Appendix 2: Sensitivity analyses

2.1 Face validity, primary analyses

In each section, participants were asked: "Are you confident the answers you gave to questions reflect your views and uncertainties?" The possibilities for answers were: 'yes', 'not sure' and 'no'. The following sensitivity analyses: (A) consider only those that responded 'yes' or 'not sure', (B) consider only those that responded 'yes'.

A. Individuals that responded 'yes' or 'not sure' to whether they were confident their answers reflected their views and uncertainties

Table 2.1A: Duration of effects, surrogacy and extrapolation – all clinical experts (only individuals that responded 'yes' or 'not sure' to whether they were confident their answers reflected their views and uncertainties).

		year 1	year 2	year 3	year 4	Total additional duration (yrs)*
			Mode [Mean] (lower, upper bounds of the 80% credible interval)			
Circulatory	mortality effects (vs. year 1)	estimable	0.5 [1.5] (0.3,2.4)	0.3 [1.2] (0.2,2.2)	0.2 [0.9] (0.2,2.1)	1.7 [11.1] (1.1,5.1)
	surrogacy (vs. same year)	0.6 [2.9] (0.4,3.2)	0.7 [2.9] (0.4,3.2)	0.6 [2.8] (0.4,3.2)	0.5 [2.8] (0.3,3.3)	--
Respiratory	mortality effects (vs. year 1)	estimable	0.3 [1.5] (0.2,2.6)	0.4 [0.7] (0.3,1.7)	0.2 [0.7] (0.2,1.8)	1.1 [9.1] (0.8,5.1)
	surrogacy (vs. same year)	0.5 [3.9] (0.4,3.8)	0.5 [4] (0.4,3.9)	0.4 [3.4] (0.3,3.7)	0.3 [3.4] (0.3,3.8)	--
Gastrointestinal	mortality effects (vs. year 1)	estimable	0.3 [1.7] (0.2,2.7)	0.2 [1.1] (0.2,2.3)	0.2 [0.9] (0.1,2.1)	0.9 [11.4] (0.6,6.1)
	surrogacy (vs. same year)	0.7 [3.6] (0.5,3.5)	0.4 [4.5] (0.3,4.2)	0.5 [4.3] (0.3,4.1)	0.5 [4.2] (0.4,4)	--
Neurological	mortality effects (vs. year 1)	estimable	0.2 [1.3] (0.2,2.5)	0.1 [0.9] (0.1,2.2)	0.1 [1] (0.1,2.2)	0.9 [6] (0.6,4.3)
	surrogacy (vs. same year)	0.7 [4.2] (0.5,3.8)	0.8 [3.2] (0.5,3.1)	0.8 [2.8] (0.6,2.9)	0.6 [3.1] (0.4,3.4)	--
Endocrinology	mortality effects (vs. year 1)	estimable	0.3 [1.4] (0.2,2.5)	0.3 [1] (0.2,2.2)	0.2 [0.6] (0.2,1.7)	1.3 [9] (0.9,4.9)
	surrogacy (vs. same year)	0.3 [4.7] (0.3,4.4)	0.4 [6.3] (0.3,5)	0.3 [5.2] (0.2,4.6)	0.3 [5.6] (0.2,4.8)	--
Others with mortality	mortality effects (vs. year 1)	estimable	0.3 [1.8] (0.2,2.8)	0.2 [1.1] (0.1,2.4)	0.1 [0.9] (0.1,2.2)	1.4 [9.6] (0.9,5)
	surrogacy (vs. same year)	0.4 [4.6] (0.3,4.3)	0.5 [5.3] (0.4,4.4)	0.6 [6.4] (0.4,4.8)	0.5 [8.8] (0.4,5.7)	--
Mental Health	Extrapolation (vs. same year)	0.8 [3.5] (0.5,3.4)	0.7 [3.4] (0.5,3.3)	0.8 [3.1] (0.5,3.1)	0.8 [2.8] (0.5,3)	--
Musculoskeletal		0.8 [3.9] (0.5,3.5)	0.9 [3.2] (0.6,3.1)	0.8 [2.9] (0.5,3)	0.8 [2.6] (0.6,2.8)	--
Others without mortality		0.8 [3.2] (0.5,3.2)	0.6 [2.9] (0.4,3.2)	0.9 [2.1] (0.6,2.4)	0.7 [2.2] (0.5,2.7)	--

* beyond the year of increased expenditure

B. Individuals that responded 'yes' to whether they were confident their answers reflected their views and uncertainties

Table 2.1B: Duration of effects, surrogacy and extrapolation – all clinical experts (only individuals that responded 'yes' to whether they were confident their answers reflected their views and uncertainties).

		year 1	year 2	year 3	year 4	Total additional duration (yrs)*
		Mode [Mean] (lower, upper bounds of the 80% credible interval)				
Circulatory	mortality effects (vs. year 1)	estimable	0.5 [1.5] (0.3,2.4)	0.3 [1.3] (0.2,2.4)	0.2 [1.0] (0.2,2.2)	1.7 [8.4] (1.1,4.2)
	surrogacy (vs. same year)	0.7 [2.3] (0.5,2.7)	0.8 [3.4] (0.5,3.3)	0.6 [3.9] (0.4,3.8)	0.6 [4.7] (0.4,4.1)	--
Respiratory	mortality effects (vs. year 1)	estimable	0.3 [1.7] (0.2,2.7)	0.4 [0.6] (0.3,1.5)	0.3 [0.4] (0.2,1.3)	1.0 [7.8] (0.7,4.8)
	surrogacy (vs. same year)	0.6 [6.7] (0.5,4.9)	0.7 [7.5] (0.5,5.1)	0.6 [7.4] (0.4,5.1)	0.6 [8.1] (0.5,5.4)	--
Gastrointestinal	mortality effects (vs. year 1)	estimable	0.4 [2.0] (0.3,2.9)	0.2 [1.4] (0.2,2.5)	0.2 [1.2] (0.2,2.4)	0.7 [12.2] (0.5,6.4)
	surrogacy (vs. same year)	0.9 [6.3] (0.6,4.5)	0.7 [10.0] (0.5,5.9)	0.7 [8.9] (0.5,5.5)	0.6 [7.2] (0.5,5.0)	--
Neurological	mortality effects (vs. year 1)	estimable	0.2 [1.7] (0.2,2.8)	0.1 [1.1] (0.1,2.3)	0.1 [1.0] (0.1,2.3)	0.8 [5.6] (0.5,4.3)
	surrogacy (vs. same year)	0.8 [7.1] (0.6,4.8)	1.2 [4.0] (0.8,3.1)	1.1 [4.5] (0.7,3.4)	1.0 [6.4] (0.7,4.4)	--
Endocrinology	mortality effects (vs. year 1)	estimable	0.4 [1.9] (0.3,2.8)	0.3 [1.3] (0.2,2.4)	0.3 [0.7] (0.2,1.9)	1.5 [7.8] (1.0,4.3)
	surrogacy (vs. same year)	1.2 [3.9] (0.8,3.0)	0.7 [10.1] (0.5,5.9)	1.2 [5.1] (0.8,3.7)	1.1 [5.7] (0.7,4)	--
Others with mortality	mortality effects (vs. year 1)	estimable	0.4 [2.5] (0.3,3.2)	0.2 [1.5] (0.2,2.6)	0.1 [1.1] (0.1,2.4)	1.2 [8.4] (0.8,4.8)
	surrogacy (vs. same year)	0.9 [5.5] (0.6,4.1)	1.2 [8.0] (0.8,4.7)	1.2 [9.1] (0.8,5.0)	1.3 [9.8] (0.9,5.2)	--
Mental Health		0.8 [4.0] (0.5,3.6)	0.8 [3.9] (0.5,3.6)	0.8 [3.6] (0.5,3.4)	0.8 [3.1] (0.5,3.1)	
Musculoskeletal	Extrapolation (vs. same year)	1.0 [4.4] (0.7,3.5)	1.0 [3.5] (0.7,3.1)	1.0 [3.1] (0.6,2.9)	0.9 [2.9] (0.6,2.8)	
Others without mortality		0.8 [3.7] (0.5,3.5)	0.6 [3.5] (0.4,3.5)	0.9 [2.3] (0.6,2.5)	0.8 [2.3] (0.5,2.6)	

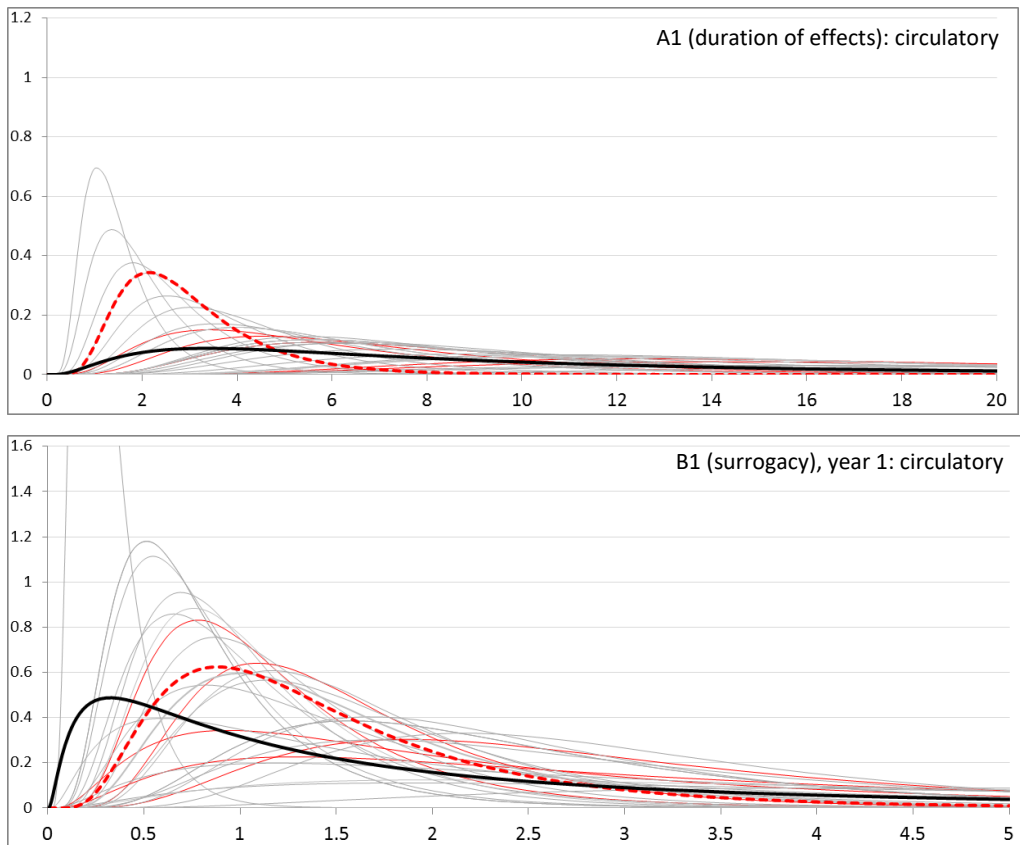* beyond the year of increased expenditure

2.2 Exploration of heterogeneity, primary analysis

Table 2.2: Duration of effects, surrogacy and extrapolation -- clinical experts from specific clinical area pooled.

		year 1	year 2	year 3	year 4	Total additional duration (yrs)*
		Mode [Mean] (lower, upper bounds of the 80% credible interval)				
Circulatory	mortality effects (vs. year 1)	estimable	0.6 [2.3] (0.4,2.8)	0.5 [2.3] (0.3,3)	0.4 [2] (0.3,2.9)	2.1 [12.8] (1.5,5)
	surrogacy (vs. same year)	0.9 [2.6] (0.6,2.7)	0.8 [3.3] (0.5,3.2)	0.7 [4.5] (0.5,4)	0.6 [5.3] (0.5,4.3)	--
Respiratory	mortality effects (vs. year 1)	estimable	0.9 [1.2] (0.6,1.6)	0.7 [0.8] (0.5,1.4)	0.6 [0.6] (0.4,1.4)	1.2 [4] (0.8,3.1)
	surrogacy (vs. same year)	1 [2.4] (0.7,2.4)	1 [1.5] (0.7,1.8)	0.9 [1.5] (0.6,1.9)	0.8 [1.3] (0.6,1.9)	--
Gastrointestinal	mortality effects (vs. year 1)	estimable	0.7 [1] (0.4,1.7)	0.6 [1] (0.4,1.8)	0.5 [0.8] (0.3,1.7)	1.6 [13.1] (1.1,5.7)
	surrogacy (vs. same year)	0.7 [1.6] (0.5,2.2)	0.8 [2.6] (0.5,2.8)	0.7 [3.2] (0.5,3.3)	0.6 [5.9] (0.5,4.6)	--
Neurological	mortality effects (vs. year 1)	estimable	0.7 [6.9] (0.5,4.9)	0.6 [5.5] (0.5,4.4)	0.6 [5.9] (0.5,4.6)	2.3 [20.9] (1.5,6.6)
	surrogacy (vs. same year)	0.9 [10.4] (0.6,5.7)	0.8 [1.9] (0.5,2.4)	0.7 [1.7] (0.4,2.3)	0.6 [3.6] (0.4,3.6)	--
Endocrinology	mortality effects (vs. year 1)	estimable	0.9 [1.3] (0.6,1.8)	0.8 [1.4] (0.5,2)	0.3 [0.6] (0.2,1.6)	1.3 [4.8] (0.8,3.4)
	surrogacy (vs. same year)	0.8 [2] (0.5,2.4)	0.8 [2.2] (0.5,2.6)	0.8 [2.3] (0.5,2.6)	0.8 [2.8] (0.5,2.9)	--
Others with mortality	mortality effects (vs. year 1)	--	--	--	--	--
	surrogacy (vs. same year)	--	--	--	--	--
Mental Health		1.1 [2.9] (0.8,2.6)	1.1 [2.3] (0.7,2.3)	0.9 [2.1] (0.6,2.3)	0.7 [2.4] (0.5,2.8)	--
Musculoskeletal	Extrapolation (vs. same year)	1.8 [6.5] (1.3,3.4)	1.6 [4.9] (1.1,3)	1.5 [4.1] (1,2.8)	1.3 [3.3] (0.9,2.6)	--
Others without mortality		--	--	--	--	--

* beyond the year of increased expenditure

Figure 2.1: Illustration of individual experts' fitted distributions and the pooled distributions–clinical experts

Full red lines: clinical specialists individually; full grey lines: other individual experts; full black line: all clinical experts pooled; red dashed line: clinical specialists pooled

2.3 Exploring heterogeneity, secondary analysis

Group	Description of group	N
G1	I have no involvement in policy	0
G2	Governmental Bodies (DH, NHSE, PHE)	15
G3	Non Departmental Public Bodies and Independent Departmental Expert Committees (NICE, JCVI)	5
G4	Industry-related bodies (ABPI)	2
G5	Patient representative organisations	2
G6	None of the above and indicated other	1

Table 2.3: Duration of effects, surrogacy and extrapolation – policy experts pooled by type of organisation.

		year 1	year 2	year 3	year 4	Total additional duration (yrs)*
			Mode [Mean] (lower, upper bounds of the 80% credible interval)			
Circulatory	mortality effects (vs. year 1)	estimable	G2: 0.5 [1] (0.3,2) G3: 0.2 [2.3] (0.2,5.3) G4: 0.9 [1.6] (0.6,3) G5: 0.3 [0.6] (0.2,1.6)	G2: 0.3 [1] (0.2,2) G3: 0.3 [1] (0.2,2.1) G4: 0.7 [1.2] (0.4,2.3) G5: 0.1 [0.3] (0.1,1)	G2: 0.2 [0.8] (0.1,1.8) G3: 0.1 [0.7] (0.1,1.5) G4: 0.5 [1.1] (0.4,2.2) G5: 0.2 [0.3] (0.2,0.6)	G2: 1.5 [19.2] (1.5,43.6); G3: 5.2 [9.4] (3.5,17.1); G4: 4.8 [10.2] (3.2,19.7) G5: 3.3 [7] (2.2,13.5)
	surrogacy (vs. same year)	G2: 0.3 [2.8] (0.3,6.4) G3: 0.2 [4] (0.3,9) G4: 0.9 [2.3] (0.6,4.8) G5: 0.5 [0.8] (0.3,1.8)	G2: 1 [2] (0.7,3.8) G3: 0.2 [3.5] (0.3,8) G4: 0.7 [2.8] (0.5,6.1) G5: 0.2 [0.5] (0.1,1.7)	G2: 0.9 [1.9] (0.6,3.6) G3: 0.4 [4.1] (0.4,9.2) G4: 1.1 [1.7] (0.7,3) G5: 0.6 [0.8] (0.4,1.5)	G2: 0.9 [1.8] (0.6,3.5) G3: 0.5 [3.6] (0.4,8.2) G4: 1 [1.5] (0.7,2.7) G5: 0.6 [0.7] (0.4,1.4)	--
Respiratory	mortality effects (vs. year 1)	estimable	G2: 0.4 [0.9] (0.3,1.7); G3: 0.2 [1.3] (0.2,2.8); G4: 0.7 [1.1] (0.5,1.9); G5: 0.5 [0.9] (0.3,2.3)	G2: 0.2 [0.6] (0.2,1.3); G3: 0.2 [0.4] (0.1,0.9); G4: 0.4 [0.8] (0.3,1.6); G5: 0.3 [0.7] (0.2,2)	G2: 0.1 [0.5] (0.1,1.2) G3: 0.1 [0.3] (0.1,0.5) G4: 0.2 [0.4] (0.1,0.8) G5: 0.2 [0.7] (0.1,3.3)	G2: 0.5 [14.5] (0.7,32.2) G3: 1.2 [7.5] (1,16.8); G4: 5.1 [7.7] (3.4,13.2); G5: 1.1 [1.9] (0.7,4.8)
	surrogacy (vs. same year)	G2: 1.2 [2.3] (0.8,4.3) G3: 0.3 [2.9] (0.3,6.5) G4: 0.6 [3.1] (0.5,6.9) G5: 0.6 [1] (0.4,2.6)	G2: 1.1 [2.2] (0.7,4.1) G3: 0.5 [3.7] (0.4,8.4) G4: 0.6 [3.6] (0.5,8) G5: 0.8 [1] (0.5,2)	G2: 0.9 [2] (0.6,3.9) G3: 0.4 [3.9] (0.3,8.9) G4: 0.5 [2.9] (0.4,6.4) G5: 0.7 [0.9] (0.5,1.7)	G2: 0.3 [2.4] (0.3,5.4) G3: 0.4 [4.3] (0.4,9.7) G4: 0.4 [2.2] (0.3,4.8) G5: 0.5 [0.6] (0.3,1.3)	--
Gastrointestinal	mortality effects (vs. year 1)	estimable	G2: 0.1 [1.4] (0.1,3.1) G3: 0.3 [3.8] (0.3,8.6) G4: 0.6 [2.7] (0.5,5.9) G5: 1.4 [2] (0.9,4.1)	G2: 0.2 [1] (0.1,2.1) G3: 0.1 [2] (0.1,4.6) G4: 0.4 [2.1] (0.3,4.7) G5: 1.6 [3.3] (1.1,9.9)	G2: 0.2 [0.8] (0.2,1.8) G3: 0.2 [2.2] (0.2,5.1) G4: 0.6 [1] (0.4,1.9) G5: 2.1 [5.7] (1.6,20.8)	G2: 1.2 [18.1] (1.3,41) G3: 3.3 [10.7] (2.3,22.5) G4: 4.6 [14.1] (3.2,29.3) G5: 1.7 [7.7] (1.6,36.6)
	surrogacy (vs. same year)	G2: 0.6 [2.6] (0.5,5.7) G3: 1.1 [1.9] (0.7,3.5) G4: 0.6 [5.9] (0.5,13.4) G5: 0.1 [0.5] (0.1,2.8)	G2: 0.6 [2.7] (0.5,5.8) G3: 0.5 [2.7] (0.4,5.9) G4: 0.6 [5.4] (0.5,12.2) G5: 0.2 [0.5] (0.2,1.6)	G2: 0.6 [2.6] (0.4,5.7) G3: 0.3 [3.4] (0.3,7.8) G4: 0.5 [4.6] (0.5,10.4) G5: 0.7 [0.9] (0.5,1.7)	G2: 0.5 [2.6] (0.4,5.7) G3: 0.5 [2.5] (0.4,5.7) G4: 0.4 [3.9] (0.4,8.9) G5: 0.4 [0.6] (0.3,1.2)	--
Neurological	mortality effects (vs. year 1)	estimable	G2: 0.6 [1] (0.4,1.9) G3: 0.2 [1.4] (0.2,3.1) G4: 0.9 [1.4] (0.6,2.4) G5: 0 [0.7] (0.1,7.4)	G2: 0.3 [0.8] (0.2,1.6) G3: 0.4 [0.8] (0.3,1.6) G4: 0.7 [1.3] (0.5,2.4) G5: 4.7 [6.3] (3.1,12.5)	G2: 0.2 [0.6] (0.1,1.4) G3: 0.2 [0.8] (0.1,1.7) G4: 0.7 [1.1] (0.5,1.9) G5: 7.6 [9.8] (5.1,18.7)	G2: 1.3 [18.9] (1.4,43) G3: 2.9 [8.4] (2,17.5) G4: 6.2 [9.6] (4.1,16.6) G5: 0.4 [6.4] (0.7,57.2)
	surrogacy (vs. same year)	G2: 1.4 [3] (0.9,5.8) G3: 1.1 [3] (0.7,6.1) G4: 1.2 [3.5] (0.8,7.1) G5: 0.4 [1.1] (0.3,3.7)	G2: 1.3 [2.5] (0.9,4.6) G3: 0.8 [3.4] (0.6,7.5) G4: 1 [2.6] (0.7,5.1) G5: 1.4 [1.7] (0.9,3.2)	G2: 1.1 [2.2] (0.7,4.1) G3: 0.8 [3.4] (0.6,7.4) G4: 0.6 [3.1] (0.5,6.8) G5: 1.2 [1.5] (0.8,2.9)	G2: 1 [2] (0.6,3.9) G3: 0.8 [3.4] (0.6,7.4) G4: 0.5 [2.2] (0.3,4.9) G5: 0.9 [1.2] (0.6,2.3)	--

Category	Subcategory					
Endocrinology	mortality effects (vs. year 1)	estimable	G2: 0.1 [1.5] (0.1,3.5) G3: 0.2 [3.1] (0.2,7) G4: 0.5 [2.5] (0.4,5.5) G5: 0.3 [0.6] (0.2,1.8)	G2: 0.1 [1.3] (0.1,3) G3: 0.3 [0.9] (0.2,1.8) G4: 0.5 [2.3] (0.4,5) G5: 0.1 [0.4] (0.1,1.8)	G2: 0 [1.2] (0.1,2.6) G3: 0.3 [0.9] (0.2,1.9) G4: 0.5 [0.8] (0.3,1.4) G5: 0.6 [0.9] (0.4,1.8)	G2: 0.9 [16.7] (1,37.6) G3: 1.8 [6.8] (1.3,14.6) G4: 4.1 [6.3] (2.8,10.7) G5: 1.8 [2.4] (1.2,4.8)
	surrogacy (vs. same year)	G2: 1 [2.5] (0.7,5) G3: 1.2 [1.9] (0.8,3.4) G4: 0.6 [3.6] (0.5,8.1) G5: 1.1 [1.6] (0.7,3.4)	G2: 1 [2.5] (0.7,4.9) G3: 0.5 [2.6] (0.4,5.8) G4: 0.6 [3.6] (0.5,8.1) G5: 0.8 [1.3] (0.5,3.2)	G2: 1.1 [2.5] (0.7,5) G3: 0.5 [2.6] (0.4,5.8) G4: 0.6 [3.6] (0.5,8.1) G5: 1.4 [2] (0.9,4.1)	G2: 1 [2.5] (0.7,5) G3: 0.5 [2.9] (0.4,6.4) G4: 0.5 [3.6] (0.5,8) G5: 1.8 [2.3] (1.2,4.3)	--
Others with mortality	mortality effects (vs. year 1)	estimable	G2: 0.5 [1.1] (0.3,2) G3: 0.4 [0.8] (0.3,1.5) G4: 0.5 [4.8] (0.5,10.8) G5: 0.7 [1.1] (0.5,2.3)	G2: 0.2 [0.9] (0.2,1.9) G3: 0.2 [0.6] (0.1,1.2) G4: 0.9 [1.4] (0.6,2.5) G5: 0.4 [0.6] (0.3,1.4)	G2: 0.2 [0.8] (0.1,1.7) G3: 0.1 [0.9] (0.1,2) G4: 0.6 [1.8] (0.4,3.7) G5: 0.4 [0.6] (0.2,1.3)	G2: 1.3 [18.7] (1.4,42.4) G3: 1.7 [4.7] (1.2,9.6) G4: 5.7 [8.7] (3.9,14.9) G5: 1.1 [1.7] (0.7,4.1)
	surrogacy (vs. same year)	G2: 0.7 [2.1] (0.5,4.4) G3: 0.6 [1.2] (0.4,2.3) G4: 0.6 [4.8] (0.5,10.9) G5: 0.2 [0.5] (0.1,1.6)	G2: 0.7 [2] (0.5,4.2) G3: 0.3 [2.3] (0.3,5.1) G4: 0.5 [5.2] (0.5,11.8) G5: 0.6 [1.1] (0.4,3.1)	G2: 0.6 [2] (0.4,4.1) G3: 0.3 [2.3] (0.3,5.2) G4: 0.5 [2.8] (0.4,6.3) G5: 0.5 [0.6] (0.3,1.3)	G2: 0.6 [1.9] (0.4,4) G3: 0.3 [2.3] (0.3,5.3) G4: 0.5 [1.1] (0.4,2.1) G5: 0.2 [0.4] (0.2,0.9)	--
Mental Health	Extrapolation (vs. same year)	G2: 1.7 [3.6] (1.1,6.8) G3: 0.6 [3.5] (0.5,7.8) G4: 0.9 [5.1] (0.7,11.4) G5: 0.9 [2.1] (0.6,6.9)	G2: 1.4 [3.5] (0.9,7) G3: 0.7 [4.1] (0.5,9.1) G4: 1.2 [2.4] (0.8,4.6) G5: 0.7 [1.5] (0.5,4.7)	G2: 1.3 [3.1] (0.9,6.2) G3: 0.5 [3.3] (0.4,7.4) G4: 0.7 [3.3] (0.5,7.3) G5: 0.6 [1.1] (0.4,3.1)	G2: 1.1 [3.3] (0.8,6.7) G3: 0.5 [3.3] (0.4,7.4) G4: 1 [1.7] (0.7,2.9) G5: 0.4 [0.7] (0.3,1.8)	--
Musculoskeletal		G2: 1.6 [4] (1.1,7.9) G3: 0.7 [3.1] (0.5,6.7) G4: 1.5 [4.4] (1.1,9) G5: 1 [3.2] (0.8,12.7)	G2: 1.3 [3.4] (0.9,6.9) G3: 1.2 [2.1] (0.8,3.7) G4: 1.4 [3.6] (1,7.2) G5: 0.6 [1.7] (0.4,6.5)	G2: 1 [3.1] (0.7,6.4) G3: 1.2 [2] (0.8,3.6) G4: 1.2 [2.7] (0.8,5.3) G5: 0.2 [0.8] (0.2,4.3)	G2: 0.8 [3] (0.6,6.3) G3: 1.2 [2] (0.8,3.6) G4: 0.9 [2] (0.6,4) G5: 0.1 [0.5] (0.1,3.1)	--
Others without mortality		G2: 1.1 [3.4] (0.7,7.1) G3: 0.7 [1.5] (0.5,2.9) G4: 1 [5.4] (0.8,11.9) G5: 0.4 [2.4] (0.4,12.6)	G2: 0.9 [2.9] (0.6,6.1) G3: 0.9 [1.6] (0.6,2.9) G4: 1.4 [2.6] (0.9,4.9) G5: 0.1 [0.5] (0.1,3.1)	G2: 0.7 [2.7] (0.5,5.7) G3: 0.9 [1.6] (0.6,2.9) G4: 0.8 [3.4] (0.6,7.5) G5: 0 [0.2] (0,10.4)	G2: 0.6 [2.6] (0.4,5.8) G3: 0.9 [1.8] (0.6,3.6) G4: 1.1 [1.7] (0.7,3) G5: 0 [0.1] (0,7.1)	--

* beyond the year of increased expenditure

G2: Governmental Bodies (DH, NHSE, PHE) ; G3: Non Departmental Public Bodies and Independent Departmental Expert Committees (NICE, JCVI); G4: Industry-related bodies (ABPI) ; G5: Patient representative organisations; G6: Other

2.4 Sensitivity analyses to the choice of distribution, primary analysis

Table 2.4: Quality of fit illustrated for duration of mortality effects in circulatory disease (question A1, circulatory)

Exp	Expert's values	Lognormal			Gamma		
		Fit LB	fit UB	pool of fits	Fit LB	fit UB	pool of fits
		Mode (LB,UB)	Mode (LB,UB)	Mode (LB,UB) [Mean]	Mode (LB,UB)	Mode (LB,UB)	Mode (LB,UB) [Mean]
1	3 (2,6)	3 [2,12.4]	3 [2.1,6]	3.4 [2.3,11.5]	3 [2,5]	3 [1.8,6]	3 [1.9,5.5]
2	6 (2,10)	5.1 [3.4,17.4]	6 [4.4,10]	6.2 [4.1,16.3]	5.5 [2.9,20.1]	6 [4,10]	4.9 [2.6,16.3]
3	5 (2,10)	4.4 [2.9,15.1]	5 [3.5,10]	5.6 [3.8,14.5]	4.7 [2.5,17.3]	5 [3,10]	4.3 [2.3,14.3]
4	6 (1,12)	4.6 [3.1,15.9]	6 [4.2,12]	6.5 [4.4,15.8]	5.1 [2.7,18.4]	6 [3.6,12]	5.2 [2.8,15.7]
5	7 (3,12)	6.2 [4.1,21.4]	7 [5.1,12]	7.4 [4.9,19.9]	6.7 [3.6,24.3]	7 [4.6,12]	5.8 [3.1,19.6]
6	10 (2,12)	7.9 [5.2,27]	10 [8.6,12]	9 [6,24.5]	8.6 [4.6,31.6]	10 [8.4,12]	7.7 [4.1,24.9]
7	5 (3,10)	4.9 [3.2,16.6]	5 [3.5,10]	5.8 [3.9,15.6]	5 [3,10.2]	5 [3,10]	5 [3,10.1]
8	10 (5,25)	9.2 [6.1,31.7]	10 [6.7,25]	12.6 [8.5,32.2]	9.9 [5.3,34.8]	10 [5.6,25]	9.5 [5.1,30.5]
9	3 (2,10)	3 [2,12.4]	3 [2,10]	4.6 [3,13.2]	3 [2,5]	3 [1.6,10]	2.6 [1.4,8.1]
10	3 (0,10)	2.1 [1.4,7.2]	3 [2,10]	3.6 [2.4,10]	2.2 [1.3,4.9]	3 [1.6,10]	2 [1.1,8]
11	1 (0,2)	0.7 [0.5,2.4]	1 [0.7,2]	1.1 [0.7,2.5]	0.8 [0.4,2.8]	1 [0.6,2]	0.9 [0.5,2.5]
12	3 (0.5,5)	2.3 [1.5,7.9]	3 [2.2,5]	3 [2,7.5]	2.5 [1.4,9.3]	3 [2,5]	2.5 [1.3,7.6]
13	3 (1,10)	2.5 [1.7,8.7]	3 [2,10]	4 [2.7,10.7]	2.8 [1.5,10.1]	3 [1.6,10]	2.9 [1.5,10]
14	20 (10,40)	18.5 [12.3,63.4]	20 [14,40]	22.8 [15.3,60.3]	19.8 [10.5,70.9]	20 [12.2,40]	17.5 [9.3,58.4]
15	5 (2,10)	4.4 [2.9,15.1]	5 [3.5,10]	5.6 [3.8,14.5]	4.7 [2.5,17.3]	5 [3,10]	4.3 [2.3,14.3]
16	2 (1,5)	1.8 [1.2,6.3]	2 [1.3,5]	2.5 [1.7,6.4]	2 [1,7.1]	2 [1.1,5]	1.9 [1,6.2]
17	10 (1,20)	7.4 [4.9,25.4]	10 [7,20]	10.7 [7.3,25.6]	8.2 [4.4,30]	10 [6.1,20]	8.7 [4.7,25.7]
18	5 (3,10)	4.9 [3.2,16.6]	5 [3.5,10]	5.8 [3.9,15.6]	5 [3,10.2]	5 [3,10]	5 [3,10.1]
19	15 (10,30)	15 [10,62.1]	15 [10.5,30]	17.1 [11.3,57.4]	15 [10,25.1]	15 [9.1,30]	14.9 [9.4,27.8]
20	1 (0.5,3)	0.9 [0.6,3.2]	1 [0.7,3]	1.4 [0.9,3.5]	0.9 [0.5,3.7]	1 [0.5,3]	0.9 [0.5,3.4]
21	5 (1,10)	3.9 [2.6,13.5]	5 [3.5,10]	5.5 [3.7,13.4]	4.3 [2.3,15.7]	5 [3,10]	4.4 [2.3,13.3]
22	15 (10,25)	15 [10,62.1]	15 [11,25]	15.5 [10.3,56]	15 [10,25.1]	15 [10,25]	15 [10,25.1]
23	15 (5,20)	12.7 [8.4,43.6]	15 [12.1,20]	14.1 [9.4,39.5]	13.8 [7.3,50.1]	15 [11.7,20]	11.7 [6.2,39.5]
24	2 (0.1,2.5)	1.4 [1,4.9]	2 [1.7,2.5]	1.8 [1.2,4.5]	1.6 [0.9,5.8]	2 [1.6,2.5]	1.5 [0.8,4.7]
25	5 (2,10)	4.4 [2.9,15.1]	5 [3.5,10]	5.6 [3.8,14.5]	4.7 [2.5,17.3]	5 [3,10]	4.3 [2.3,14.3]
26	3 (1,10)	2.5 [1.7,8.7]	3 [2,10]	4 [2.7,10.7]	2.8 [1.5,10.1]	3 [1.6,10]	2.9 [1.5,10]
27	10 (3,20)	8.3 [5.5,28.5]	10 [7,20]	11.1 [7.5,27.8]	9 [4.8,33]	10 [6.1,20]	8.7 [4.7,27.6]
28	2 (0.1,4)	1.4 [1,4.9]	2 [1.4,4]	2.1 [1.4,5]	1.6 [0.9,5.7]	2 [1.2,4]	1.7 [0.9,5]

Table 2.5: Duration of effects, surrogacy and extrapolation – all clinical experts, Gamma fit.

		year 1	year 2	year 3	year 4	Total additional duration (yrs)*
		Mode [Mean] (lower, upper bounds of the 80% credible interval)				
Circulatory	mortality effects (vs. year 1)	estimable	0 [1.2] (0.1,1.7)	0 [0.9] (0,1.1)	0 [0.6] (0,0.9)	8 [9.1] (4.8,11.7)
	surrogacy (vs. same year)	0.7 [1.7] (0.3,3.2)	0.6 [1.6] (0.4,3.3)	0.6 [1.6] (0.3,3)	0.5 [1.6] (0.2,2.7)	--
Respiratory	mortality effects (vs. year 1)	estimable	0 [1.1] (0,1.2)	0 [0.7] (0,0.8)	0 [0.6] (0,0.7)	5.3 [6.9] (1.1,4.2)
	surrogacy (vs. same year)	1.2 [2.1] (0.9,5.2)	1.2 [2.1] (0.8,5)	0.7 [1.8] (0.3,3.1)	0.7 [1.8] (0.3,2.9)	--
Gastrointestinal	mortality effects (vs. year 1)	estimable	0 [1.2] (0,1.2)	0 [0.9] (0,0.8)	0 [0.7] (0,0.5)	6.4 [7.9] (2,6.1)
	surrogacy (vs. same year)	1.3 [2.1] (1,5.6)	1.2 [2.1] (0.9,5.2)	1.1 [2.1] (0.6,4.2)	0.9 [2] (0.4,3.2)	--
Neurological	mortality effects (vs. year 1)	estimable	0 [1] (0,0.8)	0 [0.6] (0,0.4)	0 [0.6] (0,0.3)	2.8 [4.3] (0.7,3.4)
	surrogacy (vs. same year)	1.5 [2.5] (0.8,4.5)	1.3 [2.3] (0.6,4.1)	1.2 [2.3] (0.5,3.7)	1.1 [2.3] (0.4,3.1)	--
Endocrinology	mortality effects (vs. year 1)	estimable	0 [1.1] (0,1.2)	0 [0.9] (0,0.9)	0 [0.6] (0,0.7)	6.2 [7.7] (1.8,5.8)
	surrogacy (vs. same year)	0.8 [3.4] (0.1,1.1)	0.6 [3.2] (0.1,1)	0.2 [3] (0,0.9)	0.3 [3.1] (0.1,0.9)	--
Others with mortality	mortality effects (vs. year 1)	estimable	0 [1.2] (0,1.2)	0 [0.8] (0,0.7)	0 [0.6] (0,0.3)	6.6 [8.1] (2.1,6.3)
	surrogacy (vs. same year)	0.5 [3.3] (0.1,0.9)	1.1 [3.9] (0.1,1.1)	2.1 [5.4] (0.1,1)	3.7 [7.5] (0.1,1)	--
Mental Health	Extrapolation (vs. same year)	1.5 [2.8] (0.5,3.3)	1.3 [2.6] (0.4,2.8)	1.1 [2.5] (0.3,2.5)	1.1 [2.6] (0.3,2.5)	
Musculoskeletal		1.8 [3] (0.6,3.6)	1.6 [2.8] (0.5,3.3)	1.2 [2.6] (0.3,2.7)	1.1 [2.6] (0.3,2.5)	
Others without mortality		1.2 [2.3] (0.5,3.6)	1.1 [2.2] (0.4,3.4)	0.9 [2.1] (0.4,3.1)	0.8 [2] (0.3,2.6)	

* beyond the year of increased expenditure