

Philips criteria: model-based economic evaluations

| | Berto 2006 ²²⁶ | Brüggenjürgen 2008 ²²⁹ | Omnes 2007 ²²⁷ | Schädlich and Brecht 2000 ²³⁵ | Claes 2009 ²²⁴ |
|------------------|--|--------------------------------------|------------------------------|--|------------------------------|
| Structure | | | | | |
| 1. | Is there a clear statement of the decision problem? | Y | Y | Y | Y |
| 2. | Is the objective of the model specified and consistent with the stated decision problem? | Y | Y | Y | Y |
| 3. | Is the primary decision-maker specified? | Y | Y | Y | Y |
| 4. | Is the perspective of the model stated clearly? | Y | Y | Y | Y |
| 5. | Are the model inputs consistent with the stated perspective? | Y | Y | Y | Y |
| 6. | Is the structure of the model consistent with a coherent theory of the health condition under evaluation? | N | N | Y | Y |
| 7. | Are the sources of the data used to develop the structure of the model specified? | Y | Y | Y | N |
| 8. | Are the structural assumptions reasonable given the overall objective, perspective and scope of the model? | UC | Y | UC | UC |
| 9. | Is there a clear definition of the options under evaluation? | Y | N | Y | N |
| 10. | Have all feasible and practical options been evaluated? | N | N | Y | N |
| 11. | Is there justification for the exclusion of feasible options? | Y | N | N/A | N |
| 12. | Is the chosen model type appropriate given the decision problem and specified causal relationships within the model? | Y | Y | Y | Y |
| 13. | Is the time horizon of the model sufficient to reflect all important differences between the options? | Y | Y | Y | Y |
| 14. | Do the disease states (state transition model) or the pathways (decision tree model) reflect the underlying biological process of the disease in question and the impact of interventions? | Y | Y | Y | Y |
| 15. | Is the cycle length defined and justified in terms of the natural history of disease? | N/A | Y | N/A | N/A |

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| Data | | | | | | |
| 16. | Are the data identification methods transparent and appropriate given the objectives of the model? | Y | N | N | N | N |
| 17. | Where choices have been made between data sources, are these justified appropriately? | UC | N | N | N | N |
| 18. | Where expert opinion has been used are the methods described and justified? | N/A | N/A | Y | UC | N/A |
| 19. | Is the choice of baseline data described and justified? | N | N/A | N | N | N/A |
| 20. | Are transition probabilities calculated appropriately? | UC | UC | Y | Y | UC |
| 21. | Has a half-cycle correction been applied to both costs and outcomes? | N | N | UC | N | N |
| 22. | If not, has the omission been justified? | N | N | UC | N | UC |
| 23. | Have the methods and assumptions used to extrapolate short-term results to final outcomes been documented and justified? | N | N | N | N | N |
| 24. | Are the costs incorporated into the model justified? | Y | N | Y | Y | Y |
| 25. | Has the source for all costs been described? | N | N | N | N | N |
| 26. | Have discount rates been described and justified given the target decision-maker? | Y | Y | Y | Y | Y |
| 27. | Are the utilities incorporated into the model appropriate? | N/A | UC | N/A | N/A | N/A |
| 28. | Is the source of utility weights referenced? | N/A | N | N/A | N/A | N/A |
| 29. | If data have been incorporated as distributions, has the choice of distributions for each parameter been described and justified? | N/A | N/A | N/A | N/A | N/A |
| 30. | If data are incorporated as point estimates, are the ranges used for sensitivity analysis stated clearly and justified? | N | N | N | Y | N |
| 31. | Has heterogeneity been dealt with by running the model separately for different subgroups? | N | N | Y | N | N |
| 32. | Have the results been compared with those of previous models and any differences in results explained? | Y | N | N | Y | Y |

N, no; N/A, not applicable; UC, unclear; Y, yes.

Evers checklist: non-model-based economic evaluations

| | Ariano 2006 ²²² | Bachert 2007 ²²⁸ | Beriot-Mathiot 2007 ²³² | Berto 2005 ²²³ | Canonica 2007 ²³⁰ | Keiding & Jørgensen 2008 ²³³ | Nasser 2008 ²³¹ | Petersen 2005 ²³⁴ | Pokladníkova 2007 ²²⁵ |
|-----|---|--------------------------------|---------------------------------------|------------------------------|---------------------------------|--|-------------------------------|---------------------------------|-------------------------------------|
| 12. | Are outcomes valued appropriately? | Y | Y | Y | Y | Y | Y | Y | Y |
| 13. | Is an incremental analysis of costs and outcomes of alternatives performed? | Y | Y | Y | Y | Y | Y | Y | Y |
| 14. | Are all future costs and outcomes discounted appropriately? | N | Y | Y | N | Y | Y | Y | Y |
| 15. | Are all-important variables, whose values are uncertain, appropriately subjected to sensitivity analysis? | N | Y | N | Y | N | Y | Y | Y |
| 16. | Do the conclusions follow from the data reported? | Y | Y | Y | Y | Y | Y | Y | Y |
| 17. | Does the study discuss the generalisability of the results to other settings and patient/client groups? | Y | Y | N | Y | N | Y | N | Y |
| 18. | Does the article indicate that there is no potential conflict of interest of study researcher(s) and funder(s)? | N | N | N | N | N | N | N | N |
| 19. | Are ethical and distributional issues discussed appropriately? | N | N | N | N | N | N | N | N |

N, no; Y, yes.