

3Ts FBC**£millions****GEM, Tax Adjustment & Monetisation outputs combined**

Preferred	PFI Option (Partial)
-----------	-------------------------

NET PRESENT COST / (VALUE)

GEM NPC	17,669	17,649
Rank	2	1
Monetised Benefits (NPV)	-13,169	-12,828
Rank	1	2
TOTAL NPC / (NPV)	4,500	4,821
Rank	1	2

EQUIVALENT ANNUAL COST / (VALUE)

GEM EAC	642.0	636.4
Rank	2	1
PV of annuity factor (PVAF) *	27.52	27.73
Monetised Benefits (EAV) using underlying PV of annuity factors	-478.5	-462.6
Rank	1	2
TOTAL EAC / (EAV)	163.5	173.9
	1	2

* To calculate the EAC/EAV of the Monetised Benefits the output of the GEM (NPC/EAC) is used to ca

Tax Adjusted

Option Appraisal Measure	Preferred Option	PFI (Partial)
Risk Adjusted NPC	17,669	17,649
Rank	2	1
Monetised Benefits NPV	-13,169	-12,828
Rank	1	2
Total NPC / (NPV)	4,500	4,821
Rank	1	2
Equivalent Annual Cost	642.0	636.4
Rank	2	1
Monetised Benefits EAV	-478.5	-462.6
Rank	1	2
Total EAC / (EAV)	163.5	173.9
Rank	1	2

calculate a PVAF for each option

**3Ts FBC
GEM & Monetisation outputs combined**

£millions

Summary

Preferred	PFI Option (Partial)
-----------	-------------------------

NET PRESENT COST / (VALUE)

GEM NPC	17,637	17,649
Rank	1	2
Monetised Benefits (NPV)	-13,169	-12,828
Rank	1	2
TOTAL NPC / (NPV)	4,468	4,821
Rank	1	2

EQUIVALENT ANNUAL COST / (VALUE)

GEM EAC	640.9	636.4
Rank	2	1
PV of annuity factor (PVAF) *	27.52	27.73
Monetised Benefits (EAV) using underlying PV of annuity factors	-478.5	-462.6
Rank	1	2
TOTAL EAC / (EAV)	162.4	173.9
	1	2

* To calculate the EAC/EAV of the Monetised Benefits the output of the GEM (

Preferred Option

3Ts

Monetisation of Non Financial Benefits - NPV

OPTION : **INPUT OPTION NAME**

Discount Factors : - for benefits using crude mortality rates **1.50%**
 - for other benefits Year 0 to 30 **3.50%**
 - for other benefits Year 31 and thereafter **3.00%**

Assumptions / Points to note

- As per Generic Economic Model (GEM) cash inflows & Net Present Values are negative inputs & cash outflows & Net Present Costs are positive
 - Its recognised that some recurrent benefits that are repeated annually cannot grow perpetually eg those linked to extended life, and therefore all such benefits maximise after 10 years and any increase in year is offset by an equal and opposite value for reduction of benefit.

Ref	High Level Description of Benefit	TOTAL £000s	Mar-15 Year 0	Mar-16 1	Mar-17 2	Mar-18 3	Mar-19 4	Mar-20 5	Mar-21 6	Mar-22 7	Mar-23 8	Mar-24 9	Mar-25 10	Mar-26 11	Mar-27 12	Mar-28 13	Mar-29 14	Mar-30 15	Mar-31 16
Mortality benefits based on crude rate/assumed outcomes							STAGE 1			STAGE 2		STAGE 3							
C 1/2	Mortality rates for trauma & 3Ts specialties	-5,090,700						-300	-3,600	-7,200	-10,800	-14,400	-18,000	-21,600	-25,200	-28,800	-32,400	-36,000	-39,600
C 1/2	Improved long term outcomes - stroke	-5,260,390						-310	-3,720	-7,440	-11,160	-14,880	-18,600	-22,320	-26,040	-29,760	-33,480	-37,200	-40,920
C 1	Access to diagnostics 24/7	-3,563,490						-210	-2,520	-5,040	-7,560	-10,080	-12,600	-15,120	-17,640	-20,160	-22,680	-25,200	-27,720
C 1	Improved access and clinical outcomes - trauma	-4,411,940						-260	-3,120	-6,240	-9,360	-12,480	-15,600	-18,720	-21,840	-24,960	-28,080	-31,200	-34,320
C 1	Mortality rates for non 3Ts specialties	-4,242,250						-250	-3,000	-6,000	-9,000	-12,000	-15,000	-18,000	-21,000	-24,000	-27,000	-30,000	-33,000
		0																	
Totals		-22,568,770	0	0	0	0	0	-1,330	-15,960	-31,920	-47,880	-63,840	-79,800	-95,760	-111,720	-127,680	-143,640	-159,600	-175,560
NPC / (NPV)		-12,119,850	0	0	0	0	0	-1,235	-14,596	-28,761	-42,504	-55,834	-68,761	-81,294	-93,441	-105,212	-116,614	-127,656	-138,347
Discount factor			1.000	0.985	0.971	0.956	0.942	0.928	0.915	0.901	0.888	0.875	0.862	0.849	0.836	0.824	0.812	0.800	0.788
Other Benefits																			
I1	Repatriated Income Commissioner benefit	-49,480						-86	-344	-348	-407	-578	-584	-590	-596	-602	-608	-614	-620
S1	Local economy Construction benefit	-1,133,306			-172,689	-256,820	-238,174	-139,892	-74,405	-120,137	-109,891	-21,298							
S2	Patients travel benefit	-21,468						-28	-335	-335	-335	-335	-335	-335	-335	-335	-335	-335	-335
S3	Access to outside space	-76,900						-100	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200
BD3	Flexibility/adaptability of accommodation	-16,662						-22	-260	-260	-260	-260	-260	-260	-260	-260	-260	-260	-260
	Other smaller benefits not captured in above	-63,763						-83	-995	-995	-995	-995	-995	-995	-995	-995	-995	-995	-995
		0																	
Totals		-1,361,578	0	0	-172,689	-256,820	-238,174	-140,211	-77,539	-123,274	-113,088	-24,667	-3,374	-3,380	-3,386	-3,392	-3,398	-3,404	-3,410
NPC / (NPV)		-1,048,905	0	0	-161,207	-231,637	-207,555	-118,054	-63,078	-96,893	-85,880	-18,099	-2,392	-2,315	-2,241	-2,169	-2,099	-2,032	-1,967
Discount factor			1.000	0.966	0.934	0.902	0.871	0.842	0.814	0.786	0.759	0.734	0.709	0.685	0.662	0.639	0.618	0.597	0.577
TOTAL CASHFLOWS		-23,930,348	0	0	-172,689	-256,820	-238,174	-141,541	-93,499	-155,194	-160,968	-88,507	-83,174	-99,140	-115,106	-131,072	-147,038	-163,004	-178,970
TOTAL (NET PRESENT VALUE) / NET PRESENT COST		-13,168,755	0	0	-161,207	-231,637	-207,555	-119,288	-77,674	-125,653	-128,384	-73,933	-71,153	-83,609	-95,682	-107,381	-118,713	-129,688	-140,313

Preferred Option

3Ts

Monetisation of Non Financial Benefits - NPV

OPTION : INPUT OPTION NAME

Discount Factors : - for benefits using crude mortality rates
 - for other benefits Year 0 to 30
 - for other benefits Year 31 and thereafter

Assumptions / Points to note

- As per Generic Economic Model (GEM) cash inflows & Net Present Values are
 - Its recognised that some recurrent benefits that are repeated annually cannot g

Ref	High Level Description of Benefit	TOTAL £000s	Mar-32 17	Mar-33 18	Mar-34 19	Mar-35 20	Mar-36 21	Mar-37 22	Mar-38 23	Mar-39 24	Mar-40 25	Mar-41 26	Mar-42 27	Mar-43 28	Mar-44 29	Mar-45 30	Mar-46 31	Mar-47 32	Mar-48 33
Mortality benefits based on crude rate/assumed outcomes																			
C 1/2	Mortality rates for trauma & 3Ts specialties	-5,090,700	-43,200	-46,800	-50,400	-54,000	-57,600	-61,200	-64,800	-68,400	-72,000	-75,600	-79,200	-82,800	-86,400	-90,000	-93,600	-97,200	-100,800
C 1/2	Improved long term outcomes - stroke	-5,260,390	-44,640	-48,360	-52,080	-55,800	-59,520	-63,240	-66,960	-70,680	-74,400	-78,120	-81,840	-85,560	-89,280	-93,000	-96,720	-100,440	-104,160
C 1	Access to diagnostics 24/7	-3,563,490	-30,240	-32,760	-35,280	-37,800	-40,320	-42,840	-45,360	-47,880	-50,400	-52,920	-55,440	-57,960	-60,480	-63,000	-65,520	-68,040	-70,560
C 1	Improved access and clinical outcomes - trauma	-4,411,940	-37,440	-40,560	-43,680	-46,800	-49,920	-53,040	-56,160	-59,280	-62,400	-65,520	-68,640	-71,760	-74,880	-78,000	-81,120	-84,240	-87,360
C 1	Mortality rates for non 3Ts specialties	-4,242,250	-36,000	-39,000	-42,000	-45,000	-48,000	-51,000	-54,000	-57,000	-60,000	-63,000	-66,000	-69,000	-72,000	-75,000	-78,000	-81,000	-84,000
		0																	
Totals		-22,568,770	-191,520	-207,480	-223,440	-239,400	-255,360	-271,320	-287,280	-303,240	-319,200	-335,160	-351,120	-367,080	-383,040	-399,000	-414,960	-430,920	-446,880
NPC / (NPV)		-12,119,850	-148,693	-158,704	-168,386	-177,747	-186,795	-195,537	-203,979	-212,130	-219,995	-227,581	-234,894	-241,942	-248,730	-255,265	-261,553	-267,598	-273,408
Discount factor			0.776	0.765	0.754	0.742	0.731	0.721	0.710	0.700	0.689	0.679	0.669	0.659	0.649	0.640	0.630	0.621	0.612
Other Benefits																			
I1	Repatriated Income Commissioner benefit	-49,480	-626	-633	-639	-645	-652	-658	-665	-672	-678	-685	-692	-699	-706	-713	-720	-727	-735
S1	Local economy Construction benefit	-1,133,306																	
S2	Patients travel benefit	-21,468	-335	-335	-335	-335	-335	-335	-335	-335	-335	-335	-335	-335	-335	-335	-335	-335	-335
S3	Access to outside space	-76,900	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200
BD3	Flexibility/adaptability of accommodation	-16,662	-260	-260	-260	-260	-260	-260	-260	-260	-260	-260	-260	-260	-260	-260	-260	-260	-260
	Other smaller benefits not captured in above	-63,763	-995	-995	-995	-995	-995	-995	-995	-995	-995	-995	-995	-995	-995	-995	-995	-995	-995
		0																	
Totals		-1,361,578	-3,416	-3,423	-3,429	-3,435	-3,442	-3,448	-3,455	-3,462	-3,468	-3,475	-3,482	-3,489	-3,496	-3,503	-3,510	-3,517	-3,525
NPC / (NPV)		-1,048,905	-1,904	-1,843	-1,784	-1,727	-1,671	-1,618	-1,566	-1,516	-1,468	-1,421	-1,375	-1,332	-1,289	-1,248	-1,214	-1,181	-1,149
Discount factor			0.557	0.538	0.520	0.503	0.486	0.469	0.453	0.438	0.423	0.409	0.395	0.382	0.369	0.356	0.346	0.336	0.326
TOTAL CASHFLOWS		-23,930,348	-194,936	-210,903	-226,869	-242,835	-258,802	-274,768	-290,735	-306,702	-322,668	-338,635	-354,602	-370,569	-386,536	-402,503	-418,470	-434,437	-450,405
TOTAL (NET PRESENT VALUE) / NET PRESENT COST		-13,168,755	-150,597	-160,546	-170,170	-179,474	-188,467	-197,155	-205,546	-213,646	-221,462	-229,001	-236,270	-243,274	-250,020	-256,513	-262,767	-268,779	-274,557

Preferred Option

**3Ts
Monetisation of Non Financial Benefits - NPV**

OPTION : INPUT OPTION NAME

Discount Factors : - for benefits using crude mortality rates
 - for other benefits Year 0 to 30
 - for other benefits Year 31 and thereafter

Assumptions / Points to note
 - As per Generic Economic Model (GEM) cash inflows & Net Present Values are
 - Its recognised that some recurrent benefits that are repeated annually cannot g

Ref	High Level Description of Benefit	TOTAL £000s	Mar-49 34	Mar-50 35	Mar-51 36	Mar-52 37	Mar-53 38	Mar-54 39	Mar-55 40	Mar-56 41	Mar-57 42	Mar-58 43	Mar-59 44	Mar-60 45	Mar-61 46	Mar-62 47	Mar-63 48	Mar-64 49	Mar-65 50
Mortality benefits based on crude rate/assumed outcomes																			
C 1/2	Mortality rates for trauma & 3Ts specialties	-5,090,700	-100,800	-100,800	-100,800	-100,800	-100,800	-100,800	-100,800	-100,800	-100,800	-100,800	-100,800	-100,800	-100,800	-100,800	-100,800	-100,800	-100,800
C 1/2	Improved long term outcomes - stroke	-5,260,390	-104,160	-104,160	-104,160	-104,160	-104,160	-104,160	-104,160	-104,160	-104,160	-104,160	-104,160	-104,160	-104,160	-104,160	-104,160	-104,160	-104,160
C 1	Access to diagnostics 24/7	-3,563,490	-70,560	-70,560	-70,560	-70,560	-70,560	-70,560	-70,560	-70,560	-70,560	-70,560	-70,560	-70,560	-70,560	-70,560	-70,560	-70,560	-70,560
C 1	Improved access and clinical outcomes - trauma	-4,411,940	-87,360	-87,360	-87,360	-87,360	-87,360	-87,360	-87,360	-87,360	-87,360	-87,360	-87,360	-87,360	-87,360	-87,360	-87,360	-87,360	-87,360
C 1	Mortality rates for non 3Ts specialties	-4,242,250	-84,000	-84,000	-84,000	-84,000	-84,000	-84,000	-84,000	-84,000	-84,000	-84,000	-84,000	-84,000	-84,000	-84,000	-84,000	-84,000	-84,000
		0																	
Totals		-22,568,770	-446,880	-446,880	-446,880	-446,880	-446,880	-446,880	-446,880	-446,880	-446,880	-446,880	-446,880	-446,880	-446,880	-446,880	-446,880	-446,880	-446,880
NPC / (NPV)		-12,119,850	-269,368	-265,387	-261,465	-257,601	-253,794	-250,043	-246,348	-242,707	-239,121	-235,587	-232,105	-228,675	-225,296	-221,966	-218,686	-215,454	-212,270
Discount factor			0.603	0.594	0.585	0.576	0.568	0.560	0.551	0.543	0.535	0.527	0.519	0.512	0.504	0.497	0.489	0.482	0.475
Other Benefits																			
I1	Repatriated Income Commissioner benefit	-49,480	-742	-749	-757	-764	-772	-780	-787	-795	-803	-811	-819	-828	-836	-844	-853	-861	-870
S1	Local economy Construction benefit	-1,133,306																	
S2	Patients travel benefit	-21,468	-335	-335	-335	-335	-335	-335	-335	-335	-335	-335	-335	-335	-335	-335	-335	-335	-335
S3	Access to outside space	-76,900	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200
BD3	Flexibility/adaptability of accommodation	-16,662	-260	-260	-260	-260	-260	-260	-260	-260	-260	-260	-260	-260	-260	-260	-260	-260	-260
	Other smaller benefits not captured in above	-63,763	-995	-995	-995	-995	-995	-995	-995	-995	-995	-995	-995	-995	-995	-995	-995	-995	-995
		0																	
Totals		-1,361,578	-3,532	-3,539	-3,547	-3,554	-3,562	-3,570	-3,577	-3,585	-3,593	-3,601	-3,609	-3,618	-3,626	-3,634	-3,643	-3,651	-3,660
NPC / (NPV)		-1,048,905	-1,118	-1,088	-1,058	-1,030	-1,002	-975	-948	-923	-898	-874	-850	-827	-805	-783	-762	-742	-722
Discount factor			0.317	0.307	0.298	0.290	0.281	0.273	0.265	0.257	0.250	0.243	0.236	0.229	0.222	0.216	0.209	0.203	0.197
TOTAL CASHFLOWS		-23,930,348	-450,412	-450,419	-450,427	-450,434	-450,442	-450,450	-450,457	-450,465	-450,473	-450,481	-450,489	-450,498	-450,506	-450,514	-450,523	-450,531	-450,540
TOTAL (NET PRESENT VALUE) / NET PRESENT COST		-13,168,755	-270,486	-266,475	-262,523	-258,631	-254,796	-251,018	-247,297	-243,630	-240,019	-236,461	-232,955	-229,502	-226,101	-222,750	-219,448	-216,196	-212,992

Preferred Option

3Ts

Monetisation of Non Financial Benefits - NPV

OPTION : INPUT OPTION NAME

Discount Factors : - for benefits using crude mortality rates
 - for other benefits Year 0 to 30
 - for other benefits Year 31 and thereafter

Assumptions / Points to note

- As per Generic Economic Model (GEM) cash inflows & Net Present Values are
 - Its recognised that some recurrent benefits that are repeated annually cannot g

Ref	High Level Description of Benefit	TOTAL £000s	Mar-66 51	Mar-67 52	Mar-68 53	Mar-69 54	Mar-70 55	Mar-71 56	Mar-72 57	Mar-73 58	Mar-74 59	Mar-75 60	Mar-76 61	Mar-77 62	Mar-78 63	Mar-79 64	Mar-80 65	Mar-81 66	Mar-82 67
Mortality benefits based on crude rate/assumed outcomes																			
C 1/2	Mortality rates for trauma & 3Ts specialties	-5,090,700	-100,800	-100,800	-100,800	-100,800	-100,800	-100,800	-100,800	-100,800	-100,800	-100,800	-100,800	-100,800	-100,800	-100,800	-100,800	-100,800	-100,800
C 1/2	Improved long term outcomes - stroke	-5,260,390	-104,160	-104,160	-104,160	-104,160	-104,160	-104,160	-104,160	-104,160	-104,160	-104,160	-104,160	-104,160	-104,160	-104,160	-104,160	-104,160	-104,160
C 1	Access to diagnostics 24/7	-3,563,490	-70,560	-70,560	-70,560	-70,560	-70,560	-70,560	-70,560	-70,560	-70,560	-70,560	-70,560	-70,560	-70,560	-70,560	-70,560	-70,560	-70,560
C 1	Improved access and clinical outcomes - trauma	-4,411,940	-87,360	-87,360	-87,360	-87,360	-87,360	-87,360	-87,360	-87,360	-87,360	-87,360	-87,360	-87,360	-87,360	-87,360	-87,360	-87,360	-87,360
C 1	Mortality rates for non 3Ts specialties	-4,242,250	-84,000	-84,000	-84,000	-84,000	-84,000	-84,000	-84,000	-84,000	-84,000	-84,000	-84,000	-84,000	-84,000	-84,000	-84,000	-84,000	-84,000
		0																	
Totals		-22,568,770	-446,880	-446,880	-446,880	-446,880	-446,880	-446,880	-446,880	-446,880	-446,880	-446,880	-446,880	-446,880	-446,880	-446,880	-446,880	-446,880	-446,880
NPC / (NPV)		-12,119,850	-209,133	-206,042	-202,997	-199,998	-197,042	-194,130	-191,261	-188,435	-185,650	-182,906	-180,203	-177,540	-174,916	-172,331	-169,785	-167,275	-164,803
Discount factor			0.468	0.461	0.454	0.448	0.441	0.434	0.428	0.422	0.415	0.409	0.403	0.397	0.391	0.386	0.380	0.374	0.369
Other Benefits																			
I1	Repatriated Income Commissioner benefit	-49,480	-879	-887	-896	-905	-914	-923	-933	-942	-951	-961	-971	-980	-990	-1,000	-1,010	-1,020	-1,030
S1	Local economy Construction benefit	-1,133,306																	
S2	Patients travel benefit	-21,468	-335	-335	-335	-335	-335	-335	-335	-335	-335	-335	-335	-335	-335	-335	-335	-335	-335
S3	Access to outside space	-76,900	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200
BD3	Flexibility/adaptability of accommodation	-16,662	-260	-260	-260	-260	-260	-260	-260	-260	-260	-260	-260	-260	-260	-260	-260	-260	-260
	Other smaller benefits not captured in above	-63,763	-995	-995	-995	-995	-995	-995	-995	-995	-995	-995	-995	-995	-995	-995	-995	-995	-995
		0																	
Totals		-1,361,578	-3,669	-3,677	-3,686	-3,695	-3,704	-3,713	-3,723	-3,732	-3,741	-3,751	-3,761	-3,770	-3,780	-3,790	-3,800	-3,810	-3,820
NPC / (NPV)		-1,048,905	-703	-684	-665	-648	-630	-613	-597	-581	-566	-551	-536	-522	-508	-494	-481	-468	-456
Discount factor			0.192	0.186	0.181	0.175	0.170	0.165	0.160	0.156	0.151	0.147	0.143	0.138	0.134	0.130	0.127	0.123	0.119
TOTAL CASHFLOWS		-23,930,348	-450,549	-450,557	-450,566	-450,575	-450,584	-450,593	-450,603	-450,612	-450,621	-450,631	-450,641	-450,650	-450,660	-450,670	-450,680	-450,690	-450,700
TOTAL (NET PRESENT VALUE) / NET PRESENT COST		-13,168,755	-209,836	-206,726	-203,663	-200,645	-197,672	-194,743	-191,858	-189,016	-186,215	-183,457	-180,739	-178,062	-175,424	-172,826	-170,266	-167,744	-165,259

3Ts

Monetisation of Non Financial Benefits - NPV

OPTION : **INPUT OPTION NAME**

Discount Factors : - for benefits using crude mortality rates
 - for other benefits Year 0 to 30
 - for other benefits Year 31 and thereafter

Assumptions / Points to note

- As per Generic Economic Model (GEM) cash inflows & Net Present Values are
 - Its recognised that some recurrent benefits that are repeated annually cannot g

Ref	High Level Description of Benefit	TOTAL £000s	Mar-83 68	Mar-84 69	Mar-85 70	Mar-86 71	Mar-87 72	Mar-88 73	Mar-89 74	Mar-90 75	Mar-91 76	Mar-92 77
Mortality benefits based on crude rate/assumed outcomes												
C 1/2	Mortality rates for trauma & 3Ts specialties	-5,090,700	-100,800	-100,800								
C 1/2	Improved long term outcomes - stroke	-5,260,390	-104,160	-104,160								
C 1	Access to diagnostics 24/7	-3,563,490	-70,560	-70,560								
C 1	Improved access and clinical outcomes - trauma	-4,411,940	-87,360	-87,360								
C 1	Mortality rates for non 3Ts specialties	-4,242,250	-84,000	-84,000								
		0										
Totals		-22,568,770	-446,880	-446,880	0	0	0	0	0	0	0	0
NPC / (NPV)		-12,119,850	-162,368	-159,968	0	0	0	0	0	0	0	0
Discount factor			0.363	0.358	0.353	0.347	0.342	0.337	0.332	0.327	0.323	0.318
Other Benefits												
I1	Repatriated Income Commissioner benefit	-49,480	-1,041	-1,051								
S1	Local economy Construction benefit	-1,133,306										
S2	Patients travel benefit	-21,468	-335	-335								
S3	Access to outside space	-76,900	-1,200	-1,200								
BD3	Flexibility/adaptability of accommodation	-16,662	-260	-260								
	Other smaller benefits not captured in above	-63,763	-995	-995								
		0										
Totals		-1,361,578	-3,831	-3,841	0	0	0	0	0	0	0	0
NPC / (NPV)		-1,048,905	-444	-432	0	0	0	0	0	0	0	0
Discount factor			0.116	0.112	0.109	0.106	0.103	0.100	0.097	0.094	0.091	0.089
TOTAL CASHFLOWS		-23,930,348	-450,711	-450,721	0	0	0	0	0	0	0	0
TOTAL (NET PRESENT VALUE) / NET PRESENT COST		-13,168,755	-162,812	-160,400	0	0	0	0	0	0	0	0

3Ts

Monetisation of Non Financial Benefits - NPV

OPTION : **PFI Option**

Discount Factors : - for benefits using crude mortality rates 1.50%
 - for other benefits Year 0 to 30 3.50%
 - for other benefits Year 31 and thereafter 3.00%

Assumptions / Points to note

- As per Generic Economic Model (GEM) cash inflows & Net Present Values are negative inputs & cash outflows & Net Present Costs are positive
 - Its recognised that some recurrent benefits that are repeated annually cannot grow perpetually eg those linked to extended life, and therefore all such benefits maximise after 10 years and any increase in year is offset by an equal and opposite value for reduction of benefit.

Ref	High Level Description of Benefit	TOTAL £000s	Mar-15 Year 0	Mar-16 1	Mar-17 2	Mar-18 3	Mar-19 4	Mar-20 5	Mar-21 6	Mar-22 7	Mar-23 8	Mar-24 9	Mar-25 10	Mar-26 11	Mar-27 12	Mar-28 13	Mar-29 14	Mar-30 15	Mar-31 16
Mortality benefits based on crude rate/assumed outcomes										STAGE 1		STAGE 2	STAGE 3						
C 1/2	Mortality rates for trauma & 3Ts specialties	-5,090,700								-300	-3,600	-7,200	-10,800	-14,400	-18,000	-21,600	-25,200	-28,800	-32,400
C 1/2	Improved long term outcomes - stroke	-5,260,390								-310	-3,720	-7,440	-11,160	-14,880	-18,600	-22,320	-26,040	-29,760	-33,480
C 1	Access to diagnostics 24/7	-3,563,490								-210	-2,520	-5,040	-7,560	-10,080	-12,600	-15,120	-17,640	-20,160	-22,680
C 1	Improved access and clinical outcomes - trauma	-4,411,940								-260	-3,120	-6,240	-9,360	-12,480	-15,600	-18,720	-21,840	-24,960	-28,080
C 1	Mortality rates for non 3Ts specialties	-4,242,250								-250	-3,000	-6,000	-9,000	-12,000	-15,000	-18,000	-21,000	-24,000	-27,000
		0								0	0	0	0	0	0	0	0	0	0
Totals		-22,568,770	0	0	0	0	0	0	0	-1,330	-15,960	-31,920	-47,880	-63,840	-79,800	-95,760	-111,720	-127,680	-143,640
NPC / (NPV)		-11,764,275	0	0	0	0	0	0	0	-1,198	-14,168	-27,917	-41,257	-54,196	-66,744	-78,909	-90,700	-102,125	-113,193
Discount factor			1.000	0.985	0.971	0.956	0.942	0.928	0.915	0.901	0.888	0.875	0.862	0.849	0.836	0.824	0.812	0.800	0.788
Other Benefits																			
I1	Repatriated Income Commissioner benefit	-49,480							0	-86	-344	-348	-407	-578	-584	-590	-596	-602	-608
S1	Local economy Construction benefit	-1,232,043				-19,597	-197,920	-284,693	-255,308	-147,149	-76,861	-121,016	-106,936	-22,562	0				
S2	Patients travel benefit	-21,468							0	-28	-335	-335	-335	-335	-335	-335	-335	-335	-335
S3	Access to outside space	-76,900							0	-100	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200
BD3	Flexibility/adaptability of accommodation	-16,662							0	-22	-260	-260	-260	-260	-260	-260	-260	-260	-260
	Other smaller benefits not captured in above	-63,763							0	-83	-995	-995	-995	-995	-995	-995	-995	-995	-995
		0																	
Totals		-1,460,315	0	0	0	-19,597	-197,920	-284,693	-255,308	-147,468	-79,996	-124,154	-110,133	-25,931	-3,374	-3,380	-3,386	-3,392	-3,398
NPC / (NPV)		-1,063,505	0	0	0	-17,675	-172,476	-239,704	-207,693	-115,908	-60,750	-91,096	-78,075	-17,761	-2,233	-2,161	-2,092	-2,025	-1,960
Discount factor			1.000	0.966	0.934	0.902	0.871	0.842	0.814	0.786	0.759	0.734	0.709	0.685	0.662	0.639	0.618	0.597	0.577
TOTAL CASHFLOWS		-24,029,085	0	0	0	-19,597	-197,920	-284,693	-255,308	-148,798	-95,956	-156,074	-158,013	-89,771	-83,174	-99,140	-115,106	-131,072	-147,038
TOTAL (NET PRESENT VALUE) / NET PRESENT COST		-12,827,779	0	0	0	-17,675	-172,476	-239,704	-207,693	-117,107	-74,918	-119,013	-119,332	-71,957	-68,977	-81,070	-92,792	-104,150	-115,152

3Ts

Monetisation of Non Financial Benefits - NPV

OPTION : **PFI Option**

Discount Factors : - for benefits using crude mortality rates
 - for other benefits Year 0 to 30
 - for other benefits Year 31 and thereafter

Assumptions / Points to note

- As per Generic Economic Model (GEM) cash inflows & Net Present Values are
 - Its recognised that some recurrent benefits that are repeated annually cannot g

Ref	High Level Description of Benefit	TOTAL £000s	Mar-32 17	Mar-33 18	Mar-34 19	Mar-35 20	Mar-36 21	Mar-37 22	Mar-38 23	Mar-39 24	Mar-40 25	Mar-41 26	Mar-42 27	Mar-43 28	Mar-44 29	Mar-45 30	Mar-46 31	Mar-47 32	Mar-48 33
Mortality benefits based on crude rate/assumed outcomes																			
C 1/2	Mortality rates for trauma & 3Ts specialties	-5,090,700	-36,000	-39,600	-43,200	-46,800	-50,400	-54,000	-57,600	-61,200	-64,800	-68,400	-72,000	-75,600	-79,200	-82,800	-86,400	-90,000	-93,600
C 1/2	Improved long term outcomes - stroke	-5,260,390	-37,200	-40,920	-44,640	-48,360	-52,080	-55,800	-59,520	-63,240	-66,960	-70,680	-74,400	-78,120	-81,840	-85,560	-89,280	-93,000	-96,720
C 1	Access to diagnostics 24/7	-3,563,490	-25,200	-27,720	-30,240	-32,760	-35,280	-37,800	-40,320	-42,840	-45,360	-47,880	-50,400	-52,920	-55,440	-57,960	-60,480	-63,000	-65,520
C 1	Improved access and clinical outcomes - trauma	-4,411,940	-31,200	-34,320	-37,440	-40,560	-43,680	-46,800	-49,920	-53,040	-56,160	-59,280	-62,400	-65,520	-68,640	-71,760	-74,880	-78,000	-81,120
C 1	Mortality rates for non 3Ts specialties	-4,242,250	-30,000	-33,000	-36,000	-39,000	-42,000	-45,000	-48,000	-51,000	-54,000	-57,000	-60,000	-63,000	-66,000	-69,000	-72,000	-75,000	-78,000
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals		-22,568,770	-159,600	-175,560	-191,520	-207,480	-223,440	-239,400	-255,360	-271,320	-287,280	-303,240	-319,200	-335,160	-351,120	-367,080	-383,040	-399,000	-414,960
NPC / (NPV)		-11,764,275	-123,911	-134,288	-144,331	-154,048	-163,446	-172,533	-181,315	-189,800	-197,995	-205,906	-213,540	-220,904	-228,003	-234,844	-241,433	-247,776	-253,879
Discount factor			0.776	0.765	0.754	0.742	0.731	0.721	0.710	0.700	0.689	0.679	0.669	0.659	0.649	0.640	0.630	0.621	0.612
Other Benefits																			
I1	Repatriated Income Commissioner benefit	-49,480	-614	-620	-626	-633	-639	-645	-652	-658	-665	-672	-678	-685	-692	-699	-706	-713	-720
S1	Local economy Construction benefit	-1,232,043																	
S2	Patients travel benefit	-21,468	-335	-335	-335	-335	-335	-335	-335	-335	-335	-335	-335	-335	-335	-335	-335	-335	-335
S3	Access to outside space	-76,900	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200
BD3	Flexibility/adaptability of accommodation	-16,662	-260	-260	-260	-260	-260	-260	-260	-260	-260	-260	-260	-260	-260	-260	-260	-260	-260
	Other smaller benefits not captured in above	-63,763	-995	-995	-995	-995	-995	-995	-995	-995	-995	-995	-995	-995	-995	-995	-995	-995	-995
		0																	
Totals		-1,460,315	-3,404	-3,410	-3,416	-3,423	-3,429	-3,435	-3,442	-3,448	-3,455	-3,462	-3,468	-3,475	-3,482	-3,489	-3,496	-3,503	-3,510
NPC / (NPV)		-1,063,505	-1,897	-1,836	-1,777	-1,720	-1,665	-1,612	-1,560	-1,510	-1,462	-1,415	-1,370	-1,326	-1,284	-1,243	-1,209	-1,176	-1,144
Discount factor			0.557	0.538	0.520	0.503	0.486	0.469	0.453	0.438	0.423	0.409	0.395	0.382	0.369	0.356	0.346	0.336	0.326
TOTAL CASHFLOWS		-24,029,085	-163,004	-178,970	-194,936	-210,903	-226,869	-242,835	-258,802	-274,768	-290,735	-306,702	-322,668	-338,635	-354,602	-370,569	-386,536	-402,503	-418,470
TOTAL (NET PRESENT VALUE) / NET PRESENT COST		-12,827,779	-125,808	-136,124	-146,108	-155,768	-165,111	-174,144	-182,875	-191,310	-199,457	-207,321	-214,910	-222,230	-229,287	-236,087	-242,642	-248,953	-255,023

3Ts

Monetisation of Non Financial Benefits - NPV

OPTION : PFI Option

Discount Factors : - for benefits using crude mortality rates
- for other benefits Year 0 to 30
- for other benefits Year 31 and thereafter

Assumptions / Points to note

- As per Generic Economic Model (GEM) cash inflows & Net Present Values are
- Its recognised that some recurrent benefits that are repeated annually cannot g

Ref	High Level Description of Benefit	TOTAL £000s	Mar-49 34	Mar-50 35	Mar-51 36	Mar-52 37	Mar-53 38	Mar-54 39	Mar-55 40	Mar-56 41	Mar-57 42	Mar-58 43	Mar-59 44	Mar-60 45	Mar-61 46	Mar-62 47	Mar-63 48	Mar-64 49	Mar-65 50
Mortality benefits based on crude rate/assumed outcomes																			
C 1/2	Mortality rates for trauma & 3Ts specialties	-5,090,700	-97,200	-100,800	-100,800	-100,800	-100,800	-100,800	-100,800	-100,800	-100,800	-100,800	-100,800	-100,800	-100,800	-100,800	-100,800	-100,800	-100,800
C 1/2	Improved long term outcomes - stroke	-5,260,390	-100,440	-104,160	-104,160	-104,160	-104,160	-104,160	-104,160	-104,160	-104,160	-104,160	-104,160	-104,160	-104,160	-104,160	-104,160	-104,160	-104,160
C 1	Access to diagnostics 24/7	-3,563,490	-68,040	-70,560	-70,560	-70,560	-70,560	-70,560	-70,560	-70,560	-70,560	-70,560	-70,560	-70,560	-70,560	-70,560	-70,560	-70,560	-70,560
C 1	Improved access and clinical outcomes - trauma	-4,411,940	-84,240	-87,360	-87,360	-87,360	-87,360	-87,360	-87,360	-87,360	-87,360	-87,360	-87,360	-87,360	-87,360	-87,360	-87,360	-87,360	-87,360
C 1	Mortality rates for non 3Ts specialties	-4,242,250	-81,000	-84,000	-84,000	-84,000	-84,000	-84,000	-84,000	-84,000	-84,000	-84,000	-84,000	-84,000	-84,000	-84,000	-84,000	-84,000	-84,000
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals		-22,568,770	-430,920	-446,880	-446,880	-446,880	-446,880	-446,880	-446,880	-446,880	-446,880	-446,880	-446,880	-446,880	-446,880	-446,880	-446,880	-446,880	-446,880
NPC / (NPV)		-11,764,275	-259,747	-265,387	-261,465	-257,601	-253,794	-250,043	-246,348	-242,707	-239,121	-235,587	-232,105	-228,675	-225,296	-221,966	-218,686	-215,454	-212,270
Discount factor			0.603	0.594	0.585	0.576	0.568	0.560	0.551	0.543	0.535	0.527	0.519	0.512	0.504	0.497	0.489	0.482	0.475
Other Benefits																			
I1	Repatriated Income Commissioner benefit	-49,480	-727	-735	-742	-749	-757	-764	-772	-780	-787	-795	-803	-811	-819	-828	-836	-844	-853
S1	Local economy Construction benefit	-1,232,043																	
S2	Patients travel benefit	-21,468	-335	-335	-335	-335	-335	-335	-335	-335	-335	-335	-335	-335	-335	-335	-335	-335	-335
S3	Access to outside space	-76,900	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200
BD3	Flexibility/adaptability of accommodation	-16,662	-260	-260	-260	-260	-260	-260	-260	-260	-260	-260	-260	-260	-260	-260	-260	-260	-260
	Other smaller benefits not captured in above	-63,763	-995	-995	-995	-995	-995	-995	-995	-995	-995	-995	-995	-995	-995	-995	-995	-995	-995
		0																	
Totals		-1,460,315	-3,517	-3,525	-3,532	-3,539	-3,547	-3,554	-3,562	-3,570	-3,577	-3,585	-3,593	-3,601	-3,609	-3,618	-3,626	-3,634	-3,643
NPC / (NPV)		-1,063,505	-1,113	-1,083	-1,054	-1,025	-998	-971	-944	-919	-894	-870	-846	-824	-801	-780	-759	-738	-719
Discount factor			0.317	0.307	0.298	0.290	0.281	0.273	0.265	0.257	0.250	0.243	0.236	0.229	0.222	0.216	0.209	0.203	0.197
TOTAL CASHFLOWS		-24,029,085	-434,437	-450,405	-450,412	-450,419	-450,427	-450,434	-450,442	-450,450	-450,457	-450,465	-450,473	-450,481	-450,489	-450,498	-450,506	-450,514	-450,523
TOTAL (NET PRESENT VALUE) / NET PRESENT COST		-12,827,779	-260,861	-266,470	-262,519	-258,626	-254,792	-251,014	-247,292	-243,626	-240,015	-236,457	-232,952	-229,499	-226,097	-222,746	-219,445	-216,193	-212,989

3Ts

Monetisation of Non Financial Benefits - NPV

OPTION : **PFI Option**

Discount Factors : - for benefits using crude mortality rates
 - for other benefits Year 0 to 30
 - for other benefits Year 31 and thereafter

Assumptions / Points to note

- As per Generic Economic Model (GEM) cash inflows & Net Present Values are
 - Its recognised that some recurrent benefits that are repeated annually cannot g

Ref	High Level Description of Benefit	TOTAL £000s	Mar-66 51	Mar-67 52	Mar-68 53	Mar-69 54	Mar-70 55	Mar-71 56	Mar-72 57	Mar-73 58	Mar-74 59	Mar-75 60	Mar-76 61	Mar-77 62	Mar-78 63	Mar-79 64	Mar-80 65	Mar-81 66	Mar-82 67
Mortality benefits based on crude rate/assumed outcomes																			
C 1/2	Mortality rates for trauma & 3Ts specialties	-5,090,700	-100,800	-100,800	-100,800	-100,800	-100,800	-100,800	-100,800	-100,800	-100,800	-100,800	-100,800	-100,800	-100,800	-100,800	-100,800	-100,800	-100,800
C 1/2	Improved long term outcomes - stroke	-5,260,390	-104,160	-104,160	-104,160	-104,160	-104,160	-104,160	-104,160	-104,160	-104,160	-104,160	-104,160	-104,160	-104,160	-104,160	-104,160	-104,160	-104,160
C 1	Access to diagnostics 24/7	-3,563,490	-70,560	-70,560	-70,560	-70,560	-70,560	-70,560	-70,560	-70,560	-70,560	-70,560	-70,560	-70,560	-70,560	-70,560	-70,560	-70,560	-70,560
C 1	Improved access and clinical outcomes - trauma	-4,411,940	-87,360	-87,360	-87,360	-87,360	-87,360	-87,360	-87,360	-87,360	-87,360	-87,360	-87,360	-87,360	-87,360	-87,360	-87,360	-87,360	-87,360
C 1	Mortality rates for non 3Ts specialties	-4,242,250	-84,000	-84,000	-84,000	-84,000	-84,000	-84,000	-84,000	-84,000	-84,000	-84,000	-84,000	-84,000	-84,000	-84,000	-84,000	-84,000	-84,000
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals		-22,568,770	-446,880	-446,880	-446,880	-446,880	-446,880	-446,880	-446,880	-446,880	-446,880	-446,880	-446,880	-446,880	-446,880	-446,880	-446,880	-446,880	-446,880
NPC / (NPV)		-11,764,275	-209,133	-206,042	-202,997	-199,998	-197,042	-194,130	-191,261	-188,435	-185,650	-182,906	-180,203	-177,540	-174,916	-172,331	-169,785	-167,275	-164,803
Discount factor			0.468	0.461	0.454	0.448	0.441	0.434	0.428	0.422	0.415	0.409	0.403	0.397	0.391	0.386	0.380	0.374	0.369
Other Benefits																			
I1	Repatriated Income Commissioner benefit	-49,480	-861	-870	-879	-887	-896	-905	-914	-923	-933	-942	-951	-961	-971	-980	-990	-1,000	-1,010
S1	Local economy Construction benefit	-1,232,043																	
S2	Patients travel benefit	-21,468	-335	-335	-335	-335	-335	-335	-335	-335	-335	-335	-335	-335	-335	-335	-335	-335	-335
S3	Access to outside space	-76,900	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200	-1,200
BD3	Flexibility/adaptability of accommodation	-16,662	-260	-260	-260	-260	-260	-260	-260	-260	-260	-260	-260	-260	-260	-260	-260	-260	-260
	Other smaller benefits not captured in above	-63,763	-995	-995	-995	-995	-995	-995	-995	-995	-995	-995	-995	-995	-995	-995	-995	-995	-995
		0																	
Totals		-1,460,315	-3,651	-3,660	-3,669	-3,677	-3,686	-3,695	-3,704	-3,713	-3,723	-3,732	-3,741	-3,751	-3,761	-3,770	-3,780	-3,790	-3,800
NPC / (NPV)		-1,063,505	-699	-681	-662	-645	-627	-610	-594	-578	-563	-548	-533	-519	-505	-492	-479	-466	-454
Discount factor			0.192	0.186	0.181	0.175	0.170	0.165	0.160	0.156	0.151	0.147	0.143	0.138	0.134	0.130	0.127	0.123	0.119
TOTAL CASHFLOWS		-24,029,085	-450,531	-450,540	-450,549	-450,557	-450,566	-450,575	-450,584	-450,593	-450,603	-450,612	-450,621	-450,631	-450,641	-450,650	-450,660	-450,670	-450,680
TOTAL (NET PRESENT VALUE) / NET PRESENT COST		-12,827,779	-209,832	-206,723	-203,660	-200,642	-197,669	-194,740	-191,855	-189,013	-186,213	-183,454	-180,736	-178,059	-175,421	-172,823	-170,263	-167,741	-165,257

3Ts

Monetisation of Non Financial Benefits - NPV

OPTION : **PFI Option**

Discount Factors : - for benefits using crude mortality rates
 - for other benefits Year 0 to 30
 - for other benefits Year 31 and thereafter

Assumptions / Points to note

- As per Generic Economic Model (GEM) cash inflows & Net Present Values are
 - Its recognised that some recurrent benefits that are repeated annually cannot g

Ref	High Level Description of Benefit	TOTAL £000s	Mar-83 68	Mar-84 69	Mar-85 70	Mar-86 71	Mar-87 72	Mar-88 73	Mar-89 74	Mar-90 75	Mar-91 76	Mar-92 77
Mortality benefits based on crude rate/assumed outcomes												
C 1/2	Mortality rates for trauma & 3Ts specialties	-5,090,700	-100,800	-100,800	-100,800	-100,800						
C 1/2	Improved long term outcomes - stroke	-5,260,390	-104,160	-104,160	-104,160	-104,160						
C 1	Access to diagnostics 24/7	-3,563,490	-70,560	-70,560	-70,560	-70,560						
C 1	Improved access and clinical outcomes - trauma	-4,411,940	-87,360	-87,360	-87,360	-87,360						
C 1	Mortality rates for non 3Ts specialties	-4,242,250	-84,000	-84,000	-84,000	-84,000						
		0	0	0	0	0						
Totals		-22,568,770	-446,880	-446,880	-446,880	-446,880	0	0	0	0	0	0
NPC / (NPV)		-11,764,275	-162,368	-159,968	-157,604	-155,275	0	0	0	0	0	0
Discount factor			0.363	0.358	0.353	0.347	0.342	0.337	0.332	0.327	0.323	0.318
Other Benefits												
I1	Repatriated Income Commissioner benefit	-49,480	-1,020	-1,030	-1,041	-1,051						
S1	Local economy Construction benefit	-1,232,043										
S2	Patients travel benefit	-21,468	-335	-335	-335	-335						
S3	Access to outside space	-76,900	-1,200	-1,200	-1,200	-1,200						
BD3	Flexibility/adaptability of accommodation	-16,662	-260	-260	-260	-260						
	Other smaller benefits not captured in above	-63,763	-995	-995	-995	-995						
		0										
Totals		-1,460,315	-3,810	-3,820	-3,831	-3,841	0	0	0	0	0	0
NPC / (NPV)		-1,063,505	-441	-430	-418	-407	0	0	0	0	0	0
Discount factor			0.116	0.112	0.109	0.106	0.103	0.100	0.097	0.094	0.091	0.089
TOTAL CASHFLOWS		-24,029,085	-450,690	-450,700	-450,711	-450,721	0	0	0	0	0	0
TOTAL (NET PRESENT VALUE) / NET PRESENT COST		-12,827,779	-162,809	-160,398	-158,023	-155,682	0	0	0	0	0	0