The final report from the "DEcisions in health Care to Introduce or Diffuse innovations using Evidence" (DECIDE) study, led by researchers at the University of Manchester and University College London, and funded by the Health Foundation, has been published.

We were commissioned by The Health Foundation to investigate the role of evidence in decisions about introducing or diffusing innovations within the National Health Service (Mar 2016 – May 2018). DECIDE formed part of the Health Foundation's Evidence-Informed Decision-making in Health Service Innovation and Improvement Programme.

## Study background

Despite a dominant ethos of evidence-based practice in healthcare, it is well known that in health care adoption and diffusion of innovations is slow and patchy. The DECIDE study was designed in response to a call by the Health Foundation for research that helps to improve the uptake of innovation at scale. We took a range of approaches to investigate this complex question. We reviewed the literature to find out what is already known about evidence use for innovation from qualitative studies. Informed by the literature review, we used a novel adaptation of discrete choice experiment methods to delve deeper into decision-makers' reported preferences for different types of evidence. We then followed three examples of decision-making about innovations in the NHS (stroke service reconfiguration, NICE guidance on referral for suspected cancer, and 'virtual' clinics for glaucoma outpatients) to find out how evidence was used in the 'real-world'. Finally, we combined the learning from these three studies to produce some practical guidance to support evidence use in decision-making on innovation.

## Main findings

- Our <u>systematic scoping review</u> suggests there is an ever growing diversity of evidence used to inform decisions about innovation. Organisations used evidence in different ways and we found clear influences by the professional group, type of organisation or local system.
- Our case studies of decision-making showed that the influence of particular types of evidence
  and aspects of the context is amplified through sociomaterial mechanisms: connecting
  (communication concerning evidence predominantly within professional groups), ordering
  (shaping priorities for evaluating innovations through the construction and interpretation of
  evidence), and resisting (presenting alternative evidence and questioning the implications of
  evidence for innovation).
- Professional groups use evidence to exert power over decision-making (shared preferences
  for research evidence allow ideas for innovations to circulate within the medical profession,
  but may marginalise other stakeholders' views on innovations).
- The national survey identified "impact" (particularly cost effectiveness, patient safety, and care quality) as the most important type of evidence in decision-making, although there is some survey data suggesting that "context" (e.g. credibility of source, local priority, applicability to target population) and "practicability" (e.g. effort required and previous implementation) are important too.

- The discrete choice experiment showed that external evidence (guidelines, published research, and regulators' priorities) was preferred over local data. Some variation exists across professional groups: doctors prioritise research evidence, while managers do not.
- Innovations requiring low effort, had evidence of previous implementation, and were from a similar context were preferred.

## Policy and practice implications

- Assembling evidence that can be used to evaluate multiple forms of impact would fit with decision-makers' expressed priorities for evidence. However, evidence of impact is necessary but not sufficient for evaluating innovations, as characteristics relating to context (e.g. credible source) and implementation (e.g. changes to resources, staff roles) are critical.
- To enhance perceived credibility and impact of their research, producers of evidence should work through local system organisations, share accessible findings (e.g. short/ visual summaries), and develop long-term relationships with research users.
- Sound decision-making on introducing or diffusing innovations is more likely in contexts
  where: evidence highlighting a range of impacts is available; implementation issues have been
  anticipated early in decision-making; and there is a receptive local context for evaluating
  evidence.
- Organisational leaders need to consider the ways in which the environment surrounding decision-making encourages, or works against, the inclusion and reconciliation of diverse evidence and perspectives.

## The DECIDE guide

The <u>DECIDE guide</u>, derived from the study findings, is aimed at anyone concerned with informing or making decisions about introducing or spreading innovations, including providers and commissioners of care. We used the metaphor of the 'long and winding road' of decision-making to highlight that decision-making is not a single event, but a complex, non-linear process. The guide outlines six key themes, and associated questions, for decision-makers to consider along this road:

- 1. **DEFINITION**: Can the innovation and its potential impact be clearly described?
- 2. EVIDENCE: What evidence is available in relation to the innovation?
- 3. STAKEHOLDERS: Who will be involved in decisions and how?
- 4. DRIVERS: What are the key external and internal drivers for introducing innovation?
- 5. ORGANISATION: What organisational factors should be considered during decision-making?
- 6. IMPLEMENTATION: Can likely barriers and enablers to implementation be anticipated early in decision-making?

The final report, papers, and the DECIDE guide is available from the project webpage.