

*"In this place, it takes all the running you
can do, to stay in the same place"*

*Lewis Carroll
Alice Through The Looking Glass*



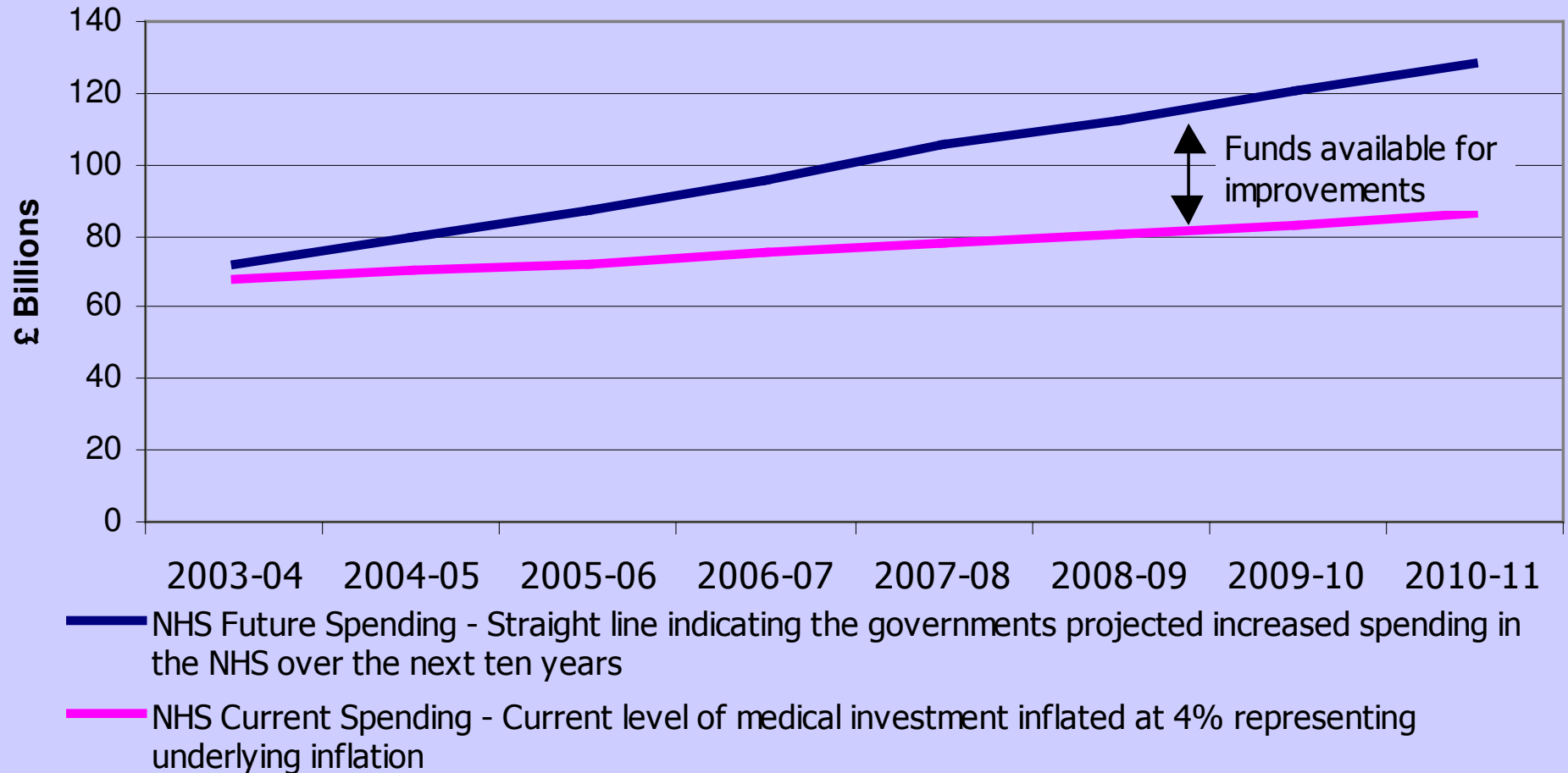
By 2010 we are promised...

(Direct Quotations)

- “Patients will be admitted for treatment within a maximum of 18 weeks from referral by their GP
- Patients will be able to be treated at any facility that meets NHS standards
- In the case of patients with suspected cancer, maximum waits will not exceed 8 weeks from referral to treatment
- Emphasis will be given in the NHS to public health, to prevent illnesses and not just to treat them
- The NHS will be able to concentrate on a transformation from a sickness service to a health service
- Fairer, faster, better care to more people than ever before”

(The NHS Improvement Plan, Department of Health, June 2004)

NHS Future Spending vs NHS Current Spending



Calculating Costs

Increases in costs can be expressed as a function of the changes specific key factors:

$$\Delta \text{ Cost} = F (\Delta (\text{Ageing population}$$

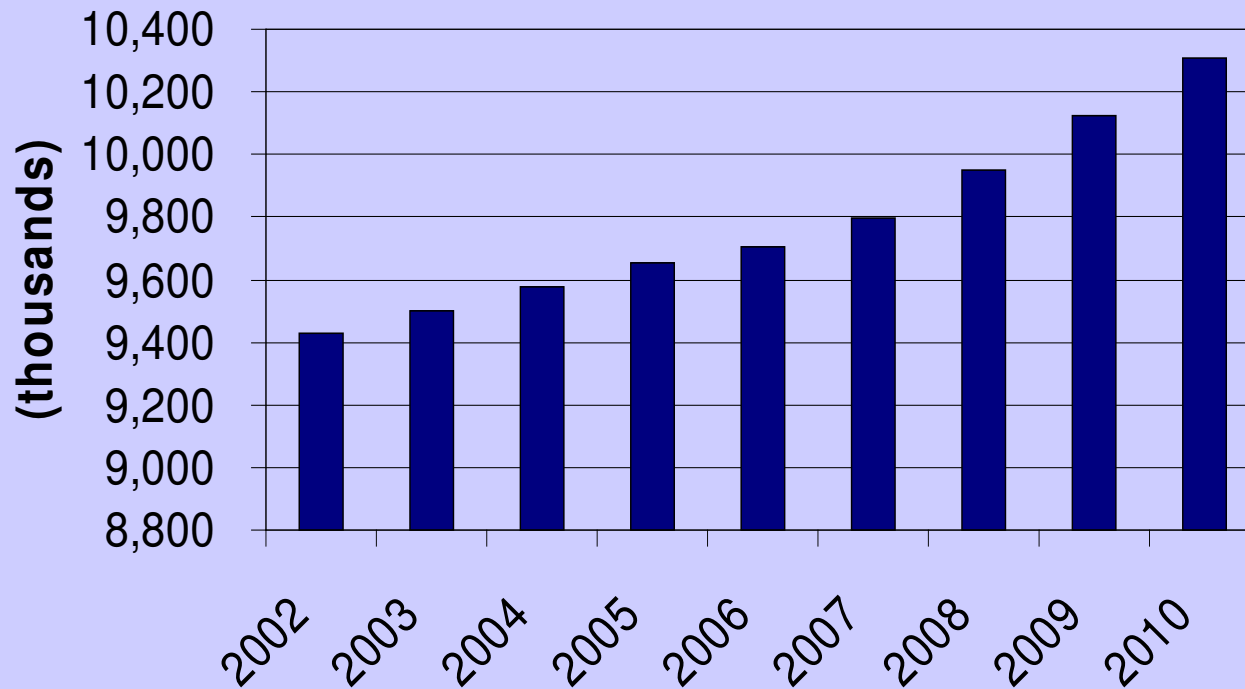
- Cancer costs
- Heart disease
- Medical negligence
- Obesity
- Lack of family support
- NHS staff & pensions cost
- Public expectation))

Consider each factor in turn...

Ageing Population

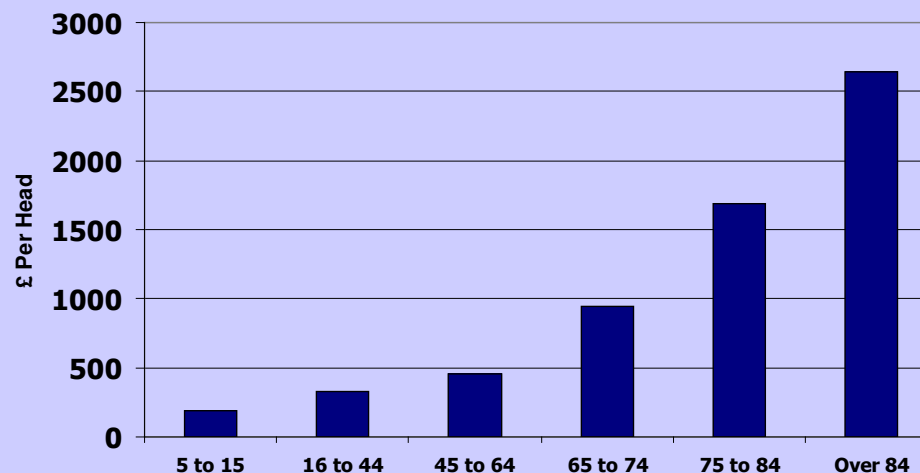
- The number of people living to 80 and beyond will **double** within 30 years¹
- For the first time there are **more people over 60** than there are **children**²

Projected UK Population Over 65³



...Ageing Population (cont'd)

Hospital spend increases dramatically with age⁴



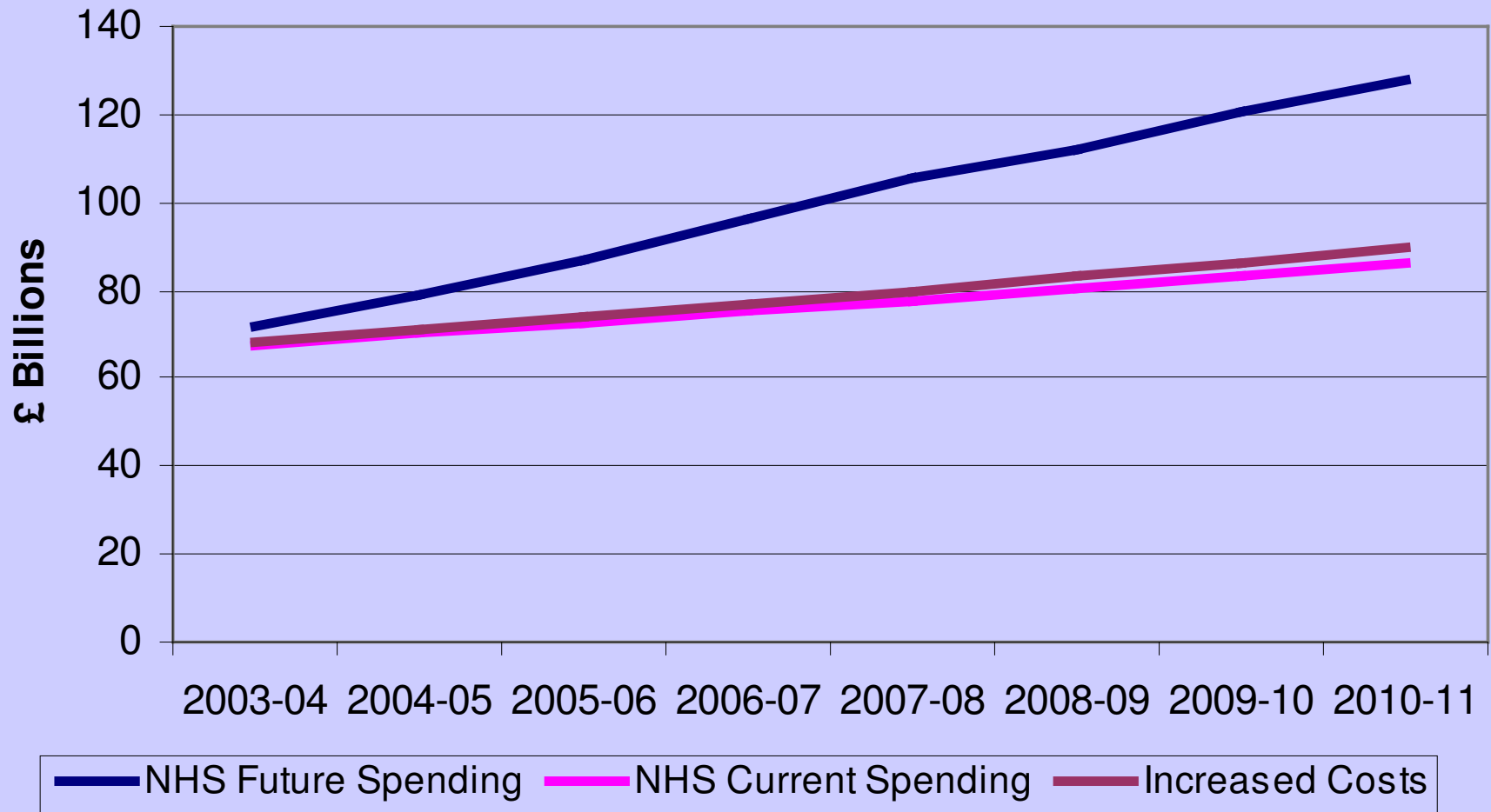
The average person between 16 and 44 costs the NHS around £400 a year, whereas those aged 85 and over cost almost £3,000 each⁵

Age	Cost per head ⁶	Population (thousands) ⁷	
		2002	2011
5 to 15	£185	7586	6851
16 to 44	£327	24618	24269
45 to 64	£459	14189	15988
65 to 74	£949	4964	5578
75 to 84	£1,684	3340	3521
over 84	£2,639	1124	1409

Some simple maths shows an increased spend due to age increases alone of **£3.9 billion** by 2011

NHS Future Spending vs NHS Current Spending

Effect of Ageing

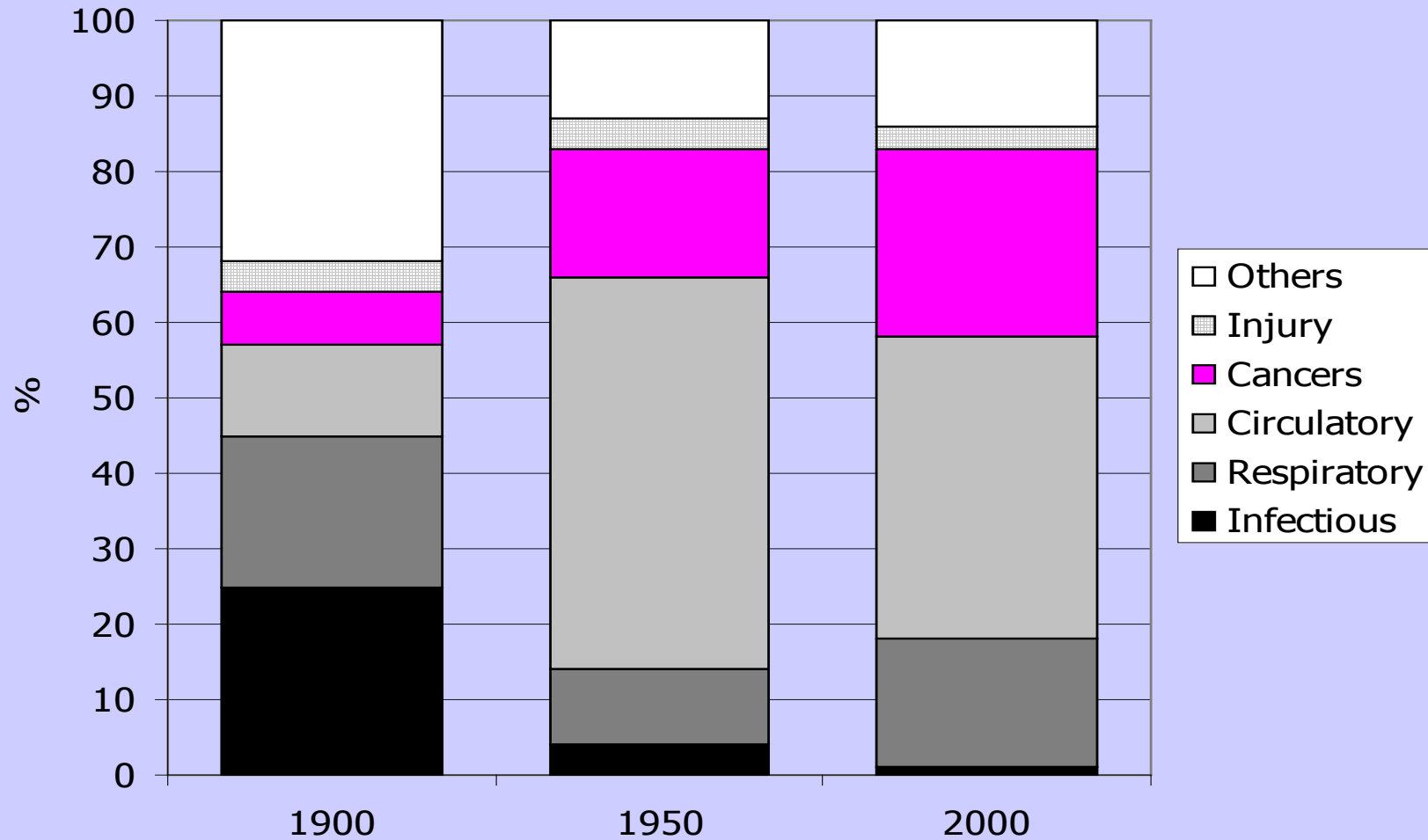


Cancer Could Bankrupt NHS

"The costs of treating as many as three times more cancer patients will put severe strains on the NHS. New treatments are likely to be more effective than today's, but a lot more expensive"

*Nigel Hawkes, Health Editor
The Times
June 14 2004*

Selected Causes of Death at the Start, Middle and End of the Last Century



Source: "Securing Good Health for the Whole Population", Derek Wanless, 2004

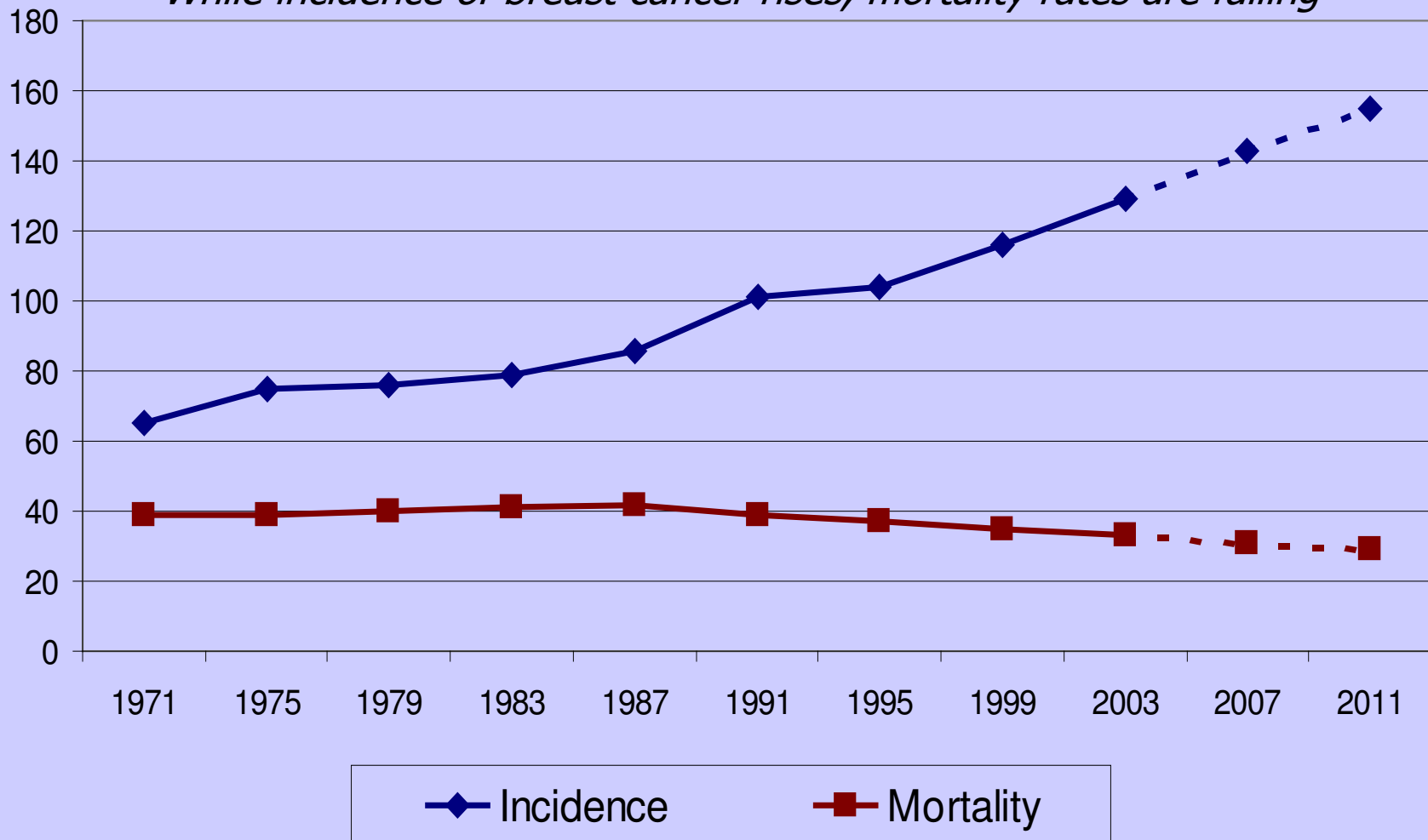
Cancer Costs

- The UK could have over 100,000 *extra* cases of cancer in 2024, thanks to its ageing population⁸
- People over 65 account for 65% of cancer cases⁹
- By 2020, 80% of cancer patients could live a normal lifespan¹⁰
- The current cost of chemotherapy is about £4,000 per year, but cocktails of new, palliative drugs will be prescribed for years at estimated costs of, perhaps, £50,000 per year¹¹
- The use of Monoclonal antibodies (mAbs) may become standard practice, accompanied by even greater cost increases¹²

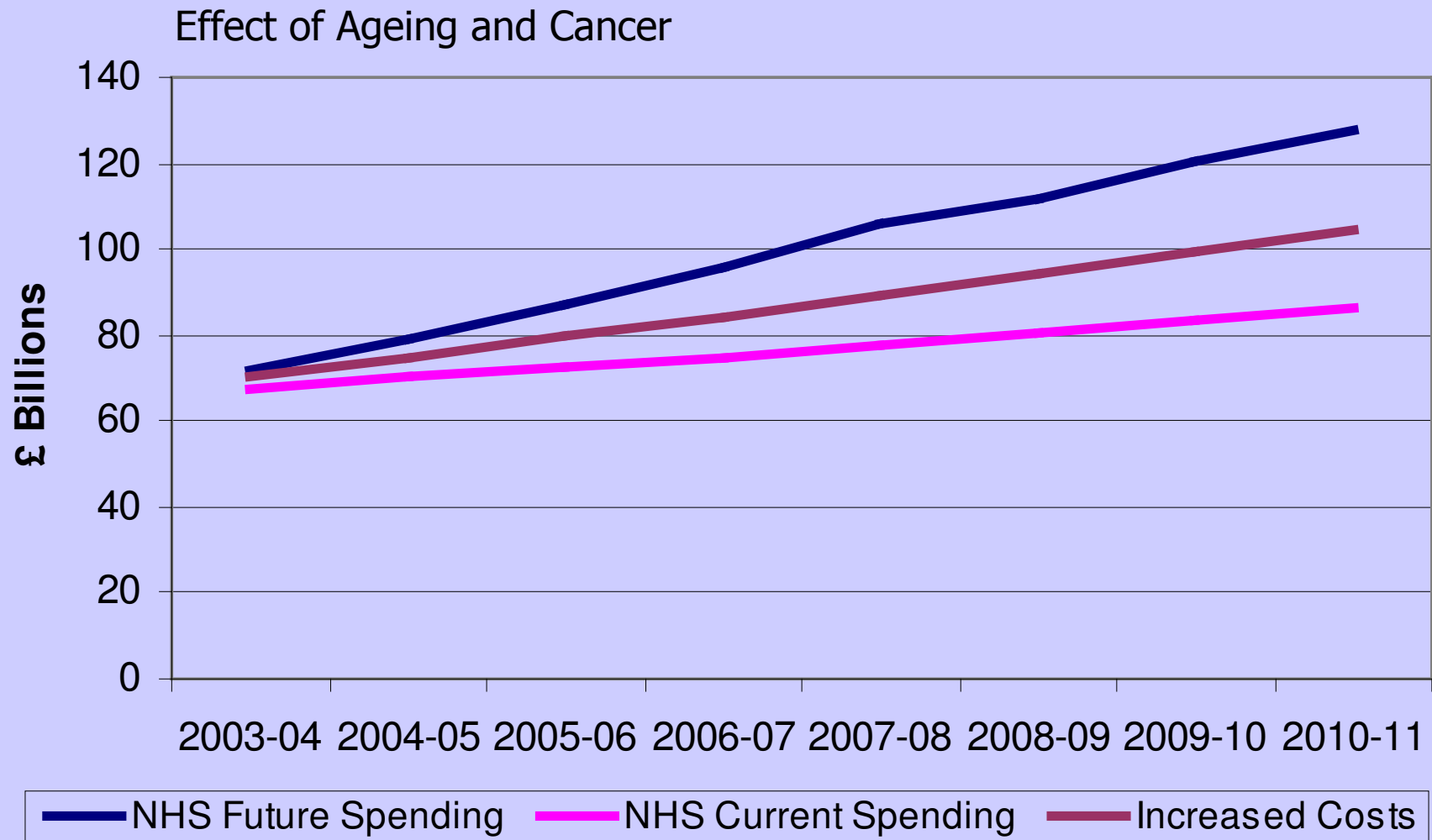
By extrapolating this extra cost along a linear trend-line we calculate an extra cost due to cancer, with the additional cost of mAbs of at least £15 billion by 2011.

Incidence and Mortality rate of Breast Cancer per 100,000 Population¹³

• *While incidence of breast cancer rises, mortality rates are falling*



NHS Future Spending vs NHS Current Spending

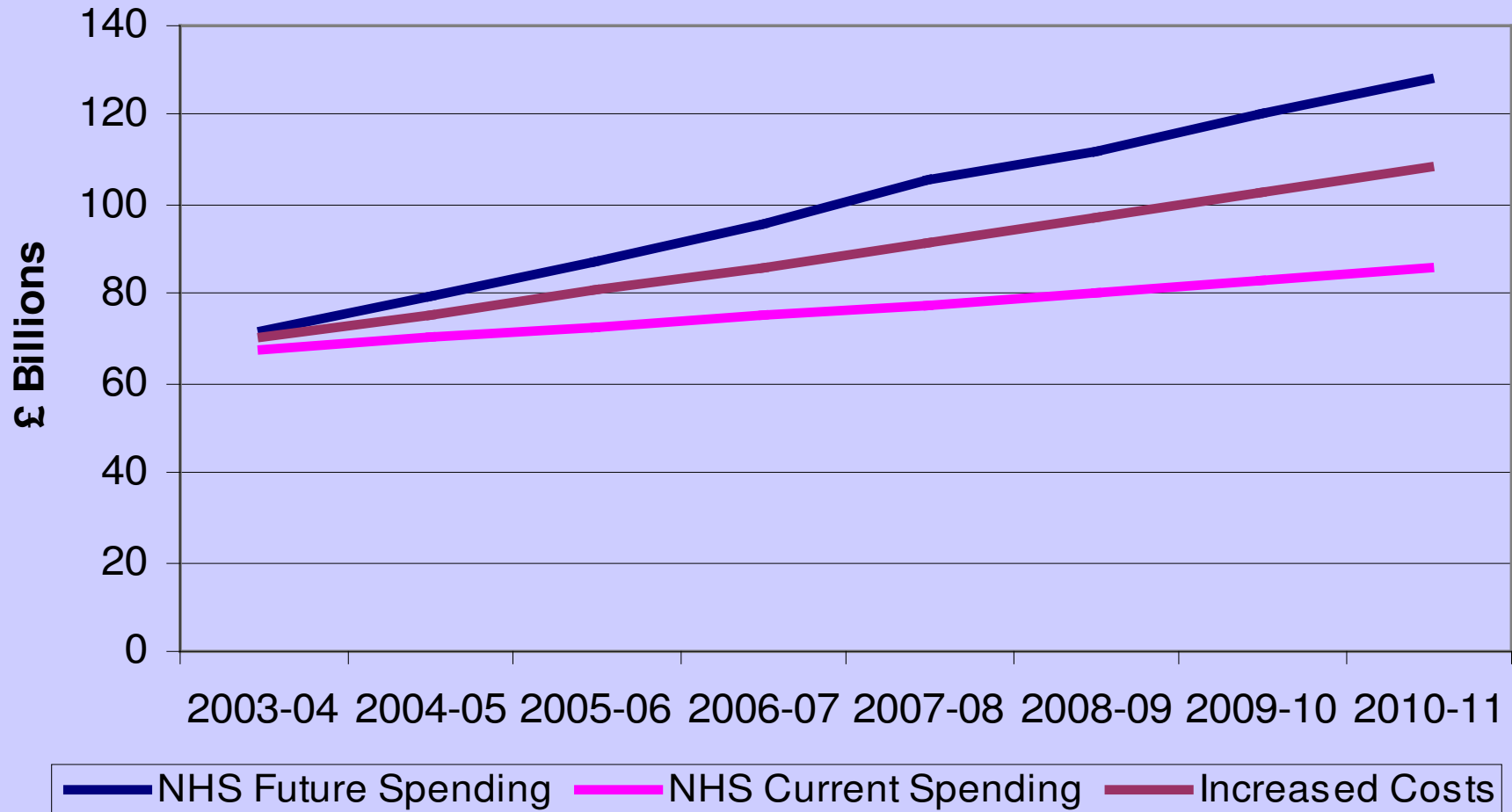


Heart Disease

- Cholesterol lowering drugs (statins) now cost the NHS more than any other class of drugs
- £440 million spent in 2001, an increase of £113 million since 2000¹⁴
- A linear projection of these figures gives an estimated spend by 2010 of £4.5 billion

NHS Future Spending vs NHS Current Spending

Effect of Ageing, Cancer and Heart Disease



Medical Negligence

- In the US, doctors are the third highest cause of death¹⁵
- In 1998 the estimated cost of settling medical negligence claims was £2.3 billion¹⁶
- By 2001 that figure had increased to £4.4 billion¹⁷
- In the USA, with five times the UK population, the cost in 2003 was \$22 billion¹⁸
- A linear projection of these figures estimates the negligence bill in 2010 at £10.7 billion

Obesity

- The cost of obesity to the NHS in 1998 was £500 million¹⁹
- In 2002, 22% of the UK population were overweight compared to 7% in 1980²⁰
- More than half of Americans are overweight and almost a third are obese²¹
- At a cost to the American public of \$39 billion a year²²
- If trends continue 28% of the UK will be overweight by 2011
- By comparison to the current costs in America, this will result in an expected cost to the NHS of more than £2 billion

NHS Future Spending vs NHS Current Spending

Effect of Ageing, Cancer, Heart Disease and Medical Negligence/Obesity



Family Support

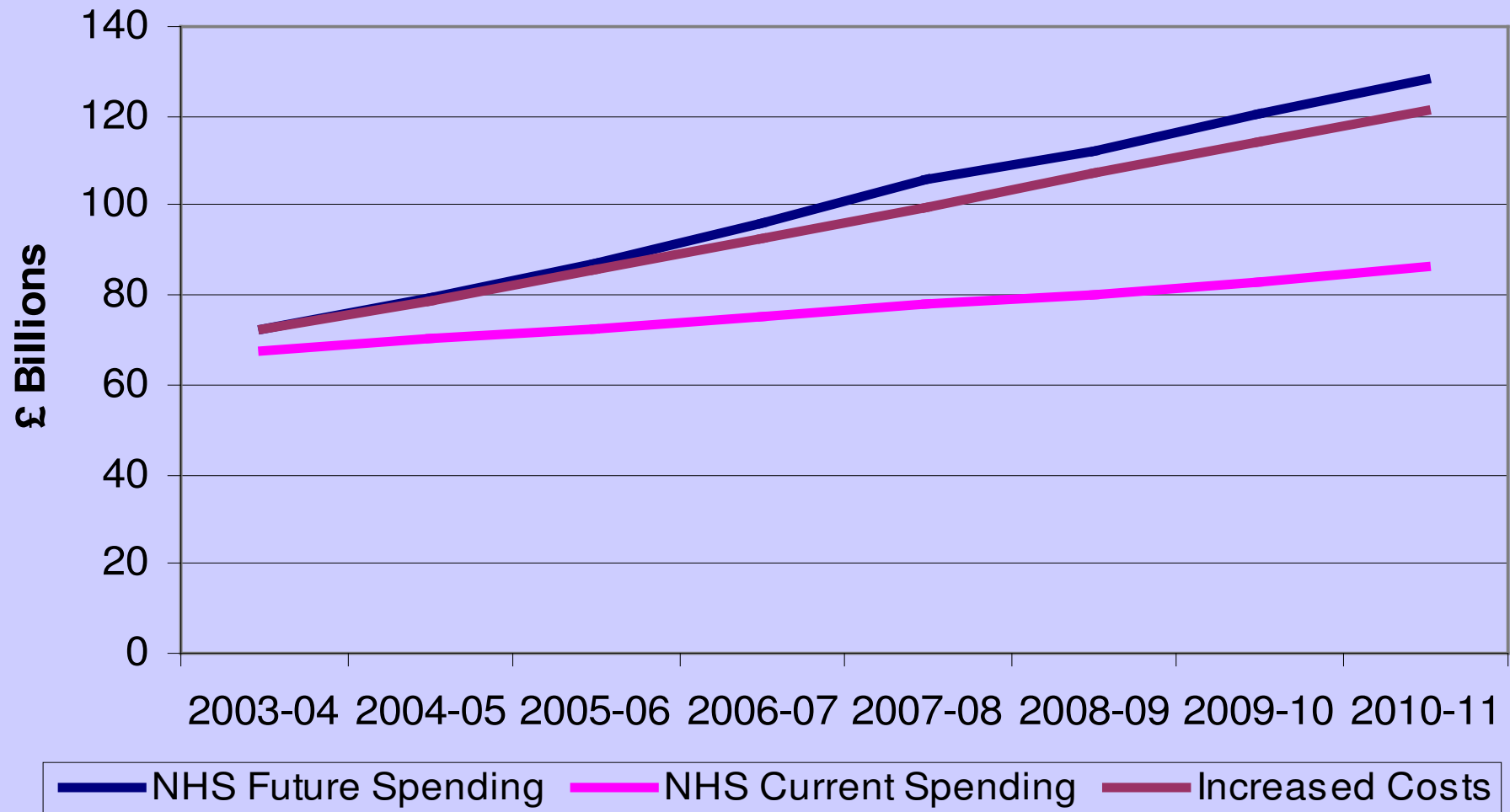
- In 2000 12% of people lived alone, compared to only 8% in 1981²³
- A study by the British Heart Foundation put the value of family care for people with heart disease at almost £2.5 billion per year²⁴

If trends continue, it is reasonable to assume that the cost to the NHS of care for people with heart disease and other conditions, that would previously have been provided in the home, could run to £5 billion by 2010.

Of course, this cost will be compounded further by the ageing population.

NHS Future Spending vs NHS Current Spending

Effect of Ageing, Cancer, Heart Disease, Medical Negligence/Obesity and Family Support



NHS Pension and Staff costs

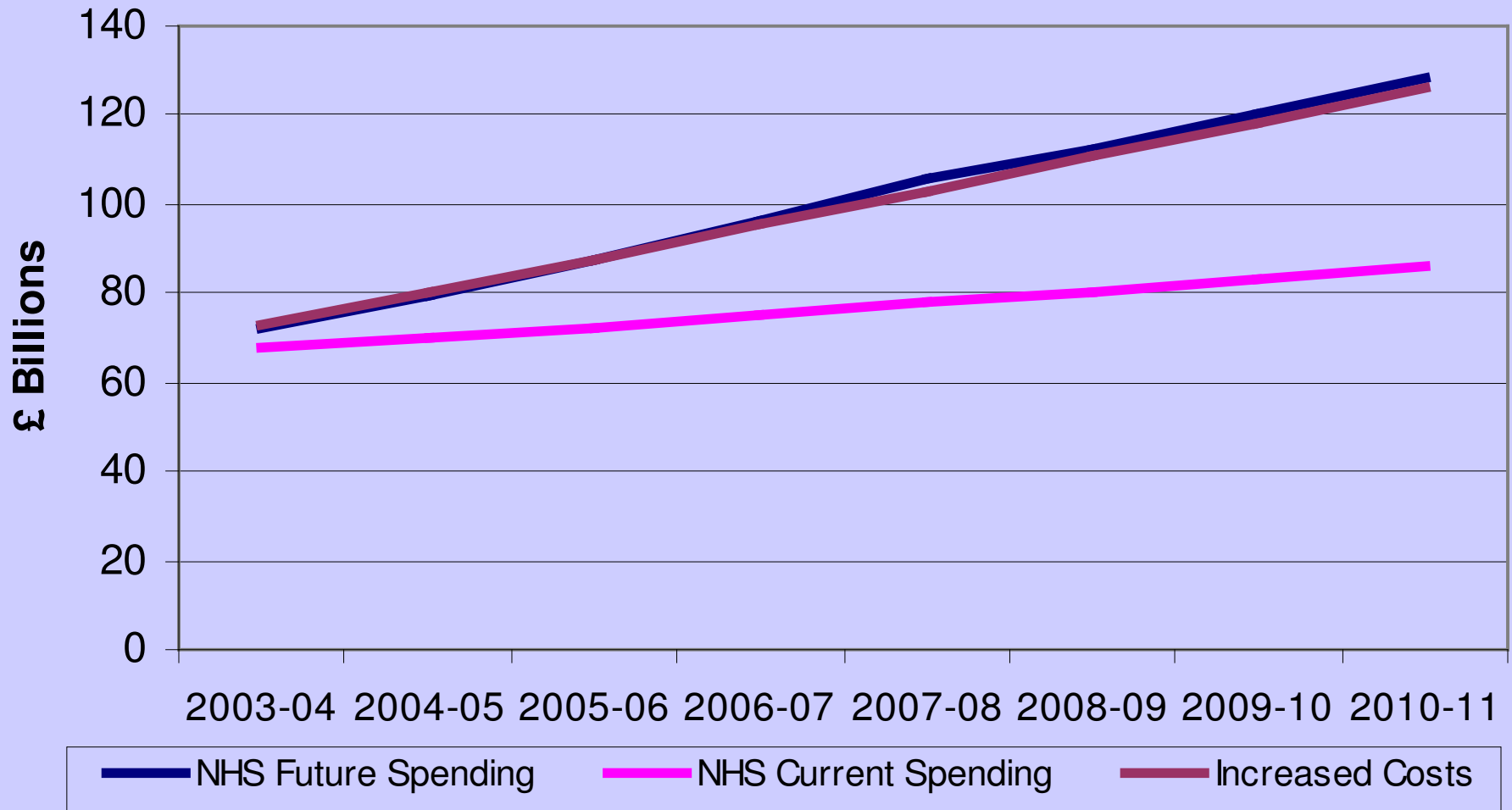
- In March 1999 there were 433,000 NHS pensions in payment at a cost of £1.9 billion²⁵
- Due to increased life expectancy and increased staff numbers it is reasonable to expect this cost to rise to £4 billion by 2010
- According to a recent report by Watson Wyatt, the pension liability of the public sector is £580 billion. NHS workers make up 28% of the public sector workforce, amounting to a liability of £160 billion
- Public sector pension liabilities are now growing at a rate of £46 billion a year, says the Watson Wyatt report - enough to add 14p to income tax

...NHS Pension and Staff costs (cont'd)

- 1.6 billion was spent on pay increases in 2002²⁶. Similar increases can be expected in the future
- EU legislation means hours worked by junior doctors must be cut to 48 hours a week by 2011, from a current average of 72
- This means 18,500 extra doctors are needed just to stay where we are
- The average newly qualified doctor earns £31,000. By 2011 the cost of 18,500 extra doctors will be over £900 million
- Thousands of the country's most experienced doctors are expected to quit the NHS within 3 years after the introduction of a new contract which means they can retire early on full pensions²⁷

NHS Future Spending vs NHS Current Spending

Effect of Ageing, Cancer, Heart Disease, Medical Negligence/Obesity, Family Support and NHS Pension / Staff Costs

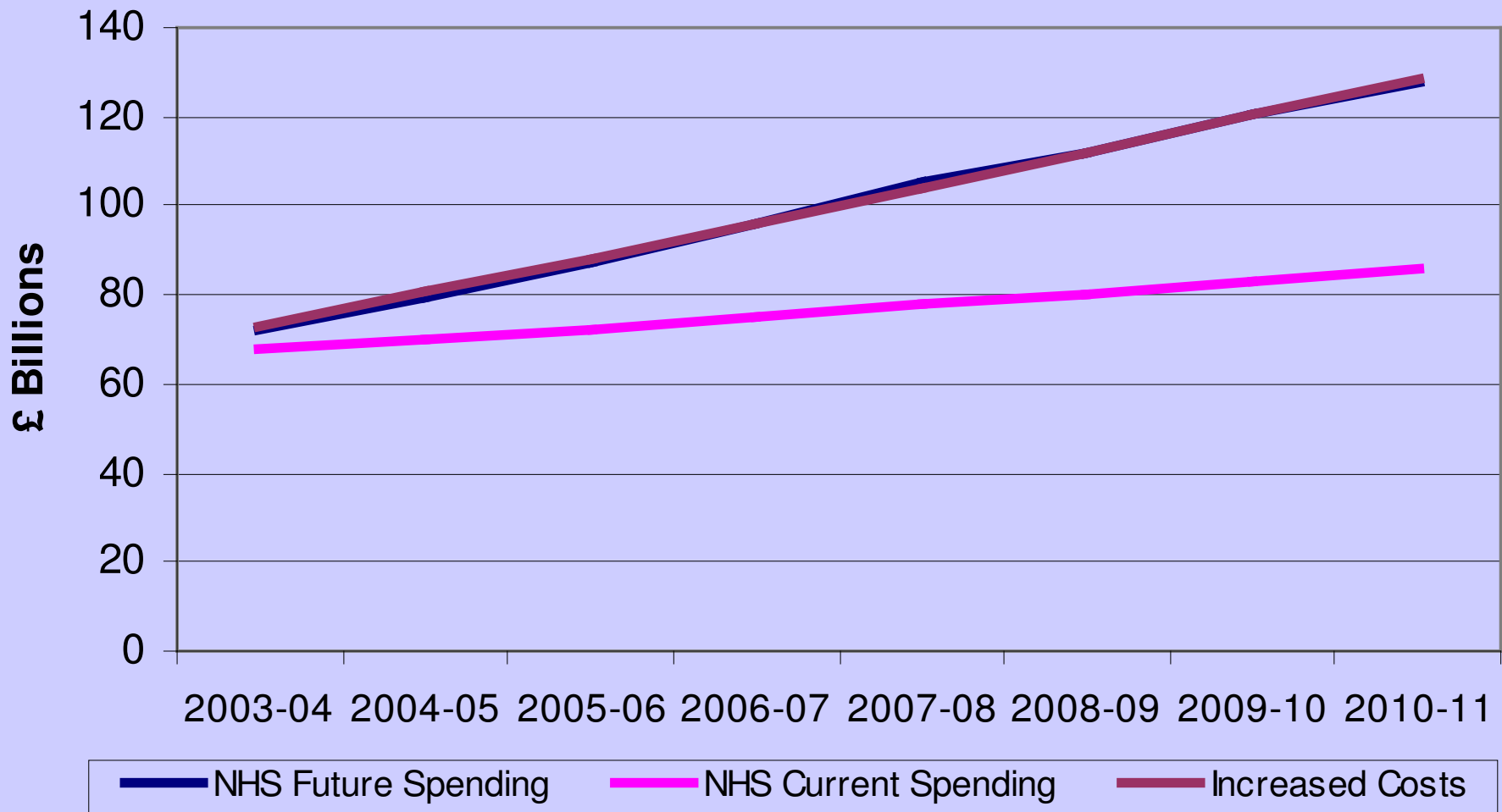


Public Expectation

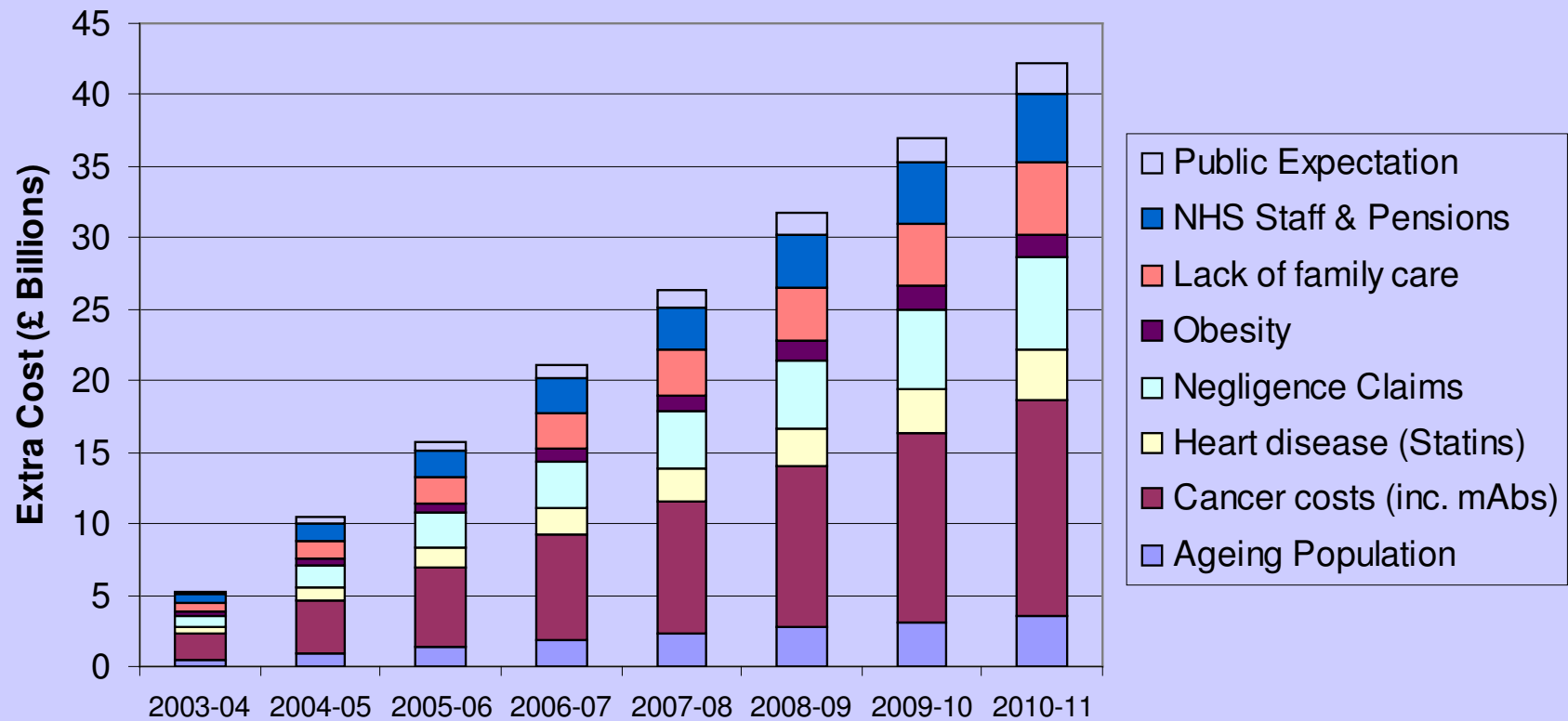
- Decision makers in the NHS are required to allocate resources to competing patients not on the basis of their ability to pay but in relation to need
- New developments rapidly evolve into needs in the eyes of the public (Enoch Powel)
- The effect of this boundless demand for improvement is modestly estimated at 4% compound per annum

NHS Future Spending vs NHS Current Spending

Effect of Ageing, Cancer, Heart Disease, Medical Negligence/Obesity, Family Support, NHS Pension / Staff Costs and Public Expectation



Breakdown of Additional Spend



"I saw, though too late, the folly of beginning a work before we count the cost and before we judge rightly of our own strength to go through with it"

*Daniel Defoe
"Robinson Crusoe"*

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