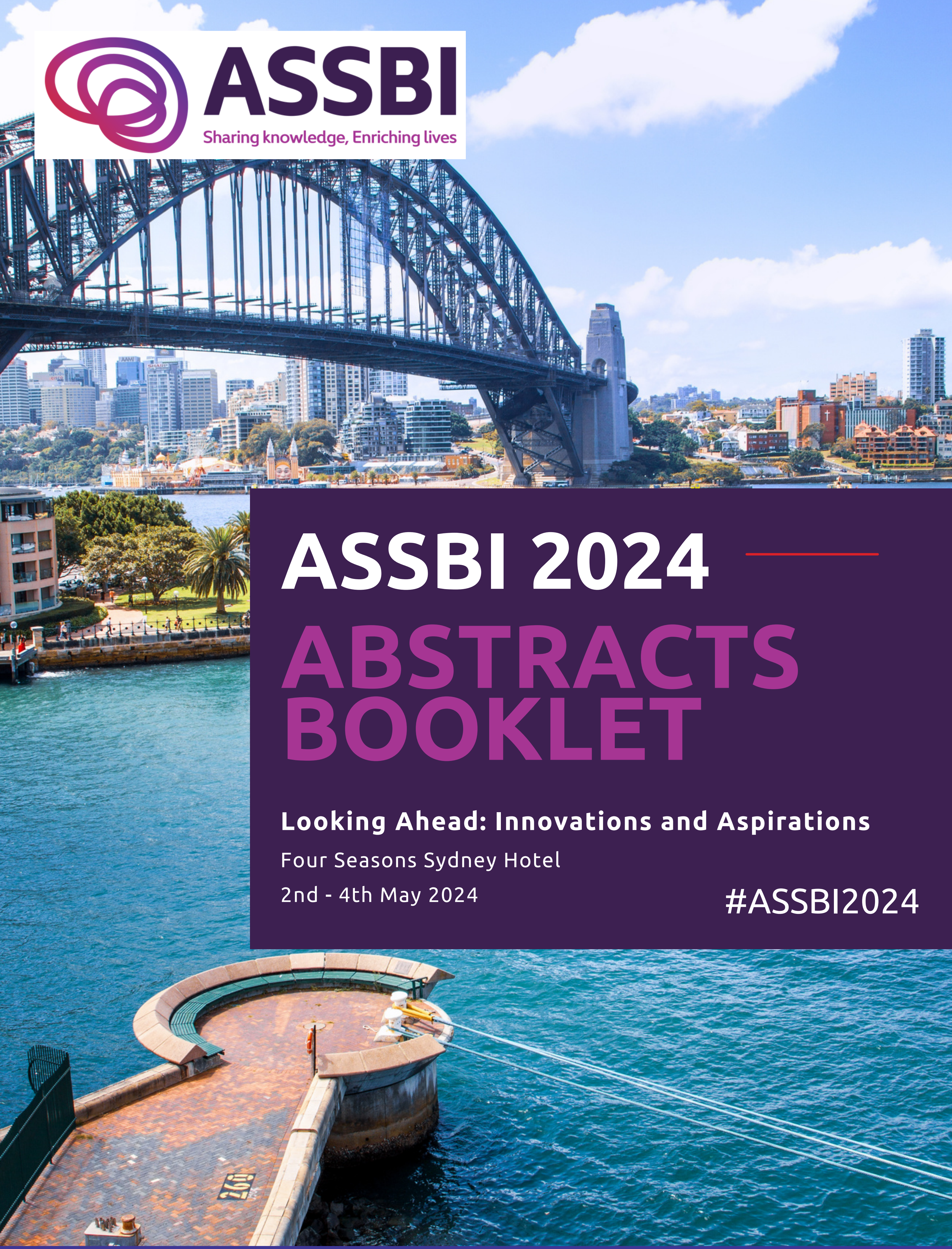

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ABSTRACTS BOOKLET

Looking Ahead: Innovations and Aspirations

Four Seasons Sydney Hotel
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Abstracts

Exploring the goals and outcomes of adults with severe acquired brain injury participating in an extended inpatientbrain injury rehabilitation unit in Australia

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Background and Objectives: Extended rehabilitation is specialised, person-centred rehabilitation delivered by a multi-professional team over a prolonged period of time for individuals with extended recovery times following severe acquired brain injury (ABI). Engagement of the person and their family in goal setting is central to ensuring the patient's priorities are the central focus of rehabilitation and has been shown to have a positive impact on engagement during rehabilitation and subsequent outcomes. The setting for this study was an extended rehabilitation unit which implemented a key-worker facilitated, role-based goal setting approach involving the patient and their family in identifying priority goals which directed their rehabilitation, delivered by an interdisciplinary team. This study sought to explore the relationship between engagement in goal setting and goal attainment and to describe the rehabilitation goals and goal attainment outcomes of peoplewith severe ABI.
Method: Mixed-methods cohort study with 29adults with severeABI in Australia. Demographic data, goal statements and pre-post program Goal Attainment Scale scores as well as Goal Engagement Scale scores were collected. Goals were coded using inductive content analysis and categorised by ICF component and domain. Goal attainment within ICF categories was described and compared using descriptive statistics. Pre-post program change in goal attainment was evaluated using Wilcoxon signed rank tests and correlations between goal engagement and attainment were explored using Spearman's (rho).
Results: There was no significant relationship found between goal engagement and goal attainment, however overall engagement of patients and family members was on average high and maintained with a positive association found between engagement in goal setting at admission and discharge. 94% of the 320 goals were categorized as ICF Activity and Participation, with the majority of goals in the domains of self-care, mobility and domestic life. There was significant improvement in goal attainment between admission and discharge ($z=-0.47$, $p<0.01$), with 80% of goals either being achieved at expected or above expected level of achievement by discharge.
Conclusion: This study offers insights into the goals elicited, goal attainment and engagement of people with severe ABI participating in an inpatient extended rehabilitation program underpinned by interdisciplinary, role-based goal setting. The interdisciplinary program underpinned by key-worker facilitated person-centred, goal setting resulted in goal attainment in chosen goals, which were primarily activity and participation focused.

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Evaluation of the implementation of a 12-week assessment and management framework for sub-acute rehabilitation patients in a prolonged disorder of consciousness

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Background and objectives: Patients with prolonged disorders of consciousness (PDOC) present as a challenging subset within the brain injury population, requiring a cohesive team-based approach to deliver high-quality rehabilitation. Building on a previous scoping review and consultative design process, a 12-week assessment and management framework was developed and implemented for PDOC patients in the Metro North Health system. The framework encompassed specific PDOC goals, a levels of care framework, a criteria-led admission pathway, and tailored evidence-based resources. This project aimed to evaluate the implementation of the framework within the Brighton Brain Injury Service (BBIS).
Method: All PDOC patients admitted to BBIS between July 2022 and May 2023 were included in the evaluation of the 12-week pathway. Retrospective chart audits of admitted patients and a pre-post survey of BBIS clinicians were conducted to assess fidelity, attitudes, knowledge, and compliance with international standards of care for this patient group.
Result(s): During the project timeframe, four patients were admitted to the pathway, with 66% of the framework's key components being delivered as planned. The majority of surveyed staff ($n=10$) agreed that the pathway was beneficial for their clinical practice and for patients and families. Auditing of service and patient charts revealed improvements aligned with PDOC rehabilitation service recommendations of the American Congress of Rehabilitation Medicine and the clinical guidelines from Royal College of Physicians.
Conclusion(s): The project demonstrated the feasibility and positive perception of the 12-week assessment and management framework at BBIS, benefiting staff, patients, and families. It also led to the provision of more evidence-based care and improved service delivery for this patient population. Limitations of the study included the small number of patients and time constraints. Future research should consider incorporating additional implementation science principles, such as strategies and outcomes, to enhance scalability and sustainability.

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'An Evolution of the Way': Planning Effective Hospital Discharge for People with Neurological Disability and Complex Needs

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Background and objectives: Hospital discharge planners play a pivotal role in coordinating successful discharges for this population; however, their ability to be effective is contingent on navigating multiple complex systems. This study aimed to explore health professionals' experiences of hospital discharge planning for people with acquired neurological disability in Australia.

Method: A sample of 16 discharge leads participated in a semi-structured interview focusing on the hospital discharge process for people with acquired neurological disability and complex support needs. Guided by phenomenology, interview transcripts were coded and analysed to identify major themes.

Results: Three interrelated themes depicted the dynamic environment that discharge planners work within. "Perpetually evolving" was characterised by a need to constantly change processes, policies and practices across multiple complex systems. "The good, the bad and the ugly" depicted contributors to and detractors of effective hospital discharge, and the consequences of these. "Blue sky thinking" reflected the best practice scenarios across hospital, funding, housing, and disability support sectors based on the participants' learnings and experiences.

Conclusion: Learning from the challenges and successes experienced by the discharge leads may improve patient care and outcomes for individuals with acquired neurological disability. These novel findings highlight the need for collaborative practices, effective communication and transparent, accountable decision making. The implications for implementation through co-designed intervention will be discussed.

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Efficacy of olanzapine for reducing agitation in post traumatic amnesia after TBI: a series of n-of-one cases

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Background and Objectives: Agitation is common during post-traumatic amnesia (PTA) following traumatic brain injury (TBI) and is associated with risk of harm to patients and caregivers. Antipsychotics are often used to manage agitation in early TBI recovery despite limited evidence to support their efficacy, safety and impact upon patient outcomes. This study describes the results of a double-blind, placebo-controlled randomized controlled trial investigating the efficacy of olanzapine for agitation management during PTA, analyzed as an n-of-1 series.

Method: Participants were 12 individuals receiving inpatient rehabilitation following severe TBI (mean age = 42.57 years, SD = 20.73) who were in PTA and had clinically significant agitation on the Agitated Behavior Scale (ABS). Participants were randomised to receive oral olanzapine (n = 6) or placebo (n = 6) for the duration of PTA in addition to recommended environmental management for PTA. Single case analyses examined for changes in agitation for participants receiving olanzapine and placebo. Secondary group analyses were also conducted for agitation, PTA duration and depth, length of hospitalization, cognitive outcome, adverse events and rescue medication use.

Results: A significant decrease in agitation with moderate to very large effect (Tau-U effect size = 0.37–0.86) was observed for four of six participants receiving olanzapine, while no significant reduction in agitation over the PTA period was observed for any participant receiving placebo. Effective olanzapine dose ranged from 5–20 mg. Response to treatment was characterized by lower level of agitation and response to treatment within 3 days. Group analyses found that participants receiving olanzapine demonstrated poorer orientation and memory during PTA with large effect size. No further group comparisons were statistically significant.

Conclusions: These results suggest that olanzapine can be effective in reducing agitation during PTA, but may be associated with poorer cognition during PTA. It is recommended that the potential benefits of olanzapine for agitation management are balanced with the possibility that the patient may never respond to the medication and may experience increased confusion. Further high-quality research is required to support these findings.

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Be Pain Smart – An innovative way to manage pain after Brain Injury and/or Spinal Cord Injury

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Background and Objectives: Chronic pain is an understudied consequence of traumatic brain injury (TBI) with an estimated prevalence rate of approximately 50%. Accessible pain management is a significant to recovery following moderate to severe TBI. To date there has been limited research, resources, and access to appropriate specialised pain services for this group. The Be Pain Smart (BPS) clinic was developed to provide specialised pain management consultancy for people with a TBI and/or spinal cord injury (SCI). It provided an interdisciplinary pain assessment and pain management plan.

Method: A sample of 40 BPS participant's scores on the Patient Reported Outcome Measurement Information System–29 (PROMIS-29+) and Brief Pain Inventory (BPI) were compared at baseline and follow-up.

Results: The 40 participants were predominately male (70%), with a mean age of 48.48 years. On the BPI from baseline to follow-up, the participants reported decreased pain scores (worst pain, and average pain) and decreased scores on pain interference measures. 75% of participants reported a clinically significant improvement on their overall BPI pain interference scores.Participants also reported improved scores on the PROMIS – 29+ including a decrease in pain interference and pain intensity, and a decrease in anxiety, depression, fatigue, and sleep disturbance symptoms. Participants improved their participation in social roles and activities domain. Overall, 70% of participants reported a clinically significant improvement on their overall pain interference scores. Consequently, these preliminary results from this pilot study provides burgeoning evidence for the effectiveness of the BPS clinics in reducing pain interference for these two complex cohorts.

Conclusions: Access to the BPS clinic reduced the level of interference of pain in the lives of TBI participants which lead to additional improvements in other domains, this emphasises the critical role of an interdisciplinary, patient-centred approach to pain management in this highly complex cohort. The ongoing high referral rate highlights the importance of embedding specialised models of care into existing clinical services to optimise referrals and overall increasing the capacity of the system to manage pain in these populations. In conclusion, a specialised patient-centred, interdisciplinary pain clinic for people with TBI&SCI reduced overall pain interference and led to improvements in other key functional domains.

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Perceived influences on decision making by occupational therapists assessing cognitive function in acute care following traumatic brain injury

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Background and Objectives: Early cognitive assessment of patients with traumatic brain injury (TBI) can help determine the impact of cognitive impairments on real-life functioning in the community. Evidence recommends that standardised performance-based tests(PBTs) involving observation of patients completing everyday tasks,are the most valid meansof assessing functional cognition. It is recommended that assessment and rehabilitation of cognitive impairments commences early while patients are still in acute care, to optimise recovery.The aims of this study were to explore the perceived influences on choice of cognitive assessment by occupational therapists, the ways in which they incorporate observation of occupational performance in assessment and their attitudes towards and experiences of implementing performance-based testing (PBT) in acute care.
Method: Fifteen occupational therapists with experience working in the area of acute care TBI management were interviewed. Data were analysed using interpretive description.
Results: Four themes included 1) an emphasis on 'functional observation of occupational performance', 2) using structured and tailored processes to make assessments 'individualised and efficient', 3) contextual influences on assessment choice including the 'occupational therapy department culture and hospital context', and 4) 'safety and management of risks'.
Conclusions: Choosing a suitable assessment of functional cognition in acute care is a complex task. The assessment of functional cognition in acute care depends on comprehensive understanding of individual patient-specific factors, as well as environment and time limitations of an acute hospital ward context. Therapists respond to pragmatic factors when choosing assessments and may modify standardised assessments to fit within the constraints of the acute care setting. The foundations for facilitating change include a supportive and consistent occupational therapy department-wide approach to enable evidence-based assessment of functional cognition in acute care.
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Acceptance and Commitment Therapy for psychological distress delivered to individuals with a traumatic brain injury via videoconferencing:A non-inferiority randomised controlled trial.

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Background and Objectives: Psychological distress is highly prevalent in the aftermath of a traumatic brain injury (TBI). In initial clinical trials, Acceptance and Commitment Therapy (ACT) has shown promising efficacy in reducing psychological distress and experiential avoidance. To date, the mode of delivery has been both face to face (F2F) and via videoconferencing (VC), but it is unclear which mode of delivery is most effective, a pertinent issue for improved access to psychological treatment for those in regional and remote locations. This study employed a parallel three-armed RCT design to test the efficacy of primary and secondary outcomes following an ACT (ACT-Adjust) treatment program delivered F2F or via VC to individuals with a moderate to severe TBI.
Method: Following ethics approval, participants were randomly allocated to receive ACT-Adjust by F2F or VC. The third arm constituted Treatment as Usual, with the TAU group also randomised to F2F or VC after an initial 3-month wait. Participants resided in metropolitan, regional and remote areas of NSW and aged between 18 and 65 years of age. Primary outcomes were psychological distress (Depression Anxiety and Stress Scale-21; DASS-21), experiential avoidance (Acceptance and Action Questionnaire – Acquired Brain Injury; AAQ-ABI), and secondary outcomes of quality of life, satisfaction with life and engaged living which were administered at pre, post and 3-month follow up.
Results: A total of 36 participants were enrolled in the trial. Using a per protocol analysis, the VC treatment arm was found to be non-inferior to F2F treatment with no significant differences found in any primary and secondary outcome measures at each time point. Within group effect sizes were moderate to large for pre to posttreatment for reductions in psychological distress and experiential avoidance, with this improvement maintained at three months follow-up. Secondary outcomes including quality of life, engaged living, and satisfaction with life indicated significant within group improvements.
Conclusions: Providing ACT-Adjust via VC to individuals with psychological distress and a moderate to severe TBI, produced outcomes that were as good as F2F delivery indicating both efficacious and cost-effective delivery. Analysis at the participant level may provide a greater understanding of what delivery mode is most effective for clinical practice when investigating the characteristics and outcomes for individual clients.
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Acceptance and Commitment Therapy for Mild Traumatic Brain Injury (ACTion mTBI): Randomised Feasibility Study of Effectiveness

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Background and Objectives: Psychological factors are well known to influence recovery following mild traumatic brain injury (mTBI). Psychological interventions can therefore be helpful for this population. Acceptance and Commitment Therapy (ACT) is a world-renowned psychotherapy, yet its effectiveness for the mTBI population is limited. To address this, we have developed ACTion mTBI, a 5-session, ACT-informed intervention that incorporates all six processes of the ACT hexaflex for a mTBI recovery context. This study examines the feasibility of ACTion mTBI using quantitative and qualitative methods when compared to a CBT intervention.
Method: This study was embedded within community-based multidisciplinary rehabilitation services in New Zealand. Using site randomisation, 24 participants respectively engaged in either ACTion mTBI or CBT.

Results: The ACTion mTBI group showed a significant reduction in post-concussion symptoms, psychological distress and functional disability when compared to the CBT group at post-treatment evaluations. The ACTion mTBI group also showed a significant increase in psychological flexibility. Qualitative descriptive analysis of post-treatment interviews for the ACTion mTBI group revealed the following themes 1). attacking the mTBI from a different direction 2). a positive impact on recovery, 3). helpful aspects of the intervention and 4). enablers of intervention effectiveness.
Conclusions: This study illustrates the potential of ACT as a psychotherapy for mTBI and sheds light on the specific aspects of this approach that may be beneficial for this population.
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Evaluating the VaLiANT (Valued Living After Neurological Trauma) group intervention for improving adjustment to life with acquired brain injury: A pilot randomised controlled trial

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Background and Objectives: Acquired brain injury (ABI) frequently results in cognitive and emotional changes that negatively impact meaningful participation and quality of life. Holistic interventions show promise in improving these outcomes but require significant time and resources to deliver. We aimed to evaluate the potential efficacy, feasibility, and acceptability of VaLiANT, a new 8-week holistic group intervention that combines Acceptance and Commitment Therapy and cognitive rehabilitation to improve wellbeing and adjustment to ABI.
Methods: Using a parallel-groups randomised controlled trial design, community dwelling adults experiencing ongoing difficulty adjusting to their ABI (>3 months post-injury) were randomly allocated (2:1 ratio) to the VaLiANT intervention or treatment-as-usual (TAU) waitlist-control. Assessments occurred at baseline, post-intervention, and 8-week follow-up. The primary outcome was wellbeing (Warwick-Edinburgh Mental Wellbeing Scale) with secondary outcomes of mood, everyday cognition, valued living, psychological flexibility, participation, and quality of life. Outcomes were analysed using mixed linear models following intention-to-treat principles, and chi-square tests for differences in proportions of reliable improvement between groups.
Results: The sample included 54 adults (Mage = 50.62, 61% male, Myears-post-injury = 5.46) primarily with stroke (52%) and traumatic brain injury (22%). While no differences were found for wellbeing, VaLiANT resulted in greater reductions in anxiety symptoms over time (d = 0.47 – 0.54) and greater improvement to psychological flexibility post-intervention (d = 0.33). Small to large within-group improvements were found across most secondary measures following VaLiANT but not TAU. Greater proportions of reliable improvement favouring VaLiANT were seen post-intervention in anxiety (45% vs 12%) and at follow-up in self-identity (63% vs 27%) and valued living (24% vs 0%), but not for other outcomes. Delivery of the intervention and the trial were feasible and participant acceptability ratings were high.
Conclusions: VaLiANT did not result in improvements to the primary outcome of wellbeing but indicated improvements to aspects of psychological distress and adjustment. Greater intervention tailoring and booster sessions may improve VaLiANT's impact. The identified signals of efficacy warrant further investigation in a definitive trial.
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Validating the DASS-10 as a brief measure of psychological distress after traumatic brain injury

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Background and Objectives: Validated and robust measures to assess psychological distress are required to screen and evaluate treatment progress when delivering psychological treatment to individuals after traumatic brain injury (TBI). Current validated measures may place too high a burden on respondents for frequent sessional screening to monitor the effectiveness of the treatment. The present study aimed to validate the Depression Anxiety Stress Scale-10 (DASS-10), a brief version of the DASS, in a sample of adults with moderate-to-severe TBI.
Method: Following ethics approval, archival data was accessed from Liverpool Brain Injury Rehabilitation Research Group, Ingham Institute, NSW, Australia. Confirmatory factor analysis was used to examine the structure and fit of the DASS-10 in a sample of adults (n=678) with moderate-to-severe TBI. Validation, using a subset of participants, involved test-retest reliability as well as undertaking an examination of convergent and divergent validity using measures of psychological distress, quality of life, experiential avoidance, and satisfaction with life.
Results: The published two-factor structure of the DASS-10 failed to run, however, further analysis using bootstrapping and loading all items on a single distress factor resulted in a good model fit. Test-retest reliability was adequate (rp=.69, p<.001). Good divergent validity against the Quality of Life in Brain Injury Rehabilitation scale (rs=-.17, ns) and convergent validity with Hospital Anxiety Depression Scale (rs=.81 p<.001) and DASS-21 (rs=.97, p<.001), experiential avoidance using the Acceptance and Action Questionnaire-Acquired Brain Injury (rs=.65, p<.001) and Satisfaction with Life Scale (rs=-.45, p<.001), was established. The DASS-10 also demonstrated good reliability with a Cronbach alpha of .90.
Conclusions: The DASS-10 is a reliable and valid tool for clinicians to use for regular screening of psychological distress in individuals after a TBI.
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Participant Perspectives on Traumatic Brain Injury Impacts and Acceptance and Commitment Therapy Outcomes: A Qualitative Analysis

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Background and Objectives: Survivors of traumatic brain injury (TBI) can experience a long and complex recovery involving adjustment to physical, cognitive and emotional sequelae and disconnection from pre-injury identity and relationships.

Acceptance and Commitment Therapy (ACT) is an evidence-based treatment for individuals with TBI that addresses psychological flexibility and distress. This study aimed to describe the experiences of individuals with a moderate-to-severe TBI who took part in an ACT intervention, ACT-Adjust, within the first five years of their recovery.

Methods: Semi-structured interviews were conducted with 15 adult participants across New South Wales, three months after completing the ACT-Adjust intervention. Thematic analysis was used to identify themes relating to the impacts of brain injury and treatment outcomes.

Results: Themes relating to ACT principles of psychological flexibility were identified for treatment outcomes, including committed action, cognitive defusion, contact with the present moment, values, self-as-context and acceptance. Qualitatively, participants indicated ACT-consistent language, positive reports of their ACT-Adjust experience and use of ACT based skills three months after completing the program. This included use of mindfulness, cognitive defusion and engaging in more goal directed behaviour consistent with their values.

Conclusions: Individuals with TBI report benefits up to three months after undertaking an adapted ACT intervention and indicate use of ACT-based strategies in daily life after brain injury.

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How to use ‘My Technology Space’: Information, tools and resources for planning the use of technology for executive function support after acquired brain injury.

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Session Synopsis: Planning individually tailored technology supports that address executive dysfunction can be challenging, particularly with the rapid growth of technology products and services. Whilst mainstream and assistive technologies can change the way support is delivered to people with acquired brain injury (ABI), tools to guide consideration and selection of technology for cognitive support are lacking for both people who may use this technology after ABI, and people who advise on its use. This ‘How To’ session will present a new open-access website, called My Technology Space, and step through single case experiments undertaken to evaluate technology interventions designed to support executive functioning following ABI. My Technology Space offers information, tools and resources for people with brain injury, their families, friends and other key supporters, as well as allied health professionals working with them, to consider technologies which may be used to compensate for executive dysfunction. Workshop attendees will explore individually tailored technology interventions our team has used, learn about approaches to evaluate these types of interventions, and consider features of technology that can be customised for cognitive support, based on a person’s goals and needs.

Level aimed for: Basic to Intermediate

Learning objectives: At the end of this session, participants will have:

1. Learnt about a new website housing technology information, tools and resources that can be used by people with ABI and health professionals working with them, called My Technology Space;
2. Developed knowledge regarding the good practice steps that can be applied to plan for assistive technology products and services;
3. Gained understanding of ways to assess the need for, plan interventions, and measure outcomes of technologies used for executive function support after ABI.

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The effect of time delay on young adults’ prospective memory

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Background and Objectives: Prospective memory (PM) refers to the mental ability to carry out intended actions at an appropriate moment in future. Event-based prospective memory refers to the ability to remember to perform a specific action or task in response to a particular event or cue in the future. The purpose of this online study was to explore how the delay interval affects the event-based prospective memory of young adults. The study employed a between-subject design and manipulated delay intervals.

Method: This study used the classical dual-task paradigm, where a PM task was integrated into an ongoing working-memory task (2-back). A total of seventy-four young adults (Mage=25.55 years) were randomly assigned to three delay conditions: Immediate, 1-day, and 1-week. Before the designated delay, all participants completed a practice block of the dual-task test. Subsequently, participants proceeded with the actual trials of the dual-task test without receiving any reminders about the PM task. The performance of both the PM task and the ongoing task were measured. Additionally, participants' cognitive abilities and emotional vulnerabilities were assessed.

Results: The results indicated a main negative effect of delay on PM performance. Post-hoc tests revealed that the delay needed to be sufficiently long (1-week) to observe this effect (i.e., 1 week < immediate). There were no differences in the performance of the ongoing tasks among the three conditions. Furthermore, a positive correlation was found between working memory capacity and PM performance in the immediate condition.

Conclusions: This study makes a novel contribution to the literature on PM by examining the impact of longer delays (1 day and 1 week) on performance. The findings suggest that PM forgetting can only be captured with delays that are long enough. This discovery may contribute to the enhancement of future theories and experimental protocols related to PM.

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The role of environmental, social and activity-based feedback mechanisms in self-awareness rehabilitation for adults with brain injury

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Background and Objectives: After brain injury, a person’s self-awareness of abilities and limitations in the context of meaningful activities is an important factor in rehabilitation. The hospital setting can present challenges to providing the necessary activity and environmental opportunities for training development of self-awareness. The aim of this study was to explore the role of feedback mechanisms in the development of self-awareness for adults with brain injury and make recommendations for clinical practice.

Method: Practice setting was a public brain injury rehabilitation unit in Australia. Participants included a convenience sample of adults with ABI (n=173): traumatic brain injury (n=110), stroke (n=39) and hypoxia (n=24) admitted to inpatient rehabilitation who received self-awareness assessment. Data were gathered through an audit of clinical records of semi-structured interviews using the Self-awareness of Deficits Interview (SADI) and analysed thematically by one researcher, with codes reviewed by a second for rigor.

Results: The three main themes were 'environmental', 'social' and 'activity-based' feedback mechanisms that contributed to the expression of self-awareness. "Environmental factors' related to being in the hospital environment and the associated uncertainty for participants about their functional abilities in the home context without having had exposure to this setting. Many believed they would experience no functional difficulties upon return home. 'Social factors' included feedback from family/friends which was described as reinforcing the presence of impairments or conversely, the absence of functional changes. Activity-based factors included lack of exposure to activities in the hospital setting which was described as a barrier to learning about abilities by some participants, while for others this reinforced poor awareness of functional limitations. Participant quotes will be presented to further describe these themes.

Conclusions: A clinical interview using the SADI provides an opportunity to understand a patient's perspective of their abilities. Comprehensive inpatient rehabilitation to support development of self-awareness should include targeted opportunities for experiences and feedback across a range of activities and environments taking into consideration the person's social context.

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Maintenance of gains following prospective memory rehabilitation for adults with traumatic brain injury

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Background and Objectives: Prospective memory (PM) failure can reduce independence, engagement in productive roles and lead to neglect of social relationships and general health following traumatic brain injury (TBI). Compensatory approaches to PM rehabilitation have been shown to be effective to address the impact of PM failure on everyday life in the short term. Long-term maintenance of these positive effects however has not been examined. Generalisation of compensatory strategies and ongoing use may be impacted by impaired self-awareness. Metacognitive skills training (MST) is an approach that aims to improve self-awareness and strategy use. This study aimed to determine if gains in PM performance, psychosocial reintegration, level of care and self-awareness are maintained following compensatory PM rehabilitation +/- MST training.

Method: A prospective observational cohort study with 40 participants (75% male, mean age=41 (SD 13)) from a randomised controlled trial. Participants were community dwelling adults with moderate-severe TBI who completed a manualised 6-session compensatory strategy training program (COMP) or COMP plus a metacognitive skills training program (COMP-MST). Measures were collected pre-intervention and 6-months post-intervention. Data were analysed using two-way mixed analysis of variance (ANOVA) to test for group differences on outcome measures at 6-months.

Results: Both groups demonstrated significant improvement in PM performance and reduction in PM failures at 6-months post-intervention. Significant improvements were also found in the type of support and care needs for both groups at 6-months. Fixed effect estimates demonstrated a significant group by time interaction between significant other reports of PM failures and type of support needs, indicating that the COMP group was more effective.

Conclusions: Improvement or maintenance of PM gains were demonstrated 6-months following compensatory PM rehabilitation without the use of booster sessions. MST may be more effective in enhancing performance-based activities such as cooking rather than a cognitively focused PM rehabilitation program.

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Expert consensus on a cognitive rehabilitation training program: A nominal group technique study

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Background and Objectives: Developing a cognitive rehabilitation plan for patients with a brain injury is complex and requires skilled clinical reasoning. Novice occupational therapists often struggle with this process, as a result, patients may not receive the optimal rehabilitation at the optimal time. In contrast, experts appear to use their clinical reasoning seamlessly to develop these plans. The aim of this study was to establish expert consensus on content and methods for a self-directed learning package to support novice occupational therapists' clinical reasoning when planning cognitive rehabilitation for patients with brain injury.

Method: An online five-step Nominal Group Technique (NGT) methodology was used to gather data from expert occupational therapists across Australia. Ethical approval was granted and snowball recruitment occurred via social media and through the researchers' established clinical and academic networks. Experts were asked to identify the content and training methods for a learning package for novice occupational therapists. Subsequently, experts rated the importance of each item using Mentimeter online. Thematic analysis of the ideas generated was completed following Braun and Clark's five-stage process with 10% of the data coded by three researchers to confirm reliability.

Results: Twenty-one expert occupational therapists participated in three focus groups, each lasting 90 minutes in duration. Overarching themes of 'knowing what', 'knowing how', and 'formulating and doing cognitive rehabilitation' were developed from the thematic analysis. Expert occupational therapists ranked: ‘activity analysis’, ‘how to grade and modify rehabilitation’, ‘understanding cognition’, and ‘evidence-based practice’ as the most important content to include in a learning package. Whilst methods prioritised for delivery of the learning package included video demonstrations, case studies, online modules, and practical assignments.

Conclusion: An online NGT method enabled rapid expert consensus to establish essential content and teaching methods for a cognitive rehabilitation learning package to enhance novice occupational therapists’ clinical reasoning in developing cognitive rehabilitation plans for patients with brain injuries. Subsequent research will develop and evaluate this learning package.

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Co-designing with people with neurological disability: Obstacles and opportunities for authentic, collaborative practice

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Background and objectives: Co-design in disability and healthcare sectors, values and leverages lived experience knowledge with the aim of creating improved outcomes that better meet the needs of service-users. While co-design is increasingly an expectation of best practice service delivery and research, there are risks when this is poorly executed. The aim of this paper is to present key considerations for authentic, collaborative co-design with people with neurological disability. Obstacles and opportunities will be explored, with consideration to inclusive co-design with people with a range of skills and experience, including cognitive and communication challenges.

Method: Qualitative data from the evaluation of two co-design projects were extracted and synthesised. This data included the experiences and perspectives of co-design workshop contributors with disability, as well as co-design facilitators with and without disability. The co-design projects were designed and delivered by the Summer Foundation co-design and research teams and were externally funded. Synthesised data were integrated with the findings of a scoping literature review of the use of co-design with adults with neurological disability, informing the development of key considerations for authentic collaborative co-design with people with neurological disability.

Results: Co-design contributors valued the opportunity to participate with others in projects that hold shared meaning. Contributors described the experience as informative, inclusive, and collaborative, with opportunities for new learning such as speaking up and gaining new perspectives. Key considerations for authentic and collaborative co-design centre around the need for a tailored approach, including the use of small groups, dedicated time for sharing lived experience, supported preparation and debriefing, and an iterative approach to the workshop design. Obstacles include group dynamics, the complexity and pace of projects, and a lack of transparency and autonomy when engaging with external funders.

Conclusions: Co-design is an empowering opportunity; however, it requires a deep level of investment from all participants, including facilitators and contributors. With this investment, contributors expect a transparent and authentic process in which their contribution is valued and honoured. Facilitators and funders should not risk disempowering co-design contributors.

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“At every stage it was my choice on what to do and how to do it and that’s important”: Therapeutic principles that facilitate choice and self-management in community based social activity intervention after severe brain injury.

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Background and Objectives: Adults with severe traumatic brain injury (TBI) experience difficulties developing and maintaining connections within the community. We recently completed evaluation of a multi-component community connection program (M-ComConnect) with key objectives of increasing social activity and supporting community participation for people with severe TBI. Results demonstrated that M-ComConnect had a positive effect on quality of life, wellbeing and community integration and these changes were sustained over 9-12 mths. The aim of this paper is to describe and exemplify the core therapeutic principles and practices that underpinned and maintained positive change at the group and case level.

Method: M-ComConnect was constructed around therapeutic principles that were combined to maximise the choice and self-management that a participant can exercise within the program. M-ComConnect was delivered on 25 occasions with adults with severe TBI (> 2yrs post-injury). We used mixed method longitudinal design (standardised measures + semi structured interviews over 5-timepoInts) to evaluate feasibility, acceptability and effectiveness at the group level and single case experimental design (SCED) using behavioural observation and self-report measures at the individual level.

Results: Across the M-ComConnect program practice principles were identified as supporting the individual’s choice and control within the therapeutic context and facilitating independence and positive outcomes. These principles reflected processes ranging from 1. conceptualising self, 2. developing and maintaining an effective therapeutic alliance, 3. finding focus within a multi-level goal structure, 4. using relational strategies to support goal development and achievement, 5. developing skills simultaneously in individual sessions and community group contexts to maximise ongoing self-management, and 6. applying a collaborative framework within the person’s social context (work with close others, support workers so they can support the person in new and ongoing community activities). Participants’ experience of M-ComConnect clustered around themes of receiving support, building skill, connecting and belonging, developing confidence and seeing a different future.

Conclusion: Given statistically significant changes post-intervention, findings support the clinical utility of these processes as design factors in the development of community participation interventions.

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Co-Design and Implementation for Promoting Discussions on Sexuality After Traumatic Brain Injury in a Multi-Disciplinary Rehabilitation Unit

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Background and Objectives: Persistent changes in sexuality often follow traumatic brain injury (TBI). Yet health professionals remain reticent in discussing sexuality and have reported barriers including uncertainties around whose role it is and limited educational and institutional support. This study employed a co-design and implementation process, aiming to promote team-wide behavioural change, whereby health professionals at a TBI rehabilitation unit would attempt to address sexuality with patients routinely.

Methods: Focus group sessions with multidisciplinary health care professional were conducted to identify barriers and enablers to behavioural change, identify areas for development, and co-design behavioural change intervention options. Following which implementation deliverables were finalized and provided to the team. Content analysis was used to analyse focus group data, with the Theoretical Domains Framework to contextualise factors influencing health professionals' behaviours and the Behaviour Change Wheel to systematically categorise intervention functions.

Results: Thirty-five barrier and eight enabler themes falling within 12 theoretical domains to behavioural change were identified. Nine co-designed intervention options aligned with five intervention functions of the Behaviour Change Wheel, resulting in six final implementation deliverables.

Conclusions: Barriers and enablers were highly intertwined, influencing the approach to implementation deliverables. Addressing multiple barriers simultaneously may indirectly alleviate discomfort around discussing sexuality. Achieving meaningful and lasting practice changes most likely necessitates organisational and team-level environmental restructuring and enablement. The next step involves evaluating the effectiveness of the co-design and implementation process in driving behavioural change and potential impacts on patient satisfaction and sexuality outcomes.

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Co-design of a technological solution for people with acquired brain injury

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Background and Objectives: People with acquired brain injury (ABI) experience difficulties during the transition to home following hospital rehabilitation due to the unpredictability of everyday life. This research aimed to use co-design to develop a technological solution to assist with the transition to home from inpatient ABI rehabilitation.

Method: A series of co-design workshops involving four people with ABI, two carers, two allied health professionals, and two technology designers were conducted over a period of h three onths. The first two workshops focused on identifying needs, the third workshop focused on ideating potential solutions, and the final workshop tested the initial prototype of the technology solution to allow people with ABI, carers, and health professionals to provide feedback on the solution.

Results: Priorities for the technological solution established by the co-design participants included the ability to: access education resources, provide information to understand the support team, share information about life before ABI with the healthcare team, set goals, and develop plans.

Conclusions: Two prototypes of technology solutions were developed and will be presented. One of the solutions is currently undergoing further development.

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Reclaiming agency in care decisions: Perspectives of people with acquired brain injury and their family members pre- and post-hospital discharge

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Background and Objectives: A person who sustains an acquired brain injury (ABI) typically experiences numerous care transitions across hospital and community services. The ability to self-advocate or influence one's decisions is integral to personalised care for people with ABI. This study aimed to understand what constitutes effective self-advocacy after ABI and identify barriers and supports to self-advocacy during the transition from hospital to community.

Method: Semi-structured interviews were conducted with 12 participant dyads of people with ABI (58% stroke; 42% traumatic brain injury) and their family members pre-discharge and approximately four months post-discharge from a tertiary hospital brain injury rehabilitation unit in Brisbane, Australia. Data were thematically analysed using a hybrid deductive-inductive approach.

Results: Self-advocacy reflects people's ongoing efforts to reclaim their sense of agency or influence over decisions about their care after ABI. Agency varies along a continuum, often beginning with limited conscious processing of self or environment (loss of agency), before individuals begin questioning their current care (emerging agency), and then planning and directing their future care (striving for agency). The journey of reclaiming agency is influenced by an individual's capacity and desire for control over decisions about their care and the availability of scaffolded support from family and health professionals to navigate care transitions.

Conclusions: Self-advocacy after ABI entails a process of reclaiming agency whereby people seek to first understand, then question, and ultimately direct their care. Level of agency varies according to an individual's capacity and desire and their support network. Further work to codesign a tool to support self-advocacy skill development early during brain injury rehabilitation is underway.

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The change in mental well-being over one year for people with neurological disabilities and complex needs after moving into individualised housing

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Background and Objectives: Individualised housing models, such as Specialist Disability Accommodation (SDA) are designed for autonomous living for people with disabilities and complex needs. It's been evidenced that living in appropriate housing positively contributes to mental well-being. However, the longitudinal impact of quality housing on the well-being of people with disabilities is under researched. This study explored the change in well-being for people with neurological disability who have moved into individualised housing. It was hypothesised that significant improvements in well-being would be demonstrated over 6-months and 1-year post-move, compared to pre-move.

Method: This study is part of a larger longitudinal, mixed-methods project that explores individual experiences and outcomes of moving into individualised housing for people with disability. Data was collected from 16 participants (63% female, 37% male, M age = 46.80 years) who had a range of neurological disability types (3 = cerebral palsy, 3 = multiple sclerosis, 2 = spinal cord injury, 2 = leigh's disease, other neurological = 6). All participants completed a pre-move, 6 months, and 1-year post-move mental well-being evaluation (Warwick-Edinburg Mental Well-being Scale; WEMWBS). Paired samples t-test and reliable change index were used to compare wellbeing and WEMWBS items across pre- and post-move time points. A one-tailed alpha level of p <.05 was used to determine significance. Effect sizes (Cohen's d) were reported for significant results.

Results: There was a significant increase in participants' well-being (t(15) = 1.85, p = .04) with a moderate effect size (d = 0.46) at 6-months post move, and no significant improvement found at 1-year post move. Participants showed a significant increase in the WEMWBS item of 'I've been feeling useful' at both 6-months post move (t(15) = 3.78, p = .002) with a large effect size (d = 0.95), and 1-year post move (t(15) = 2.42, p = .014) with a moderate effect (d = 0.61). No significant changes were found for the remaining 13 WEMWBS items. A positive and reliable clinical improvement for well-being was present for 2/16 participants at 6-months post move and 3/16 participants at 1-year post move.

Conclusions: These findings highlight that the independence and self-determination gained from living in appropriately designed housing can significantly and positively contribute to the mental well-being of people with disabilities.

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Social-ABI-lity pilot 2.0- Using an online training program and a peer-moderated private Facebook group to support safe use of social media for connection after brain injury

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Background and Objectives: Social media can be challenging for people with an acquired brain injury (ABI) to use meaningfully and safely. A pilot study presented at ASSBI 2023 found the multicomponent social-ABI-lity intervention to be feasible and acceptable. Participants reported improvements in confidence and enjoyment using a clinician-moderated Facebook group for social connection. The current project evaluated the outcomes of conducting the multi-component intervention with a peer-moderated Facebook group.

Methods: A mixed-methods, pre-post intervention design was used. Two people with ABI joined the research study as peer-moderators and co-investigators. Participants completed a self-guided social-media course (social-ABI-lity), and participated in a private, peer-moderated Facebook group over an 8-week period. Data were collected through observation of Facebook group activity, weekly surveys, and a post-intervention interview. Data were also collected on social media use and quality of life at pre-intervention, post-intervention, and 3 months post-intervention. Descriptive analysis was conducted for participant characteristics, social media use, social media knowledge, and social media engagement. Statistical analysis was used to compare measures for quality of life and reported ratings of frequency, confidence, and enjoyability of Facebook use. Qualitative content analysis was conducted on interview data, using an iterative process through discussions between co-investigators with an auto-ethnographic approach.

Results: Seven adults with an ABI completed the 8-week intervention, reporting improved confidence and enjoyment in using Facebook. Although there were no significant changes in quality of life, participants reported multiple benefits from the intervention. Preliminary thematic analysis results show that providing safe and supported opportunities to engage with peers enabled participants to build relevant social and tool-based skills to cultivate ongoing connections with their chosen communities.

Conclusions: This multicomponent social-ABI-lity intervention is the first of its kind with pilot study results providing preliminary evidence that this intervention improved outcomes for people with ABI. New insights relating to the peer-moderated group component of this subsequent pilot study will be discussed and contrasted with those of the clinician-led pilot study.

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Reporting on the usefulness of a narrative discourse task during and after post-traumatic amnesia

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Background and Objectives: For people with severe traumatic brain injury, post-traumatic amnesia (PTA) may extend for a prolonged period following emergence from coma. In Australia, PTA status is typically assessed daily with the Westmead Post-traumatic Amnesia Scale (WPTAS) measuring memory and orientation. However, cognitive communication disruption is also a key feature of post-traumatic amnesia (PTA). In recent INCOG 2.0 guidelines (Ponsford et al., 2023), speech pathologists are recommended to monitor communication during PTA and to assist with optimising interactions. Standardised cognitive communication tests suitable for use during PTA are lacking, therefore speech pathology assessment is typically informal. Narrative discourse tasks have the potential to provide a structured, repeatable, and informative measure of cognitive communication function. This study aimed to report on the utility of a short narrative discourse task for monitoring communication functions, and to examine any associations between scorable narrative task components and memory and orientation scores as measured with the WPTAS.

Method: As part of a larger study, samples of discourse were elicited from 10 participants in PTA on admission to a specialist TBI ward, and again at PTA emergence. The Flowerpot Incident, a six-image black and white picture sequence was used as a narrative stimulus. Participants were asked to tell the story with a beginning, a middle and an end. Samples were transcribed orthographically and analysed using micro- and macro-linguistic measures.

Results: There were differences both quantitatively and qualitatively in samples from during PTA and after emergence. Samples during PTA contained fewer story grammar elements and key concepts, and participants misinterpreted the story more. Associations between memory and orientation components of the WPTAS and discourse production will be discussed. While the task had benefits as a structured assessment task for monitoring change, there were disadvantages to clinical application that require consideration.

Conclusions: A narrative task has the potential to provide additional insight into the communication ability of patients in PTA, particularly in relation to change over time. This may be of benefit for informing staff working with the patient on how to optimise clinical interactions.

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An online multimodal intervention for people with brain injury and their communication partner to improve their conversation skills together: a pilot study

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Background: People with traumatic brain injury (TBI) experience communication breakdown many years after injury, affecting their relationships. Access to ongoing services is essential, especially in rural and remote locations. Digital health can overcome challenges of travel, cost efficiencies, and client engagement. Convers-ABI-lity is a novel multimodal intervention platform adapted from the core content of previous evidence-based programs and developed using co-design with key stakeholders. This research aimed to investigate the effectiveness of a digital health platform for people with TBI to improve their conversation skills with their communication partner (CP).

Method: Ten dyads (a person with severe TBI and their usual CP) participated in a pilot study. They completed a 10-session conversation skills intervention called convers-ABI-lity, involving videoconference sessions with a clinician and self-guided online modules. Outcomes were evaluated using the Adapted Kagan Scales for casual and purposeful conversation samples. These scales measure Participation in Conversation (MPC) for people with TBI and Support in Conversation (MSC) for CPs. Pre-intervention ratings were compared with post-intervention ratings, and post-intervention ratings with follow-up ratings to examine treatment effects using Wilcoxon signed rank tests. Effect sizes were calculated.

Results: For purposeful conversations, there was a moderate effect size for pre-post ratings in MPC Transaction (r=0.30, 4/8 participants improved). Large effect sizes were found for post-follow-up ratings in MPC Interaction (r=0.84, 5/6 participants improved), MPC Transaction (r=0.91, 5/6 participants improved), and MSC Acknowledge Competence (r=0.72, 4/6 participants improved). In casual conversation, there was a moderate effect size for pre-post ratings in MPC Transaction (r=0.31, 4/8 participants improved). Large effect sizes were found for post-follow-up ratings in MPC Interaction (r=0.58, 4/6 participants improved) and MPC Transaction (r=0.67, 3/6 participants improved). Other comparisons had negligible to small effect sizes.

Conclusion: Participants with TBI improved their conversation participation in both casual and purposeful conversations, and CPs improved their support in purposeful conversations. Convers-ABI-lity, in its innovative online format, shows promise for enhancing post-TBI conversations, offering greater accessibility. Further research with a larger sample size is warranted.

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Supporting Return to Work in People with Traumatic Brain Injury: Synthesis of Publicly Available Information on Assistive Technology Used by Speech Pathologists

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Background and Objectives: People with traumatic brain injury often experience challenges in reading, writing, and returning to work. Speech pathologists play a key role in their rehabilitation and increasingly utilise technology to support these individuals in their return to work goals. This research reviews public information on assistive technology products recommended by speech pathologists to determine how it might influence their prescription of assistive technology for those with cognitive communication disorders following brain injury.

Method: A sequential explanatory mixed methods approach was utilised to firstly identify the specific assistive technology products named by speech pathologists from Australia and the United Kingdom and secondly, input these product names into Google's search engine to perform a document analysis as informed by Bowen (2009) and Rapley (2007) on the first page of website results.

Results: 12 assistive technology products were identified by participants as used to support people with traumatic brain injury in their return to work goals. Ninety two websites were analysed after a Google search of each product name. Three overarching categories were identified, (1) an incomplete picture across analysed websites on the functional application of these products to support individuals with cognitive communication disorders post traumatic brain injury within the workplace context, (2) limited reference to people with traumatic brain injury using these products provided on websites, and (3) potential bias identified in publicly accessible information referencing these products through unsubstantiated claims of product utility and more than half of the websites analysed being commercially driven rather than educationally driven.

Conclusions: Currently the public information available on assistive technology products used by speech pathologists to support return to work for people with cognitive communication disorders post traumatic brain injury may not be adequately providing robust and contextualised information that is suitable for people with traumatic brain injury to support their return to work goals.

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Important event recounts after traumatic brain injury

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Background and Objectives: There is a critical lack of long-term research investigating communication recovery after traumatic brain injury (TBI). This longitudinal study aimed to investigate quantitative and qualitative changes in important event recounts produced by a group of people with severe TBI up to two years post-injury.

Method: A prospective observational design with inception cohort was adopted. Thirty-four participants with severe TBI were asked to produce an important event recount at 6, 12 and 24 months post-injury. A mixed methods approach comprised quantitative repeated measures analysis of microlinguistic and macrolinguistic automated discourse measures. A qualitative content analysis was also conducted.

Results: The measures revealed significant differences between 6 and 24 months indicating a protracted recovery trajectory. Microlinguistic analysis showed increased use of revision and repetition over time. The macrostructural analysis highlighted changes in complexity and inclusion of detail in recounts. These related to orientation of character and number of elements within the events. Content analysis revealed themes of: (1) childhood events (2) family and relationships (3) career and education and (4) grief or loss, with career and education dominant at 24 months.

Conclusions: This is the first study to explore Important Event recounts told by people with severe TBI as they recovered. Participants showed discourse recovery beyond 12 months, highlighting the need for services into the chronic period of recovery. The Important Event recount shows good potential as an ecologically valid assessment tool to evaluate communication recovery that can also be integrated with advances in computerised analysis. Analyses additionally provided insights into potential therapy targets and content themes for chronic discourse impairments.

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Addressing persisting challenges for people with aphasia after TBI

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Background and Objectives: People with aphasia after a TBI are at risk of poor outcomes yet there is extremely limited evidence to guide assessment and treatment for this vulnerable group. This longitudinal study aimed to investigate the spoken discourse produced by a group of people with aphasia after severe TBI up to two years post-injury.

Method: The study was approached with a prospective observational design with initial data point from 3-6 months post-injury and follow-up at 12 and 24 months. Eleven participants with aphasia after severe TBI were asked to produce spoken discourse in response to the Speech, Brain Injury and Recovery tasks on the TBIBank protocol. The discourse was compared to a cross-section of matched healthy control participants. A mixed methods approach comprised quantitative repeated measures analysis of automated discourse measures. A qualitative content analysis was also undertaken.

Results: Significant differences were observed across a range of discourse measures at all time points when compared to the control group performance. A single variable, percent pronouns changed significantly over time. Content analysis generated the following categories: (1) Cognition and communication (2) Recall of the brain injury (3) Personal thoughts and experiences (4) Internal and external resources and (5) Timely and individualised care.

Conclusions: Findings indicate chronic communication difficulties in people with aphasia after TBI that are significantly different to a typical sample. Participants demonstrated capacity for recovery but also limited scope of discourse recovery, highlighting the need for long-term support at least up to 2 years post-injury and possibly beyond. Furthermore, perceptions of the recovery experience offer insights into potential avenues for person-centred advancements and supports for this vulnerable population.

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Helping people to identify and progress towards their personally meaningful aspirations following brain injury using PBS+PLUS

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Synopsis of session: The journey for people post-injury is often fraught with set-backs, injury-related impairments and loss of function. These can impact participation in important life roles and identity that can culminate in pessimism for their future. Without hope, engaging people in the hard work of post-injury rehabilitation can be challenging. Using the PBS+PLUS approach, we foster hope by prioritising what matters to the person and what they want for their lives, driven by a relentless optimism that there is always something that works. In this session, we will provide a semi-structured flexible framework, which guides the person, family and clinicians to identify meaningful outcomes that are personal, valued and aspirational. Strategies to collaboratively facilitate consideration of these outcomes while navigating common obstacles to determine and agree on priorities will be discussed. You will learn approaches to guide the person to work towards their aspirations through delineating them into discrete stages or goals. These goals can then become the basis for the more immediate rehabilitation focus. Managing the discordance between concurrently working on aspirations and funding body requirements will also be explored. Drawing from our application and evaluation of PBS+PLUS since 2015, case examples and real session videos will be used to demonstrate this approach in practice.

Level aimed for: Basic, Intermediate, Experienced

Learning objectives:

1. Delegates will learn a range of tools to help collaboratively identify personally meaningful and aspirational outcomes with people with brain injury, their families and their team.

2. Delegates will learn how to delineate these outcomes into discrete goals to support intervention planning and funding requests.

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*Maintaining and developing psychosocial resources for recovery and adaptation in neurorehabilitation

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Background and Objectives: The psychosocial burden of neurological injury or illness has a marked impact on long-term outcomes yet remains one of the biggest unmet needs identified by people living with neurological impairment. The dominant approach to addressing this burden has focused on treating negative pathopsychological factors. However, it is increasingly clear that it is not just the absence of negative factors, but the presence of positive factors (such as hope, self-efficacy, sense of self and belonging) that contributes to better long-term outcomes. Bolstering these psychosocial resources may be critical for people to develop their psychosocial capabilities to successfully navigate the complexities inherent in living with neurological impairment. We aimed to explore how, for whom, and under what circumstances psychosocial resources are maintained and developed in neurorehabilitation.

Methods: A realist-informed qualitative descriptive study. Participants were people impacted by neurological injury or illness and health professionals working with these populations. We drew on purposeful sampling for a diversity of experience across both participant types. Data was collecting using semi-structured interviews. Data analysis was realist-informed and drew on conventional content analysis. Context-mechanism-outcome (CMO) configurations were used as a heuristic device to guide the synthesis of data attending to the processes and contexts of care in which psychosocial resources may be developed.

Results: A series of CMOs were developed which link specific circumstances relevant to a healthcare encounter (e.g. communicating prognosis), health professional orientation (e.g. emotionally attuned and reflexive), health professional actions and activities (e.g. clear roadmap and plan), client response (e.g. sense of control), outcome (e.g. hope). CMOs were produced for a range of outcomes including hope, self-efficacy, motivation and engagement, and sense of self and identity. Each CMO offers insights into contextually-appropriate health professional orientations, actions and activities which may bolster psychosocial resources in neurorehabilitation.

Conclusion: Our findings contribute to improved understanding of how psychosocial resources are maintained and developed in neurorehabilitation so that we can harness their potential for supporting recovery and adaptation. Drawing on a positive

psychology perspective of recovery in neurorehabilitation provides novel opportunities for interventions and support for people impacted by neurological injury and illness.
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A Pilot Trial of Cognitive Behaviour Therapy for Migraine in Multiple Sclerosis

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Background and Objectives: Approximately 50% of people with relapsing-remitting multiple sclerosis (MS) have migraines and often face difficulties with cognition, mood, and fatigue. There is a need for effective non-pharmacological treatment of migraine in MS given challenges with medication adherence, stress acting as a migraine trigger, and the worsening of migraine with MS disease-modifying treatments. This study was a pilot randomised controlled trial of cognitive behaviour therapy (CBT) tailored to these conditions. We examined the feasibility and acceptability of the therapy as well preliminarily indicators of symptom change.
Methods: A sample of thirty participants with relapsing-remitting multiple sclerosis and at least three migraine days per month were recruited from MS Australia and outpatient hospital clinics nationwide. Participants were randomly allocated to receive adapted CBT or a waitlist period. The therapy was manualised and delivered by a neuropsychologist in five weekly sessions via telehealth. Primary outcome was the number of migraine days per month assessed at baseline, post-treatment, and one month follow-up.
Results: Preliminary data indicated that at the five-week endpoint, the CBT group demonstrated significantly reduced monthly migraine days relative to waitlist controls (mean difference: 3.47, 95% CI [1.39 to 5.5]). Gains were maintained at one month follow-up. The retention rate across the trial was 96.55%.
Conclusion: These findings demonstrate the feasibility of this therapy program and warrant extension to a larger-scale trial with implications for patient care, quality of life, and healthcare burden.
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Exploring Patient Engagement on a New App for Memory Rehabilitation (MEMORehab)

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Background and Objectives: Levels of motivation and engagement help determine the success of cognitive rehabilitation in patients with Acquired Brain Injury (ABI) (Williams et al., 2021). Demographic variables such as gender and age have been found to affect participation in other types of rehabilitation (Freund, 2006; Ott et al., 2022), but the influence of these factors has rarely been explored on cognitive interventions. The MEMO Rehab app provides a memory rehabilitation program over a three-month period involving six sessions with a clinician, as well as online videos, quizzes (based on video content) and computer-based exercises for learning and practicing strategies. We sought to determine how patients used the online resources.

Method: Data from the first 50 ABI patients in the MEMORehab program were considered, with respect to number of times educational videos were watched, number of times the quizzes (on video content) were tried and number of attempts on computerised strategy training exercises. Participants were divided by gender (17 female; 33 male) and by age range (Younger <50: n=13; Older >50: n=37).
Results: Overall, level of engagement was high, with only 4/50 failing to try any of the online material. Most patients (67%) accessed videos and quizzes more than once and, for those who started an exercise, the tendency was to persist until they had obtained the highest level (i.e., on average, 66% reached level 7). Men and women did not differ in average age (mean= 57). Women engaged more often with the computerised exercises than did men. On average, more women tried an exercise at least once (68% vs 48%) and they made more attempts on an exercise (11.4 vs 6.1; F=6.3, p<.02). There were no differences between men and women in the level of engagement on number of video viewings (mean = 12.5) or quizzes attempted (mean = 8.7). Age range had no significant affect on the level of engagement, though it's worth noting that there are not yet many participants aged between 20-40.
Conclusions: The high level of engagement in this web-based app indicates that ABI patients are motivated by this method of rehabilitation delivery. Women tried the computer-based exercises more often than did men, but the possible influence of success rate and etiology on these findings will be discussed. Older age was not a barrier to participation.How engagement is related to outcome is the focus of other current studies involving this app.
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An immersive virtual reality game to identify spatial neglect: The full story from conception and piloting, to efficacy and implementation analysis

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Background and Objectives: Collaboration of researchers and clinicians produces more relevant applied research. With this in mind, we consulted with clinicians at a neurosciences rehabilitation unit about the use of immersive virtual reality (iVR) in their practice. The idea for creating a spatial neglect assessment came from these discussions. Neglect is a predictor of long-term disability following brain injury—but current assessments are insensitive—resulting in underdiagnosis, and poor treatment outcomes. We set out to create, pilot, and evaluate an iVR game to assess for neglect. We conducted usability and implementation analysis to understand the potential for real-world translation and clinical uptake. Here we present the full story—from idea generation to implementation.

Method: Workshops with clinicians were undertaken for idea generation. We then created a prototype iVR game with clinical and patient feedback, created a research protocol, and piloted the game. We undertook a full study with brain injury inpatients (N = 51) and controls (N = 30) who played the game, which required visual search for a target among distractors through difficulty levels of increasing set size. We classified neglect according to an explainable mathematical definition based on multiple spatially dependent and non-spatially dependent metrics. We used normative modelling to identify visuospatial atypicality. We then conducted usability analysis with clinicians using the Think Aloud technique and Instant Data Analysis, followed by interviews based on the Theoretical Domains Framework and Theoretical Framework of Acceptability to evaluate implementation potential.

Results: Piloting indicated game play parameters (e.g., time played and data collected) and acceptability. Efficacy studies showed visuospatial atypicality was positively associated with neglect risk factors and iVR classification identified 25.5% of neglect cases compared with 17.6% on standard assessments. iVR also classified patients as having difficulties in several categories of neglect combining orientation and general attentional difficulties.

Conclusions: iVR classification independently identified neglect and novel categories of neglect more sensitively than current assessments. Usability and implementation considerations are important for successful translation into hospital settings and here we present in depth discussions on how technological advancements into neglect assessment may be implemented.

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Caring for carers: Managing changed behaviours at home in dementia

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Background and Objectives: Changed behaviours are common in dementia and significantly impact functional ability and quality of life. Pharmacological interventions to address these changes are often ineffective and accompanied by side-effects. Positive Behaviour Support (PBS) has been recommended as a viable non-pharmacological intervention for managing changed behaviours in dementia. We evaluated the utility of a family-directed PBS education program to manage changed behaviours in dementia. The PBS education program was delivered in two phases—telehealth (Phase 1) and face-to-face (Phase 2).

Methods: Forty-one family carers of individuals with dementia completed a five-week PBS education program either via telehealth or face-to-face. Over five 2-hour weekly sessions covering a dementia-specific PBS program (e.g., behaviour analysis, preventative strategies, crisis-aversion), carers learned generalisable behaviour support strategies. Carer feedback was obtained immediately after the program and after 3 months. The questionnaires comprised open-ended questions about (1) the helpfulness of the program in developing behaviour support strategies, (2) the impact of the education program on their confidence in providing behaviour support, and (3) and the delivery mode and recommendations for improvement.

Results: Thematic analysis was conducted. 36 out of 41 (88%) participants completed the questionnaire at program completion and 33 (of 41, 80%) at the 3-month follow-up. Key themes emerged: (1) increased carer understanding of beha-viour change in dementia, (2) increased carer confidence in managing challenging behaviours, (3) change in carers' own behaviour and (4) improvement in the person with dementia's behaviour (e.g., less aggressive) and mood (e.g., happier) post-education. At 3 months, these key themes remained, and carers reported ongoing use of strategies and resources provided during the education program.

Conclusions: These results indicate that a 5-week dementia PBS education program improves family carers knowledge of and confidence in providing behaviour support. Our study further demonstrates that telehealth is a viable option to administer PBS programs, increasing accessibility. Evaluation of the effectiveness of telehealth versus face-to-face delivery is ongoing. Future research is needed to further evaluate the format of the education program based on participant feedback (e.g., longer PBS education programs with one-hour sessions).

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Investigating the nature of language impairments in behavioural variant frontotemporal dementia

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Background and Objectives: Behavioural variant frontotemporal dementia (bvFTD) is a dementia characterised by personality and behaviour change. To-date, few studies have focused upon their language function, despite suggestions that similar patterns may exist between bvFTD and Semantic Dementia (SD). As patients with bvFTD may be further subclassified as "probable" or "possible", this study aimed to investigate the language function of bvFTD subgroups in reference to healthy controls and patients with SD, and to explore the relationship between language and executive function measures.

Method: Data from 43 possible bvFTD, 106 probable bvFTD, 42 SD, and 115 healthy controls were extracted from the FRONTIER research database. All participants had completed the Addenbrooke's Cognitive Examination (ACE-III), a single word processing language battery (SYDBAT) and measures of executive function (word generativity, mental flexibility, response inhibition and working memory). All data were from the participants' first assessment with FRONTIER.

Results: Both bvFTD subgroups showed significant reductions in single word language performance when compared with healthy controls, with deficits more prominent in probable bvFTD. Naming impairments were observed in approximately half the possible bvFTD group (45%), with both naming and semantic association deficits commonly occurring in probable bvFTD (51% and 58% of cases respectively). When examining performance across subtests, the pattern observed in the SD group, wherein naming performance was significantly more impaired than performance on other single word tasks, was not found in either bvFTD groups. Both the SD and probable bvFTD groups did show similar patterns regarding the superior performance on word repetition compared to other single word tasks (not found in possible bvFTD). Language performance in both bvFTD groups were consistently predicted by semantic measures from the ACE-III, with some executive functioning contributions relating to response inhibition.

Conclusion: Naming deficits appear to be common in both possible and probable bvFTD, with semantic association deficits also frequently arising in probable bvFTD. Similarities in the pattern of impairments may be observed between SD and probable bvFTD, but appear less evident in those with possible bvFTD. Response inhibition may contribute to some of the language performance deficits observed.

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A novel observational task reveals relationship between apathy measurement and behaviour in new, enriched environments in dementia

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Background and Objectives: Apathy is a pervasive symptom of dementia. Assessment of apathy has primarily depended on self- or informant-report, however, these methods are subjective and can be influenced by lack of insight and carer burden. We aimed to examine whether these measures accurately describe behaviour during a novel observational task.

Methods: Sixty-four participants (21 behavioural-variant frontotemporal dementia, 17 Alzheimer's disease (AD), 10 semantic dementia (SD) and 16 healthy controls) were recruited. Participants were introduced to a novel, enriched environment, and asked to wait for 15-20 minutes. The 'waiting room' was furnished with activities (e.g., magazines, activity books, wooden puzzles, chocolates). Participants were recorded via concealed video cameras. Recordings were examined, and behaviours were classified according to a bespoke coding scheme. The informant-rated Dimensional Apathy Scale (DAS) and the self-rated Depression, Anxiety and Stress Scale were also collected.

Results: On the DAS, all patient groups showed higher apathy than controls (all $p \leq .001$). A principal components analysis of the behaviours revealed 3 components: 1. Disengagement (looking around the room, self-grooming, non-activity); 2. Utilisation behaviour (eating, rapidly touching, manipulating objects); 3. Puzzles/reading (puzzles and flipping through pages positively loaded, reading negatively loaded). Higher disengagement was correlated with higher apathy ($r = .36$, $p = .004$) and higher depression ($r = .34$, $p = .009$). No significant relationship between the other components and apathy or depression was found. Between group analyses found that AD scored higher on disengagement than controls ($p = .002$). SD scored higher than controls on puzzles/reading ($p = .001$). No effect of group was found on utilisation behaviour ($p = .220$).

Conclusions: Ecological measures of behaviour provide additional insight into the behavioural profiles of people with dementia, beyond self- or informant-report. This novel observational task reveals a group of disengaged behaviours that correlate with apathy and depression. However, this relationship was not as strong as might be expected based on informant report alone. Further research should examine whether enriched environments may elicit behaviour in people who are otherwise apathetic in their home environment, as this may influence the development of programs for the effective management of apathy.

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The Test of Financial Skills: a new clinical tool for assessment of financial capability in dementia

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Background and Objectives: The capacity to handle money and personal finances is crucial for living independently. Cognitive decline can lead to financial mismanagement (e.g., forgetting to pay bills, overspending) and exploitation (e.g., falling for financial scams). While greater susceptibility to financial mismanagement and exploitation is commonly reported by carers of people with dementia, objective and validated clinical tools for assessment of these financial skills are scarce, often leading to no or inappropriate clinical recommendations for financial support and interventions.

Method: The Test of Financial Skills (TOFS), a novel neuropsychological test comprising financial tasks across three key areas (part 1: everyday financial tasks, part 2: scam awareness and detection and part 3: higher order financial knowledge and skills), was developed and tested in healthy older adults (n=112) and dementia patients, including mild cognitive impairment (MCI; n=16), Alzheimer's disease (AD; n=14) or behavioural-variant frontotemporal dementia (bvFTD; n=18). To evaluate construct validity of the TOFS, informant-reported measures of financial activities of daily living and susceptibility to financial scams were also collected, using the Disability Assessment for Dementia (DAD) and Social Vulnerability Scale (SVS).

Results: The TOFS showed good to excellent internal and inter-rater reliabilities. In support of the TOFS' construct validity, scores on part 1 of the TOFS correlated with DAD finance and correspondence subscale scores, and scores on part 2 of the TOFS were associated with SVS scores. Relative to controls, AD and bvFTD patients showed lower overall performance on the TOFS, whereas MCI patients did not differ significantly from controls. While AD and bvFTD patients showed similar levels of impairment on parts 1 and 3, bvFTD patients performed significantly worse on part 2 of the TOFS.

Conclusions: The TOFS shows promise as a clinical tool for assessing financial capability in older adults and people with dementia. Notably, we found important differences in the areas of financial skills impacted by different stages and subtypes of dementia. The TOFS therefore provides novel insights into the different factors that contribute to deficits in financial skills in people with dementia. Use of the TOFS in clinical settings may help guide recommendations for targeted financial support strategies.

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Introducing a symptom-led staging system for semantic and non-fluent agrammatic variants of Primary Progressive Aphasia with case studies of its clinical application

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Background and Objectives: Our aim was to develop a symptom-led staging system for semantic variant and non-fluent-agrammatic variant primary progressive aphasia (PPA). These complex dementia syndromes are associated with frontotemporal lobar degeneration and are primarily characterised by the insidious deterioration of speech and language, yet relative preservation of other cognitive abilities in the early to mid-stages. PPA syndromes pose unique diagnostic and management challenges that current resources do not fully address. We describe the development of the staging system and present two case studies to demonstrate its potential to support diagnosed individuals and their families in clinical practice.

Method: Caregivers of people with semantic and non-fluent agrammatic PPA from the UK and Australia were surveyed on the development of symptoms and functional disability under six provisional clinical stages. Responses were analysed using a mixed-methods sequential explanatory design. Two single case studies (1 semantic variant and 1 non-fluent-agrammatic variant PPA) are presented with demographic and clinical data acquired at or near the time of their presentation to speech and language services included. The use of the staging system in their clinical care is described.

Results: In both PPA syndromes, symptoms of communication impairment and non-verbal behavioural change were present from stage 1. The data revealed syndromic convergence with disease progression and the emergence of functional dependency. In addition, they showed that the illness journey was not linear and “milestone” symptoms, signalling significant illness transition, for each syndrome, were identified. These data were applied to the creation of a prototypical progression and severity scale of functional impairment: the PPA Progression Planning Aid (PPA-Squared). The presented case studies demonstrate the application of the staging system in informational counselling, for the diagnosed individual and their families.

Conclusions: We have developed a staging system informed by the lived experience of caregivers of people with semantic and non-fluent agrammatic variant PPA. This prototypical staging system has implications for clinicians and researchers, and importantly for patients and their families. The two presented case studies demonstrate the applicability of the staging system in clinical practice, and its potential to guide management and care planning.

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Fibre-specific alterations in amygdala-associated white matter tracts in the language variants of frontotemporal dementia

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Background and Objectives: Semantic dementia (SD) and progressive nonfluent aphasia (PNFA) are the two language presentations of frontotemporal dementia. Social cognitive disturbances have been reported in both syndromes in addition to their language deficits. These changes may partly be linked to amygdala atrophy, which has been observed in both subtypes. Importantly, however, investigations of the structural integrity of the white matter tracts connecting the amygdala are lacking. This study aimed to address this gap by applying a novel neuroimaging data analysis technique, fixel-based analysis (FBA), to assess fibre-specific abnormalities in SD and PNFA.

Method: Diffusion weighted imaging data were obtained from patients clinically diagnosed with SD (n=17), PNFA (n=17) and 17 matched healthy controls. Whole-brain FBA investigations compared micro- and macrostructural changes in white matter fibre density, fibre cross-section, and the product of both metrics between the patient groups and controls. Statistical significance was set at $p< .05$, corrected for family-wise error. TractSeg software was used for atlas-based white matter tract segmentation. Region of interest analyses compared FBA metrics across 17 major amygdala-associated white matter tracts as identified a priori by established human amygdala connectivity profiles.

Results: Whole-brain FBA analysis revealed extensive and pronounced left-sided white matter degeneration in both SD and PNFA, with SD exhibiting more severe white matter loss in the amygdala-associated tracts. The inferior occipito-frontal fasciculus, uncinate fasciculus and anterior commissure were significantly and selectively damaged in SD, whereas the left superior longitudinal fasciculus was more affected in PNFA. Notably, both groups showed overall greater reductions in fibre density compared to fibre cross-section, suggesting that white matter loss in amygdala-associated tracts mainly occurs at the microstructural level.

Conclusions: The language variants of frontotemporal dementia demonstrate syndrome-specific changes in amygdala-associated white matter tracts. SD exhibited more severe and exclusive white matter loss in tracts connecting the amygdala to the prefrontal cortex. These findings provide evidence for structural disturbances in the white matter tracts of the amygdala. Future studies are warranted to elucidate the clinical implications of the observed changes.

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Longitudinal changes in functional capacity, cognition, and behaviour in the frontotemporal dementias and Alzheimer’s disease

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Background and Objectives: Dementia syndromes, such as frontotemporal dementia (FTD) and Alzheimer's disease (AD), exhibit various functional, cognitive, and behavioural disturbances. These profiles, however, can vary widely both among different dementia syndromes and over time. This study aimed to investigate how functional capacity, cognition, and behavioural disturbances progress over time in a well-characterised cohort of FTD patients and in both typical and atypical AD presentations.

Methods: We recruited 126 behavioural variant FTD (bvFTD), 40 progressive non-fluent aphasia (PNFA), 64 semantic dementia (SD), 45 logopenic progressive aphasia (LPA), and 115 typical AD patients. Functional capacity, cognition, and behavioural

disturbances were measured annually over ~7 years using the Disability Assessment for Dementia, Addenbrooke's Cognitive Examination-III, and the Cambridge Behavioural Inventory-Revised carer questionnaire, respectively.
Results: Linear mixed effects models revealed disproportionate functional impairment in bvFTD at baseline and throughout the study period, relative to the other dementia syndromes (PNFA, SD, LPA, AD). In contrast, functional capacity among the other syndromes showed a more uniform pattern of decline, with less severe functional impairment at baseline and ~7-10% mean annual decline. Early functional impairments in bvFTD coincided with pronounced behavioural, eating, and motivational disturbances, which remained relatively stable over the study period. In contrast, SD patients demonstrated an escalation of florid behavioural changes including stereotypical and eating changes. While florid behavioural problems remained relatively indolent in PNFA, LPA, and AD, motivational disturbances emerged across all groups with disease progression. Finally, all patients demonstrated progressive cognitive decline over time, most severe in the LPA group.
Conclusions: Our findings provide a comprehensive overview of distinct functional, cognitive, and behavioural profiles across dementia syndromes with disease progression. Identifying pivotal progression milestones across syndromes and over the disease course will improve clinical management and reduce carer burden.
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A Review of Tools for Screening and Assessment of Acquired Neurogenic Language Disorders in Arabic

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Background and Objectives: The development of psycholinguistically, clinically and culturally instruments to study acquired neurogenic language (speaking, reading and writing) and speech disorders (articulation) has been widely reported in aphasiology in Western languages. While the majority of these tools stemmed from English-speaking countries, there has been an interest in translation, adaptation, standardization and validation of these screening and assessment tools in non-western languages including Arabic. Therefore, this review aimed to map them and identify their psychometric properties.
Method: A literature review was conducted in August 2023 following the framework of Arksey and O' Malley (2007). We searched in PubMed, Web of Science and Scopus databases. We identified 116 articles published in English that addressed the screening and assessment of acquired neurogenic language disorders in adults in Arabic. Based on the inclusion criteria, 22 suitable studies were selected. The clinical tools have been categorized and summarized according to demographic, psycholinguistic and psychometric features, ranging from early screening to assessment.
Results: The majority of studies focused on stroke aphasia (n=17), dysarthria (n=4), diglossic aphasia (n=1) while none addressed apraxia of speech, alexia or agraphia. There are a number of factors to consider when translating, adapting, normalizing and validating tools for screening and assessment of acquired neurogenic language disorders in Arabic, including psycholinguistic, sociolinguistic, demographic and psychometric variables. Different biases have been identified such as reduced sample size, lack of guidelines and theoretical framework based on Arabic typical features, Arabic diglossia and colloquial status in different Arabic-speaking countries which limited the use of assessments and their crosslinguistic dissemination.
Conclusions: There is a need to implement psycholinguistic and psychometric equivalent tools for screening and assessment of acquired neurogenic language disorders in Arabic. As a result, the overlapping of factors including pluriglossia, biculturalism and acculturation may lead to clinical variability, heterogeneity and inconsistency in administrating these instruments for adults speaking different Arabic dialects.
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Developing Clinical Practice Guidelines for the Treatment of Psychosocial Difficulties in Adults with Moderate-to-Severe TBI: Applying Novel Methods for Identifying Guideline Priorities and Scope

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Background and Objectives: Moderate-to-severe TBI can significantly impact social, emotional and behavioural functioning, leading to disrupted independence, relationships and community participation. Despite growing evidence, there are no comprehensive guidelines for the management of these psychosocial difficulties. To inform development of such guidelines, we aimed to integrate evidence availability with stakeholder input to identify practice priorities and establish the guideline scope.
Method: Scoping reviews were conducted to establish the availability of evidence. Priority surveys with expert clinicians and individuals with lived experience of TBI were also completed. A panel comprising of 23 experts convened at a one-day workshop to discuss scoping review and survey results and decide on priorities. Priorities and guideline scope were then iteratively refined by a review committee and a guideline steering group, leading to a scoping document specifying the clinical questions the guidelines will address.
Results: The scoping reviews identified 23 (from 4,887 records), 105 (from 18,701 records) and 57 (from 6,139 records) relevant intervention studies in the domains of social cognition, mental health, and challenging behaviours, respectively. Survey results indicated a preference for most psychosocial difficulties within each of these domains to be prioritised and identified key treatment outcomes. Availability of relevant evidence was also influential in deciding on priorities. A need for different processes and evidence types to be used for guidelines on interventions for First Nations people with TBI was identified.
Conclusions: The novel methodology used to establish the guideline scope will enable development of practice guidelines

that reflect the priorities of people living with psychosocial difficulties post-TBI and can be implemented by clinicians. The GRADE approach will be used to develop guidelines based on the evidence available in each priority area.
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Examining intervention, context, and implementation variables to underpin an evidence-based framework for peer support after brain injury

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Background and Objectives: Formal service provision often fails to address the ongoing needs of people with traumatic brain injury (TBI) and their family in the context of a social and relational process of learning to live with and adapt to life after TBI. Peer support is a source of support, internal to a community, which draws on knowledge derived from personal experience. Peer support interventions have been found to have a positive effect on outcomes in a variety of health conditions. However, there is little published evidence about peer support after TBI. Our research aimed to a) test the effectiveness of a peer support intervention for improving participation, health, and well-being after TBI; and b) explore key process variables related to intervention, context, and implementation to underpin an evidence-based framework for ongoing service provision. In this presentation, we will share emerging insights on the latter.
Method: A randomised pragmatic waitlist trial with process evaluation. Consistent with principles of implementation science research, this research was designed to consider translation from the outset. Peer support services were established in three locations in the North Island of Aotearoa New Zealand, with a service coordinator appointed in each. Process data included intervention-related data, service coordinator journals, mentor debriefing sessions, interviews with mentees, mentors, and service coordinators.
Results: Preliminary findings from process data: a) highlight the importance of foregrounding and legitimising lived and shared experience as a critical component of peer support in training and support; b) challenge assumptions around matching on injury and demographic characteristics when pairing mentors and mentees; c) indicate there are tensions and trade-offs between flexibility and structure in intervention format which need to be carefully balanced; and d) provide insights into different mentoring styles and approaches taken up by mentors depending on the mentor, context and the mentee-mentor relationship.
Conclusions: An in-depth analysis of process data collected during this trial provides rich insights into key service parameters that will optimise the design of peer support interventions for people experiencing the enduring impacts of TBI. These findings will inform the development of a service framework to support routine implementation of peer support after brain injury.
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“I just kept growing in myself and developing and building my confidence": the impact of peer support for mentors

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Background and Objectives: We have recently carried out a pragmatic randomised trial to test the effectiveness of a peer support intervention for improving participation, health, and well-being after traumatic brain injury (TBI). While this intervention is targeted at supporting long term outcomes after TBI with the assumption this will reduce the burden for those with recent injury experience, our feasibility research highlighted this reciprocal relationship has the potential to offer wider benefits to those involved. As such, a secondary aim of our trial was to explore mentor experiences and perceived impact of their involvement in the delivery of a peer support intervention. In this presentation, we will share findings relevant to this secondary aim.
Method: A nested qualitative study embedded within a randomised pragmatic waitlist trial. Across three locations in the North Island of Aotearoa New Zealand, 14 people with TBI were employed as mentors. Mentors were >18 years, up to six years after TBI, and at least one-year post discharge from inpatient rehabilitation. Data included reflective notes and transcripts from group debriefing sessions carried out with mentors during the active intervention period, and transcripts from in-depth interviews carried out with each mentor on study completion. Data was analysed using Reflexive Thematic Analysis.
Results: Being employed as a mentor helped mentors feel that their experience of TBI was worth something. The mentors felt valued and able to make a valuable contribution. The training and experience of sharing injury and recovery experiences and supporting others, provided the space and opportunity to re-engage with their own experience. They learned from each other and found skills and capabilities they thought they had lost or didn’t recognise they possessed. These experiences were perceived as important to their own ongoing recovery and adaptation; and assisted them to transition into other roles.
Conclusions: While the benefit of peer support for those receiving the support is often the primary point of interest, we may underestimate the impact for mentors whose own recovery remains an enduring process. Reflecting on these experiences prompts the need to re-evaluate our understanding of rehabilitation, including benefits of additional input years post-TBI and whose experience holds significance.
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Facilitating community integration following acquired brain injury

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Background and Objectives: Community integration is acknowledged as a primary goal of rehabilitation following acquired brain injury (ABI). Although there are a number of frameworks that describe the components of community integration, these are not congruent with research exploring the lived experience of those with ABI. Further, this literature does not appear to be translating into clinical practice. This research sought to explore the process of community integration from the perspectives of adults with ABI and generate clinical recommendations for those working with this population.

Method: Using Interpretative Descriptive methodology, people with ABI who had recently discharged from inpatient rehabilitation were interviewed in their own homes. Eight semi-structured interviews explored participants experiences of community integration; the resources required; personal choices; influence of social networks; the physical and attitudinal environment; and complexities relating to the activities undertaken. Participants were provided with opportunities to demonstrate what they had been doing, in addition to articulating it through interview. Data analysis involved a four-stage process of comprehending, synthesising, theorising and reconceptualising.

Results: From the analysis four interconnecting themes were constructed: Growing into a new way of community living, Living up to expectations, (Re)Building social connections, and Engaging in meaningful occupations. Growing into a new way of community living is a four-stage process that offers insights into the dynamic, iterative and temporal aspects of community integration. Living up to expectations incorporates expectations from a variety of sources that either facilitated or challenged integration. (Re)building social connections highlights the importance of developing social networks to support community engagement. Engaging in meaningful occupations assists people with ABI to measure their progress, remain motivated, build relationships, and reduce dependency on others.

Conclusions: A number of clinical recommendations have been generated from these findings, which can be incorporated into service delivery to facilitate community integration for people with ABI. Most importantly, clinicians should consider the importance of engagement in meaningful shared occupations that create social connections and develop a sense of belonging in the community.

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Managing challenging behaviour after traumatic brain injury: The results of an RCT designed to measure effectiveness

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Background and Objectives: Families of people with a traumatic brain injury (TBI) often find it difficult to manage challenging behaviours in the home. “The Carers Way Ahead” (CWA) is a program with seven on-line modules designed to provide education and support to families. Two modules are educational, four focus on specific behaviours, i.e. anger, apathy, disinhibition and social difficulties and one focuses on carer self-care. In each, four families are depicted in colourful graphics and a psychologist provides tips and advice. A randomized controlled trial was conducted to determine whether CWA was effective for improving carer well-being and reducing the severity and frequency of challenging behaviours

Method: 38 carers (mainly parents, spouses or siblings) of adults with TBI participated. Following initial assessment of mood, carer strain and extent of challenging behaviours, they were randomly allocated to active treatment or waitlist (N = 19 respectively). During active treatment participants worked through the modules and could also engage with a clinical psychologist who reinforced the messages and provided additional support. The same measures were administered after the program was completed.

Results: The treatment group demonstrated significant improvements in depression, anxiety and stress relative to those in waitlist. Both groups improved in reported carer strain (i.e. no treatment specific effect). No treatment effects were found in the number or severity of challenging behaviours.

Conclusions: An on-line resource such as CWA seems to be beneficial for improving carer well being even in the absence of a demonstrable change in overt challenging behaviours on the part of the person with TBI.

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Experience of adapted cognitive behaviour therapy to address sexuality changes after traumatic brain injury: a qualitative study

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Background and Objectives: Sexuality can often suffer adverse effects in individuals who sustain traumatic brain injury (TBI), impacting up to 50% of those affected. However, scant research has delved into assessing the effectiveness of targeted interventions in addressing these changes. Gaining insight into the participant experience of undergoing treatment for post-TBI sexuality issues is a crucial aspect of intervention evaluation. This study aimed to investigate participants with TBI experience of undergoing eight sessions of a novel cognitive behaviour therapy (CBT) intervention designed to help both couples and singles improve sexual wellbeing after TBI.

Method: The study comprised eight individuals with moderate to severe TBI, of whom 50% were male. The average age of the participants was 46.38 years (standard deviation = 13.54 years). The research methodology incorporated a qualitative interview approach, using a six-phase reflexive thematic analysis method.

Results: Despite variability in participant characteristics, the findings suggested that participants with TBI experience reflected that of a positive treatment journey. Key themes identified included contextual factors that preceded treatment, factors that facilitated treatment engagement, outcomes derived from the treatment experience, and feedback provided on reflection. This nuanced understanding not only provides insight into the client experience of the intervention but also offers preliminary evidence that supports the efficacy of this novel CBT intervention in addressing the intricate and enduring issues related to sexuality post-TBI.

Conclusions: By conducting in-depth qualitative interviews with participants who underwent a novel CBT intervention, the study sheds light on their journey and the effectiveness of treatment. The key themes identified have enriched our understanding of the intervention's impact on participants, thus offering promising preliminary evidence of its efficacy in addressing complex and persistent sexuality challenges experienced by individuals after TBI. This research contributes to the growing body of knowledge in the field and underscores the significance of targeted interventions in enhancing the well-being of TBI survivors in the realm of sexuality.

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Cognitive Behavioural Therapy versus Health Education for Sleep Disturbance and Fatigue Following Acquired Brain Injury:

A Randomised Controlled Trial

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Background and Objectives: Sleep disturbance and fatigue are highly prevalent after acquired brain injury (ABI), and associated with poorer functional outcomes. Cognitive behavioural therapy (CBT) is a promising treatment for sleep and fatigue problems after ABI, although comparison with an active control is needed to establish efficacy. We compared CBT for sleep disturbance and fatigue (CBT-SF) with a health education intervention (HE) to control for non-specific therapy effects.

Methods: In this parallel groups, randomised controlled trial, 126 individuals aged 16-71 (M= 47.83, SD= 14.30, 53% male) with traumatic brain injury (TBI) (n=51) or stroke (n=75) and clinically significant sleep and/or fatigue problems were randomised 2:1 to receive 8 weekly individual sessions of either CBT-SF (n=86) or HE (n=40), both adapted for cognitive impairments. Groups did not differ significantly in demographic, injury, or cognitive variables at baseline. Participants were assessed at baseline, post-treatment, 2-months and 4-months post-treatment. Primary outcomes were the Pittsburgh Sleep Quality Index (PSQI) and Fatigue Severity Scale (FSS), with a secondary measure of mood (Hospital Anxiety and Depression Scale). Treatment was delivered in person (n=30) or via telehealth videoconferencing (n=96).

Results: CBT-SF resulted in significantly larger improvements in sleep quality compared to HE after treatment, and treatment gains were maintained at follow-ups (p<.001, 95% CI -2.34 – -0.65). There were significant reductions in fatigue after CBT-SF, maintained at all time points (p<.01, 95% CI 0.10 - 0.38). The HE group showed delayed improvement in sleep quality at 2- and 4-month follow-up, and fluctuating improvements in fatigue after treatment and at 4-months, but not at 2-month follow-up. Both groups had significantly reduced anxiety and depression (p<.0001, 95% CI -2.15 – -1.25). Injury type and face-to-face or telehealth delivery mode did not significantly impact treatment outcomes.

Conclusions: CBT-SF delivered in person or via telehealth is a uniquely beneficial treatment for sleep disturbance and fatigue after TBI and stroke, over and above HE, with treatment gains maintained over time. HE may provide delayed benefit for sleep and fatigue, possibly due to healthy lifestyle changes. This study is the largest of its kind, and provides a foundation for translation of this treatment into the broader community.

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“I am me again”: Co-Designing a Cyberscam Recovery Intervention Framework for People with Acquired Brain Injury

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Background and Objectives: Over $3 billion was reported lost due to scams in Australia in 2023 (ACCC, 2023). While anyone can be scammed, people with acquired brain injury (ABI) are more vulnerable and experience devastating impacts. Despite the significant financial loss and deleterious psychological impacts, there are no available psychological treatments tailored to cyberscam recovery. To address this unmet need, we aimed to co-design a cyberscam disengagement and psychological recovery intervention framework with and for people with ABI. We also aimed to explore the co-design experience of including a large group of people with ABI, close others and clinicians in designing an intervention together. Co-design is gaining prevalence in ABI as an integral aspect of research and practice that emphasises person-driven and inclusive approaches.

Method: We applied the Knowledge to Action framework (Graham et al., 2006). Fifteen participants took part in the co-design process. Five were facilitator-participants who were part of the project team and ten were participants recruited through convenience sampling. In total, adults with ABI (n=5), family members/carers (n=3) and clinicians/service provider (n=7) participated in 20 hours of co-design focus groups (2.5h x 8) in hybrid format to co-develop and review topics and content, intervention measurement tools, promotion and sustainability plans. Semi-structured qualitative interviews were used to explore the co-design experience. Reflexive thematic analysis was used.

Results: A comprehensive and flexible cyberscam recovery intervention framework, following a biopsychosocial approach was co-designed. The excellent participation and engagement within the co-design groups allowed the perspectives of living experience, caregivers and allied health clinicians to be authentically integrated. Preliminary themes include: “I feel privileged”; “Learning experience”; “Equal opportunity to speak”; “Validating of my experiences”. Practical recommendations for improving the co-design process for people with ABI were also provided.

Conclusions: Overall, a world-first co-designed cyberscam recovery intervention framework was developed and will be piloted for feasibility and efficacy in people with brain injury. Furthermore, this study contributes to the expanding body of literature endorsing the use of co-design methodology with individuals with ABI, family members/carers and clinicians in an inclusive manner.

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Translating the INCOG 2023 guidelines into clinical practice: lessons in neuropsychological rehabilitation

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Synopsis of session: Two clinicians, a neuropsychologist and a speech language therapist, will present clinical cases with video excerpts, illustrating lessons learnt in applying up to date clinical practice guidelines into real-world settings. Aspects of the INCOG 2023 guidelines will be reviewed, including recommendations relating to self-monitoring, metacognitive strategy training, and cognitive-communication rehabilitation. Cases presented will illustrate the importance of clear objectives and review using goal-attainment scaling, clear communication within team, the importance of initial training and ongoing fidelity checking, and the need for flexibility to account for changing psychosocial situations. In addition, case examples will be presented that underscore the importance of both psychological and neuropsychological formulations to guide intervention.

Level aimed for: This talk is aimed for clinicians with Basic and Intermediate levels of experience in neuropsychological interventions.

Learning objectives: Delegates will come away from this session with an understanding of:

1. Elements of the INCOG 2023 guidelines relating to executive

dysfunction and cognitive communication difficulties.
2. A list of practical considerations to review before implementing neuropsychological interventions in clinical practice.
3. An understanding of how to use case-based formulation to guide clinical practice in rehabilitation.

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Mystify me no more: Using the Rehabilitation Treatment Specification System (RTSS) to make brain injury interventions transparent and replicable

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Synopsis of session: Most clinicians are familiar with the International Classification of Functioning, Disability, and Health (ICF; World Health Organization [WHO], 2021). The ICF ensures clinicians consider all aspects of a client when assessing and selecting areas for intervention. What it doesn't do is elucidate the how of intervention. The Rehabilitation Treatment Specification System (RTSS; Hart et al., 2019) fills this gap. Cognitive rehabilitation is multi-factorial and therefore complex. Advancing knowledge and skill in this important area of practice has been hindered by poor interprofessional understanding of interventions and lack of clarity in describing exactly what we do, whether in the research literature or in clinical practice (Hamilton et al., 2022). This session will introduce participants to three key elements in the RTSS: targets, aims, and ingredients. Targets and aims provide clarity on the concept of "goals" so that all clinicians have a shared understanding of exactly what they hope to achieve and when. Ingredients are the actions, words, and objects used by clinicians to help a client achieve their goals. Until the advent of the RTSS, ingredients were rarely and usually only generically described, making it impossible for any clinician to replicate what another clinician or researcher did. Specifying targets, aims, and ingredients is a crucial step toward demystifying cognitive rehabilitation and will improve the efficiency of our interventions and the speed of knowledge transfer.

Level aimed for: Basic, Intermediate, Advanced

Learning objectives:
1. Define "target", "aim", and "ingredients."
2. Categorize intervention components into targets, aims, and ingredients using clinical practice examples.
3. Explain the value the RTSS brings to clinical practice.
4. Achieve a 3/5 on the "I'm ready to use the RTSS" scale.

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Towards the development of an interactive information platform: educational priorities and e-learning preferences of children and adult relatives with lived experience of parental acquired brain injury - a national survey

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Background and Objectives: About a third of people who sustain an acquired brain injury (ABI) have dependent children aged under 18 years. However, children are typically overlooked in clinical settings and there is an identified lack of age-appropriate resources. The development of supportive interactive technology has been previously recommended. This study aimed to survey children and adult relatives with lived experience of parental ABI (pABI) to assess their educational needs and preferred (e-)learning methods.

Method: A national cross-sectional survey study was employed (2020-2021), using Qualtrics software, targeted to children 11-17 years and adult family members with a direct relationship to a parent with ABI living in Australia. Survey development was guided by the Checklist for Reporting Results of Internet E-Surveys (CHERRIES). The survey comprised four sections: socio-demographic and pABI information; brain injury educational needs; preferred (e-)learning method and platform (e.g.phone, tablet, PC). Using IBM SPSS Statistics, data were analysed performing descriptive statistics and relevant subgroup analysis using Chi-square tests.

Results: In total 62 participants, 15 children (53% female) and 41 adults (76% female), completed the survey. Most children (80%) expressed a need for an introduction to brain injury, with up to half wanting information about rehabilitation (47%), brain facts (47%), and hospital systems (40%). Adults' educational needs were mostly (>87%) related to ABI severity, diagnosis and treatment, recovery and impacts (e.g. mental and emotional health and impact on family). Preferred e-learning methods (>50%) included YouTube and other videos using a tablet or mobile phone, as well as face-to-face and peer stories. Preferences differed by age and gender groups, as well as time post-injury.

Conclusions: This survey determined educational priorities and support needs, in addition to e-learning preferences, of children and adult relatives with lived experience of pABI. The survey results have informed the prototype of the 'Brain Connect' platform, a "world first" interactive information platform. Brain Connect is currently under co-design development and will provide children and families with access to information, tailored to their age, gender and time post injury.

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Reducing lifetime cost of care and family burden post catastrophic injury through an interdisciplinary therapy based transitional program at Brightwater Marangaroo, Western Australia

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Background and Objective: Costing $35.8 billion in 2022-23, the federal government will spend more on the National Disability Insurance Scheme (NDIS) this year compared to Medicare, $30.8 billion and hospitals, $27.3 billion; creating debate about its sustainability and plans to clarify 'reasonable and necessary'. This is a single case study of a 59 year old female unsuitable for further inpatient stay 4.5 months post ABI with multi-morbidities. A NDIS plan of $786,567 was approved to facilitate hospital discharge directly to long term accommodation. This study demonstrates the cost benefits of transitioning to Brightwater's Transitional Accommodation Program (BW TAP) to enable adjustment, reduce disability and lifetime cost of care prior to discharge home.

Method: The Northwick Park Dependency Score (NPDS) and Care Needs Assessment (NPCNA) were used to compare changes in dependency and generic estimated care hours and cost. Compared cost of NDIS plan provided and Department of Health (DoH) funding at BW TAP. Changes in disability measured using the UK FIM+FAM. Carer burden measured using The Zarit Burden Interview. Outcomes compared from admission to discharge over the 12 months in transition.

Results: NPDS score changed from 69/100 (Very high dependency) to 27/100 (medium), a change in weekly daytime care hours from 148.75 to 82.25, a reduction of 3,458 hours per year. Night support improved from a wake to sleep shift. Using the

NDIS price guide, this equates to an annual reduction of $353,676 (44.6% cost reduction). A lifetime cost savings of $5.6 million. DoH funds BW TAP $250,025 yearly per bed; includes core supports, nursing and therapy aimed at building capacity. Compared with her NDIS plan of $598,375 provided for 1:1 supports (core, irregular, nursing); equates to $348,350 saved by transitioning through BW TAP. UK FIM + FAM from 68 to 126 / 210. Improvements in eating, grooming, bathing, dressing, continence, mobility, communication and emotion. Zarit Burden Interview Score from 29 (high) to 15/48 (mild to moderate burden).

Conclusion: BW TAP provides a goal oriented, interdisciplinary care model incorporating therapy and nursing into day to day supports allowing consistent practise of skills learnt, encouraging neuroplasticity. This case study demonstrates the effectiveness of the program's unique model interfacing between the DoH and NDIS, improving capacity, increased family adjustment time, reducing burden and lifetime cost of care.

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Improving dementia knowledge and intentions towards healthy lifestyle choices - a targeted education video for young adults

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Background and Objectives: While not foremost in young adults' minds, forty percent of lifetime dementia risk may be due to modifiable factors that can be mitigated through early intervention. Improving dementia knowledge in young adults and encouraging risk-reducing behaviours across the lifespan may prove important in lowering dementia incidence over time. This study aimed to develop a brief educational video, designed specifically for young adults, to test its impact on dementia knowledge and perceptions regarding when healthy lifestyle choices should be implemented.

Methods: An online, randomised controlled study was conducted with 88 young Australian adults, aged between 18-24 years. Participants were allocated to view either an age-targeted short dementia-specific video ("Let's Talk Dementia"; n=41) or a broader health-related video ("Let's Talk Health"; n=47). Participants were assessed at three timepoints (baseline, immediate post-intervention, and 2 weeks later) on their dementia knowledge via a series of true/false statements and asked the ideal age to commence risk-reducing lifestyle changes.

Results: Videos were perceived favourably, with 90% of the intervention and 83% of control participants indicating the videos were relevant to them. No baseline differences were found between groups for any background or assessment variable, with mean accuracy of dementia characteristics at 52% and knowledge of dementia risk factors at 42%. At immediate post-intervention, the intervention group significantly improved their knowledge of dementia characteristics (to 70% accurate) compared to the control group, who remained at 55% (group x time interaction effect: $F(1,86) = 28.113$, $p <.001$). Both groups improved their knowledge of risk factors (76% for intervention group; 58% for control group) although accuracy was greater at post-intervention for the dementia video group ($t(87) = 4.24$, $p <.001$). Of those who completed the follow-up, improvements in knowledge were maintained (timepoint 2 vs 3 : $t(30) = 0.48$, $p=.634$). Attitudes towards early implementation of risk-reducing behaviours were positive at baseline, with 69% of participants believing this should begin in early life. By immediate post-intervention, this increased to 93% of participants.

Conclusion: Age-targeted educational videos can increase dementia knowledge and encourage positive attitudes towards healthy lifestyle choices in young adults. Future studies should measure behaviour change.

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Younger Onset Dementia Service Model

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Background and Objectives: Brightwater has developed a Service Model to support and enable people living with Younger Onset Dementia (YOD) that incorporates a model of care and potential YOD services. YOD is dementia diagnosed under 65 years of age, it is estimated that there are 3000 people living with YOD in Western Australia (WA). People diagnosed with YOD are required to navigate dementia services for older adults and the National Disability Insurance Scheme that was not designed for people with progressive and terminal neurological conditions. They cannot enter residential aged care, disability services are not designed for people living with YOD and staff are not trained in dementia. The Service Model aligns with the theme of "Looking Ahead: Innovations and Aspirations" to reflect ASSBI's vision towards supporting innovation in knowledge and practice for best possible treatment and care.

Method: Brightwater undertook a review of evidence surrounding YOD and consulted with people living with YOD, families, Dementia stakeholders and service providers. An evaluation was undertaken of sites for a YOD Supported Independent Living (SIL) home including consultation with Dementia Training Australia and people with lived experience. A survey of internal staff was undertaken to determine knowledge and experience of YOD and training requirements.

Results: There is no clear pathway following a YOD diagnosis in WA. Gaps in services included: multidisciplinary reablement services; YOD respite and permanent care options; peer support and social opportunities. A Model of Care was developed with intent statements for participants of: understanding; autonomy; purpose; trust; connected; and continuity. A Service Model was developed that incorporated: multidisciplinary approach; reablement and best practice; relationship centred care; enabling environments; community participation; integrated service delivery; skilled staff and active care; and a household model. Specific YOD services options include: a multidisciplinary team to deliver reablement based services; a SIL Home; respite; education, peer and social support; a community of practice and referral network.

Conclusions: Brightwater seeks to become leaders in supporting and enabling people living with YOD and their families to access and follow a clear pathway of reablement based services that have been informed by lived experience and evidence based.

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Concussion knowledge and attitudes towards sport and activity: A nationally representative survey of Australian parents

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Background and Objectives: Timely recognition of concussion and evidence-based management is key to optimising recovery and reducing risk of persisting symptoms. Parents have a key role in identifying a potential concussion, seeking healthcare, and guiding a child's recovery and return to activities. Understanding knowledge gaps and confidence in this role can identify education and resource needs to support parents and improve child outcomes. Misconceptions that may be driven by media and community messaging around concussion has the potential to influence parent attitudes towards sport and activity participation. Most research addressing these issues is drawn from Emergency Department settings, or international samples of high school or collegiate athletes. This study aims to explore knowledge and attitudes toward concussion amongst a nationally representative sample of Australian parents.

Method: The Royal Children's Hospital National Child Health Poll is a periodic online survey of a sample of Australian parents with at least one child aged 0-17 years. A random sample selected from a consumer panel of over 350,000 adults, and stratified by age, sex, and state, were invited to participate. Administered in September 2023, data collected included child concussion history, sport participation, parent concussion knowledge, and attitudes towards sport and activity participation. Results were weighted by parents' age, sex, number of children, socioeconomic status, state, and indigenous status, to reflect the distribution of the Australian population using figures from the Australian Bureau of Statistics.

Results: 1,951 parents, representing 3,257 youth completed the survey. Only 15% of parents reported they were very confident in recognising signs of concussion and 27% were very confident about knowing how to manage their child's recovery and return to activities. Eighty-five percent of children had a parent report worry about their child sustaining a concussion in contact sports, regardless of whether they currently played. For approximately 50% of children aged over 3 years, parent concern about concussion risk affected decisions about which sport and physical activities children could participate in.

Conclusions: Only a small proportion of Australian parents report a high level of confidence recognising and managing paediatric concussion. The risk of concussion commonly affects parents' decision making around their child's sport and activity participation.

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Evaluation of a supported primary health care pathway for mild traumatic brain injury

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Background and Objectives: Best-practice guidelines recommend that patients are followed-up to check if they have recovered following a mild traumatic brain injury (mTBI) and to refer to concussion services, if needed. However, in New Zealand, rates of follow-up are low and access to concussion services can be delayed. This study aimed to determine if a supported health care pathway could improve rates of follow up and facilitate access to concussion services for those at risk of prolonged recovery.

Method: A quality improvement project to evaluate the implementation of a supported health care pathway for mTBI patients aged ≥8years. The pathway included a decision support tool, funded follow-up appointments, clinician training and patient resources. The proportion of patients receiving a follow-up appointment by type and time from injury were extracted from the Accident Compensation Corporation database between 18/05/22 and 30/06/23 and compared to national data prior to implementation.

Results: Data were extracted for 220 patients, with a mean age of 31.5 years, 51.4% female and 21.4% Māori and Pacific. There was an increase in the proportion of patients receiving a follow-up from 36% pre-implementation compared to 56.8% post-implementation. Time to concussion service reduced from an average of 55 days to 37 days.

Conclusions: This quality improvement project provides initial evidence for implementation of a supported health care pathway for mTBI. Digital health infrastructure is needed to support systematic uptake of the pathway and enable access for all primary care practitioners.

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"…. I don't want to fail…" Successful return to study with persistent post-concussive symptoms

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Background and Objectives: Persistent post-concussive symptoms are one of the most difficult injuries to diagnose and manage. This is due to the absence of a gold standard for diagnosis, variations in clinical presentation and the significant variability in each individual's presentation and course of recovery. Such variables are the catalyst for why an individualised approach to cognitive management is recommended. Despite this knowledge, most position and consensus statements contain general recommendations regarding cognitive recovery and successful return to study post-concussion, which may include academic adjustments. Such recommendations, however, do not provide sufficient details regarding the timing, duration, nor other specifics regarding how to proceed for successful return. This presentation will highlight the clinician's perspective of working within a multidisciplinary Concussion Clinic and how best to manage students experiencing persistent post-concussive symptoms.

Method: Statistics from the clinic including percentage of students, mechanism of injury and rates of recovery were extracted. Review of assessment processes, support provided, guidelines for treatment and intervention based on EBP for successful return to study.

Results: Presentation of suggested guidelines around assessment and treatment for students experiencing persistent concussive symptoms from Year 10 to University. Process for support explained to include concussion education; individualised pacing; investigation of extraneous impacts; impact of personal traits including resilience, regaining control, message of hope and change in focus from grades to passing as well as applying for special consideration for assignments and exams.

Conclusions: This presentation will provide a descriptive analysis of the use and effectiveness of successful strategies to be used for students returning to study with persistent post-concussive symptoms including personalised anecdotal lived experience commentary from students, families and schools.

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The protective role of resilience in the reporting of post-concussive symptoms within a non-clinical sample

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Background and Objectives: Despite being common following a brain injury, post-concussive symptoms (PCS) are highly prevalent in healthy and non-concussed individuals. Psychosocial factors likely subserve the maintenance of symptoms, and numerous studies have identified prominent risk factors associated with post-concussive symptom reporting (e.g. history of depression). However, few studies have investigated protective factors in this context. The aim of the current study was to examine the relationship between resilience and PCS, and to identify the factors subserving resilience within this relationship.

Method: Healthy and non-concussed participants (n = 283, Mage = 22.70 years) completed questionnaires examining PCS (Rivermead Post-Concussion Symptom Questionnaire) and resilience (Resilience Scale for Adults), together with a screener of background demographic/clinical factors.

Results: Resilience negatively predicted PCS above and beyond the effect of demographic and clinical factors previously implicated in the reporting of PCS. Interestingly, heightened "perception of self" was the resilience factor uniquely associated with PCS symptoms. The final model accounted for 33% of the variance in PCS. Overall, female gender, a history of headaches, and diagnoses of attention-deficit/hyperactivity disorder and depression, and reduced "perception of self" were all predictive of greater PCS (ps < .05).

Conclusion: Resilience, particularly perception of self, is a positive protective factor in the reporting of PCS. These findings highlight the importance of early identification of less resilient individuals following trauma-such as a mild traumatic brain injury and provide a potential rationale for the incorporation of resilience-based rehabilitation programs into the recovery process, particularly those that promote greater self-efficacy and self-competency.

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Data Sovereignty in the AUS-mTBI study: Having Aboriginal and Torres Strait Islander control over Aboriginal and Torres Strait Islander data

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Background and Objectives: National and international collaborative data collections, resultant 'big data' sets, use of linked data have become increasingly valued in western research. However, Indigenous peoples have raised concerns about ownership, interpretation and use of this data which often stereotypes priority populations and reinforces negative narratives around health outcomes and causality. The notion of data sovereignty is prominent in seeking to address these issues.Indigenous data sovereignty "…is the right of Indigenous peoples to determine the means of collection, access, analysis, interpretation, management, dissemination and reuse of data pertaining to the Indigenous peoples from whom it has been derived, or to whom it relates" (Walter et al., 2020). This paper outlines the development of a Data Sovereignty Plan for the AUS-mTBI study (MRFF, 2022-2025) that ensures clear Aboriginal and Torres Strait Islander governance over Aboriginal and Torres Strait Islander participant data. AUS-mTBI aims to improve outcomes for all Australians after mild traumatic brain injury (mTBI) through collection of the first comprehensive national data enabling better prediction of recovery and direction to relevant services. The Data Sovereignty Plan is part of a sub-study currently underway, focused on developing culturally secure research processes within AUS-mTBI.

Method: The Data Sovereignty Plan was devised through a series of meetings of the AUS-mTBI Aboriginal and Torres Strait Islander Advisory Group. It aligns with principles of Aboriginal control of the data, contextualised and disaggregated data, relevant data empowering sustainable self-determination, data structures accountable to Indigenous peoples.

Results: The operationalisation of data sovereignty in a Data Sovereignty Plan provided researchers with the challenge of translating principles into communication and research practice - both to share knowledge and to gain a shared understanding that could maximise the benefits to stakeholders and participants. The formation of an Aboriginal and Torres Strait Islander Data Governance Sub-committee to oversee and monitor data collection, interpretation and dissemination was a central component.

Conclusions: The AUS-mTBI Data Sovereignty Plan will constitute a template for future projects endeavouring to grapple with issues related to operationalisation of sovereignty and governance in Aboriginal and Torres Strait Islander research.

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Social Cognition in Paediatric Acquired Brain Injury: A Systematic Review and Meta-Analysis

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Background and Objectives: Social dysfunction is one of the most debilitating and persistent problems after paediatric acquired brain injury (ABI). Central to successful social functioning is the adequate development of social cognition, a set of mental processes known to be vulnerable to the effects of brain injury. The purpose of this review was to provide a systematic and quantitative summary of recent literature relating to social-cognitive outcomes following paediatric ABI.

Method: Fifty studies published between 2000-2023 were summarised in terms of participant, injury-related and methodological characteristics, with 32 of these studies contributing to meta-analyses of social-cognitive domains at two distinct time points post-injury.

Results: Children with mild traumatic brain injury (mTBI; but not moderate to severe) performed worse than control participants on tests of social cognition 6 to 23 months post-injury. Children with moderate to severe TBI, or alternative kinds of ABI, who were more than 24 months post-injury also performed worse than controls. Significant differences were found between TBI groups and controls for domains of social cognition including moral reasoning and theory of mind, but not for social problem solving. There were insufficient numbers of studies to investigate emotion recognition, empathy and pragmatic language.

Conclusions: Overall, findings suggest that children who sustain an ABI are vulnerable to long-standing social-cognitive deficits. Several factors limited the ability for the review to make broader conclusions including an absence of research at the acute stage of injury, studies focused on moderate to severe TBI

groups (despite mTBI being more prevalent), studies examining theory of mind over other sub-domains, studies combining across ABI severity and type, and a lack of available standardised/age-normed assessment measures. More research is needed to understand the lack of difference in social cognition between moderate to severe TBI and controls for 6 to 23 months injury. Potential explanations include the low number of studies, or the prevalence of younger children in the included mTBI groups. However, given that the vulnerability of the social brain network to even mild injury was evidenced in this review, it is proposed that the development of effective social-cognitive interventions for survivors of paediatric ABI is a vital avenue for future research.
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Post-traumatic Amnesia in Children: Phenomenology of Behavioural Disturbances and Development of a Prototype Scale

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Background and Objectives: Post-traumatic amnesia (PTA) is a period following traumatic brain injury (TBI) during which a patient is disoriented and amnesic for ongoing events and likely to experience behavioural disturbance. Research into phenomenology of behavioural disturbances and instruments for their assessment are limited. We aimed to detail behavioural disturbances and develop a prototype of a scale for monitoring behaviour of children in PTA.
Method: First, we conducted a scoping review of the literature according to the pre-registered protocol (CRD42021268275). A conventional content analysis was used to examine and categorise behavioural disturbances extracted from the literature. Second, via an online expert (n=7) survey, we collected quantitative and qualitative feedback on the relevance and developmental appropriateness of behavioural items extracted from the scoping review, resulting in a preliminary scale. Clinicians (n=20) evaluated the acceptability, feasibility, and usability of this preliminary scale. Descriptive statistics and qualitative analysis were used.
Results: First, scoping review identified 30 manuscripts that detailed behavioural disturbances of patients in PTA. No manuscript focused exclusively on children. Content analysis bore 37 items, placed in 8 behavioural categories: Disinhibition, Agitation, Aggression, Lability, Lethargy/Low Mood, Perceptual Disturbances/Psychotic Symptoms, Personality Change and Sleep disturbances. Second, all experts highlighted that a scale needs to be short and easy to administer. They eliminated 6 items and consistently categorised 15 out of 37 items in one of 8 categories. Categorised items were bundled. The preliminary scale had 18-items. Clinicians regarded the preliminary scale highly suitable and easy to implement and indicted that the scale addressed a gap in current clinical practice. The layout of the scale and wording of some items was modified according to clinicians' qualitative feedback, arriving at an 18-item prototype scale.
Conclusions: We detailed phenomenology of behavioural disturbances exhibited by patients in PTA and designed, to our knowledge, the first scale to assess the range of behavioural disturbances in children in PTA. Further work is needed to validate this scale, which has the potential to systematically evaluate behavioural recovery, guide clinical management, document responses to interventions, and facilitate discussions with caregivers of children in PTA.
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Relationship between sleep outcomes and lifestyle factors in young adults living with childhood traumatic brain injury

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Introduction: We investigated the relationships between subjective and objective sleep outcomes and lifestyle factors (i.e., nap duration, screentime, chronotype, use of tobacco, alcohol, caffeine, and medications) in young adults who sustained traumatic brain injury (TBI) in childhood.
Methods: We report cross-sectional data collected at 20 years post-childhood TBI, as part of a prospective study. Participants included 54 young adults with TBI (Mean age, 27.7years) who were assessed at 20 years postinjury (mild (n = 14), moderate (n = 27), and severe (n = 13) TBI) and 13 healthy controls (Mean age, 26.0 years). The Pittsburgh Sleep Quality Index and actigraphy were used to assess sleep outcomes, and lifestyle factors were assessed with study-designed measures.
Results: Results showed that poor subjective sleep quality was significantly associated with evening chronotype ($p < 0.001$) and tobacco use ($p < 0.001$), while being a parent ($p = 0.038$) and alcohol use ($p = 0.035$) were significantly associated with poorer objective sleep efficiency in the TBI group.
Discussion: These preliminary findings highlight interesting associations between poor sleep quality and lifestyle factors in young adults who sustained TBI in childhood, and indicate the need to further explore these relationships in this TBI population to inform on potential avenues for sleep interventions.
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Strengths Based Diagnostic Assessments for Adults with Autism and clinically relevant therapeutic approaches: Service Evaluation and Group Therapy Co-Design with Consumers

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Background/Objectives: Strengths-based neuropsychology assessments for adults undergoing Autism evaluation fits within a neurodiversity framework and can be instrumental in supporting diagnosis-affirming care. The Neuropsychology service at The Melbourne Clinic sought to gauge the acceptability of the Autism assessment and feedback processes, identify improvements in clinical practice to better align with neurodiversity-affirming care and, ascertain preferences for a co-designed autism specific mental health therapy group.
Method: Qualitative research was undertaken via 10 semi-structured interviews with clients of the service, and thematic analysis was undertaken. Phase two of the study utilised a consumer focus-groups co-design model with 4 clients to further develop and refine the group content, structure and implementation procedures.
Results: Key themes were identified under the following categories: clients' experience of a neuropsychological diagnostic assessment; from referral to feedback; the Autism identity

journey; previous psychological therapy experiences, preferences for an Autism specific therapy group.

Conclusions: Neurodiversity affirming and strengths-based approach was acceptable to clients, with the majority reporting positive experiences. A number of helpful suggestions were provided for improving the process, particularly in regard to feedback. Clients had undertaken a wide range of therapies previously, and there was strong support for the development of an Autism specific mental health therapy group. Utilising a co-design framework for the program was value in improving the likelihood the program would met client needs.

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Negative humour styles predict higher affective lability in healthy older adults: Implications for clinical practice

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Background and Objectives: Affective lability refers to rapid and exaggerated changes in mood (e.g., excessive laughter or crying) which are reportedly independent of emotional experience. No prior research, however, has examined the relationship between affective lability and dispositional humour style, i.e., how we use humour in our social relationships. Humour style encompasses four sub-dimensions representing two positive (self-enhancing, affiliative) and two negative (self-defeating, aggressive) styles. Exaggerated emotional expression may indicate the onset of neuropsychiatric symptoms which can occur with or without cognitive symptomatology (i.e., Mild Behavioural Impairment). We investigate humour style as a potential indicator of neuropsychiatric changes in non-clinical populations.

Method: 373 adults aged 65-97 years (M = 73.4, 82% female) with no self-reported bipolar disorder or neurological diagnosis completed the humour styles questionnaire (HSQ; Martin et al., 2003) and Centre for Neurologic Study - Lability Scale (CNS-LS; Moore et al., 1997). Multiple linear regression was used to determine if humour styles predict affective lability controlling for age, gender, depression (past/current), and cultural identity (Australian/other).

Results: Mean CNS-LS was below clinical cut-off (M = 12.4, SD = 2.9). Notably, humour style significantly predicted affective lability, F(9,363) = 4.96, p ≤ .001, R2 = .11, whereby higher levels of the two negative humour styles predicted more affective lability (aggressive, B = .18, p = .001; self-defeating, B = .18, p =.002). No significant relationship emerged between CNS-LS and either of the positive humour styles (affiliative, p = .467; self-enhancing, p = .171).

Conclusions: Negative humour styles significantly predicted higher affective lability in healthy older adults. Our novel finding shows individuals experiencing more exaggerated episodes of laughter and crying are more likely to report using self-defeating and aggressive styles of humour in their social interactions. Further investigation of the social-cognitive profile associated with greater use of negative humour styles in clinical populations is needed and may provide important diagnostic insight, particularly in the preclinical stages of dementia.

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Efficacy of Early Vocational Intervention following Traumatic Injury: A Randomised Controlled Trial

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Background and Objectives: Returning to work (RTW() is an important goal for individuals sustaining traumatic injury. RTW rates range from 38% for spinal cord injury (SCI), to 40% for traumatic brain injury (TBI) to 58% for multi-trauma orthopaedic (MTO) injuries. For many, vocational rehabilitation is not available, or is offered long after injury, and controlled evaluation has been limited. The aim of this study was to evaluate the impact of providing an Early Vocational Intervention Rehabilitation Service (EVIRS) to individuals with traumatic injury on work outcomes, mental health and quality of life at 2 years post-injury.

Method: A randomised parallel two-group design was used to compare the EVR group with a control group receiving usual rehabilitation treatment. Outcomes included time taken to RTW and employment status at 2 years post-injury (primary outcomes), anxiety and depression on Hospital Anxiety and Depression Scale and Health Related Quality of Life on SF-12. Participants were adults aged 16-70, employed prior to traumatic injury. Eighty-eight EVR treatment (34 TBI, 37 MTO, 17 SCI) and 82 (32 TBI, 34 MTO, 16 SCI) control group participants were recruited, 75% male with mean age 38 years. There were no group differences in demographic, employment or injury characteristics. Participants were recruited an average of 47 days post-injury, mostly as inpatients. EVR therapists provided activities associated with fostering hope for RTW, thinking about, preparing for, returning to, and sustaining work, building RTW goals into multi-disciplinary rehabilitation, liaising with the employer and offering peer support.

Results: Linear regressions revealed that at 2 years post-injury, the EVR group took significantly less time from injury to RTW (Median = 166; IQR: p25=87, p75=279.5) than those in the control group (Median = 238; IQR: p25=143.5, p75=325), (p=.04) (Cohen's d=.38). Quartile regressions by diagnosis showed a significant main effect of group (i.e., control vs treatment; p=.02) but no interaction between group and diagnosis (p=.60). There was a strong trend for all diagnoses that those in the treatment group took less time to return to work than those in the control group, particularly for the TBI and MTO groups. Employment status did not differ between groups at 2 years. There were also no group differences in anxiety or depression symptoms or quality of life.

Conclusions: Offering EVR may reduce time to RTW after traumatic injury.

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Individuals with extremely severe traumatic brain injuries can achieve similar return to work outcomes to their less severely injured peers: A secondary analysis of the Vocational Intervention Project (VIP1.0) trial

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Background and Objectives: Return to work (RTW) rates following severe traumatic brain injury (TBI) are typically below 50% across studies. However, a broad spectrum of injury severities are represented within this cohort and there is limited research into whether RTW outcomes differ for the extremely severe group (i.e., >28 days post-traumatic amnesia; PTA) compared to those with less severe injuries.
Method: Secondary data analysis of severe TBI participants in the Vocational Intervention Program (VIP1.0) efficacy trial in New South Wales, Australia. Participants completed workplace trials (focused on either return to pre-injury employment or gaining new employment) or were treatment-as-usual (TAU) controls who did not receive a vocational rehabilitation (VR) intervention. The sample was divided into two groups: 1) severe/very severe TBI (8-28 days PTA; s/vsTBI); 2) extremely severe TBI (>28 days PTA; esTBI). Competitive employment status (Yes/No) and clinician ratings of disability and participation were collected pre- and post-intervention. Demographic and injury variables were also collected.
Results: The sample comprised 62 (55%) s/vsTBI and 50 (45%) esTBI. There were no demographic differences between the two injury severity groups, but esTBI were further post injury than s/vsTBI (Med=14.5 vs. 9 months). Across the sample, undertaking a VR intervention was associated with a substantial increase in RTW rates at post-intervention relative to TAU (p=.0006). Of those who undertook a VR intervention, comparable improvements in RTW rates were achieved by s/vsTBI (from 7% to 76% working) and esTBI (13% to 65%) (p=.24). Similarly, injury severity did not affect post-intervention RTW success within each RTW pathway (return to pre-injury employer: s/vsTBI=91% vs. esTBI=85%; obtaining new employment: s/vsTBI=45% vs. esTBI=40%; ps>.57). These outcomes were achieved despite esTBI being rated at the outset of the trial as less capable of meeting job requirements and having poorer overall participation and independent living skills (ps<.05).
Conclusions: Individuals with extremely severe TBI can achieve successful RTW outcomes from tailored workplace interventions that are broadly comparable to their less severely injured peers. It is important to consider these individuals as candidates for VR.
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“From trauma to triumph”: strategies that workplace rehabilitation consultants implement to assist ABI clients to return to work with their pre-injury employer

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Background and objectives: The State Head Injury Unit (SHIU) assists ABI clients to return to work (RTW) with their pre-ABI employer. This study aimed to calculate the RTW rates of SHIU clients, collate the interventions used in RTW programs, and identify the unique ABI-related challenges that case managers face when assisting ABI clients to RTW.
Methods: SHIUs MEDTech32 database was interrogated to calculate the RTW rates of 988 ABI-clients on program between 2021 and 2023. To create the list of interventions, 74 RTW client files were reviewed. Residual deficits of each client at discharge were recorded. Five SHIU staff were interviewed about the the challenges they encounter in assisting ABI clients to RTW.
Results: Between January 2021 and July 2023, 988 ABI clients attended the SHIU. Of the 91 who commenced a SHIU RTW program 69 (75%) successfully returned to work full or part-time – with the majority returning to their pre-ABI employer. The remaining pursued alternative roles e.g. study, domestic duties, or retirement. Given the cognitive and fatigue issues, it was not surprising that only 12% of all SHIU clients were deemed to have the capacity to commence a RTW program. The file review created a comprehensive list of 100+ unique interventions used in ABI RTW programs. This unique list will be shared with ASSBI conference participants. NB: an ’intervention’ refers to any action implemented during an RTW program e.g. assessments, worksite visits, counselling, equipment prescription. The interviews identified the following challenges that case managers need to be aware of when assisting ABI clients to RTW: (i) The ABI Client’s Capacity is Constantly Changing; (ii) The Importance of Building the ABI Client's Work Readiness; iii) The Challenge of Impaired Insight; (iv) The Double-Edged Sword of Enhanced Awareness; (vii) The Importance of Employer Engagement; (vii) The Vulnerability of Employment; and (viii) Aligning Job Demands with Post-ABI Capacities.
Conclusions: The RTW statistics for SHIU clients are promising. A notable 51% resumed full-time work of 30+ hours/week and 24% were part-time. The unique challenges of ABI emphasise the need for specialist vocational rehabilitation programs that are tailored to ABI clients. The comprehensive list of 100+ unique interventions used in ABI RTW programs will assist new and experienced healthcare professionals to have a wide array of ideas for interventions to customise their RTW programs.
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How do people with disability and complex needs experience the built environment in new specialist disability housing?

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Background and Objectives: Despite the emerging evidence that individualised specialist disability housing promotes wellbeing, participation, and human rights, it is unclear whether the built environment in these housing models is designed in a way that is optimal for people with disability and complex needs. The aim of this study was to explore the impact of the built environment of modern individualised housing from the perspective of people with disability and complex needs.
Method: Fourteen adults with neurological disability and complex needs (Ehlers Danlos Syndrome = 3; Cerebral Palsy = 1; Spinal Cord Injury = 1; Neuromuscular Disorder = 1; Multiple sclerosis = 3; Other neurological = 4; Other = 1) who had been residing in individualised housing for six months undertook semi-structured interviews. Interviews were guided by the residential interview component of the Residential Environment Impact Scale, Version 4.0 and explored residents’ experiences of everyday space, objects, and activities in their residence. Guided by grounded theory principles, analysis of interview transcripts moved through a process of data-driven open and focused coding revealing themes and relations between them.
Results: Five themes that describe participants' experiences with the built environment and their impact on participants' daily life emerged: 1) having adequate space to meet needs 2) requiring accessible design 3) integrating equipment and assistive technology into the built environment 4) regulating the sensory space and 5) having your own space. When the built environment was optimal, participants experienced autonomy over their daily activities, were connected to the community, and were able to use their home space for leisure or work activities. When the built environment was not optimal, partici-

pants experienced frustration, a reliance on support, and exposure to hazards and safety issues and increased health risks. Participants described the built environment as being optimised when it was modifiable and designed to meet tenants' specific needs and preferences.
Conclusions: These findings support the premise that well designed individualised housing can enable participation, independence, and quality of life. Findings highlight the importance of people with disability having input into the design of their homes to achieve optimal design.
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Applying the Knowledge to Action framework to improve housing and supports for people with Multiple Sclerosis

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Background and Objectives: People with Multiple Sclerosis (MS) may require specialised housing and supports to maintain their independence at home. However, a paucity of research to guide the development of suitable housing and support services for this population leaves people at risk of long hospitalisations and admission to residential aged care. The aim of this study was to use the Knowledge to Action (KTA) framework to synthesise the findings of previous studies with available data on the housing and support needs and preferences of people with MS. Further, this study aimed to provide a foundation for the development of a co-designed intervention based on the findings.
Method: A rapid review of the literature on housing and support for people with MS was conducted. Following this, quantitative (n = 80) and qualitative (n = 6) data from interviews with people with MS was extracted and integrated from larger projects exploring the housing and support needs and preferences of people with disability. Following synthesis of all data sources, results were presented to a reference group for validation, contextualisation, and adaptation to the local context.
Results: People's support needs varied according to the time of day, from day to day, and over time as the disease progressed. Subsequently, people required support workers who could understand the variability of their condition and adapt their style accordingly. People frequently required climate control and wheelchair accessibility as well as equipment and assistive technology. People reported gaps between what they wanted and what they received, citing individual and systemic barriers. Presentation of these results to the reference group highlighted a funding scheme that is not fit for purpose for people with progressive neurological disorders and a workforce that does not have adequate expertise in this population.
Conclusion: People with MS have support needs requiring proactive and responsive funding arrangements, housing design, and support provision. Informed by the action cycle of the KTA, future research should work with people with lived experience of MS to co-design interventions that improve home and living outcomes for this population.
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Development of an Australian physical activity clinical practice guideline for people living with moderate-to-severe traumatic brain injury

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Background and Objectives: In 2020 the World Health Organization (WHO) released the first international physical activity public health guideline for people living with disability. However, the evidence informing the guideline was not specific to people with traumatic brain injury (TBI), nor did it provide guidance for clinicians on the prescription and promotion of physical activity in rehabilitation. We aimed to develop an Australian physical activity clinical practice guideline for people living with moderate-to-severe TBI.
Method: The overarching project was guided by the Exploration Preparation Implementation Sustainment (EPIS) framework. We used a Grading of Recommendations Assessment, Development and Evaluation (GRADE) ADOLOPMENT approach to determine whether to 'adapt' or 'adopt' the WHO guideline or develop de novo recommendations. We established guideline leadership and development groups, conducted a rapid review to identify direct evidence in TBI, and reviewed guidelines in other relevant health conditions (i.e., stroke, cerebral palsy) to identify indirect evidence. To inform implementation considerations, we conducted an audit of brain injury services in Australia and qualitative consultations with key stakeholders including people with TBI.
Results: Direct evidence for the prescription of physical activity for people with moderate-to-severe TBI is limited. The clinical practice guideline developed incorporated 10 de novo recommendations to support health professionals' clinical decision-making and increase uptake of physical activity by people of all ages living with moderate-to-severe TBI. Twenty-six brain injury services were audited, with 54-100% of services prescribing physical activity interventions consistent with the clinical practice guideline, indicating feasibility, although practice variation was identified. Data from stakeholder focus groups indicated good acceptability of physical activity interventions, however barriers to implementation e.g., identifying and accessing community physical activity, were identified.
Conclusions: The prescription of individually-tailored physical activity interventions should be standard clinical practice for

people with moderate-to-severe TBI in Australian rehabilitation settings. However, there is a need for more direct evidence in this population, as well as research to evaluate how the guideline can be implemented into clinical practice.
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An Audit of Physical Activity Provision and Promotion in Brain Injury Services within Australia in 2023

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Background and Objectives: Physical inactivity is a global health problem, and survivors of traumatic brain injury (TBI) are particularly inactive. For people with moderate-to-severe TBI, physical activity is likely to be prescribed and promoted within the rehabilitation setting, but our understanding of current practice is limited. The aim of this audit was to investigate the provision of physical activity interventions in brain injury services across Australia.
Method: Health services providing rehabilitation to people with moderate-to-severe TBI were identified through the Australasian Rehabilitation Outcomes Centre and via health and investigator networks, with 45 invited to participate in an online survey. Physiotherapists and exercise physiologists at participating services completed the survey on behalf of their teams.
Results: Twenty-six (n=26) services (20 adult, 5 paediatric, 1 all ages) across the eight states and territories of Australia participated in the audit. Twenty-two services were located in metropolitan areas, two services in inner regional areas, and two in remote areas. Thirteen (50%) were specialist brain injury services; four (15%) were general rehabilitation services, and eight (30%) were private outpatient rehabilitation services. All services delivered strength and mobility training, while 25 (96%) services delivered aerobic training and promoted overall physical activity. All sites with paediatric services delivered unstructured play, and 5 of the 6 sites servicing paediatrics also provided sport and physical recreation. We found inconsistencies in the number of services conducting exercise tests, with only 36% of services administering aerobic fitness tests, but 92% of services conducting muscle strength assessments. The most common barriers to physical activity delivery were the lack of resources and therapist knowledge of physical activity promotion.
Conclusions: Structured aerobic exercise and muscle strengthening training is routinely prescribed to people with moderate-to-severe TBI in brain injury rehabilitation services across Australia. However, this audit has identified practice gaps and inconsistencies in the provision and promotion of physical activity. The findings of this audit will assist in the development and implementation of a national physical activity clinical practice guideline for people with moderate-to-severe TBI.
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Mental and physical health comorbidities in traumatic brain injury: A comparison with non-TBI controls

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Background and Objectives: Ageing with a moderate-severe traumatic brain injury (TBI) is thought to be associated with a higher prevalence of health-related comorbidities. However, studies examining this have been limited by the general omission of control group comparisons. This study examined whether ageing with a TBI was associated with a greater burden of health-related comorbidities compared to a demographically similar non-TBI control cohort. The association between comorbidity burden, emotional outcomes, and health-related quality of life (HRQoL) after TBI was examined across ages.
Method: Participants with TBI had sustained a moderate-severe TBI 1-33 years previously. The number of cardiovascular, general physical health, and mental health comorbidities for 559 participants was compared between cohorts and age strata using Poisson regression. The relationships between comorbidities, age, emotional outcomes (Generalized Anxiety Disorder Scale-7, and Patient Health Questionnaire-9) and HRQoL (PROMIS Global Health Measure) were examined with linear regression. Distinct subgroups of comorbidities were identified using latent class analysis. The associations of comorbidity classes with demographic and outcome variables were evaluated using multinomial logistic and linear regressions, respectively.
Results: TBI participants had a significantly higher comorbidity burden than controls, primarily driven by elevated rates of mental health disorders. Cardiovascular and physical health comorbidities were not elevated in the TBI group compared to controls. Three comorbidity subgroups were found. These subgroups were similar between TBI and control cohorts, suggesting consistent patterns of co-occurring health conditions regardless of TBI exposure. Physical and mental health comorbidities were associated with elevated depression and anxiety symptoms and diminished HRQoL after TBI compared to controls.
Conclusions: TBI was associated with greater mental, but not physical, health comorbidities in the decades following injury. However, physical and mental health comorbidities significantly impacted emotional and HRQoL status after TBI, underscoring a greater need for long-term support for individuals with TBI coping with both physical and mental health comorbidities.
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Falls on an inpatient brain injury rehabilitation unit: The nature and significant characteristics of consequential falls

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Background and Objectives: Falls are a frequently recorded patient safety incident in the inpatient context and falls in a brain injury rehabilitation unit are particularly prominent. This is due to physical, behavioural, and cognitive presentations of people with a brain injury which can increase their risk of falls. While falls research to date has explored the characteristics of people with a brain injury who experience falls and the nature of these falls, the significant characteristics of people who experience a consequential fall and falls that result in consequence has not yet been investigated. The purpose of this study is to describe the nature of consequential falls and explore the patient and fall characteristics that are significant for consequence in inpatient brain injury rehabilitation.
Method: The study included participants who had fallen while an inpatient in the brain injury rehabilitation unit at a metropolitan hospital between January 2017 and December 2021. Patients were included if they had one or more reports of a fall recorded in the incident reporting system during that period. Data were analysed between categorical variables using Fisher's exact test; in continuous variables using the Mann-Whitney U test; a logistic regression model was fit to the patient data to model the odds of a patient having had a consequential fall; and a binomial GLMM was fit to the falls data to model the odds of a fall being consequential.
Results: 161 people (64% male) experienced 276 falls over the 5-year period. 90 (56%) people experienced a consequence from one or more of their falls, whereas 119 (43%) of the falls had a consequence. There was moderate evidence for difference in age between consequential and non-consequential fallers (p=0.017); weak evidence for association between sex and consequential fallers (p=0.071). There was strong evidence for association between a fall being not witnessed by staff and being consequential (p<0.001), and weak evidence for association between the time of day of a fall and being consequential (p=0.052). The odds of a consequential fall increase by 1.03 times for each year increase in age. The odds of a consequential fall in autumn, winter, and spring is 2 to 3 times higher than in summer.
Conclusions: More falls with consequence within a brain injury rehabilitation unit occur with increasing age and when not witnessed by staff.Least consequential falls occur in summer.
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Mapping experiences and provision of stroke care in Aotearoa New Zealand: Where is the work to support well-being?

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Background and Objectives: Following stroke, a sense of well-being can be a person's quality of life. However, it is commonly impacted by the stroke. People with stroke and practitioners all suggest it is poorly addressed in stroke services, with some suggesting the wider context and drivers in stroke care constrain practice. We sought to understand experiences of different people and people and parties across the continuum of stroke care – people with stroke, family and whānau, service providers – to identify: (a) how well-being is, or is not addressed in care; (b) factors which may contribute to this; and (c) where there is potential to work differently to support well-being.
Method: Guided by Interpretive Description and He Awa Whiria (a framework for upholding Māori and non-Māori knowledges), we interviewed 37 people impacted by stroke (19 Māori, 18 non-Māori) and 34 healthcare professionals. Data were analysed using content analysis, with journey maps constructed to identify relationships between care-as-received by patients and family, care-as-intended by healthcare professionals providing care, and care-as-organised by stroke services, quality monitors, and funders.
Results: Mapping stroke care highlighted the complexity of stroke service provision. It revealed key aspects of 'work' that people with stroke, their families and whānau undertook to 'get through' a complex and emotionally challenging time; this work was often invisible to healthcare practitioners and not accounted for within service structures, processes, staffing and education. Practitioners' ways of working were commonly driven by local and national imperatives, resulting in tensions between the needs and priorities of all the different people and parties in stroke services. Through mapping, we identified multiple places in which there were missed opportunities to support well-being, and sometimes, actions that negatively impacted well-being.
Conclusions: Stroke care is complex. Mapping people's journeys in stroke services provides rich insights into how stroke care is experienced. By connecting experiences and practices to the wider context of care, we gain insight into the structural changes that are needed to support practitioners to provide more comprehensive well-being support. Journey mapping is a valuable tool for opening up thinking about how things could be done differently to better support people's long-term well-being after stroke.
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Accessibility of Rehabilitation Health Service Websites following Stroke: A Need for Improved Implementation of Web Accessibility and Communication Access Guidelines

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Background and Objectives: Finding information about health conditions, treatments or services online is typical practice. People who have had a stroke are no exception. They regularly use the Internet and technology to find and access healthcare. Recent studies have found that many health services and public health websites do not meet Web Content Accessibility Guidelines (WCAG). However, websites for stroke rehabilitation services have not been a focus of this research. Furthermore, the evaluation of stroke service websites needs to be extended beyond WCAG criteria to also consider the communication and cognitive support needs of individuals who require access to such websites. The present study examined the accessibility of local public-facing stroke rehabilitation service websites by considering both WCAG and communication access requirements.
Method: A cross-sectional descriptive study design was utilised to identify relevant clinical, rehabilitation and allied health services in Victoria and South Australia. The organisation homepage and rehabilitation service webpages were assessed for WCAG errors and alerts using the WAVE® Web Accessibility Evaluation Tool. A 16-item checklist was used to document accessibility issues for people with aphasia, cognitive and visual processing impairments. The checklist assessed webpage navigation issues, content readability, formatting and the presence of an accessibility statement or policy on the website. Data

were analysed using descriptive statistics.
Results: A total of 126 homepages and 59 service-specific webpages were evaluated against WCAG standards. Accessibility checklist evaluations were completed for 105 websites. Most webpages (n=150, 81.1%) had one or more WCAG errors with a median of five errors per webpage. The most prevalent WCAG error was empty links that could not be read by a screen reader (n=92, 49.7%). Problems with readability were common, with all websites for government and private not-for-profit organisations having a reading level above grade 6. Just over half (n=55, 52.4%) of websites used less than a 14-point font and did not have a plug-in to enable text adjustment.

Conclusions: Health services must make concerted steps towards ensuring that their websites are accessible for all healthcare consumers, including people with language, cognitive and visual processing impairments so they can actively access information and make decisions about their own healthcare.

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Mental Health Support After Stroke: A Qualitative Exploration of Lived Experience

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Purpose: Unmanaged mental health problems following stroke can hinder the recovery process. This study aimed to investigate the lived experience of: (i) having mental health challenges after stroke, (ii) help-seeking for mental health, including factors that influenced access to and utilisation of treatment, and (iii) receiving mental health treatment and support.

Research Method: Individual semi-structured interviews were conducted with 13 participants (62% female, age at stroke 35-76 years) who had experienced mental health difficulties following their stroke. Data were analysed using reflexive thematic analysis with a critical realist approach.

Results: Six themes were identified. Mental health challenges post-stroke were diverse in nature, beyond high prevalence disorders such as depression and anxiety that are typically addressed in research and clinical guidelines. Attitudes and previous experiences relating to mental health influenced inclination to seek help. Participants valued an individualised approach to provision and timing of psychoeducation. Accessibility of services was impacted by financial and transportation barriers, as well as availability of services and clinicians who were appropriately trained to work with survivors of stroke. Participation in support groups was a positive experience for most participants. Lived experience of mental health treatment ranged from positive to negative, and participants conveyed helpful and unhelpful aspects.

Conclusions: These findings underscore the importance of the provision of psychoeducation and early screening for post-stroke mental health difficulties. It is equally crucial to ensure the availability and accessibility of community-based mental health support services throughout the stroke recovery journey. Offering a range of options for mental health support and treatment can assist stroke survivors in finding an approach that suits their individual needs and preferences. Moreover, training clinicians to adapt mental health treatment to accommodate stroke related impairments, such as cognitive and sensorimotor challenges, could be beneficial.

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"Until now I had no idea there was something special about the right hemisphere": Co-designing an education resource with people affected by a right hemisphere stroke

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Background and Objectives: Right hemisphere (RH) stroke is associated with a risk of social isolation when communication and social cognition impairments are present. Despite the documented risk, few educational resources are available with the potential to support people with a cognitive communication disorder (CCD) post RH stroke, their family members and friends. The objective of this study was to develop, and evaluate, a consumer-informed web-based education resource about CCD. Education about the communication changes that arise following RH stroke can promote maintenance of relationships, which in turn may reduce negative psychosocial outcomes of stroke.

Method: A mixed method study brought together healthcare providers (speech pathologists), people with RH stroke and their family members, to co-construct an education resource. This study (1) explored educational preferences related to timing, mode of delivery, and content about CCD, (2) produced a beta or draft online education resource using experience-based co-design, and (3) trialled the resource to evaluate acceptability as reported by healthcare providers and consumers. Gathered data informed the finalisation of the resource in preparation for larger scale evaluation of efficacy.

Results: Content analysis of co-construction workshop data revealed that both healthcare providers and people affected by RH stroke experience challenges in sourcing information about CCD post RH stroke. Key themes that informed the development of the resource related to (1) generic stroke information being insufficient to understand how communication changes after RH stroke, (2) the need for modifiable and individualised educational resources, and (3) that the ease of access of evidence-informed information after discharge from rehabilitation is important for people affected by RH stroke.

Conclusions: Clinical Guidelines for Stroke Management recommend tailored information for all people with stroke and their families. This study provides insights into the ideal timing, mode of delivery and content that should be included in educational information for people affected by RH stroke and those who support them. Findings supported the development of a web-based resource that has the potential to support those affected by RH stroke at all stages of stroke recovery.

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Using systems-based approaches to understand and work with families following acquired brain injury

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Synopsis of session: Acquired brain injury (ABI) is associated with a range of acute and long-term outcomes, impacting not only the individual with an ABI, but also their interactions and relationships within their family unit and broader systems. A systems-based approach to working with individuals following ABI therefore provides opportunities to support individuals within their unique personal contexts. This approach incorporates collaboration, open communication and sharing, responsiveness to the priorities and needs of individuals and their systems, and interdisciplinary teamwork. This session will provide an overview of systems-based approaches to working with individuals with acquired brain injuries and contemporary approaches to partnering with families in research and education. The value of lived experience will be highlighted, illustrated through examples of the impact of storytelling approaches for both children and adults with ABI. Building upon family-centred research in paediatric rehabilitation, this session will provide practical tips for engaging and partnering with individuals' systems – including their families – in research and rehabilitation across the care trajectory.

Learning objectives:

1. To develop an understanding of a systems-based approach to acquired brain injury rehabilitation.

2. To gain knowledge of contemporary frameworks for working with children and families following acquired brain injury in research and practice.

Level aimed for: Basic, Intermediate, Experienced

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A workshop on using the free self-guided online resource interact-ABI-lity to upskill communication partners of people with acquired brain injury

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Synopsis of session: Changes in communication skills can occur for 75% of people following an acquired brain injury (ABI). These difficulties with communication lead to less successful and less enjoyable interactions with others, in family, social, vocational, and community settings. To address these difficulties, it is internationally recognised best practice that the communication partners of people with a brain injury should receive education about how best to support communication (Togher et al., 2023). Our research team developed a self-guided online resource called interact-ABI-lity, which is designed to provide this education to family members, friends, and health professionals who interact with a person with an ABI. This resource has been developed through a process of collaborative design and pilot testing (Miao et al., 2022) with evidence of positive outcomes. This workshop will increase the knowledge of rehabilitation clinicians about interact-ABI-lity by providing an overview of its development, evidence base, content and format. Workshop participants will understand how to effectively use interact-ABI-lity as a tool in their clinical practice to engage with communication partners. The workshop activities will address considerations such as who interact-ABI-lity may be suitable for, how to support communication partners to complete the self-guided training, and the role that interact-ABI-lity can play in rehabilitation alongside other communication partner training approaches.

Level aimed for: Basic to intermediate

Learning objectives:

- Learn about the collaborative process of developing interact-ABI-lity with input from people with brain injury, their family members, speech pathologists and other health professionals
- Understand the evidence supporting the use of interact-ABI-lity
- Become familiar with the content and format of the interact-ABI-lity resource
- Be able to support communication partners of a person with a brain injury to gain access to and engage effectively with interact-ABI-lity
- Be aware of how interact-ABI-lity may complement other approaches to communication partner training

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POSTERS

The lived experience of memory disturbance in primary progressive aphasia

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Background and Objectives: Mounting evidence indicates the memory profiles of the primary progressive aphasia (PPA) variants are distinct. Neuropsychological findings suggest that memory is disproportionately impaired in the logopenic variant (lv-PPA) relative to the non-fluent (nfv-PPA) and semantic (sv-PPA) variants. Less is known, however, regarding the real-world experience of day-to-day memory disturbances in PPA. This study investigated this aspect.

Methods: The memory profiles of 26 lv-PPA, 24 nfv-PPA, and 40 sv-PPA patients, and 70 matched healthy controls were evaluated using the Cambridge Behavioural Inventory-Revised (CBI-R) carer questionnaire. The CBI-R surveys the patient's day-to-day level of functioning over the previous month. Group comparisons of CBI-R Memory and Orientation items (1-8 on the survey) were analysed using non-parametric tests. Receiver operating characteristic curves (AUC) were used to identify the most discriminative CBI-R Memory and Orientation items to distinguish lv-PPA from nfv-PPA patients.

Results: Compared to controls, lv-PPA and sv-PPA carers reported significantly more day-to-day memory issues (CBI-R Item 1), increased repetition of questions (Item 2), forgetting familiar names of people (Item 4) and objects (Item 5), and poor concentration (Item 6) (all p values < .001). Lv-PPA carers also reported significantly more frequent occurrences of losing or misplacing items (Item 3) and forgetting the day (Item 7) (both p values < .001), while all PPA groups experienced significantly more confusion in unfamiliar environments (Item 8) than controls (all p values < .009). Direct comparisons among PPA groups revealed distinct profiles, with lv-PPA and sv-PPA carers indicating more frequent forgetting of names of objects (Item 5) than nfv-PPA (both p values < 0.016), and sv-PPA demonstrating greater day-to-day memory impairment (Item 1), repeated questions (Item 2), forgetting names of people (Item 4), and poor concentration (Item 6) compared to nfv-PPA (all p values < .011). Direct comparison of the lv-PPA and nfv-PPA groups found forgetting the names of familiar objects (Item 5) was the most sensitive and specific distinguishing item (AUC = .714, p = .011).

Conclusions: Our findings demonstrate distinct day-to-day memory profiles in PPA which extend beyond language deficits. These findings have important implications for PPA diagnosis, management, and carer psychoeducation.
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Determining the range and prevalence of post-stroke cognitive impairments

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Background and aims: Post-Stroke Cognitive Impairment (PSCI) is reported as affecting from 20% to 80% of survivors, a huge range, due partly to identification via dementia screening tools, and partly to inadequate definitions of “PSCI” e.g. social cognition is not considered by any PSCI prevalence studies, though impairment of social cognition is common and significant after stroke.
Method: We analysed the Anatomical Tracings of Lesions after Stroke dataset of MRI scans to identify each lateralised brain region affected by stroke, then systematically reviewed the Voxel-based Symptom-Lesion Mapping literature for deficits associated with lesions in each identified region, excluding symptoms which did not meet our definition of “cognitive”.
Results: In addition to visuospatial, language, attentional, self-control and planning deficits, our analysis suggests post-stroke deficits in limb praxis, apathy, emotional empathy, and insight. Few affected areas were associated with memory retention and retrieval, however, despite significant attention to memory assessment in commonly-used brief measures (e.g. MMSE, MoCA), domain-specific screens (e.g. Oxford Cognitive Screen), and recommended test batteries (e.g. Vascular Cognitive Impairment Harmonisation Standards).
Conclusions: In many prevalence studies and most recent large-scale clinical trials, the definition of PSCI defaults to "a poor performance on either the MMSE or MoCA". To interpret their findings, we need to know what types and degrees of PSCI are captured and over-looked by the MMSE and MoCA as recovery from stroke progresses. Using our analysis as a guide, we have constructed a comprehensive test battery with which we aim to determine the range and prevalence of post-stroke cognitive impairments, and compare this to the results of testing with the MMSE, MoCA, etc.
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How, where, why and with whom: Lifespace during driving disruption following ABI

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Background and Objectives: The lifespace of participants referred for occupational therapy driving assessment following acquired brain injury (ABI) were explored to understand how, why, where and with whom access and participation in community-based occupations is occurring during the period of driving disruption.
Method: The mixed methods convergent research design consisted of travel diary and Lifespace Mobility Assessment-Composite quantitative elements and semi-structured interviews analysed with an interpretive description lens.
Results: Forty-eight participants aged 26 to 65 years, on average left home daily to conduct instrumental activities of daily living, health management and social participation occupations. Most reported restricted lifespace (54.2%) requiring support to conduct community occupations (68.1%). Family members mainly provided help (80.3%). Analysis of semi-structured interviews (n=15) identified three themes that shaped participant occupational experience during driving disruption: i) changes to occupational participation; ii) reliance on others for community access and participation; and iii) trying to move forward.
Conclusions: The non-driving period following ABI is a time of occupational disruption which restricts lifespace, changing how, why, where and with whom participation in community-based occupations occurs. Rehabilitation facilitating occupational adaptation process to enhance community access capacity is indicated.
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Using immersive virtual reality for assessing cognitive-communication disorders following traumatic brain injury: What do speech pathologists think?

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Background and Objectives: Up to 75% of people experience cognitive-communication disorders (CCD) following a traumatic brain injury (TBI) (MacDonald, 2017), resulting in difficulties with social communication and engaging in successful conversations. The use of virtual reality (VR) for brain injury rehabilitation is an emerging area of research and has been suggested as a way to provide more dynamic and contextual simulated environments for assessing communication skills following TBI (Rietdijk & Meulenbroek, 2023). Investigating the opinions and needs of VR users is recommended for developing VR tasks that are meaningful and successful. Therefore, this study engaged speech pathologists in testing of commercially available VR applications. The aim was to determine acceptability, usability, feasibility, tolerance, and end-user perspectives of using these VR applications for assessing conversation skills after moderate-severe TBI.
Method: This was an exploratory, mixed-methods study. A user-based testing approach was used. Speech pathologists with a minimum of one year of work experience in TBI rehabilitation were recruited. Participants tested two commercially available VR applications. Data for acceptability, usability, feasibility, tolerance, and participant perspectives were collected via observations, questionnaires, and semi-structured interviews. Data were analysedusing descriptive statistics and conventional content analysis.
Results: Five speech pathologists participated in this study. Three speech pathologists experienced mild or moderate side effects of VR use (e.g., eye strain, headache). All participants experienced VR usability challenges that were able to be resolved. Preliminary content analysis of interview transcripts has generated three categories: (1) “I can see potential”: Using VR apps and tasks for conversation assessment; (2) “I wonder whether you could…”: Exploring broader applications and perspectives of VR; and (3) “I think that would be more challenging”: Realistic considerations for using VR in TBI and CCD assessment.
Conclusions: The findings from this study provide preliminary evidence that speech pathologists with experience working in

TBI rehabilitation view commercially available VR applications as being feasible for assessing conversation skills following moderate-severe TBI.
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Take Charge After Stroke (TACAS): An evaluation of implementation in usual practice in a stroke support service

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Background: Take Charge After Stroke (TACAS) is an evidence-based intervention to support people to identify what is meaningful and to empower them to 'take charge' of their recovery. Clinical trials have demonstrated its efficacy in promoting independence and quality of life, however it is not embedded in usual care in stroke services in New Zealand. This study sought to understand the process and experience of implementing TACAS in routine practice in a non-governmental organisation providing community-based stroke support.
Methods: Process evaluation was undertaken, with data collected through multiple means. We surveyed people with stroke (clients) and service providers, gathered fidelity date from providers, and conducted interviews and focus groups with clients and service providers, and a focus group with managers. Data were analysed using conventional content analysis. Normalisation process theory is being used to examine processes that impacted on implementation into routine practice.
Results: People were generally positive about TACAS, considering it valuable for people after stroke. Clients predominantly found TACAS was empowering, helping them review their life and priorities and envision how to move toward in their life. For some, it appeared to help them feel they had permission to take charge of their lives and recovery. Providers appeared less likely to offer TACAS to people from non-English speaking backgrounds, and providers and clients identified implementation challenges when clients had visual, communication or cognitive difficulties. There were a range of perspectives around the timing of TACAS sessions with providers worried about client 'readiness' and 'overwhelm'. It could be challenging for some providers to see how TACAS differed from usual practice, while some struggled with the role shifts, from problem-solver to facilitator. Extensive training and coaching supported implementation.
Conclusion: TACAS was valued as an evidence-based intervention; this gave it legitimacy with client and providers. However, support is needed to help providers embed it ways that are flexible and responsive to a client's individual need and context. Its use in routine practice requires shifts in thinking about the provider's role and their approach to supporting clients and requires organisational support from service leaders and systems. This evaluation will provide useful insights for services seeking to implement TACAS.
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The CyberABIlity Scale: Validating a Measure to Assess Online Risk and Safety for People with Acquired Brain Injury

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Background and Objectives: Individuals with acquired brain injury (ABI) may be vulnerable to cyberscams due to injury-related cognitive and psychosocial changes. There is, however, a lack of objective means for assessing cyberscam risk factors, assess prevalence rates, and evaluate interventions. Our team co-designed a measure of cyberscam risk ("The CyberABIlity Scale"), consisting of 40 self-rated items and 10 practical scam scenarios. This study aimed to validate the psychometric properties and shorten The CyberABIlity Scale.
Method: Participants with ABI (n=149) and without ABI (controls; n=138) were convenience sampled via existing databases and word-of-mouth. Demographic information was collected, and participants completed the pilot CyberABIlity Scale at baseline and after 2-weeks. Response frequencies, inter-item correlations, and item-total correlations were calcu-lated to reduce items. Exploratory factor and multiple-group confirmatory factor analyses were used to identify the factor structure of the scale. Psychometric properties of the final CyberABIlity Scale were assessed via tests of reliability and validity, and cut-off scores were established.
Results: From the 40 self-rated items, nine items were removed due to poor item discrimination, inter-item correlation and item-total correlation. Exploratory factor analysis identified four factors which were named: 'prior scam experience', 'seeking connection', 'existing supports', and 'scam awareness'. 15 items were removed due to insufficient loading onto factors, loading onto multiple factors, and theoretical fit. The 4-factor structure was confirmed through multiple-group confirmatory factor analysis. Of the 10 practical scam identification items, one item was removed as it was deemed non-discriminatory, and one item was removed due to redundancy. The finalised CyberABIlity Scale (16 self-rated and 8 scam identification items) was found to have good internal consistency and test-retest reliability, and construct validity was confirmed. Scoring cut-offs were established for high and low 'cyberability' scores. The finalised CyberABIlity Scale, including hard-copy and online versions, will be shared.
Conclusions: The CyberABIlity Scale is a brief, valid, and reliable tool to screen online vulnerability for persons with ABI which will enable future research into ABI-specific cyberscam risk factors and evaluation of evidence-based interventions.
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Building a consumer-focused paediatric acquired brain injury research program

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Background & Aims: Paediatric acquired brain injury (ABI) is a leading cause of childhood disability and can profoundly alter a child and families life trajectory. Clinicians and researchers often work in silos based on ABI diagnosis, yet there are common diagnostic challenges, interventions, transitions of care and impacts on daily life. Breaking down silos may provide the key to innovative research and clinical progress. To build such a cutting-edge research program that is meaningful to the community, inclusion of lived experience experts is vital. To achieve this vision, the Murdoch Children's Research Institute developed the ABI Flagship Community Partnership Program (CPP). The CPP deepens collaborations between ABI researchers at MCRI, clinicians at the Royal Children's Hospital, and community organisations who support young people with ABI and their family. The aims of the CPP are to 1) identify and develop ABI research priorities, 2) identify key child and family outcomes, 3) develop research collaborations to undertake this research. This presentation will share the process and findings of aim one.
Method: Community partner organisations were identified by CPP researchers and clinicians as those supporting young people with ABI, defined as, but not limited to, traumatic brain

injury, concussion, stroke, cancer, demyelinating disorders. Organisations (n=7) were invited to join the CPP in 2022-23, with an inaugural face-to-face workshop held in Aug 2023 to collaboratively develop research priorities in paediatric ABI. The workshop used a combination of brainstorming in small groups and individually, and individual ranking of the most urgent and important priorities.

Results: Workshop attendees included 10 community organisation representatives and 12 researchers, most of whom also work clinically. The most urgent and important research priorities established in the workshop were best practices for a) navigation of paediatric to adult healthcare transitions; b) navigation of education transitions and systems; c) psychosocial support for the family unit; and d) improved communication with families.

Conclusions: Our large, collaborative team are now establishing working parties that include young people and families to develop research projects to address these pressing challenges. We hope that by better addressing these challenges there is potential to reduce the burden on public health systems, and support advocacy efforts for public policy changes.

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Age-Related Measurement Invariance of Abilities Measured by the Wechsler Adult Intelligence Scale, Fifth Edition Australian and New Zealand

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Abstract: Examination of measurement invariance refers to the empirical demonstration that a test measures the same latent variables across different populations. Measurement invariance analysis investigates whether scores on the same test obtained across populations have the same meaning. If a cognitive test is found to be equivalent across populations, the observed score differences between populations can be interpreted as reflecting differences in the latent variable of interest. This study will examine age-related measurement invariance of the abilities measured by the Wechsler Adult Intelligence Scale, Fifth Edition Australian and New Zealand (WAIS-5A&NZ). Analysis will be conducted using preliminary WAIS-5A&NZ standardisation normative raw data. Confirmatory factor analysis will be performed first to separately determine the best-fitting cognitive model for two age groups. Measurement invariance analysis will next be undertaken to compare the model fit across age groups to determine to what extent the underlying factor model and latent mean scores are equivalent. This is the first-time age-related measurement invariance analysis will be conducted with an Australian and New Zealand WAIS-5 normative sample. The results of this study will provide empirical and theoretical evidence to support the interpretation of the WAIS-5A&NZ subtest and factor index scores across age.

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Disability, health-related quality of life, and self-concept change in people with Multiple Sclerosis: A moderated mediation

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Background and Objectives: Disability informs self-concept (i.e., opinions of self) and importantly, how it changes following Multiple Sclerosis (MS) diagnosis. Health-related quality of life (HRQoL) and relationship satisfaction are also known to influence self-concept in people with MS. Whether these psychosocial factors account for the relationship between disability and self-concept change however is not known. This study investigated the potential mediation effect of HRQoL on the relationship between disability and self-concept change in people with MS, and whether relationship satisfaction is a moderator of the mediated relationship.

Method: 995 people with MS (79.5% female; Age M = 59.72 years, SD = 11.15) completed the Self-Reported Disease Steps Scales (assessing disability), the Assessment of Quality of Life – 8 dimensions (assessing HRQoL), and the MS Self-Concept Change Scale. Of these, 726 participants who indicated they were currently in a relationship also completed the Relationship Assessment Scale (assessing relationship satisfaction). Moderated mediation (conditional process) and parallel mediation analyses were used to analyse the data in SPSS.

Results: The relationship between disability and self-concept change was partially mediated by HRQoL. Across the eight subdomains of HRQoL, only the ‘relationships’ and ‘coping’ subdomains mediated the relationship between disability and self-concept change. However, for those participants in a relationship, relationship satisfaction did not moderate any mediation effects.

Conclusion: The findings highlight the role that perceptions of HRQoL in some domains may have in explaining the relationship between disability and self-concept change. Further research is needed to explicate the causal direction of these relationships in longitudinal studies.

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The Multiple Sclerosis (MS) Self-Concept Change Scale: Development and validation of a new measure

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Background and Objectives: Self-concept may impact psychological wellbeing and functioning in people with Multiple Sclerosis (MS). However, the extent and nature of changes in self-concept that people with MS experience is poorly understood, likely owing to the lack of validated quantitative measures available to assess this construct. The current study aimed to develop and validate a new measure by examining the factor structure, validity, and internal consistency of the newly developed Multiple Sclerosis Self-Concept Change Scale (MSSCCS).

Method: Items measuring self-concept change were created based on relevant literature and interviews with people living with MS. These items were reviewed by a panel of experts and pre-tested in a sample of 135 people with MS. A revised list of 51 items were then administered to 1307 Australian MS Longitudinal Study participants (80.3% female; Age M=59.21 years, SD=11.40), together with measures of disease impact and psychosocial functioning.

Results: Exploratory factor analysis using principal axis factor extraction in 643 randomly selected participants yielded 23-

items measuring 5 latent factors: Connected Self, Humanitarian Self, Compassionate Self, Socially Engaged Self, and Industrious Self. Confirmatory factor analysis involving the remaining participants supported the 5-factor model, as well as a 2nd order model of "global change". The MSSCSS demonstrated good internal consistency (α = .89) and good concurrent and construct validity.

Conclusion: The MSSCCS is a reliable and valid assessment of self-concept change for people living with MS. This new scale may assist in enhancing understanding of how self-concept change is experienced by those living with MS.

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Childhood Stroke Project: Delivering new resources to support survivors and their families

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Background and Objectives: Contrary to expectations, children do not experience better stroke recovery than adults. The lifetime impact on children and their families is likely to be greater than in adults, because children surviving stroke face many more years living with disability. Research shows reduced levels of well-being for survivors of childhood stroke across a variety of domains. Families tell us of the dearth of help and support available, and that they feel alone and often helpless. This project aims to address key barriers to recovery by developing new information products, increasing awareness and partnering with aligned organisations.

Methods: Following a codesign framework, the Stroke Foundation Childhood Stroke team is working alongside a Lived Experience Advisory Group, made up of survivors of childhood stroke and parents.

Results: This presentation will explore the value of lived experience and the codesign process. It will provide an overview of resources that have been developed and what is planned for delivery throughout the 3-year project.

Conclusions: The Stroke Foundation's Childhood Stroke Project is raising awareness of childhood stroke and delivering much needed resources to survivors of childhood stroke and their families.

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MEMORehab: Bringing Memory Rehabilitation into the Digital Age

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Background/Objectives: In the context of Covid, limitations of healthcare services and the move towards telehealth approaches, three studies were conducted to explore ways in which technology could enhance and facilitate the delivery of the Making the Most of Your Memory (MMYM) program (Radford et al., 2010).

Method: Ten neuropsychologists experienced with running the group-based, in-person rehabilitation program participated in semi-structured interviews on the strengths and weaknesses as well as potential innovations to MMYM. Qualitative analysis was used to identify themes, which were translated into design features and used to create a prototype. Mockups of the program were subsequently shown to 10 neuropsychologists for feedback and revision prior to its development. A trial of the minimum viable product, with user testing and interviews of a group of three patients and the neuropsychologist facilitator were used to develop the program further.

Results: MEMORehab was created as a web-based app to aid in the delivery of a memory intervention. To satisfy identified themes and user feedback, the program includes 6 guided, interactive "core training" sessions between patient(s) and clinicians (which can be delivered via videoconferencing or in person). Bespoke computer-based exercises for practicing memory strategies and videos to provide psychoeducation have been added. Homework tasks for generalisation can be reported online and digital reminders are provided to participants to help build good memory habits. Positive feedback promotes motivation and access to materials post-core training allows for booster sessions. Clinicians are provided with data on progress. Running the program with small groups of participants provides social interaction and peer support. However, to accommodate the need for individual goal setting and tailoring of approach, the program can also be run one-on-one and material can be excerpted if appropriate.

Conclusion: Qualitative analysis of interviews, design thinking and user experience feedback have yielded a new, computer-ised and enhanced version of the MMYM program. This can be delivered by allied health staff irrespective of their patients' mobility or location. Many features of this web- based app provide the opportunity to learn and practice strategies between and beyond the core training sessions. The program can support either a comprehensive, group-based intervention or a more individualised approach.

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Use of personal portable devices during and after inpatient rehabilitation by people with acquired brain injury

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Background and Objectives: Whilst there is literature exploring the use of technology during rehabilitation, focus is often placed on overcoming physical difficulties to enable technology use. Furthermore, within the acquired brain injury (ABI) literature, it appears that research focussing on personal portable devices (PPD; e.g. smart devices) has been predominantly on the use of applications and social media. This project aimed to develop a broader understanding of the needs and experiences of people with ABI in relation to PPD use.

Method: Qualitative study involving two people with ABI and their key support people. Interviews were conducted separately with each individual, with interviews lasting between 30 minutes and 1 hour. An interpretive descriptive approach was used to analyse interview transcripts.

Results: Two overarching themes were identified: 1) Individuality of PPD use and 2) Untapped potential. The first theme emphasised that changes in PPD use had occurred for both people with ABI, but these changes presented very differently and changed throughout each individuals' post injury journey. The second theme emphasised the possibilities for PPD use for people with ABI, as highlighted by the individuals with ABI and their support people.

Conclusions: PPD use following an ABI can be complex to navigate for the individual who experiences the ABI and their support network. There is great potential for PPD use to enhance people's lives following ABI. Given the individual nature of experiences and how these change over the post-ABI continuum, a person-centred, targeted approach is warranted.

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Developing a return to driving intervention in an acquired brain injury transitional rehabilitation service

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Background and Objectives: The Acquired Brain Injury Transitional Rehabilitation Service (ABITRS) in Brisbane, Australia provides client goal-directed transitional rehabilitation for 10 weeks post-hospital discharge. Return to driving (RTD) after ABI is a common client goal. ABITRS clinicians identified that existing RTD interventions were not meeting client needs. They focused on medical restrictions, were vague, and lacked relevance to transitional rehabilitation. Clients had poor recall and understanding of education. This led to limited client engagement in driving goals, unresolved driving concerns and frustration. A need was identified for a clinical resource that could be individualised, promote participation in alternate transport modes, remediate driving skills, improve client wellbeing, and maximise recovery. The resource would be implemented by Occupational Therapy, involve the interdisciplinary team, and align to ABITRS model of care.

Method: The RTD intervention resource was developed using a quality improvement framework. The project involved interrelated stages, including review of existing resources and guidelines, and establishment of an interdisciplinary working group to develop the resource, which was piloted with ABITRS clients and revised following client and clinician feedback.

Results: The developed resource is a workbook which combines informative text with worksheets to promote discussion. It allows clinicians to personalise RTD education, promotes using alternate transport modes to rehabilitate driving skills and maintain community engagement while not driving, and personalise a plan for client RTD goals. The workbook enables a consistent, cohesive team approach to address client driving concerns and link therapy activities to RTD goals. Client and staff feedback identified improved client understanding of their RTD journey and how RTD goals were being addressed. Encouragement to use alternate transport modes aided skills remediation and promoted community re-engagement for optimised wellbeing and recovery.

Conclusions: Creating a detailed workbook to guide RTD interventions in transitional rehabilitation has benefited clients and the treating team. The developed resource supports clinicians to provide detailed, personalised RTD education. Clients demonstrated better recall and understanding, which improved client engagement in RTD interventions. Further research into RTD intervention in transitional rehabilitation is needed.

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Benchmarking survey: cognitive-communication assessment protocols post Traumatic Brain Injury (TBI) across the continuum

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Background and Objectives: Speech pathologists within the Tasmanian Health Service (THS) South hypothesised that there were inconsistencies in the assessment practices of cognitive-communication with adult patients post Traumatic Brain Injury (TBI) across the continuum of care within the service. These clinicians also theorised the lack of a Clinical Practice Guideline (CPG) or standardised clinical pathway to guide assessment protocols may contribute to inconsistencies in delivering best practice assessment. A survey was distributed to speech pathologists working with adults experiencing cognitive-communication changes post TBI across Australia. The aim of the survey was to:

- Benchmark speech pathology service protocols across Australia for assessment of cognitive-communication post TBI,
- Gather perspectives on the consistency of assessment practices and protocols within individual services,
- Identify if speech pathology workplaces used CPGs or a standardised clinical pathway to guide assessment of cognitive-communication post TBI,
- Determine the barriers to delivering best practice assessment with this population.

Method: A benchmarking survey consisting of 10 questions was formulated using the free online survey software 'Qualtrics' (see Appendix A). It was distributed via email to the 'Speech Pathology Email ChatS' (SPECS) group and a contact list of 36 speech pathologists and speech pathology departments working with the adult TBI population. Their contact information was obtained from the Speech Pathology Australia (SPA) website and contacts were selected from a cross section of Australia to include each state and territory. The email included a brief summary outlining the purpose of the benchmarking survey and a website link and QR code directing them to the survey. It was estimated the survey would take respondents under five minutes to complete. By July 2023, all surveys had been sent to the contacts and data was collated in late August of 2023 using the Qualtrics software. Braun and Clarke's (2006) six-step thematic analysis method was completed to determine common themes within the qualitative data gathered in the open ended responses on Question 10 'What are the barriers to providing best practice assessment of cognitive-communication post TBI?'. Clinicians used coding processes and affinity mapping techniques to identify commonalities in responses and assign an overarching theme. Four key themes were identified: knowledge, resources, time, and patient factors.

Results: A total of 32 clinicians responded to the survey; 13 were working in the acute setting, 7 in inpatient rehabilitation, and 12 in outpatient rehabilitation. Only 15% of the respondents had a CPG or standardised clinical pathway. Of these, all were created within the service from a literature review and were all used consistently amongst the team. For clinicians that did not have a CPG or standardised pathway, the majority (54%) reported assessment was not consistent across clinicians. Two thirds (62.5%) of respondents reported working in the inpatient setting, and 43% of clinicians reported screening all patients with a TBI for cognitive-communication deficits. Results of the thematic analysis on the barriers to best practice assessment as reported by clinicians identified four key themes: knowledge, resources, time, and patient factors (see Appendix B). Clinicians identified a lack of knowledge as a barrier both within speech pathology as well as the broader multi-disciplinary team (MDT). This was stated seven times with speech pathologists indicating a lack of understanding and confidence in the assessment of cognitive-communication impairment as well as access to resources and information. A lack of understanding within the broader MDT of the speech pathology role in working with this cohort was reported as a barrier to receiving referrals. For example, one clinician noted that patients with TBIs who presented with "functional communication" were often only referred to occupational therapy (OT) and not speech pathology. Access to resources was identified seven times. Resources stated in this category included clinical practice guidelines, assessments, environment (such as an appropriate space to assess patients), and finances. Although time could be considered a resource, it was mentioned nine times and classified as a separate barrier. Clinicians stated that time was limited due to staffing and competing clinical priorities. The final category was patient factors. Five clinicians identified that patient factors were a barrier to assessing cognitive-communication. They noted that a patient's lack of insight into their communication changes and competing goals meant they often did not consent to assessment. One clinician noted that their workplace assessments relied on pre-morbid data and collateral history to confirm communication changes, however this information was not always available.

Conclusions: A survey was conducted with speech pathologists around Australia working with individuals experiencing cognitive-communication difficulties post TBI across the continuum of care. The survey was distributed via SPECS and emailed to speech pathologists listed as working with adults on the SPA website with a total of 32 respondents. Clinicians identified that this is a complex population where patient factors such as reduced insight, competing goals, and access to pre-morbid data can be barriers to engagement. Gaps in understanding best practice have resulted in reduced confidence advocating for the role of speech pathology. Clinicians reported this lack of knowledge limits referrals and access to resources to assess appropriately. However, clinicians with access to CPGs felt this improved consistency of assessment protocols. A review of the current literature is recommended to identify best practice for assessing cognitive-communication following TBI with the aim of increasing knowledge and developing resources to support clinical decision making.

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Therapeutic groups run for community-dwellers with acquired brain injury: A global perspective

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Background and Objectives: Little is known about the extent of therapeutic groups run for community-dwellers with acquired brain injury (ABI), despite groupwork's regular use in inpatient rehabilitation settings. In response, current literature concerning the nature of therapeutic groups run for community-dwellers with ABI and the involvement of occupational therapists was reviewed.

Method: Scoping review methodology was followed with systematic searching of relevant databases guided by Arksey and O'Malley's framework. Studies were included if they reported on therapeutic groups designed and implemented for community-dwellers with ABI.

Results: Seventy articles met inclusion. Groups are used across the world as therapeutic change agents for community-dwellers with ABI. Participants overwhelmingly valued group programs that established safe environments, a sense of belonging, growth opportunities and social connections. Group programs are utilised by a range of allied health disciplines, with strong representation noted in occupational therapy. Group programs can successfully address participation barriers, yet group accessibility needs to be improved, with better funding avenues available for service providers, as well as greater consumer involvement in group design and facilitation.

Conclusions: Groups can be a powerful therapeutic modality supporting community-dwellers with ABI, yet further research is warranted into the use of groupwork by occupational therapists working with community-dwellers with ABI within the Australian context.

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Post Traumatic Amnesia: A Collaborative Allied Health Approach on an Acute Trauma Ward

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Background/Objectives: Post traumatic amnesia (PTA) is a state of transient neurological disturbance following traumatic brain injury (TBI). Best practice guidelines suggest that a coordinated interdisciplinary approach is best practice for assessment and intervention of complex needs during PTA (e.g., motor, behavioural, emotional, cognitive, language and sensory function). This project aims to deliver increased occupational therapy (OT), speech pathology (SP) and Neuropsychology (NP) assessment and intervention for patient in PTA on an acute trauma ward.

Methods: Early (within 24 hours of admission) identification and referral to SP/NP/OT of this patient group for OT activities of daily living (ADL) retraining, NP behaviour support and SP language screen and strategies for cognitive-communication deficits in addition to standard care. The 3 disciplines will establish a Teams chat for each patient, complete joint assessment (where appropriate) and document a collaborative care plan to address patient and family/caregiver needs.

Results: Medical file audit of patients in PTA with language, behaviour and ADL needs that were seen by all 3 disciplines, and file audit of number of code greys/blacks, and use of mechanical restraints for patients in PTA.

Conclusion: Anticipated outcomes are increased delivery of OT, SP, NP assessment & intervention for this patient group in the acute stages of recovery, reductions in code greys, blacks and need for restrictive interventions.

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Effects of Animal Assisted Therapy on the emotional, physical, and psychological well-being of people with an acquired brain injury.

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Background and Objectives: The Animal Assisted Therapy (AAT) study aimed to evaluate the emotional, psychological, and physical impacts of AAT and determine its feasibility and acceptability.

Method: Seven clients at a Perth rehabilitation facility for people with ABI, who were at various stages of their rehabilitation, were recruited for the study. Each client underwent an individualised 1-hour AAT programme per week for 13 weeks. They completed assessments and questionnaires pre- and post-AAT, measuring emotional and psychological outcomes. Facility staff also provided feedback about the utility of the programme.

Results: Feedback from the participant, client, and staff questionnaires found significant benefits were derived from AAT. Rehabilitation engagement rates either maintained at the current rate of engagement or improved up to 24%. QOLIBRI results in self-perceived cognition, emotions and view of yourself, independence and daily function, and social relationships. Feelings and physical problems are both reduced. The Berg Balance Scale was used for pre-and-post-AAT assessment and found both clients had improved. The Manual Muscle Test was completed with three clients with improvements made in the client with the most recent ABI. The Wessex Head Injury Matrix was completed with one client pre-and-post AAT and showed the emergence of four additional behaviours, three of which, were directly related to the study. The Chedoke postural control assessment and the Trunk impairment scale were used as pre-and-post-AAT measures for a client working on her core strength to assist with independent standing. The client is 2 years post-ABI. The client moved from stage 3 to stage 4 on the Chedoke postural control assessment and improved by 35%.

Conclusions: Findings showed practical benefits to the introduction of AAT in the rehabilitation of clients with ABI. Impacts of the findings include considerations to be made when tailoring an AAT programme to ensure feasibility in its implementation.

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A phase 1 evaluation of the Making Everyday Memory Optimal (MEMORehab) telehealth-based group memory rehabilitation program

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Background and Objectives: Group compensatory-based memory rehabilitation has demonstrated efficacy post-ABI, but is often difficult to access. MEMORehab is a novel six-week memory program designed within a more accessible, purpose-built web application. This study aimed to explore the feasibility, preliminary effectiveness, and patient and clinician experience of MEMORehab.

Methods: 12 participants with a neurological diagnosis (6 epilepsy, 3 stroke, 3 other), reporting memory difficulties, were recruited from the community (4 male, 8 female, Mage = 54.0 years). Each set memory goals, and completed measures of memory at baseline, program completion, and follow-up. Semi-structured interviews explored patient and clinician perspectives of MEMORehab.

Results: Nine of 12 participants successfully completed the program, and eight fully completed data collection. Excluding withdrawn patients, group session attendance averaged 83%, partly due to initial issues with automated reminders. Seven of eight participants reported achieving at least one memory goal, with six maintaining this change at follow-up. Preliminary repeated-measures ANOVA analyses suggested improvement in measures of learning ($\eta p2 = .574$), memory ($\eta p2 = .559$), memory self-efficacy ($\eta p2 = .135$), and the frequency of everyday memory failures ($\eta p2 = .060$). Framework analysis of participant and clinician interview data identified several barriers to online memory rehabilitation, including technical difficulties, distractibility at home, and the challenge of group sessions relying on engagement with presession material that not all participants view prior. Facilitating factors included greater accessibility, reduced time and resource burdens compared to in-person group sessions, and the benefits of using group sessions to prioritise discussion and practical psychoeducation.

Conclusions: These results support the feasibility of MEMORehab to deliver telehealth-based memory rehabilitation, and offer preliminary evidence for memory improvements. However, further investigation on a larger scale is needed. These findings are being used to inform the ongoing development of the MEMORehab program.

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Health professional and consumer perspectives of the important features of a community brain injury rehabilitation service

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Background and Objectives: Co-design can facilitate equal partnership between health service staff and consumers, to best design and deliver health services. The Nominal Group Technique (NGT) can be an effective method of gaining multiple perspectives from healthcare professionals and people with cognitive disability to generate priorities and consensus for health service provision (Lakhani et. al., 2017; Harvey & Holmes, 2012). As part of service evaluation and redesign, clinicians at the Northern Brain Injury Rehabilitation Service Australia conducted workshops with health professionals and consumers using the NGT to understand the most important features of a brain injury rehabilitation service. This presentation details the methods and outcomes of the NGT process with health professionals and people with brain injury.

Method: 23 participants (health professional, n = 19; consumers, n = 3) engaged in a total of six workshops. The NGT was utilised to obtain participant priorities in response to the question: What are the most important features of a brain injury rehabilitation service? The NGT procedure described by McMillan (2014) was utilised due to its capacity to involve a range of participants from various backgrounds. Data was analysed using the procedure in Van Breda (2005).

Results: The NGT process provided an effective format for health professionals and consumers to generate ideas, explore and clarify idea meaning and facilitate equal group participation. Ideas generated were similar between health professional and consumer participant groups. Key themes included: brain injury services should provide a central coordinating role; have adequate staffing to support patients' specialised needs; build the capacity of the wider health workforce to care for people with brain injury; and to provide advocacy, person-centred, and evidence-based care.

Conclusions: The NGT is a feasible research methodology for clinicians to implement and is advantageous compared to other qualitative methodologies due to its time efficiency, cost-effectiveness, and minimal need for training. Future models of service delivery should aim to ensure that specialist brain injury services are adequately funded and have the capacity to provide support to the wider health workforce.

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Advancing ABI community rehabilitation: Hybrid model development in Queensland

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Background and Objectives: A key recommendation of the Queensland Statewide adult brain injury rehabilitation service plan 2016-2026 was expansion of community-based specialist ABI rehabilitation services. Service capacity in the community has historically been critically under resourced despite growing demand. At the Princess Alexandra Hospital (PAH), Brisbane, two community-based services are well established within the ABI rehabilitation continuum: the Acquired Brain Injury Transitional Rehabilitation Service (ABITRS) provides intensive home/community therapy for 10 weeks post-hospital discharge; the Acquired Brain Injury Outreach Service (ABIOS) provides rehabilitation coordination to facilitate longer-term community integration. Funding from the statewide Brain and Spinal Cord Injury Project (BaSCI) enabled exploration of innovative, sustainable ways of providing specialist ABI services in other parts of the state. The focus was on development of a 'hybrid' model (blending transitional rehabilitation and rehabilitation coordination) in partnership with another Queensland Hospital and Health Service (HHS). This presentation outlines project processes and outcomes, including the final hybrid service model.
Method: Development of the hybrid model involved several inter-related steps: scoping of relevant literature; targeted benchmarking with existing services in Queensland and other states; extensive consultation and partnership with consumers and local service providers; and piloting an embedded Rehabilitation Coordinator within the partnering HHS.
Results: The above processes provided evidence for the efficacy of the rehabilitation coordination role and culminated in the development of a draft hybrid service model, which was refined locally with the partnering HHS via a collaborative working party including consumer involvement. The final hybrid service model formed the basis of a comprehensive business case for future funding.
Conclusions: The hybrid model presents an evidence-based and sustainable option for future ABI community rehabilitation service expansion incorporating early transition and long-term term community reintegration for clients with ABI and their families. Collectively, the findings further inform the broader literature with respect to innovative models of specialist ABI community rehabilitation.
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Towards a new normal – Improving Carer support within the Acquired Brain Injury (ABI) field.

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Background and objectives: An ABI has a significant impact upon families resulting in increased emotional distress and caregiver burden. To date limited supports exist for families and carers within the WA health system, particularly within the ABI field. Carers may reduce caregiver burden through ABI education or by private psychotherapy. However, ABI psychoeducation remains distinct from a therapeutic process. To our knowledge, none of the current WA carer programs combine ABI psychoeducation with a group therapy-based focus. We propose that the integration of ABI education within a group therapy model, will decrease caregiver burden. Our aim is to provide ABI Carers with the necessary ABI knowledge and strategies within a reflective and supportive group setting. The combination of ABI psychoeducation with Acceptance Commitment Therapy (ACT), is anticipated to reduce caregiver burden.
Method: Two carer groups (N1=9; N2=10) were facilitated over a 2-hour period weekly for 6 weeks. The group was given the Zarit Caregiver Burden Assessment questionnaire (ZCBAQ revised 22 items) to complete in week 1 and week 6.
Results: Participants saw a reduction in caregiver burden scores in personal strain and role strain. In group 1 results showed a reduction in caregiver burden from pre group to post group administration (Δ=-0.78). In group 2 results showed a reduction in caregiver burden from pre group to post group administration (Δ=-0.29). Both groups of participants demonstrated a larger reduction in the personal strain than role strain.
Conclusions: Our analysis shows that a combination of group therapy with ABI psychoeducation, results in a reduction of caregiver burden in relation to personal strain and role strain. The results indicate a greater personal strain reduction than role strain. This may reflect that personal strain is more responsive to therapeutic strategies as personal strain exists within the Carer's locus of control, whereas the practical demands of the carer role may be more difficult to alter. We will seek to determine whether the reduction in caregiver burden, post group intervention, remains consistent over time. Future research could focus on whether a reduction in caregiver burden, aids the client's rehabilitation.
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Implementing best practice management of patients presenting with disorders of consciousness post-acquired brain injury

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Background and Objectives: The Royal Melbourne Hospital (RMH) is a major provider of care to the acquired brain injury population, including patients presenting with disorders of consciousness (DoC). Despite RMH Speech Pathology (SP) and Occupational Therapy (OT) departments having a long history of caring for patients with DoC, management practices were known to be inconsistent and lacking a strong evidence base. This prompted the formation of a passionate multidisciplinary project team with the aims of optimising DoC management and improving multidisciplinary clinicians' knowledge, confidence and skill in this area of practice.
Method: Surveys were completed by RMH allied health and nursing staff to evaluate existing levels of knowledge and confidence with managing the DoC population. A targeted literature review was performed to identify the best available evidence and benchmarking with hospitals in Australia and the U.K. was completed to capture current clinical practices.
Results: RMH staff survey results revealed average confidence in DoC management and confusion between DoC and post-traumatic amnesia management principles amongst nursing staff. Poor knowledge of the evidence was the most commonly reported limiting factor, with 68% of all staff reporting that they did not know what constituted best practice management of this population. The results of the literature review were combined with the benchmarking data to develop an RMH clinical guideline and sensory stimulation booklet, a resource consumer-reviewed by family members of patients presenting with DoC. The guideline and resource were rolled out as part of staff education sessions in August 2023. After a six-month pilot, a file audit will be completed to assess guideline compliance and surveys will be repeated to measure changes in staff knowledge and confidence.
Conclusions: Final results, conclusions and valuable learnings will be available for presentation at the conference.
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A Case of Alexia Without Agraphia Post Stroke: Speech Pathology and Neuropsychology Characterisation and Management

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Background and Objectives: Alexia without agraphia (AWA) is characterised by impaired reading ability whilst writing is preserved. This is a rare clinical syndrome, most frequently seen in individuals after a left hemisphere stroke and commonly presents with aphasia. We present a combined Speech Pathology and Neuropsychological perspective on the case of a 72 year old man (AS) with AWA and aphasia resulting from a left posterior cerebral artery infarct. We describe the findings of cognitive and language assessments and discuss the impact of cognitive impairments on rehabilitation approaches, and the gains made from aphasia and alexia therapy.

Method: Data was collected through the inpatient and outpatient Speech Pathology and Neuropsychology services as part of AS's post-stroke rehabilitation program. Data includes two Neuropsychological assessments and two Speech Pathology assessments conducted across a 16-month period. AS received regular individual speech pathology therapy which began at an impairment level, utilising top-down and bottom-up approaches and then moved towards practical and functional strategies to enable meaningful participation in daily activities.

Results: Over the course of his rehabilitation, AS demonstrated mild gains in some cognition domains and modest improvements in language functions, but minimal change in reading skills. Cognitive impairments, particularly in verbal encoding and recall, were the most significant barrier to his progress in Speech Pathology at an impairment level. He was able to effectively learn to use and implement technology to support his reading impairment in the later stages of therapy, including use of mobile phone/tablet to read and communicate in both personal and occupational settings.

Conclusions: We offer a unique perspective in considering how neuropsychological characteristics can substantially impact alexia and aphasia therapy, and the benefits and challenges of focusing intervention on both an impairment level therapy and on more practical and functional communication strategies. Consideration must be given to concurrent cognitive impairments in individuals with acquired AWA, to inform adaptation of intervention and the importance of family members or close others on a person's recovery. At the close of our treatment with AS, he said "life is good" and "my brain and my phone are now well connected".

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Be Pain Smart – Evaluation of Online Clinician Pain Management Education Modules

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Background and Objectives: There is a growing body of literature aimed at understanding the assessment and management of chronic pain after moderate to severe traumatic brain injury (M/S-TBI). Multidisciplinary (MDT) pain management is accepted as gold standard for chronic pain, but there is limited evidence to guide clinicians on how to modify general pain management strategies for people with a M/S-TBI. The Be Pain Smart – Online Education Modules (BPS-OEM) are a suite of online modules, providing evidence-based training for clinicians on pain management strategies for people with a M/S-TBI. The modules have utilised optimal adult learning principles within the design to support the learning of pain management strategies and clinical decision making aligned with the BPS clinical reasoning framework. The online delivery allows for maximum accessibility to facilitate the training of clinicians across metropolitan and rural/remote regions. The aim of the study was to evaluate the feasibility and acceptability of the BPS-OEM, particularly examining clinicians' pain beliefs, confidence and clinical practice when managing pain with people who have a M/S-TBI.

Methods: A sample of allied health clinicians were recruited via advertisements through the relevant New South Wales (NSW) networks. Data was collected via an online survey with outcome measures targeting clinical practice, knowledge, confidence, pain beliefs and clinical value of the BPS-OEM.

Results: Improvement in clinician confidence and pain knowledge, and changes in pain beliefs to be more aligned with MDT pain management approaches were found. The BPS clinical reasoning framework with an online interactive clinical reasoning tool will be presented.

Conclusions: Improvements in clinician confidence and pain knowledge will lead to increased capacity within existing services to assess and manage chronic pain in the TBI population. The added value of additional 6 group mentoring sessions to compliment the BPS-OEM will be reviewed. The BPS-OEM provides training and a clinical reasoning framework to assist clinicians to improve access to and the delivery of appropriate pain management services for people with a M/S-TBI.

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Preliminary scoping of technology use in outpatient brain injury rehabilitation services

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Background and Objectives: The increased availability and accessibility of technology has the potential to expand rehabilitation opportunities and contribute to better functional outcomes for people with acquired brain injury (ABI). This study aims to better understand the current practices and role of technology in an outpatient brain injury rehabilitation setting and perceived barriers and enablers to technology use.

Method: This study employs a prospective longitudinal design and mixed methods approach. Data are collected via patient and clinician completed surveys and interviews at a hospital-based multi-disciplinary outpatient brain injury rehabilitation service in Brisbane, Australia. Data relating to the type, purpose, frequency and importance of technology use, as well as barriers and enablers are collected across four time points: admission (T1), during each therapy session (T2), at discharge (T3) and at three to six months post-discharge (T4). Since March 2022, data have been collected for 41 patients (54% female; aged 16-65 years; 41.5% traumatic brain injury, 22% stroke). Here, descriptive statistics are used to explore their use of technology during admission (T1-T3).

Results: Technology was on average discussed in 53.42% (SD=20.0%) of patients' therapy sessions, and in at least one session for 97.6% of patients, predominantly by Occupational Therapists and Speech Pathologists. Types of technology most discussed were mobile phones to support memory, planning and communication. Patient willingness and confidence in using technology were rated as moderate (M = 6.93, SD = 2.91 and M =

6.88, SD = 2.56, respectively; 0 = not at all, 10 = extremely). Most common barriers to technology use following ABI related to psychological and cognitive or communication challenges. In contrast, technology use following ABI was most enabled by pre-injury experience or familiarity with technology, and motivation to achieve rehabilitation goals.

Conclusions: Preliminary data indicate relatively high utilisation of technology during outpatient brain injury rehabilitation. Further data collection and analysis will broaden the understanding of the role of technology in brain injury rehabilitation and provide insight into ways to support technology use following ABI.

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Designing a best practice model of care for rehabilitation of patients with a prolonged disorder of consciousness (PDOC)

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Background and aim(s): Patients with prolonged disorders of consciousness (PDOC) constitute a small, yet clinically and ethically challenging subset of patients with brain injuries. Delivering high-quality rehabilitation to this vulnerable population necessitates a cohesive team-based approach1. This approach includes precise diagnosis, targeted sensory instigative rehabilitation, and tailored best-interest discussions that address the distinct requirements of both patients and their families. This project aimed to develop a model of sub-acute rehabilitation care tailored specifically for PDOC patients within the Metro North Health system. The objective was to enhance efficiency, consistency of care, and improve the experiences of both patients and their families.

Method: A comprehensive scoping review was conducted, including an examination of national and international guidelines, benchmarking with other institutes, one-on-one clinician and consumer interviews, and qualitative chart and service audit against established guidelines. The findings from the scoping phase informed the subsequent design phase. A consultative approach was employed to develop a model that included a core set of goals specific to PDOC, levels of care framework, a criteria-led admission pathway and a range of evidence-based resources that are both innovative and tailored to the context.

Result(s): A 12-week assessment and management framework for PDOC rehabilitation was successfully developed and implemented. Additionally, funding was secured for a 12-month implementation pilot to evaluate, refine, and establish the framework as standard practice within the Metro North Health and Hospital Service.

Conclusion(s): Patients with PDOC require a specialized and personalized approach to sensory-stimulative rehabilitation to ensure accurate diagnosis and improve their quality of life based on individual preferences. The newly developed PDOC Assessment and Management Framework aims to enhance coordination, consistency, and equity of care for this vulnerable patient population and their families, which is sustainable and scalable

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Neuropsychological Model of Agraphia in Arabic-Speaking Patients with Alzheimer’s Disease and Primary Progressive Aphasia

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Background and Objectives: To our knowledge, no study has been conducted in Arabic regarding cognitive-linguistic characterization in neurodegenerative diseases since the majority of studies have been carried out in English. In this study, we characterized writing disorders (agraphia) in Alzheimer's disease (AD) and primary progressive aphasia (PPA).

Method: The study sample consisted of 21 patients. Fourteen patients (4 women and 10 men; 4 with mild AD and 10 with moderate AD) and 7 patients with PPA (3 PPA-non-fluent; 3 PPA-logopenic variant and 1 PPA semantic variant). They underwent the Moroccan version of the Mini-Linguistic State Examination (MLSE) which is a screening battery for language disorders in neurodegenerative diseases (Patel et al., 2022). Additionally, neuropsychological assessment has been used for different cognitive functions (attention, memory, executive functions, visual perception). The neurolinguistic impairments in Arabic have been discussed according to a revisited neurocognitive model of the modular written language processing (Margolin, 1984; Caramazza et al, 1987; McCloskey et al., 2018).

Results: According to our neurocognitive model, graphemic and post-graphemic buffer errors are produced by patients with moderate AD. Because the graphemic buffer is located after lexical processing, lexical variables, such as frequency and grammatical class, should not have any influence on patient performance. Most patients in this case series with AD and PPA might share the same linguistic pattern in writing. We suggest that commands arrive at the level of the graphemic buffer, which is divided into multiple sub-buffers that are responsible for processing abstract identities of letters in Arabic, diacritics, vowels, and consonant-vowel order. The shape of the word is preserved at the graphemic buffer, whereas at the post-graphemic level, the required allographs (i.e., letter shapes in Arabic) and the associated graphomotor patterns are selected, arranged, and produced (muscle and spatial-temporal parameterization). A delay or error in processing these parameters might induce graphomotor paragraphias.

Conclusions: This study provides a new perspective in the linguistic characterization of agraphia in AD and PPA. The pattern of graphemic disorders found in our patients is consistent with the impairment of triple peripheral writing buffers: graphemic, graphomotor, and allographic. Moreover, the omission of diacritics is a typical visuospatial finding that explains these paragraphias in Arabic.

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Serious Games Assessment and Interventions in Arabic Patients with Dyslexia: A Narrative Scoping Review

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Background and Objectives: Due to the booming of neurodevelopmental and learning language disorders and the lack of accessible screening, assessment and therapeutic tools in Arabic, there is an increasing need to innovate, rehabilitate and compensate reading disorders (dyslexia) in Arabic-speaking children. Nowadays, the non-pharmacological interventions encompass new technological mediums such as serious game, artificial intelligence, augmented and virtual environments to optimize the therapeutic outcomes. The present review aims to investigate the gamification-based assessment and intervention in Arabic-speaking children with dyslexia according to the current neurocognitive models of reading and game design.

Method: A literature review was conducted in September 2023 following the framework of Arksey and O’ Malley (2007) for scoping reviews. We searched articles published in English from 2010 to 2023 in PubMed, Web of Science and Scopus databases that addressed the gamification in dyslexia in Arabic-speaking children. A total of 87 articles has been identified. Based on the inclusion criteria, 17 suitable studies were selected. Variables were described according to MDA framework (Hunicke et al, 2004) for game design which is based on three dimensions: Mechanics (M), Dynamics (D), and Aesthetics (A).

Results: There are a number of variables to take into account while using gamification for dyslexic children in Arabic, including pre-assessment of dexterity and psychomotor fine gesture, self and hetero-motivation, flexibility and aesthetics vs ergonomics of Graphical user interface (GUI). The technological medium ranged from diverse applications of AI in early screening and diagnosis to the use of augmented reality and chatbot. The application of MDA core components was heterogeneous in this population with a lack of cognitive-based model for gamified applications in Arabic. While the mechanics of different applications was excellent, however the aesthetics and dynamics were limited. Different studies used gamified assessment (n=5), gamified rehabilitation (n=9), cognitive one domain (n=2); cognitive multi-domain and non-cognitive (psychomotor and multimodal approaches, n=1).

Conclusions: This scoping review showed the interest of developing innovative approaches in the assessment and rehabilitation of dyslexia in Arabic. There is a need to implement a neuropsychological-guided framework of reading in Arabic games for children with limited literacy from underserved and marginalized communities.

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The potential of cognitive remediation therapy for improving the functional communication capabilities of adults with schizophrenia and other psychotic spectrum disorders

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Background and objectives: Impairment in aspects of communication affects ability to complete daily activities, the quality of relationships and quality of life of people with schizophrenia and other psychotic spectrum disorders. Little research has focussed on communication outcomes in relation to cognitive remediation therapy within this population. This study surveyed changes in ratings of the functional communication and pragmatics capability of adults with schizophrenia before and after completing the CIRCuiTS cognitive remediation therapy program.

Method: 30 adults with schizophrenia and other psychotic spectrum disorders completed the CIRCuiTS therapy program as part of an implementation trial in 2018 and 2019. Most participants were male (93%) and inpatients at Bloomfield hospital (73%) in Orange, NSW. Ratings on the Adaptive Behaviour Assessment System (ABAS3) were returned before and after completion of the CIRCuiTS program. The magnitude of changes in ABAS3 Indices, the Communication scale and Functional academics scales was assessed between timepoints.

Results: Participants' mean ABAS3 index scores prior to the CIRCuiTS program were in the extremely low range (~2nd percentile) and increased to the low range (~7th percentile) following this therapy, achieving strong mean effect sizes (Cohen's d =.92 to 1.24). Significant improvements in functioning were observed on ABAS3 Communication and Functional Academics scales, with large mean effect sizes on both scales (Cohen's d = 1.09 and .99 respectively). Substantial improvements in ratings occurred on items including initiating conversations, talking and listening over longer periods, explaining more complex information, using lists and reminders and a schedule or diary, completing written forms, and personal money management.

Conclusions: Most participants were observed to make gains in aspects of functional communication pragmatics. Further research with participants with a broader range of demographic, clinical and functional capability, that controls for the effects of medications and other therapeutic interventions and that utilises more comprehensive assessment of communication seems warranted.

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Cognitive Rehabilitation Following Traumatic Brain Injury: An International Survey of Current Clinician Practice

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Background and Objectives: Cognitive difficulties are persistent consequences of moderate-severe traumatic brain injury (TBI), impacting activity participation and wellbeing. Cognitive functioning is an important focus of rehabilitation to promote independence and engagement in essential and meaningful activities and relationships. Despite this, the current state of clinical practice is not well understood. This study surveyed clinicians, internationally, to explore their approaches to cognitive rehabilitation, training and resources, and facilitators and barriers of cognitive rehabilitation.

Method: 559 clinicians of various disciplines and years of experience, from 42 countries, completed an online survey regarding their current cognitive rehabilitation practice. Data were analysed utilising descriptive statistics and qualitatively via content analysis.

Results: Clinicians most commonly employed compensatory strategies (i.e. internal, external, environmental) to deliver cognitive rehabilitation. Restorative approaches were also utilised, but less frequently. Common components of cognitive rehabilitation included assessment, goal-setting, psychoeducation, and progress monitoring. Cognitive rehabilitation was most frequently practised in inpatient settings, closely followed by the community which was noted to promote real-world integration. Client, clinician, and service-related facilitators and barriers were identified. Service-related factors such as inadequate time, staffing, multidisciplinary cohesion, funding or non-conducive settings were commonly limiting, as well as challenges such as clients' lack of self-awareness and/or supports. Clinicians indicated a lack of formal training to meet their needs in providing cognitive rehabilitation; and mostly learned through experience. Whilst aware of and indicating use of clinical practice guidelines and other resources, usage was relatively infrequent (less than monthly). Overall, clinicians desired further training and resources to bolster their self-efficacy and bridge the knowledge-to-practice gap in cognitive rehabilitation.

Conclusions: A range of approaches to cognitive rehabilitation are utilised internationally, with facilitators and barriers to practice identified. Such findings will inform how needs, training, and development of required evidence to support clinicians' practice of cognitive rehabilitation can be addressed to promote best practice and outcomes following TBI.

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Leisure activity participation in Hong Kong older population and its associations with cognitive, psychological and functional abilities

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Background and Objectives: Participating in leisure activities, (i.e., things that people engage in for enjoyment or well-being) is considered to foster healthy ageing. However, there is limited evidence to comprehensively examine the relationship between leisure activity participation and cognitive, psychological, and functional abilities in older adults. Therefore, the current study aimed to investigate the relationship between leisure activity participation and self-reported cognitive, psychological, and functional abilities in older adults.

Method: This survey study recruited a convenient sample of 280 healthy Hong Kong older adults aged 60 years or above. Leisure activity participation, including the number of subtypes, frequency, and the number of hours per week of four categories of activities (viz., intellectual, social, recreational and physical) was collected. Cognitive abilities were measured by the Chinese version of the Cognitive Complaints in Bipolar Disorder Rating Assessment, Dysexecutive Questionnaire, and Prospective and Retrospective Memory Questionnaire. Psychological abilities were assessed by the Chinese version of the UCLA loneliness scale, Satisfaction with Life Scale, and Depression, Anxiety and Stress Scale-21. Functional independence was measured by the Chinese version of the Instrumental Activities of Daily Living Scale (IADL).

Results: Seven sequential regressions were conducted to examine the effects of leisure activity participation on each outcome. Except for IADL, all of the outcome measures showed significant results, which indicated that leisure activity participation was positively associated with cognitive and psychological abilities. Intellectual and social leisure activities were found to be beneficial to cognitive and psychological abilities, respectively. Specifically, dimensions of participation, such as diversity and frequency, were the significant predictors of the relationship. Cross-domain advantages were also observed, such as more frequent participation in physical activities were associated with better cognitive abilities (i.e., general cognition, executive function, and memory).

Conclusions: Leisure activity participation is positively associated with self-reported cognitive and psychological abilities of older adults. Future research is recommended to investigate the effectiveness of leisure activity participation as an intervention on objective cognitive, psychological and functional outcomes.

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Underpinning low mood: Impact of cognitive and physical stroke sequelae on the multiple domains of interpersonal intimacy

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Background/Objectives: There are many types of intimacy (e.g., emotional, experiential, intellectual) we have with different people in our lives. Suffering a stroke means people may have cognitive impairments in memory, language, emotional regulation and executive functioning let alone changed physical abilities and reduced participation in previously valued activities. Those who love the individual are also dealing with the cognitive, physical and functional sequelae of the stroke in addition to shouldering caregiving responsibilities.

Method: Visual depiction of the multiple intimacy domains and how these are impacted following a stroke.

Results: Clinicians can grow their knowledge of the domains of intimacy, and how underpinning a presenting problem of a sense of isolation or low mood is often due to a loss of intimacy in itself a product of the stroke sequelae.

Conclusions: Clinicians are asked to consider the cognitive, caregiving, functional and physical reasons for reduced intimacy as then underpinning a presenting problem of low mood or depression to be treated.

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A pilot review of an interdisciplinary transitional accommodation program in Perth, WA supporting people with Korsakoff Syndrome transition from hospital to long term accommodation in the community

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Background and objective: Transition for people from acute mental health inpatient to long term accommodation is often a vulnerable period. Studies also show that longer inpatient stays are usually associated with negative outcomes. Korsakoff Syndrome (KS)is a chronic neuropsychiatric syndrome characterized by memory loss, reduced cognition, confusion and confabulation. These symptoms contribute to non-acceptance of future care needs and accommodation options. This study aims to evaluate the effectiveness of the Brightwater Transitional Accommodation Program (BW TAP) on 4 clients with KS and discuss success contributors and challenges.

Method: Four clients with KS admitted to BW TAP were reviewed with length of stay (LOS) compared. A timeline of clients' key stakeholder engagement since admission and frequency of attendance were completed for:

a) Positive Behaviour Support Practitioner (PBSP), Mental Health Occupational Therapist and Services (MHOT)
b) Next of Kin/Office of the Public Advocate Guardian (NOK/OPA)

Results: Clients A and B stayed for 20 and 28 months each, while Clients C and D stayed for 6 and 9 months respectively.

a) PBSP, MHOT

Client A&B: Client A had clinical psychologist at month 4 for 6 sessions. No PBSP engagement until at discharge destination. Client B's engagement of MHOT and PBSP started on month 17 and 27 respectively, both attended frequently thereafter.

Client C&D: PBSP, MHOT and site social worker engaged within the first 2-3 month; attended to client weekly initially, then monthly until discharge. Both the NDIS practitioners worked with site staff providing strategies to support clients and were present during discharge process to long term accommodation.

b) NOK/OPA

Client A&B: Ad- hoc communication mainly with BW Coordinator for specific issues. OPA most involved 2-3 months prior to discharge. Did not attend goal setting and review meetings.

Client C&D: Active involvement and regular communication with all key stakeholders including BW TAP interdisciplinary team, attended goal setting meeting at 1st month and 4 monthly reviews.

Conclusion: Positive outcomes were evident when PBSP, MHOT and NOK/OPA worked collaboratively with site staff to prepare and support client transition focusing on strategies for consistent and frequent client interactions leading to discharge. A less timely stakeholder involvement led to increased client resistance to identified suitable discharge options and increased LOS.

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Thank you!

We hope you enjoy this year's conference. We look forward to seeing you in Sydney, Australia!

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