

**UNIVERSITY OF BIRMINGHAM AND UNIVERSITY OF YORK
HEALTH ECONOMICS CONSORTIUM
(NICE EXTERNAL CONTRACTOR)**

Health economic report on piloted indicator(s)

Pilot QOF indicator: The percentage of patients with a new diagnosis of hypertension after 1 April 2012 whose diagnosis was confirmed following ambulatory blood pressure monitoring (ABPM).

Potential output: Recommendations for NICE Menu

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Introduction

This briefing paper presents a cost effectiveness analysis for a potential indicator from pilot 6 of the NICE Quality and Outcomes Framework (QOF) indicator development programme:

The percentage of patients with a new diagnosis of hypertension after 1 April 2012 whose diagnosis was confirmed following ambulatory blood pressure monitoring (ABPM).¹

The economic analysis is based on evidence of delivery costs and evidence of benefits expressed as quality-adjusted life years (QALYs). Additionally, the economic analysis takes account of potential QOF payments based on a range of available QOF points and a range of levels of achievement.

The possible range of QOF points for this analysis was agreed with the economic subgroup of the NICE QOF Advisory Committee prior to the analysis being undertaken.

A net benefit approach is used whereby an indicator is considered cost effective when net benefit is greater than zero for any given level of achievement and available QOF points:

$$\text{Net benefit} = \text{monetised benefit} - \text{delivery cost} - \text{QOF payment.}$$

For this indicator, the net benefit analysis is applied with a lifetime horizon at baseline.

The objective is to evaluate whether the proposed indicator represents a cost effective use of NHS resources. This report provides the QOF Advisory Committee with information on whether the indicator is economically justifiable, and will inform the Committee's decision making on recommendations about the indicator.

¹ At the NICE QOF Advisory Committee it was agreed that the wording of this indicator should change to "The percentage of patients with a new diagnosis of hypertension after 1 April 2014 whose diagnosis was confirmed following ambulatory blood pressure monitoring (ABPM) or home blood pressure monitoring (HBPM)". Analysis of the cost effectiveness of HBPM is not included in this report.

Economic Rationale for the Indicator

Patients with blood pressure persistently higher than 140/90mmHg are defined as being hypertensive, although patients may be wrongly diagnosed as hypertensive on the basis of a one-off reading. Above blood pressures of 115/70mmHG the risk of cardiovascular events doubles for every 20/10mmHG rise in blood pressure, as well as other poor health outcomes such as kidney disease and cognitive decline [1].

Pharmaceutical treatment to lower blood pressure in hypertensive patients has been found to be highly cost effective, based on the low cost of anti-hypertensive drugs and the high cost of associated treatments for health outcomes that they can avert. Any of the main classes of drugs to treat hypertension were found to be both cost saving and to be more effective (generating more QALYs), than no intervention [1].

Diagnosis of hypertension following an initial reading of 140/90 or above can be clinic-based (CBPM), home-based (HBPM) or ambulatory (ABPM). According to section 7.3 of the NICE guideline on the clinical management of primary hypertension in adults, ABPM has greater accuracy in terms of specificity and sensitivity than CBPM and HBPM and, as such, results in a greater percentage of truly hypertensive patients being identified and receiving (or not receiving inappropriate) treatment [1].

Summary of assumptions

- It is assumed that there is greater accuracy in diagnosis if people, who have an initial reading 140/90mmHg, have their diagnosis confirmed through ABPM;
- The indicator is designed to lower blood pressure and the use of ABPM results in a greater percentage of truly hypertensive patients being identified.

Evidence on Delivery Cost of the Indicator

A detailed cost model on the use of ABPM, CBPM or HBPM in diagnosing hypertension was designed in the development of the NICE guideline. These costs related to activity in a primary care setting and so are directly transferable to the costs that can be assumed to be incurred to deliver this indicator.

Based on the annual costs of equipment and nurse and GP consultation times, the cost of ABPM per diagnosis was £53.40, compared with £39.13 for HBPM and £38.00 for CBPM. The differential cost of ABPM over HBPM was therefore £14.27, and over CBPM it was £15.40.

After diagnosis, the modelling for NICE guideline development suggested that once a patient is taking hypertensive medication, cost savings from reduced treatment of cardiovascular events outweigh the costs of the medication. The modelling also considered the potential cost savings generated by the increased number of patients correctly identified as normotensive and not prescribed unnecessary medication and those patients correctly diagnosed as hypertensive and prescribed medication. For those scenarios, the modelling suggested the cost savings by ABPM over HBPM and CBPM outweighed the additional cost of ABPM over the two alternatives. The cost savings depended on the age and gender of the patient diagnosed, but varied between £16 and £323 per patient.

In the baseline analysis, a cautious approach has been adopted by taking the incremental saving through the use of ABPM to be the lowest of those found in the NICE model i.e. £16. In the analysis, should the indicator not be found to be cost effective at baseline using £16 per patient as the saving figure, then scenario analysis would be used to identify the incremental saving at which ABPM could be considered cost effective.

Baseline costs

- The baseline costs are based on the costing model for the NICE hypertension guideline;
- The costing model suggests that cost savings are generated by the use of hypertensive medication for those with hypertension and for those identified as normotensive who are not prescribed medication. ABPM is more cost saving than the alternatives and the most conservative saving figure was adopted.
- The incremental cost of providing ABPM at baseline is -£16 per patient (ie a saving of £16 per patient). This is the difference in cost between using ABPM and CBPM.

Evidence on the Benefits of the Indicator

In the NICE model, incremental lifetime QALY values were calculated for men and women at ages 40, 50, 60, 70 and 75, diagnosed using ABPM compared with CBPM or HBPM. QALY gains were seen for all patients diagnosed using ABPM, with the exception of males aged 40 and females aged 40 or 50. In these three patient groups there were slight QALY falls for people using ABPM compared to CBPM and HBPM because the lack of accuracy of CBPM and HBPM results in some patients without hypertension, who would have gone on to develop hypertension, being prescribed anti-hypertensive drugs and therefore gaining some benefit.

This finding is slightly counter-intuitive and arises in part because negative side effects from anti-hypertensive medication are ignored in the analysis.

Lifetime QALY gains for ABPM over CBPM, for all other age and gender groups, vary between 0.001 and 0.022, with the higher QALY gains being observed for older patients.

In cost effectiveness analysis of the pilot 5 indicators on hypertension, QALY gains estimated in models of hypertensive medication were assumed to have been overestimated, due to poor compliance with medication. The NICE guidelines on hypertension suggested compliance could be as low as 20%, so this was used as a cautious assumption. A similarly cautious assumption has been applied for this indicator. The assumption is, therefore, that the QALY gain is 0.004 at baseline (ie. just under 20% of the maximum QALY gain). This figure was subject to sensitivity analysis to the lower QALY gain identified, i.e. 0.001.

Baseline benefits

- The baseline benefits are based on the costing model for the NICE hypertension guideline;
- It was assumed that compliance with hypertensive medication was low (20%);
- The incremental lifetime baseline QALY gain of ABPM is 0.004.

Eligible Population

The eligible population is all patients who have not already been diagnosed with hypertension and who have an initial clinic blood pressure reading of 140/90 or higher. The NICE costing report for the hypertension guidance [2] provides an estimated incidence rate of suspected hypertension of 0.78% of people older than 18. According to the Office of National Statistics (ONS)² 78.8% of the population in England was over the age of 18 in 2010. Combining these two percentages provides an incidence rate of newly diagnosed hypertension in a practice population of 0.61%. This percentage was used at baseline and was tested with sensitivity analysis between values of 0.11% and 1.11% (ie +/- half a percentage point either way, or roughly 80% higher or lower than the baseline population).

² See <http://www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcm%3A77-231847>

Baseline Level of Achievement

The NICE hypertension guideline's costing report [2] used expert opinion to assess the extent to which ABPM is currently being used. The report suggested that 90% of diagnoses of hypertension were currently made using CBPM, with the remaining 10% split between ABPM and HBPM. As such we have assumed that baseline achievement is 5%. As data becomes available from the pilot sites we will adjust this accordingly.

Population

In the base case, the economic analysis was based on the total population registered with practices in England, that is 8,228 practices, with an average list size of 6,297 [3].

Table 1: Practice information for all UK countries, 2011

Country	Number of practices	Average list size
England	8,228	6,297
Scotland	1,014	5,122
Wales	488	6,146
Northern Ireland	357	5,011

QOF Payments

Each QOF point is assumed to result in a payment of £133.76. This is the average value per point in England during 2012/13 (source: Health and Social Care Information Centre).

Table 2: Value per point 2012/13

Country	Value per point
England	£133.76
Scotland	£130.46
Wales	£133.72
Northern Ireland	£125.04

Societal Value of a QALY

The expected increase in QALYs was costed at both £20,000 and £25,000 per QALY. This is based on the bottom and the middle of the range £20,000 - £30,000, below which NICE generally considers something to be cost effective. Applying a value per QALY gained (for example £20,000) provides the 'monetised benefit' component of the net benefit analysis.

QOF Points

The economic analysis considers the cost-effectiveness of incentivising the proposed activity over a range of QOF points.

In the base case analysis, 20 points were allocated to the proposed indicator. This takes into account that 20 and 56 points were allocated to other hypertension indicators (BP4 and BP5). It also reflects the fact that practices that have not purchased the ABPM equipment may require a financial incentive to do so.

Sensitivity analysis was carried out between the agreed lower and upper bounds of 10 and 30 points (i.e. the range evaluated).

Thresholds

The minimum payment threshold is set to 40% achievement, and the incentivised payments increase linearly up to the maximum threshold of 90% achievement.

Results (assuming a value per QALY of £20,000)

Under the baseline assumptions of incremental delivery cost (-£16), incremental benefit (0.004 QALYs with a value of £20,000 per QALY) and eligible population (0.61%) the net benefit analysis suggests that the indicator is cost effective at the baseline of 20 points, although not to the upper bound of 30 points (Appendix A).

Under our conservative assumptions, the increase in quality of life offered by ABPM to confirm hypertension outweighs the increases in costs in a net benefit analysis if the value per QALY is assumed to be £20,000.

The indicator ceases to be justifiable at baseline on economic grounds at 23.4 points or when the value per QALY falls to £16,484.

Findings are sensitive to a 100% increase in cost and are also sensitive to changes in the eligible population (Appendices B&C) and reductions in the assumed QALY gains (Appendix D). The indicator would no longer be justifiable on economic grounds at even 10 points should the QALY gain be as low as 0.001.

For the indicator no longer to be cost effective at 20 points, a value per QALY of £20,000 and 90% achievement then:

- Cost savings per patient have to fall £14 to £2. This is equivalent to an increase of the actual delivery cost increment of ABPM over CBPM or HBPM (from £15.40 to approximately £27.40 per patient);
- The incremental benefit per patient would have to fall by 25% to 0.003 QALYs;
- The eligible population would have to fall 20% to 0.5%.

The economic analysis points to the baseline of 20 QOF points being appropriate for this indicator at a QALY value of £20,000. There is no economic justification to award points up to the upper threshold of 30 points in this scenario.

Results (assuming a value per QALY of £25,000)

Under the baseline assumptions of incremental delivery cost (-£16), incremental benefit (0.004 QALYs with a value of £25,000 per QALY) and eligible population (0.61%) the net benefit analysis suggests that the indicator is cost effective at the baseline of 20 points although not to the upper bound of 30 points (Appendix E).

Under our conservative assumptions, the increase in quality of life offered by ABPM to confirm hypertension outweighs the increases in costs in a net benefit analysis if the value per QALY is assumed to be £25,000.

The indicator ceases to be justifiable at baseline on economic grounds at 28.3 points or when the value per QALY falls to £16,484.

Findings are insensitive to a 100% increase in cost, but are sensitive to changes in the eligible population (Appendices F&G) and reductions in the assumed QALY gains (Appendix H)

For the indicator no longer to be cost effective at 20 points, a value per QALY of £25,000 and 90% achievement then:

- Cost savings per patient have to fall £34 to a positive cost of £18. This is equivalent to an increase of the actual delivery cost increment of ABPM over CBPM or HBPM (from £15.40 to approximately £47 per patient);
- The incremental benefit per patient would have to fall by 35% to 0.0025 QALYs;
- The eligible population would have to fall 30% to 0.43%.

The economic analysis points to the baseline of 20 QOF points being appropriate for this indicator at a QALY value of £20,000. There is no economic justification to award points up to the upper threshold of 30 points in this scenario.

Discussion

Under the conservative baseline assumptions it appears unambiguous that this indicator is cost effective at 20 points at £20,000 and £25,000 per QALY. Our assumptions were conservative in the potential cost savings, taking the lowest estimate of those suggested by NICE. We were also conservative in the potential QALY gains, because potential side effects from taking medication (as a result of having a confirmed diagnosis of hypertension) that provided no health benefit were not considered. We also assumed a very low level of compliance with medication and no benefit from partial compliance.

Taking the conservative nature of the analysis into account, it cannot be ignored that the findings were still relatively sensitive to the cost differential of ABPM. Similarly, at the lower estimate of QALY gains (found for younger people in the NICE model) the indicator was not cost effective at 20 points. Overall, our baseline analysis would point to there being sufficient evidence to recommend the indicator at 20 points but the economic rationale to award points greater than this is not sufficiently strong to recommend more than 20 points.

References

- [1] National Institute for Health and Clinical Excellence. CG127 Hypertension: The clinical management of primary hypertension in adults. 2011
- [2] National Institute for Health and Clinical Excellence. Hypertension: Costing report. 2011
- [3] General Practice Trends in the UK. Health and Social Care Information Centre. Published 22 March 2011.

Appendix A: Net Benefit Base Case Analysis (£20,000 QALY)

Pilot 6 - Diagnosis of hypertension with ABPM

Value per point achieved	£133.76	Societal value of a QALY	£20,000
Number of practices	8,228		
Mean practice population	6,297		
Minimum threshold	40%	Baseline achievement	
Maximum threshold	90%	Eligible population (mean % of practice population)	0.6%
		Baseline achievement (mean % of eligible patients)	5.0%
		Cost-effectiveness estimates	
		Incremental cost (£ per patient)	-£16
		Incremental effect (QALYs per patient)	0.004

Points: 10 12 14 16 18 20 22 24 26 28 30

National totals															
Expected Achieveme	QOF payments (£000s)											Change in treatment cost (£)	Change in QALYs		
	30%	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0			£0	£0
35%	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	-£1,517,047	379
40%	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	-£1,769,888	442
45%	£1,101	£1,321	£1,541	£1,761	£1,981	£2,201	£2,421	£2,641	£2,862	£3,082	£3,302	£3,522	£3,742	-£2,022,729	506
50%	£2,201	£2,641	£3,082	£3,522	£3,962	£4,402	£4,843	£5,283	£5,723	£6,163	£6,603	£7,043	£7,483	-£2,275,571	569
55%	£3,302	£3,962	£4,622	£5,283	£5,943	£6,603	£7,264	£7,924	£8,585	£9,245	£9,905	£10,566	£11,226	-£2,528,412	632
60%	£4,402	£5,283	£6,163	£7,044	£7,924	£8,805	£9,685	£10,566	£11,446	£12,326	£13,207	£14,087	£14,967	-£2,781,253	695
65%	£5,503	£6,603	£7,704	£8,805	£9,905	£11,006	£12,106	£13,207	£14,308	£15,408	£16,509	£17,609	£18,710	-£3,034,094	759
70%	£6,603	£7,924	£9,245	£10,566	£11,886	£13,207	£14,528	£15,848	£17,169	£18,490	£19,810	£21,131	£22,451	-£3,286,935	822
75%	£7,704	£9,245	£10,786	£12,326	£13,867	£15,408	£16,949	£18,490	£20,031	£21,571	£23,112	£24,653	£26,193	-£3,539,776	885
80%	£8,805	£10,566	£12,326	£14,087	£15,848	£17,609	£19,370	£21,131	£22,892	£24,653	£26,414	£28,175	£29,936	-£3,792,618	948
85%	£9,905	£11,886	£13,867	£15,848	£17,829	£19,810	£21,791	£23,772	£25,754	£27,735	£29,716	£31,697	£33,678	-£4,045,459	1011
90%	£11,006	£13,207	£15,408	£17,609	£19,810	£22,012	£24,213	£26,414	£28,615	£30,816	£33,017	£35,218	£37,419	-£4,298,300	1075
95%	£11,006	£13,207	£15,408	£17,609	£19,810	£22,012	£24,213	£26,414	£28,615	£30,816	£33,017	£35,218	£37,419	-£4,551,141	1138
100%	£11,006	£13,207	£15,408	£17,609	£19,810	£22,012	£24,213	£26,414	£28,615	£30,816	£33,017	£35,218	£37,419	-£4,803,982	1201

Net Benefit (£000s)															
30%	£7,585	£7,585	£7,585	£7,585	£7,585	£7,585	£7,585	£7,585	£7,585	£7,585	£7,585	£7,585	£7,585	£7,585	£7,585
35%	£9,102	£9,102	£9,102	£9,102	£9,102	£9,102	£9,102	£9,102	£9,102	£9,102	£9,102	£9,102	£9,102	£9,102	£9,102
40%	£10,619	£10,619	£10,619	£10,619	£10,619	£10,619	£10,619	£10,619	£10,619	£10,619	£10,619	£10,619	£10,619	£10,619	£10,619
45%	£11,036	£10,816	£10,596	£10,375	£10,155	£9,935	£9,715	£9,495	£9,275	£9,055	£8,835	£8,615	£8,395	£8,175	£7,955
50%	£11,452	£11,012	£10,572	£10,132	£9,692	£9,252	£8,812	£8,372	£7,932	£7,492	£7,052	£6,612	£6,172	£5,732	£5,292
55%	£11,869	£11,208	£10,548	£9,888	£9,227	£8,567	£7,907	£7,246	£6,586	£5,926	£5,265	£4,605	£3,945	£3,285	£2,625
60%	£12,285	£11,405	£10,524	£9,644	£8,763	£7,883	£7,002	£6,122	£5,242	£4,361	£3,481	£2,601	£1,721	£841	£1,696
65%	£12,702	£11,601	£10,501	£9,400	£8,299	£7,199	£6,098	£4,998	£3,897	£2,796	£1,696	£600	£490	£380	£270
70%	£13,118	£11,797	£10,477	£9,156	£7,835	£6,515	£5,194	£3,873	£2,553	£1,232	£100	£100	£100	£100	£100
75%	£13,535	£11,994	£10,453	£8,912	£7,371	£5,831	£4,290	£2,749	£1,208	£333	£100	£100	£100	£100	£100
80%	£13,951	£12,190	£10,429	£8,668	£6,907	£5,146	£3,386	£1,625	£100	£100	£100	£100	£100	£100	£100
85%	£14,368	£12,387	£10,405	£8,424	£6,443	£4,462	£2,481	£500	£100	£100	£100	£100	£100	£100	£100
90%	£14,784	£12,583	£10,382	£8,181	£5,979	£3,778	£1,577	£100	£100	£100	£100	£100	£100	£100	£100
95%	£16,301	£14,100	£11,899	£9,698	£7,496	£5,295	£3,094	£893	£100	£100	£100	£100	£100	£100	£100
100%	£17,818	£15,617	£13,416	£11,215	£9,014	£6,812	£4,611	£2,410	£209	£100	£100	£100	£100	£100	£100

Where the net benefit produces a non-negative outcome then it is **cost effective** for the NHS to adopt the indicator.

When this is the case, the cells are highlighted with a yellow background.

Appendix B: Net Benefit Analysis Assuming Eligible Population 0.1% (£20,000 QALY)

Pilot 6 - Diagnosis of hypertension with ABPM

Value per point achieved	£133.76	Societal value of a QALY	£20,000
Number of practices	8,228		
Mean practice population	6,297		
Minimum threshold	40%	Baseline achievement	
Maximum threshold	90%	Eligible population (mean % of practice population)	0.1%
		Baseline achievement (mean % of eligible patients)	5.0%
		Cost-effectiveness estimates	
		Incremental cost (£ per patient)	-£16
		Incremental effect (QALYs per patient)	0.004

Points: 10 12 14 16 18 20 22 24 26 28 30

National totals															
Expected Achievement	QOF payments (£000s)											Change in treatment cost (£)	Change in QALYs		
30%	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	-£207,247	52
35%	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	-£248,696	62
40%	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	-£290,146	73
45%	£1,101	£1,321	£1,541	£1,761	£1,981	£2,201	£2,421	£2,641	£2,862	£3,082	£3,302	£3,522	£3,742	-£331,595	83
50%	£2,201	£2,641	£3,082	£3,522	£3,962	£4,402	£4,843	£5,283	£5,723	£6,163	£6,603	£7,043	£7,483	-£373,044	93
55%	£3,302	£3,962	£4,622	£5,283	£5,943	£6,603	£7,264	£7,924	£8,585	£9,245	£9,905	£10,566	£11,226	-£414,494	104
60%	£4,402	£5,283	£6,163	£7,044	£7,924	£8,805	£9,685	£10,566	£11,446	£12,326	£13,207	£14,087	£14,967	-£455,943	114
65%	£5,503	£6,603	£7,704	£8,805	£9,905	£11,006	£12,106	£13,207	£14,308	£15,408	£16,509	£17,609	£18,710	-£497,392	124
70%	£6,603	£7,924	£9,245	£10,566	£11,886	£13,207	£14,528	£15,848	£17,169	£18,490	£19,810	£21,131	£22,451	-£538,842	135
75%	£7,704	£9,245	£10,786	£12,326	£13,867	£15,408	£16,949	£18,490	£20,031	£21,571	£23,112	£24,653	£26,193	-£580,291	145
80%	£8,805	£10,566	£12,326	£14,087	£15,848	£17,609	£19,370	£21,131	£22,892	£24,653	£26,414	£28,175	£29,936	-£621,741	155
85%	£9,905	£11,886	£13,867	£15,848	£17,829	£19,810	£21,791	£23,772	£25,754	£27,735	£29,716	£31,697	£33,678	-£663,190	166
90%	£11,006	£13,207	£15,408	£17,609	£19,810	£22,012	£24,213	£26,414	£28,615	£30,816	£33,017	£35,218	£37,419	-£704,639	176
95%	£11,006	£13,207	£15,408	£17,609	£19,810	£22,012	£24,213	£26,414	£28,615	£30,816	£33,017	£35,218	£37,419	-£746,089	187
100%	£11,006	£13,207	£15,408	£17,609	£19,810	£22,012	£24,213	£26,414	£28,615	£30,816	£33,017	£35,218	£37,419	-£787,538	197

Net Benefit (£000s)															
30%	£1,243	£1,243	£1,243	£1,243	£1,243	£1,243	£1,243	£1,243	£1,243	£1,243	£1,243	£1,243	£1,243		
35%	£1,492	£1,492	£1,492	£1,492	£1,492	£1,492	£1,492	£1,492	£1,492	£1,492	£1,492	£1,492	£1,492		
40%	£1,741	£1,741	£1,741	£1,741	£1,741	£1,741	£1,741	£1,741	£1,741	£1,741	£1,741	£1,741	£1,741		
45%	£889	£669	£449	£229	£9	£-212	£-432	£-652	£-872	£-1,092	£-1,312	£-1,532	£-1,752		
50%	£37	£-403	£-843	£-1,284	£-1,724	£-2,164	£-2,604	£-3,045	£-3,485	£-3,925	£-4,365	£-4,805	£-5,245		
55%	£-815	£-1,475	£-2,135	£-2,795	£-3,455	£-4,115	£-4,775	£-5,435	£-6,095	£-6,755	£-7,415	£-8,075	£-8,735		
60%	£-1,667	£-2,547	£-3,428	£-4,308	£-5,188	£-6,069	£-6,949	£-7,830	£-8,710	£-9,591	£-10,471	£-11,352	£-12,232		
65%	£-2,519	£-3,619	£-4,720	£-5,820	£-6,921	£-8,021	£-9,122	£-10,223	£-11,323	£-12,424	£-13,524	£-14,625	£-15,725		
70%	£-3,370	£-4,691	£-6,012	£-7,332	£-8,653	£-9,974	£-11,295	£-12,615	£-13,936	£-15,257	£-16,577	£-17,898	£-19,218		
75%	£-4,222	£-5,763	£-7,304	£-8,845	£-10,386	£-11,926	£-13,467	£-15,008	£-16,549	£-18,090	£-19,631	£-21,171	£-22,712		
80%	£-5,074	£-6,835	£-8,596	£-10,357	£-12,118	£-13,879	£-15,640	£-17,401	£-19,162	£-20,923	£-22,684	£-24,445	£-26,206		
85%	£-5,926	£-7,907	£-9,888	£-11,869	£-13,850	£-15,831	£-17,812	£-19,793	£-21,774	£-23,755	£-25,736	£-27,717	£-29,698		
90%	£-6,778	£-8,979	£-11,180	£-13,381	£-15,583	£-17,784	£-19,985	£-22,186	£-24,387	£-26,588	£-28,789	£-30,990	£-33,191		
95%	£-6,529	£-8,730	£-10,932	£-13,133	£-15,334	£-17,535	£-19,736	£-21,937	£-24,138	£-26,340	£-28,541	£-30,742	£-32,943		
100%	£-6,281	£-8,482	£-10,683	£-12,884	£-15,085	£-17,286	£-19,487	£-21,688	£-23,890	£-26,091	£-28,292	£-30,493	£-32,694		

Where the net benefit produces a non-negative outcome then it is **cost effective** for the NHS to adopt the indicator.

When this is the case, the cells are highlighted with a yellow background.

Appendix C: Net Benefit Analysis Assuming Eligible Population 1.1% (£20,000 QALY)

Pilot 6 - Diagnosis of hypertension with ABPM

Value per point achieved	£133.76	Societal value of a QALY	£20,000
Number of practices	8,228		
Mean practice population	6,297		
Minimum threshold	40%	Baseline achievement	
Maximum threshold	90%	Eligible population (mean % of practice population)	1.1%
		Baseline achievement (mean % of eligible patients)	5.0%
		Cost-effectiveness estimates	
		Incremental cost (£ per patient)	-£16
		Incremental effect (QALYs per patient)	0.004
Points	10 12 14 16 18 20 22 24 26 28 30		

National totals														
Expected Achievement	QOF payments (£000s)											Change in treatment cost (£)	Change in QALYs	
30%	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	-£2,279,716	570
35%	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	-£2,735,659	684
40%	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	-£3,191,602	798
45%	£1,101	£1,321	£1,541	£1,761	£1,981	£2,201	£2,421	£2,641	£2,862	£3,082	£3,302	£3,302	-£3,647,545	912
50%	£2,201	£2,641	£3,082	£3,522	£3,962	£4,402	£4,843	£5,283	£5,723	£6,163	£6,603	£6,603	-£4,103,488	1026
55%	£3,302	£3,962	£4,622	£5,283	£5,943	£6,603	£7,264	£7,924	£8,585	£9,245	£9,905	£9,905	-£4,559,431	1140
60%	£4,402	£5,283	£6,163	£7,044	£7,924	£8,805	£9,685	£10,566	£11,446	£12,326	£13,207	£13,207	-£5,015,374	1254
65%	£5,503	£6,603	£7,704	£8,805	£9,905	£11,006	£12,106	£13,207	£14,308	£15,408	£16,509	£16,509	-£5,471,317	1368
70%	£6,603	£7,924	£9,245	£10,566	£11,886	£13,207	£14,528	£15,848	£17,169	£18,490	£19,810	£19,810	-£5,927,260	1482
75%	£7,704	£9,245	£10,786	£12,326	£13,867	£15,408	£16,949	£18,490	£20,031	£21,571	£23,112	£23,112	-£6,383,203	1596
80%	£8,805	£10,566	£12,326	£14,087	£15,848	£17,609	£19,370	£21,131	£22,892	£24,653	£26,414	£26,414	-£6,839,147	1710
85%	£9,905	£11,886	£13,867	£15,848	£17,829	£19,810	£21,791	£23,772	£25,754	£27,735	£29,716	£29,716	-£7,295,090	1824
90%	£11,006	£13,207	£15,408	£17,609	£19,810	£22,012	£24,213	£26,414	£28,615	£30,816	£33,017	£33,017	-£7,751,033	1938
95%	£11,006	£13,207	£15,408	£17,609	£19,810	£22,012	£24,213	£26,414	£28,615	£30,816	£33,017	£33,017	-£8,206,976	2052
100%	£11,006	£13,207	£15,408	£17,609	£19,810	£22,012	£24,213	£26,414	£28,615	£30,816	£33,017	£33,017	-£8,662,919	2166

Net Benefit (£000s)														
30%	£13,678	£13,678	£13,678	£13,678	£13,678	£13,678	£13,678	£13,678	£13,678	£13,678	£13,678	£13,678	£13,678	£13,678
35%	£16,414	£16,414	£16,414	£16,414	£16,414	£16,414	£16,414	£16,414	£16,414	£16,414	£16,414	£16,414	£16,414	£16,414
40%	£19,150	£19,150	£19,150	£19,150	£19,150	£19,150	£19,150	£19,150	£19,150	£19,150	£19,150	£19,150	£19,150	£19,150
45%	£20,785	£20,565	£20,344	£20,124	£19,904	£19,684	£19,464	£19,244	£19,024	£18,804	£18,584	£18,364	£18,144	£17,924
50%	£22,420	£21,980	£21,539	£21,099	£20,659	£20,219	£19,778	£19,338	£18,898	£18,458	£18,017	£17,577	£17,137	£16,697
55%	£24,055	£23,395	£22,734	£22,074	£21,413	£20,753	£20,093	£19,432	£18,772	£18,112	£17,451	£16,791	£16,131	£15,471
60%	£25,690	£24,809	£23,929	£23,049	£22,168	£21,288	£20,407	£19,527	£18,646	£17,766	£16,885	£16,005	£15,125	£14,245
65%	£27,325	£26,224	£25,124	£24,023	£22,923	£21,822	£20,722	£19,621	£18,520	£17,420	£16,319	£15,219	£14,119	£13,019
70%	£28,960	£27,639	£26,319	£24,998	£23,677	£22,357	£21,036	£19,715	£18,395	£17,074	£15,753	£14,433	£13,113	£11,793
75%	£30,595	£29,054	£27,514	£25,973	£24,432	£22,891	£21,350	£19,810	£18,269	£16,728	£15,187	£13,646	£12,105	£10,565
80%	£32,230	£30,469	£28,708	£26,947	£25,187	£23,426	£21,665	£19,904	£18,143	£16,382	£14,621	£12,860	£11,100	£9,339
85%	£33,865	£31,884	£29,903	£27,922	£25,941	£23,960	£21,979	£19,998	£18,017	£16,036	£14,055	£12,074	£10,093	£8,113
90%	£35,500	£33,299	£31,098	£28,897	£26,696	£24,495	£22,293	£20,092	£17,891	£15,690	£13,489	£11,288	£9,087	£6,886
95%	£38,236	£36,035	£33,834	£31,633	£29,431	£27,230	£25,029	£22,828	£20,627	£18,426	£16,225	£14,024	£11,823	£9,622
100%	£40,972	£38,771	£36,569	£34,368	£32,167	£29,966	£27,765	£25,564	£23,363	£21,161	£18,960	£16,759	£14,558	£12,361

Where the net benefit produces a non-negative outcome then it is cost effective for the NHS to adopt the indicator.

When this is the case, the cells are highlighted with a yellow background.

Appendix D: Net Benefit Analysis Assuming QALY Gain of ABPM of 0.001 (£20,000 QALY)

Pilot 6 - Diagnosis of hypertension with ABPM

Value per point achieved	£133.76	Societal value of a QALY	£20,000
Number of practices	8,228		
Mean practice population	6,297		
Minimum threshold	40%	Baseline achievement	
Maximum threshold	90%	Eligible population (mean % of practice population)	0.6%
		Baseline achievement (mean % of eligible patients)	5.0%
		Cost-effectiveness estimates	
		Incremental cost (£ per patient)	-£16
		Incremental effect (QALYs per patient)	0.001



National totals														
Expected Achieveme	QOF payments (£000s)											Change in treatment cost (£)	Change in QALYs	
30%	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	-£1,264,206	79
35%	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	-£1,517,047	95
40%	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	-£1,769,888	111
45%	£1,101	£1,321	£1,541	£1,761	£1,981	£2,201	£2,421	£2,641	£2,862	£3,082	£3,302	£3,302	-£2,022,729	126
50%	£2,201	£2,641	£3,082	£3,522	£3,962	£4,402	£4,843	£5,283	£5,723	£6,163	£6,603	£6,603	-£2,275,571	142
55%	£3,302	£3,962	£4,622	£5,283	£5,943	£6,603	£7,264	£7,924	£8,585	£9,245	£9,905	£9,905	-£2,528,412	158
60%	£4,402	£5,283	£6,163	£7,044	£7,924	£8,805	£9,685	£10,566	£11,446	£12,326	£13,207	£13,207	-£2,781,253	174
65%	£5,503	£6,603	£7,704	£8,805	£9,905	£11,006	£12,106	£13,207	£14,308	£15,408	£16,509	£16,509	-£3,034,094	190
70%	£6,603	£7,924	£9,245	£10,566	£11,886	£13,207	£14,528	£15,848	£17,169	£18,490	£19,810	£19,810	-£3,286,935	205
75%	£7,704	£9,245	£10,786	£12,326	£13,867	£15,408	£16,949	£18,490	£20,031	£21,571	£23,112	£23,112	-£3,539,776	221
80%	£8,805	£10,566	£12,326	£14,087	£15,848	£17,609	£19,370	£21,131	£22,892	£24,653	£26,414	£26,414	-£3,792,618	237
85%	£9,905	£11,886	£13,867	£15,848	£17,829	£19,810	£21,791	£23,772	£25,754	£27,735	£29,716	£29,716	-£4,045,459	253
90%	£11,006	£13,207	£15,408	£17,609	£19,810	£22,012	£24,213	£26,414	£28,615	£30,816	£33,017	£33,017	-£4,298,300	269
95%	£11,006	£13,207	£15,408	£17,609	£19,810	£22,012	£24,213	£26,414	£28,615	£30,816	£33,017	£33,017	-£4,551,141	284
100%	£11,006	£13,207	£15,408	£17,609	£19,810	£22,012	£24,213	£26,414	£28,615	£30,816	£33,017	£33,017	-£4,803,982	300

Net Benefit (£000s)														
30%	£2,844	£2,844	£2,844	£2,844	£2,844	£2,844	£2,844	£2,844	£2,844	£2,844	£2,844	£2,844	£2,844	£2,844
35%	£3,413	£3,413	£3,413	£3,413	£3,413	£3,413	£3,413	£3,413	£3,413	£3,413	£3,413	£3,413	£3,413	£3,413
40%	£3,982	£3,982	£3,982	£3,982	£3,982	£3,982	£3,982	£3,982	£3,982	£3,982	£3,982	£3,982	£3,982	£3,982
45%	£3,451	£3,230	£3,010	£2,790	£2,570	£2,350	£2,130	£1,910	£1,690	£1,470	£1,249	£1,029	£808	£587
50%	£2,919	£2,479	£2,038	£1,598	£1,158	£718	£277	£-163	£-603	£-1,043	£-1,483	£-1,923	£-2,363	£-2,803
55%	£2,387	£1,727	£1,067	£406	£-254	£-895	£-1,575	£-2,235	£-2,895	£-3,555	£-4,215	£-4,875	£-5,535	£-6,195
60%	£1,856	£975	£95	£-786	£-1,666	£-2,547	£-3,427	£-4,308	£-5,188	£-6,069	£-6,949	£-7,830	£-8,710	£-9,590
65%	£1,324	£223	£-877	£-1,978	£-3,078	£-4,179	£-5,280	£-6,380	£-7,481	£-8,581	£-9,682	£-10,782	£-11,883	£-12,983
70%	£792	£-529	£-1,849	£-3,170	£-4,491	£-5,811	£-7,132	£-8,453	£-9,773	£-11,094	£-12,415	£-13,735	£-15,056	£-16,376
75%	£260	£-1,280	£-2,821	£-4,362	£-5,903	£-7,444	£-8,984	£-10,525	£-12,066	£-13,607	£-15,147	£-16,688	£-18,228	£-19,769
80%	£-271	£-2,032	£-3,793	£-5,554	£-7,315	£-9,076	£-10,837	£-12,598	£-14,359	£-16,120	£-17,880	£-19,641	£-21,401	£-23,162
85%	£-803	£-2,784	£-4,765	£-6,746	£-8,727	£-10,708	£-12,689	£-14,670	£-16,651	£-18,632	£-20,613	£-22,594	£-24,575	£-26,556
90%	£-1,335	£-3,536	£-5,737	£-7,938	£-10,139	£-12,340	£-14,542	£-16,743	£-18,944	£-21,145	£-23,346	£-25,547	£-27,748	£-29,949
95%	£-766	£-2,967	£-5,168	£-7,369	£-9,570	£-11,771	£-13,973	£-16,174	£-18,375	£-20,576	£-22,777	£-24,978	£-27,179	£-29,380
100%	£-197	£-2,398	£-4,599	£-6,800	£-9,001	£-11,203	£-13,404	£-15,605	£-17,806	£-20,007	£-22,208	£-24,409	£-26,610	£-28,811

Where the net benefit produces a non-negative outcome then it is cost effective for the NHS to adopt the indicator.

When this is the case, the cells are highlighted with a yellow background.

Appendix E: Net Benefit Base Case Analysis (£25,000 QALY)

Pilot 6 - Diagnosis of hypertension with ABPM

Value per point achieved	£133.76	Societal value of a QALY	£25,000
Number of practices	8,228		
Mean practice population	6,297		
Minimum threshold	40%	Baseline achievement	
Maximum threshold	90%	Eligible population (mean % of practice population)	0.6%
		Baseline achievement (mean % of eligible patients)	5.0%
		Cost-effectiveness estimates	
		Incremental cost (£ per patient)	-£16
		Incremental effect (QALYs per patient)	0.004

Points	10	12	14	16	18	20	22	24	26	28	30
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National totals														
Expected Achieveme	QOF payments (£000s)											Change in treatment cost (£)	Change in QALYs	
30%	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	-£1,264,206	316
35%	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	-£1,517,047	379
40%	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	-£1,769,888	442
45%	£1,101	£1,321	£1,541	£1,761	£1,981	£2,201	£2,421	£2,641	£2,862	£3,082	£3,302	£3,302	-£2,022,729	506
50%	£2,201	£2,641	£3,082	£3,522	£3,962	£4,402	£4,843	£5,283	£5,723	£6,163	£6,603	£6,603	-£2,275,571	569
55%	£3,302	£3,962	£4,622	£5,283	£5,943	£6,603	£7,264	£7,924	£8,585	£9,245	£9,905	£9,905	-£2,528,412	632
60%	£4,402	£5,283	£6,163	£7,044	£7,924	£8,805	£9,685	£10,566	£11,446	£12,326	£13,207	£13,207	-£2,781,253	695
65%	£5,503	£6,603	£7,704	£8,805	£9,905	£11,006	£12,106	£13,207	£14,308	£15,408	£16,509	£16,509	-£3,034,094	759
70%	£6,603	£7,924	£9,245	£10,566	£11,886	£13,207	£14,528	£15,848	£17,169	£18,490	£19,810	£19,810	-£3,286,935	822
75%	£7,704	£9,245	£10,786	£12,326	£13,867	£15,408	£16,949	£18,490	£20,031	£21,571	£23,112	£23,112	-£3,539,776	885
80%	£8,805	£10,566	£12,326	£14,087	£15,848	£17,609	£19,370	£21,131	£22,892	£24,653	£26,414	£26,414	-£3,792,618	948
85%	£9,905	£11,886	£13,867	£15,848	£17,829	£19,810	£21,791	£23,772	£25,754	£27,735	£29,716	£29,716	-£4,045,459	1011
90%	£11,006	£13,207	£15,408	£17,609	£19,810	£22,012	£24,213	£26,414	£28,615	£30,816	£33,017	£33,017	-£4,298,300	1075
95%	£11,006	£13,207	£15,408	£17,609	£19,810	£22,012	£24,213	£26,414	£28,615	£30,816	£33,017	£33,017	-£4,551,141	1138
100%	£11,006	£13,207	£15,408	£17,609	£19,810	£22,012	£24,213	£26,414	£28,615	£30,816	£33,017	£33,017	-£4,803,982	1201

Net Benefit (£000s)														
30%	£9,165	£9,165	£9,165	£9,165	£9,165	£9,165	£9,165	£9,165	£9,165	£9,165	£9,165	£9,165	£9,165	£9,165
35%	£10,999	£10,999	£10,999	£10,999	£10,999	£10,999	£10,999	£10,999	£10,999	£10,999	£10,999	£10,999	£10,999	£10,999
40%	£12,832	£12,832	£12,832	£12,832	£12,832	£12,832	£12,832	£12,832	£12,832	£12,832	£12,832	£12,832	£12,832	£12,832
45%	£13,564	£13,344	£13,124	£12,904	£12,684	£12,464	£12,244	£12,023	£11,803	£11,583	£11,363	£11,363	£11,363	£11,363
50%	£14,297	£13,857	£13,416	£12,976	£12,536	£12,096	£11,655	£11,215	£10,775	£10,335	£9,894	£9,894	£9,894	£9,894
55%	£15,029	£14,369	£13,709	£13,048	£12,388	£11,728	£11,067	£10,407	£9,746	£9,086	£8,426	£8,426	£8,426	£8,426
60%	£15,762	£14,881	£14,001	£13,120	£12,240	£11,359	£10,479	£9,599	£8,718	£7,838	£6,957	£6,957	£6,957	£6,957
65%	£16,494	£15,394	£14,293	£13,193	£12,092	£10,991	£9,891	£8,790	£7,690	£6,589	£5,489	£5,489	£5,489	£5,489
70%	£17,227	£15,906	£14,585	£13,265	£11,944	£10,623	£9,303	£7,982	£6,661	£5,341	£4,020	£4,020	£4,020	£4,020
75%	£17,959	£16,419	£14,878	£13,337	£11,796	£10,255	£8,714	£7,174	£5,633	£4,092	£2,551	£2,551	£2,551	£2,551
80%	£18,692	£16,931	£15,170	£13,409	£11,648	£9,887	£8,126	£6,365	£4,604	£2,844	£1,083	£1,083	£1,083	£1,083
85%	£19,424	£17,443	£15,462	£13,481	£11,500	£9,519	£7,538	£5,557	£3,576	£1,595	£-386	£-386	£-386	£-386
90%	£20,157	£17,956	£15,755	£13,553	£11,352	£9,151	£6,950	£4,749	£2,548	£347	£-1,855	£-1,855	£-1,855	£-1,855
95%	£21,990	£19,789	£17,588	£15,387	£13,185	£10,984	£8,783	£6,582	£4,381	£2,180	£-22	£-22	£-22	£-22
100%	£23,823	£21,622	£19,421	£17,220	£15,018	£12,817	£10,616	£8,415	£6,214	£4,013	£1,812	£1,812	£1,812	£1,812

Where the net benefit produces a non-negative outcome then it is cost effective for the NHS to adopt the indicator.

When this is the case, the cells are highlighted with a yellow background.

Appendix F: Net Benefit Analysis Assuming Eligible Population 0.1% (£25,000 QALY)

Pilot 6 - Diagnosis of hypertension with ABPM

Value per point achieved	£133.76	Societal value of a QALY	£25,000
Number of practices	8,228		
Mean practice population	6,297		
Minimum threshold	40%	Baseline achievement	
Maximum threshold	90%	Eligible population (mean % of practice population)	0.1%
		Baseline achievement (mean % of eligible patients)	5.0%
		Cost-effectiveness estimates	
		Incremental cost (£ per patient)	-£16
		Incremental effect (QALYs per patient)	0.004

Points: 10 12 14 16 18 20 22 24 26 28 30

National totals													
Expected Achieveme	QOF payments (£000s)											Change in treatment cost (£)	Change in QALYs
	30%	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0		
35%	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	-£248,696	62
40%	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	-£290,146	73
45%	£1,101	£1,321	£1,541	£1,761	£1,981	£2,201	£2,421	£2,641	£2,862	£3,082	£3,302	-£331,595	83
50%	£2,201	£2,641	£3,082	£3,522	£3,962	£4,402	£4,843	£5,283	£5,723	£6,163	£6,603	-£373,044	93
55%	£3,302	£3,962	£4,622	£5,283	£5,943	£6,603	£7,264	£7,924	£8,585	£9,245	£9,905	-£414,494	104
60%	£4,402	£5,283	£6,163	£7,044	£7,924	£8,805	£9,685	£10,566	£11,446	£12,326	£13,207	-£455,943	114
65%	£5,503	£6,603	£7,704	£8,805	£9,905	£11,006	£12,106	£13,207	£14,308	£15,408	£16,509	-£497,392	124
70%	£6,603	£7,924	£9,245	£10,566	£11,886	£13,207	£14,528	£15,848	£17,169	£18,490	£19,810	-£538,842	135
75%	£7,704	£9,245	£10,786	£12,326	£13,867	£15,408	£16,949	£18,490	£20,031	£21,571	£23,112	-£580,291	145
80%	£8,805	£10,566	£12,326	£14,087	£15,848	£17,609	£19,370	£21,131	£22,892	£24,653	£26,414	-£621,741	155
85%	£9,905	£11,886	£13,867	£15,848	£17,829	£19,810	£21,791	£23,772	£25,754	£27,735	£29,716	-£663,190	166
90%	£11,006	£13,207	£15,408	£17,609	£19,810	£22,012	£24,213	£26,414	£28,615	£30,816	£33,017	-£704,639	176
95%	£11,006	£13,207	£15,408	£17,609	£19,810	£22,012	£24,213	£26,414	£28,615	£30,816	£33,017	-£746,089	187
100%	£11,006	£13,207	£15,408	£17,609	£19,810	£22,012	£24,213	£26,414	£28,615	£30,816	£33,017	-£787,538	197

Net Benefit (£000s)													
30%	£1,503	£1,503	£1,503	£1,503	£1,503	£1,503	£1,503	£1,503	£1,503	£1,503	£1,503	£1,503	£1,503
35%	£1,803	£1,803	£1,803	£1,803	£1,803	£1,803	£1,803	£1,803	£1,803	£1,803	£1,803	£1,803	£1,803
40%	£2,104	£2,104	£2,104	£2,104	£2,104	£2,104	£2,104	£2,104	£2,104	£2,104	£2,104	£2,104	£2,104
45%	£1,303	£1,083	£863	£643	£423	£203	£-17	£-237	£-457	£-678	£-898	£-1,118	£-1,338
50%	£503	£63	£-377	£-817	£-1,258	£-1,698	£-2,138	£-2,578	£-3,018	£-3,459	£-3,899	£-4,340	£-4,780
55%	£-297	£-957	£-1,617	£-2,278	£-2,938	£-3,598	£-4,259	£-4,919	£-5,579	£-6,240	£-6,900	£-7,560	£-8,220
60%	£-1,097	£-1,977	£-2,858	£-3,738	£-4,619	£-5,499	£-6,379	£-7,260	£-8,140	£-9,021	£-9,901	£-10,781	£-11,661
65%	£-1,897	£-2,997	£-4,098	£-5,199	£-6,299	£-7,400	£-8,500	£-9,601	£-10,701	£-11,802	£-12,903	£-14,004	£-15,104
70%	£-2,697	£-4,018	£-5,338	£-6,659	£-7,980	£-9,300	£-10,621	£-11,942	£-13,262	£-14,583	£-15,904	£-17,224	£-18,544
75%	£-3,497	£-5,038	£-6,579	£-8,119	£-9,660	£-11,201	£-12,742	£-14,283	£-15,823	£-17,364	£-18,905	£-20,445	£-21,986
80%	£-4,297	£-6,058	£-7,819	£-9,580	£-11,341	£-13,102	£-14,863	£-16,623	£-18,384	£-20,145	£-21,906	£-23,666	£-25,427
85%	£-5,097	£-7,078	£-9,059	£-11,040	£-13,021	£-15,002	£-16,983	£-18,964	£-20,945	£-22,926	£-24,907	£-26,887	£-28,868
90%	£-5,897	£-8,098	£-10,299	£-12,501	£-14,702	£-16,903	£-19,104	£-21,305	£-23,506	£-25,707	£-27,908	£-30,109	£-32,310
95%	£-5,597	£-7,798	£-9,999	£-12,200	£-14,401	£-16,602	£-18,804	£-21,005	£-23,206	£-25,407	£-27,608	£-29,809	£-32,010
100%	£-5,296	£-7,497	£-9,698	£-11,900	£-14,101	£-16,302	£-18,503	£-20,704	£-22,905	£-25,106	£-27,307	£-29,508	£-31,709

Where the net benefit produces a non-negative outcome then it is **cost effective** for the NHS to adopt the indicator.

When this is the case, the cells are highlighted with a yellow background.

Appendix G: Net Benefit Analysis Assuming Eligible Population 1.1% (£25,000 QALY)

Pilot 6 - Diagnosis of hypertension with ABPM

Value per point achieved	£133.76	Societal value of a QALY	£25,000
Number of practices	8,228		
Mean practice population	6,297		
Minimum threshold	40%	Baseline achievement	
Maximum threshold	90%	Eligible population (mean % of practice population)	1.1%
		Baseline achievement (mean % of eligible patients)	5.0%
		Cost-effectiveness estimates	
		Incremental cost (£ per patient)	-£16
		Incremental effect (QALYs per patient)	0.004
Points	10 12 14 16 18 20 22 24 26 28 30		

National totals																	
Expected Achievement	QOF payments (£000s)											Change in treatment cost (£)	Change in QALYs				
30%	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	-£2,279,716	570
35%	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	-£2,735,659	684
40%	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	-£3,191,602	798
45%	£1,101	£1,321	£1,541	£1,761	£1,981	£2,201	£2,421	£2,641	£2,862	£3,082	£3,302	£3,522	£3,743	£3,963	£4,184	-£3,647,545	912
50%	£2,201	£2,641	£3,082	£3,522	£3,962	£4,402	£4,843	£5,283	£5,723	£6,163	£6,603	£7,044	£7,484	£7,924	£8,364	-£4,103,488	1026
55%	£3,302	£3,962	£4,622	£5,283	£5,943	£6,603	£7,264	£7,924	£8,585	£9,245	£9,905	£10,566	£11,226	£11,887	£12,547	-£4,559,431	1140
60%	£4,402	£5,283	£6,163	£7,044	£7,924	£8,805	£9,685	£10,566	£11,446	£12,326	£13,207	£14,087	£14,968	£15,848	£16,728	-£5,015,374	1254
65%	£5,503	£6,603	£7,704	£8,805	£9,905	£11,006	£12,106	£13,207	£14,308	£15,408	£16,509	£17,609	£18,710	£19,810	£20,911	-£5,471,317	1368
70%	£6,603	£7,924	£9,245	£10,566	£11,886	£13,207	£14,528	£15,848	£17,169	£18,490	£19,810	£21,131	£22,452	£23,772	£25,093	-£5,927,260	1482
75%	£7,704	£9,245	£10,786	£12,326	£13,867	£15,408	£16,949	£18,490	£20,031	£21,571	£23,112	£24,653	£26,194	£27,735	£29,276	-£6,383,203	1596
80%	£8,805	£10,566	£12,326	£14,087	£15,848	£17,609	£19,370	£21,131	£22,892	£24,653	£26,414	£28,175	£29,936	£31,697	£33,458	-£6,839,147	1710
85%	£9,905	£11,886	£13,867	£15,848	£17,829	£19,810	£21,791	£23,772	£25,754	£27,735	£29,716	£31,697	£33,678	£35,659	£37,640	-£7,295,090	1824
90%	£11,006	£13,207	£15,408	£17,609	£19,810	£22,012	£24,213	£26,414	£28,615	£30,816	£33,017	£35,218	£37,419	£39,620	£41,821	-£7,751,033	1938
95%	£11,006	£13,207	£15,408	£17,609	£19,810	£22,012	£24,213	£26,414	£28,615	£30,816	£33,017	£35,218	£37,419	£39,620	£41,821	-£8,206,976	2052
100%	£11,006	£13,207	£15,408	£17,609	£19,810	£22,012	£24,213	£26,414	£28,615	£30,816	£33,017	£35,218	£37,419	£39,620	£41,821	-£8,662,919	2166

Net Benefit (£000s)																	
30%	£16,528	£16,528	£16,528	£16,528	£16,528	£16,528	£16,528	£16,528	£16,528	£16,528	£16,528	£16,528	£16,528	£16,528	£16,528	£16,528	£16,528
35%	£19,834	£19,834	£19,834	£19,834	£19,834	£19,834	£19,834	£19,834	£19,834	£19,834	£19,834	£19,834	£19,834	£19,834	£19,834	£19,834	£19,834
40%	£23,139	£23,139	£23,139	£23,139	£23,139	£23,139	£23,139	£23,139	£23,139	£23,139	£23,139	£23,139	£23,139	£23,139	£23,139	£23,139	£23,139
45%	£25,344	£25,124	£24,904	£24,684	£24,464	£24,244	£24,023	£23,803	£23,583	£23,363	£23,143	£22,923	£22,703	£22,483	£22,263	£22,043	£21,823
50%	£27,549	£27,109	£26,669	£26,228	£25,788	£25,348	£24,908	£24,468	£24,027	£23,587	£23,147	£22,707	£22,267	£21,827	£21,387	£20,947	£20,507
55%	£29,754	£29,094	£28,433	£27,773	£27,113	£26,452	£25,792	£25,132	£24,471	£23,811	£23,151	£22,491	£21,831	£21,171	£20,511	£19,851	£19,191
60%	£31,959	£31,079	£30,198	£29,318	£28,437	£27,557	£26,676	£25,796	£24,915	£24,035	£23,155	£22,275	£21,395	£20,515	£19,635	£18,755	£17,875
65%	£34,164	£33,064	£31,963	£30,862	£29,762	£28,661	£27,561	£26,460	£25,360	£24,259	£23,158	£22,058	£20,957	£19,857	£18,757	£17,657	£16,557
70%	£36,369	£35,048	£33,728	£32,407	£31,086	£29,766	£28,445	£27,124	£25,804	£24,483	£23,162	£21,842	£20,521	£19,201	£17,881	£16,561	£15,241
75%	£38,574	£37,033	£35,493	£33,952	£32,411	£30,870	£29,329	£27,789	£26,248	£24,707	£23,166	£21,625	£20,085	£18,544	£17,004	£15,463	£13,923
80%	£40,779	£39,018	£37,257	£35,496	£33,735	£31,975	£30,214	£28,453	£26,692	£24,931	£23,170	£21,409	£19,648	£17,887	£16,127	£14,366	£12,606
85%	£42,984	£41,003	£39,022	£37,041	£35,060	£33,079	£31,098	£29,117	£27,136	£25,155	£23,174	£21,193	£19,212	£17,231	£15,250	£13,269	£11,288
90%	£45,189	£42,988	£40,787	£38,586	£36,385	£34,183	£31,982	£29,781	£27,580	£25,379	£23,178	£20,977	£18,776	£16,575	£14,374	£12,173	£9,972
95%	£48,495	£46,294	£44,092	£41,891	£39,690	£37,489	£35,288	£33,087	£30,886	£28,685	£26,484	£24,283	£22,082	£19,881	£17,680	£15,479	£13,278
100%	£51,800	£49,599	£47,398	£45,197	£42,996	£40,795	£38,593	£36,392	£34,191	£31,990	£29,789	£27,588	£25,387	£23,186	£20,985	£18,784	£16,583

Where the net benefit produces a non-negative outcome then it is cost effective for the NHS to adopt the indicator.

When this is the case, the cells are highlighted with a yellow background.

Appendix H: Net Benefit Analysis Assuming QALY Gain of ABPM of 0.001 (£25,000 QALY)

Pilot 6 - Diagnosis of hypertension with ABPM

Value per point achieved	£133.76	Societal value of a QALY	£25,000								
Number of practices	8,228										
Mean practice population	6,297										
Minimum threshold	40%	Baseline achievement									
Maximum threshold	90%	Eligible population (mean % of practice population)	0.6%								
		Baseline achievement (mean % of eligible patients)	5.0%								
		Cost-effectiveness estimates									
		Incremental cost (£ per patient)	-£16								
		Incremental effect (QALYs per patient)	0.001								
Points	10	12	14	16	18	20	22	24	26	28	30

National totals														
Expected Achieveme	QOF payments (£000s)											Change in treatment cost (£)	Change in QALYs	
30%	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	-£1,264,206	79
35%	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	-£1,517,047	95
40%	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	-£1,769,888	111
45%	£1,101	£1,321	£1,541	£1,761	£1,981	£2,201	£2,421	£2,641	£2,862	£3,082	£3,302	£3,302	-£2,022,729	126
50%	£2,201	£2,641	£3,082	£3,522	£3,962	£4,402	£4,843	£5,283	£5,723	£6,163	£6,603	£6,603	-£2,275,571	142
55%	£3,302	£3,962	£4,622	£5,283	£5,943	£6,603	£7,264	£7,924	£8,585	£9,245	£9,905	£9,905	-£2,528,412	158
60%	£4,402	£5,283	£6,163	£7,044	£7,924	£8,805	£9,685	£10,566	£11,446	£12,326	£13,207	£13,207	-£2,781,253	174
65%	£5,503	£6,603	£7,704	£8,805	£9,905	£11,006	£12,106	£13,207	£14,308	£15,408	£16,509	£16,509	-£3,034,094	190
70%	£6,603	£7,924	£9,245	£10,566	£11,886	£13,207	£14,528	£15,848	£17,169	£18,490	£19,810	£19,810	-£3,286,935	205
75%	£7,704	£9,245	£10,786	£12,326	£13,867	£15,408	£16,949	£18,490	£20,031	£21,571	£23,112	£23,112	-£3,539,776	221
80%	£8,805	£10,566	£12,326	£14,087	£15,848	£17,609	£19,370	£21,131	£22,892	£24,653	£26,414	£26,414	-£3,792,618	237
85%	£9,905	£11,886	£13,867	£15,848	£17,829	£19,810	£21,791	£23,772	£25,754	£27,735	£29,716	£29,716	-£4,045,459	253
90%	£11,006	£13,207	£15,408	£17,609	£19,810	£22,012	£24,213	£26,414	£28,615	£30,816	£33,017	£33,017	-£4,298,300	269
95%	£11,006	£13,207	£15,408	£17,609	£19,810	£22,012	£24,213	£26,414	£28,615	£30,816	£33,017	£33,017	-£4,551,141	284
100%	£11,006	£13,207	£15,408	£17,609	£19,810	£22,012	£24,213	£26,414	£28,615	£30,816	£33,017	£33,017	-£4,803,982	300

Net Benefit (£000s)														
30%	£3,240	£3,240	£3,240	£3,240	£3,240	£3,240	£3,240	£3,240	£3,240	£3,240	£3,240	£3,240	£3,240	£3,240
35%	£3,887	£3,887	£3,887	£3,887	£3,887	£3,887	£3,887	£3,887	£3,887	£3,887	£3,887	£3,887	£3,887	£3,887
40%	£4,535	£4,535	£4,535	£4,535	£4,535	£4,535	£4,535	£4,535	£4,535	£4,535	£4,535	£4,535	£4,535	£4,535
45%	£4,083	£3,863	£3,642	£3,422	£3,202	£2,982	£2,762	£2,542	£2,322	£2,102	£1,882	£1,882	£1,882	£1,882
50%	£3,630	£3,190	£2,750	£2,309	£1,869	£1,429	£989	£548	£108	-£332	-£772	-£772	-£772	-£772
55%	£3,177	£2,517	£1,857	£1,196	£536	£124	£785	£1,445	£2,105	£2,766	£3,426	£3,426	£3,426	£3,426
60%	£2,725	£1,844	£964	£83	£797	£1,678	£2,558	£3,439	£4,319	£5,200	£6,080	£6,080	£6,080	£6,080
65%	£2,272	£1,171	£71	£1,030	£2,130	£3,231	£4,331	£5,432	£6,533	£7,633	£8,734	£8,734	£8,734	£8,734
70%	£1,819	£499	£822	£2,143	£3,463	£4,784	£6,105	£7,426	£8,746	£10,067	£11,388	£11,388	£11,388	£11,388
75%	£1,367	£174	£1,715	£3,256	£4,797	£6,337	£7,878	£9,419	£10,960	£12,501	£14,041	£14,041	£14,041	£14,041
80%	£914	£847	£2,608	£4,369	£6,130	£7,891	£9,652	£11,413	£13,173	£14,934	£16,695	£16,695	£16,695	£16,695
85%	£461	£1,520	£3,501	£5,482	£7,463	£9,444	£11,425	£13,406	£15,387	£17,368	£19,349	£19,349	£19,349	£19,349
90%	£9	£2,193	£4,394	£6,595	£8,796	£10,997	£13,198	£15,399	£17,601	£19,802	£22,003	£22,003	£22,003	£22,003
95%	£657	£1,545	£3,746	£5,947	£8,148	£10,349	£12,550	£14,752	£16,953	£19,154	£21,355	£21,355	£21,355	£21,355
100%	£1,304	£897	£3,098	£5,299	£7,500	£9,701	£11,902	£14,104	£16,305	£18,506	£20,707	£20,707	£20,707	£20,707

Where the net benefit produces a non-negative outcome then it is **cost effective** for the NHS to adopt the indicator.

When this is the case, the cells are highlighted with a yellow background.