



**Improvement science methods research theme:
sharing and synthesising knowledge to understand sustainable change**

Background and aim

The aim of the improvement science research theme is to develop the methods for designing, delivering and evaluating safe, effective, compassionate and equitable sustainable care at scale which leads to improved outcomes. SISCC is focussed on strengthening the evidence base on how large scale and sustainable change which improves outcomes can be achieved and replicated in different contexts. Work across SISCC has been planned to overlap and synergise as all components are needed to inform and deliver effective sustainable change at scale and pace.

Progress

We have drawn on expertise across multiple academic disciplines, and from the experience of those with direct experience of delivering improvement activity in health and social care. In all of our methods work we work with practitioners and public stakeholders. Our focus in the first two years has been on synthesising current approaches to improvement and implementation science and on developing the methods, theories, instruments and measures needed to design, test and evaluate large-scale change. Examples of this can be seen across our programme; in our work examining measurement we have engaged through interviews, focus groups and workshops with national and international health and social care providers and commissioners, improvement advisors, policy-makers, academics and the third sector to identify key features of measure of unintended consequences arising from improvement initiatives. Within our maternal and child work-stream we have widely consulted with parents and families who have (or have had) babies cared for in neonatal units on how best to understand and incorporate their perspective and experiences into our change programme.

Current opinion suggests that large-scale sustained change in any setting requires effective engagement of staff and of service users and carers. Our methods development therefore extends to understanding how to engage stakeholders more effectively. We have run focus groups and workshops with a diverse range of stakeholders from government, education, third sector, private sector, health and social care settings and public representatives across most of our research themes and work-stream projects, and we are currently evaluating the use of participatory action research methods within our DQIP 2 project. We are actively involved in developing and evaluating approaches to effecting change through education and developing innovative knowledge translation and exchange approaches. For example, we have conducted focus groups and interviews with students, early career professionals (ECPs), clinical and academic mentors who have participated in elective placements focussing on quality improvement to evaluate this approach to developing students and ECPs as agents of change.

Challenges – lessons learned

Examples of excellent practice already exist and SISCC has learnt much from the experience of those who have implemented large scale improvement projects across diverse settings. Improvement and implementation science are relatively new fields of research, particularly in the field of health and social care. This increases the challenge of identifying effective ways of achieving sustained change since the thinking and the evidence base is still being developed, particularly in the form of prospective, longitudinal studies. There are many models, frameworks and theories which aid in describing, understanding, explaining, categorising and evaluating changes in different settings and there are many commonalities. The cross-disciplinary nature and development of improvement and implementation science - requiring business, management, psychology, social sciences, health and social care et al - has resulted in a lack of a common language, leading to difficulties developing a common understanding.

There is no one size fits all or gold standard approach, and all current evidence suggests that one is unlikely to emerge. One of the challenges for SISCC is to understand how and when different approaches might usefully be employed and how they might be enhanced and developed further to result in large-scale improvement. Our work will inform the further development of a framework of 'what works, for whom, and in what context' in relation to quality improvement approaches.

Way forward

SISCC is continuing to share learning across the research themes and work-streams, to test approaches and to better understand mechanisms underlying effective change. It is important to have all the voices in the room to discuss the challenges posed. SISCC will continue to bring together that diversity and experience, through our co-created projects, our seminars and Think Events.