

Examples of different ways in which links between research and impact were evidenced in REF2014 case studies

Examples of how links between research and impact were evidenced	Examples of problems establishing links between research and impact
<ul style="list-style-type: none"> • Description of pathways to impact demonstrates causal chain from impact all the way back to research, with each link in the chain evidenced clearly • All claimed impacts clearly arise from the research 	<ul style="list-style-type: none"> • Research leads to an activity or other pathway, but with no evidence that these pathways led to impacts • Claims that research was used without explaining how or to what effect • Cause and effect implied but not stated or evidenced explicitly • Link to research only established for some (not all) impacts claimed • Important missing links in causal chains from research to impact • The nature of the claim means it would be impossible to attribute impact to the research (this was acknowledged explicitly in some cases)
<ul style="list-style-type: none"> • Citation of the research in policy documents, often supported by testimonials detailing the contribution that the research made 	<ul style="list-style-type: none"> • Policy change that co-incidentally matches research recommendations without citation or testimony to demonstrate the change was linked to research
<ul style="list-style-type: none"> • Spin-out companies that commercialise specific research findings 	<ul style="list-style-type: none"> • Spin-out companies that work in a similar area to the research with no explicit link between products/services and specific research findings, or whose main activities are not linked to the research
<ul style="list-style-type: none"> • Clear distinction between research, pathways to impact and impact, showing how excellent research led to impact • Impacts (in section 4, “details of the impact”) mapped against research findings (in Section 2, “underpinning research”) 	<ul style="list-style-type: none"> • Descriptions of underpinning research that describes the pathway to impact more than (or instead of) the originality, significance and rigour of the research, making it difficult to identify the research findings that impacts have arisen from • No explicit reference back to underpinning research in the description of impact
<ul style="list-style-type: none"> • Research was commissioned by organisation that implemented findings • Other evidence of close collaboration and buy-in from early in research process e.g. via researchers in organisational roles or placements, researchers as practitioners, or evidence of embeddedness of researchers with community or culture 	<ul style="list-style-type: none"> • Limited information about pathway to impact means causal links between research and impact are implicit only, rather than explicitly described and credible

Table 9 in: Reichard, B, Reed, MS, Chubb, J, Hall, G, Jowett, L, Peart, A and Whittle, A: "Writing Impact Case Studies: A comparative study of high-scoring and low-scoring case studies from REF2014", Palgrave Communications, www.nature.com/articles/s41599-020-0394-7