

Enhancing engagement with Type 2 Diabetes services and self- management behaviours using behavioural science

12 November 2025



Agenda

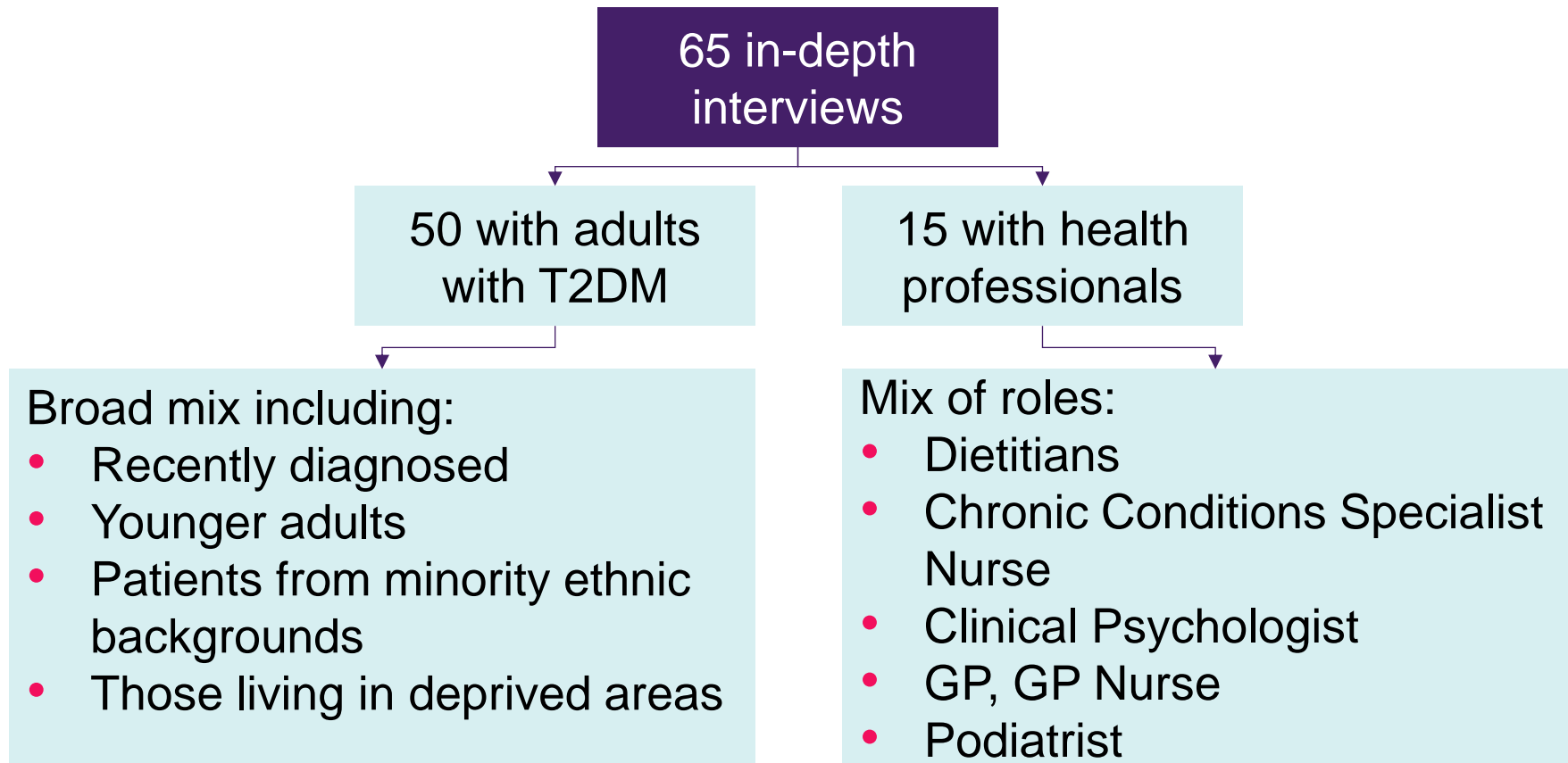
- Research project overview
- Using behavioural science models to shape the research
- Outcome of using behavioural science models
- Benefits, challenges, tips using behavioural science



Research project overview

Project overview

Overall objective: explore factors that influence how adults in Wales manage their Type 2 Diabetes including engaging with healthcare services



Zoom / Teams interviews lasting up to 1 hour

Fieldwork February – May 2025

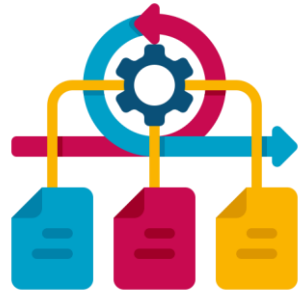


How behavioural science models informed the work

Behavioural science models informed research across its stages



Topic guides
development



Analysis
framework



Conclusions,
recommendations






Developing the topic guide for adults with Type 2 Diabetes



COM-B Model and Health Belief Model used as theoretical frameworks

COM-B Model

- Simple, practical structure: what drives behaviour
 -  **Capability** – having knowledge, skills
 -  **Opportunity** – external factors like environment, access, and social support
 -  **Motivation** – internal drivers e.g. beliefs, habits, emotions
- Informs intervention planning via Behaviour Change Wheel

Health Belief Model



Helps explore people's beliefs re. personal risk, diabetes seriousness



What might prompt / prevent taking action



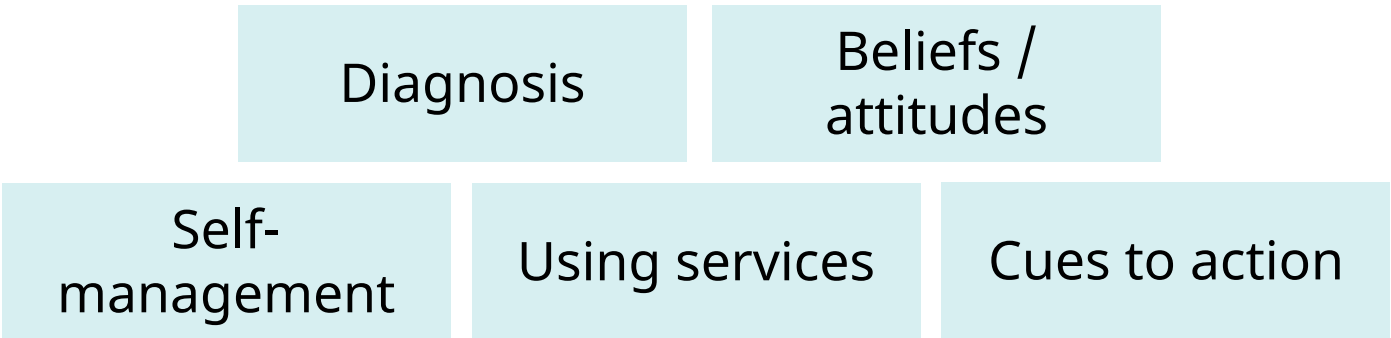
Useful for shaping questions re. perceived barriers, benefits, readiness to engage



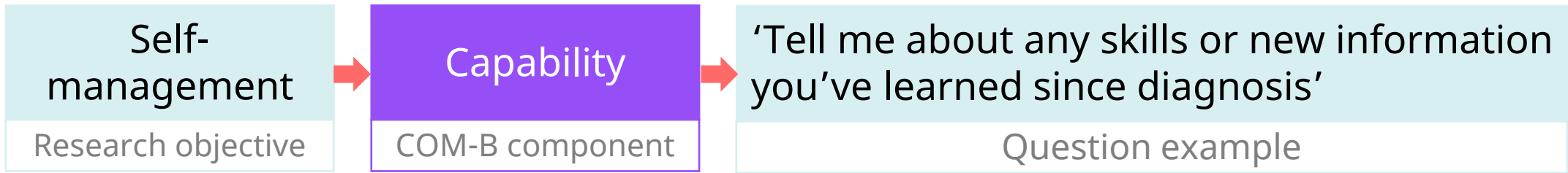
Developing the topic guide for adults with Type 2 Diabetes



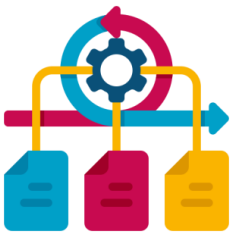
Discussion guide divided into 5 main sections



Key components of models covered in questions across sections e.g.



Analysis framework



PHW behavioural science colleagues drafted broad analysis framework – foundation for coding interviews

What research trying to find out

Topic guide questions

Tying back to models

Research question

Question/ prompt

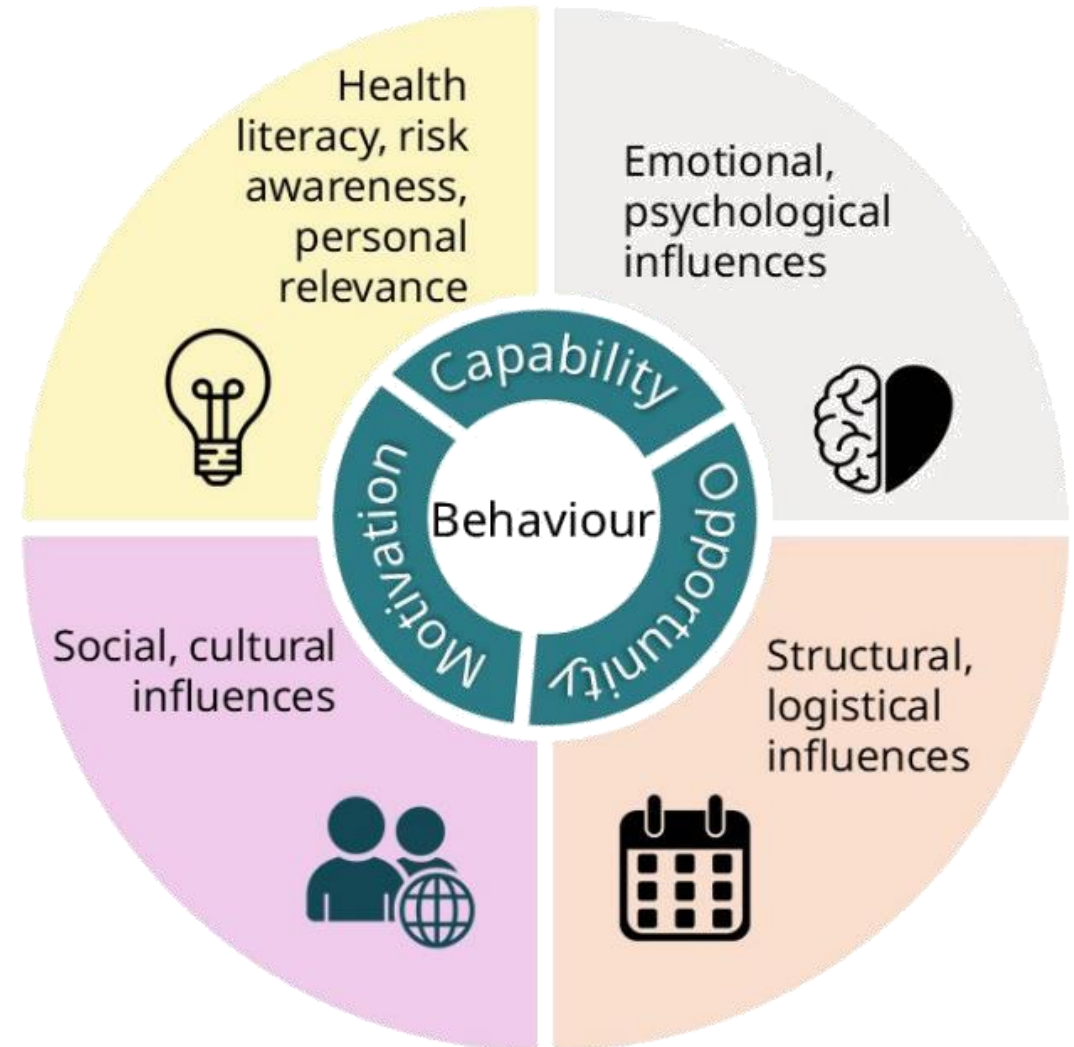
Model: domain / component

	A	B	C	D	E
1	Research question	Question/prompt	Model	Domain / component	
	What are the beliefs and attitudes of adults living with T2DM towards their condition	Thinking about how you currently feel about diabetes, what are your thoughts on how serious diabetes is as a condition for you?	Health belief model	Risk perception, perceived severity	
6					
7		Can you tell me more about why you feel that way?	Health belief model	susceptibility to complication	
8		Are there any complications you associate with having diabetes?	Health belief model	perceived barriers	
9		How do you feel about the impact of these complications on your life?	COM-B	Capability	
10		How serious do you think these complications are?	Health belief model	Perceived severity	
16					
17		Do you feel confident managing your diabetes on your own, or would you prefer more regular help from healthcare professionals?	COM-B	Perceived self-efficacy: reflective motivation, capability	
		With the information you have now, do you feel able to make decisions about	COM-B	Capability	

Reporting



- Analysis evolved over time
- Emerging themes identified, refined, questioned, combined – within context of COM-B Model
- Thematic approach to report structure - easier to understand and use findings
 - Links to model components acknowledged within themes to highlight adopting evidence-informed approach



Informing recommendations



1

- COM-B Model comes to fore
- Taking each broad research theme and highlighting
 - Sub-themes / the issue
 - Which COM-B Model components we felt each fitted

Theme	Issue	COM-B component
Health literacy		
Limited understanding of condition, diet, and diabetes risks	Knowledge gaps about diet management, misconceptions about food, limited understanding of the disease and its complications	Psychological capability
Difficulty processing or receiving information	Struggling to absorb information at diagnosis; rushed or unclear conversations with HCPs; limited dialogue during appointments	Psychological capability, social opportunity (targeting healthcare professional behaviour)
Variable perceptions of personal risk	Some did not feel at risk or believed complications were unlikely to happen to them	Reflective motivation

Informing recommendations



2

- Consulted PHW Behavioural Science Unit documents and supportive PHW Behavioural science staff:
 - ‘Exploring factors influencing the application of behavioural science within public health practice across Wales’
 - ‘Improving health and wellbeing: A guide to using behavioural science in policy and practice’
 - ‘Behavioural Diagnosis: Mapping insights and selecting intervention functions’



Informing recommendations

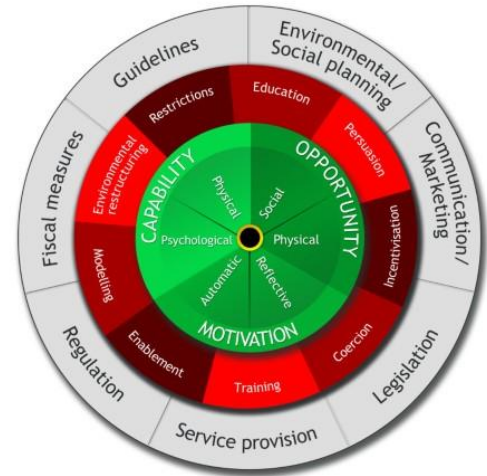


3

- Used support documents (and Behaviour Change Wheel framework) to add potential intervention types / policy options to table, recommendations and desired outcomes

Theme	Issue	COM-B component
Health literacy challenges, behaviour related goals, and		
Limited understanding of condition, diet, and diabetes risks	Knowledge gaps about diet management, misconceptions about food, limited understanding of the disease and its complications	Psychological capability
Difficulty processing or receiving information	Struggling to absorb information at diagnosis; rushed or unclear conversations with HCPs; limited dialogue during appointments	Psychological capability, social opportunity (targeting healthcare professional behaviour)

- Sources of behaviour
- Intervention functions
- Policy categories



COM-B	Education	Persuasion	Incentivisation	Coercion	Training	Restriction	Environmental Restructuring	Modelling	Enablement
Physical Capability					✓				✓
Psychological Capability	✓				✓				✓
Reflective Motivation	✓	✓	✓	✓					
Automatic Motivation		✓	✓	✓	✓		✓	✓	✓
Physical Opportunity					✓	✓	✓		✓
Social Opportunity						✓	✓	✓	✓

Intervention functions are broad categories of means by which an intervention can change behaviour

Informing recommendations



4

- Highlight intended goals, outcomes from recommendations (e.g. health literacy, below)
- Challenge to distinguish between behavioural goals (behaviour to be achieved) and outcomes goals (a positive outcome of a wanted behaviour)

The recommendations for consideration above are intended to support the following behaviour related goals:

- Patients are eating healthier food, doing suitable exercise, and adhering to medication
- Patients continue to practise self-management behaviours and seek advice when symptoms linked to possible complications arise
- Patients' regularly attend appointments for care processes and services.

The intended outcomes include:

- Improved understanding of how Type 2 Diabetes can affect the body and health over time
- More informed decision-making about lifestyle, diet, and engagement with health services
- More confidence and capability to self-manage diabetes
- Reduced confusion or misinformation (e.g. around diet or symptoms) that might hinder self-management
- Stronger sense of ownership and personal relevance, supported by a more tailored approach to communication from health services
- More consistent uptake of the care processes and attendance at key appointments
- Improved clarity for patients on what support is available, when to use it, and how it can help
- Reduced disengagement linked to low perceived severity or lack of understanding
- How more technology use could reduce to an extent the burden on healthcare professionals from patients who are managing but feel they need more healthcare professional interaction.

Benefits, challenges, tips

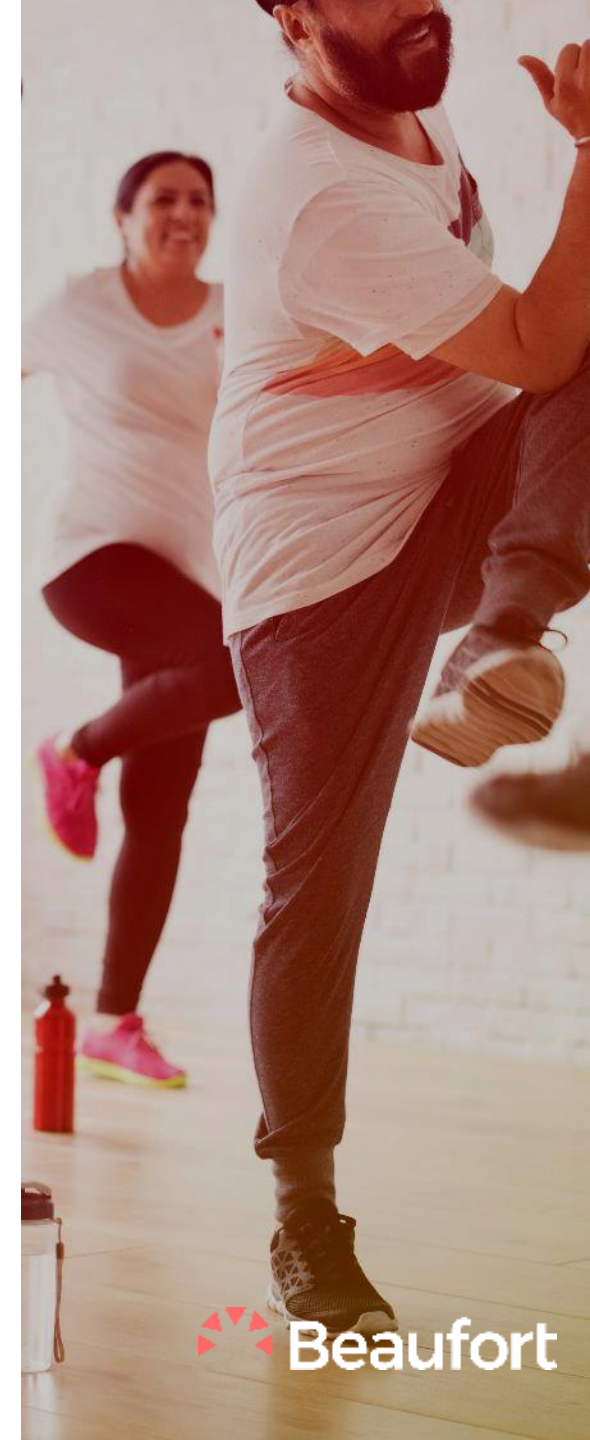
Benefits/challenges using behavioural science models with this research

Benefits

- Instilled confidence – using established systematic method that helps explore factors influencing health-related behaviours
- Valuable point of reference throughout project to help keep things focused
- Practical foundation for identifying intervention opportunities
- Don't need to be behavioural scientists to use it

Challenges

- Ensuring models don't hinder natural conversations with participants
- Potential to introduce complexity using more than one model
- Plenty of grey areas over where a point / theme fits in models
- Distinguishing between determinants of behaviour, behavioural goals, and outcome goals



Tips

- Collaborate with PHW behavioural scientists! We received lots of valuable support (e.g. ensuring right questions asked, BCW application)
- Use PHW Behavioural Science Unit documents – practical guidance and accessible to non-behavioural scientists
- Don't get too hung up on where a specific point belongs in the model if it's not very clear
- Don't lose sight of what you're trying to achieve: keep overall objectives - and report end-users - at forefront
- Using in-depth conversational interviews helped to explore model components effectively
- Be wary of including too many models





Diolch / thanks