NHS Health Check costs, benefits and savings

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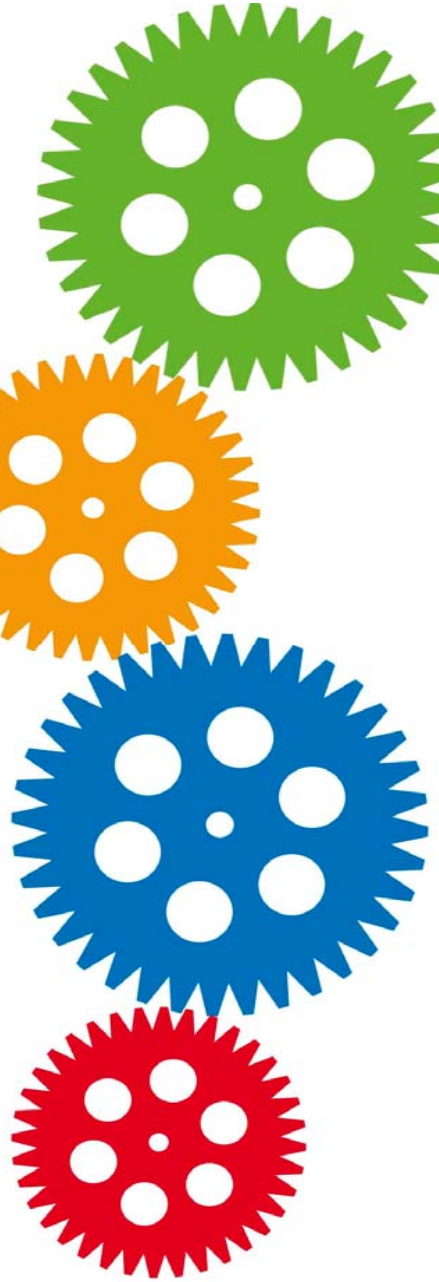
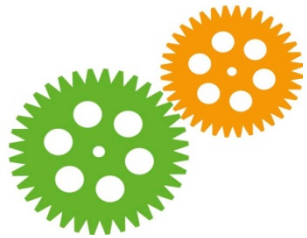
NHS Diabetes and Kidney Care



Purpose of presentation

- Costs to NHS of Health Checks – England and PCT average
- Benefits to patients – QALYs
- Value of QALYs using NICE approach
- Savings to NHS

- Not covered here – Costs to individuals
  - Non-health costs to government



How much will Health Checks cost?

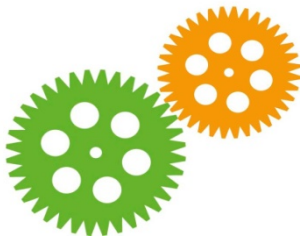
£165 million in 2011-12

£1.08m. per PCT

Figure includes not just the checks themselves, but the treatment that follows – monitoring, medications, lifestyle interventions

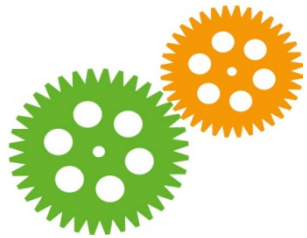
Annual costs rise in the early years, and then level off

	2011-12	4 year average	10 year average	15 year average
England	£165m.	£255m.	£320m.	£351m.
PCT average	£1.08m.	£1.68m.	£2.11m.	£2.31m.



What are the health benefits?

- Approximately 119,000 QALYs gained a year over the first 4 years in England
- Average 783 QALYs a year per PCT
- Cost per QALY = £2,142
- This figure doesn't allow for savings to the NHS from prevented strokes, MIs, diabetes etc.
- We'll look at those later
- There are also savings to individuals and to government through benefits and taxes.



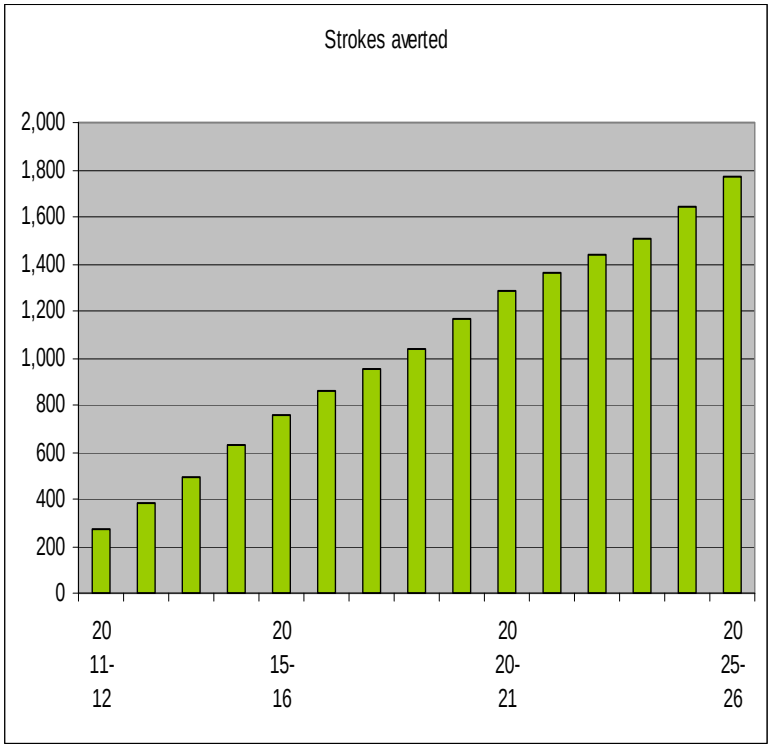
Where do the QALY gains come from? Stroke prevention

Up to 1800 **strokes** prevented per year through statins, anti-hypertensives and smoking cessation

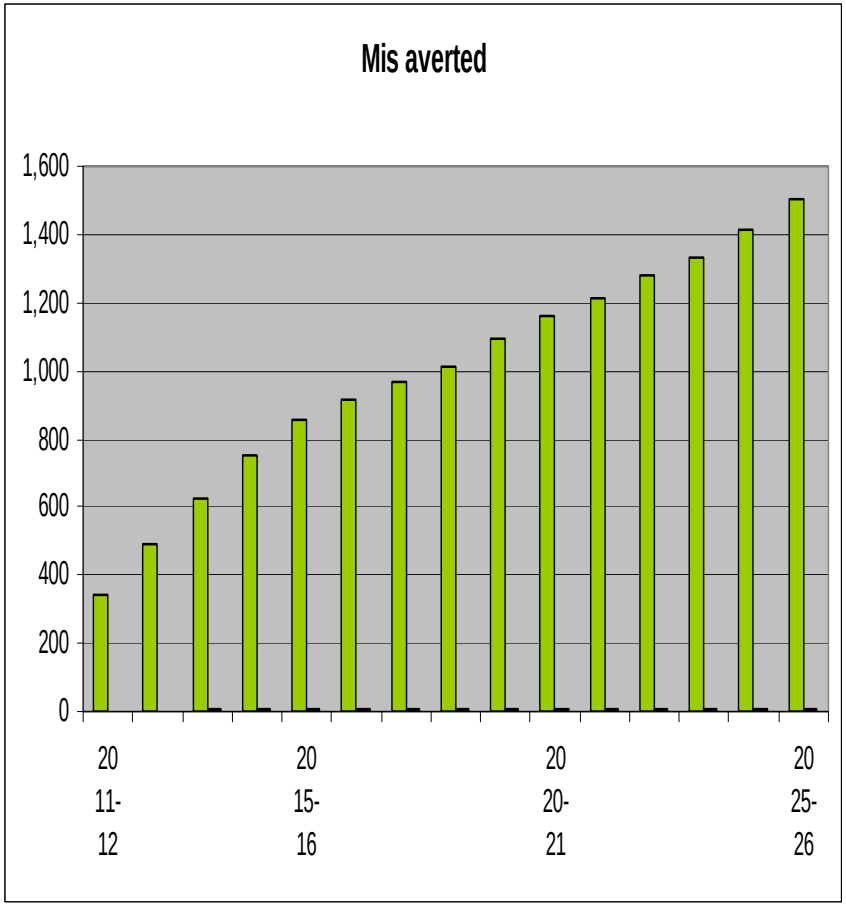
12 per PCT

Numbers rise each year as more people are tested, and because at risk patients identified in early years avoid strokes in later years

Average 445 per year in first 4 years



Where do the QALY gains come from? MI prevention



Up to 1500 **MIs** averted per year through statins, anti-hypertensives and smoking cessation

10 per PCT

As with strokes, numbers increase over time

Average 550 prevented per year in first 4 years

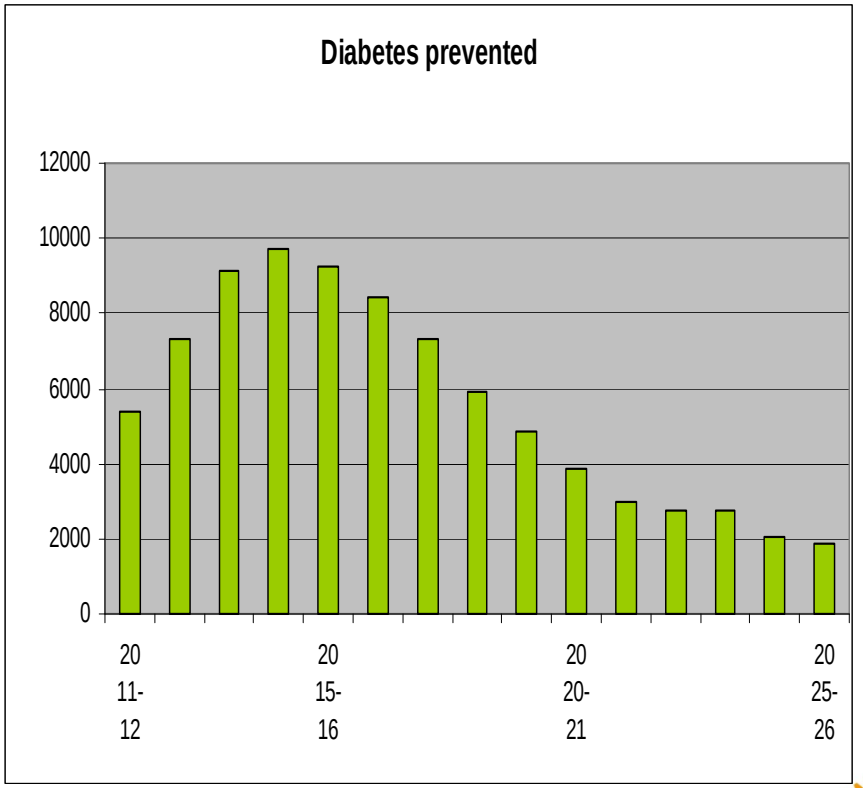
Where do the QALY gains come from? Diabetes prevention

Up to 9,700 cases of **diabetes** prevented each year through Impaired Fasting Glycaemia detection and lifestyle interventions

64 per PCT

Figures higher in early years because of undetected prevalent IFG

Average 7,900 cases a



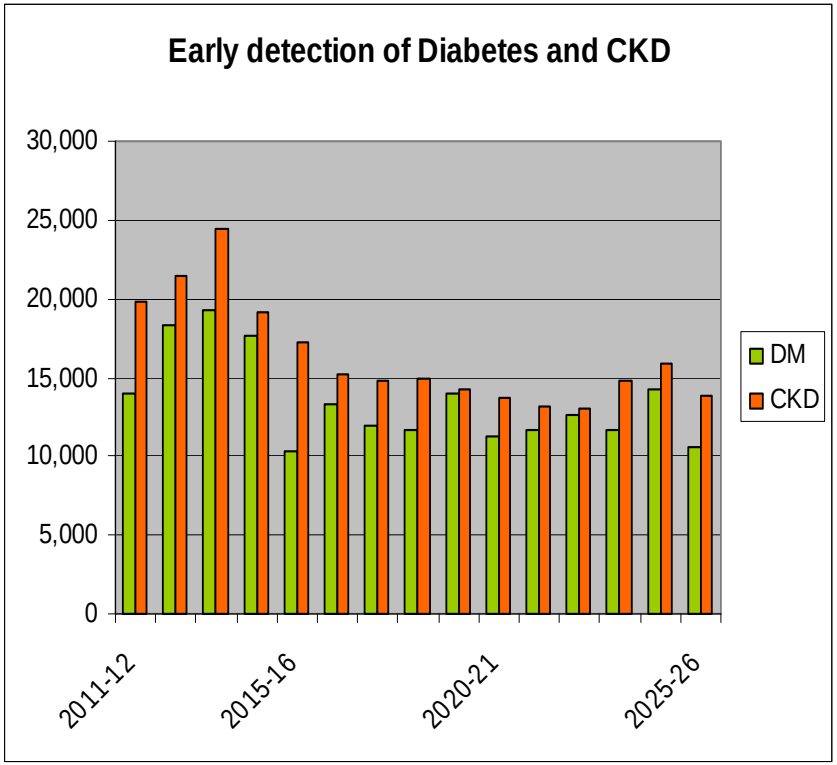
Where do the QALY gains come from? Diabetes and CKD early detection

Up to 19,000 cases of **diabetes** and 24,000 cases of **CKD**

detected early each year

127 cases of diabetes and 160 cases of CKD per PCT

Early detection reduces the risk of disease progression and of complications such as renal failure.



What are the assumptions behind these health gains?

Uptake – Number of patients who take up a recommended treatment

Compliance – Number of patients who complete a treatment

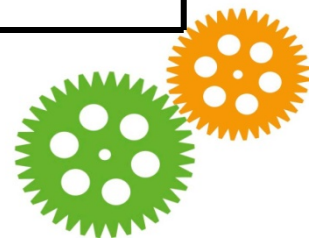
Attribution – Number of patients who wouldn't get the treatment without the Health Check

Relative Risk Reduction of CVD

These assumptions come from the pre-implementation Impact Assessment

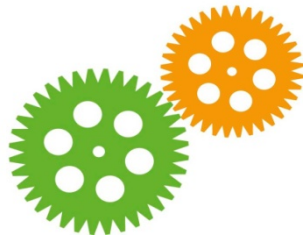
Some will need to be re-examined in the

	Statins	Exercise
Uptake	85%	77%
Compliance	70%	5%
Attribution	50%	63%
RRR of CVD	0.31	0.14



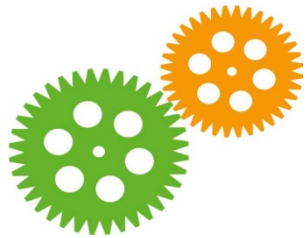
How much NHS money will Health Checks save?

	Averted strokes	Averted MIs	Diabetes prevented	Diabetes detected early	CKD detected early	Total
4 year average	£5m.	£4m.	£40m.	£1m.	£7m.	£57m.
10 year average	£9m.	£6m.	£94m.	£1m.	£21m.	£132m.
15 year average	£12m.	£7m.	£122m.	£2m.	£32m.	£176m.



What are the PCT-level savings?

	Averted strokes	Averted MIs	Diabetes prevented	Diabetes detected early	CKD detected early	Total
4 year average	£34,000	£27,000	£264,000	£5,000	£46,000	£378,000
10 year average	£61,000	£40,000	£619,000	£8,000	£141,000	£869,000
15 year average	£80,000	£49,000	£801,000	£10,000	£214,000	£1.2m.



Comparing costs and savings

Over time, savings grow substantially, while costs level off

2011-12 Savings at PCT level are around £130,000

Costs are £1.08 million

By 2025-26 Savings are £1.9m.

Costs are £2.8 million

Nearly 70% of cost is recouped at this point

These figures take no

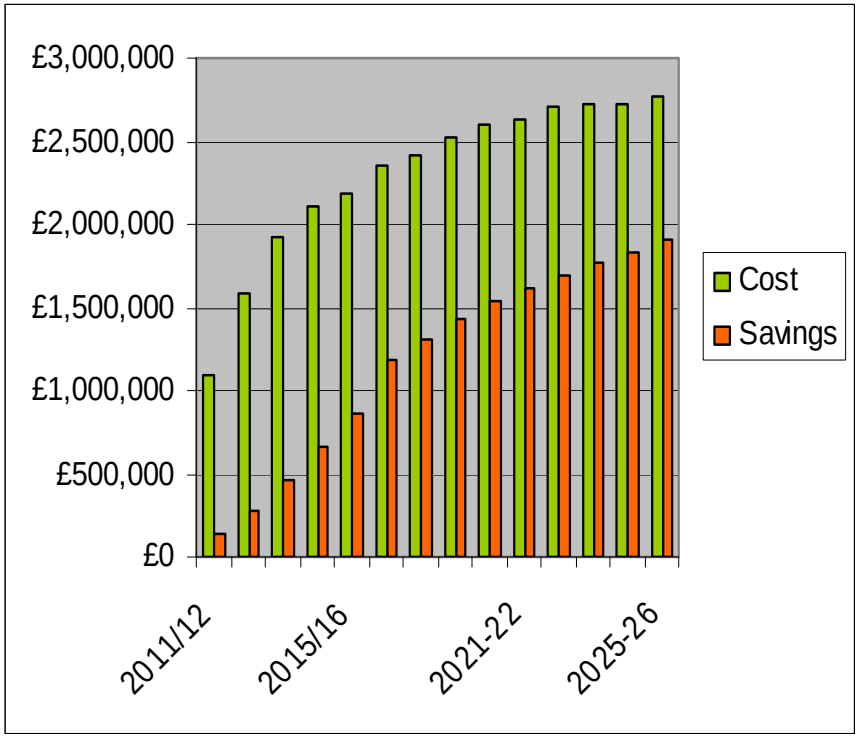
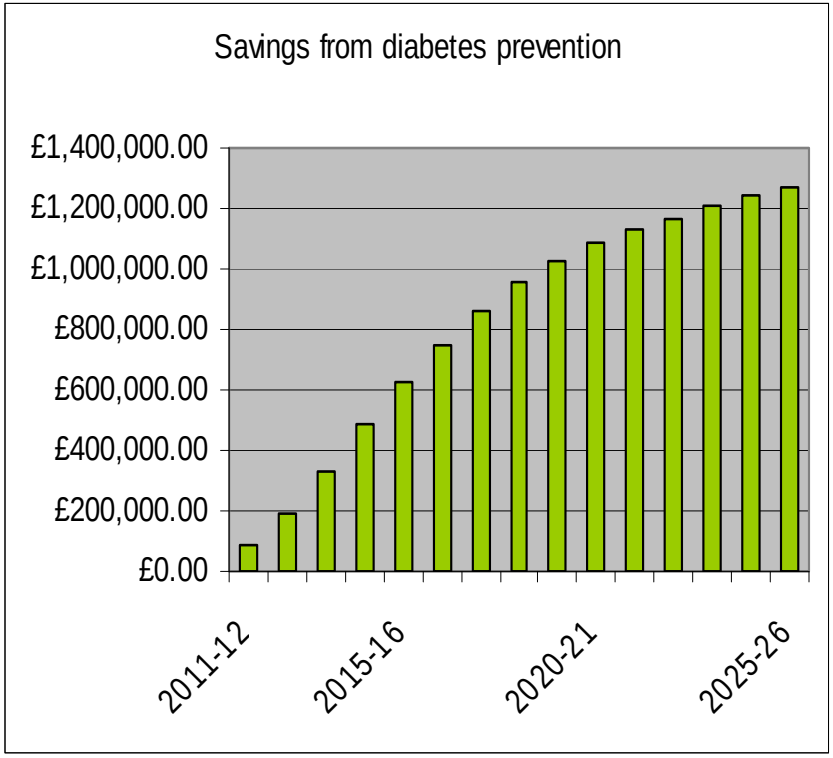


Illustration - Diabetes prevention



Savings from diabetes prevention in year 5 are 8 times as high as those in year 1

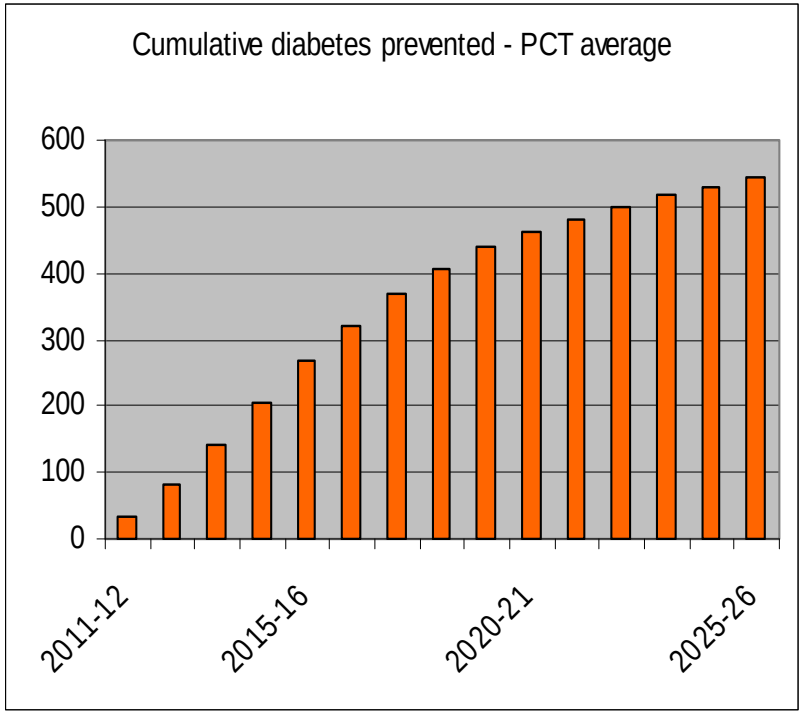
By year 15, they are 15 times the year 1 level

Savings derive from direct costs of diabetes, and also from averted strokes, MIs, blindness, amputations and renal replacement therapy.

Diabetes prevention

The higher savings over time arise as the population in which diabetes has been prevented grows.

Diabetes prevented in a single year creates a long-term stream of

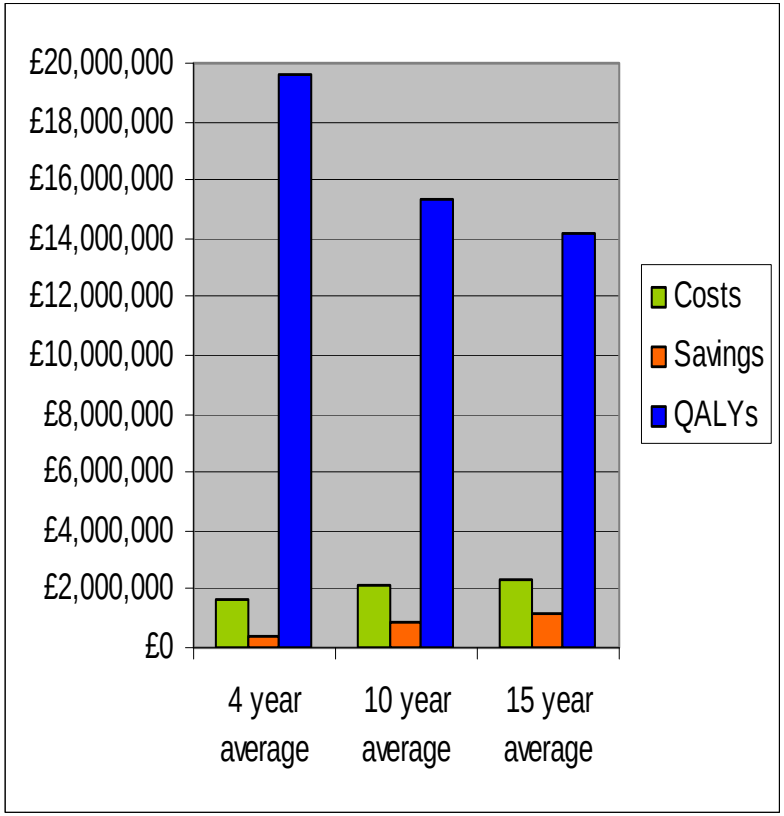


Comparing costs and savings

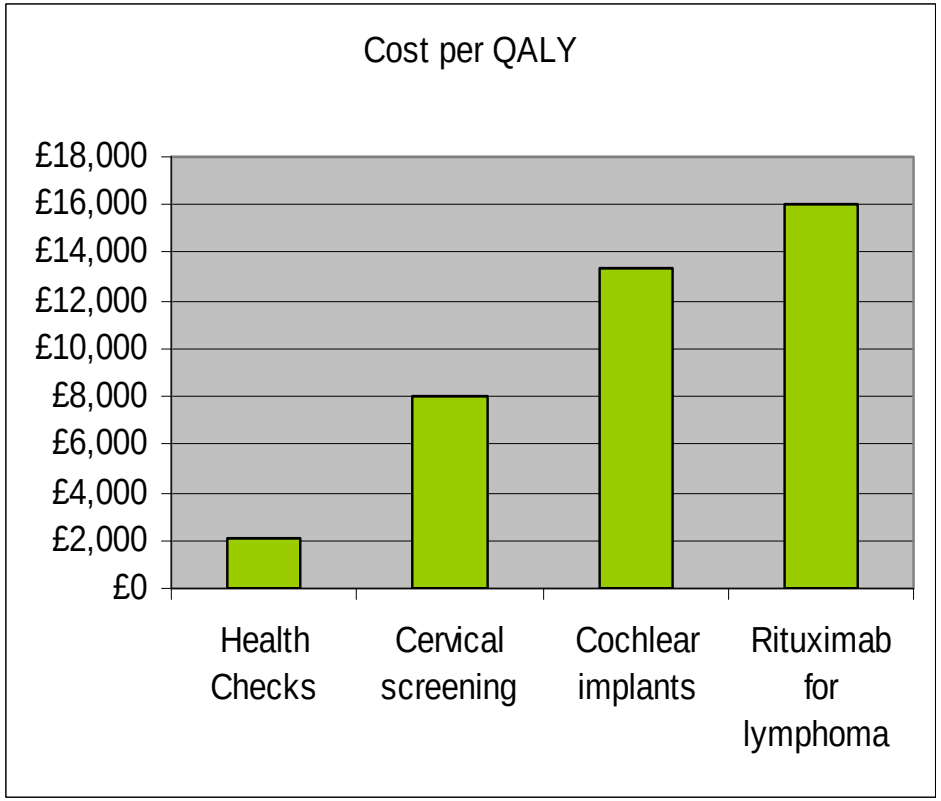
QALY gains evaluated at mid-point of NICE range (£25,000)

In early years annual QALY gains valued at nearly £20 million per PCT

Very few health interventions where improvements in quality of life and survival can be achieved so cost effectively



Cost effectiveness comparison



Cost per QALY for Health Checks is £2,142

Cost per QALY for NICE recommended therapies:

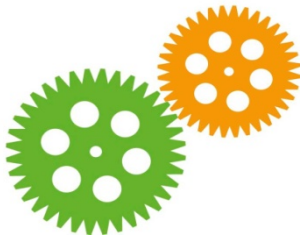
Liquid based cytology for Cervical Cancer screening = £8000

Cochlear implants = £13,400

Rituximab for lymphoma = £16,000

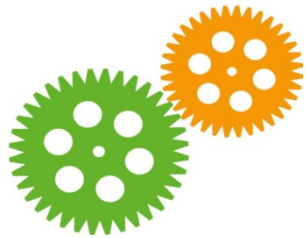
Social Care Savings

- In addition there are likely to be substantial savings to social care
- For non-fatal strokes averted as a result of Health Checks, social care savings are estimated at up to £16 million a year in England
- That’s equivalent to £103,000 a year on average per PCT



Social Care Savings - stroke

	England	PCT average
5 year average	£7,355,454	£48,391
10 year average	£11,937,908	£78,539
15 year average	£15,701,072	£103,297



Social Care savings

- It is likely that there will be additional social care savings as a result of other conditions and complications averted through Health Checks
- For example, people with end stage renal disease, blindness, or lower limb amputations are likely to use social care more than those of the same age without these conditions
- However, there is a shortage of robust national social care data at disease-level
- It is therefore difficult to estimate