

Using behavioural science to design antimicrobial stewardship interventions.

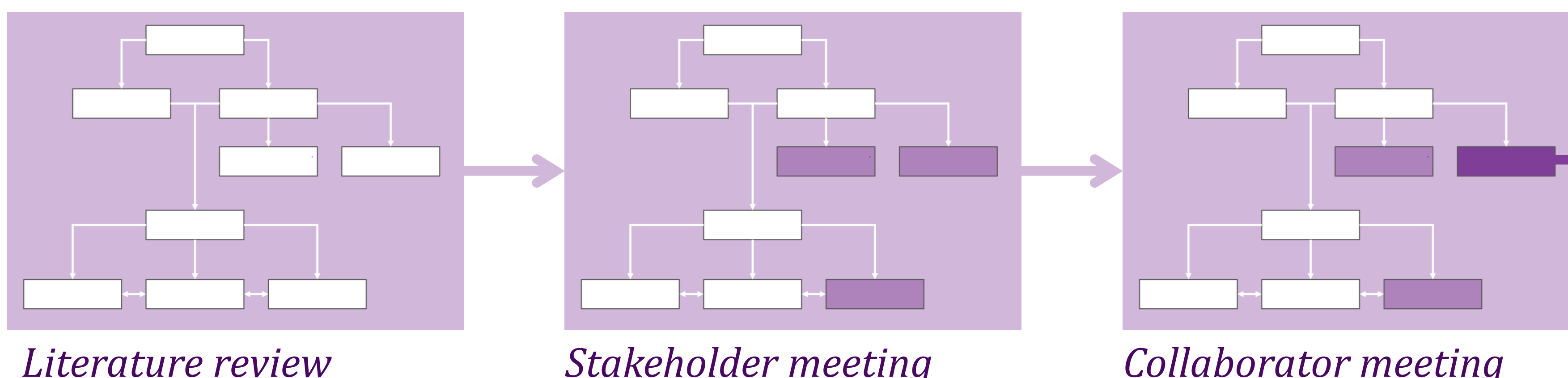
Ben Walker[†], Dan O'Neill[†], Huw Stacey[‡], Dave Brodbelt[†].

[†]Royal Veterinary College, Hatfield, AL9 7TA, UK

[‡]Pets at Home Vet Group Limited, Handforth, SK9 3RN



1 Choose and define the behaviour



Literature review

Stakeholder meeting

Collaborator meeting

AACTT Example

Actor: Small animal clinicians
 Action: Provide NSAIDs and advice
 Context: First-opinion practice
 Target: Cats with urinary disease
 Time: First presentation

Model pathways

Shortlist behaviours

Select target behaviours

Specify behaviour using AACTT

2 Understand current behaviour

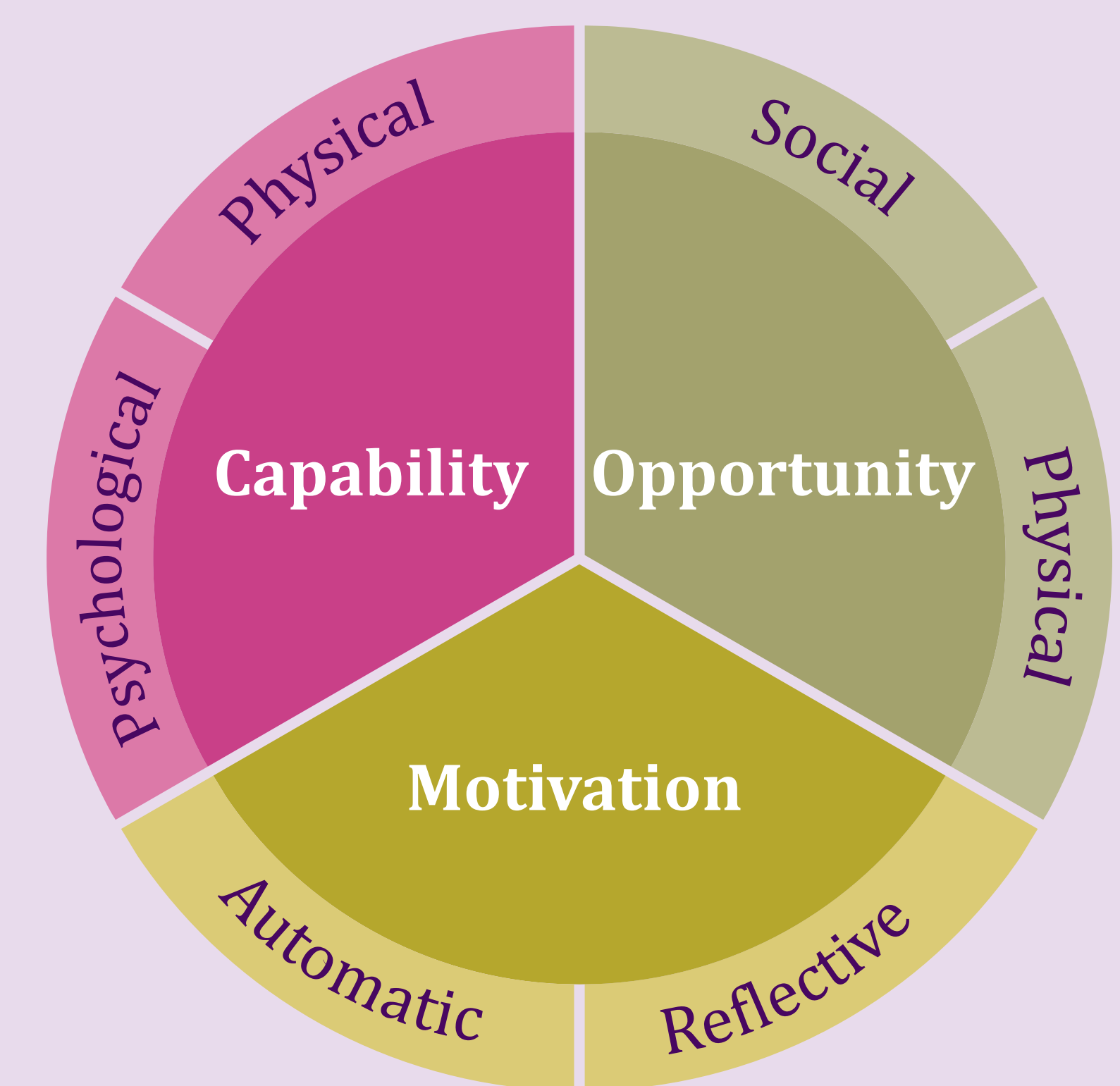
“If I just give NSAIDs, he might be back tomorrow and I’ve lost a day.”

“If I don’t fix it immediately they complain or they won’t see me again.”

“I trust my boss. He says start on antimicrobials, so I think that will help.”

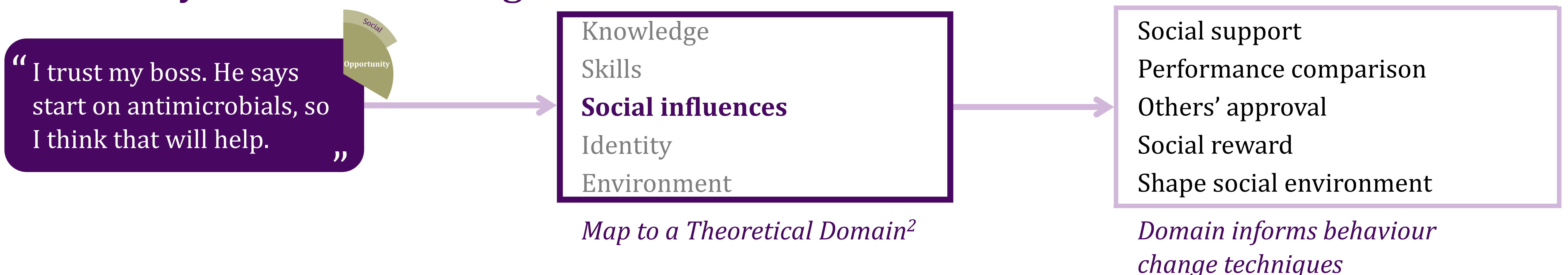
“I see GPs prescribe a lot, so our stewardship might be a waste of time.”

Interviews & observations in clinics



Apply a behaviour change theory (e.g., COM-B¹)

3 Let theory inform the design



Map to a Theoretical Domain²

Domain informs behaviour change techniques

Then...



Candidate interventions



Focus groups to refine



RCT to assess uptake & impact

Benefits:

Considers mechanism of effect

Takes local context into account

Standardises reporting

Acknowledgements

Funding provided by the UKRI Strategic Priorities Fund
 This project is part of a wider study funded by the PetPlan Charitable Trust
 Additional thanks to the Pets at Home Vet Group and their participating clinics



References

¹Michie, S., et al. The behaviour change wheel: a new method for characterising and designing behaviour change interventions. *Implementation Sci* 6, 42 (2011)

²French, S.D., et al. Developing theory-informed behaviour change interventions to implement evidence into practice: a systematic approach using the Theoretical Domains Framework. *Implementation Sci* 7, 38 (2012).