

Creating open-access resources for undertaking expert elicitation in healthcare decision-making

Written by Laura Bojke.

Research Team: [Laura Bojke](#), [Dina Jankovic](#), [Marta Soares](#) (CHE, University of York), [Dawn Lee](#) (University of Exeter), [James Horscroft](#) (Lumanity).

Making informed decisions about healthcare interventions relies on good quality evidence about a range of factors such as long-term health outcomes and costs. However, sometimes elements of this evidence base are missing because the specific topic area is less well-developed e.g. diagnostics, medical devices, early access to medicines scheme or public health; or the evidence is of limited use because it is flawed, contradictory or less relevant.

In these situations, structured expert elicitation can provide valuable additional information to supplement health and care decision-making (see Box 1). Elicitation is the process of transforming the knowledge of experts into quantifiable measures. While the use of expert elicitation in healthcare decision-making has increased in recent years, the methods used vary widely and there are no published guidelines for analysts to follow.

Box 1

Why is SEE valuable in healthcare decision-making?

-  Global trends are leading to higher **uncertainty** at the point of decision making
-  Recognized as a **preferred method** where empirical evidence is lacking^{1,2}
-  Minimizes known **biases** associated with expert judgements³
-  Can be used **longitudinally** to predict clinical outcomes⁴
-  Provides **bounds to uncertainty** for key clinical or economic parameters³

References: ¹ NICE Technology Evaluations Manual; ² CADTH Guidelines for the Economic Evaluation of Health Technologies- Canada; ³ Bojke et al. (2021). Developing a reference protocol for structured expert elicitation in health-care decision-making: a mixed-methods study. Health Technology Assessment (Winchester, England), 25(37), 1-4. Cope et al. Integrating expert opinion with clinical trial data to extrapolate long-term survival: a case study of CAR-T therapy for children and young adults with relapsed or refractory acute lymphoblastic leukemia. BMC medical research methodology 19.1 (2019): 1-11

Our research has developed guidance for structured expert elicitation to inform healthcare decision-making. The National Institute for Health and Care Excellence in England & Wales and the Canadian Agency for Drugs and Technologies in Health have

integrated this guidance into their methods for health technology assessment. However, there are still barriers to the use of elicitation in formal decision-making processes. We surveyed members of the International Pharmacoeconomics and Outcomes Research community and found that one of the biggest barriers is a lack of accessible resources for conducting structured expert elicitation.

To help overcome this obstacle, we developed the STEER (Structured Expert Elicitation Resources) project to produce resources that help analysts and decision-makers to use the elicitation guidance in practice. Along with stakeholders, including academic and consultancy analysts, we have produced materials that cover the entire structured expert elicitation (SEE) process from the design to reporting stage. This includes (1) an overview and a practical guide for conducting SEE in healthcare, (2) adaptable tools for building bespoke SEE exercises, (3) training materials for experts taking part in SEE, (4) resources used in previous SEE exercises, and (5) examples of published SEE in healthcare decision-making. The materials cover practical considerations such as timelines, skills requirements, and administrative requirements, such as contracting with experts and writing consent forms.

The use of off-the-shelf resources can streamline the structured expert elicitation process whilst maintaining the robustness required for healthcare decision-making.

[Further information on the guidance is available.](#)

The [STEER resources](#) are available.

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