is discontinued. The MAP for dupilumab confined reimbursement support to adults with refractory moderate-to-severe atopic dermatitis, where cost-effectiveness was plausible in the HTA. The MAP for calcitonin-gene-related-peptides monoclonal antibodies confines reimbursement support to patients with chronic migraine, refractory to at least three prophylactic treatments, where cost-effectiveness was plausible in the HTA.

Conclusions: Across these MAPs, over 3,000 patients accessed novel treatments for chronic illnesses in September 2023. HTM provides an effective mechanism to facilitate access to high-cost medicines for targeted patient groups, while providing increased oversight and budgetary certainty. Key to acceptance is utilization of HTA outputs to implement evidence-based HTM measures targeting specific uncertainties as highlighted in the HTA report.

OP07 Technical Aspects Of Artificial-Intelligence-Based Tools Applied In Health Technology Assessment Processes: A Scoping Review

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Introduction: In the last decade, artificial intelligence (AI) has been increasingly applied in health technology assessment (HTA) to accelerate evidence synthesis, optimize resources allocation, and guarantee timely delivery of trustworthy technologies in health. The aim of the present scoping review is to map AI models applied in HTA, and technical characteristics of AI-based automation and semi-automation applied in HTA.

Methods: A search strategy containing core expressions "AI" and "HTA" and correlated terms was conducted in nine specialized databases (health and informatics) in February 2022. Inclusion criteria were publications testing AI models applied in HTA. Study selection was performed by independent pairs, with consensus meetings. No filters were applied. Data on year and country of publication, HTA phase, subsets of AI (e.g., machine learning [ML], neural networks), type of algorithm (e.g., support vector machine [SVM], K-nearest neighbors), and performance scale were extracted. Data were analyzed as descriptive frequency statistics. Used metrics will be presented narratively.

Results: Sixty-one publications were included. The first study identified was published in 2006, and since then the number of publications has been consistently growing, with 11 publications in the year 2021. Canada, USA, and the UK concentrate 72 percent of publications (44 in 61) equally distributed. The most common HTA phase was the evidence synthesis, with 59 studies (96%). The main task performed was study screening/selection (66.6%). The majority of ML models (80.9%) contained two learning nodes or fewer, and applied SVM and decision-tree-based algorithms. Inter-rater agreement, accuracy, and 95 percent recall were the most common scales observed.

Conclusions: Although recent developments in AI applied to HTA show increasing potentiality, studies are concentrated in the study selection phase of evidence synthesis. Many areas need further development, such as horizon scanning and policymaking processes. Additionally, studies reporting time gain and economic gain outcomes are scarce and should be considered for the development of future studies in the field.

OP08 Health Technology Assessments Of Artificial Intelligence: Special Considerations And Development Of A Checklist

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Introduction: Artificial intelligence (AI) technologies are becoming more widespread in daily life, including in health and care settings. AI is being developed for use in many areas, including diagnostics, treatment planning, and patient monitoring. There are new challenges and additional considerations when performing a health technology assessment (HTA) for AI use in healthcare.

Methods: Health Technology Wales has developed additional guidance and a checklist of considerations for researchers to use when undertaking an HTA on AI. These documents were created as a result of involvement in discussions with healthcare services around AI; attendance at meetings and training sessions with government, healthcare, and academic institutions; and observations from undertaking our first HTAs investigating AI technologies.

Results: We identified seven main areas to consider: (i) the AI model being used and its training datasets; (ii) clarity on where in the clinical pathway the AI sits and whether this is appropriate for the local healthcare service; (iii) clear identification of the target patient population and whether there are gaps in the evidence base for subgroups; (iv) who uses the AI and the training required; (v) possible barriers and inequities in usage, particularly if the AI is patient facing; (vi) ongoing monitoring of the AI model; and (vii) data security and usability.

Conclusions: HTA assessment of AI presents new challenges for HTA bodies. Additional outcomes for assessment (including user acceptability) may be required, and an awareness of background information that allows for contextualization of the technology and clear indication of its usefulness in the local healthcare setting is key. The development of guidance related to AI technologies may enable rigorous evaluation.