Delphi study

Development of a European guideline for the valuation of care services and lost productivity from a societal perspective

Feedback report Delphi ROUND 2 , February 2015

Consensus was considered to be reached when at least 67% of the panel agreed.

Question	Description	Panel		
	Part I - In Delphi round 1, the panel members were asked to indicate which cost categories should be included in a European economic evaluation. In the following questions, we will address the resource use categories for which no consensus was reached in the previous Delphi round.			
	Identification of resource use - Complementary therapists	**% Yes**	**% No**	**No expertise (n)**
	Should this resource use category be included in a European economic evaluation conducted from a societal perspective?			
1	**Complementary therapists**	63%	38%	0
2	***Please motivate your answer.***			
	"No clinical evidence available, not evidence based. Not included in national guidelines."			
	"It depends on the perspective of the analysis. I am not sure what is meant by complementary therapists but I believe these resources should be treated as other resurces and be included if there is a difference between the alternatives being compared."			
	"This category should be included on a case by case basis. I am aware of some guidelines that include certain forms of complementary therapists, but not one size fits all approach. It's also wrong to assume that complementary may work in cases that western medicines fails."			
	"Only if we expect differences between the studied groups in our economic evaluation. So, most of the time, complementary therapists will not be included."			
	"I believe there shoud be any clear rules on what is the healtcare service and what is not. The non-drug therapy may be taken into consideration provided it is in the range of guaranted benefits in specific healthcare system. However I have to admit that I would include OTC drugs ..."			
	"Since homeopath is wide spread, in my opinion it should be included; the rest - not necessarily"			
	"it is not considered as basic right and official medicine."			

"Maybe, we should extending the issue to all "no drug alternatives". That point could be related with the "best supportive care" which is often not defined and detailed in the clinical studies and economical studies. Too often, we don't know what cares are really proposed. It as some implications in termes of transposability of clinical or economical results in the real life. I aggree totally with the first example about "evaluation is too often drugs oriented". If recommandations don't encourage the production of data, we will continue not to include "no drugs alternatives" in the economical evaluations due to missing data ! It is not a scientific argument."
"Complementary therapies are not officially considered as health care interventions"
"Complementary therapy is not healthcare covered by health insurance funds."
"Healthcare is supposed to be a holistic matter (not only drugs and surgery), therefore complementary therapy should be included, especially in a societal perspective."
"Not all complementary approaches but e.g. Acupuncture may be also reimbursed by the healthcare systems"
"Although I do not consider complentary therapists as evidence based medicine. People make use of these theraptists and are sometimes reimbursed the costs by their health insurance or the system. Therefore it are costs that are made by society and should be included in the analysis."
"A societal perspective should include all resource use related to the medical condition. Lack of evidence should not preclude an item of resource use to be included."
"Irrespective of the evidence basis, if there are complementary tgherapists interventions, their cost should be taken into account. From a societal perspective health care costs have to be considered wherever and whenever they occur."

	Identification of resource use - Absenteeism from unpaid labor	% Yes	% No	No expertise (n)
	Should this resource use category be included in a European economic evaluation conducted from a societal perspective?			
3	**Absenteeism from unpaid labor such as household activities, education, voluntary work**	27%	73%	1
4	***Please motivate your answer.***			
	"It is only possible to include that aspect if data are available. In this field very rare data are published."			
	"If the interventions that are being evaluated are believed to have an effect on unpaid labor, these costs should be inclueded. The difficulty of measuring it is a later issue. These costs may be very important when assessing interventions directed to patient groups with ages over the retirement age. Why would it be double counting for unpaid labor and not for paid labor?"			
	"Difficult to estimate. If appropriate methods will be developed, this might become possible."			
	"Economic evaluation from a societal perspective raise concerns on cheeting with overestimated costs - let's keep it within reasonable boundaries."			
	"Hard to evaluate."			
	"no reason to include that as it has no foundation to be estimated."			
	"It could be proposed as a complementary data, not in the reference case. Too much uncertainty on the valuation method. I don't think a standard method exist."			
	"Difficult to obtain credible estimations"			

	"Only the values that can be credibly estimated should be included." "Household activities and etc. indicate person's seocietal activity and abilities/capabilities in general, therefore it is important to include it into the societal perspective." "As the first cons motivation." "It does affects people and can come with costs. However these costs may be compensated by other people doing more. The problem is how to determine the value of absenteeism from unpaid labor" "A societal perspective should include all resource use. Unpaid labour or informal care is an important item of resource use, particularly in the care of the frail elderly and people with disabilities. Not including unpaid labour risks shifting the costs of care to families." "very difficult to capture, only a nice ad-on."			
	Identification of resource use - Future health care costs incurred for diseases or conditions unrelated to the intervention	**% Yes**	**% No**	**No expertise (n)**
	Should this resource use category be included in a European economic evaluation conducted from a societal perspective?			
5	**Future health care costs incurred for diseases or conditions unrelated to the intervention**	50%	50%	0
6	***Please motivate your answer.*** "Health economic evaluation should include future costs with the aim to highlight costs avoided due to a treatment." "Theoretically, these costs should all be included in the analysis when an intervention prolongs life but it is very important to clarify how the unrelated health care costs influence the ICER since decisions based on this information may raise some important ethical issues. Including these costs have different consequences in interventions directed to different patient groups (those that can and cannot work), especially if unpaid labor is not taken into account." "Difficult to measure." "In my opinion if we decide to include these costs, they may be differently estimated by different authors for the same healthcare system and it may be specifically hard to get the unified estimations. So they should not be included unless there exists detailed epidemiology-based methodology, preferable on national level." "no as these costs do not relate to the intervention. We are estimating cost effectivenes of the interventio. If we decide yes here also the costs for food or clothes could be included" "How to do that ? If health care costs are included, we should include the desutility associated with the disease too. So we should make some strong hypothesis on the diseases which will occur. I wish I had a crystal ball to forecast what diseases would occur, but I'm just an economist. Please, try first to do correctly what we know to do !" "To describe all consequences." "Health care costs for diseases or conditions related to the intervention should be taken into account, only." "I would say yes but with warnings - reliable data eg risks to develop unrelated events - identifiable in the methodology" "Theoretically it should be included in the analyses. Problem remains how to determine which disease or condition a person may incur in the future and the costs related to that. The calculations are related to a lot of assumptions."			

	"Future health care costs unrelated to the intervention should not be included because they have no relation to the intervention under evaluation. Otherwise, there is the risk of overestimating the costs in patient groups more susceptible to future disease (e.g. elderly)." "Depending on the time horizon within a sensitivity analysis. Ethical constraints have to be respected adequatly"			
	Identification of resource use - Future non-health care expenditures	**% Yes**	**% No**	**No expertise (n)**
	Should this resource use category be included in a European economic evaluation conducted from a societal perspective?			
7	**Future non-health care expenditures (for example food, clothes, and housing)**	19%	81%	0
8	***Please motivate your answer.*** "On the one hand direct non-medical costs should principally be included in the evaluation. On the other hand data are only available in very few cases. Due to that fact the inclusion of these costs is the first best solution. It should not be recommended for all evaluations. Uncertainty is too high." "These costs should be included in the analysis when an intervention prolongs life but it is very important to clarify how the future non-health care expenditures influence the ICER since decisions based on this information may raise some important ethical issues. Including these costs have different consequences in interventions directed to different patient groups (those that can and cannot work), especially if unpaid labor is not taken into account." "They are the same for healthy and ill population, and as a result do not anything of value to the evaluation." "Only if related to the intervention or disease, so only: future non-health care incorred for diseases or condition related to the intervention" "Non-health expenditure are non-differential for healthy and ill population" "no. these costs are totally unrelated ti the intervention. They would occur even of individual had no disease." "Idem as above" "Difficult to clarify" "It is not healthcare covered by health insurance funds." "As the first cons" "Not relavent as there are no differences between populations" "Future non-healthcare costs unrelated to the intervention should not be included because the intervention will have no impact on them." "This is not a topic of care services and lost productivity from a societal perspective."			
	Identification of resource use - Intervention costs - Development	**% Yes**	**% No**	**No expertise (n)**
	Should this resource use category be included in a European economic evaluation conducted from a societal perspective?			
9	**Intervention costs - Development**	40%	60%	1
10	***Please motivate your answer.*** "In case that development costs are a kind of R&D and production cost, costs are expressed in the price of the health care good or service. Therefore should not part of an evaluation."			

	"For interventions developed within the private sector, this is usually covered by the price of the intervention." "Development costs embed innovation costs related to development of an new product and as such they should be incorporated. If they are not included, this could be a signal to the industry to foster low cost and low risk pathways. This would end to marginal innovation." "For the comparison of different treatments, a 'steady state' should be assumed, in which development, implementation and initial training should not be taken into account." "The cost of development of the new technology is the one of manufacturer and is included in the price." "yes. but only in technologies where ot makes sense eg. implantable devices." "All production costs should be included. It can be treated as a specific case, when development is important." "It represents a cost which should be already included in the cost of the intervention." "Included in the intervention cost" "At least not in base-case analyes. Costs are often very unclear especially with pharmaceuticals and devices and can have a large impact on the analyses." "Development costs should be included if, rather then the market cost of the intervention, the intervention is being micro-costed." "Depending on the research question, i.e. the intervention itself. In some cases definitely yes..."			
	Identification of resource use - Intervention costs - Training costs	**% Yes**	**% No**	**No expertise (n)**
	Should this resource use category be included in a European economic evaluation conducted from a societal perspective?			
11	**Intervention costs - Training costs**			
12	***Please motivate your answer.***	60%	40%	1
	"Training time is a part of staff costs." "For interventions developed within the private sector, this is usually covered by the price of the intervention." "If a new technology incurs significant costs at the beginning, as in the case of robotic surgery, then these costs should be definitely taken into consideration. This is prominent in case that training is integral part of the use of the technology." "For the comparison of different treatments, a 'steady state' should be assumed, in which development, implementation and initial training should not be taken into account." "Not separately, training costs are the part of the implementation costs." "yes if applicable. this is not everywhere." "I think that if you estimate a training cost, you should consider the learning curve too (efficacy side)." "Same as the previous." "They can be considered as sunk costs and are therefore not always relevant. You would like to analyse the steady state and may want to include the whole learning process in a different scenario." "Training costs should be included if training is required to implement the intervention." "Obviously yes, as the are part of the intervention costs"			

	Identification of resource use - Intervention costs - Costs of donated items	% Yes	% No	No expertise (n)
	Should this resource use category be included in a European economic evaluation conducted from a societal perspective?			
13	**Intervention costs - Costs of donated items (Donated items: items that are sponsored during the study period)**	71%	29%	2
14	***Please motivate your answer.***			
	"If a price or a tariff exists, this should be used for donated items as a "shadow price"."			
	"After the study, it is not sure that these costs will be donated."			
	"The economic evaluation should give a representative view of costs and effects occuring in practice in a steady state. As items will not be donated after the study period, their costs should be included."			
	"At the same basis as non-paid work time - these costs are unmeasurable (or at least not a subject to verification)."			
	"yes. they should be included. it is clear that donated items will not be donayed all the time and even if yes, they will not be donated in equal quantities. the costs will be there and are real."			
	"Sponsored or not is not the question. If the cost will occur in the real life, it must be estimated (no matter who pays). If the costs are just related to the study, they are not included."			
	"After the study period these items need to be paid for"			
	"Not clear what is meant by this"			
	"Costs of donated items should be included if, in clinical practice, those items will be purchased."			
	"See pros statement"			

	'Valuation of costs - Value added taxes (VAT)	% Yes	% No	No expertise (n)
	Should VAT be included in a European economic evaluation conducted from a societal perspective?			
15	**Valuation of costs - Value added taxes (VAT)**	79%	21%	2
16	***Please motivate your answer.***			
	"Should be included. In the EU the health care sector is under tax low. VAT is part of the consumption as mentioned above."			
	"From a societal perspective, VAT is a transfer of money and not a cost in itself. It depends on the perspective of the analysis."			
	"Since payer incurs full cost, including VAT, then there is no reason why it should not be included"			
	"It is a cost of end-payer"			
	"yes, but only in the countries where vat is paid. if medical goods are exempted from vat, of course vat will not be included."			
	"VAT exists due to the consumption of cares. It is a cost !"			
	"It is the value from which has to be covered."			
	"VAT affects significantly out of pocket payments along with public expenditure and differs greatly across countries."			
	"As VAT rates differ between countries I would say do not include VAT in the base case analyses."			
	"VAT is a transfer from the individual to the government. Hence it is a cost to the individual and a benefit for the government. Consequently, it should not be included."			

	"It is part of the real health care costs, even as a tax (redistribution). In statutory health insurance for instance you redistribute also contributions."		
	Part II and III - In Delphi round 1, the panel members were asked to indicate methods that are appropriate for measuring and valuing resource use and lost productivity in a European economic evaluation from societal perspective. In the following questions we included methods from Delphi round 1 for which consensus was reached (these methods are marked with a "*") and methods for which no consensus was reached.		
	Measuring resource use	**Ranking Panel**	**No expertise (n)**
17	***Please rank the following methods to collect information on resource use in order of relevance (1 = most relevant to 8 = least relevant)***		
	*Patient level data: Patient based reports (resource use questionnaires and interviews, self-reported activity logs, cost diaries	1	0
	*Secondary level data: National insurance fund utilization databases	2	0
	*Patient level data: Observer/care provider based reports (medical records, time and motion records, etc.)	3	0
	*Secondary level data: National registers	4	0
	*Secondary level data: Hospital information system	5	0
	*Secondary level data: Local registers	6	0
	*Estimates based on clinical practice guidelines	7	0
	*Expert opinion	8	0
18	***Please motivate your answer.***		
	"To be credible the analysis should be based on measurable data, transparent and comparable. Patient level data are more variable and the methods of gathering them may not be transparent. Pharmacoeconomic analysis with societal perspective should be as transparent as possible, and the transparency of costs estimates is crutial even if underestimates/omit some of them"		
	"It's difficult to rank. The method I would rank first is to cross over different sources."		
	"At least in the Netherlands are the claim databases in hospitals and by insurers not always up to date which could make them unreliable. Clinical practice guidelines are not always followed. Literature state that expert opinion is not very reliable either and should only be used as last resort"		
	"The objective is to obtain accurate information on resource use. In principle, the most accurate records are those made concurrently with the resource use in order to ensure payment, that is hospital information systems and national insurance fund utilisation databases. Registries should also have accurate information, but since it is not used for payment, it may not be as accurate. Patient based reports are subject to recall and social desirability bias. Observer/care provider based records may be subject to hawthorn effect. Estimates based on clinical practice guidelines are based on what should occur rather on what does occur. Expert opinion is, by definition, an opinion only and not fact."		

	Measuring care-related travel distances	Ranking Panel	No expertise (n)
	Please rank the following methods for measuring care-related travel distances in order of relevance according to your opinion (1 = most relevant to 2 = least relevant).		
19	***Methods for which consensus was reached in Delphi round 1 are marked with a "*"***		
	*Standard distances	1	0
	Patient-reported distances	2	0
20	***Please motivate your answer.***		
	"Distance is a objective issue which cannot be manipulted"		
	"The standardisation is a good way to include some costs while minimising the consequence of uncertainty."		
	"standard distances makes it easier to compare between patients. Patients may choose to go to a different health professional than the one that is closest by"		
	"See answer 18."		

	Measuring absenteeism from paid labor	Ranking Panel	No expertise (n)
	Please rank the following methods to collect information on absenteeism from paid labor in order of relevance according to your opinion (1 = most relevant to 3 = least relevant)		
21			
	*Company registered data for sick leave	1	3
	*Self-reported sick leave due to the disease under study	2	3
	Self-reported sick leave due to general health	4	3
	*Using published estimates of previous studies	3	3
22	***Please motivate your answer.***		
	"If previous studies have done this in a adequate way."		
	"General health should be further clarified whether it's relevant to side-effects of the treatment under assesment"		
	"registered data are the "hard" one, comparable between sources; self-reported data are more personal-dependent, however not to be neglected. Estimates form previous studies may be hardly relevant to specific situation so they are the last choice (if the only one)."		
	"Company data are often not complete. Data in published articles could be out of date"		
	"See answer 18."		

	Measuring reduced productivity while at work (presenteeism)	Ranking Panel	No expertise (n)
	Please rank the following methods to collect information on reduced productivity while at work (presenteeism) in order of relevance according to your opinion (1 = most relevant to 3 = least relevant)		
23			
	*Quantity and Quality (QQ) method. Individual ratings of both the quantity and the quality of work	1	5
	*Self-reported perceived performance during working hours due to the disease under study	2	5
	Self-reported perceived performance during working hours due to general health	4	5

	Self-reported comparative perfomance (how an employee's performance differs from that of others or from his/her usual performance)	3	5
	Self-reported unproductive time while at work	5	5
24	***Please motivate your answer.***		
	"I do not rank as I voted againt including presenteism into analysis"		
	"I don't think it should be included in the reference case. Too much uncertainty and a very strong impact on ICER."		
	"Preference for standardised method like QQ to increase comparability"		

	Methods to collect information on unpaid labor	**Ranking Panel**	**No expertise (n)**
	Please rank the following methods to collect information on unpaid labor in order of relevance according to your opinion (1 = most relevant to 2 = least relevant).		
25	Self-reported changes in time spent on unpaid labor due to the disease under study	1	3
	Self-reported additional time others (would have to) spend on unpaid labor tasks not performed by the patient due to illness	2	3
26	***Please motivate your answer.***		
	"I am not quite convinced how unpaid labor (such as leisure or home activities) can be precisely tagged with a price cost"		
	"Both should be measured."		
	"I do not rank as I voted againt including unpaid labor into analysis"		
	"I don't think it should be included in the reference case. Too much uncertainty and a very strong impact on ICER."		
	"The same as previous answer"		
	"There are other methods in addition to self report."		
	"Second alternative rather difficult to capture"		

	Prices to value health care utilization use in a European economic evaluation	**Ranking Panel**	**No expertise (n)**
	Please rank the following prices that can be used to value health care utilization use in a European economic evaluation in order of relevance according to your opinion (1 = most relevant to 2 = least relevant)		
27	*Country specific price	1	0
	Using prices from one or more other countries and convert them using power purchasing parities	2	0
28	***Please motivate your answer.***		
	"A single price does not represent the EU. Prices are very different in the EU."		
	"It depends on the purpose of the analysis. If it aims to inform one specific country, then country-specific prices would be preferred. It is more difficult with evaluations conducted with the purpose to inform decision makers in several countries. Sensitivity analysis would be important in this cases."		
	"Conversion of prices through PPP is based on Ramsey theory and it's generally accepted in the field of pharmaceuticals. Therefore, it makes sense to adjust prices using PPP."		

	"In the pharmacoeconomic analysis is done to ease decision-making on reimbursement it should be country-specific" "Prices can be very country specific also because of the large differences in financing and organisation. PPP should only be used if no other options are available" "National price structure more reliable"		
	Proxy measures for the opportunity costs of health care services	**Ranking Panel**	**No expertise (n)**
	Please rank the following proxy measures for the opportunity costs of health care services in order of relevance		
29	***according to your opinion (1 = most relevant to 7 = least relevant).***		
	*Standard/units costs	1	1
	Country-specific standardized costs	2	0
	Market prices	4	1
	Tariffs	6	1
	*Bottom-up/micro cost price calculation	3	1
	Top-down/macro cost price calculation	7	1
	*Diagnosis Related Groups (DRG)	5	1
30	***Please motivate your answer.***		
	"Price and tariffs and DRGs represent cost for different goods and services. Not really possible to rank"		
	"It depends a lot on what is available. Market prices would be preferred but are seldom available. A well-conducted bottom-up calculation would be good but if of low quality, standardized costs would be better. To save time and gain consistency, stantardized costs would be preferred but not the best measure of opportunity cost. It also depends on the purpose of the analysis. If it aims to inform one specific country, then country-specific prices would be preferred. It is more difficult with evaluations conducted with the purpose to inform decision makers in several countries. Sensitivity analysis would be important in this cases."		
	"I would say that market prices are not usually the reimbursed prices, since they are subject to confidential agreements such as rebates, clawbacks and discounts."		
	"It's impossible to rank for FRANCE, because it dépends on the field (drugs, device, hospital, etc.)."		
	"It is known that DRG is based on averages so not always useful. Tariffs do not reflect the real prices."		
	"The ranking is completely depending on the research question. So there is no clear rule... The easiest way wouls be to use market prices... but these aren't set free in health care"		
	Proxy measures for the opportunity costs of supportive care/social care services	**Ranking Panel**	**No expertise (n)**
	Please rank the following proxy measures for the opportunity costs of supportive care/social care services in order of		
	relevance according to your opinion (1 = most relevant to 5 = least relevant).		
31	*Standard/unit costs	1	2
	Country-specific standardized values	2	1
	*Market prices	4	1

	Tariffs	5	2
	*Bottom-up/micro cost price calculation	3	2
	Top-down/macro cost price calculation	6	2
32	***Please motivate your answer.***		
	"It depends a lot on what is available. Market prices would be preferred but are seldom available. A well-conducted bottom-up calculation would be good but if of low quality, standardized costs would be better. To save time and gain consistency, stantardized costs would be preferred but not the best measure of opportunity cost. It also depends on the purpose of the analysis. If it aims to inform one specific country, then country-specific prices would be preferred. It is more difficult with evaluations conducted with the purpose to inform decision makers in several countries. Sensitivity analysis would be important in this cases."		
	"See previous answer"		
	"see 30."		

	Proxy measures for the opportunity costs of patient-out-of-pocket expenses	**Ranking Panel**	**No expertise (n)**
33	***Please rank the following proxy measures for the opportunity costs of patient-out-of-pocket expenses in order of relevance according to your opinion (1 = most relevant to 5 = least relevant).***		
	*Patient-reported costs	1	1
	*Standard/unit costs	2	1
	*Market prices	3	1
	Tariffs	5	1
	*Bottom-up/micro cost price calculation	4	2
	Top-down/macro cost price calculation	6	2
34	***Please motivate your answer.***		
	"Tariffs and calculations don't play a role in assessing patients OOPs"		
	"Tariffs are the least reliable. Patient out-of-pocket expenses are very disease and country specific so the patient is probably the most reliable source"		

	Proxy measures for the opportunity costs of patient time costs/informal care	**Ranking Panel**	**No expertise (n)**
35	***Please rank the following proxy measures for the opportunity costs of patient time costs/informal care in order of relevance according to your opinion (1 = most relevant to 5 = least relevant).***		
	*Shadow prices (opportunity costs when the actual price is not known or difficult to calculate)	1	3
	National average wages of unskilled labor	3	3
	National average wages of unskilled labor sex/age-specific	2	3
	Specific (self-reported) wages	4	1
	National average wages to reflect the value of leisure time	5	3
36	***Please motivate your answer.***		
	"What does Specific (self-reported) wages mean?"		

	"as said previously I would not use another valuations not to introduce more uncertainty"		
	"National avarage wage will probably result in an overestimation"		
	Proxy measures for the opportunity costs of travel costs in order of relevance	**Ranking Panel**	**No expertise (n)**
37	***Please rank the following proxy measures for the opportunity costs of travel costs in order of relevance according to your opinion (1 = most relevant to 3 = least relevant).***		
	*Standard/unit costs	1	1
	*Market prices	3	1
	Patient-reported costs	2	1
38	***Please motivate your answer.***		
	"Travel costs is sometimes hard to estimate by the patient therefore standard prices"		
	Approaches for the valuation of absenteeism	**Ranking Panel**	**No expertise (n)**
39	***Please rank the following approaches for the valuation of absenteeism (1 = most relevant to 2 = least relevant).***		
	*Friction Cost Approach	1	5
	Human Capital Approach	2	5
40	***Please motivate your answer.***		
	"In Sweden, the human capital approach is recommended. Personally, I think it overestimates the value a lot. The "true" value is probably somewhere in betweeen."		
	"Both methods"		
	"From the point of view of public evaluator/decision maker there is a huge concern on overestimation of costs and using societal perspective in the analysis to over-valuating the benefits of medical technology. Friction cost approach gives more control over these practice."		
	"I don't think it should be included in the reference case. Too much uncertainty and a very strong impact on ICER."		
	"Human capital approach will result in overestimation. Country-specific estimation of the friction period may be needed"		
	"The fricition cost approach is more elaborated, but the friction periods are oftentime unkown... So for the base case scenario I would prefer the HCA"		
	Proxy measures for the opportunity costs of absenteeism	**Ranking Panel**	**No expertise (n)**
41	***Please rank the following proxy measures for the opportunity costs of absenteeism in order of relevance according to your opinion (1 = most relevant to 4 = least relevant).***		
	*National average wages of the population as a whole sex/age-specific	1	1
	National average wages of the population as a whole	2	1
	Specific (self-reported) wages	3	1
42	***Please motivate your answer.***		

	"The use of sex- and age specific wages raises some important ethical issues. Are the differences in wages between women and men a reflection of differences in production or rather due to discrimination on the labor market?" "Sex/age adjusted wages imply that a more detailed assesment will take place" "I don't think it should be included in the reference case. Too much uncertainty and a very strong impact on ICER." "People not always want to report their wage and you do not want to make a difference between diseases that mostly affect highly educated people and diseases that mostly affect lower educated people"		
	Proxy measures for the opportunity costs of presenteeism	**Ranking Panel**	**No expertise (n)**
43	***Please rank the following proxy measures for the opportunity costs of presenteeism in order of relevance according to your opinion (1 = most relevant to 3 = least relevant).***		
	National average wages of the population as a whole	2	1
	National average wages of the population as a whole sex/age-specific	1	1
	Specific (self-reported) wages	3	1
44	***Please motivate your answer.***		
	"The use of sex- and age specific wages raises some important ethical issues. Are the differences in wages between women and men a reflection of differences in production or rather due to discrimination on the labor market?" "Sex/age adjusted wages imply that a more detailed assesment will take place." "no presenteism in analysis" "I don't think it should be included in the reference case. Too much uncertainty and a very strong impact on ICER." "I believe that sex/age-specific data are the best estimates"		
	Proxy measures for the opportunity costs of unpaid labor	**Ranking Panel**	**No expertise (n)**
45	***Please rank the following proxy measures for the opportunity costs of unpaid labor in order of relevance according to your opinion (1 = most relevant to 5 = least relevant).***		
	*Shadow prices (opportunity costs when the actual price is not known or difficult to calculate)	1	3
	National average wages of unskilled labor	3	4
	National average wages of unskilled labor sex/age-specific	2	3
	National average wages of the population as a whole sex/age-specific	5	4
	Specific (self-reported) wages	4	3
46	***Please motivate your answer.***		
	"The use of sex- and age specific wages raises some important ethical issues. Are the differences in wages between women and men a reflection of differences in production or rather due to discrimination on the labor market?" "no unpaid labour in analysis" "'I don't think it should be included in the reference case. Too much uncertainty and a very strong impact on ICER." "See answer question 36"		

	Part IV - The following questions were designed based on suggestions made by panel members in round 1 of the Delphi study.			
47	**Perspective**	**% Yes**	**% No**	**No expertise (n)**
	In round 1 alternative perspectives were proposed to the societal and health care perspective which are listed below. Could you indicate whether the following perspectives should be included in a European economic evaluation (as a complementary analysis)?			
	Government	40%	60%	0
	Health care payer(s)	86%	14%	1
	Health insurance-public funds	87%	13%	0
	Social services	67%	33%	0
48	***Please motivate your answer.***			
	"The analysis should be performed from a societal perspective, but to be more informative and more transferable it should be specific about in what sectors of the society the costs occur. The results shold consequently be presented for different perspectives."			
	"There is usually significant overlap between government, health care payer, and insurance funds, therefore i believe that it's imperative to include their perspective. With regards to social services, they incur a smaller part of health costs, and as such their perspective should be taken into consideration as well"			
	"These perspectives should not be included in all economic evaluations, only if appropriate. Health care perspective and societal perspective should be the default."			
	"As said above (in pros and cons) in real world pharamacoeconomic analysis are used for making the decisions on reimbursement and this decisions are made by (for) payer/insurer - so it is the primary perspective in many European jurisdictions."			
	"social care is not part of health care"			
	"Health care payers perspective could be very comparable to health-insurance fund perspective. Hospital perspective could also be interesting"			
	"With the exception of the governmentalperspective all the others make sense within sensitivity analyses depending on the research question."			
	E-health	**% Yes**	**% No**	**No expertise (n)**
49	***E-health was suggested as a relevant healthcare use item in a European economic evaluation from a societal perspective in the first round of the Delphi study. Do you think E-health should be included in a European economic evaluation from a societal perspective?***			
	E-health	71%	29%	1
50	***Please motivate your answer.***			
	"if it is a cost factor"			

	"No reason why it should not be included if relevant for the analysis."			
	"This needs further clarification. What do you mean by e-health ? If you mean costs related to implementation of an e-health interface program, i believe that the offset costs should be included since this is a tool to facilitate better health care, especially to people to comorbidities, such as the elderly"			
	"No experience yet with this item, but if costs are involved then it should be included"			
	"not common in Central-Eastern Europe"			
	"e health is not a specific category of costs"			
	"Due to increasing use of E-Health"			
	"Only if the intervention is a specific e-health relevant one"			
	Valuation of travel costs	**% Yes**	**% No**	**No expertise (n)**
51	***In round 1 panel members were asked to consider suitable proxy measures for the opportunity costs of travel costs in a European economic evaluation from a societal perspective. The following was suggested: "Public transport should be valued by market prices and travelling by care using standard costs per kilometer/mile." Do you agree with this statement?***			
	"Public transport should be valued by market prices and travelling by care using standard costs per kilometer/mile."	86%	14%	
52	***Please motivate your answer.***			
	"Since there can be significant deviations, i believe that aforementioned proposal is fine"			
	"the explicit methodology should be issued because of transaprency"			
	"what are the other options?"			
	"Believed to be the best standardised option"			
	Part V - In this part we would like to elicit your opinion on other topics that are relevant for the European guideline.			
	Discounting costs	**% Yes**	**% No**	**No expertise (n)**
53	***In the European guideline, what should the recommended discount rate for costs be?***			
	European average discount rate	54%	46%	2
	Lowest European discount rate	8%	92%	2
	Highest European discount rate	8%	92%	2
	Country specific discount rate	80%	20%	0
54	**Optional: Other (please specify)**			
	"The discount rate of the majority of EU countries. I think it is 3%"			
55	***Please motivate your answer.***			
	"The discount rate of the majority of EU countries. I think it is 3%"			

"Once, again this depends on the purpose of the analysis. Until we have a European consensus on discounting, I belive it would be best to use a country-specific discount rate and vary this rate in sensitivity analysis. Lowest and highest European discount rate may be used in the sensitivity analysis."
"I think that this depends on the sensitivity analysis. If results are highly sensitive to discounting then i think it's prudent to use a coutnry specific. If they are not, i think that an EU average would serve"
"at least in the analysis for reimbursement submission which are country-specific"
"cf. Sensibility analyses"
"Discount rates are country-specific as preferences are country specific"
"Either you use as a proxy the interest on capital or you have to refer to the specific disount rate because there can be cultural and other differences between the respective countries."

	Discounting, sensitivity analysis	**% Yes**	**% No**	**No expertise (n)**
56	***In the European guideline, should a sensitivity analysis be recommended to evaluate the effect of using a specific discount rate?***			
	Sensitivity analysis on discounting rates	92%	8%	2
57	***If yes, which scenarios should be evaluated?***			
	European average discount rate	46%	54%	2
	Lowest European discount rate	62%	38%	2
	Highest European discount rate	62%	38%	2
	Country specific discount rate	62%	38%	2
58	***Optional: Other (please specify)***			
	No alternatives given			
59	***Please motivate your answer.***			

"Until we have a European consensus on discounting, I belive it would be best to use a country-specific discount rate and vary this rate in sensitivity analysis. Lowest and highest European discount rate may be used in the sensitivity analysis."
"A sensitivity analysis ideally should include lower to higher discounting levels"
"as above"
"All could be considered in sensitivity analysis"

	Analysis - Type of economic evaluation	**% Yes**	**% No**	**No expertise (n)**
60	***Which type of economic evaluation should be performed in a European economic evaluation?***			
	Cost-effectiveness analysis	100%	0%	1
	Cost-utility analysis	100%	0%	1
	Cost-minimization analysis	71%	29%	1
	Cost-benefit analysis	43%	57%	1
61	***Optional: Other (please specify)***			

	No alternatives given			
62	***Please motivate your answer.***			
	"Many countries do not accept CBA. CMA can be used if it has been proven that the two alternatives being compared have similiar effects."			
	"Cost-utility with the use of QALY has been establised as the cornerstone, although in somecase a cost minimization would also serve the goal"			
	"Depends on the situation, if both treatments are equally effective, the economic evaluation is a cost minimization analysis. If no information on quality of life is available a cost-effectiveness analysis should be performed, but the preferred type of evaluation is a cost-utility analysis"			
	"the type of anlysis depends on the data available. However in some countries cost-utility analysis is mandatory"			
	"Does not make sense to answer NO to any of the types."			
	"difficulties with monetarising benefits"			
	"Cost-benefit analysis is for obvious reasons (e. g. monetarization of life years gained) not implementable. Cost-minimization can be caprured by CEA or CUA, there is no need for this specific kind of eceonomic evaluation, since you abandon uncertainty on the effect side which is completely wrong to do!"			
	Model-based or trial-based?	**% Yes**	**% No**	**No expertise (n)**
63	***In the European guideline, which approach to economic evaluation should be recommended?***			
	Model-based (outcomes of an average patient are assessed)	86%	14%	1
	Trial-based (outcomes of an individual patient are assessed)	86%	14%	1
64	**Please motivate your answer.**			
	"Depends on the products in question. Both should be possible."			
	"It depends on the decision problem."			
	"If no trial based evaluation is possible, a model based evaluation should be performed"			
	"Model-based analysis are the primary one. I would not say that trial-based analysis is unrelevant but it is hard to expect many of big credible trials and the small ones are weaker."			
	"The both are interesting. The information is complementary."			
	"it will depend on the specific situation."			
	"Depends on question"			
	"Depending on the research question."			
	Maximum willingness-to-pay			
65	***In the European guideline, what should the recommendation be on the maximum willingness-to-pay per incremental QALY gained? (Euros (€) per incremental QALY gained)***			
	"100 000"			
	"100,000"			
	"100000"			

	"150.000"	
	"30 000 EUR"	
	"3x GDP"	
	"45000"	
	"country specific"	
	"country-dependent"	
	"GDP per capita"	
	"no"	
	"x"	
	"-"	
	"-"	
66	***Please motivate your answer.***	
	"GDP per capita"	
	"In Sweden, we do not have a specific threshold but costs per QALY over approximately 100 000 euro per QALY are considered as very high. This does however need to be more thoroughly investigated. Also, the threshold should depend on other factors such as the severity of the disease."	
	"in relation to country GDP"	
	"This critically depends on th health condition. I would suggest the utilization of WHO guidelines (3 x GDP which can be increased up to 5 x GDP for rare conditions) could be a rational starting point"	
	"Do we need a recommendation on the maximum willingness to pay? In acceptability curves a range of values can be shown."	
	"the issue is crutial as some countries introduced stiff max WTP thresholds and try to neglect the need of specific regulations for eg. orphans. On the other hand - it is country-specific decision on max WTP threshold. In my opinion it is too early to have European threshold, but it is the time to start the discussion on the rules."	
	"cannot answer this question"	
	"i do not support icer to be defined."	
	"I don't understand the question. it is not a lotery..."	
	"From 2011, concerning the economic and legal dimensions of HTA Core Model, there is a basic threshold defined in the Slovak legislation. # 1 is 24 x average monthly salary € / QALY (approx. 19 000 Eur) # 2 is 35 x average monthly salary € / QALY (approx. 28 000 Eur)"	
	"Depends on country as economic status (when using rule of thumb WHO) and money spend on health care (when using opportunity costs) depends on the specific country"	
	"This is a catch question. The maximum WTP is a truly value judgement and thus, depending on indication, age of patients and so on... Furthermore it is depending on the financial strength and health budget of each country…"	
	Measurement of lost productivity - recall periods	**No expertise (n)**

	What do you consider appropriate recall periods for absenteeism from paid labor, presenteeism and absenteeism from unpaid labor? (weeks or months)	
67	**Absenteeism from paid labor - recall period (Weeks)**	7
	3, 4, 4, 12, 12	
	Absenteeism from paid labor - recall period (Months)	7
	3, 12	
	Presenteeism - recall period (Weeks)	7
	1, 1, 1, 3, 4	
	Presenteeism - recall period (Months)	7
	1	
	Absenteeism from unpaid labor - recall period (Weeks)	7
	1, 1, 3, 12, 12	
	Absenteeism from unpaid labor - recall period (Months)	7
	3	
68	***Please motivate your answer.***	
	"Question is not clear for me"	
	"If a diary is used, longer periods are possible"	
	"only absenteizm; if based on the registered data no problems with long recall time"	
	"3 months is believed to be long enough to capture information and not too long for recalling absenteeism. This is more difficult with presenteeism so shorter period"	
	"Absenteeism is a more clear concept for survey participants"	
	Valuation of lost productivity costs - absenteeism - Friction costs approach - length of friction period	**No expertise (n)**
	In the European guideline, what should the recommendation be regarding the length of the friction period? (Weeks or days)	
69	**Friction costs approach - Length of friction period (Days)**	
	120	10
	Length of friction period (Weeks)	
	8-12	10
	2	
70	***Please motivate your answer.***	
	"It depends on the organisation. It could not be a fixe period."	
	"should be assessed on the real world data; probably should be contry-specific and changable year-by-year"	
	"should be country specific"	
	"country or sector specific. A general very conservative rule could be about 120 days"	

	'Valuation of lost productivity costs - absenteeism - elasticity values	% Yes	% No	No expertise (n)
	Please indicate if and which elasticity value(s) should be used in your opinion.			
71	0.0	33%	67%	10
	0.8	50%	50%	10
	1.0	0%	100%	10
72	Optional: Other value for elasticity (please specify)			
	No alternatives given			
73	***Please motivate your answer.***			
	"published by the Dutch Economic Institute"			
	"No expertise"			
	"Crystall ball question."			
	End of feedback report			