SA210

Exploring the Use of Expert Opinion via Delphi Panels in NICE Appraisals: A Retrospective Analysis

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Objectives

The National Institute for Health and Care Excellence (NICE) often faces uncertainties and evidence gaps requiring expert opinion during health technology appraisals, particularly for rare diseases when outcomes are not fully demonstrated in trials or real-world settings.[1] Delphi panel is a NICE-recognized structured method for gathering expert opinion through iterative rounds of consultation, which can help address these gaps by providing consensus-based insights.[2] This study aimed to evaluate the extent to which NICE accepts and incorporates evidence from Delphi panels into its appraisals and how this expert-driven evidence influences NICE decision-making.

Methods

A retrospective review was conducted of NICE technology appraisals published until 2023 that utilized Delphi panel evidence. Data were extracted from appraisal documents available on the NICE website. Key characteristics analyzed included therapeutic area, disease rarity, treatment line, panel composition, domains explored, and committee perceptions. In addition to quantitative frequencies and proportions of perceptions, qualitative data were reported as the committee's interpretation and utilization of Delphi panel evidence in decision-making processes.

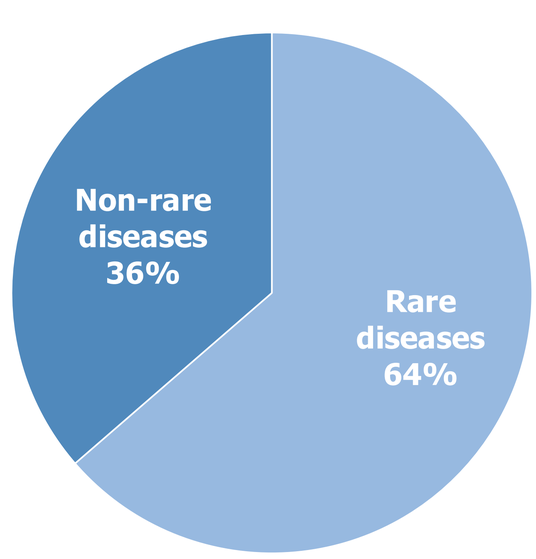
Results

A total of 11 NICE appraisals were analyzed. Of those, 72% (8/11) were first-line therapies, 64% (7/11) addressed rare diseases (Figure 1), and 100% (11/11) received a positive recommendation. Overall Delphi panels were used in both highly specialized technology assessments (HSTs) (5/11) and single technology assessments STAs (6/11) (Figure 2). Delphi panels typically engaged 4-20 UK or international clinical experts as panelists and primarily addressed evidence gaps and uncertainties in resource utilization, long-term outcomes, and utility values that informed base-case economic models and scenario analyses (Figure 3). NICE generally viewed Delphi panel evidence as a useful supplement to other available evidence.

Conclusion

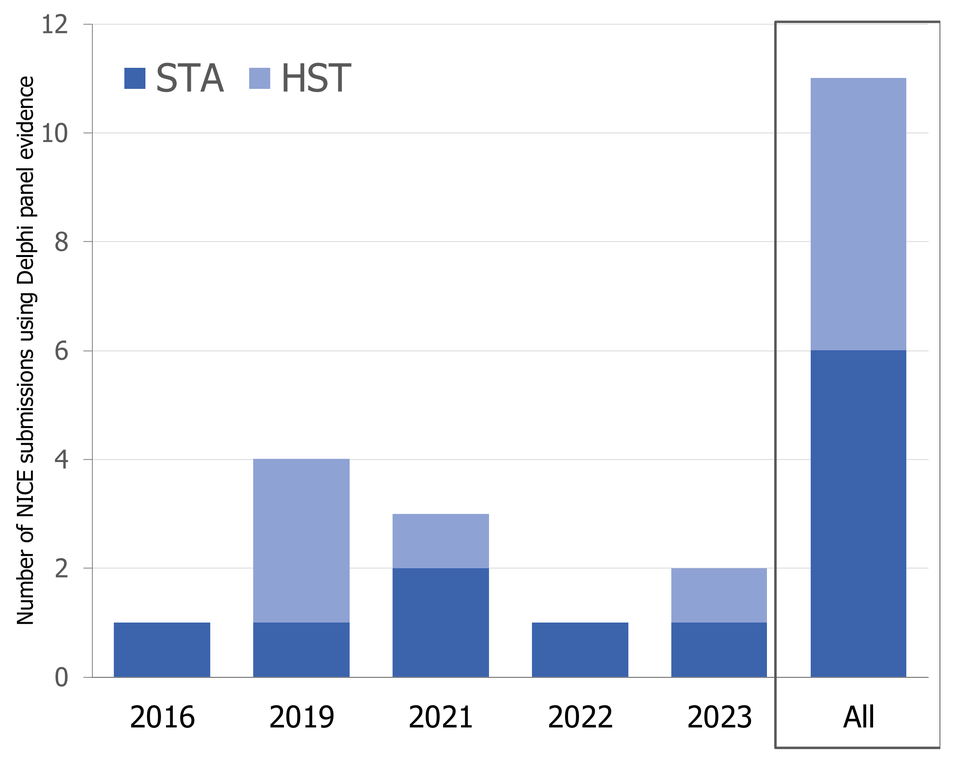
While acknowledging the limitations of expert opinion in general, NICE committees incorporated the evidence from Delphi panels to inform their decision-making, especially for rare diseases or long-term outcomes where robust clinical data may be limited.

Figure 1: Use of Delphi panels in NICE technology appraisals between 2016 and 2023



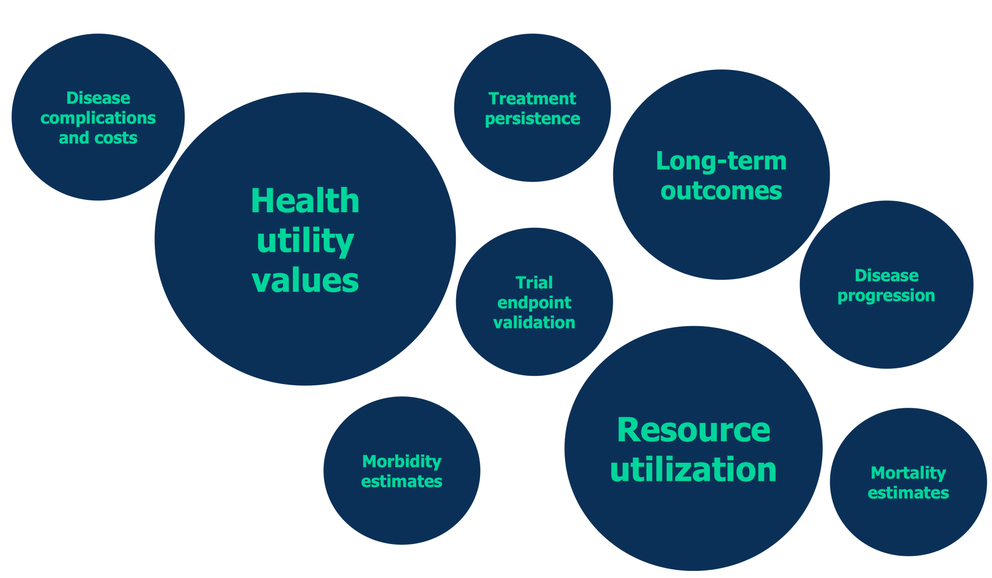
Abbreviation: NICE, National Institute of Health and Care Excellence

Figure 2: Use of Delphi panel evidence in NICE HSTs and STAs between 2016 and 2023



Abbreviations: NICE, National Institute of Health and Care Excellence; HST, highly-specialized technology assessment; STA, single technology assessment

Figure 3: Key domains explored in Delphi panels during NICE appraisals



Note: Circle size reflects frequency of each domain explored across all analyzed Delphi panel evidence
Abbreviation: NICE, National Institute of Health and Care Excellence.

References:

1. Hale G, Morris J, & Barker-Yip J. (2023). Flexibility in assessment of rare disease technologies via NICE's single technology appraisal route: a thematic analysis. Journal of comparative effectiveness research, 12(11), e230093. https://doi.org/10.57264/cer-2023-0093

2. National Institute for Health and Care Excellence. (2015). Developing NICE guidelines: The manual. https://www.nice.org.uk/media/default/about/what-we-do/our-programmes/developing-nice-guidelines-the-manual.pdf