Background Age-related macular degeneration (AMD) is the third leading cause of blindness in industrialised countries. The heavy burden of the disease, the expected increase in the number of cases, and a lack of effective treatment options highlight the need to examine new therapies. The implantable miniature telescope (IMT) is a potential new treatment for AMD. However, few high-quality studies are currently available to assess its effectiveness. Despite limited evidence, the US Food and Drug Administration (FDA) and Medicare granted regulatory approval, potentially increasing patient demand.

Context In the context of limited available evidence, but potential patient demand driven by lack of alternatives, a large, US-based integrated healthcare system rapidly developed evidence-based guidance and implementation strategies for IMT.

Description of Best Practice A systematic review was conducted to assess IMT effectiveness. A centralised, collaborative panel of experts was convened based upon clinical expertise, interest in providing IMT surgery, and potential operational volume. Evidence-based recommendations informed rapid development of an implementation strategy over six months. The strategy involved 1) centralised patient review and selection; 2) consent forms that describe benefit vs. harms; and 3) surgical training standards. Rapid development and distribution of the implementation strategy ensured that IMT would be provided in a timely and appropriate clinical context. The centralised process facilitated development of a patient database to track outcomes and inform future research.

Lessons for Guideline Developers, Adaptors, Implementers, and/or Users Rapid, collaborative, and evidence-based development of clinical guidance and implementation strategies is an effective model for spreading best practices in an environment of uncertain or low-quality evidence.

Results Most of the 357 recommendations issued were supported by evidence warranting low or very low confidence in estimates (256, 72%). Evidence cited in support of these recommendations came exclusively from observational studies in 233 recommendations (65%). Most recommendations were strong (206, 58%); of these, 121 (59%) were supported by evidence warranting low or very low confidence in estimates. In 101/121 (83%), we identified a compelling rationale for the recommendations; in 20 (17%), we did not.

Conclusions Most TES strong recommendation based on low quality evidence are justified and appropriate, but a substantial proportion are not.

Implications for Guideline Developers Guideline developers should carefully justify any strong recommendations based on low confidence in effect estimates.

Efficacy, Cost and Implementation of a Computerised Decision Support System for Primary Care and Urgent Care in the Netherlands


Background The implementation of decision support systems (DSSs) in primary care and urgent care settings is an emerging area of interest. This study aimed to evaluate the efficacy, cost, and implementation of a computerised DSS for primary care and urgent care in the Netherlands.

Methods A mixed-methods design was used, combining quantitative and qualitative data collection methods. The study involved a randomised controlled trial (RCT) and a mixed-methods evaluation. The primary outcomes were the effectiveness of the DSS in improving diagnostic accuracy and clinical decision-making, and the cost-effectiveness of its implementation.

Results The RCT showed a significant improvement in diagnostic accuracy among practitioners using the DSS compared to those using standard care alone. The cost-effectiveness analysis indicated that the DSS was cost-effective in improving patient outcomes while also reducing healthcare costs. The implementation evaluation highlighted the importance of user involvement, stakeholder engagement, and continuous support during the implementation process.

Conclusions The computerised DSS for primary care and urgent care was effective in improving diagnostic accuracy and cost-effective. A comprehensive implementation strategy that involves user engagement, stakeholder collaboration, and ongoing support is essential for successful adoption.