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PERSON CENTRED RESEARCH**

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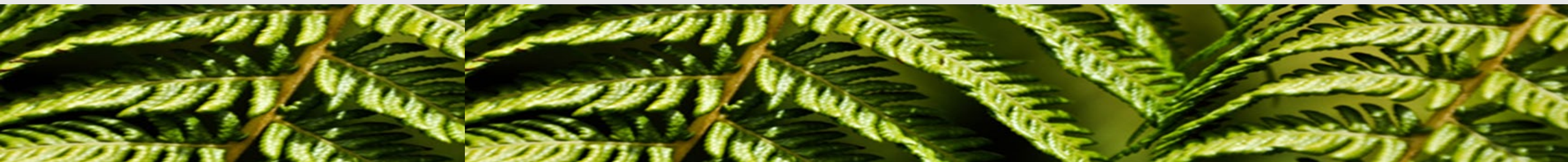
# Changing physiotherapy behaviour to optimise outcome: an in-depth examination of a knowledge translation process

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# Two early drivers for this research

1. Research on client behaviour prolific, but limited attention on professional behaviour

What might we gain if we turn our attention to professional behaviour?

2. Research takes 20 years or more to find its way into practice

Isn't it time we focused our energy and resources on getting what we know into practice?





# Rapid growth in implementation science

- Research into the science of knowledge translation
- Strategies and methodologies for:
  - Facilitating uptake of research findings into practice
  - Embedding new ways of working into practice
- Jury's still out, but consensus that:
  - It's complex
  - Needs active management
  - Multi-component interventions better





So...

- What can we learn from an in-depth examination of the knowledge translation process in rehabilitation?
- How might that inform us in our efforts to increase uptake of our research findings into practice?
- But, where to start?

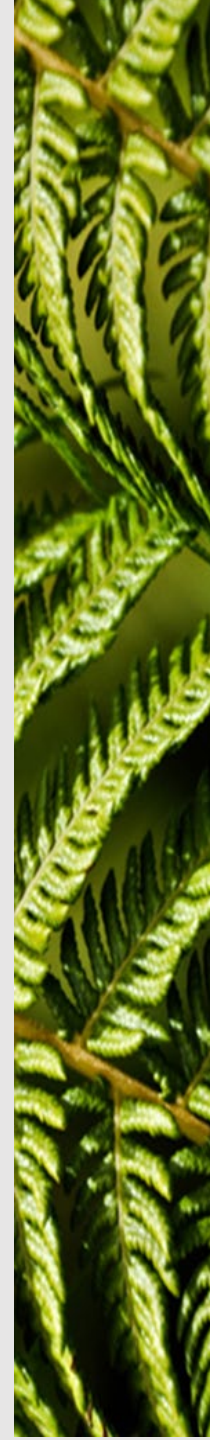






# An exemplar issue?

- “Adherence” is associated with better outcome from musculoskeletal physiotherapy (PT) (Jack et al., 2010)
- But, rates of non-adherence are as high as 70%
- A combination of person-centred practice and targeted behaviour change techniques may optimise adherence (McLean et al., 2010)
- However, integration of these into routine physiotherapy practice has proven complex (Norris & Kilbride, 2013; Nicholls & Holmes, 2012)
- A long standing knowledge transfer problem?





## Our aims

- To test the feasibility of an active, multi-component knowledge translation intervention to support adoption of adherence-promoting strategies into musculoskeletal physiotherapy practice
- To critically explore the process of knowledge translation in a rehabilitation context





# Knowledge translation intervention

## Interactive workshop

- A toolbox of adherence-promoting strategies
- Evidence-based and informed by COM-B model (Michie et al., 2011)
- Eight discrete tools e.g. if-then plans, checking importance and confidence, connectivity

## Knowledge broker

- One day a week for three months
- Seconded to the role
- Advised to be flexible and tailor role to PT needs
- Fortnightly supervision with research team

## Online discussion

- Invited to contribute to online discussion forum
- Across the clinics





# Clinics and participants

Clinic One	Clinic Two
Two sites n=5 PT 29 (range 23 – 42) years old 4 (range 1.5 – 8) years experience (average) KB 34 years old; 12 years experience	Two sites n=4 PT 41 (range 37 – 43) years old 18 (range 12 – 22) years experience (average) KB 37 years old; 8 years experience

PT=physiotherapist; KB=knowledge broker







# Data collection and analysis

- Multiple data sources
  - Individual, semi-structured interviews informed by Damschroder et al. (2009)
  - Knowledge broker reflective diary and activity log
  - Online discussion
- Initially conventional content analysis
- Drew on Corbin and Strauss conditional matrix as an analytic tool





# What did we find?

Knowledge broker critical to PTs giving tools a go

*I have been to a couple of different courses and done a few things and literally, after a minute you, you might learn [...] two new skills, and then by the minute you leave the door, they are like one skill, then and then after a couple of months they are like a 0.5 of a skill...you don't just take home enough. But by having someone coming in and teaching you once every fortnight about the tools [...] it helped to consolidate that knowledge.*



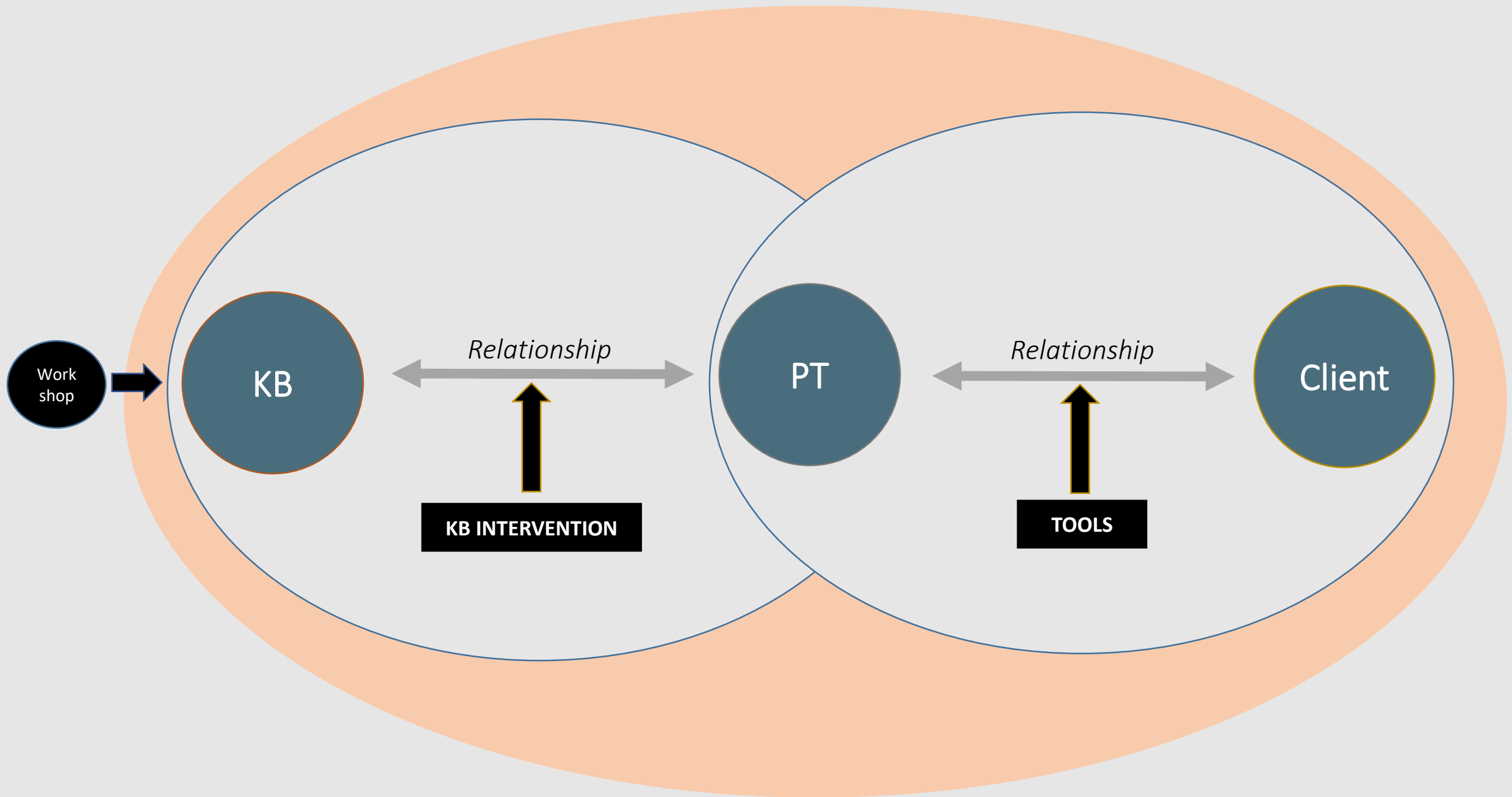


Simple at face value...

Knowledge broker = success?

But alas, not so simple...



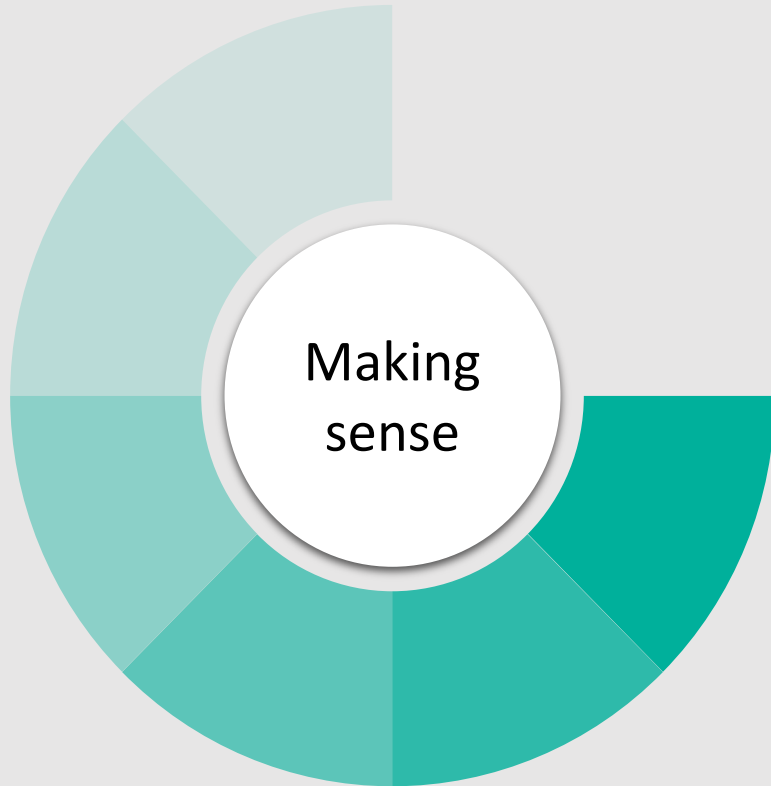






# Knowledge uptake in action





CONDITIONS

Perceived value/need  
Service structures  
Knowledge broker

INTER/ACTIONS

Gathering information  
Contextualising knowledge  
Finding fit

CONSEQUENCES

Consolidating  
Developing coherence  
Seeing the possibility



# Service structures

*...so if we had had a weekly little chit chat with everybody talking about it with everybody – that would have worked better... but [...] we are at different sites, [x and x] so quite far apart. I'm self-employed so any time that I would give to that is unpaid, outside of my day, and I can't work late because I have got the kids.*





# Knowledge broker

*Someone who is going to do research and talk you through it. But, then she is really good at putting things into laymen's terms or she does a lot of background work as well and then will come on the day with her ideas ready and waiting to go.*

*I would say the two key things were having the initial day where you are just running through it all in general and you are looking at a bit of everything. So you have that context... then being able to have [KB] then to go through more specifics with you and to implement it, you know, in your day to day... that's really important.*







CONDITIONS

Knowledge broker  
Simple/intuitive  
Perceived expectations

INTER/ACTIONS

Looking for opportunities  
Testing the water  
Slipping it in

CONSEQUENCES

Developing Capability  
Recognising value  
Tailoring



# Simple/intuitive

*Almost day one I could bring those in [one of the tools]. And I think its because it was easy to remember, simple, straight forward.*

*But in general a lot of the things, particularly the shorter questions are very good and useful and easy to implement. And then there are others that I haven't used as much because they just require more time, and particularly here whether you are in the school or in the clinic, because you have only got 15 or 20 minutes, it's very difficult to do something that requires much thought or that requires much time.*





# Recognising value

*So, yeah... it was like, not until I started to utilise them and seeing the benefit that people gained from the tools, did I actually realise the value of them.*





CONDITIONS

Reflecting on practice  
Seeing results

INTER/ACTIONS

Gaining confidence  
Experiencing success  
Embedding into practice

CONSEQUENCES

Feeling empowered  
Feeling good  
Making a difference







# Reflecting on practice

*That was quite good bouncing ideas off and sort of... I think, actually speaking about the way that I am using it and examples and things gave me more confidence in using it again. So, I could actually show that it was working. Whereas, I wouldn't have analysed it so much if I was just left to my own devices.*





# Seeing results

*And I think obviously if you try it once and if it doesn't work for you're probably unlikely to try it too many more times. So the ones that worked from the off I probably persisted with a bit more.*





# Making a difference

*I think it's had a big impact. I can see with my patients [...] I have noticed a big change and when people come back in [...] they actually are getting better.*

*[...] It's kind of exciting. It's nice to think, the biggest thing for me is to make a difference for people, that's the satisfaction I get from my job and that's why we do it [...] all those little things like being able to incorporate that and actually be working to something that that patient actually wants, feels like I am helping them. It feels satisfying to me.*









# It is a multi-tiered, dynamic process?



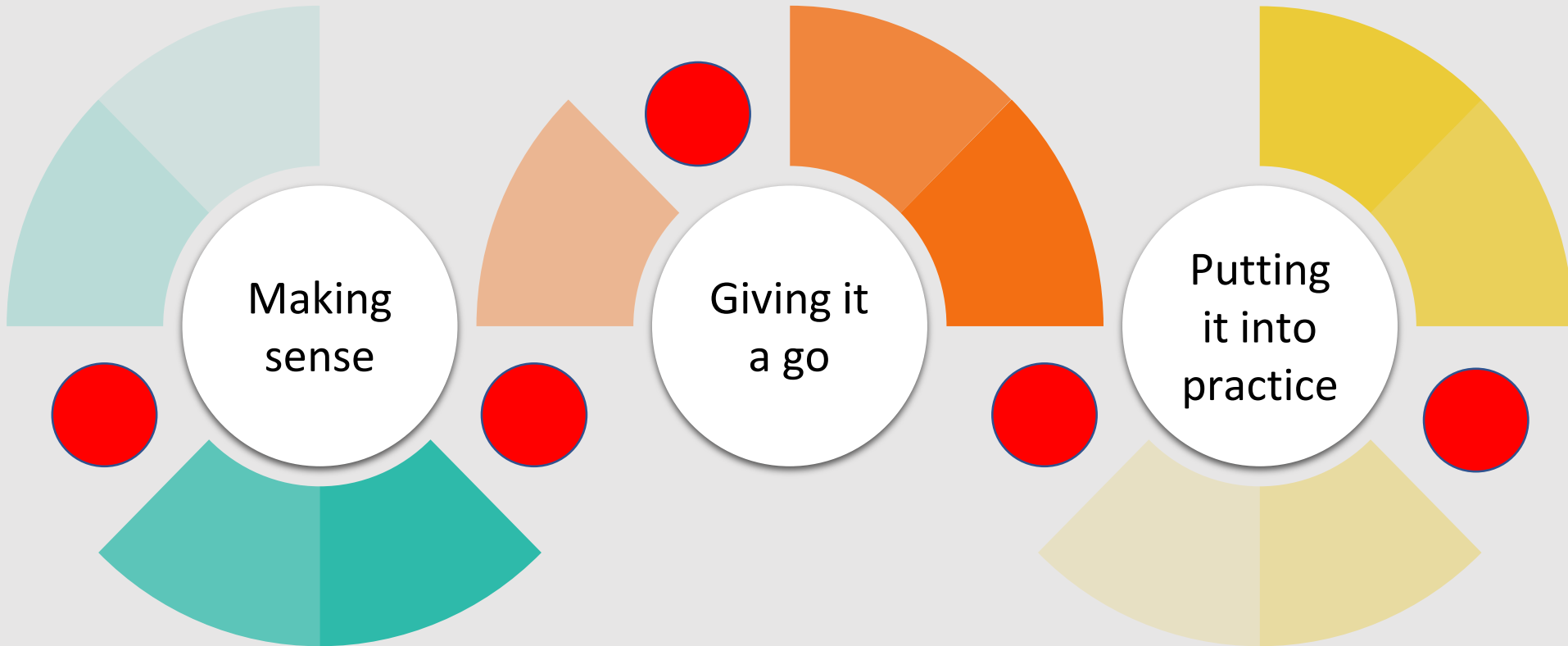


Key take home 1: Knowledge translation strategies need to be active, responsive, and ongoing





# There are multiple possible tipping points





Key take home 2: Timely and targeted strategies may help tipping points to become levels for change





# Knowledge broker may play a critical role

Making sense	Keeping it on the agenda Searching for evidence Developing resources Distilling knowledge Sharing learning
Giving it a go	Creating a plan Problem solving Identifying opportunities Supporting trials
Putting it into practice	Supporting reflection

BUT...

Relationship  
Expertise/experience  
Person factors

1:1  
Observation  
Reflection  
Community of practice

Structured



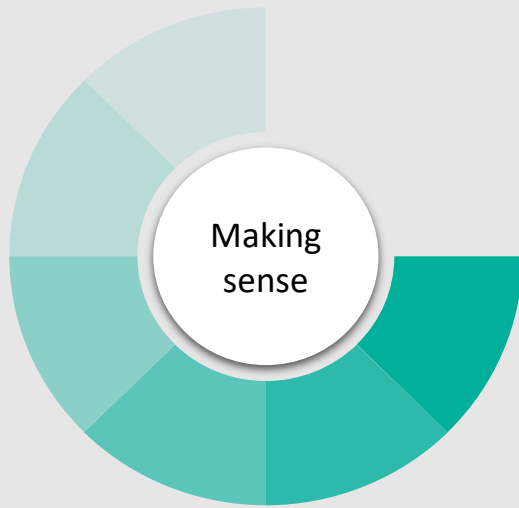




## Key take home 3: *Who, What* and *How* of knowledge brokerage matters







Making  
sense



Giving  
it a go



Putting  
it into  
practice

CONSEQUENCES/  
CONDITIONS

CONDITIONS

INTER/ACTIONS

Perceived value/need  
Service structures  
Knowledge broker

Gathering information  
Contextualising knowledge  
Finding fit

Consolidating  
Developing coherence  
Seeing the possibility

CONSEQUENCES/  
CONDITIONS

CONDITIONS

INTER/ACTIONS

Knowledge broker  
Simple/intuitive  
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Looking for opportunities  
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Developing Capability  
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CONSEQUENCES/  
CONDITIONS

CONDITIONS

INTER/ACTIONS

Reflecting on practice  
Seeing results

Gaining confidence  
Experiencing success  
Embedding into practice

Feeling empowered  
Feeling good  
Making a difference

It's complex



Key take home 4: Knowledge brokerage necessary, but not sufficient to manage the complexity





# Some unanswered questions: Just new tools for old ways of working?





Key take home 5: Need to better understand what it would take for more paradigmatic shifts in practice

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**"I thought I felt a paradigm shift, but  
it was just my undershorts riding up."**







# To conclude

- Potentially applicable to a range of populations, settings and contexts
    - Researchers: knowledge translation, research impact
    - Service managers/providers: change management, quality improvement
    - Practitioners: critical reflection on practice
  - There is still much we don't know but we aim to:
    - Keep learning and developing understanding
- And most importantly...
- Work with our clinical partners to *apply* that learning to optimise the impact of our research in rehabilitation practice





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