



Background and Objective

Background:

- ❖ Generic preference-based measures (e.g. EQ-5D) do not have condition labels
- ❖ Condition specific preference based measures (e.g. AQL-5D) and vignettes often have the condition name embedded in the text (e.g. 'experienced asthma symptoms as a result of air pollution') or in the valuation task
- ❖ No consensus in literature on impact of condition labelling due to previous studies being too small, within subject (and hence 'focusing' on condition) or covering a small severity range

Objective:

This paper examines the impact of referring to the medical condition in the descriptions of the health states valued by members of the general public

Study design and analysis

- Between-subject study
- Respondents valued:
 - ❖ 8 states produced using EORTC-8D – a non-labeled condition specific preference-based measure derived from the EORTC QLQ-C30
 - ❖ Health states of differed severity (see example state below)
 - ❖ one of three versions: no label, irritable bowel syndrome label, cancer label
 - ❖ using MVH Time Trade-off protocol
- Sampling strategy to ensure representativeness across label groups and to UK general population

Regression analysis (RE GLS model) to determine impact on elicited utility values due to condition label, state severity, interaction of label and severity, respondent characteristics, experience of condition

Results

- ❖ 241 members of the general public provided 1910 observations with a response rate of 39% and completion rate of 99%
- ❖ Values from the original EORTC-8D study as expected are very similar to the 'no label' group (Table 1)
- ❖ The IBS label group also gave similar states
- ❖ The cancer label group gave lower values for most states
- ❖ The RE GLS regression (after controlled for socio-demographics) found that impact of including a cancer label depends on the severity of the state – with significant reduction being found for more severe states (up to -0.25 for the worst possible state, but no significant differences for mild states (Table 2)

Discussion

Inclusion of condition labels can affect health state values, but this is dependent upon

- ❖ specific condition
- ❖ severity of state

Experience of condition affects values

Why does this occur?

- ❖ the label provides a richer and more complete picture of the condition or
- ❖ A label like cancer brings up preconceptions like dread and/or concerns about impact on survival (that are already included in the QALY)

We recommend qualitative research into respondents reasoning for giving different values with labels

In the meantime we argue against using condition labels to avoid distortions caused by preconceptions about the condition and life expectancy

References

Deriving a preference-based measure for cancer using the EORTC QLQ-C30. *Value in Health* 2011 14(5),721-731.
 Brazier J, Rowen D, Young T, Tsuchiya A, Barkham M. Developing and testing methods for deriving preference-based measures of health from condition specific measures (and other patient based measures of outcome) *Health Technology Assessment* (in press)

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Table 1 descriptive statistics

	Original study (n=344)	No label (n=81)	IBS label (n=79-80)	Cancer label (n=79-80)
Health state	Modelled utility value	Mean (s.d.)	Mean (s.d.)	Mean (s.d.)
11111111	1	0.96 (0.13)	0.99 (0.06)	0.96 (0.12)
31212241	0.75	0.74 (0.32)	0.81 (0.23)	0.80 (0.22)
13423411	0.72	0.67 (0.30)	0.71 (0.37)	0.64 (0.36)
44321321	0.65	0.66 (0.35)	0.68 (0.37)	0.56 (0.50)
23141224	0.64	0.63 (0.36)	0.69 (0.36)	0.57 (0.45)
24432411	0.64	0.66 (0.33)	0.65 (0.40)	0.54 (0.44)
51224434	0.51	0.49 (0.41)	0.53 (0.42)	0.41 (0.49)
54444444	0.29	0.20 (0.49)	0.17 (0.49)	-0.03 (0.50)

Table 2 Regression results

States		Cancer interaction terms		Labelling	
		11111111 x Cancer	-0.041	IBS	0.008
31212241	-0.197***	31212241 x Cancer	-0.007		
13423411	-0.284***	13423411 x Cancer	-0.079	Experience of condition	
44321321	-0.304***	44321321 x Cancer	-0.147**	Cancer in themselves	-0.157*
23141224	-0.313***	23141224 x Cancer	-0.128**	Caring for others with cancer	0.134**
24432411	-0.317***	24432411 x Cancer	-0.148**	IBS in themselves	-0.036
51224434	-0.456***	51224434 x Cancer	-0.136**	Caring for others with IBS	0.064
54444444	-0.785***	54444444 x Cancer	-0.254***	Constant	0.967***

Example health state

(no label) / Due to having irritable bowel syndrome / Due to having cancer

- You have very much trouble taking a short walk outside of the house
- You are not limited in pursuing your hobbies or other leisure time activities
- Your physical condition or medical treatment interferes a little with your social activities
- Pain interferes a little with your daily activities
- You feel depressed very much
- You are tired very much
- You are constipated and/or have diarrhoea quite a bit
- You feel nauseated very much