

PP88 Breaking Boundaries In Health Technology Assessment: Quantifying Non-Traditional Value Of Medical Technology Through ExpertLink Remote Connectivity Solutions

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Introduction: A diverse range of services often supplements procedures that involve medical technologies and adds value along patient care pathways. However, these novel elements of value are often not captured in traditional assessment frameworks. ExpertLink is one such example. ExpertLink uses digital solutions to connect clinical experts worldwide, enabling remote training and collaboration, while maintaining the highest standard of patient care.

Methods: Rezum™ is a minimally invasive therapy for patients with symptomatic benign prostatic hyperplasia (BPH). It is a quick day procedure with proven safety, effectiveness, and durability in clinical outcomes. Leveraging ExpertLink, an expert in Sydney, Australia, remotely proctored 11 Rezum™ procedures in Malaysia in November 2022, supporting five urologists in five hospitals across five states within five hours. Efficient and straightforward procedures such as Rezum™ are well suited to remote proctorship. Through this case study, we quantify the sustainability, equity, and access benefits, illustrating the additional value ExpertLink brings across the healthcare continuum and beyond.

Results: For a proctor traveling from Australia to Malaysia, over 6,500 kilometers and 17 hours travel time is saved, equating to an estimated 1,700-kilogram reduction in CO₂ emissions. Without ExpertLink, a proctor may be away from practice for up to a week. ExpertLink allows for continuity of practice, including consultations and procedures, during this time. For five doctors traveling from Malaysia to Australia for training, an estimated 7,400-kilogram reduction in CO₂ emissions and approximately 85 hours travel time is saved. ExpertLink provided 11 geographically dispersed patients with timely access to treatment and expedited the physician learning curve.

Conclusions: This case study illustrates the value for just one technology on one day. ExpertLink embodies novel elements of value that are not captured in traditional value assessment frameworks. Collaborative effort between stakeholders is needed to broaden the view of value in healthcare, incorporate additional elements of value in existing assessment frameworks, and appropriately recognize this often-uncounted value in decision-making.

PP89 Artificial Intelligence And Health Technology Assessment: Playing Catch-Up

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Introduction: The use of artificial intelligence (AI) in health care has the potential to improve clinical and patient outcomes and to reduce rising costs. There is an exponential increase in health technologies that use AI. We present a health technology assessment (HTA) case study demonstrating that the rapid rise in publications presents challenges for HTA bodies seeking to provide robust, timely assessments.

Methods: We conducted an HTA of AI-assisted endoscopy in the detection and characterization of lower gastrointestinal (GI) cancer. Searches were conducted up to October 2023. Unusually, the search targeted only the intervention: artificial intelligence and lower-GI-tract endoscopy (including colonoscopy, proctoscopy, etc.). The search strategy was peer reviewed. MEDLINE, Embase, KSR Evidence, CINAHL, Cochrane Library, and the INAHTA HTA database were searched, as well as ongoing trial registers and key websites. A date limit of 2010 onwards was applied, as Xbox Kinect launched in 2010 and was the first mainstream device used for healthcare imaging.

Results: Two network meta-analyses, 15 meta-analyses, one systematic review of meta-analyses, and three systematic reviews published since 2020 were identified. One review conducted searches to January 2020, identifying three randomized controlled trials (RCTs); a review that searched up to February 2023 identified 21 RCTs. There was substantial overlap regarding included primary studies, but not all reviews included the same outcomes. An additional seven RCTs were published in 2023. We also identified 12 cohort studies published between 2021 and 2023. We prioritized higher quality meta-analyses of clinical RCTs to include all outcomes of interest and updated the meta-analyses for primary outcomes.

Conclusions: This case study of an HTA of an AI-related technology demonstrates how rapidly the field is moving. It is necessary to use well targeted but not overly exclusive search strategies, limit by date, and prioritize inclusion of identified evidence according to quality and availability of outcomes. Time should be allowed to update existing meta-analyses.