

080 IMPLANTABLE MINIATURE TELESCOPE – IMPLEMENTING GUIDELINES WHEN EVIDENCE IS UNCERTAINA Gupta, P Garg, D Patel. *Kaiser Permanente, Pasadena, USA*

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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.

081 THE ENDOCRINE SOCIETY GUIDELINES: IMPLICATIONS OF STRONG RECOMMENDATIONS WITH LOW QUALITY EVIDENCE¹J Britto, ¹J Domecq, ¹M Murad, ²G Guyatt, ¹V Montori. ¹Mayo Clinic, Rochester, MN, USA; ²McMaster University, Hamilton, Canada

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Background In 2005, the Endocrine Society (TES) adopted the GRADE system of developing clinical practice guidelines. This system facilitates the formulation of evidence-based recommendations by explicitly describing the confidence in estimates (quality of evidence) and strength of each recommendation.

Objectives To describe and characterise the relationship between confidence in estimates and strength of recommendation in TES guidelines.

Methods We included all published TES guidelines between 2005 (when TES started using GRADE) and 2011. Independently and in duplicate, reviewers extracted, for each recommendation: disease area, confidence in estimates and design of the studies considered, and strength of recommendation. In strong recommendations with low quality of we developed and applied a taxonomy of appropriate recommendations and identified those we considered inappropriate.

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.

082 EFFECT OF WORDING AND PRESENTATION OF ELECTRONIC ALERTS ON BEHAVIOR OF PROVIDERS CARING FOR OUT-OF-CONTROL DIABETICSE Stone, H Hsu. *Kaiser Permanente, Pasadena, USA*

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Background Guideline implementation through electronic point-of-care alerting has been shown to be effective. The best displays of these alerts have not been well studied.

Objectives To assess the effect of wording and presentation of electronic alerts on insulin ordering by providers caring for out-of-control diabetics on 2 or more oral hypoglycemic agents.

Methods An electronic message to the provider caring for an out-of-control diabetic was displayed. Prior to randomisation, a generic message was presented to all providers. Health centres were then randomised to 1 of 4 specific messages recommending insulin. Messages differed by wording (active/passive voice) and presentation (black text/red and black text). A 2-arm RCT was then performed where health centres were randomised to a complete absence of any alert or to one of the specific messages.

Results The generic alert triggered 56,878 times. Providers prescribed insulin 5.11 % of the time. During the 4-arm RCT, the alerts triggered 11,744, 11,826, 11,742, and 11,554 times and insulin was prescribed 5.17%, 5.01%, 5.11% and 5.20% respectively. There were no statistically significant differences amongst the 4 rates ($p=0.67$) nor was there a statistically significant difference between insulin ordering with the generic message compared to insulin ordering with the more specific messages ($p=0.62$). For the 2-arm RCT, insulin ordering remained at 5% for the specific messages and was 0% where there was no alert ($P<0.05$)

Lessons for Guideline Developers, Adaptors, Implementers, and/or Users Extra effort to craft wording and develop eye-catching electronic alerts may not be worthwhile. Guideline adherence was improved by an electronic alert.

083 DEVELOPING AND IMPLEMENTING A COMPUTERISED DECISION SUPPORT SYSTEM FOR GENERAL PRACTICE IN THE NETHERLANDS¹M Bouma, ²M Lugtenberg, ³R Dorland, ³R de Groot, ²D Pasveer, ²T Kool, ¹J Burgers. ¹Dutch College of General Practitioners (NHG), Utrecht, The Netherlands; ²IQ healthcare, Radboud, The Netherlands; ³University Nijmegen Medical Centre, Nijmegen, The Netherlands; ⁴ExpertDoc, Rotterdam, The Netherlands

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