

Elly Stolk, Marcel Jonker, Esther de Bekker-Grob, Sesil Lim, Bas Donkers  
Erasmus Choice Modelling Centre, Erasmus University Rotterdam, The Netherlands

## Aims

In 2014 this team reported DCEduration results that were much lower than TTO results; with state 55555 for instance valued at -1.5. This poster reports our later DCE duration results highlighting differential elements in the methods

## Available datasets

Table 1. Initial and later datasets

	DCE duration	DCEdead	TTO	latent scale DCE
2014: online, first attempt	788	-	-	-
2015: online, jointly optimized	300	300	-	-
2016: f2f administration DCE'15	400	400	200	-
2016: online, QALY balanced	500	500	-	500

**2014: DCEduration**, using matched pairwise choices, fig 1. Comparing two EQ5D5L states first (AB) and then B to C (t yrs in full health,  $t < 10$ ).

**2015: DCEduration and DCEdead**, using a design that was jointly optimized for both tasks, allowing use of the same EQ5D5L states, regardless of "C" referring to death or full health.

**2016: TTO, DCEduration and DCEdead**: 800 people participating in a TTO exercise also administered the 2015 DCEdead or DCEduration survey, in face to face interviews.

**2016: QALY balanced design project** Comparing D-efficient designs to designs created by selecting AB from severity strata (fig 2) for DCEdead, DCElatent scale, and DCEduration.

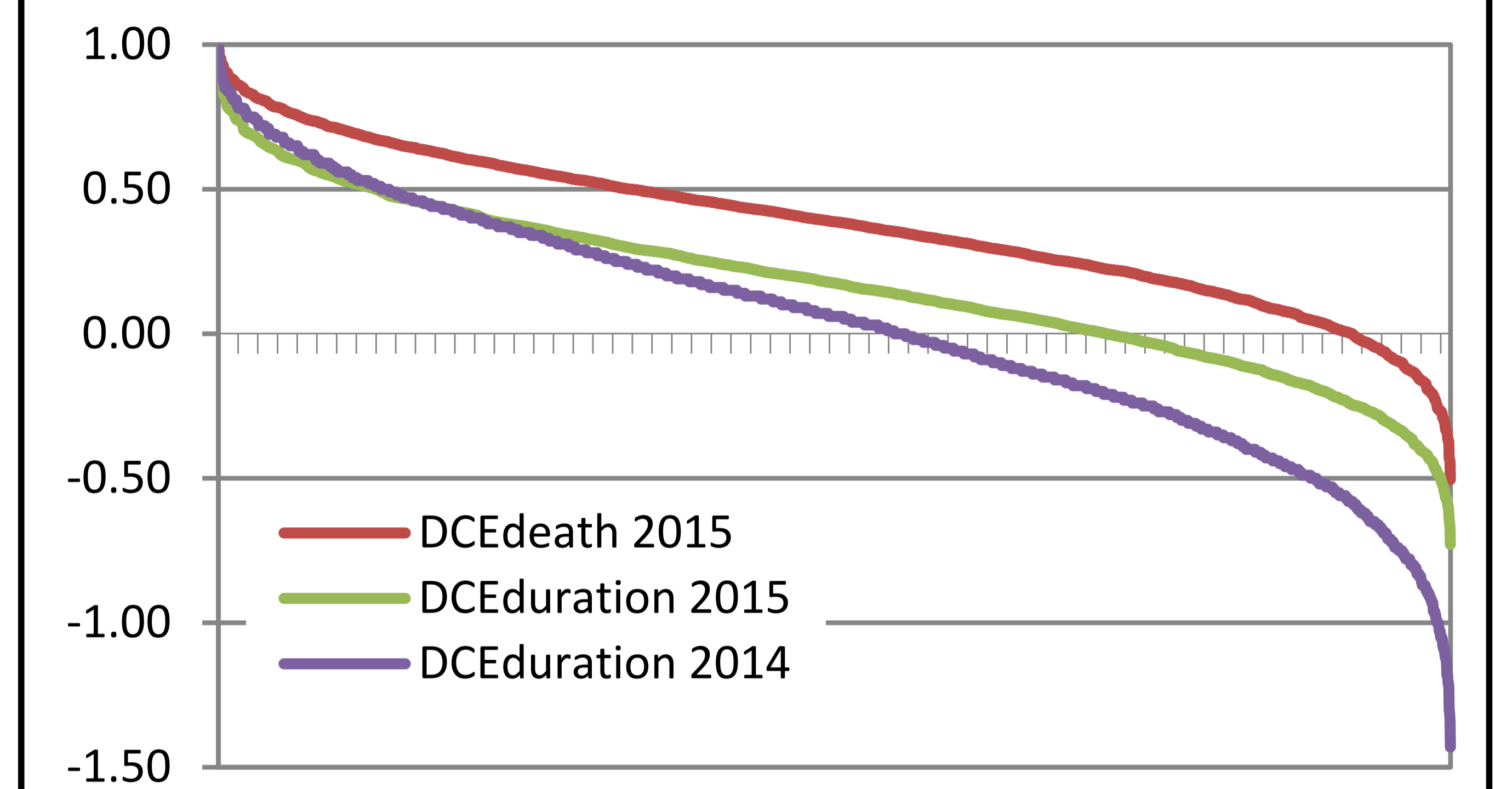
**Figure 1. Matched pairwise choice set with 3 alternatives ABC**  
Respondents choose first between AB and then between BC

A	B	C
10 years in this health state, followed by death	10 years in this health state, followed by death	You die immediately
No problems in walking about	Moderate problems in walking about	7 years in this health state, followed by death
No problems in washing or dressing	No problems in washing or dressing	No problems in walking about
Moderate problems in doing usual activities	No problems in doing usual activities	No problems in washing or dressing
Severe pain or discomfort	Extreme pain or discomfort	No problems in doing usual activities
Extremely anxious or depressed	Slightly anxious or depressed	No pain or discomfort
		Not anxious or depressed

## Conclusion

1) Reconciling differences between DCEduration, DCEdead and TTO seems possible. 2) DCEduration seems vulnerable to extrapolation problems, both in the severity domain (this study) and in the duration dimension (Craig et al). In moving forward we should investigate what conditions provide stable results. 3) We need to advance with caution when including a dead alternative with DCEduration pairs and investigate the impact of mode of administration.

Figure 2. 2014 and 2015 DCE results (online)



## Results

- 2015 DCEduration values were much higher than DCEduration valuescale DCE the design strategy - standard or QAY balanced - had no impact.
- In the face to face 2016 study, differences between DCEduration, DCEdead, and TTO were reconciled.
- Face to face administration of the 2015 DCE gave the same results for DCEduration, but lower values s obtained in 2014 (fig 2).
- The 2016 QALY balanced project showed that this was -at least in part- an artifact of the D-efficient design not covering the severity range well (fig 3).
- In DCEdead and latent for DCEdead that did not differ from DCEduration.

Figure 3: D-efficient (top) versus QALY balanced design (bottom)  
brown bars: distribution of EQ5D5L states over the severity range  
black bars: EQ5D5L states selected for the design

