

Supplementary Material VI: Quality Assessment

Quality assessment of included effectiveness studies

Year	Questions about: First author (year)	Population			Method of selection					Outcomes					Analysis				Summary		Score
		1•1	1•2	1•3	2•1	2•2	2•3	2•4	2•5	3•1	3•2	3•3	3•4	3•5	4•1	4•2	4•3	4•4	5•1	5•2	
Studies identified for this review																					
2011	Duarte et al. ⁵	++	+	-	NA	+	++	-	++	+	+	-	+	++	NA	+	-	+	-	-	-
2012	Goetsch et al. ²⁰	++	+	-	NA	+	++	-	++	++	-	-	NA	NA	NR	++	-	-	-	-	-
2012	Ospina et al. ²¹	++	++	++	++	++	++	-	++	+	++	-	NA	NA	++	++	-	++	-	++	+
2015	Aldridge et al. ¹⁹	++	++	++	++	++	-	-	++	+	++	+	NA	NA	-	+	+	+	+	+	+
Studies identified for the NICE review¹²																					
2001	El-Hamad et al. ²⁴	++	+	++	NA	++	++	+	+	++	++	+	++	++	NR	++	+	++	+	+	+
2004	Deruaz & Zellweger ²⁸	++	+	+	-	+	-	-	+	-	++	++	++	++	NR	-	++	+	-	+	-
2008	Ricks ²³	++	+	++	++	++	++	++	+	+	++	++	++	+	NR	++	++	++	++	+	++

++	well designed study, minimal risk of bias
+	study may not have addressed all potential sources of bias
-	significant risk of bias
NA	not applicable
NR	not reported

Quality assessment questions for effectiveness studies:

- 1-1 Is the source population or source area well described?
- 1-2 Is the eligible population or area representative of the source population or area?
- 1-3 Do the selected participants or areas represent the eligible population or area?
- 2-1 Selection of exposure (and comparison) group. How was selection bias minimised?
- 2-2 Was the selection of explanatory variables based on a sound theoretical basis?
- 2-3 Was the contamination acceptably low?
- 2-4 How well were likely confounding factors identified and controlled?
- 2-5 Is the setting applicable to Europe?
- 3-1 Were the outcome measures and procedures reliable?
- 3-2 Were the outcome measurements complete?
- 3-3 Were all the important outcomes assessed?
- 3-4 Was there a similar follow-up time in exposure and comparison groups?
- 3-5 Was follow-up time meaningful?
- 4-1 Was the study sufficiently powered to detect an intervention effect (if one exists)?
- 4-2 Were multiple explanatory variables considered in the analyses?
- 4-3 Were the analytical methods appropriate?
- 4-4 Was the precision of association given or calculable? Is association meaningful?
- 5-1 Are the study results internally valid (i.e. unbiased)?
- 5-2 Are the findings generalisable to the source population (i.e. externally valid)?

Quality assessment of included cost-effectiveness studies

Questions about:		Applicability								Study limitations											Overall
Year	First author	1•1	1•2	1•3	1•4	1•5	1•6	1•7	1•8	2•1	2•2	2•3	2•4	2•5	2•6	2•7	2•8	2•9	2•10	2•11	
Studies identified for this review																					
2011	Jit et al. ²¹	Y	Y	Y	Y	N	N	Y	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	N	Potential serious limitations [+]
Studies identified for the NICE review¹²																					
2002	Bothamley et al. ²⁵	PA	Y	Y	N	PA	N	N	PA	PA	U/C	PA	N	N	Y	N	N	Y	PA	N	Very serious limitations [-]
2006	Miller et al. ²⁶	Y	Y	PA	N	PA	N	N	PA	PA	PA	PA	PA	PA	PA	PA	PA	Y	Y	N	Potential serious limitations [+]
2008	Mor et al. ²⁷	PA	Y	PA	N	PA	N	N	PA	PA	PA	PA	N	PA	PA	U/C	U/C	Y	N	N	Very serious limitations [-]

Y	Yes to question
N	No to question
PA	Partially applicable
NA	Not Applicable
U/C	Unclear

Quality assessment questions for cost-effectiveness studies:

- 1·1 Is the study population appropriate for the topic being evaluated?
- 1·2 Are the interventions appropriate for the topic being evaluated?
- 1·3 Is the system in which the study was conducted sufficiently similar to the current European context?
- 1·4 Was/were the perspective(s) clearly stated and what were they?
- 1·5 Are all direct health effects on individuals included, and are all other effects included where they are material?
- 1·6 Are all future costs and outcomes discounted appropriately?
- 1·7 Is the value of health effects expressed in terms of quality-adjusted life years (QALYs)?
- 1·8 Are costs and outcomes from other sectors fully and appropriately measured and valued?
- 2·1 Does the model structure adequately reflect the nature of the topic under evaluation?
- 2·2 Is the time horizon sufficiently long to reflect all important differences in costs and outcomes?
- 2·3 Are all important and relevant outcomes included?
- 2·4 Are the estimates of baseline outcomes from the best available source?
- 2·5 Are the estimates of relative 'treatment' effects from the best available source?
- 2·6 Are all important and relevant costs included?
- 2·7 Are the estimates of resource use from the best available source?
- 2·8 Are the unit costs of resources from the best available source?
- 2·9 Is an appropriate incremental analysis presented or can it be calculated from the data?
- 2·10 Are all important parameters whose values are uncertain subjected to appropriate sensitivity analysis?
- 2·11 Is there any potential conflict of interest?