

MULTI COUNTRY PILOT STUDY

TTO and hybrid

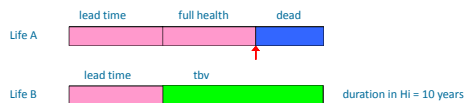
Ben van Hout

TTO



The lead time TTO

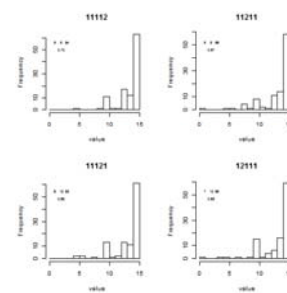
'Lead time' TTO (state happens to be better than dead)



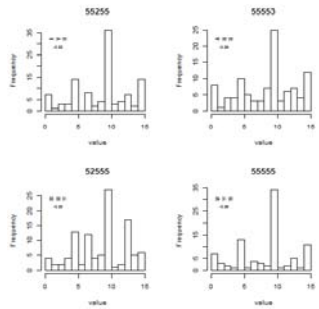
'Lead time' TTO (state happens to be worse than dead)



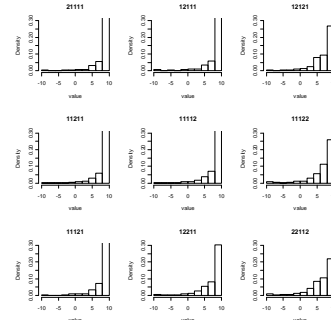
Multi country study good health states



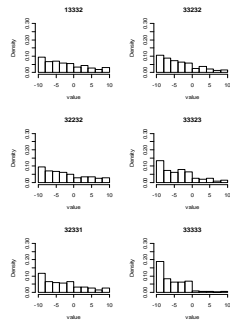
Multi country study bad health states



MVH good health states



MVH bad health states



Linear regression results

Linear Regression		United Kingdom	United States	The Netherlands	Canada				
constant		0.6006	0.057	13.1901	0.285	13.4435	0.284	12.8496	0.238
mobility	level 2	-0.0087	0.082	0.3892	0.405	-0.2532	0.420	-0.0377	0.334
	level 3	-0.0262	0.114	-0.7276	0.577	-1.2927	0.606	-0.1518	0.485
	level 4	-0.0578	0.048	-0.7343	0.241	-1.3094	0.232	-0.3358	0.214
	level 5	-0.3041	0.090	-1.4940	0.443	-1.8202	0.461	-0.8910	0.370
self care	level 2	0.0422	0.091	0.3125	0.432	-0.1559	0.524	-0.4648	0.351
	level 3	0.1184	0.110	0.3122	0.541	0.4630	0.607	0.4458	0.451
	level 4	-0.1809	0.048	-0.1859	0.245	-1.1218	0.234	-1.1651	0.213
	level 5	-0.3827	0.056	-0.3712	0.463	-1.0763	0.539	-1.1161	0.381
usual activities	level 2	0.0404	0.072	-0.0642	0.357	-0.1684	0.357	-0.1078	0.298
	level 3	0.0541	0.086	0.4283	0.441	0.0804	0.438	0.5148	0.212
	level 4	0.1312	0.049	-0.6931	0.247	-0.8108	0.235	-0.6188	0.213
	level 5	0.1304	0.077	-0.5741	0.391	-1.5388	0.394	-0.3707	0.325
pain discomfort	level 2	-0.0224	0.086	-0.0008	0.391	0.0403	0.394	-0.2488	0.321
	level 3	-0.1188	0.094	-0.0974	0.480	0.3817	0.460	0.5384	0.397
	level 4	-0.3524	0.048	-0.6884	0.241	-1.5417	0.234	-0.6252	0.209
	level 5	-0.3794	0.085	-1.0606	0.422	-1.3128	0.422	-1.0148	0.348
anxiety depression	level 2	0.1022	0.088	0.0142	0.420	-0.4688	0.442	0.2879	0.351
	level 3	-0.1805	0.047	-0.5283	0.245	-0.2562	0.240	-0.1842	0.208
	level 4	-0.3687	0.091	-1.2274	0.457	-1.0822	0.528	-0.8151	0.378
	level 5	-0.4865	0.035	-1.0300	0.177	-1.3899	0.178	-0.8119	0.152

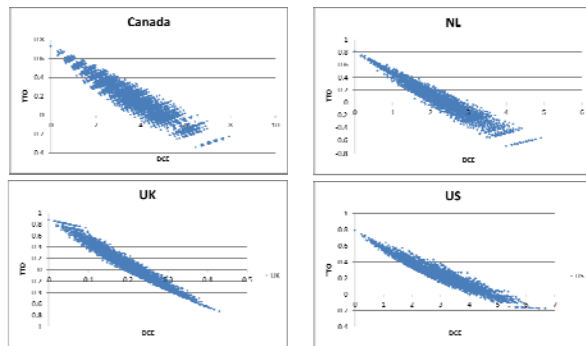
An alternative regression

- Suppose that the relative meaning of slight, moderate, severe and extreme is the same for each dimension but that dimensions differ in weight

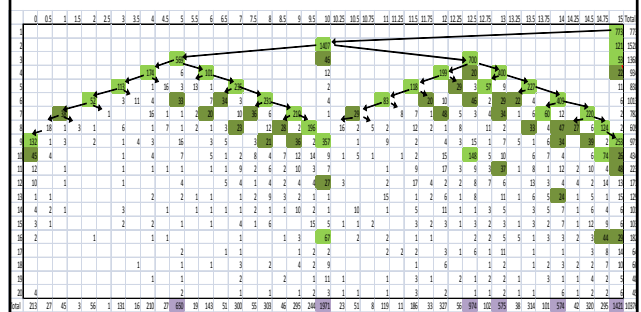
	United Kingdom	United States	The Netherlands	Canada
constant	-1.3333	-1.700	-0.6487	-0.936
constant	0.6642	0.579	0.4490	0.350
mobility	-0.0470	-0.075	-0.0306	-0.050
self care	-0.0507	-0.080	-0.0254	-0.046
usual activities	-0.0378	-0.062	-0.0211	-0.039
pain discomfort	-0.0808	-0.129	-0.0369	-0.058
anxiety depression	-0.0751	-0.118	-0.0392	-0.063
level 2	0.3080	-0.296	1.2981	0.313
level 3	1.4262	0.764	1.9991	1.079
level 4	4.0695	2.527	4.4245	2.892
level 5	4.8131	3.027	4.5274	2.983
norm constant	3.6527	2.874	2.8031	1.955

DCE	UK	NL	US	Canada
slight	1.559	0.49	0.0941	0.04
moderate	1.946	0.61	0.1204	0.05
severe	5.515	1.67	0.4476	0.19
extreme	6.607	2.01	0.5718	0.25
mobility	-0.2593	0.09	-2.761	1.23
self care	-0.2082	0.07	-2.379	1.06
usual activities	-0.208	0.07	-2.718	1.21
pain and discomfort	-0.3329	0.12	-3.939	1.74
anxiety and depression	-0.384	0.14	-4.133	1.823
TTO	UK	NL	US	Canada
slight	0.3080	-0.296	1.1051	0.381
moderate	1.4262	0.764	1.3199	0.603
severe	4.0695	2.527	4.6572	2.567
extreme	4.8131	3.027	4.2165	2.211
mobility	-0.0470	-0.075	-0.0388	-0.075
self care	-0.0507	-0.080	-0.0502	-0.097
usual activities	-0.0378	-0.062	-0.0418	-0.079
pain and discomfort	-0.0808	-0.129	-0.0792	-0.147
anxiety and depression	-0.0751	-0.118	-0.0687	-0.126

DC vs TTO

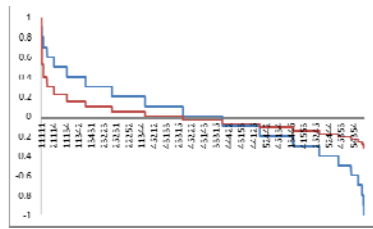


The Oppe chart



Bringing DC and TTO together

- Do they give the same results?
- Should they give the same results?
- Errors and heterogeneity?
- The N3 term?



Bringing DCE and TTO together

- Anchoring on dead and the worst health state
- A link function
- One likelihood function
- DCE_{tto} The Pret project (Aki Tsuchiya, Brendan Mulhan)