

the checklists were validated by choosing cost-effectiveness models with known errors and/or discrepancies and testing that the issues were captured by the checklists.

**Conclusions.** These guidelines are not an exhaustive list of checks that should be performed, but are presented as the minimum requirements for consideration to be included with each RG assessment of the corresponding HTA submission. The guidelines will be constantly updated as the process evolves over time. The cost-effectiveness models should follow the National Health Information and Quality Authority (HIQA) Guidelines for the Economic Evaluation of Health Technologies in Ireland.

## OP98 Limitations In Health-Economic Guidance For Medical Devices

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**Introduction.** Health technology assessment (HTA) includes consideration of health and economic factors, playing a key role in optimizing healthcare provision in Europe. Medical devices are an important contributor to both health outcomes and the cost of healthcare provision, yet they are rarely addressed in current guidance for health-economic evaluation. Our aim is to help improve assessment of medical devices via review of European health-economic guidelines and recent research.

**Methods.** Searches for European HTA guidelines were performed and where available were reviewed by two researchers working independently. Additionally, a systematic review of published literature focused on assessment of medical devices was conducted. English, German, or French literature published between 2000 and 2017 was analyzed. The status of HTA guidance to date was subsequently reviewed in light of current research findings and suggestions made to help improve standardization.

**Results.** Of the 41 investigated European countries, 22 had official HTA guidance. Only four of 22 (18 percent) dedicated documentation to guidance specific to medical devices. Where differences between pharmaceuticals and medical devices were highlighted, specifics for health-economic assessment of medical devices were generally absent. The systematic review yielded 472 unique articles, 28 of which underwent full-text review. Issues surrounding medical device value assessment that commonly emerged were: limited evidence base, learning curve effects, organizational impact, incremental innovation, diversity of devices, dynamic pricing, and transferability. While identification of issues was ubiquitous, actionable suggestions on how to overcome them were less common. The most frequent recommendations were use of Bayesian methods, inclusion of real-world data, and modelling the learning curve. Key to implementation is determination of the medical device type and its impact duration.

**Conclusions.** Current guidelines rarely address the needs of medical devices. Practical recommendations for improvements exist and provide opportunity to start discussion on how best to serve the medical devices field and improve the HTA process.

## OP103 Incorporating Health Technology Assessment In The Development Of A Clinical Care Pathway

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**Introduction.** Clinical care pathways (CPWs) provide a step-wise multidisciplinary care plan for patients with a particular health condition. Their aim is to optimize patient outcomes and organization of care by supporting evidence-based practice. It therefore seems inevitable that health technology assessment (HTA) should be incorporated within the development process of a CPW. As CPWs become increasingly utilized, there is a need to understand the added value and strategies to integrating HTA in the development of a CPW.

**Methods.** Through a case study of an HTA on treatments for chronic low back pain requested as part of the development of a CPW for chronic musculoskeletal pain, we demonstrated the three key strategies to include HTA in CPWs described by Rehaluk 2016 and added a fourth one. We then showed how these strategies contribute to the development of a CPW which answers the quality criteria outlined by the Cochrane Effective Practice of Care group through a strength, weaknesses, opportunities, and threats analysis.

**Results.** We confirmed four key strategies to including HTA in CPWs (organizational positioning of the HTA unit, partnership and communication with stakeholders, tailoring the integration of contextual data with evidence from the literature, explore tools to facilitate the use of HTA findings). The inclusion of HTA through these strategies contributes to the development of a CPW which meets the ten criteria to evaluate the quality of a CPW outlined by the Cochrane Effective Practice of Care group. Through a strength, weaknesses, opportunities, and threats analysis, we describe how each of the criteria were met and how this led to recommendations influencing our regional organization of care.

**Conclusions.** The inclusion of HTA in CPW development increases its capacity to directly influence organization of care. HTA can represent a pivotal vehicle to ensure good quality CPWs.

## OP105 Factors Affecting Horizon Scanning For Hospital-Based Health Technology Assessment

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**Introduction.** The strategic MedTech investment for the expansion of a central London paediatric hospital must sustain its ambitions to remain a state-of-the-art hospital, whilst implementing recent and future MedTech innovations and taking into account spatial and financial limitations. Horizon scanning (HS) is an important health technology assessment (HTA) tool to achieve these goals. To this end, we developed a methodology to help decide the suitability of investing in the following imaging-based