



Improvement science methods research theme: analysis of expert opinion

Background and aim

To ensure that changes are effective, affordable, acceptable to all stakeholders, avoid unintended negative consequences, and can be sustained beyond the duration of a single project into routine practice, it is essential that improvement work is informed by robust evidence of what works well. Our rapid evidence reviews identified a paucity of empirical evidence on ways of creating large-scale, sustained change in health and social care, however. At the same time, we noted opinion pieces where views on ways of achieving this were confidently asserted. We developed a hypothesis that there is some dissonance between prevailing opinions on how to create sustainable, large scale change, and the supporting evidence base. We tested this hypothesis in a documentary analysis of think pieces, debates and opinion papers within the fields of improvement science/quality improvement.

Progress

We searched the online archives of three influential open access journals with a specific remit in improvement: *Implementation Science*, *BMJ Quality and Safety*, *Healthcare: The Journal of Delivery Science and Innovation*. Our search included papers over a ten year period (1st January 2005 until 31st March 2015), to capture the growing attention to improvement science and launch of inaugural journals during this time. Screening was conducted independently by two reviewers against specific inclusion criteria (opinion rather than empirical, with a primary focus on sustainable large scale change). Included papers were independently reviewed to extract the main propositions being made about how to achieve and sustain large scale improvement. For each proposition, the reviewers classified the type of evidence, if any, that was provided in support of the statement. The propositions were then grouped using an iterative documentary analysis process to identify a set of parsimonious themes that summed up the prevailing opinions and debates.

Thirteen papers met the inclusion criteria, containing a collective total of 43 propositions about how to achieve sustainable, large scale change. 17 propositions were unsupported, 13 were supported by non-empirical literature, and 15 supported by empirical literature. One statement was supported by both empirical and non-empirical sources and was counted twice. Analysis of the propositions generated three thematic areas of discussion about large scale sustainable change within the quality improvement field:

1. What contextual factors are needed for large scale change?
2. How should we be achieving sustainability?
3. How should we be scaling up improvement work?

Lessons learned

This work found that the majority of published opinions about how to achieve large scale sustainable change do not draw upon an empirical evidence base. There is an important disconnect between the certainty with which statements are made and the lack of available evidence. At the same time, evidence that does exist is not as yet being reflected in leading discussions. Those seeking to achieve sustainable, large scale change should consider the best available empirical evidence to identify optimum strategies. SISCC work will help to inform this, for example through developing and testing new models for large-scale, sustained change such as the 'Motivating Change' model described in Section 2.1, Example 6. Cultural change will also be needed for quality improvement to be seen by all involved as a process that needs a stronger evidence base to be developed.

Next steps

Our work recognises that there are many challenges to using evidence in practice, relating to behavioural, contextual, capacity and capability factors, but the findings from this review provide a convincing argument for developing strategies that make it easier to incorporate research evidence within improvement work. For example, future work might include the development of a Cochrane type database for Quality Improvement. The work also contributes methodological knowledge to the field of evidence synthesis, by developing and delivering an example of a novel approach to reviewing expert opinion, and challenging the limits that journal editors often place on the number of empirical references permitted within opinion papers. This publication will be submitted for publication in September 2016, and the key findings highlighted on our website.