

**Institution: University of Bristol** 

Unit of Assessment: 18 Economics and Econometrics

## Title of case study:

Changing policy on competition in the UK health-care market to benefit patients and taxpayers

1. Summary of the impact (indicative maximum 100 words)

National and international policy on the use of competition in health care since 2006 has been strongly influenced by a series of studies conducted at the University of Bristol led by Professor Carol Propper. By providing compelling evidence on how competition affects patient care, these studies have had a major impact on policy design at the highest levels. The research has underpinned a series of political decisions to use competition and choice in the NHS and informed the design of the current regulatory structures to support these policies. Specific decisions influenced by the research relate to the structure of prices, policy on mergers, and policies to promote greater use of choice and competition to benefit patients and taxpayers.

# 2. Underpinning research (indicative maximum 500 words)

The underpinning research comprises a series of studies led by Professor Carol Propper, Chair in Economics at Bristol since 1995, into the use of markets in health care. This body of research was initiated in the late 1990s at Bristol and is ongoing. It was initially undertaken with Professor Simon Burgess at Bristol (late 1990s to 2008). Since 2008, Propper's co-authors in the research have been from Imperial College London (where Propper holds a 50% appointment), the LSE, Carnegie Mellon and Stanford.

## 1. Whether competition in health care improves quality of patient care

The first studies of the impact of market structure on quality of hospital care led by Propper [1] [2] examined the NHS internal market reforms which were introduced in 1991 and abolished in 1997. In these reforms, hospitals competed on price and volume. Propper's research showed that such competition led to a decline in quality (indicated by higher death rates in competitive markets) and suggested that these reforms cost 1,030 lives at a cost of around £355.35 million.

The second set of studies examined the Labour government's 'pro-choice' reforms of 2006. These re-established competition between hospitals, but under a system of regulated prices. Propper's research showed that the reforms raised quality for patients without increasing resource-use [3]. Her work suggested that the reforms saved approximately 4,791 life years. The researchers concluded that price regulation allowed competition to occur on quality. A second paper examined whether the reforms increased the elasticity of demand with respect to quality. This is a prerequisite for pro-competitive reforms to have a positive impact on the quality produced by hospital suppliers. Propper and her co-authors found that the elasticity of demand with respect to quality rose post-reform, particularly for sicker patients [4]. A third paper examined the relationship between management, quality of care and competition and suggested that one of the ways in which competition might bring about improvements in care was through better management [5].

#### 2. The effect of hospital mergers on patient care, deficits and waiting times

Propper and colleagues exploited the large-scale closure of hospitals in England between 1997 and 2003 to examine whether mergers in hospitals had similar negative outcomes to those in the private sector. The research analysed a range of patient- and taxpayer-relevant outcomes,



including death rates following emergency admissions, waiting times, expenditure, deficits and staffing levels. The research design compared merged hospitals with appropriate controls. It was found that mergers promised gains ex-ante but brought, ex-post, negative outcomes: longer waiting times, larger deficits and no evidence of improvement in clinical outcomes [6]. The gains for patients and tax payers were therefore minimal.

In recognition of her research, Propper was awarded a CBE in June 2010 [11].

## **3. References to the research** (indicative maximum of six references)

The high quality of the research is corroborated by the quality of the journal publications, the high volume of associated peer-reviewed competitive grant funding and the highly prestigious CBE award given to Propper in recognition of her research.

- Burgess, S, Propper, C, Gossage, D, (2008). Competition and Quality: Evidence from the NHS Internal Market 1991-99. *Economic Journal* 118,138-170.
  DOI: 10.1111/j.1468-0297.2007.02107.x
- [2] Propper, C, Burgess, S, Green, K, (2004). Does competition between hospitals improve the quality of care? Hospital death rates and the NHS Internal Market. *Journal of Public Economics* 88, 1247-1272. DOI: 10.1016/S0047-2727(02)00216-5
- [3] Gaynor, M, Moreno-Serra, R, Propper, C, (2010). Death by Market Power: Reform, Competition and Patient Outcomes in the National Health Service. CMPO, University of Bristol Working Paper No. 10/242, <a href="http://www.bristol.ac.uk/cmpo/publications/papers/2010/wp242.pdf">http://www.bristol.ac.uk/cmpo/publications/papers/2010/wp242.pdf</a>, (2013) American Economic Journal: Economic Policy 5, 134-166. DOI: 10.1257/pol.5.4.134, Listed in REF2.
- [4] Gaynor, M, Propper, C, Seiler, S, (2012). Free to choose? Reform and demand response in the English NHS, NBER Working Paper No 18574. http://www.nber.org/papers/w18574.pdf
- [5] Bloom, N, Propper, C, Seiler, S, Van Reenen, J, (2010). Does competition lead to better management in health care in the English NHS? NBER Working Paper No 16032. <a href="http://www.nber.org/papers/w16032.pdf">http://www.nber.org/papers/w16032.pdf</a>
- [6] Gaynor, M, Laudicella, M, Propper, C, (2012). Can governments do it better? Merger mania and hospital outcomes in the English NHS. *Journal of Health Economics* 31, 3, 528-543. DOI: 10.1016/j.jhealeco.2012.03.006

#### **Grants**

All grant funding was peer-reviewed and competitively awarded.

- [7] Propper, with S Burgess, P Grout, I Jewitt and I Tonks (all then Bristol): 'Boundaries of the State' Leverhulme Trust, F/00/182/E and F/182/BB, £3m, 1998-2007.
- [8] Propper, (Co-I): ESRC CMPO Centre Grants, RES-343-28-3001 and RES-343-28-0001, £4.8m, 2004-2014.
- [9] Propper (PI): 'Competition in Health Care'. Department of Health Policy Reform Evaluation Programme, £0.5m, 2007-2010. Extension 2010-2011, £140K.
- [10] Propper (PI): ESRC Professorial Fellowship, December 2012-2015, £0.6m. Professorial Fellowships support leading social scientists in the UK by providing them with the freedom to pursue their own innovative and creative research agendas.

## Award

[11] CBE, June 2010, for Propper's contribution to social science.



#### **4. Details of the impact** (indicative maximum 750 words)

The Coalition government established an ambitious programme of health-sector reform in England in 2010. An integral component was the use of competition and choice as a *means* of delivering better health care for patients. To ensure better health care though choice and competition the government had to establish a structure of market regulation which set the 'rules of the game', including price regulation and merger behaviour. Government policies on these matters directly affect patients, through the quality of care delivered, and taxpayers, through the costs associated with implementing the policies.

Officials testify that Propper's body of research has had a major impact on decisions made throughout the process of developing a structure of market regulation. A Department of Health director stated: "In 2006 the Department of Health commissioned a flagship Health Reform Evaluation Programme [...] Of the research projects commissioned within the programme, the work by Professor Carol Propper had the most practical impact. It was cited and used during the passage of the Health and Social Care Bill [2011], was quoted in the national media, was considered carefully by Ministers and in particular the then Secretary of State for Health, the Rt Hon Andrew Lansley CBE. The quality of the research and the clarity of its conclusions directly led to Government amendments, to what is now the Health and Social Care Act, ruling out the possibility of price competition. In my 20 years' experience in Government it is most unusual for even the best research work to have such influence as that on competition undertaken by Professor Propper" [a].

Examples where Propper's research was used to develop/change policy include:

# i. The decision to use choice and competition as a means of delivering better health care in England

Propper's research was part of the underpinning for the overall (highly controversial) policy on the use of choice and competition contained in the Health and Social Care Bill of 2012 [a] [b]. The research has been used to decide who should be allowed to compete with NHS providers: "[3] was used as evidence in the review of the Operation of Any Willing Provider for the Provision of Routine Elective Care [...] The Department of Health accepted the key recommendations of this review" [b]. "[4] has been used to demonstrate that there is an incentive for providers to improve quality" [b]. To achieve this impact, Propper disseminated the work widely and gave a large number of presentations and individual briefings to policymakers. Media coverage of the first set of research 1990s internal market included The Guardian in January 2011 (http://www.guardian.co.uk/commentisfree/2011/jan/17/free-market-bill-blow-nhs-apart). Her research was quoted several times in Tim Harford's 'Undercover Economist' bloa (www.timharford.com), e.g. 'A healthy dose of competition will help the NHS pull through' (3 July 2010). She had one-to-one meetings with the Secretary of State for Health (Andrew Lansley, June 2011) and the Number 10 policy advisor on health (Paul Bate, July 2011); presented research findings at the UK Department of Health, the Prime Minister's Strategy Unit, the Treasury and the Cabinet Office (May 2012); and was a member of the expert panel for the Office of Fair Trading 2011 review of competition in private medical care and for the Office of Health Economics Commission on Competition (2012).

#### ii. Decision on the use of centrally-regulated prices in the NHS

Initial Coalition plans envisaged allowing hospitals to negotiate prices freely. The Financial Times, 7 January 2011, quoted Propper as warning against allowing price competition: "By taking this



step, Andrew Lansley is ignoring all the evidence on the impact of price competition in the hospital sector" [e]. In March 2011, the Secretary of State for Health changed course when he announced that initial plans to scrap price regulation in the Health and Social Care Bill had been abandoned. Propper's work was integral to this decision [b]. "Propper's research [3] and [1] were used as evidence in internal presentations, alongside similar papers, to set out the empirical support for the theory that, by fixing a national price, and allowing providers to compete only on non-price factors, competition can lead to better quality outcomes for patients. Propper's papers were seen as especially valuable since they set out the effects that occurred within the English NHS under two distinct policy periods" [b]. Reports by the health care regulator, Monitor, regularly acknowledge or quote Propper's work (e.g., [d]). Media reports also credit Propper's research as leading to the policy reversal – e.g., Financial Times 4 March 2011[f].

## iii. Writing of rules for mergers in the NHS

Merger policy is integral to balancing potential patient and taxpayer gains and losses from hospital consolidation. Propper's research has been used to inform decisions on health-care mergers. "[3] and [6] have been used as evidence in eight advisory reports of the Co-operation and Competition Panel (CCP) to the Secretary of State for Health (and Monitor) on whether proposed hospital mergers were consistent with quality" [b]. "[6] has been used in evidence in internal presentations [...] to provide a general context on the tendency of hospital mergers to fail to achieve efficiencies or to improve quality for patients. This is particularly important, given the claimed efficiencies and clinical advantages that merger parties have put to the CCP as the rationale for their proposed merger. The panel has therefore had to form judgements on the deliverability of those claims and this paper has helped inform those judgements" [b] [c].

Pathways to impact have included briefings to policy officials (Propper gave briefings on research on mergers to Monitor (December 2010) and Department of Health economists (November 2011)) and media coverage – for instance, The Guardian (12 January 2012) quoted Propper as warning of the potential negative consequences of hospital mergers brought about to solve funding or capacity issues [g]. Impact has also been achieved through presentations to the wider community. For example, Propper presented at the Inaugural Festival of Economics in Bristol, attended by over 1,000 people (November 2012), and to economics and business students at Clifton College (March 2013).

#### **5. Sources to corroborate the impact** (indicative maximum of 10 references)

- [a] Factual Statement, Director, Department of Health
- [b] Factual Statement, Policy Official, Cooperation and Competition Directorate, Monitor
- [c] Mike Farrar, Head of the NHS Confederation, in oral evidence in response to the Parliamentary Health Committee, 13 September 2011, referenced Propper's research in this area: http://www.publications.parliament.uk/pa/cm201012/cmselect/cmhealth/uc1499-i/uc149901.htm
- [d] Monitor examples Price Waterhouse Cooper report on pricing for Monitor report <a href="http://www.monitor-nhsft.gov.uk/sites/default/files/Evaluation%20Report%20-%20Full%20Report%20FINAL.pdf">http://www.monitor-nhsft.gov.uk/sites/all/modules/fckeditor/plugins/ktbrowser/\_openTKFile.php?id=4516</a>
- [e] Financial Times article, 07/01/2011 <a href="http://www.ft.com/cms/s/0/8ae64fd6-1a71-11e0-b003-00144feab49a.html#axzz2f8Zq6xMo">http://www.ft.com/cms/s/0/8ae64fd6-1a71-11e0-b003-00144feab49a.html#axzz2f8Zq6xMo</a>
- [g] Guardian article, 12/01/2012 http://www.guardian.co.uk/healthcare-network/2012/jan/12/hospital-mergers-fail-gains-study