

## Supplemental File 2: Template for conceptualising interventions based on study methodology

In order to aid practitioners and researchers to conceptualise interventions in improvement initiatives, we suggest the following approach.

Identifying and operationalising intervention components of an improvement initiative				
<b>Step 1</b>	Identify the evidence-base (the scientific underpinnings for the intervention, e.g. NICE guidelines) to be operationalised in practice			
<b>Step 2</b>	Identify all intervention components needed to make the evidence base work in practice. Document component functions and adaptations within and between sites. (e.g. use interviews, document analysis, observation)			
<b>Step 3</b>	Classify components under ‘Spheres of Operation’ to consider the “core” and “periphery” in relation to the proximity of the intervention components to a focal point of the initiative (e.g. the evidence-base).			
	<b>Spheres of Operation</b>	Component(s)	Function	Adaptations
	<b>Accessibility of evidence-base</b> (ways of making the evidence-base easily available, understandable and usable for the people that implement it in practice, e.g. development of training materials)	•	•	•
	<b>Process of enactment</b> (the activities involved in introducing the primary intervention or evidence-base in local practice, e.g. executing clinical procedures, or identifying appropriate patients)	•	•	•
	<b>Dependent processes</b> (changes made to organisational processes and infrastructure that are needed to enable the delivery of clinical care, e.g. implementing new staff rotas or documentation and communication protocols)	• •	•	•
	<b>Dependent sociocultural issues</b> (beliefs, common practices and/or behaviour that need to be established or changed to implement and embed the intervention into practice, e.g. establishing collaborations or changing decision-making processes)	•	•	•
<b>Step 4</b>	Refine and validate the components and sphere allocation with the implementation team(s) (e.g. through a focus group)			
<b>Step 5</b>	Discuss the perceived importance and interdependencies of the components to highlight crucial/irreducible components of the initiative. Consider the work and effort required to implement and adapt the intervention (e.g. effort expended exercise)			
<b>Step 6</b>	Share learning (e.g. intervention component table or figure) with future implementation teams to aid understanding of the components of the intervention, their interdependencies and the anticipated effort, to manage expectations for the planning, conduct and iteration of components in new sites.			