

<p>Name of your approach to assess societal impact</p>	<p>The Social Impact Framework (SIF)</p> <p>(Beckett, K., Farr, M., Kothari, A. Wye, L. le May, A. Embracing complexity and uncertainty to create impact: exploring the processes and transformative potential of co-produced research through development of a social impact model. <i>Health Res Policy Sys</i> 16, 118 (2018). https://doi.org/10.1186/s12961-018-0375-0)</p>
<p>Approach description</p> <p>Please summarize your approach and its application context/options in a few sentences or bullet points.</p>	<p>The SIF is designed to uncover and map micro-macro (from individual through to societal and paradigmatic) level impacts which occur throughout and beyond co-produced research. These impacts result from multi-level interactions between individuals and/or groups.</p> <p>The Social Impact Framework: -</p> <ul style="list-style-type: none"> • captures impact by prompting exploration/recording of who is/was involved at micro (individual) to macro (societal) levels, what the impact was on them/ their involvement, and importantly which key mechanisms enabled which impact; • permits identification of linear and non-linear chains of causation and multi-level situational, relational, and more traditional behavioural and economic impact metrics; • emphasises the importance of impact <i>and</i> mechanisms demonstrating the dynamic nature of impacts ensuing from research co-production.
<p>Concepts used in the approach</p> <p>Please insert definitions for key concepts and components.</p>	<p>The SIF draws on Pawson's notion of context¹ and Pfadenhauer's² conceptualisation of micro, meso and macro levels.</p> <p>Complexity and systems approaches to implementation also informed the framework design; these show the multiple levels of influence on implementation, and relationships within and across levels, which lead to different impacts, synergies, and outcomes.</p> <p>We also explored or developed the following concepts:</p> <ul style="list-style-type: none"> • a continuum of co-produced research: identifies key attributes within research co-production which influence the degree of impact and potential of different approaches to transform; • non-linear chains of causation: those that are unexpected or unaligned with the research topic and require understanding of processes and outcomes to spot; • transformative synergy: more sustained and multi-level change occurring when co-produced research aligns with other interventions, policies and practice priorities; • virtuous cycles: the capacity of research co-production to create self-sustaining cycles of research and micro to macro level impacts with the ability not only to generate useful knowledge, but also to transform it into usable knowledge and to broaden research capacity in the process.
<p>Key challenges</p> <p>Please write down what you are struggling with concerning the application of your approach.</p>	<p>Further application and testing is required. Limited testing to date is probably due to the complexity of our original paper which includes the theory and methods behind the development process. The SIF and accompanying guide are relatively simple to apply but we have yet to make these more widely available and need help with this.</p>

¹ Pawson R. The Science of Evaluation: A Realist Manifesto. London: SAGE; 2013.

² Pfadenhauer LM, Gerhardus A, Mozygemba K, Lysdahl KB, Booth A, Hofmann B, Wahlster P, Polus S, Burns J, Brereton L, Rehfuss E. Making sense of complexity in context and implementation: the Context and Implementation of Complex Interventions (CICI) framework. *Implement Sci.* 2017;12:21.

	<p>We used successful case studies from our own research to develop the Framework, but it has had limited application to studies in which co-production had failed or was perceived of as being challenging. Further application to both positive and less successful co-produced research would help extend its value/utility.</p>
<p>Visualization and narratives</p> <p>Please add short information on whether and how you use visualization, narratives or other boundary objects in your approach.</p>	<p>The development of our approach involved a series of co-author meetings in which we used case-studies and narratives from our own work to create new knowledge and theory. Using more creative and visual means to illuminate the complexity of impact within co-produced research also assisted us in developing the framework.</p> <p>We know from several workshops - where we facilitated use of our framework - that it also helps others to visualize the impact of their work and construct narratives around that (even when co-production was perceived of as challenging or to have failed). These narratives and visualizations act as boundary objects which can create discussion, further impact, and more co-produced research. So, the SIF can work as a transformative as well as an information framework.</p> <p>The Social Impact Framework comes with a grid (Supplementary Information File H) that a team can fill out, collaboratively, with the assistance of a 'Guide for Using the Social Impact Framework' (Additional File 8). The grid represents a boundary object in the application of the Framework.</p>