

Data extraction form used in systematic review

Reviewer:			
Date form completed:			
Title:			
Author(s):			
Year Published:			
Citation (incl. doi):			
Type of study: Trial-based EE <input type="checkbox"/> Model-based EE <input type="checkbox"/> Non-EE modelling study <input type="checkbox"/>			
Economic evaluation details (if applicable) N/A <input type="checkbox"/>			Location in text (page/figure/table/other)
Objective/decision problem:			
Patient population characteristics (<i>describe</i>):			
Location (<i>country/city</i>):			
Setting (<i>describe</i>):			
Economic study design:			
CEA	<input type="checkbox"/>	CBA	<input type="checkbox"/>
CUA	<input type="checkbox"/>	CMA	<input type="checkbox"/>
CCA	<input type="checkbox"/>	Cost(s) only	<input type="checkbox"/>
Health outcomes(s) only	<input type="checkbox"/>		
Perspective of analysis:			
Societal	<input type="checkbox"/>	Individual clinician	<input type="checkbox"/>
Patient and patient family	<input type="checkbox"/>	Insurer/third party payer	<input type="checkbox"/>
Healthcare system	<input type="checkbox"/>	Other:	<input type="checkbox"/>
Healthcare provider	<input type="checkbox"/>		
Primary costs/consequences/outcome measure(s) (<i>please list</i>):			
Strategies/comparators:			
Time horizon of analysis:			
Was discounting used? (<i>state annual or otherwise</i>)			
	Discount rate for costs:		
	Discount rate for health outcomes:		
	No Discounting <input type="checkbox"/>		
	N/A (no information/not relevant) <input type="checkbox"/>		

Modelling details (if applicable)N/A **Location in text**

[Adapted from Philips 2006 and Vemer 2016 (AdViSHE) checklists]

(page/figure/table/other)

Model typeCohort-based decision tree (DT) Cohort-based State Transition model (MM) Individual patient-level DT Individual patient-level MM Discrete event simulation Agent-based model

System dynamics model

Other:

Rationale for model type:Yes

If Yes please specify:

No **Model structure** (*paste structure*):**Rationale for model structure:**Yes

If Yes please specify:

No **Structural assumptions, incl. cycle***length (describe):***Have experts been asked to judge the appropriateness of the model?**Yes

If Yes please specify:

No

1. Who:
2. Why they are experts:
3. Level of agreement:

Has the model been compared with other models found in the literature?Yes

If Yes please provide reference/citation:

No **Was patient heterogeneity modelled?**Yes

If Yes please specify:

No **Source of data for clinical effect sizes, adverse events & complications:**1 Meta-analysis of RCTs with direct comparison between comparator therapies, measuring final outcomes. 2 Single RCT with direct comparison between comparator therapies, measuring final outcomes 3 Meta-analysis of RCTs with direct comparison between comparator therapies, measuring surrogate outcomes Meta-analysis of placebo-controlled RCTs with similar trial populations, measuring final outcomes for each individual therapy

Modelling details (if applicable)N/A **Location in text**

[Adapted from Philips 2006 and Vemer 2016 (AdViSHE) checklists]

(page/figure/table/other)

	4 Single RCT with direct comparison between comparator therapies, measuring surrogate outcomes	<input type="checkbox"/>
	Single placebo-controlled RCTs with similar trial populations, measuring final outcomes for each individual therapy	<input type="checkbox"/>
	5 Meta-analysis of placebo-controlled RCTs with similar trial populations, measuring surrogate outcomes	<input type="checkbox"/>
	6 Single placebo-controlled RCTs with similar trial populations, measuring surrogate outcomes for each individual therapy	<input type="checkbox"/>
	7 Case-control or cohort studies	<input type="checkbox"/>
	8 Non-analytic studies, for example, case reports, case series	<input type="checkbox"/>
	9 Expert opinion	<input type="checkbox"/>
	0 Not stated	<input type="checkbox"/>
	Other:	<input type="checkbox"/>
	Specify relevant data sources:	
	More than 1 data source per parameter?	<input type="checkbox"/>
	Reasons for excluding data sources?	<input type="checkbox"/>
	Evidence synthesis performed?	<input type="checkbox"/>
	Calibration?	
Source of baseline clinical data:	1 Case series or analysis of reliable administrative databases specifically conducted for the study covering patients solely from the jurisdiction of interest.	<input type="checkbox"/>
	2 Recent case series or analysis of reliable administrative databases covering patients solely from the jurisdiction of interest.	<input type="checkbox"/>
	3 Recent case series or analysis of reliable administrative databases covering patients solely from another jurisdiction.	<input type="checkbox"/>
	4 Old case series or analysis of reliable administrative databases. Estimates from RCTs	<input type="checkbox"/>
	5 Estimates from previously published economic analyses: unsourced	<input type="checkbox"/>
	6 Expert opinion	<input type="checkbox"/>
	0 Not stated	<input type="checkbox"/>
	Other:	<input type="checkbox"/>

Modelling details (if applicable)N/A **Location in text**

[Adapted from Philips 2006 and Vemer 2016 (AdViSHE) checklists]

(page/figure/table/other)

	Specify relevant data sources: More than 1 data source per parameter? Reasons for excluding data sources? Evidence synthesis performed? Calibration?	<input type="checkbox"/>
Source of data for duration of primary effect (i.e. after end of follow-up of source of primary effect size)	1 Analysis of reliable administrative databases specifically conducted for the study covering patients solely from the jurisdiction of interest	<input type="checkbox"/>
	2 Recent analysis of reliable administrative databases covering patients solely from the jurisdiction of interest	<input type="checkbox"/>
	3 Recent analysis of reliable administrative databases covering patients solely from another jurisdiction	<input type="checkbox"/>
	4 Old analysis of reliable administrative databases.	<input type="checkbox"/>
	5 Estimates from previously published economic analyses: unsourced	<input type="checkbox"/>
	6 Expert opinion	<input type="checkbox"/>
	0 Not stated	<input type="checkbox"/>
	Other: Specify relevant data sources: More than 1 data source per parameter? Reasons for excluding data sources? Evidence synthesis performed? Calibration?	
Source of data for resource use:	1 Prospective data collection or analysis of reliable administrative data from same jurisdiction for specific study	<input type="checkbox"/>
	2 Recently published results of prospective data collection or recent analysis of reliable administrative data – same jurisdiction	<input type="checkbox"/>
	3 Unsourced data from previous economic evaluations – same jurisdiction	<input type="checkbox"/>
	4 Recently published results of prospective data collection or recent analysis of reliable administrative data – different jurisdiction	<input type="checkbox"/>
	5 Unsourced data from previous economic evaluation – different jurisdiction	<input type="checkbox"/>

Modelling details (if applicable)N/A **Location in text**

[Adapted from Philips 2006 and Vemer 2016 (AdViSHE) checklists]

(page/figure/table/other)

	6 Expert opinion <input type="checkbox"/> 0 Not stated <input type="checkbox"/> Other: Specify relevant data sources: <input type="checkbox"/> More than 1 data source per parameter? Reasons for excluding data sources? Evidence synthesis performed? Calibration?	
Are methods for identifying and synthesising input data reported?	Yes <input type="checkbox"/> No <input type="checkbox"/> If Yes please specify:	
Were all data sources described and reported?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Were mutually inconsistent data reported in the model?	Yes <input type="checkbox"/> If Yes were the choices No <input type="checkbox"/> justified?	
Model uncertainty	Methodological uncertainty <input type="checkbox"/> If yes, describe: Structural uncertainty <input type="checkbox"/> If yes, describe: Heterogeneity <input type="checkbox"/> If yes, list subgroups: Parameter uncertainty <input type="checkbox"/> If yes, list method:	
Have experts been asked to judge the appropriateness of the input data?	Yes <input type="checkbox"/> If Yes please specify: <input type="checkbox"/> No 1. Who: <input type="checkbox"/> 2. Why they are experts: 3. Level of agreement:	
When input parameters are based on regression models, have statistical tests been performed?	Yes <input type="checkbox"/> If Yes please specify tests: <input type="checkbox"/> No <input type="checkbox"/>	
Model internal validation (mathematical logic and accuracy of coding)	Computerised model examined by modelling experts <input type="checkbox"/> Model run for specific, extreme sets of parameter values to detect coding errors <input type="checkbox"/> Patients tracked through model to determine if its logic is correct <input type="checkbox"/> Tested individual sub-modules of the computerised model <input type="checkbox"/> Internal validation not reported:	
Model external validation	Model outcomes assessed by experts <input type="checkbox"/>	

Modelling details (if applicable)N/A **Location in text**

[Adapted from Philips 2006 and Vemer 2016 (AdViSHE) checklists]

(page/figure/table/other)

- Model outcomes compared with the outcomes of other models that address similar problems
- Model outcomes compared with the outcomes obtained when using alternative input data
- Model outcomes compared with empirical data
- Model calibrated against independent data with differences explained and justified
- Counterintuitive results from model explained and justified
- External validation not reported:

Other model validation (describe):**Data details (all analyses)**

[Adapted from Coyle & Lee 2002, and with additional items]

Location in text

(page/figure/table/other)

Costs included:

- | | | | | | |
|----------------------|--------------------------|-------------------------|--------------------------|-------------------------------|--------------------------|
| Direct medical | <input type="checkbox"/> | Direct non-medical | <input type="checkbox"/> | Productivity losses | <input type="checkbox"/> |
| Direct treatment | <input type="checkbox"/> | Social care | <input type="checkbox"/> | Income forgone due to illness | <input type="checkbox"/> |
| In-patient | <input type="checkbox"/> | Social benefits | <input type="checkbox"/> | Income forgone due to death | <input type="checkbox"/> |
| Out-patient | <input type="checkbox"/> | Travel costs | <input type="checkbox"/> | Income forgone due to death | <input type="checkbox"/> |
| Day care | <input type="checkbox"/> | Caregiver out-of-pocket | <input type="checkbox"/> | Income forgone due to death | <input type="checkbox"/> |
| Community healthcare | <input type="checkbox"/> | Criminal Justice | <input type="checkbox"/> | | |
| Medication | <input type="checkbox"/> | Training of staff | <input type="checkbox"/> | | |
| Side effect costs | <input type="checkbox"/> | | | | |
| or | | | | | |
| Staff | <input type="checkbox"/> | | | | |
| Medication | <input type="checkbox"/> | | | | |
| Labs/diagnostic | <input type="checkbox"/> | | | | |
| Overhead | <input type="checkbox"/> | | | | |
| Capital equipment | <input type="checkbox"/> | | | | |
| Real estate | <input type="checkbox"/> | | | | |

Other:

Source of data for costs:

- 1 Cost calculations based on reliable databases or data sources conducted for specific study – same jurisdiction
- 2 Recently published cost calculations based on reliable databases or data sources – same jurisdiction

	3 Unsourced data from previous economic evaluation – same jurisdiction	<input type="checkbox"/>
	4 Recently published cost calculations based on reliable databases or data sources – different jurisdiction	<input type="checkbox"/>
	5 Unsourced data from previous economic evaluation – different jurisdiction	<input type="checkbox"/>
	6 Expert opinion	<input type="checkbox"/>
	0 Not stated	<input type="checkbox"/>
	Other:	<input type="checkbox"/>
	Specify relevant data sources:	
	More than 1 data source per parameter?	<input type="checkbox"/>
	Reasons for excluding data sources?	
	Evidence synthesis performed?	
	Calibration?	
Source of data for utilities:	1 Direct utility assessment for the specific study from a sample either: (a) of the general population, or (b) with knowledge of the disease(s) of interest, or (c) of patients with the disease(s) of interest	<input type="checkbox"/>
	Indirect utility assessment for the specific study from patient sample with disease(s) of interest, using a tool validated for the patient population	<input type="checkbox"/>
	2 Direct utility assessment from a previous study from a sample either: (a) of the general population, or (b) with knowledge of the disease(s) of interest, or (c) of patients with the disease(s) of interest	<input type="checkbox"/>
	Indirect utility assessment from a previous study from patient sample with disease(s) of interest, using a tool validated for the patient population	<input type="checkbox"/>
	3 Indirect utility assessment from a patient sample with disease(s) of interest, using a tool not validated for the patient population	<input type="checkbox"/>
	Patient preference values obtained from a visual analogue scale	<input type="checkbox"/>
	4 Delphi panels, expert opinion	<input type="checkbox"/>
	0 Not clearly stated	<input type="checkbox"/>
	Other:	<input type="checkbox"/>
	Specify relevant data sources:	
	More than 1 data source per parameter?	<input type="checkbox"/>
	Reasons for excluding data sources?	
	Evidence synthesis performed?	

Calibration?	
Were QOL estimates derived:	Yes <input type="checkbox"/> No <input type="checkbox"/>
If validated tools were used, which instrument(s):	Rosser Index <input type="checkbox"/> Health Utilities Index (HUI) <input type="checkbox"/> EQ-5D <input type="checkbox"/> Quality of Well Being (QWB) <input type="checkbox"/> 15D <input type="checkbox"/> SF-36 <input type="checkbox"/> SF-12 <input type="checkbox"/> SF-6 <input type="checkbox"/>
Converted into utilities?	Yes <input type="checkbox"/> No <input type="checkbox"/> If Yes report value set:
If direct elicitation was used, which approach(s):	Standard Gamble <input type="checkbox"/> VAS/rating scale <input type="checkbox"/> Time trade-off <input type="checkbox"/> Person trade-off <input type="checkbox"/>
Utility values combined with survival to form QALYs?	Yes <input type="checkbox"/> No <input type="checkbox"/>

Study results	Location in text (page/figure/table/other)
Currency and cost year	
Cost-effectiveness results (e.g. ICER)	Point estimate: Probabilistic results (probability of being cost-effective):
Study conclusions	

Quality and risk of bias for economic evaluations (if applicable)	N/A <input type="checkbox"/>
Checklists completed:	CHEC (all EE) <input type="checkbox"/> ISPOR (models only) <input type="checkbox"/>
Risk of bias [CHEC, ISPOR]:	High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/> Unknown <input type="checkbox"/>
Comments on study quality and limitations:	