

# Knowing where to start:

The impact of a brief educational intervention on prioritisation of implementation targets for speech pathologists.

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# Introduction – the evidence-practice gap

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## Evidence-practice gaps exist in aphasia management

- **Adherence to aphasia recommendations = 58%** (*Hubbard et al, 2012*) but variable for individual recommendations.
  - *“Some aphasia friendly information available in 46% hospitals”* (*Stroke Foundation audit*)
- **CPGs are:**
  - **effective** in changing both care **processes** and **outcomes** (*Thomas et al., 2009*)
  - associated with **better stroke recovery outcomes** (*Hubbard et al., 2012*)

**Aims of my PhD:** to investigate speech pathologists' **implementation** of clinical practice guideline **recommendations** in the management of post-stroke **aphasia**

# Introduction – implementation science

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## Implementation science can improve clinical practice

- Implementation efforts should be tailored to local clinical & organisation context to be most effective (Baker et al, 2015)
- So (speech pathology) clinicians need to drive these implementation efforts
- And (speech pathology) clinicians need to have knowledge & skills in implementation
- BUT there are so many areas of practice that need improvement...
- Where do we start???

# Prioritising Implementation Targets

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## What did we do?

- Developed of novel process for prioritising implementation efforts
- 34 evidence-based recommendations categorised into topic areas
- 7 implementation criteria identified and applied to topics
- Evidence matrix populated using data from above

### **Implementation criteria:**

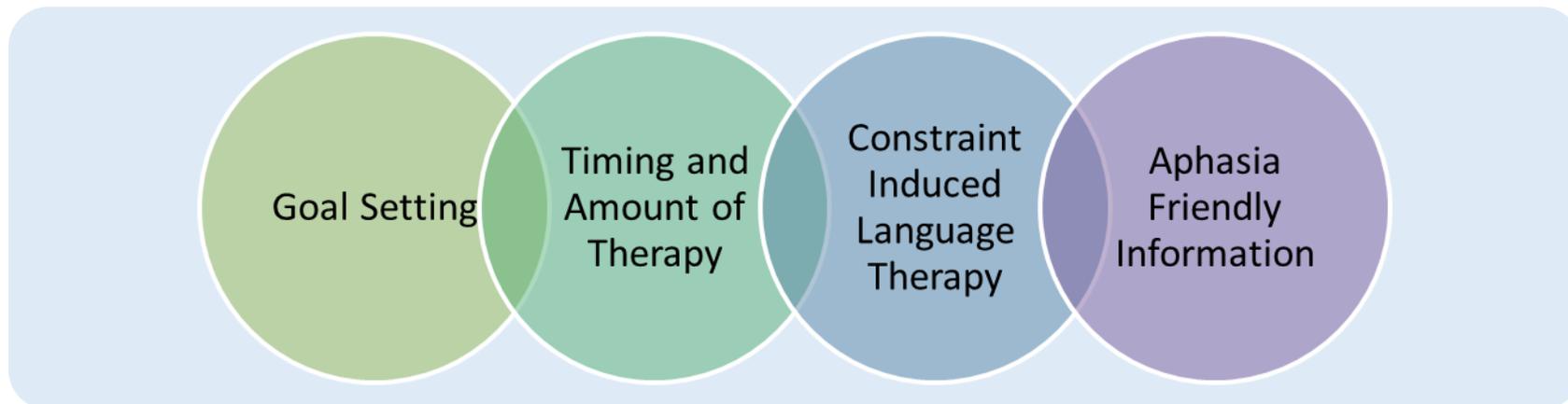
1. Strength of the evidence
2. Current evidence-practice gap
3. Clinician preference
4. Client preference
5. Modifiability
6. Measurability
7. Health impact

# Priorities for Implementation in Aphasia

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## What did we find?

- 2009 documents identified in the searches
- 7 topics underpinned by high-level evidence
- 4 topics had moderate-high evidence-practice gaps
- Lack of information for clinician and client preferences (*now a focus of the Stroke Foundation's Living Guidelines group*)
- Four priorities



# The problem – many unanswered questions

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- What are speech pathologists' priorities?
  - *How do they decide what to target for implementation and practice change?*
  - *Do SPs have adequate knowledge & training on how to do this?*
- Do my 'research' priorities relate to the needs of the local context?
- Issue of 'consumer buy-in'



# The solution – a research study

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**Aims:** to identify **current implementation priorities** in clinical aphasia management and whether SPs' **knowledge, skills and confidence** in prioritising clinical targets improved following an implementation workshop.



# Method

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- **Intervention:** a brief interactive, educational workshop about developing local implementation priorities.
- **Participants:** 33 clinical SPs who attended an aphasia conference workshop.
- **Outcome measures:** Changes in knowledge, skills and confidence explored through a pre-post workshop survey. This included demographic and open-ended questions, and Likert scale ratings for statements based on seven (of 14) domains of the Theoretical Domains Framework (Cane et al 2012). ***Also asked about priorities.***
- **Analysis:** Descriptive statistics and paired t-tests for change scores.

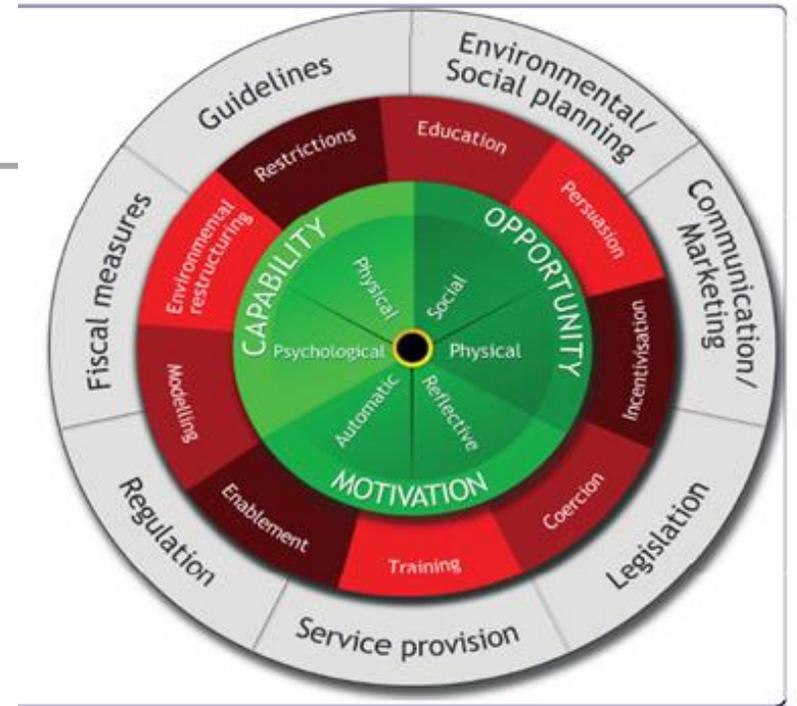
# Method – Workshop content

SLPs received a **single, face-to-face, 1 hour interactive workshop** delivered by me and EP

There was pre-reading!

Intervention included these strategies:

- Education – about implementation, the TDF, and how prioritisation can occur
- Training – worksheets with instructions, opportunities to practice applying process
- Persuasion – with input from clinicians, discussion re outcomes/benefits/risks
- Enablement – discussion/problem-solving to promote self-efficacy and positive experience
- Environmental restructuring – SLPs provided with resources including worksheets, best practice statements, and our article on prioritisation.



## WORKSHEET 2: Identify the evidence-practice gaps

(Write the *evidence*, or a *plan* of how you will obtain this information)

**1. Which areas of practice have the largest evidence-practice gap?**  
(i.e., What are you currently not doing as well as you could? *Use the BPS as a guide.*) How do you know? (What are some ways you can collect this information?)

**2. Which 'gaps' have the strongest evidence?**  
**What is the underlying evidence & source for the proposed change?**

- Derived from research, clinical consensus, patient views, local data, combination? It is perceived as rigorous and robust?

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**3. Now identify 3 priorities – areas that have known evidence-practice gaps and strong evidence – for your workplace.**

**Priority 1:**

**Priority 2:**

**Priority 3:**

# Results

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- **Participants**

- 14 workshop participants consented and completed both pre- and post-workshop surveys.
- 12/14 had not received prior implementation training
- Female = 100%
- Years of experience – 40% worked for 3-5 years
- Majority working in metro areas (89.47% ) in inpatient rehabilitation (36.36%)

# Results 1 – Factors influencing practice in prioritising imp targets

TDF Domain (n=14)	Baseline	Post	1-sided paired t-test
Knowledge	2.86	4.07	*p = 0.002 ↑
Skills	2.64	3.64	*p = 0.002 ↑
Beliefs about Capabilities	2.86	3.86	*p = 0.004 ↑
Beliefs about Consequences	4.07	4.64	*p = 0.036 ↑
Goals	4	4.57	*p = 0.044 ↑
Environmental Context/Resources	3.71	4.07	*p = 0.048 ↑
Behavioural Regulation	2.86	2.93	p = 0.403 ↑

# Results 2 - Implementation priorities

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Post Workshop

1. Conversation Partner Training

2. Communication Access and  
Aphasia-Friendly Information

2. Collaborative Goal Setting

4. Assessment

# Results 3 – Clinician comments

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## **What did you enjoy most about the workshop?**

- “Hearing other peoples' ideas and strategies. Thinking about what I can take back to d/w my team - using these resources to help us refine our priorities and how we'll work towards them.”
- “Reviewing the TDF”
- “Thought provoking --> reflection”

## **What are your suggestions for improving the workshop?**

- “Do more, longer!”
- “Perhaps less structured and more informal discussion”
- “I understand there were time constraints however it became difficult to absorb information towards the end as it was a large amount of information in a short period of time.”

# Conclusion/Clinical Implications

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- Clinicians' knowledge and skills in prioritising implementation targets can be improved through a brief **theoretically-based behaviour change intervention**.
- **Important to target implementation efforts at priority areas – *what is a priority for you, your service and your clients? What is the evidence-practice gap and are you measuring it?***
- Important to **identify local priorities in a systematic way**
- Need to **target implementation strategies at B & F** (TDF an option), and review progress to work to overcome new barriers that may emerge

# Future Research Directions

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1. **Investigate** whether participants tried to **implement** practice change following the workshop
2. Expand to **multidisciplinary teams** (not just SLPs)
  - **If you are wanting to change practice and need support**
  - **If you would like to include implementation science methodologies in your research...**
  - **I am interested in collaborating on projects outside of aphasia**
  - **I run workshops on implementation**

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