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The impact of competition on quality and prices in the English care homes market

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ABSTRACT

This study assesses the impact of competition on quality and price in the English care/nursing homes market. Considering the key institutional features, we use a theoretical model to assess the conditions under which further competition could increase or reduce quality. A dataset comprising the population of 10,000 care homes was used. We constructed distance/travel-time weighted competition measures. Instrumental variable estimations, used to account for the endogeneity of competition, showed quality and price were reduced by greater competition. Further analyses suggested that the negative quality effect worked through the effect on price – higher competition reduces revenue which pushes down quality.

1. Introduction

Market mechanisms and competition has been introduced into the long-term care systems of many countries, replacing hitherto public bureaucratic, non-profit or other non-market arrangements (Fernandez et al., 2011). The importance of markets in the care homes sector in England has increased markedly in the last 30 years; by 2010 over 90% of all placements were made in the care homes market, with only a residual number of (publicly-supported) residents placed directly in publicly-owned homes (Laing & Buisson, 2010). This paper seeks to assess the impact of market competitiveness on quality and prices. Whole-market metrics of concentration indicate that the English care homes market is highly competitive (Forder and Allan, 2011).

Despite market forces playing a crucial role in the provision of care homes in England, there is very little work that has examined the impact of competition. Forder and Netten (2000) found a mean price elasticity of competition for English residential and nursing home placements of −0.04, while for providers in London authorities the mean price elasticity was −0.08. Gage et al. (2009) found a positive association between price charged and quality ratings, but Netten et al. (2003) found no relationship between the quality of the home and the likelihood of closure, although (low) price was seen as an important contributory factor.

There is a larger US evidence base on the impact of competition on nursing home price (Nyman, 1994; Mehta, 2006; Mukamel and Spector, 2002) and quality (Nyman, 1994; Zinn, 1994; Grabowski, 2004; Starkey et al., 2005; Gammonley et al., 2009; Zinn et al., 2009). This literature suggests that price effects of competition are small and the effects of competition on quality are mixed.[1] Studies that looked at the relationship between quality and market concentration as measured (predominantly) by a county level Herfindahl index found that more competition led to reduced quality (e.g. Grabowski, 2004). One study (Castle et al., 2007) found the opposite. By contrast most studies that look at indicators of market contestability – e.g. use of CON regulations and other indicators of excess demand – suggest that the least contested markets (e.g. where excess demand can persist) produce lower quality. The paucity of appropriate 'quality' measures, problems of market definition and little account of the potential endogeneity of competition measures are limitations of some of the literature.

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[1] See Forder and Allan (2011).

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This paper examines the impact of competition in the English care homes market. We used the population of just over 10,000 care homes in England identified using data from the regulator, the Care Quality Commission (CQC). Quality was measured by the CQC's quality rating of the home. The four-category quality rating of the home was determined after inspection visits, documentary returns made by the care home and by other data. It covered seven key lines of regulatory assessment (KLORA) about the quality of: individual health and personal care needs support; daily life and social activities; staffing (training and numbers); environment (safe, well-maintained and comfortable); resident home choice and information; management (openness, effectiveness and quality assured); and complaints and protection.[2] The ratings were publicly available and listed on many care home directory websites in addition to the regulator's website. This measure is a proxy for an underlying quality or utility gain construct. A significant positive relationship between quality ratings and the social care-related quality of life (SCRQoL) of a sample of care home residents has been found (Netten et al., 2010).

We calculated competitiveness/concentration for each home directly, avoiding the need to rely on administrative boundaries to identify markets.[3] Using homes' address (postcode), competitors were identified, with the total number of competitor beds weighted by distance (straight-line and travel time adjusted).

The behaviour of each provider is likely to affect the behaviour of competitors, and therefore affect the level of competitiveness locally (Bresnahan, 1989; Forder, 2000). In principle, nonetheless, the level of competition in any given locality will be strongly related to underlying demand and supply characteristics, including the factors affecting barriers to entry and exit. These characteristics will vary geographically and therefore the competition any one provider faces will be a function of these characteristics in its locality and also the characteristics of neighbouring localities (as they also affect the circumstances of competitors). Summary statistics of the latter can serve as instrumental variables to address the endogeneity problem.

The rest of the paper is organised as follows. Section 2 discusses the institutional characteristics of the care homes market. Section 3 develops a conceptual model to link the empirical analysis to the underlying economic theory. Section 4 discusses the empirical specification. Section 5 presents and discusses the data, and the results of the analysis follow in Section 6. The implications of the main findings are then discussed.

2. Institutional characteristics of the care market

The care homes market has two main groups: (1) publicly-supported residents where services are commissioned by public authorities (local councils) on behalf of service users; and (2) self-payers (those who do not qualify for public support). In 2010 40% of placements in private (for- and non-profit) care homes in England were self-funded. Other than a small proportion of placements made by the National Health Service (around 8%), the remaining placements were made by commissioners in local councils.

By and large, the self-pay market can be regarded as a conventional market, although all homes, regardless of payer, are required to meet minimum quality standards (assessed as outlined above) or face sanctions, including removal of operating licences. The publicly-supported market is a quasi-market (Bartlett et al., 1994). There is a wealth-based means-test whereby people with eligible assets (including housing assets for single person households) below a certain threshold receive council financial support; otherwise they are self-payers (Wanless et al., 2006).

There are 152 councils in England that commission long-term care services. Exact commissioning practice varies between them, but generally involves the following process. Commissioners negotiate with care homes that are prepared to offer services in line with the council payment rate for that locality and other conditions. Local authority-supported placements are then made according to these terms for individual placements. In some cases, councils may block purchase places in advance. The contractual terms require that the home meets the minimum quality standards, but they generally do not involve any considerations for higher quality beyond that level. There are no restrictions that the care home needs to be within the council's boundaries. On this basis, demand from councils is unlikely to be affected by quality choices made by homes above the minimum.

Local authority commissioners work with potential LA-funded residents to find a place in their preferred care home. Potential residents are able to choose potential homes as long as the home meets the council's contractual terms. In this process, commissioners will focus on finding a vacancy in a care home that meets the minimum standards. We might expect potential residents to be influenced by the quality of homes they wish to use, but also by other factors, particular the home's location. Since a care home admission is usually prompted by some health crisis (sometimes described as a 'distressed purchase'), the availability of a vacancy in any local home is often seen as an overriding priority.

Individuals are often required to make a contribution to the local authority for their placement, but the amount of the charge reflects the person's means, not the characteristics of the placement (Wanless et al., 2006). Some councils also allow supported residents to opt for higher priced homes if a third-party (not the resident) can be found to pay the difference over the council price.[4] This could also mean that demand is affected by quality although the demand for higher quality would be tempered by the need for a third-party to pay a top-up on the price.

Local authorities appear to have some market power as suggested by the discounts they apparently secure compared to self-pay rates (Office of Fair Trading, 2005). Similar price differentials are seen between public (Medicaid) and private payers in the US nursing home market (Grabowski, 2004; Mukamel and Spector, 2002).

Self-payers have more freedom to choose homes at their preferred price-location/type-quality point, but it is worth noting that almost all homes currently operate with a mix of self-pay and local authority residents (Laing & Buisson, 2010). As such, local authority commissioning practices are likely to influence self-payer purchasing options.

The NHS also funds places in care homes, but without charges (or third-party top-ups) for residents. The process and terms are similar to LA-funded placements, although the prices that the NHS will pay are often slightly higher.

Much of the industry comprises single home providers or small multi-home organisations, although there are some large chains. Around 15% of the market is supplied by non-profit providers. However, many 'for-profit' providers, particularly the single home or small multi-home organisations can be regarded as having some

[2] http://webarchive.nationalarchives.gov.uk/20100812003411/http://cqc.org.uk/_db/_documents/klora_care_homes_200903181530.doc.

[3] Local authority-funded residents can be placed outside of the funding council's administrative boundary. In 2008, 26,220 (14.4%) supported over-65 residents were placed 'out of area' (NHS Information Centre, 2008).

[4] The extent of topping up is unclear but as many as one third of local-authority funded placements could involve top-ups (Laing & Buisson, 2010).