# Competition in health care: What can we learn from the UK?

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## The appeal of competition

- Market-oriented approaches health care an important reform model
- Competition in rest of the economy argued to promote growth
- Simple political appeal in heavily regulated healthcare markets with low productivity growth
- But consolidation in US markets has led to questions about functioning of markets in health care
- Is competition useful in healthcare?

#### This talk

- Focuses on lessons from a large experiment in the introduction of competition in the UK
  - Begin with a brief look at theoretical support and the evidence from the USA
  - Outline the reform agenda in the UK
  - Summarise recent empirical studies to see what the evidence suggests

## **Preliminaries - Definition**

- In healthcare can have either competition on insurer side and/or competition on provision side
- Both: USA, the Netherlands (started with the insurance side); Switzerland (very regulated)
- Provider only UK; Nordic countries
- Focus here on the latter

## Theoretical support

- Many models not very specific to the health care sector (though growing interest)
- Bottom line
  - Competition generally beneficial when prices are regulated (similar to simple models of school competition)
  - Anything could happen when they are not and results are sensitive to model specification
- Implications empirical evidence is needed

#### Non-UK evidence

- Mostly from USA
  - Where prices are regulated prices competition increases quality
  - Less clear when there are market determined prices
  - Effects are different across different types of buyers
  - Market structure may be endogenous to quality
- So ...evidence from policy experiments very valuable



#### **Evidence from the UK**

- A. The Blair pro-choice reforms
- B. Competition and management in public hospitals
- C. Hospital consolidation

## The Blair pro-choice reforms

- Blair regime started with 'co-operation' and targets
- Mid-2000s shifted to policy of 'choice and competition'
- Components
  - Freedom for patients to choose hospital of care
  - Shift from selective contracting to prospective per case payments (similar to DRGs) for around 70% of hospital activity
  - Greater autonomy for well performing hospitals (keep some surpluses)

## The Blair pro-choice reforms

- Should increase elasticity of demand with respect to quality
- Hospital response increase quality since can't change prices and can keep surpluses
- Incentives greater where market is less concentrated

#### The impact

- Did the reforms change behaviour and market structure?
- Did this have any effect on outcomes, processes, productivity, equity?



#### Behaviour and market structure

- Patient knowledge of choice
  - Around 50% of patients recalled being offered choice within two years of the reform
  - But also a view from some GPs that their patients did not want (or need) choice



#### Behaviour and market structure

'Better' hospitals attracted more patients post reform

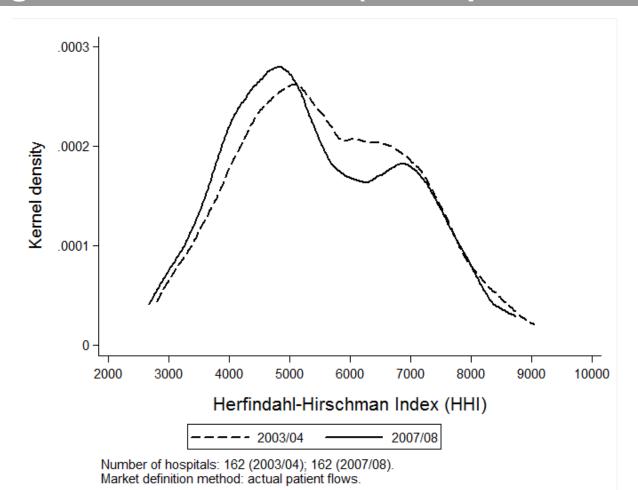


## Better hospitals attracted more patients

|  | Quality (AMI mortality rate 2003) |        |        |              |        |        |
|--|-----------------------------------|--------|--------|--------------|--------|--------|
|  | Bottom quartile                   |        |        | Top quartile |        |        |
|  |                                   |        | %      |              |        | %      |
|  |                                   |        | change |              |        | change |
|  |                                   |        | (2003- |              |        | (2003- |
|  | 2003                              | 2007   | 07)    | 2003         | 2007   | 07)    |
| Number of elective admissions                | 33,985                            | 38,274 | 12.6%  | 41,398       | 45,132 | 9.0%   |
| Average distance travelled by patients       | 11.4                              | 11.7   | 2.4%   | 10.0         | 10.1   | 1.1%   |
| Share of patients bypassing nearest hospital | 0.37                              | 0.39   | 5.4%   | 0.45         | 0.43   | -4.4%  |
| Number of hospitals                          | 33                                | 33     |        | 32           | 32     |        |



#### Change in market structure (actual provider HHI)

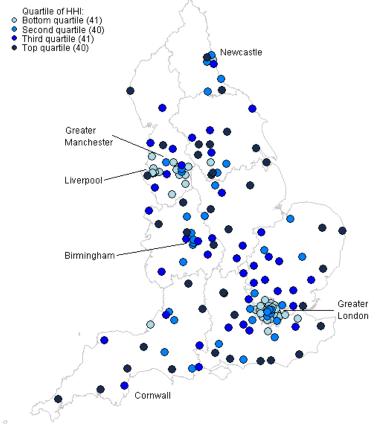


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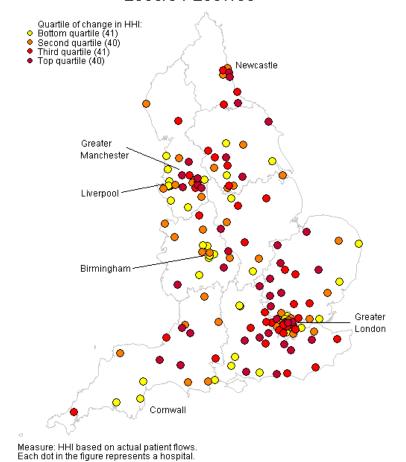
### Where did freeing up choice have an impact?

## Concentration levels: hospitals 2003/04



#### Measure: HHI based on actual patient flows. Each dot in the figure represents a hospital.

## Changes in concentration: hospitals 2003/04-2007/08



#### Did choice matter?

- Formal demand estimates (Seiler et al 2011)
  - (Elective CABG pre and post reforms)
  - Test of relaxation of constraints on choice
  - Average effect limited but
    - Better matching sicker patients more responsive to quality post reform
    - No evidence of increase in inequality

#### The impact on quality and process

Where potential competition was greater:

- Quality rose (measured by fall in AMI and all cause mortality, 2 studies)
- Productive efficiency rose (decline in length of stay, 2 studies)
- Financial performance no effect
- Access no effect (waiting times,1 study)
- Inequality did not increase (1 study)

#### **Summary Blair reforms**

Impact of reform appears positive even with only some patients exercising choice

- Increased amount of competition in markets
- Good hospitals attract more patients post reforms
- Quality of care risen without increase in expenditure

Cost benefit analysis – direct impact after 2 years small but if maintained potentially much larger

But ..... large political push back



## Competition and Management in Public Hospitals





#### **Motivation**

- Management has been shown to result in greater firm productivity
- Economies which are competitive have better management
- Is this the case in hospitals?

**Mechanism:** Adapt Bloom and Van Reenen (2007, QJE) management practice survey technique for healthcare



#### Management in NHS hospitals and competition

- Bloom et al (2010) find that
- Better management is
  - Associated with a range of better outcomes (quality, financial performance, waiting times, staff satisfaction and regulator ratings)
  - Management better in hospitals facing more competition



## MY (co-author's) FAVOURITE QUOTE:

#### Don't get sick in Britain

Interviewer: "Do staff sometimes end up doing the wrong sort of work for their skills?

NHS Manager: "You mean like doctors doing nurses jobs, and nurses doing porter jobs? Yeah, all the time. Last week, we had to get the healthier patients to push around the beds for the sicker patients"



## Evidence from UK Hospital consolidation



## Evidence from UK Hospital consolidation

- US evidence: consolidations raise prices, mixed impact on quality, reduce costs only slightly (Vogt 2009)
- Is this the same for a public system?
  - 1997 onwards UK experienced a wave of hospital reconfigurations
    - Over half of acute hospitals were involved in a reconfiguration with another trust
    - Median number of hospitals in a market fell from 7 to 5
- What was the impact on hospital production?



#### Hospital consolidation

- Analysis (Gaynor et al 2012)
  - Exploit large number of mergers to examine hospital performance before and after merger are compared
  - Exploit randomness of merger activity from political marginality to create a 'control' group of non merging hospitals



#### **Hospital consolidation effects:**

- Consolidations resulted in:
  - Lower growth in admissions and staff numbers but no increase in productivity
  - No reduction in deficits
  - No improvement in quality
- Summary costly to bring about with few visible gains other than reduction in capacity



#### Summary of UK evidence

- Competition beneficial in UK with fixed prices
  - Increase in quality, no increase in expenditure, no evidence of increased inequalities
  - Perhaps some of this gain is through better management
- Local mergers only reduce hospital capacity



## Lessons and emerging Issues

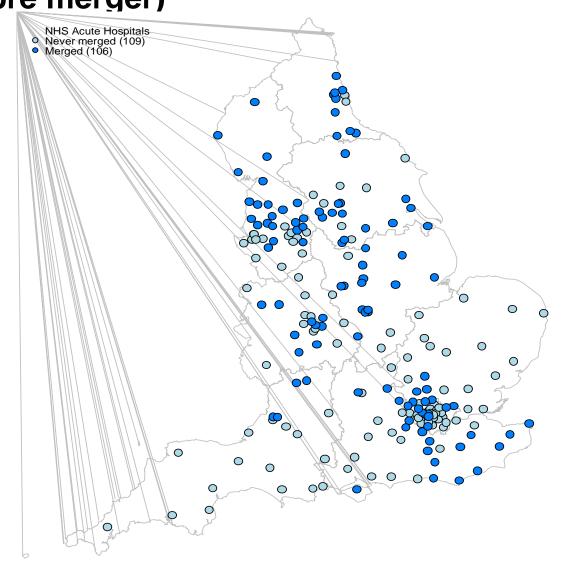
- Pro-competitive policies appear to have brought about gains for patients
- Need market regulation to ensure mergers do not remove all competition
- Need to ensure market regulation does not become command and control by another name



## The evidence from the UK

#### THANK YOU

Widespread merger activity: merged and unmerged hospitals (pre merger)





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