherapist through supervision of P1 and AHA roles.
- Provision of concussion education to WAPHA and other external services; and contributions to the SHIU concussion website regarding physical recovery / return to exercise and sport.
- Development of a walking group program which will commence in 2023-2024.
- Development of revised PT content for support worker training for both the full and short courses.

### Challenges in 2022-2023:

- The P1 physiotherapy position initially started as a contract position and delays occurred with transition to permanency creating gap in service provision

### Reason for referral to SHIU PT services by percentage:



Neurophysical assessment and home / community exercise programs are the primary reasons for referral to SHIU PT (>20%), with functional mobility and vestibular assessment / treatment next in line (>14%). Vestibular and musculoskeletal assessment / treatment are often completed post-concussion. Combining those areas with concussion assessment / treatment, 30% of referrals for SHIU PT are concussion related.

Exercise programs within the home and community, and improving functional mobility goals have led to the development of a walking group program to be commenced in the 2023-2024 financial year. These groups are planned to be 4 weeks and will move between central, south, north and east-based locations to assist clients with carrying over strategies into their local environments. It is anticipated these groups will assist clients with developing social networks with others who have lived experience – bringing shared experience together to assist with adjustment post-ABI.



# Allied Health Assistant

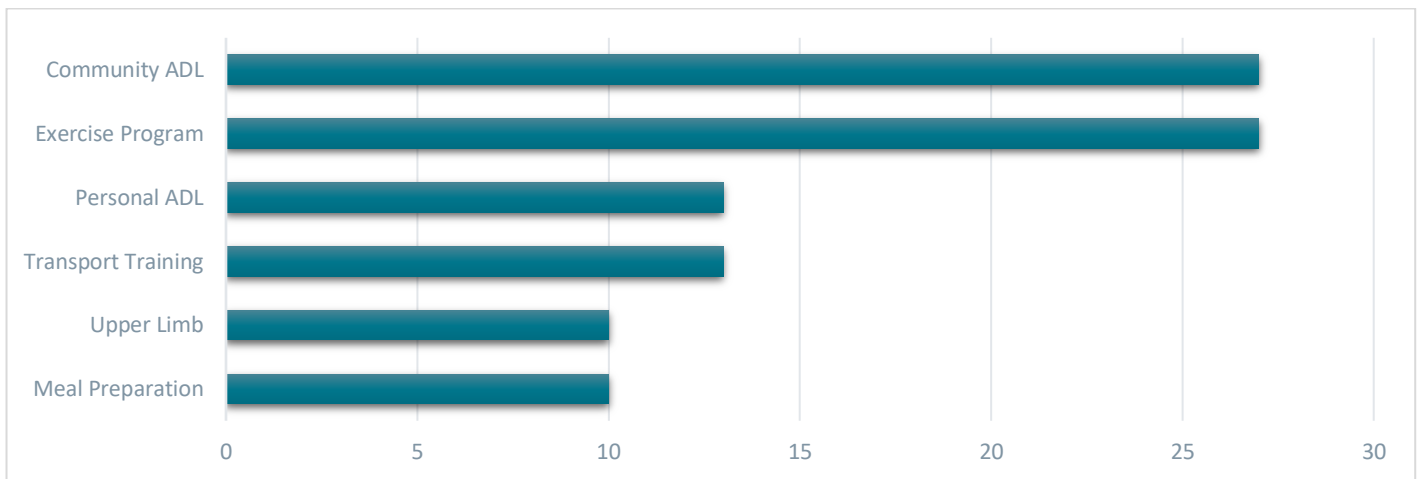
## Achievements for 2022 – 2023

- Developing partnerships with community groups to assist with client engagement – e.g., Kings Park Warriors ABI support group.
- Presenting at the SHIU carer training day and being involved in unit promotion.
- Upskilling, particularly for new staff, regarding working with a complex client cohort and developing skills across all disciplines. E.g., implementing neuropsychology strategies for managing challenging behaviours into OT and PT programs; working with clients who have aphasia and cognitive communication difficulties in the community for speech pathology.

## Challenges in 2022-2023:

- Staff changes resulting in reduced service capacity towards end 2022

## Reason for referral to SHIU AHA services by percentage:



The AHA service is essential in assisting the therapy services to implement home and community rehabilitation programs with increased frequency, to improve client independence and community access post-ABI. Community ADLs and exercise programs are the primary reasons for referral, with the final four areas aimed at improving functional independence. The AHAs also play a key role in informing therapy and case coordination staff of any client concerns, goal achievement or changes to goals, psychosocial issues and difficulties with engagement due to the frequency in which they engage clients.



SHIU AHA with Kings Park Warriors  
Photo provided by Kings Park Warriors





# SHIU Education and Group Programs

## Understanding Acquired Brain Injury (UABI)

The UABI group education program is held monthly for both clients and their carers / family to build on their knowledge of ABI and associated recovery. Areas covered include: introduction to brain anatomy; functions of the brain lobes; causes and effects of an injury; phases of recovery; and strategies to manage common difficulties. This education is an excellent entry point for clients into the service and is often a prerequisite for engagement in SHIU psychology services.

Clients are invited at point of referral to service if deemed suitable to engage in a group at that time. Alternatively, they can attend once their program has commenced. Invitation is extended to clients who may be deemed ineligible for SHIU services (e.g. early access to NDIS, ICWA CISS) but would benefit from the education offered. With external UABI referrals, the referrer must be available to provide ongoing support and intervention should concerns arise.

This year one former client presented their story as part of the education. He had contacted the unit to explore undertaking this role as part of retraining for a role which required public speaking. Presenting their story at UABI is encouraged by SHIU staff for those keen to share as part of their rehabilitation goals. Preparation and training is provided by UABI presenters and SP to ensure the client is supported and confident in sharing. The lived experience section is usually the most well received aspect of UABI as it connects attendees with shared experience.

In 2022-2023, the UABI program was held on 10 occasions (monthly excluding December and January) seven of which were held online, and three in person at the Niche. Online sessions were primarily in 2022, with 2023 transitioning to alternating between online and in person to ensure the education is open to all across WA. This year, 118 SHIU clients, 31 carers/family members, 4 ICWA clients and 2 RITH staff (total 155) attended the UABI.

## Living Well with ABI (LWWABI)

The LWWABI group is an eight week program for clients and carers/ family members designed to assist people to live well in the community following ABI. The group also provides a means for clients to meet others with shared experience and develop long term support networks outside of the unit. The group continues to be facilitated by clinical psychology and neuropsychology students and is the preferred pathway for clients experiencing difficulties with adjustment post-ABI. The two hour weekly session topics include:

- Adjustment to changes post-ABI
- Acceptance and exploring values
- Fatigue and fatigue management
- Fatigue and completing daily activities
- Sleep, sleep hygiene, and muscle relaxation
- Thought management
- Thought management and goal setting
- Group review and evaluation
- One month review – follow-up and check-in

Following the group program, if mental health issues attributed to ABI are evident, the client can be referred to CP services for 1:1 therapy.

In 2022-2023 the group was held virtually on two occasions: September 2022 – November 2022 and April 2023 – June 2023. Each group was comprised of four regular attendees equating to 72 occasions of service.

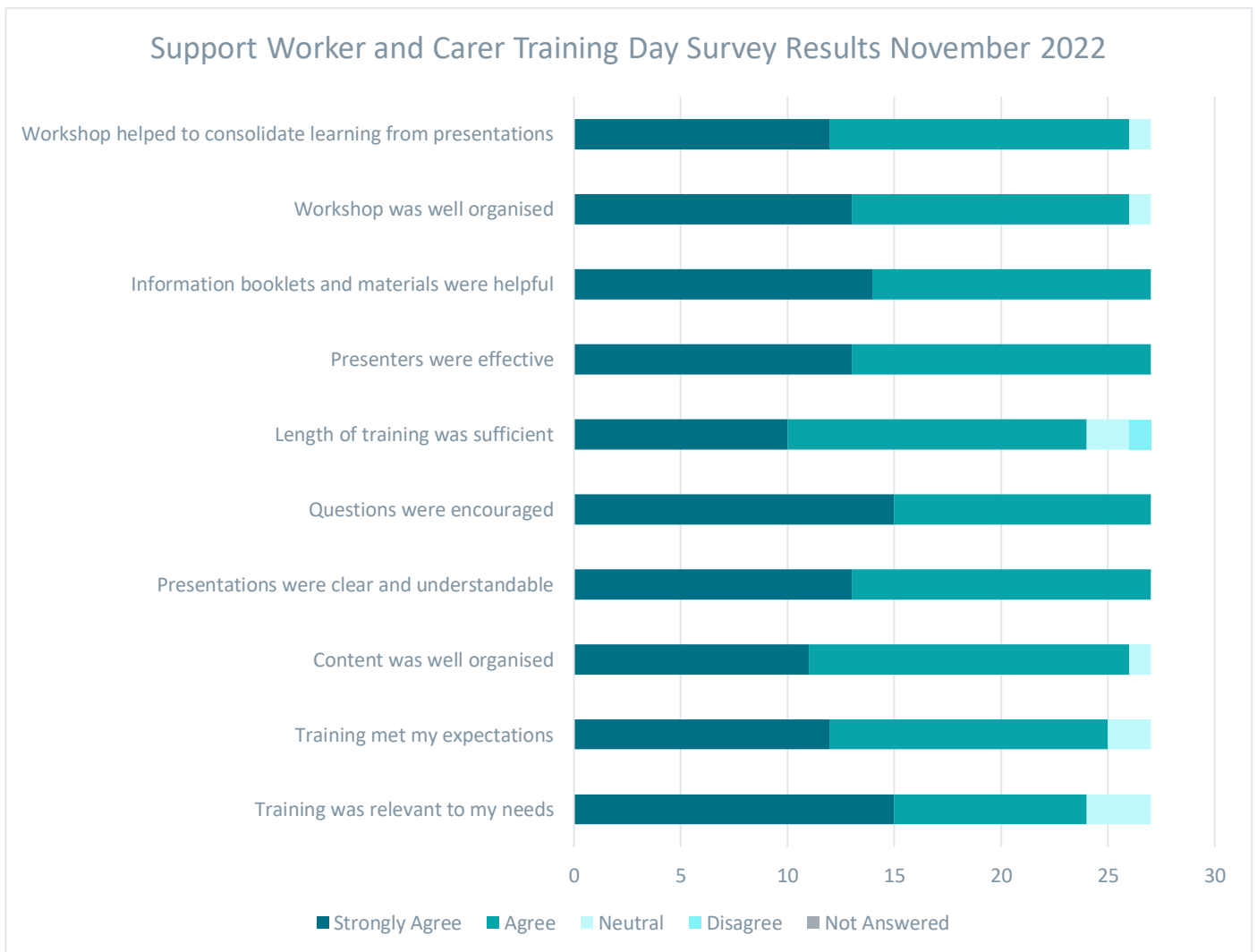


## Support Worker and Carer Training

The SHIU provides ABI education and practical strategies to non-government organisations through our Support Worker and Carer Training Day. In 2022-2023 we have changed the delivery of this training to be either a full day (large groups) or half day at individual organisations (minimum of 10 attendees). The course is for paid support workers and carers which offers education in the following areas:

- Understanding the brain and ABI (NP)
- The significance of support workers and creating therapeutic relationships in your rehabilitation role (SW)
- Understanding behaviours (CP)
- Towards independence: improving activity participation (OT)
- Facilitating mobility and physical activity post-ABI (PT)
- Supporting swallowing and communication in ABI (SP)
- The role of the allied health assistant in community rehabilitation (AHA)
- Interactive workshop\* (All presenters and SHIU leadership)
  - \*Workshop is only held at full day training

November 2022 saw 27 support workers attend and engage in the full day training. An excellent response was outlined in the survey results: >95% of attendees ‘Strongly Agree’ or ‘Agree’ that the education was effective, relevant, organised and met expectations.



The SHIU continue to provide half day training to One2One Disability Services WA at their offices. The flexibility of the half day training allows staff to upskill and learn about other disciplines as presentations are shared rather than a representative from each discipline. This format also allows staff, who would otherwise not present at the full day, an opportunity to be a part of this process.

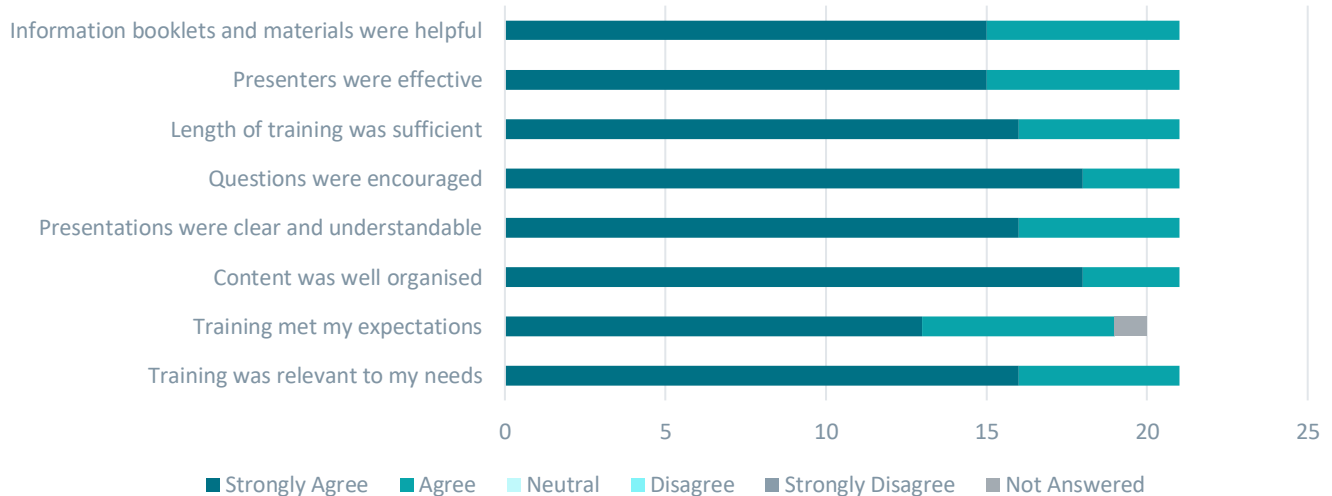
Over November 2022 and May 2023, training was provided to 21 support workers and was really well received –

>95% of attendees ‘Strongly Agree’ or ‘Agree’ that the education was effective, relevant, organised and met expectations. The SHIU now offer this training to One2One at least twice a year as they have included it as part of their mandatory training for new staff.



SHIU Case Coordinator presenting at One2One Support Worker Training

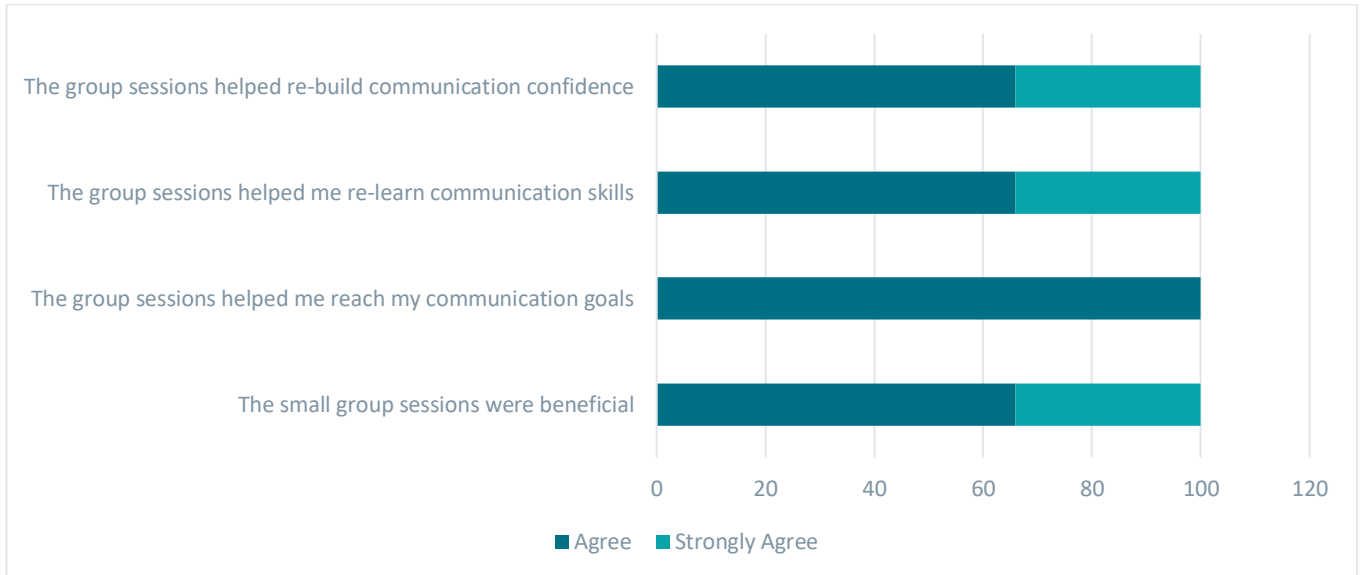
### Support Worker Training - One2One November 2022 and May 2023



## SHIU Communication Group

In 2022-2023, SHIU speech pathology developed and trialed a small-group format communication group, designed to assist clients post-ABI to improve their communication skills (verbal and written) through task completion, being provided with roles within the group, and practicing communicating with each other.

Feedback was gained from the pilot group and demonstrated that 100% of attendees either agreed or strongly agreed that the small group sessions were beneficial, helped with communication goals, confidence and skill building.



Additionally, participants indicated:

- 66% prefer sessions both online and in person, with 34% preferring online only;
- 66% preferred weekly sessions, with 34% preferring fortnightly;
- Participants appreciated Senior SP support to generate ideas that assisted with improvement in communication skills;
- They valued having the tasks and roles to complete as it opened new conversations; and
- Participants enjoyed practicing their skills in a safe environment.

This evidence supports continuation of this therapeutic style with the SHIU SP program.



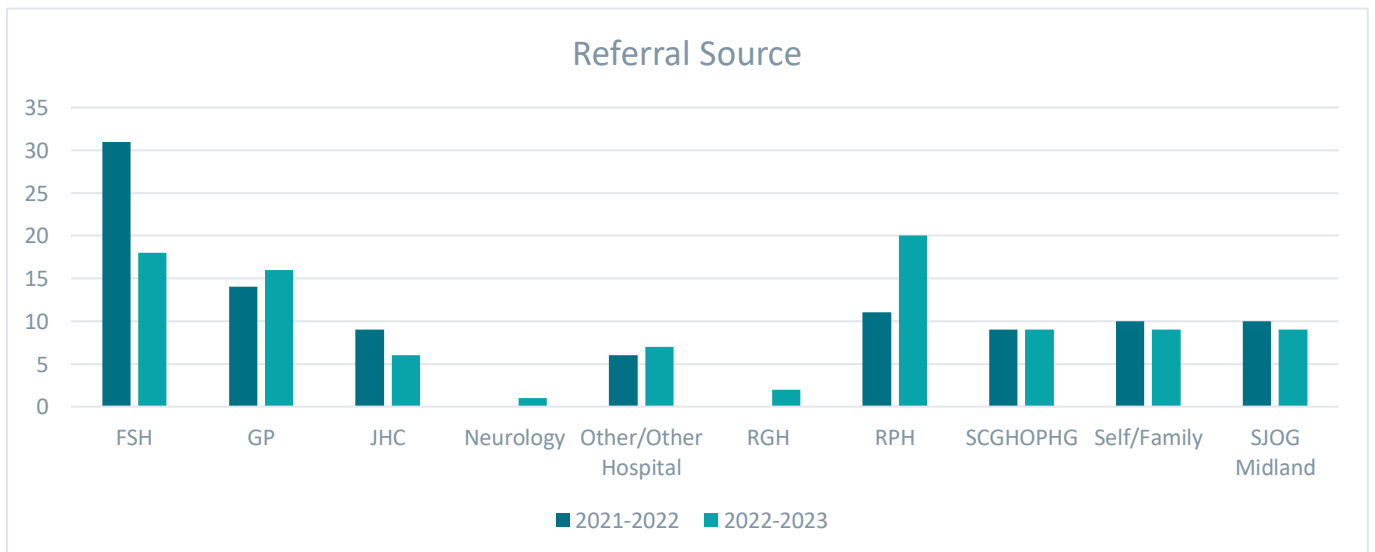
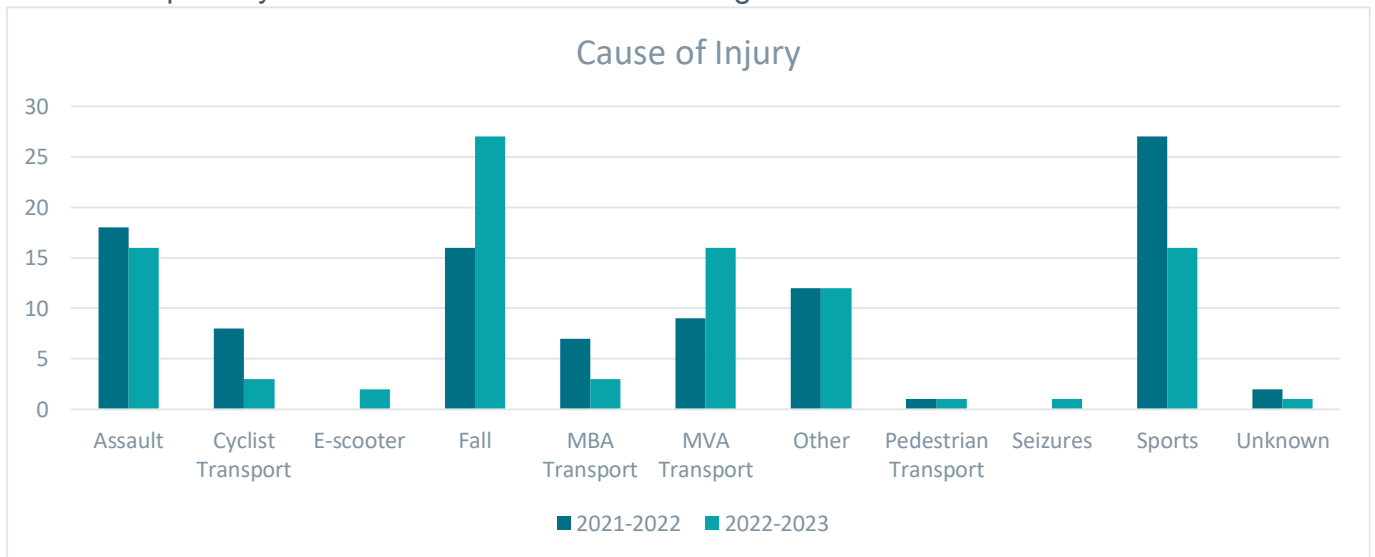
# Concussion Program

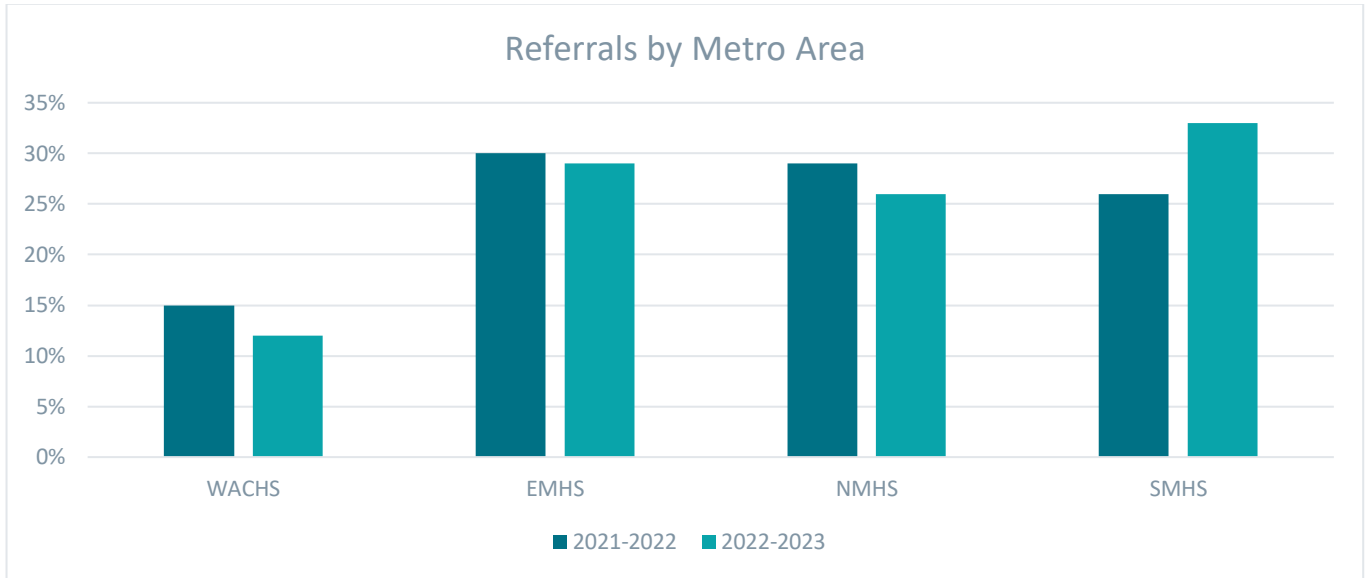
In 2022-2023, the SHIU received 108 referrals for clients post-concussion which is an increase of 7 on 2021-2022. The SHIU saw 56 clients admitted and discharged (i.e. complete program) within the financial year. Of those 56, the average time from date of referral to contact by CC was 10 days, a reduction of 3 days on 2021-2022. The average length of program was 53 days which is an increase (7 days) on 2021-2022. Early education continues to be the key for this population group to manage symptoms as per evidence based practice to optimise recovery.

The SHIU concussion website continues to be a valuable resource for clients and health professionals, with positive feedback received ease of use and information available. Clients are directed to the early stages of concussion section upon referral to the unit, with many clients implementing strategies early, optimising recovery and reducing the need for active intervention. Quarter four of 2022-2023 website data shows 7169 views in a three month period, significantly more than the previous year (~10000 in six months), reinforcing the importance of this resource.

A review of the 2022-2023 referral data shows:

- Primary causes of concussion are: falls; assault; sports-related; and MVA
- Primary referrers are: RPH, FSH and GP
- Majority of clients presenting with concussion reside within the SMHS
- The primary reason for referral is case management





Education to service providers continues to be a priority for concussion management, particularly to promote appropriate and essential early intervention to optimise post-concussion recovery. In 2022-2023, the following education has been provided:

- WAPHA concussion pathway education to GP’s – 6 September 2022
- SHIU CC presented to RITH (various sites) regarding management of concussion – 18 August 2022; 18 September 2022, 23 March 2023 and 14 June 2023
- SHIU CC attended a helmet presentation by George Booth with Connectivity – 27 September 2022
- SHIU NP and Dr Gill Cowen presented to the Sexual Assault Resource Centre (SARC) regarding management of concussion – 11 May 2023

Following on from being subject matter experts for the development of the WAPHA concussion pathway, SHIU was invited by the UQ to assist in the development of the ANZCPG for concussion, in particular, from an OT perspective. This role has been undertaken by SHIU Program Manager. As mentioned previously, this project is still in its infancy with reviewing existing research and best-practice guidelines however is expected to be a valuable resource in the future.

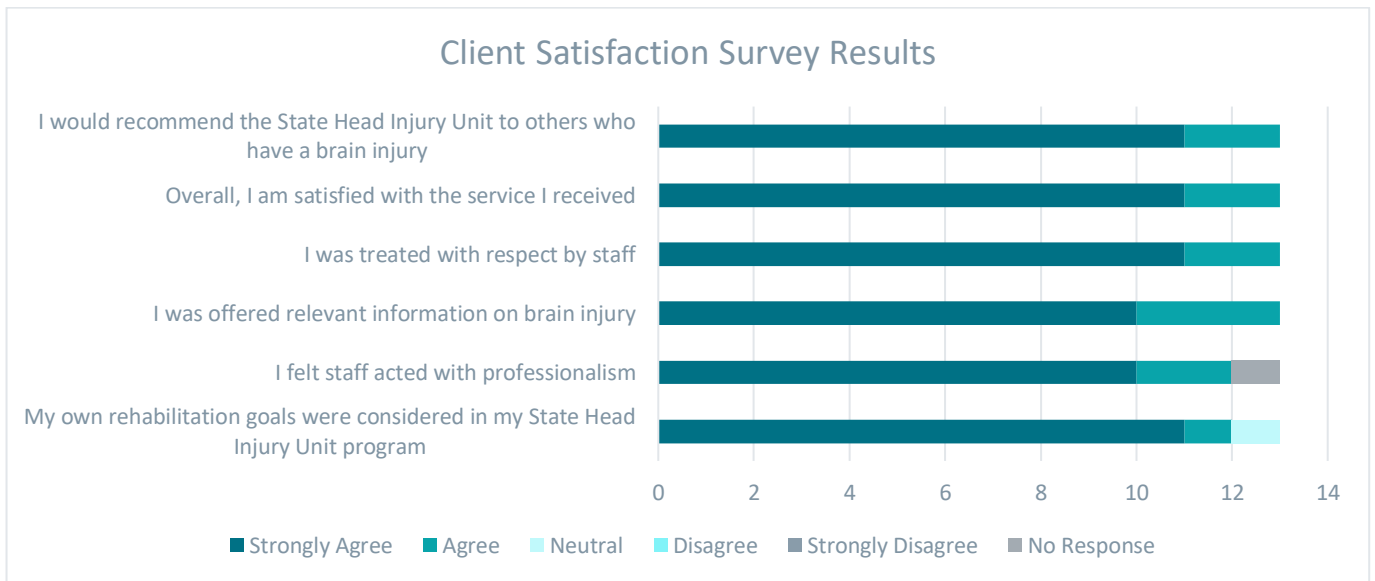


# Client Satisfaction Survey

The SHIU client satisfaction survey is sent to clients on discharge from the SHIU program. It is a brief survey sent either via email or text with a QR code, with survey results available in real time. In 2022-2023, 10% of sent surveys were returned, which is a lower than expected number given the changes made to the survey to deliver electronically and more succinctly.

Regardless, results below demonstrate the high rate of satisfaction with service provision, 100% of clients ‘Strongly Agree’ or ‘Agree’ with recommending the unit; being satisfied with services received; being treated with respect; and being offered relevant information on ABI. More than 90% of responses felt staff acted with professionalism and that their own goals were considered in their SHIU program.

Comments shared from clients in their survey responses demonstrate excellent service provision, with high praise for all members of the team received.



Thankyou  
 Knowledge  
 Patience  
 Respect  
 Assurance  
 Empathetic  
 Supportive  
 Recovery  
 Unbelievable  
 Sensational  
 Helpful



## Key Performance Indicators (KPIs)

Key Performance Indicator	Frequency	Target	Thresholds			Av. Outcome end 2022-2023
			Not Performing	Under Performing	Performing	
1. Percentage of referrals triaged within 10 days of date of receipt of referral and waitlisted based on clinical priority	Quarterly	100%	<75%	75 – 89%	>90%	92%
2. Percentage of waitlisted patients sent waitlist letter within 10 days of triage	Quarterly	80%	<70%	70-79%	>80%	97%
3. Percentage of patients contacted (attempted) by Case Coordinator within 10 days of allocation	Quarterly	95%	<85%	85-94%	>95%	95%
4. Percentage of patients contacted within 2/52 of receiving therapy referral	Quarterly	80%	<70%	70-79%	>80%	65%
5. Percentage of appointed clients who did not attend / engage with the service	Quarterly	<10%	>20%	10-19%	<10%	2.5%
6. Percentage of Unit patient discharge letters sent within 1/52 of program completion and discharge	Quarterly	90%	<80%	80-89%	>90%	91%
7. Percentage of Unit Discharge/Clinical Handover reports completed within 2/52 of discharge	Quarterly	>85%	<75%	75-84%	>85%	86%
8. Number of participants attending monthly Understanding ABI Seminar	Quarterly	>10	<5	5-10	>10	15/mth
9. Percentage of Therapy Summary reports completed within 2/52 timeframe	Quarterly	>85%	<75%	75-84%	>85%	87%
10. Average time from triage to allocation for clients with concussion diagnosis to be < 14 days	Quarterly	<14 days	>18 days	14-17 days	<14 days	10 days

Overall, in 2022-2023, the SHIU has ‘performed’ in the majority of the KPIs ensuring a high level of service delivery and timely access to resources across the program.

An area of challenge for the SHIU, that has continued from 2021-2022 to 2022-2023 is the percentage of patients contacted within 2/52 of receiving therapy referral (KPI 4). The interpretation of this KPI is challenging as this metric incorporates all disciplines. On review of the data breakdown, challenges exist whereby demand for service is incongruent with available FTE, which includes clinical psychology, neuropsychology and speech pathology. Occupational therapy has been impacted with action timeliness due to undertaking acting opportunities in addition to their clinical caseload (limited backfill options available). Given the SHIU is a specialist rehabilitation service, providing backfill for clinical therapy staff is challenging due to expertise shortages and the time involved in orientation and training new staff.





# Quality Improvement

The SHIU has a strong commitment to QI to optimise clinical outcomes; provide evidence-based and best-practice programs; and to ensure service delivery is effective and timely.

During 2022-2023, the SHIU finalised several projects registered on GEKO and commenced new initiatives as described below:

## Completed QI activities and GEKO reports:

GEKO ID	Project Title
33059	<p>Triaging protocols for clients with a concussion diagnosis</p> <ul style="list-style-type: none"> <li>Developed to facilitate early access to services and education which has been proven to reduce length of stay post-concussion.</li> </ul>
38923	<p>SHIU Professional Development Framework</p> <ul style="list-style-type: none"> <li>Internal framework to address the professional development requirements of SHIU staff.</li> </ul>
39192	<p>Development of specific SHIU referral form with Aboriginal Health</p> <ul style="list-style-type: none"> <li>Part of the improving access to rehabilitation services for Aboriginal clients post-ABI.</li> <li>An abbreviated referral form to be used by AHLO staff primarily to facilitate introduction to SHIU services.</li> </ul>
39193	<p>Development of Aboriginal SHIU brochure with Aboriginal Health</p> <ul style="list-style-type: none"> <li>Part of the improving access to rehabilitation services for Aboriginal clients post-ABI.</li> <li>A new brochure outlining SHIU services tailored to Aboriginal clients.</li> </ul>
39662	<p>Development of education package for clients with a mild brain injury</p> <ul style="list-style-type: none"> <li>An education package sent to clients where referral to SHIU states the client has returned to baseline; or requires monitoring only; with a less than one week hospital stay. This package provides early education and encourages the client to contact SHIU should they require further support, with a copy to their GP. If no contact with three months of package being sent, the referral is closed.</li> </ul>
42313	<p>Development of Therapy Protocols</p> <ul style="list-style-type: none"> <li>An addition to the SHIU Model of Care, the therapy protocols advise of each discipline's inclusion and exclusion criteria, models of care, service delivery and discharge planning.</li> </ul>
42433	<p>Development of occupational therapy protocols for screening fitness to drive</p> <ul style="list-style-type: none"> <li>Completed as part of an OT student project, these protocols advise of the SHIU OT process for facilitating fitness to drive post-ABI.</li> </ul>
44037	<p>Evaluation and implementation of outcome measures for SHIU OT services delivery</p> <ul style="list-style-type: none"> <li>SHIU OT services reviewed and trialled various outcome measures to determine which best suits the OT service. The outcome was the Mayo-Portland Adaptability Inventory.</li> </ul>



GEKO ID	Project Title
47726	<p>Using the Mayo-Portland Adaptability Index to evaluate acquired brain injury rehabilitation.</p> <ul style="list-style-type: none"> <li>Evaluation of SHIU unit outcome measures resulting in a poster presentation for conferences, demonstrating excellent overall outcomes for clients post-rehabilitation.</li> </ul>

#### Approved QI activities and GEKO reports:

GEKO ID	Project Title	Expected Due Date
44165	<p>Carer Group - working towards a new normal</p> <ul style="list-style-type: none"> <li>Development of a six week education and support group for Carers of clients who have an ABI.</li> <li>Enables shared experience in a supportive environment.</li> </ul>	June 2024
47778	<p>Evaluating and updating post-concussion management through consumer feedback (including consumer focus groups and individual feedback).</p> <ul style="list-style-type: none"> <li>Evaluation of website post-concussion resources using focus groups and individual reports.</li> </ul>	October 2023
47779	<p>Identifying education needs for children of clients with ABI</p> <ul style="list-style-type: none"> <li>Identified as a gap in service provision, and utilising new resources from Brightwater Care Group, exploring support required and method of delivery of education for children whose parent has an ABI.</li> </ul>	November 2023
49971	<p>Development of an acquired brain injury education seminar for children and parents transitioning from PCH to adult services.</p> <ul style="list-style-type: none"> <li>Identified gap in service provision with children moving to adult services. Parents from PCH are to attend the SHIU UABI sessions and provide feedback on application to teenagers and suggested changes to make relevant.</li> </ul>	December 2024
50055	<p>Developing and implementing SHIU kids education packs</p> <ul style="list-style-type: none"> <li>Continuation of the education needs for children of clients with ABI, is identifying appropriate resources for various age groups and trialling with ABI families.</li> </ul>	June 2024
50223	<p>NDIS Education Group</p> <ul style="list-style-type: none"> <li>Trial group developed by SHIU SW to assist with managing the demands of NDIS referrals.</li> </ul>	July 2024



# State Head Injury Unit Promotion

As Covid-19 restrictions eased in 2022-2023, promotion of the SHIU shifted back to traditional in-person sessions with stakeholders and health services, with online sessions available upon request.

In addition to those outlined already in this report, promotional and interagency liaison opportunities for 2022-2023 have included:

- SHIU PM presented to the Strategic Aboriginal Health Group re: improving access to ABI rehabilitation for Aboriginal clients – 19 July 2022
- Attendance at the Neurological Council of WA 'World Brain Day' – 22 July 2022
- SHIU Senior PT presented to SCGH Physiotherapy Department on community rehabilitation and vestibular challenges – 27 July 2022
- SHIU CC presented to RITH regarding management of concussion – 18 August 2022
- Physiotherapy department presented to FSH acute and subacute physiotherapy services re: referrals to SHIU and the challenges of early access to NDIS – 22 August 2022
- SHIU CC presented to RPH RITH regarding post-concussion – 18 September 2022
- SHIU PM attended Synapse networking and lived experience event – 19 September 2022
- SHIU CC involved in helmet wearing presentation by George Booth and with Connectivity – 27 September 2022
- SHIU SCC and PM attended "Exploring service availability for teens with ABI transitioning to adult services" with Synapse, Brightwater, NCWA and former PCH clinical psychologist – 4 and 28 November 2022; and 1 February 2023
- SHIU SCC, Senior PT and CC presented to RGH RITH – 19 January 2023
- SHIU SCC, Senior PT and AHA presented to South Guildford RITH – 7 February 2023
- SHIU SCC, Senior PT and NP presented to SCGH RITH – 14 February 2023
- SHIU SCC and CC presented to RPH RITH – 28 February 2023
- SHIU SCC and OT presented to Bentley Health Service inpatient and outpatient services – 1 March 2023
- SHIU Senior SW and NP presented to the Perth Speech Pathology Special Interest group on cognitive communication – 15 March 2023
- SHIU CC presented to RGH RITH re: post-concussion – 23 March 2023
- SHIU SCC and NP presented to Neurological Council of WA – 27 April 2023
- SHIU SCC and two CC's presented to Fremantle Hospital RITH and Community Physiotherapy Services – 3 May 2023
- SHIU Rehabilitation Consultant and NP presented to PCH Rehabilitation Team (medical) – 3 May 2023
- SHIU SCC and OT presented to Joondalup RITH – 10 May 2023
- SHIU NP and Dr Gill Cowen presented to the Sexual Assault Resource Centre (SARC) regarding management of concussion – 11 May 2023
- SHIU PM and NP presented to Neurosurgery regarding importance of rehabilitation in ABI recovery – 29 May 2023
- SHIU PM provided Professional Supervision training to Public Health – May and June 2023
- SHIU CC presented to Fremantle Hospital RITH re: post-concussion – 14 June 2023



# Stakeholders and Partnerships

All members of the WA ABI Advisory Group

Health Services:

- North Metropolitan Health Service
- South Metropolitan Health Service
- East Metropolitan Health Service
- WA Country Health Service
- Child and Adolescent Health Service
- Rehabilitation in the Home
- Emergency Departments; wards; and rehabilitation services
- Strategic Aboriginal Health Group
- Aboriginal Health Services
- Health Promotion

Universities:

- University of WA
- Edith Cowan University
- Curtin University of Technology
- University of Queensland

Non-Government Organisations:

- National Disability Insurance Agency (NDIA)
- Synapse
- Stroke Foundation
- Mission Australia
- Explorability
- VisAbility
- Brightwater
- Private Allied Health service providers
- Ethnic Disability Advocacy Centre (EDAC)
- Commonwealth Respite and Carelink Centres

Government:

- Centrelink
- Department of Housing
- Department of Justice

Consumers, Carers and Community, including:

- Health Consumers Council
- Carers WA



**This document can be made available in alternative formats  
on request for a person with a disability.**

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