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# Impact of reintroducing competition in the English NHS: a synthesis of evidence from the Health Reform Evaluation Programme

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# What did theory and past research tell us might occur?



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- US evidence of higher levels of competition associated with higher quality of hospital care under fixed prices (Gaynor, 2004)
- Evidence from 1990s NHS internal market of association between greater inter-hospital competition and lower costs, but poorer outcomes (Propper, Burgess & Gossage, 2008)
- Overall direction of performance advantage of different types of providers not clear
- PbR likely to increase activity (tho' capacity constraints?) and reduce unit costs, but potential for 'cream skimming'
- Patient choice could also increase inequities though little evidence

# Impact of competition with fixed prices on patient care (Gaynor et al, 2010)

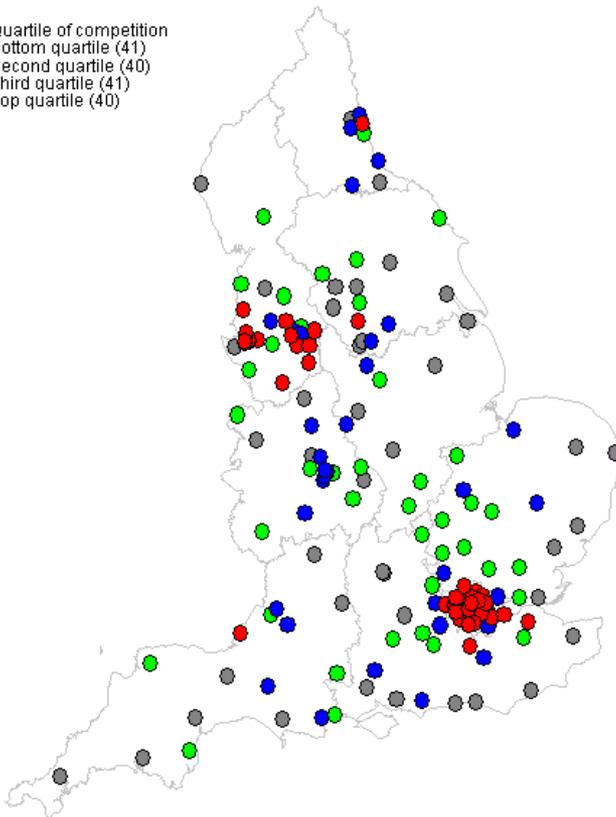
- Hospital markets are highly concentrated compared with non-hospital markets, especially for non-electives
- Commissioning patterns are also concentrated
- But increase in spatial competition, 2003/04-2007/08
  - particularly from 2006/07
  - around rather than in urban areas
  - greater for elective than non-elective services

# The location of, and changes in, competition



## Competition at the hospital level 2003/04

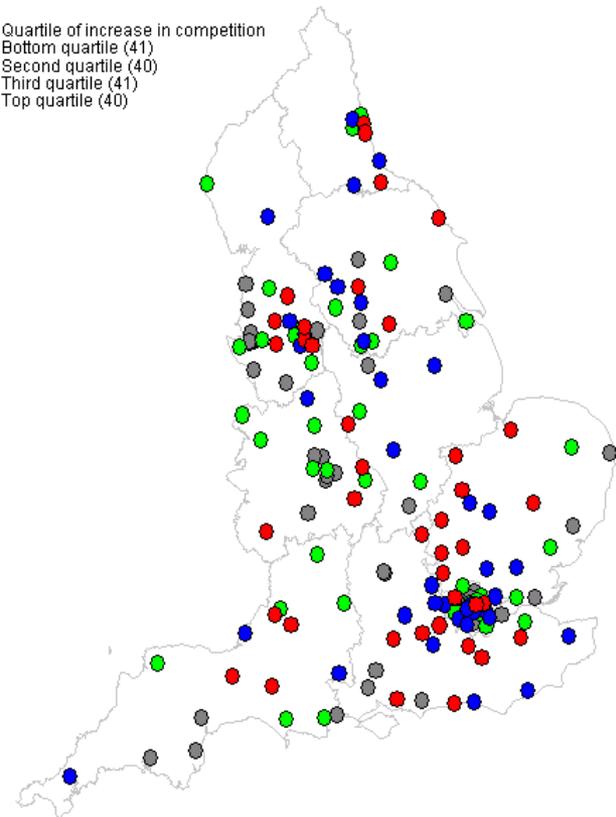
- Quartile of competition
- Bottom quartile (41)
- Second quartile (40)
- Third quartile (41)
- Top quartile (40)



Competition measure: Actual HHI - Patient Flow.  
Each dot in the figure represents a hospital.

## Increase in competition - hospitals 2003/04-2007/08

- Quartile of increase in competition
- Bottom quartile (41)
- Second quartile (40)
- Third quartile (41)
- Top quartile (40)



Competition measure: Actual HHI - Patient Flow.  
Each dot in the figure represents a hospital.

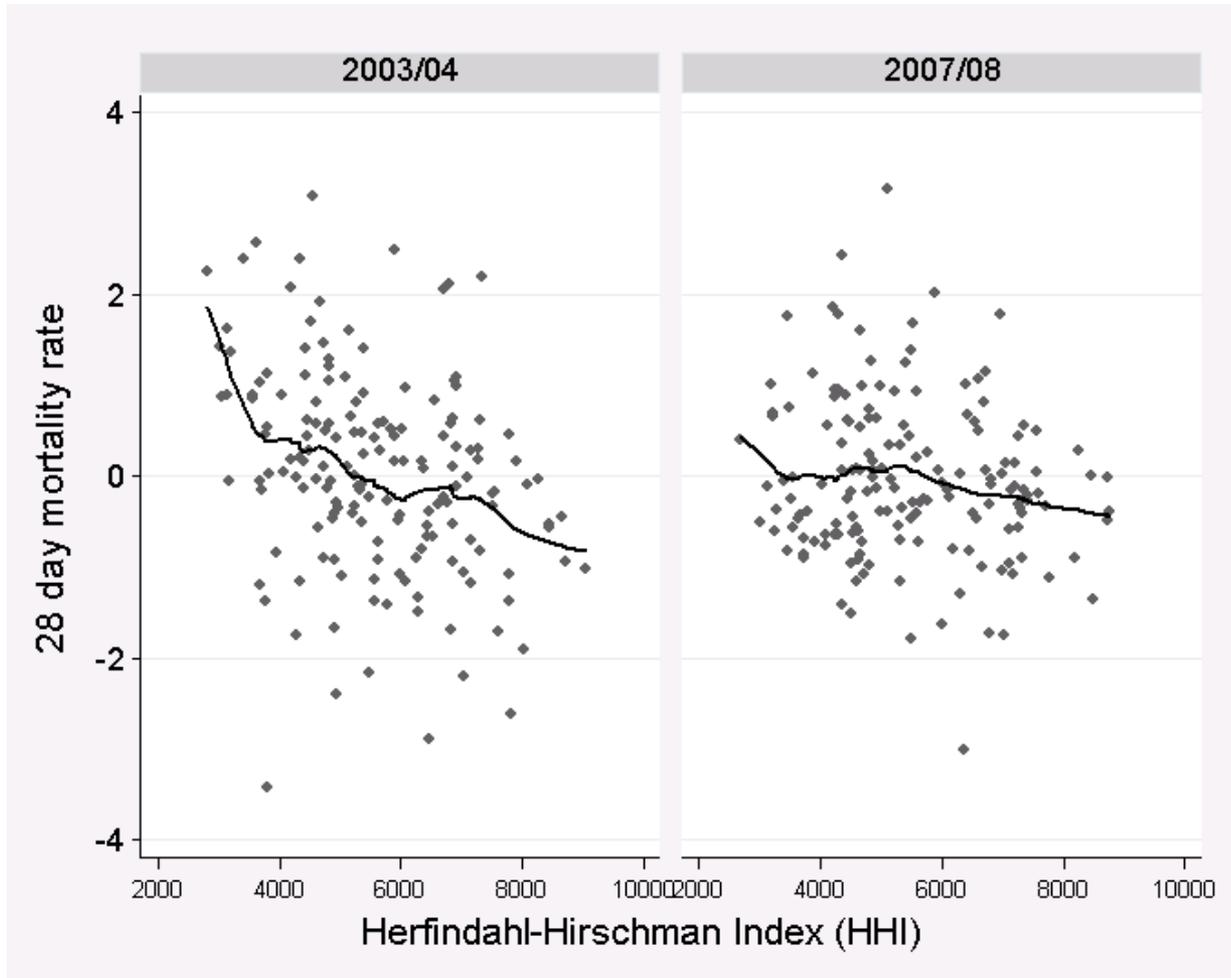
# Impact of competition with fixed prices on patient care



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- Increase in competition associated with an improvement in clinical outcomes, as measured by all-cause & AMI death rates, and shorter length of stay, unlike 1990s
- Death rates fell more 2003/04-2007/08 in hospitals which faced more competition, not explained by increase in spending per capita or in admissions
- Cooper et al (2010) similarly show quicker fall in AMI mortality (i.e. emergency care) for patients living in more competitive spatial hospital markets after Jan 2006 introduction of patient choice for electives

# 28 day post-hospital mortality rate (all causes) and levels of HHI pre- and post-reform

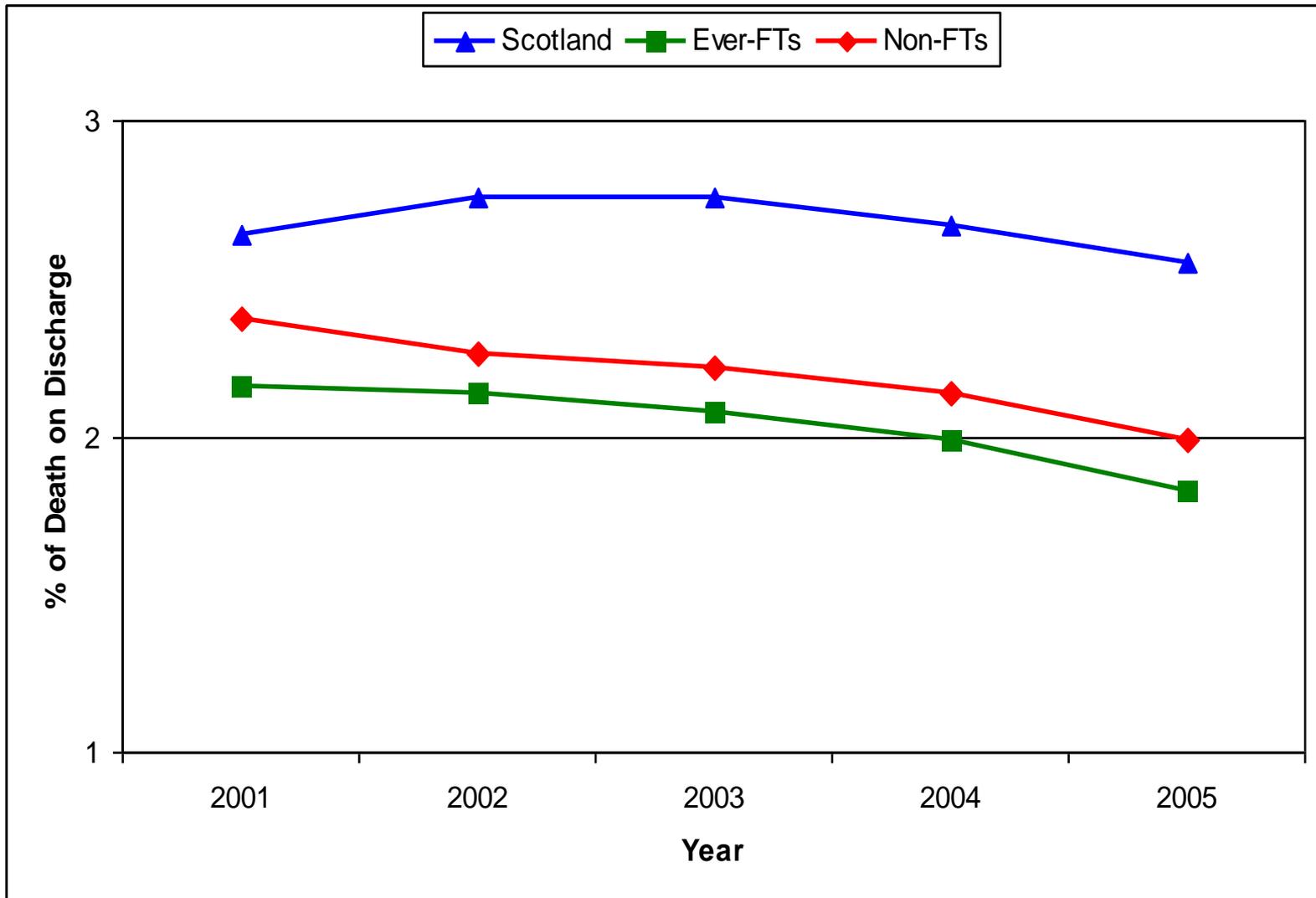




# Impact of 'Payment by Results' (Farrar et al, 2009)

- Took advantage of staged roll-out and comparison with Scotland where no PbR
- PbR had the expected (modest) effects on unit costs, but not on volumes
- DiD analysis of FTs vs Scotland, 03/04-06/07, showed significant 8% greater reduction in LOS, significant 3% greater rise in day case rate
- Feared negative effects on quality did materialise
  - e.g. in-hospital mortality reduced faster in England

# Trends in hospital mortality

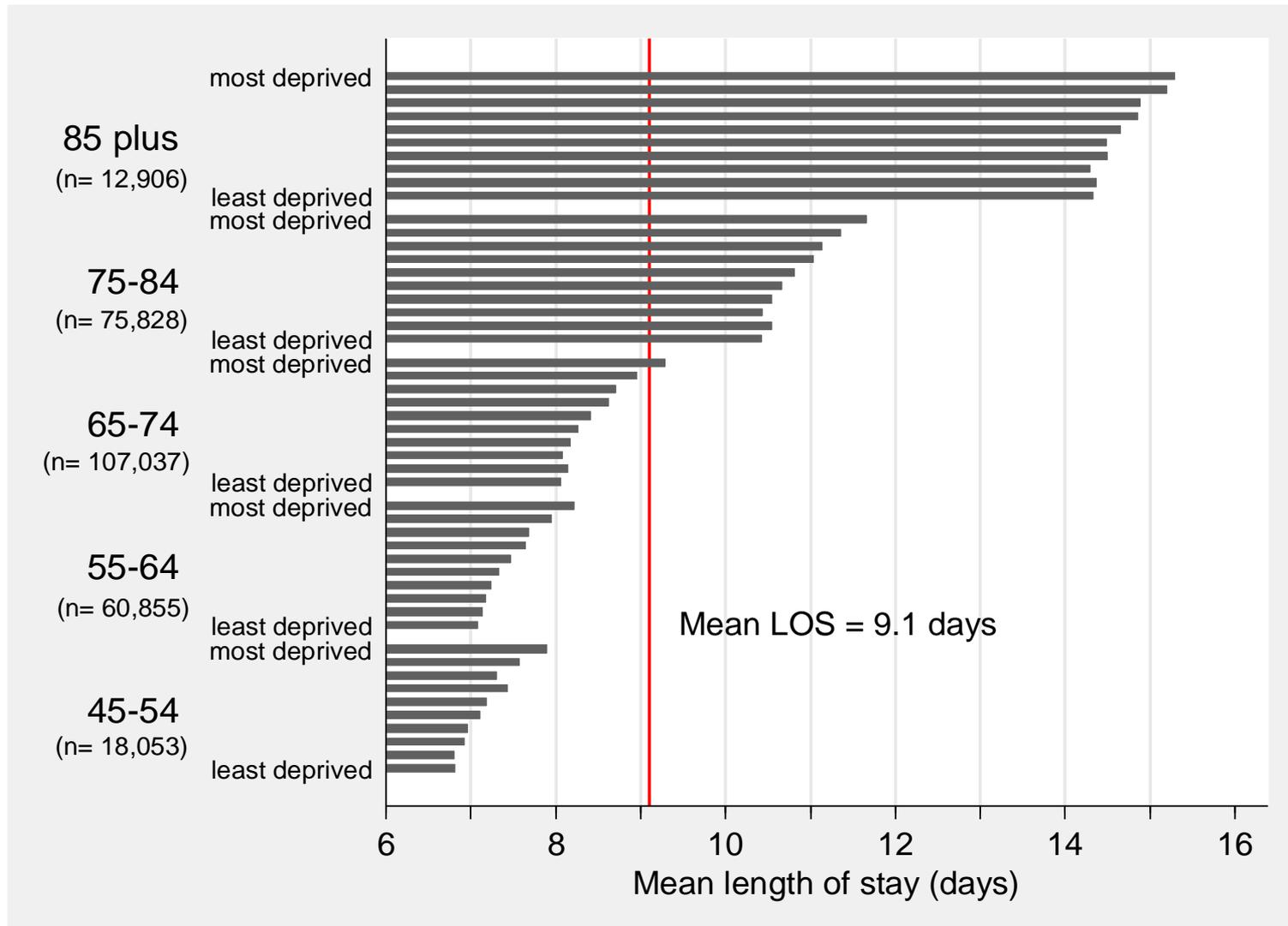




# Effects on inequality of access to health care (Cookson & Laudicella, 2010)

- Patients from most deprived decile of areas stayed 6% longer after THR in 2001/02 than those from least deprived decile allowing for other patient characteristics, falling to 2% by 2007/08
- This suggests some incentive under PbR to 'cream skim'

# Mean length of stay by age group and deprivation decile for THR



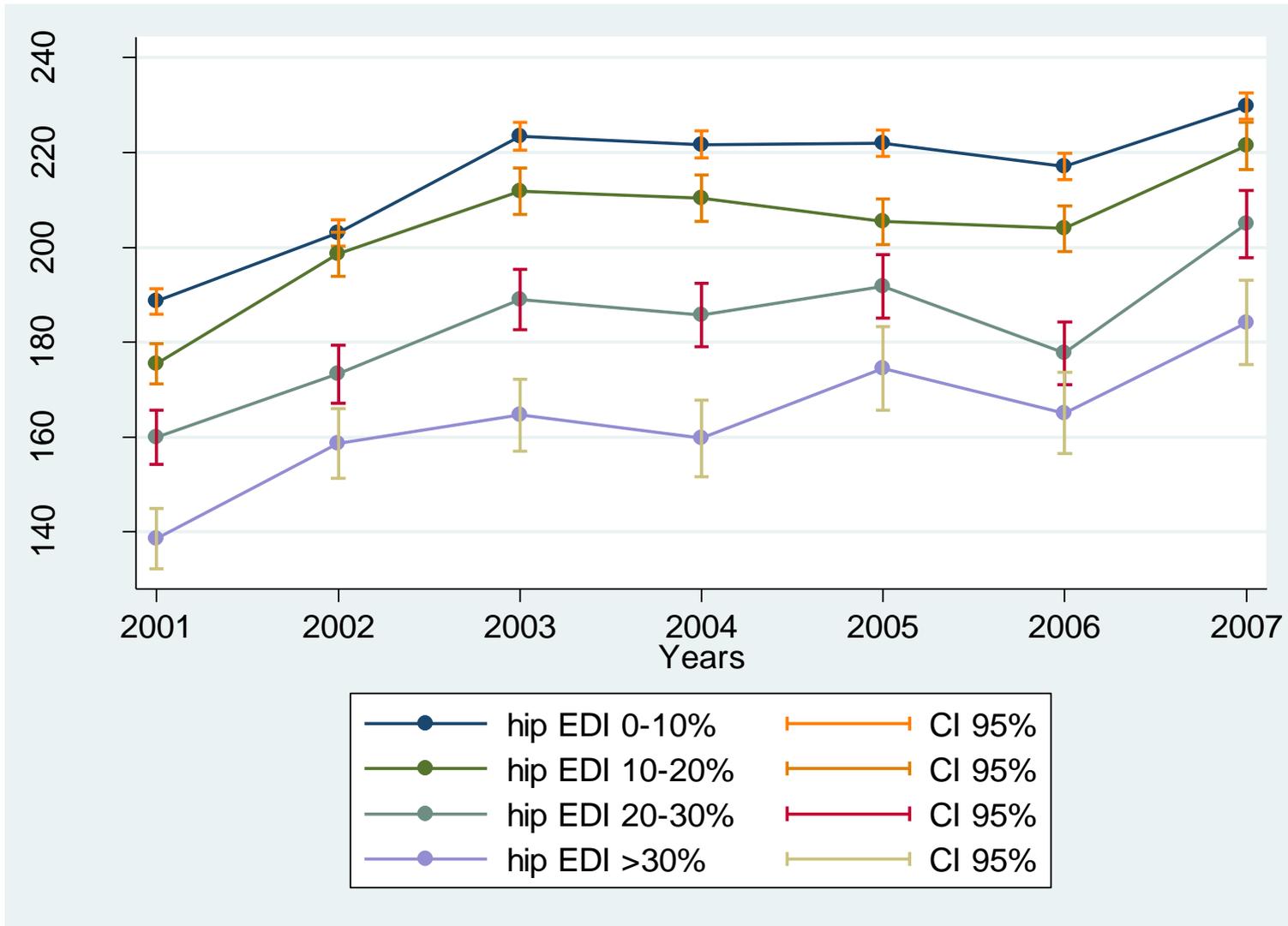
# Effects on inequality of access to health care



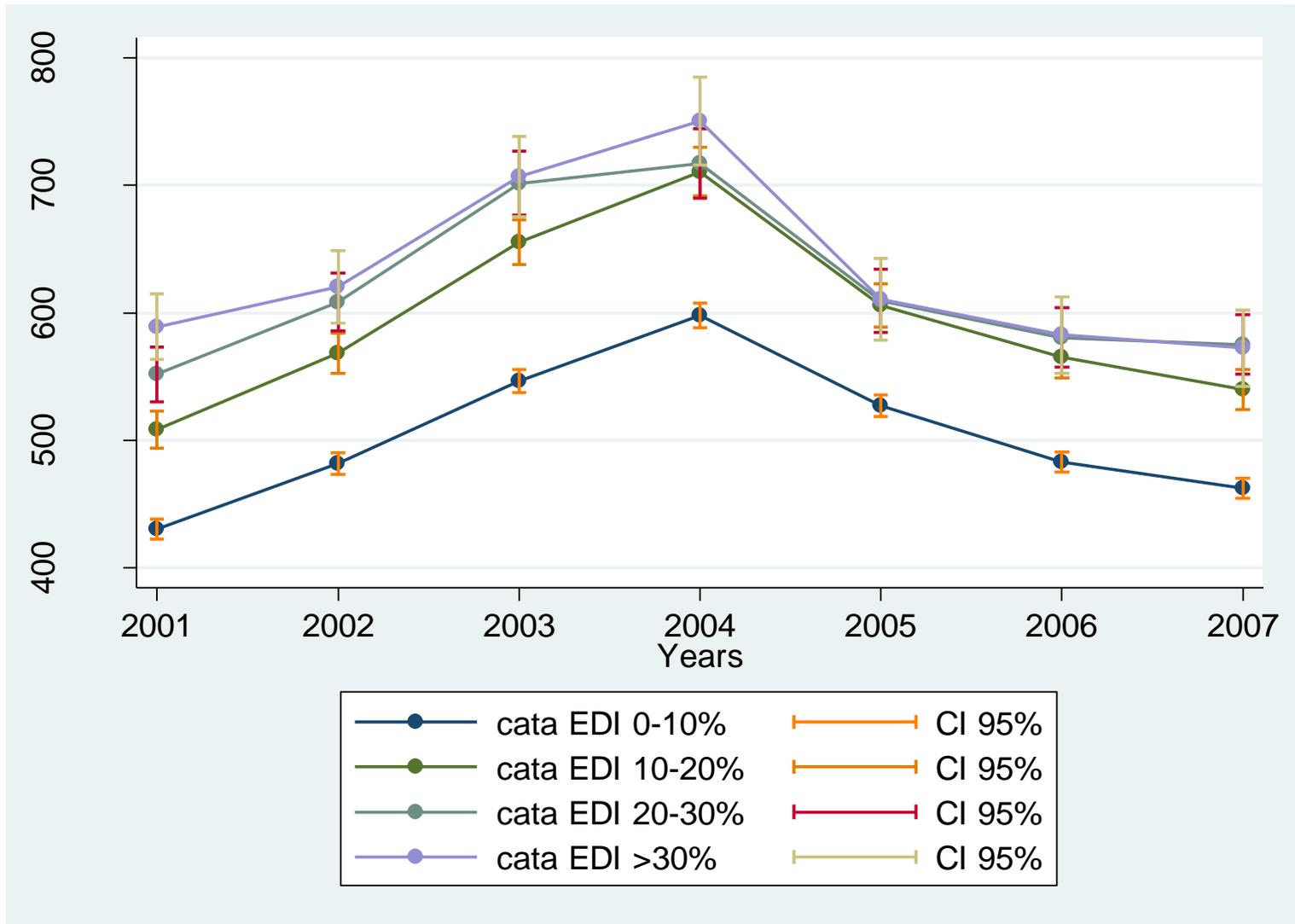
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- But no change in socioeconomic equity of use, 2001/02-2008/09 for electives
- And evidence that equity might even have improved despite increase in competition
  - admission rates rose slightly faster in low income areas
- Cooper et al (2009) similarly show fall in waiting time & in SES gradient of waiting, 1997-2007 (over the targets & quasi-market periods)
- Raine et al (2010) show SES equity in colorectal, breast and lung cancer procedure rates unchanged 1999-2006

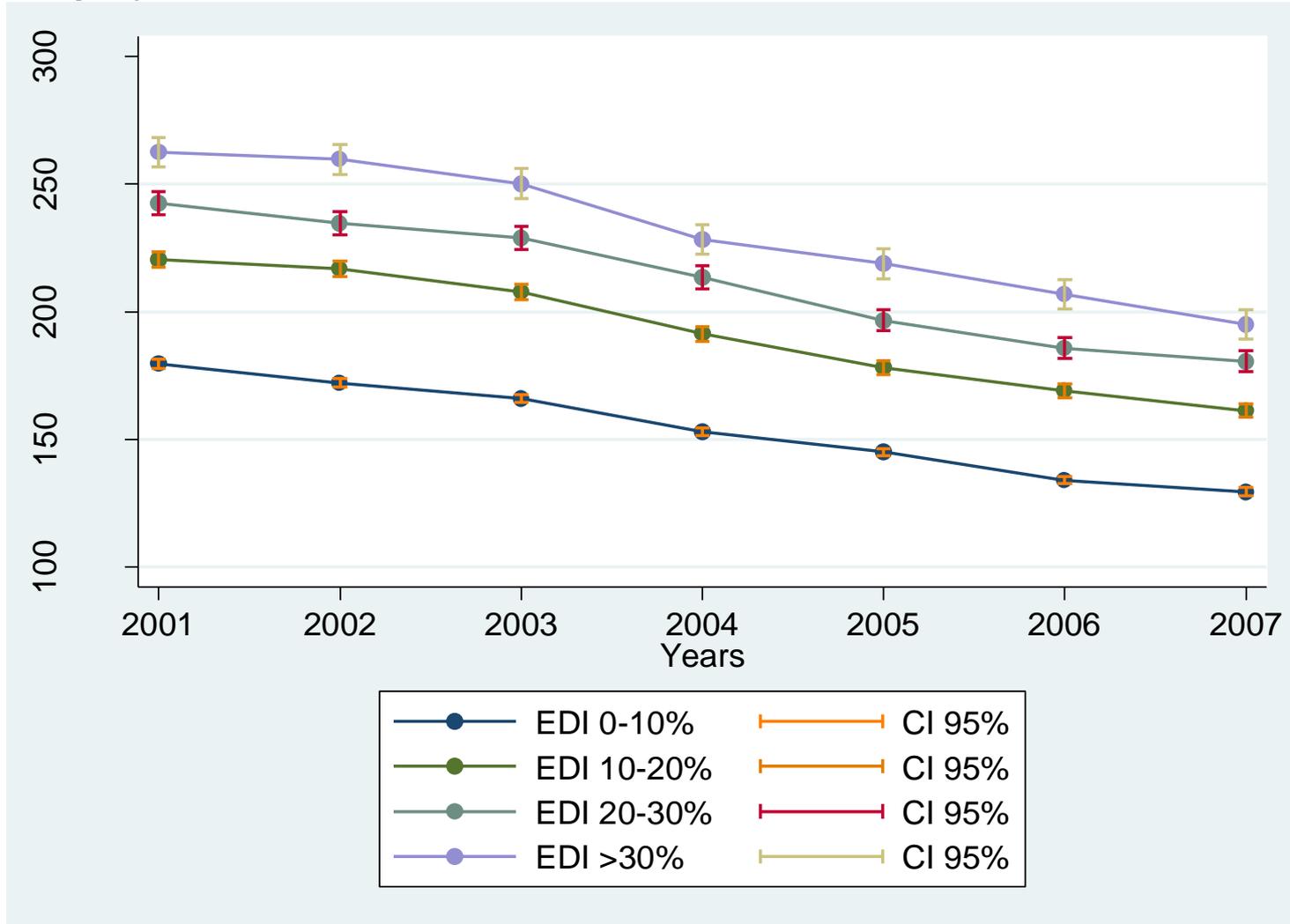
# Trends in hip replacement rates, 2001-07, by income deprivation groups (intervals of EDI)



# Inequality trends in cataract repair rates, 2001-07, by income deprivation groups (intervals of EDI)



# Trends in age-sex adjusted mortality from ischaemic heart disease, 2001-7, by income deprivation (EDI groups)



# Impact of provider diversity (Bartlett et al)



- Local commissioners are influential in extent of provider diversity, but strong barriers to new entrants (e.g. in bidding & contracting) and thus limited private penetration affecting competition
- Little head-to-head competition & evaluation
- Private sector tends to focus innovation on organisation, management & skill mix, NHS on clinical practice & technology, and Third Sector on new services for neglected/hard-to-reach groups



# Impact of provider diversity

- NHS providers have responded to e.g. ISTCs by introducing new care pathways and improving patient experience, but most perceive little competition
- Little evidence favouring one sector over another
  - ISTC patients report same level of quality of care as NHS patients though some differences in specific aspects (Pérotin et al, 2010)
  - No significant differences in patient-reported outcomes for electives (Browne et al, 2008)

# How patients choose and providers respond (Dixon et al, 2010)

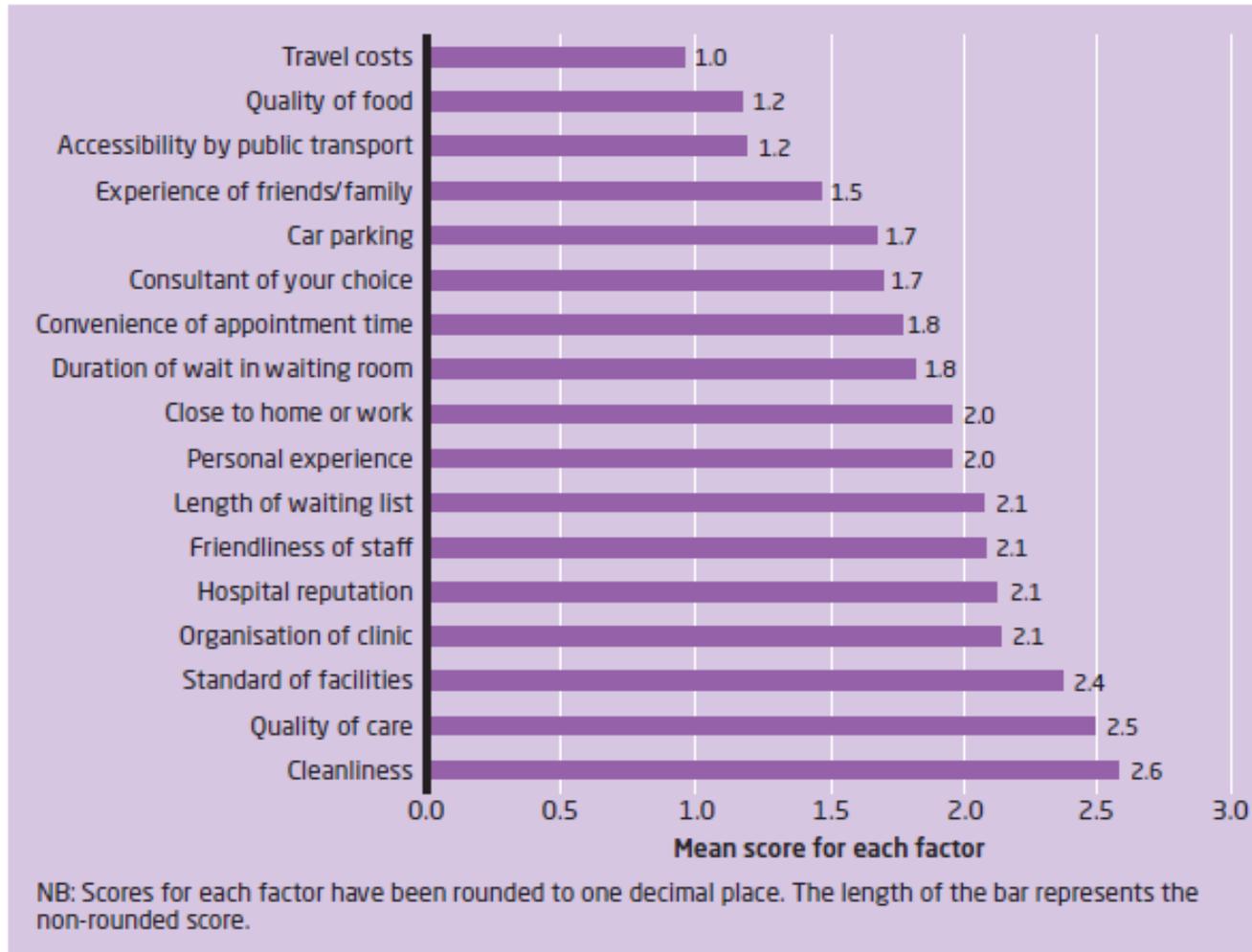


- Patient survey showed that vast majority think choice is important (especially elderly & minorities), 49% reported offered 'choice' of hospital
- GPs reluctant to prioritise offering choice routinely
- Personal experience (41%) and GP (36%) were main sources of advice rather than formal information on quality (4% used NHS Choices)

# How patients choose and providers respond



Figure 9 Factors that influenced patients' choice of hospital



# How patients choose and providers respond



- Patients offered a choice were more likely to travel to a non-local hospital (29%) than those not (22%)
- If patients had had a bad experience of a hospital they were more likely to go elsewhere
- Patients with more education more likely to be aware of choice and to go to a non-local hospital
- NHS hospitals perceived patient choice as of limited significance, but a small percent of patients were switching with offer of choice
  - Is this enough to send a signal to poor providers?

# Main themes emerging from health reforms evaluation

- Predictions largely confirmed, though some dissonance between local & national data and perceptions
- NHS is still some distance from running as a fully fledged market in all parts though some hospitals seem to be competing on quality
- Implementation varies by area, specialty
  - Reforms appear best to 'fit' electives & where there is contestability rather than e.g. long term conditions, mental health services; PbR still only applies to 30-40% of hospital services; entry of new providers is modest; patient choice is still often GP-led; need for better information on quality

# Main themes emerging from health reforms evaluation

- No obvious signs of ‘harm’ (hard to measure)
  - No evidence of reduction in equity of access to electives or fall in quality though not able to look at all service areas (e.g. chronic care)
  - Regulated prices appear to be important for quality
- Other impacts comparatively modest compared with the impact of ‘targets’ (e.g. for waiting), but in the direction expected
  - PbR appears to have improved efficiency (↓ LOS, ↑ day case rates) without upward pressure on activity
  - Independent contribution of market reforms shown in Anglo-Scottish comparisons

# Main themes emerging from health reforms evaluation



- Second quasi-market of 2000s may have stronger incentives for quality & efficiency than 1990s version and these may be gathering pace
  - Choice may well be ‘working’ since only a small percent of patients likely need to alter their choice of provider to send strong signals to providers about risk of further shifts
  - Still too many barriers to market under New Labour from pro-market perspective (Civitas)

# Broad questions for discussion



- How should we value and explain these findings?
  - Civitas concluded that little had been achieved but at higher cost (described as a ‘lose-lose’)
  - Other policies than competition used in the period
  - e.g. what is producing lower 30-day hospital mortality in more competitive hospital areas? Bloom et al (2010) found greater competition associated with better management practices, but what about clinical innovation?
- What might the policy implications of findings be in a very much more financially constrained NHS with price variation?





# Will the effects of the market be the same in future?

- NHS entering 5-7 years of financial stringency
  - resources increased greatly during the reform period and this may have blunted tension between policy instruments (e.g. waiting time targets & choice)
- Need for stronger referral management systems
- PbR prices will be reduced & varied, possibly affecting quality
  - plans to pay less for unplanned admissions beyond threshold levels
  - experiments with quality-based reimbursement for hospital services & un/re-bundling tariff payments
  - plans to let prices vary may not be wise given association of competition, regulated prices and better outcomes

# Will the effects of the market be the same in future?



- If prices vary, importance of good information on quality rises if market is to improve efficiency
- Prospect of more mergers reducing competition
  - evidence suggests that these should be resisted
- Should competition be between hospitals or between vertically integrated providers, at least for chronic care?



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<http://www.hrep.lshtm.ac.uk/>

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