The Hopkins Centre
Research for Rehabilitation and Resilience

Speech pathology management of adults with cognitive-communication disorders following traumatic brain injury:
A mixed-methods investigation

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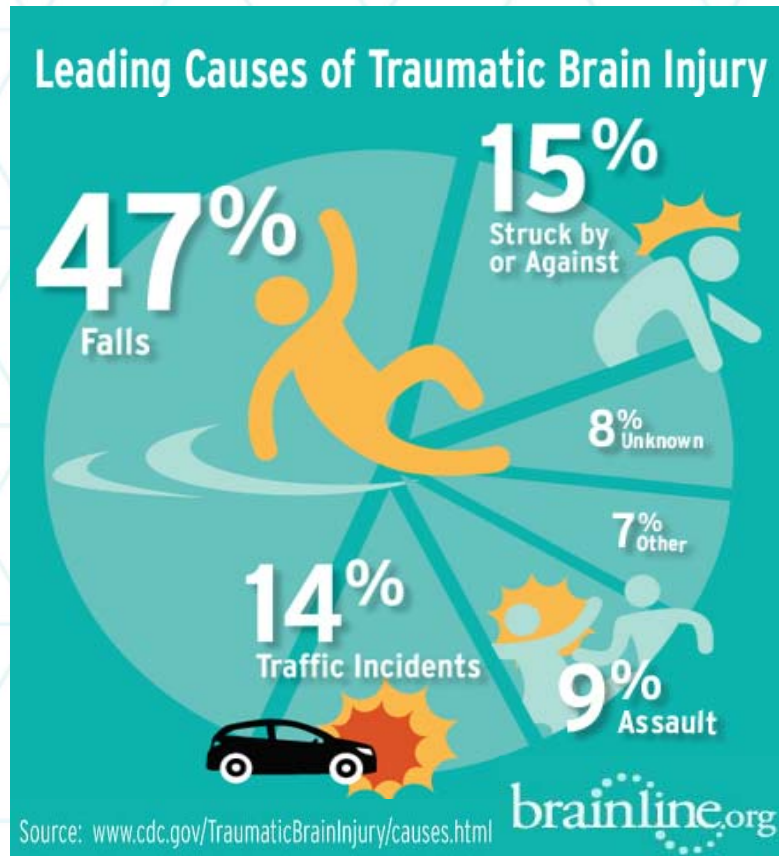
Traumatic Brain Injury (TBI)

Leading Causes of Traumatic Brain Injury

47% Falls

15% Struck by or Against

8% Unknown

7% Other

14% Traffic Incidents

9% Assault

Source: www.cdc.gov/TraumaticBrainInjury/causes.html

brainline.org
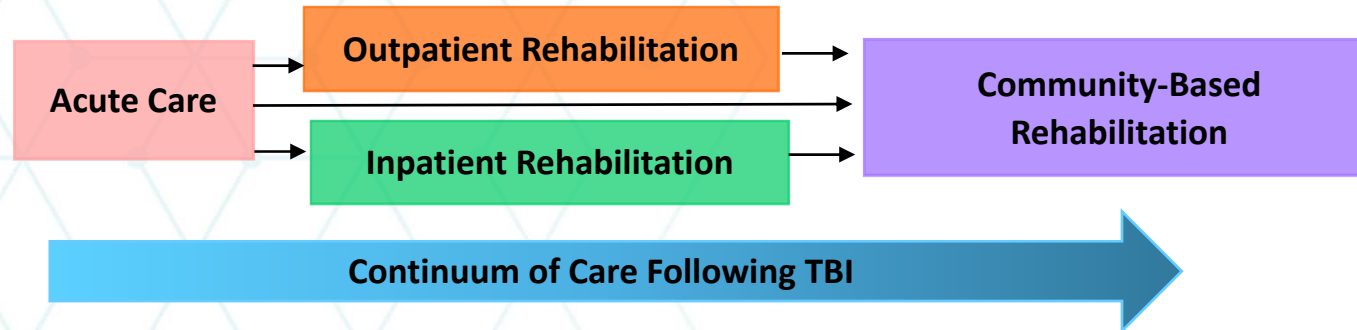
Cognitive-communication disorder (CCD)

Difficulties in communicative competence:
- Listening
- Speaking
- Reading
- Writing
- Conversation
- Social interactions

CCDs often lead to:
- Reduced communicative interactions
- Diminished social participation
- Fewer employment opportunities
- Lower overall quality of life

Rehabilitation

Intervention guidelines:

- **INCOG** Recommendations for managing of cognition following TBI (Togher et al., 2014)

- Cognitive-Communication Intervention Review Framework (CCIRF; MacDonald & Wiseman-Hakes, 2010)

- International acquired brain injury guidelines (American Speech-Language-Health Association, ASHA 2005; College of Speech-Language Pathologists and Audiologists of Ontario, CASLPO 2006; New Zealand Guidelines Group, NZGG 2007; Scottish Intercollegiate Guidelines Network, SIGN 2013)

Study aims

1. To identify the current **processes and practices of speech pathologists'** when managing community-dwelling adults with **CCDs following TBI**.

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2. To explore **recommendations of clinicians** currently working in the area regarding key features to consider for **future rehabilitation models of care**.

Methods

Sequential explanatory mixed-methods design involving two distinct data collection phases:

1) **In-depth online survey**

- Participant demographics

- Service characteristics

- Management practices

- Collaboration practices

- Client engagement

- Professional development

- Service strengths and challenges

2) **Semi-structured one-on-one interviews**

Part one - Survey

- **51 participants** - Speech pathologists with current experience working in CBR services.

- **Australia** (QLD, NSW, VIC, WA, SA and NT)

- **New Zealand** (North and South Islands)

- Median number of years as a speech pathologist = 10.2 years

- Median number of years working with people with TBI = 5.5 years

Service type – Survey participants	n=51	%
Community-based government-funded programs	35	**69**
Private hospital outpatient service	2	4
Private practice	7	14
Non-government organisation	4	8
Other	3	6

Part two – Interviews

- **14 participants** - Speech pathologists with current experience working in CBR services.

- **Australia** (QLD, NSW, VIC, and WA)

- **New Zealand** (North and South Islands)

- Median number of years as a speech pathologist = 11.8 years

- Median number of years working with people with TBI = 11.2 years

Service type- Interview participants	n=14	%
Community-based government-funded programs	8	57
Private practice	6	43

Service contexts and environments

Role of significant others

Key findings

Models used in service delivery

Therapy focus

Service contexts and environments

Referral source	Proportion of referrals			
	0-24%	25-49%	50-74%	75-100%
Inpatient rehabilitation unit	37	8	**20**	**35**
Inpatient acute units	86	12	**2**	**0**
Outpatient services	80	8	8	4
Private practice	96	0	4	0
GP	96	2	**2**	**0**
Self-referral	94	2	4	0
Other	75	8	2	16

Therapy environment	% of therapy sessions
Client's homes	**60%**
Health centre/rehab unit	34%
Community/public space	**2%**
Tele-rehabilitation	0%
Other	4%

"The clients are in their comfort zone when they're at home which I think is very important for someone especially after head injury…they need to feel safe before the learning can start." (Participant 10).

Models used in service delivery

Service frequency – Survey participants	N=51	%
>Twice weekly	6	12
Twice weekly	17	33
Weekly	19	**37**
<Weekly	9	**18**

"I usually see my TBI clients roughly once a week. Ideally it would be more but it's a busy caseload I'm juggling." (Participant 12)

Service delivery models	%	%	%
	Never	Occasionally	Often/always
One-on-one therapy	2	2	**96**
Group therapy	43	41	**16**
MDT therapy sessions	6	57	37
Transdisciplinary sessions	33	45	22

"We've tried to run groups in the past but we've found they don't want to do them, or we don't have the numbers, sometimes it's just about getting the right mix which is hard." (Participant 9)

Therapy focus

One-on-one treatment focus	%	%	%
	Never	Occasionally	Often/always
Impairment-specific	0	35	65
Compensatory strategies	0	25	75
Functional approach	0	0	**100**
Social skill development	0	31	69
TBI/CCD education	0	16	84

"We try and focus on functional tasks that help them make daily life that bit better. Sometimes that's practising making an appointment over the phone, or ordering a coffee, it might even be helping them to fill out a form or practise a hard conversation with the boss." (Participant 14)

Role of significant others

"Having a family member or friend be part of the journey with them can be so helpful. It's that extra push to get them engaging consistently, and honestly I find they help keep therapy sessions more meaningful." (Participant 5)

"Logistically they (significant others) can't always be there and some of my clients don't always want them there so it is client dependent. So while it's ideal, yes you have that person in all the time and you can do a lot of that training, in practice I don't find it always works that way." (Participant 2)

Summary

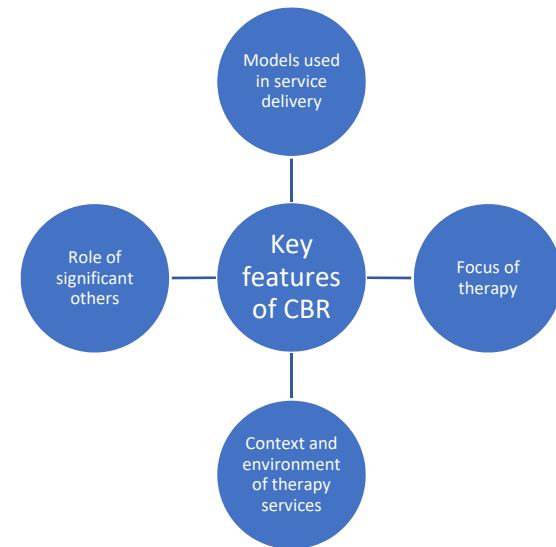**INCOG guidelines + international evidence-based recommendations implemented in current practice**
- Speech pathology specific programs
- Home-based therapy
- Functional therapy approach
- Significant other inclusion

Current challenges exist when managing this complex client population
- Referral pathways
- Therapy frequency
- Community-based therapy environments
- Group therapy
- Significant other involvement

Further exploration is required of other key stakeholders
- Community-dwelling adults with CCDs following TBI
- Significant others

Models used in service delivery

Role of significant others

Key features of CBR

Focus of therapy

Context and environment of therapy services

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Questions?

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