
Issue Panel 18

How to deal with model uncertainty at the planning stage of cost- effectiveness?: Tips from Global Experience

Presentation for

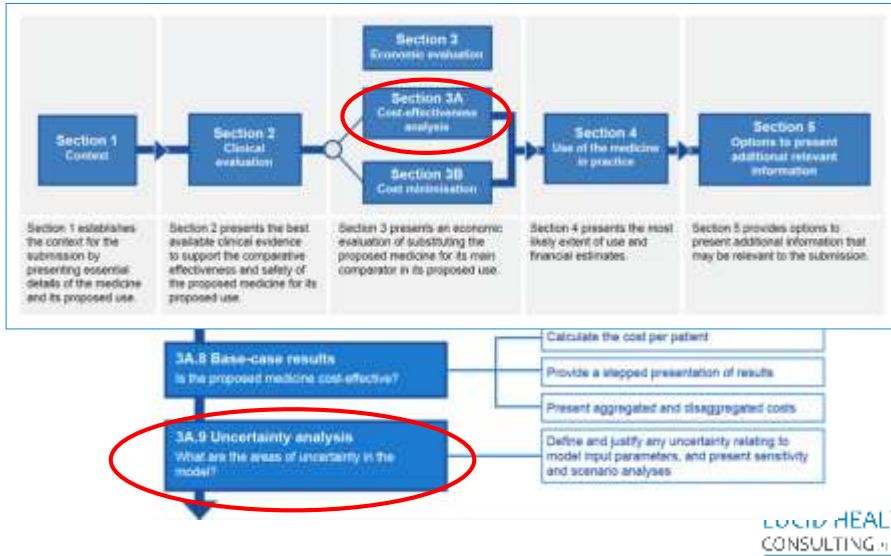
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Agenda

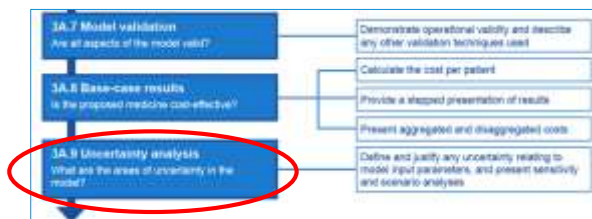
- Australian Cost Effectiveness Analysis Guidelines
- Uncertainty in the “Guidelines”
- Sources of Uncertainty
- Tips on handling uncertainty
- Conclusion
- Questions.....

Where is “uncertainty” dealt with?



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Section 3A.9 Uncertainty Analysis (Analyses)



- Models and Supporting Document are provided in the submission but are not publicly available
- Review of Public Summary Documents and PBAC Outcomes

- 3A.9.1 Identifying and defining uncertainty in the model
 - *Parameter uncertainty*
 - *Translational uncertainty*
 - *Structural uncertainty*
- 3A.9.2 Presentation of univariate sensitivity and scenario analyses
- 3A.9.3 Presentation of multivariate and probabilistic sensitivity analyses
- 3A.9.4 Summary of the uncertainty analysis

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Sources of Uncertainty

- Time horizon
- Extrapolation method
- Duration of treatment effect
- Inclusion/exclusion of AEs
- Health states included
- How parameters change over time
- Link between surrogate and final outcomes
- Model specific structural parameters

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Tips

- Currently no standard approach to assessing uncertainty
- It is difficult and time consuming
- Does have an impact on the ICER
- Conduct sensitivity analyses to assess assumptions
- Identify potential sources of structural uncertainty when developing model
- Compare model with published models
 - Review Published Summary Documents and PBAC Outcomes
- Consider what's likely to be important or of interest

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