



Lessons from the Limeys

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Outline

1. Prologue: translating evidence into practice
 2. An outline of the Blair NHS reforms
 3. Workforce issues: numbers, skill mix and incentives
 4. Overview: is the bottle half full or half empty?
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A prologue on Limeys ...



James Lind
(1716-1794)

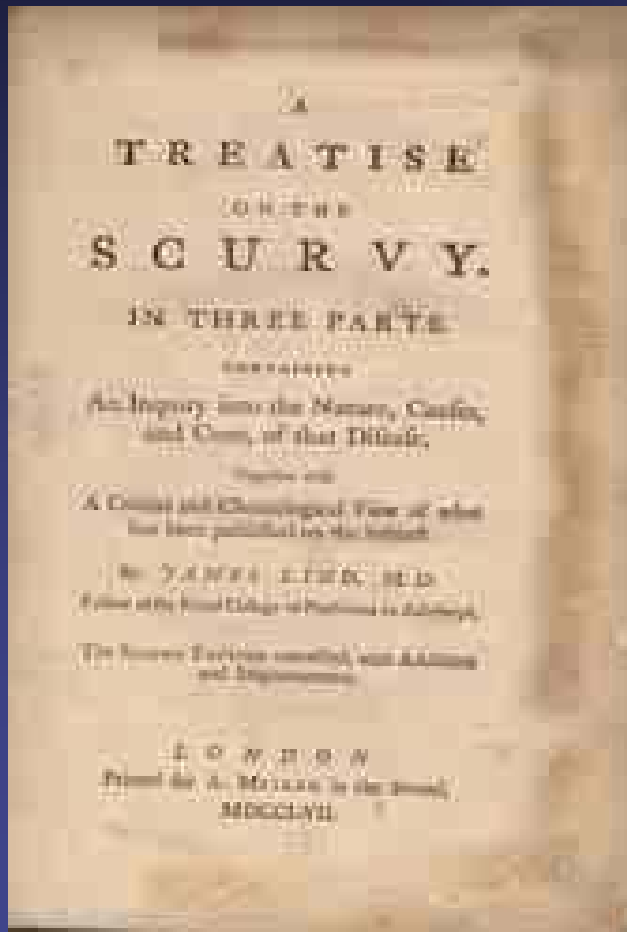
Conducted a trial of competing interventions to treat scurvy, a condition common at the time, which induced loose teeth, bleeding gums and haemorrhages

The comparators in Lind's controlled trial

- Six groups of scurvy-afflicted sailors aboard the HMS Salisbury – given usual diets plus:
 - cider,
 - seawater,
 - garlic, mustard and horseradish,
 - vinegar,
 - oranges,
 - lemons.
- The effect of citrus fruits was dramatic
 - one of the men with scurvy recovered enough to return to active duty within six days.
- The other treatments failed to show any improvement.



Translating evidence into practice?



- Lind published his findings in 1753
- Only by 1795 did the Royal Navy issue limes routinely to naval crews.
- An early example of the difficulty of translating evidence into practice (www.jameslindlibrary.org)
- And the origin of the term 'limeys'

The UK-NHS

- “Cash limited” or capped national budget divided amongst the 4 constituent countries of the UK: England, Scotland, Wales and Northern Ireland by the Westminster government
 - Budgets divided within each country by weighted capitation formulae.
 - Budgets spent by, in England, 152 Primary Care Trusts (PCTs) which vary in size and are local monopsonists. PCTs purchase primary care from groups of general practitioners (GPs) and hospital care from public and private organisations (private provision is for elective care and marginal but growing)
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Blair reforms

- Massive increase in funding since 2000
 - From 6.5 to 9.4% of GDP
 - 88% increase in real terms expenditure in 10 years
 - Annual real increases of 7% since 2000
 - Blair bonanza ends in March 2008, when funding growth will decline.
 - Political response to waiting for access to care in the NHS
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Performance targets in England

- Waiting time for **elective** surgery:
 - 18 weeks from GP referral to the knife by end 2008.
 - Waiting time for access to primary care:
 - 24 hours for a nurse, 48 hours for a GP,
 - Other sources of advice and/or treatment
 - NHS Direct (telephone access to advice)
 - Walk-in centres (nurse-led)
 - “National Service Frameworks” (NSFs) and investments to improve service quality and access in cancer, heart, renal, diabetes, children, elderly etc.
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Regulation: overlapping - competing bureaucracies

- Health Care Commission annually appraises financial and service performance: formerly with “star ratings”, now with poor/fair/good excellent gradings.
 - “Monitor” appraises financial performance of emerging and more independent NHS hospitals “Foundation Trusts” (FTs)
 - Audit Commission audits finances of non-FTs
 - National Audit Office independently appraises NHS programmes, reporting directly to Parliament
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Workforce issues

- Rapid increase in workforce numbers since 2000: implied assumption of constant or diminishing returns
 - Innovative approach to skill mix to increase workforce and undermine the monopoly powers of physicians
 - The reform of physician incentives: the new hospital specialist-consultant and GP contracts
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Workforce numbers

Staff group	Total (1999)	Total (2005)	% increase
All	1,098,348	1,366,030	24.4%
Doctors	94,953	122,987	29.5%
Consultants	23,321	31,993	37.2%
GPs	29,987	35,302	17.7%
Nurses	329,937	404,161	22.6%
Senior Managers	24,287	39,391	62.2%

NHS Plan targets and outcomes 1999-2004

Staff group	Plan	Outcome	Variance
Consultants	7,500	7,329	-3%
GPs	2,000	4,098	+105%
Nurses	20,000	67,878	+340%
Allied health Professions	6,500	11,039	+69%

Changes in skill mix

- Power to **prescribe the full formulary** given to nurses and pharmacists.
 - Minimal training (nearly 10,000 nurses now trained) and as yet conservative behaviour.
 - Hypotheses:
 - nurses may adhere better than physicians to protocols?
 - But with minimal investment in continuous medical education, industry may induce inappropriate prescribing?
 - What are the relative skills in diagnostics of physicians, nurse prescribers and pharmacists?
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Other areas of changing skill mix

- Nurse endoscopists
 - Nurse (minor) surgery
 - Nurse anaesthetists (common in the Netherlands, Sweden and the USA)
 - **But are they complements or substitutes?**
 - Is such change clinically and cost effective? A consensus is that nurses working with GPs have similar outcomes but do not reduce physician workload or cost (e.g. Sibbald et al. Cochrane Review)
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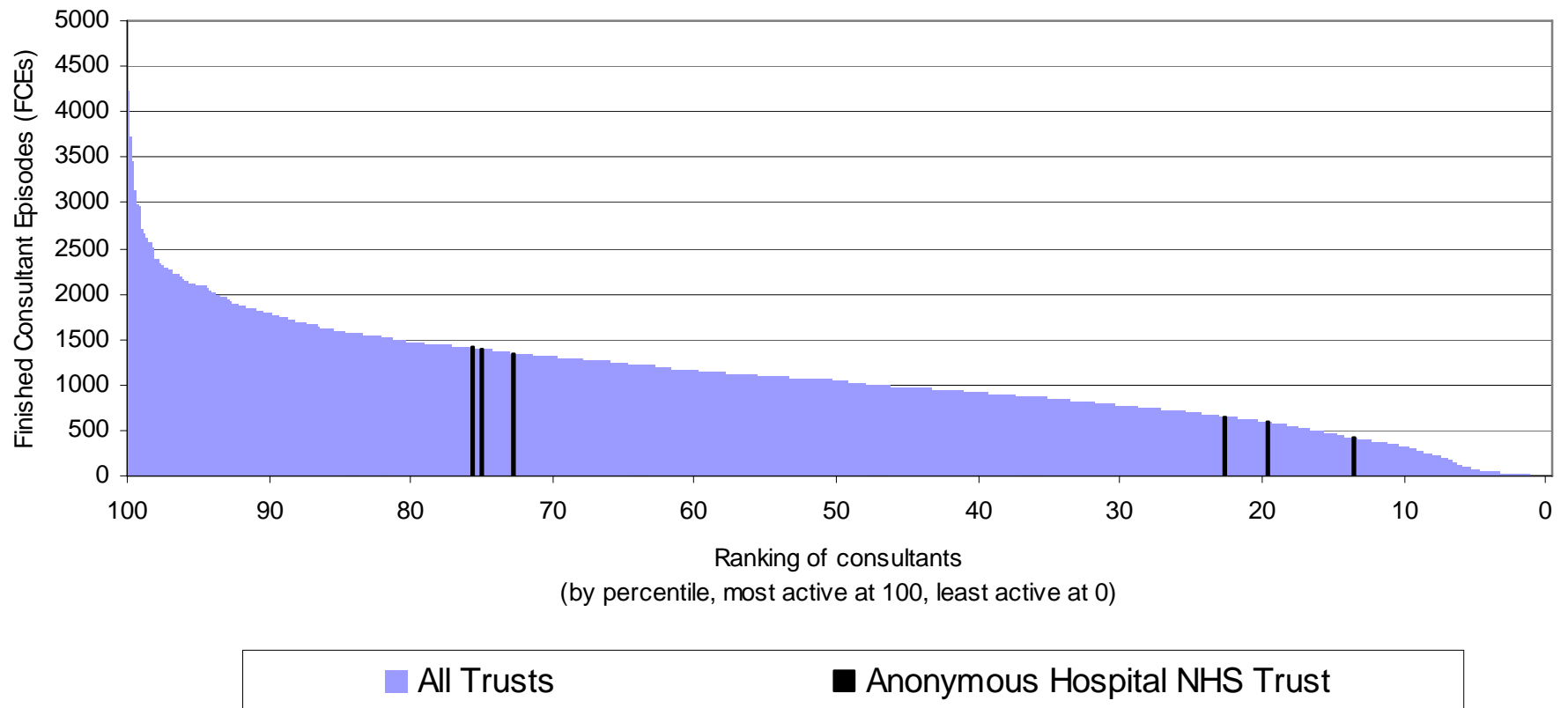
Workforce incentives: lots of advice!

- “The only way to get a message to a doctors is to write it on a cheque” Aneurin Bevan (architect of the NHS)
 - “there are many ways of paying physicians: some are good and some are bad. The three worst are fee for service, capitation and salary” Robinson (2001).
 - “The only way to pay a doctor is to change it every three years” Bob Evans
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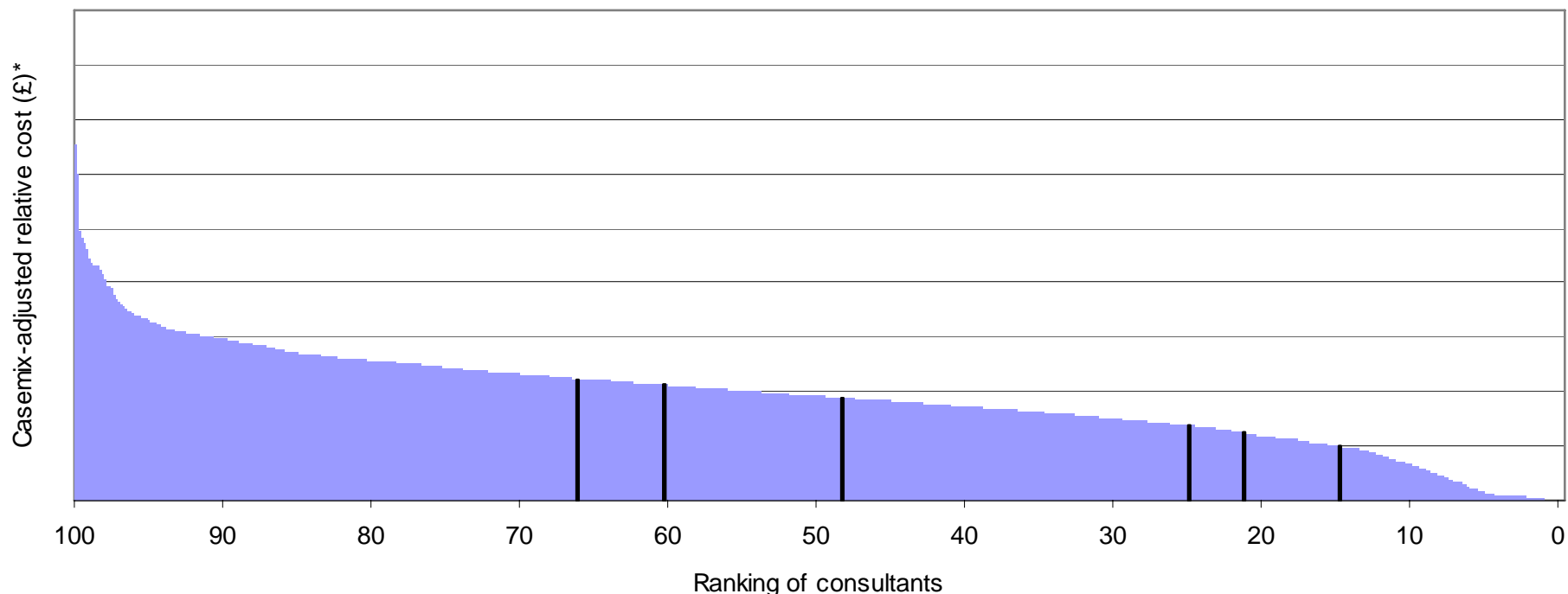
Incentives: what's the problem?

- Uncertainty about what works in medicine
 - Variations in clinical practice created by limited evidence base and “clinical autonomy”
 - Attention to measures of failure (e.g. mortality rates) and lack of attention to patient reported outcome measurement (PROM) and effects of care on mental and physical functioning
 - Variation is long established (e.g. Department of Health and Social Security (1976), ubiquitous and unmanaged
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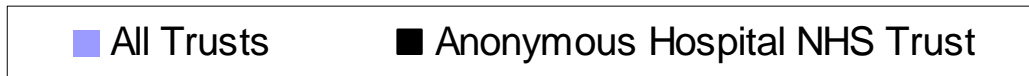
Variation in activity in general surgery: FCEs



Variation in activity in general surgery: casemix adjusted



*FCEs x national average
reference cost based on HRGs
(see guidance notes)



Reforming the Consultant contract

- Large pay increases
- Some potential increases in transparency
- Cost of over £715million; (National Audit Office, 2007)
- Overall - small return for a large investment

Year	Average earnings	% increase
2002-3	£86,746	
2003-4	£99,168	14.3%
2004-5	£103,648	19.5%
2005-6	£109,974	26.8%

Source House of Commons, Select Committee on Health, (2007), p 25

Reforming the GP contract

- Large pay increases,
- withdrawal from “out of hours” obligations
- “quality and outcomes framework” (QOF)
- Overspend due to “over-performance” of £250 million

Year	Average earnings	% increase
2002-3	£64,443	14.04%
2003-4	£72,752	12.89%
2004-5	£87,076	19.69%
2005-6	£95,350	9.50%

Source: House of Commons, Select Committee on Health (2007) page 23

GP Contract quality framework

A: Clinical indicators

■ CHD:	121
■ Stroke:	31
■ Cancer:	12
■ Hypothyroidism:	8
■ Diabetes:	99
■ Hypertension:	105
■ Mental health:	41
■ COPD:	45
■ Epilepsy:	16
■ <i>Total:</i>	<i>550</i>

The QOF: performance related pay to enhance improve chronic care

- The QOF offers up to 1050 points, 550 for clinical activity and the rest managerial. Points allocated on sliding scale related to performance, with each point now worth £125 (initially £75)
 - Paid to practices=groups of GPs to enhance peer policing
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Public perceptions of the GP contract?



'Hello, doctor's surgery? When would it be convenient for me to have abdominal pains?'

Research questions about the QOF

- No “before” or baseline data so before and after evaluation difficult
 - Possible payment for what they already were doing!
 - Points weighting not related to population health gains
 - (see: Fleetcroft and Cookson, JHSRP, 1/2006)
 - What is the opportunity cost?
 - Who is delivering the QOF?
 - Can primary care be delivered with GP/population ratios of 5000 (with nurse substitution) rather than present 1750?
 - The problem of gaming, especially with “light touch” regulation
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Incentive reform in the NHS

- Missed opportunities
 - Consequent “discovery” of workforce productivity!
 - What is productivity?
 - process performance and/or outcome performance?
 - Non financial incentives
 - e.g. the publication of cardiac surgery mortality rates shifts the mean and affects dispersion (Heart, (2007).
 - The use of patient reported outcome measures:
 - the work of the British United Provident Association since 1999 (SF12/36 for elective procedures), and CHKS pilots for elective care in 4 NHS hospitals using SF12 and EQ5D
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Experimentation with financial incentives – what else could we do?

- Manipulate the QOF, with targeting on relative population health gains
 - Enforce the consultant contract with transparency in cost, activity and outcomes (mortality and PROM)
 - The role of prospect theory=loss aversion/ reputational incentives: if doctors value small losses more than small gains, is it time to put margins of remuneration at risk to induce behaviour change?
 - (e.g. Rizzo and Zechhauser, Review of Economics and Statistics, 2003)
 - Note all the time that all reforms are social experiments (Campbell 1969) and our ignorance of the costs and benefits of alternatives is large (IOM 2007)
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Overview

- The Limeys were too hasty
 - “Instead of ready , take aim and fire, the Government chose to make ready, fire and then take aim”! (Raymond Hoffenberg)
 - The Limeys paid little attention to the evidence base and failed to evaluate systematically
 - “The operation was a success but the patient died”!
 - Access and quality have improved but is the bottle half empty (the sceptics) or half full (the optimists)?
 - Where do I stand?
 - Imbued with scepticaemia
 - defined by Skrabanek and McCormick (fellow sufferers) as “an uncommon generalised disorder of low infectivity. Medical school education is likely to confer life-long immunity”!
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