

Developing a theoretically-informed knowledge translation intervention to improve the uptake of research into clinical practice

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Using the following steps as a guide (Table 1), outline your plan to develop a KT intervention to implement something new into your practice.

Table 1: Steps for developing a theory-informed KT intervention (French 2012).

Step	Tasks
STEP 1: Who needs to do what, differently?	<ul style="list-style-type: none"> • Identify the evidence-practice gap • Measure the evidence-practice gap • Determine the magnitude of change needed (desirable target) • Specify the behaviour change needed to reduce the evidence-practice gap • Specify the health professional group whose behaviour needs changing
STEP 2: Using a theoretical framework, which barriers and facilitators need to be addressed?	<ul style="list-style-type: none"> • From the literature, and experience of the development team, select which theory(ies), or theoretical framework(s), are likely to inform the pathways of change • Use the chosen theory(ies), or framework, to identify the pathway(s) of change and the possible barriers and enablers to that pathway • Use qualitative and/or quantitative methods to identify barriers and enablers to behaviour change
STEP 3: Which intervention components could overcome the modifiable barriers and enhance the enablers?	<ul style="list-style-type: none"> • Use the chosen theory, or framework, to identify potential behaviour change techniques to overcome the barriers and enhance the enablers • Identify evidence to inform the selection of potential behaviour change techniques and modes of delivery • Identify what is likely to be feasible, locally relevant, and acceptable and combine identified components into an acceptable intervention that can be delivered
STEP 4: How can behaviour change be measured and understood?	<ul style="list-style-type: none"> • Identify mediators of change to investigate the proposed pathways of change • Select appropriate outcome measures (care provider, patient and/or system/organisational level) • Determine feasibility of outcomes to be measured • Use qualitative and/or quantitative methods to assess behaviour change

STEP 1: Who needs to do what, differently?



STEP 2: Which barriers and facilitators need to be addressed?

List relevant barriers and facilitators for each domain of the Theoretical Domains Framework (TDF; Michie 2005; Cane 2012) in the matrix beginning on the next page.

STEP 3: Which intervention components could overcome the modifiable barriers and enhance the enablers?

Using the EPOC taxonomy and the Taxonomy of Behaviour Change Techniques (See Choosing intervention components - Resources), populate the matrix with intervention components that address the identified barriers and enablers.

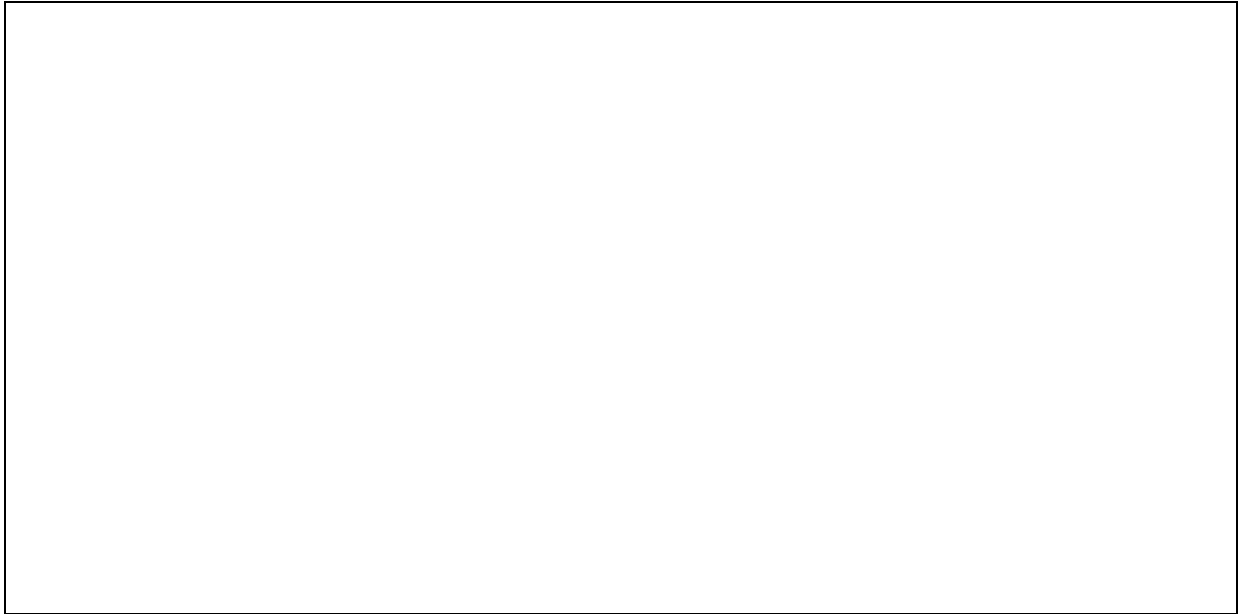
Theoretical Domains Framework (TDF) Domain and definition	Barriers/facilitators	Intervention components Behaviour change techniques and mode(s) of delivery
1. Knowledge <i>An awareness of the existence of something.</i>		
2. Skills <i>An ability or proficiency acquired through practice.</i>		
3. Social/Professional Role and Identity <i>A coherent set of behaviours and displayed personal qualities of an individual in a social or work setting.</i>		
4. Beliefs about Capabilities <i>Acceptance of the truth, reality, or validity about an ability, talent, or facility that a person can put to constructive use.</i>		

Theoretical Domains Framework (TDF) Domain and definition	Barriers/facilitators	Intervention components Behaviour change techniques and mode(s) of delivery
5. Beliefs about consequences <i>Acceptance of the truth, reality, or validity about outcomes of a behaviour in a given situation.</i>		
6. Motivation and goals <i>The outcomes or end states to which one is striving and a person's willingness to exert physical or mental effort in pursuit of those outcomes or end states.</i>		
7. Memory, Attention & Decision Processes <i>The ability to retain information, focus selectively on aspects of the environment and choose between two or more alternatives.</i>		
8. Environmental context and resources <i>Any circumstance of a person's situation or environment that discourages or encourages the development of skills and abilities, independence, social competence, and adaptive behaviour.</i>		

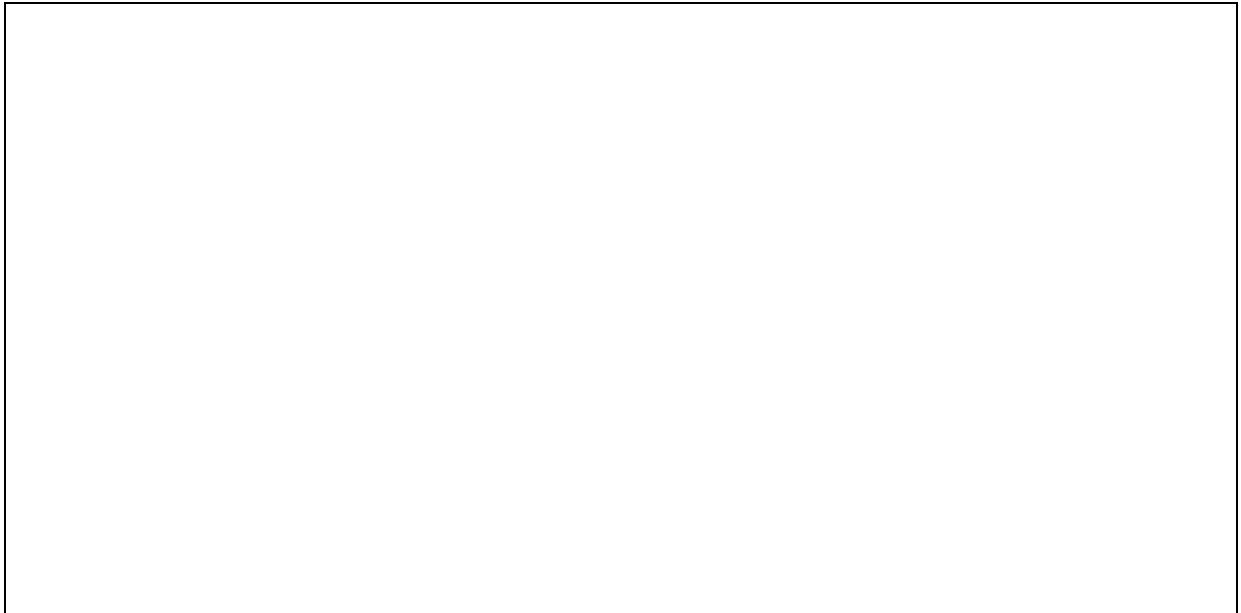
Theoretical Domains Framework (TDF) Domain and definition	Barriers/facilitators	Intervention components Behaviour change techniques and mode(s) of delivery
9. Social influences <i>Those interpersonal processes that can cause individuals to change their thoughts, feelings, or behaviours.</i>		
10. Emotions <i>A complex reaction pattern, involving experiential, behavioural, and physiological elements, by which the individual attempts to deal with a personally significant matter or event.</i>		
11. Behavioural Regulation <i>Anything aimed at managing or changing objectively observed or measured actions.</i>		
12. Nature of the behaviours <i>Essential characteristics of the behaviour.</i>		

STEP 3: continued

Now combine the intervention components you have chosen into a cohesive intervention



STEP 4: How can behaviour change be measured and understood?



Resources for choosing components of a KT intervention

Cane J, O'Connor D, Michie S. Validation of the theoretical domains framework for use in behaviour change and implementation research. *Implement Sci* 2012;7(1):37

Available at: <http://www.implementationscience.com/content/7/1/37>

EPOC Taxonomy of strategies for change: Effective Practice and Organisation of Care (EPOC). EPOC Taxonomy; 2015. Available at: <https://epoc.cochrane.org/epoc-taxonomy>

French SD, Green SE, O'Connor DA, McKenzie JE, Francis JJ, Michie S, Buchbinder R, Schattner P, Spike N, Grimshaw JM. Developing theory-informed behaviour change interventions to implement evidence into practice: a systematic approach using the Theoretical Domains Framework. *Implement Sci* 2012;7(1):38

Available at: <http://www.implementationscience.com/content/7/1/38>

Michie S, Johnston M, Abraham C, Lawton R, Parker D, Walker A, on behalf of the "Psychological Theory" Group. Making psychological theory useful for implementing evidence based practice: a consensus approach. *Qual Saf Health Care* 2005;14(1):26-33

Michie S, Richardson M, Johnston M, Abraham C, Francis J, Hardeman W, Eccles MP, Cane J, Wood CE. The behavior change technique taxonomy (v1) of 93 hierarchically clustered techniques: building an international consensus for the reporting of behavior change interventions. *Ann Behav Med* 2013;46(1):81-95