were discussed and validated by the committee members who helped reframe two levels in one of the attributes and delete one attribute. The final seven attributes were: treatment modality, pain reduction, onset of treatment efficacy, duration of efficacy, difficulty in daily living activities, sleep problem, and knowledge about their body and pain.

Conclusions. This study is one of the few to comprehensively describe the selection process of attributes and levels for a DCE. This may help ensure transparency and judge the quality of the decision-making process. In the context of a HB-HTA unit, this strengthens the legitimacy to perform a DCE to better inform decision-makers in a patient-centered care approach.

OP33 Treatment Of Mitral Insufficiency And Multicriteria Decision-Making

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Introduction. Controversy regarding the efficacy of transcatheter mitral valve repair with a clip (TMVRc) in reducing the mitral regurgitation is related to the lack of solid scientific evidence. Worldwide, refusal or conditional acceptance for implementation of TMVRc, reflect ongoing uncertainty. We sought to apply a systematic multicriteria framework to ensure a fair and reasonable decision regarding the use of TMVRc in Quebec.

Methods. The framework included the following domains: context, quality of evidence concerning safety, efficacy and effectiveness, unmet patient needs, expected volume of patients, and impact on the health system including costs. Each domain within the framework was examined by a review of the literature and through consultations with a scientific advisory committee, a TMVRc clinical expert committee, TMVRc clinical teams, industry representatives and the Institut national d'excellence en santé et en services sociaux (INESSS) clinical excellence committee.

Results. The literature review indicated that uncertainty about the efficacy and effectiveness of TMVRc persists, particularly in the real world context, and this view was supported by scientific experts. The TMVRc clinical teams provided insight into the burden of mitral insufficiency on patients and the health system and their belief in the promise of TMVRc. They also highlighted the challenges of patient selection and organizational issues related to the introduction of TMVRc within their institutions. The advisory committee stressed the need for further evaluation prior to wide diffusion.

Conclusions. Using a multicriteria framework facilitated a more standardized and transparent approach to our literature review and consultations as well as to the development of the proposed recommendations. This was especially important in the context of an evaluation of a promising new approach to treat mitral valve disease with many important uncertainties. This multicriteria approach will facilitate a more standardized process for deliberation on how new health technologies should be implemented into the Quebec health system.

OP34 One-Way Sensitivity Analysis For Cost Effectiveness Analysis

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Introduction. Although stochastic analysis has become the accepted standard for decision analytic cost effectiveness models, deterministic one-way sensitivity analysis continues to be used to meet the needs of decision makers to understand the impact that changing the value taken by one specific parameter has on the results of the analysis. However, there are a number of problems with this approach.

Methods. We review the reasons why deterministic one-way sensitivity analysis will provide decision makers with biased and incomplete information. We then describe a new method - stochastic one-way sensitivity analysis (SOWSA), and apply this to a previously published cost effectiveness analysis, to produce a stochastic tornado diagram and conditional incremental net benefit curve. We then discuss how these outputs should be interpreted and the potential barriers to the implementation of SOWSA.

Results. The results illustrate the shortcomings of the current approaches to deterministic one-way sensitivity analysis. For SOWSA, the expected costs and outcomes are captured, along with the sampled value of the parameter and these are linked to the probability that the parameter takes that value – which can be read off the probability distribution for the parameter used in the stochastic analysis. From these results it is possible to gain insights into probability that a parameter will take a value that will change a decision.

Conclusions. Although a well-used technique, one-way deterministic sensitivity analysis has a number of shortcomings that may contribute to incorrect conclusions being drawn about the importance of certain parameter values on model results. By providing fuller information on uncertainty in model results, it is hoped that the methods here will lead to more informed decision making. Although, as with all developments in the presentation of analytic results to decision makers, care will be required to ensure that the decision makers understand the information provided to them.

OP37 Impact On Uncertainty Of Disaggregating Cost Data

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Introduction. Economic models contain several parameters ordinarily subject to uncertainty. Unlike most other model parameters, costs can constitute numerous distinct components. For example, a surgical intervention can require a variety of disposables and reusable equipment. A micro-costing output may be disaggregated or presented as a total cost. Uncertainty could be applied to individual cost components or to total cost. We aimed to explore how disaggregation of cost data may impact on uncertainty using a case study.