

## Appendix B – Behavioural Diagnosis

Target behaviour: Reducing and stopping antidepressant medication		
BCW/COM-B Components	What needs to happen for the target behaviour to occur?	Proposed intervention element
<b>Physical capability</b> <i>Physical skill, strength or stamina</i>	<ul style="list-style-type: none"> <li>Understanding how to reduce doses physically: e.g. how to take tapered medication appropriately, in order to reduce the occurrence of side effects.</li> </ul>	<ul style="list-style-type: none"> <li><b>GP</b></li> <li><b>Internet intervention modules</b></li> <li><b>Telephone support</b></li> </ul>
<b>Psychological capability</b> <i>Knowledge or psychological skills, strength or stamina to engage in necessary mental processes</i>	<ul style="list-style-type: none"> <li>Detailed, accessible guidance on the withdrawal process in general (setting up appropriate expectations)</li> <li>Improving knowledge on how to withdraw (practicalities)</li> <li>Developing <u>psychological skills</u> to manage the process:               <ul style="list-style-type: none"> <li>Managing psychological side effects of withdrawal</li> <li>Understanding helpful appraisals of symptoms</li> <li>Learning about the prevention of relapse, managing fear of recurrence</li> <li>Developing skills to manage life-stressors cognitively and behaviourally</li> </ul> </li> </ul> <p><i>Social Cognitive Theory (SCT) and research will be broadly drawn on to ensure information/techniques are described and applied to align with evidence-based principles for increasing self-efficacy</i></p>	<ul style="list-style-type: none"> <li><b>Internet intervention modules</b></li> <li>(Telephone support)</li> </ul>

<p><b>Physical opportunity</b> <i>Opportunity afforded by the environment involving time recourses, locations, cues, physical affordance</i></p>	<ul style="list-style-type: none"> <li>• Ability to access and get to GP appointments/pharmacy to collect reduced dose antidepressants</li> </ul>	<ul style="list-style-type: none"> <li>• <b>General practitioner (as a function of usual care)</b></li> <li>• <b>Telephone support/advice</b></li> </ul>
<p><b>Social opportunity</b> <i>Opportunity afforded by interpersonal influences, social cues and cultural norms that influence the way we think about things</i></p>	<ul style="list-style-type: none"> <li>• Close social network (family/friends) of patient may need to be supportive of the withdrawal process/attempt</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Brief overview material developed for family members/friends</b></li> </ul>
<p><b>Reflective motivation</b> <i>Reflective processes involving evaluations/beliefs about what is good and bad, and plans (self-conscious intentions)</i></p>	<ul style="list-style-type: none"> <li>• Modification of beliefs about depression: <ul style="list-style-type: none"> <li>○ Exploring the nature of depression in a way that aligns with behavioural/cognitive management</li> <li>○ Discussing impact of beliefs and expectations about chronicity</li> <li>○ Exploring effect of analogies with physical conditions (diabetes/asthma)</li> <li>○ Acknowledging complexity re our understanding of depression in an accessible manner</li> </ul> </li> <li>• Modification of beliefs about antidepressant medication: <ul style="list-style-type: none"> <li>○ Addressing beliefs about addiction/dependency</li> <li>○ Exploring the serotonin hypothesis; evidence, balanced implications, rationale for behaviour/cognition to substitute medication</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• <b>Internet intervention modules</b></li>   <li>• <b>Internet intervention modules</b></li> </ul>

	<ul style="list-style-type: none"> <li>• Foster motivation to withdraw through discussion of benefits, reduction of side effects, potential for increase in agency, potential for effective use of alternatives to pharmacological management</li> <li>• Facilitate clear planning for the withdrawal process e.g. human contacts, management strategies, access to rapid/emergency support</li> </ul> <p><i>Inductive qualitative work (meta-synthesis and primary qualitative research) and theory will be used to inform this material</i></p>	<ul style="list-style-type: none"> <li>• <b>General practitioner</b></li> <li>• <b>Telephone support/advice</b></li> </ul>
<p><b>Automatic motivation</b> <i>Automatic processes involving emotional reactions, desires (wants and needs) impulses, inhibitions, drive states and reflex responses</i></p>	<ul style="list-style-type: none"> <li>• Encourage awareness of automatic disruptive modes/thought process that may trigger or be triggered by symptoms</li> <li>• Work on developing habitual healthier responses to symptom occurrences</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Internet intervention modules</b></li> </ul>
<p><b>Behavioural diagnosis of the relevant COM-B components</b></p>	<p>Although all areas of the COM-B model will need to be addressed to some extent, <b>psychological capability</b> and <b>reflective motivation</b> are likely to be the key targets for a supported digital intervention to help patients withdraw from antidepressant medication</p>	

#### References:

1. Michie S, van Stralen MM, West R. The behaviour change wheel: a new method for characterising and designing behaviour change interventions. *Implement Sci.* 2011;6:42.
2. Michie SF, Atkins L, West R. The behaviour change wheel: a guide to designing interventions. London: Silverback Publishing; 2015