Supplementary Table 1. Number of Participants. Number of People, HTA Units and Countries Participating

in the 2 Projects that Piloted the HTA Core Model

Participants	Pilot Core HTAs	
	Drug Eluting Stents (DES)	Multislice Computed Tomography (MSCT)
Investigators	39	51
– HTA units	16	15
– Countries	11	10
Reviewers	21	28
– HTA units	11	17
– Countries	10	12

Supplementary Table 2. Topic Selection. Motivations for the Selection of DES and MSCT as the Topics that Pilot the HTA Core Model.

Drug Eluting Stents (DES)	Multislice Computed Tomography (MSCT) in Coronary Angiography
– DES has proven effectiveness in specific patient populations (e.g., diabetics). – There is an increasing pressure to expand indications for the use of DES. – Drug eluting stents are very expensive compared to bare metal stents. – Expansion of indications may raise questions about how DES should be reimbursed.	– MSCT has the potential to reduce the number of invasive coronary angiographies. – As MSCT is a noninvasive technology, there is a risk that it will be inappropriately used. – Information on the cost effectiveness of MSCT compared to other noninvasive procedures, e.g., MRI would be useful. – There are several safety and patient issues of relevance, e.g., radiation, contrast agents, and beta-blockade.

Supplementary Table 3. Validation Feedback: Challenges. Suggested Improvements from the Validation Feedback of the Pilot Core HTAs on Drug Eluting Stents (DES) and Multislice Computed Tomography (MSCT) in Coronary Angiography.

	DES	MSCT
Structure of the pilot Core HTA:	– Introduction: poor definition of DES, names of products would be informative, does not specify the need /motivation, not focused to DES, too short, summary of results – Overlapping identified, repetition in text.	– Introduction: comparison of MSCT remains unclear. – Feasible but not useful – The appendices should be collected in the end. – Accuracy and effectiveness could be combined – The structure makes it hard to provide state-of art reporting of economic evaluation. – Some answers too lengthy: 20 pages concluding that there are no problems. – Overlapping – The order of presentation should follow the logic of decision maker: first description of technology, then legal aspects, then accuracy, then safety.
Adequate research questions:	– Many questions are not relevant, at least in the view of the narrow PICO (BMS vs DES). – Safety issues were combined with effectiveness. – Was it worth the effort? No	– Suggestion to move budget impact in Costs domain. – Too many unanswered issues. – Harmonization needed across domains: e.g., in Safety domain number of alternative technologies (such as MPS; MRI, EBCT) are discussed, but

	- relevant question, no new knowledge for decision making. - New issues needed in current use: "does the use of this technology lead to increased/decreased use of additional/further treatments/examinations?" - Psychological and other patient related issues and time of hospitalization should be included, - Some issues are very detailed, some very broad and generic	- corresponding information is not provided in the Effectiveness and Costs domains. For balanced decision making all information would have been needed. - There was no issue called "substitute of obsolete technology".
Adequate quality of data:	- Justification missing why certain methods were used. - Quality of research missing. - Search strategy missing or defective. - Evidence tables missing - More detail needed on meta-analysis methods. - Better referencing needed.	- Methods are not always reported. One respondent suggested combining all methods to one appendix. - Criticism toward study selection in Costs domain: patient in acute care settings. - In ethics domain several issues have no evident connection to an ethical analysis.
Usefulness in local decision making:	- Varying opinions. - Answers are too general. - A summary is needed. - The question relevant to decision makers should be made in front and the rest, e.g.,	- Too stiff and complex for many readers, too extensive for decision makers. - A summary is needed for the whole report (13 of 16 responses). Summary should be placed first. - Summary needed for each domain too.

	in appendix.	– Better layout needed. – Tool is needed for creating conclusions /recommendation (GRADE).

Supplementary Table 4. Domain specific Validation Results. The number of respondents who agreed with the statement divided by the number of all respondents, in the validation of the pilot Core HTAs on drug eluting stents (DES) and multi-slice computed tomography (MSCT) coronary angiography. Poor agreement (<50%) is highlighted.

	Introduction section is adequate	Methodology section is adequate	Answers are produced through research of adequate quality.	Answers are useful as such in local decision making
Current use				
DES	4/6 (67%)	4/5 (80%)	5/5 (100%)	3/5 (60%)
MSCT	4/7 (57%)	5/7 (61%)	2/7 (29%)	5/7 (71%)
Description				
DES	6/8 (75%)	5/8 (62%)	5/8 (62%)	5/8 (62%)
MSCT	5/7 (71%)	7/7 (100%)	4/7 (57%)	4/7 (57%)
Safety				
DES	–	–	–	–
MSCT	5/8 (62%)	5/8 (62%)	7/8 (87%)	5/7 (71%)
Effectiveness				
DES	5/6 (83%)	5/6 (83%)	6/6 (100%)	5/6 (83%)
MSCT	6/7 (86%)	6/7 (86%)	5/7 (71%)	6/7 (86%)
Accuracy				
MSCT	4/5 (80%)	6/6 (100%)	5/6 (83%)	5/6 (83%)
Costs				
DES	6/8 (75%)	5/8 (62%)	6/8 (75%)	3/8 (37%)
MSCT	3/5 (60%)	4/5 (80%)	3/5 (60%)	0/5 (00%)
Ethical				

DES	5/7 (71%)	7/7 (100%)	6/7 (86%)	4/7 (57%)
MSCT	5/8 (62%)	6/8 (75%)	4/8 (50%)	7/8 (87%)
Organizational				
DES	8/8 (100%)	8/8 (100%)	5/8 (62%)	5/8 (62%)
MSCT	5/6 (83%)	4/6 (67%)	6/6 (100%)	4/6 (67%)
Social				
DES	4/7 (57%)	6/6 (100%)	3/6 (100%)	4/5 (80%)
MSCT	3/8 (37%)	8/8 (100%)	5/8 (62%)	6/8 (75%)
Legal				
DES	5/6 (83%)	2/6 (33%)	2/5 (40%)	2/5 (40%)
MSCT	7/7 (100%)	7/7 (100%)	5/7 (71%)	1/6 (17%)