S26 Oral Presentations

OP68 Real-World Experience With The National Institute For Health And Care Excellence's Willingness To Accept Less Costly, Less Effective Healthcare Technologies

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Introduction. Research suggests a different willingness to pay for more effective interventions than willingness to accept (WTA) for less effective interventions which has prompted debate as to whether the threshold in the southwest (SW) quadrant should be kinked to reflect this disparity. Acceptance of less costly, less effective interventions with incremental cost-effectiveness ratios (ICERs) in the SW-quadrant presents an opportunity for resource-constrained healthcare systems by releasing resources for other purposes, which is of particular importance during a pandemic. The National Institute for Health and Care Excellence (NICE)'s methods guide suggests the threshold for decision-making for SW-quadrant interventions be the same as for more expensive, more effective interventions. To assess NICE's WTA less effective treatments, the objective was to review the outcomes and decision drivers for interventions presenting SW-quadrant ICERs.

Methods. A review of NICE health technology appraisals (HTAs) containing SW-quadrant ICERs identified from 2015-2021 was conducted. Appraisal details were extracted and analyzed to identify trends in the WTA and decision drivers.

Results. The HTA review identified twenty-one submissions containing SW-quadrant ICERs in the base-case/scenario analysis. Eighty-one percent received a positive recommendation, with ICERs ranging from GBP 30,000-GBP 4.2m (EUR 35,264-EUR 5m) compared to a range of GBP 789-GBP 50,905 (EUR 927-EUR 59,837) for negative recommendations. The HTAs covered a wide range of therapeutic areas including psoriasis, multiple sclerosis and multiple oncology indications. Decision drivers identified that may have had a positive influence on final outcomes included a high net monetary benefit, a small QALY difference, clinical unmet need, poor tolerability of existing treatments, and oral administration route.

Conclusions. The analysis suggests that there is a high rate of acceptance of interventions with ICERs in the SW-quadrant, however, the threshold for acceptance is unclear. The high frequency of HTAs with SW-quadrant ICERs identified in this review indicates the need for further guidance on such interventions in the NICE reference case.

OP70 Gaps In The Evaluation Of Clinical Decision Support Software (CDSS): Interviews With Australian Policymakers

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Introduction. Clinical Decision Support Software (CDSS) can improve the quality and safety of care by providing patient-specific diagnostic and treatment recommendations. However, robust evaluation is required to ensure that the recommendations provided are clinically valid, up-to-date, and relevant to a specific clinical context. Most evaluation studies assess CDSS performance from the perspective of end-user requirements. But only occasionally is CDSS subject to stringent pre- and post-market evaluation, making it difficult to determine the safety and quality in practice. This study aimed to assess CDSS evaluation in Australia to identify gaps in evaluation approaches.

Methods. We conducted 11 semi-structured interviews with different policymakers from committees involved in digital health activities in Australia. Data were thematically analyzed using both theory-based (deductive) and data-driven (inductive) approaches.

Results. Our findings indicated that evaluating CDSS as a purely technical intervention has overly narrowed the assessment of benefits and risks by inadequately capturing the sociotechnical environment. Existing evaluation methods, adopting a static view of the implemented system, cannot discern the impact of the dynamic clinical environment and rapidly evolving technology on CDSS performance. The timeframe of evaluation studies are also incongruent with fast software upgrade cycles, with clinical practices and software potentially changing by the time evaluation is complete. The regulation of software as a medical device depends on the intended use. CDSS are exempt from regulation because they only 'produce advice'; however, this ignores the fact that they can transition to specifying a diagnosis and treatment after a software update. There is no framework for continuous post-market monitoring, and this is especially important when a CDSS algorithm can change and impact on patient management

Conclusions. The sociotechnical environment is a significant factor influencing the impact of CDSS on clinical practice, therefore evaluation approaches must acknowledge the dynamic nature of clinical and organizational contexts. Pragmatic and data-driven methodologies are required for CDSS evaluation that acknowledge the evolving landscape of clinical practice and its relationship to technology.