ELSEVIER

Contents lists available at ScienceDirect

Social Science & Medicine

journal homepage: www.elsevier.com/locate/socscimed



Ownership and hospital behaviour: Employment and local unemployment

Andrew E. Clark^a, Carine Milcent^{b,*}

- ^a Paris School of Economics (PSE), CNRS, IZA, France
- ^b Paris School of Economics (PSE), CNRS, France



ARTICLE INFO

Keywords:
France
Hospitals
Management
Competition
Public employment
Unemployment

ABSTRACT

In this paper, we address two issues: *i)* how hospital employment changes with local unemployment, according to the type of hospital ownership, and *ii)* whether this relationship changed after the implementation of a procompetitive reform that made hospitals more similar. A 2006–2010 French panel of 1695 hospitals over five waves allows us to consider within-hospital employment changes. We first find that higher local unemployment is associated with greater employment in State-owned hospitals, but not for any other hospital ownership type: French local authorities then seem to respond to depressed local labour markets by increasing employment in State-owned hospitals. After the full implementation of the pro-competitive reform hospital funding became based only on activity and no longer on some historical budget. Theoretically, the new reimbursement system should break the relationship between public-hospital employment and local unemployment. Our results reveal that the reform worked as expected in less-deprived areas: reducing employment and eliminating the correlation between local unemployment and State-owned hospital employment. However, in higher-unemployment areas, public-hospital employment remains counter-cyclical. Poor local labour-market health then seems to trump financial incentives in determining employment in public hospitals.

1. Introduction

The way that healthcare is organised will affect the behaviour of healthcare suppliers, including hospitals. The healthcare system can be characterised not only by the private-sector share of hospitals, including those that are for-profit, but also by the list of publicly-available performance indicators and the way in which actors are reimbursed. Kolstad (2013) shows that information on performance that was unrelated to patient demand led to an intrinsic response by hospitals that was larger than their response to profit incentives.

In this paper, we consider the employment behaviour of different kinds of hospitals according to their ownership. In particular, we examine the relationship between local politics, hospital ownership, and changes in payment systems on the one hand, and hospital employment on the other. Our analysis extends earlier cross-sectional work and shows that local politics affect public-sector employment.

Economic efficiency is a central question here, trading off health-care expenditure for healthcare quality. As a chapter in the Handbook of Health Economics (Sloan, 2000) notes, one of the three fundamental questions in the economic literature is which form of ownership is the most efficient in the healthcare industry. The scope for public intervention in markets has been discussed all over the world (Le Grand and Bartlett, 1993). The public sector accounts for a significant share

(15–20%) of employment in most industrialised countries (Melly and Puhani, 2013). However, the exact definition of what 'public' means in terms of employment is not fixed and has changed over time. In European countries, the status of employees working in the public sector has changed from being civil servants to long-term contract employees. This hybridisation of hospital staff types and the focus on economic efficiency has not come without conflict (Choi et al., 2011). A number of recent papers have developed methods to quantify management practices in order to measure managerial quality across different firms (Jacobs et al., 2006; Bloom and Van Reenen, 2007; Bloom et al., 2015).

We here consider employment decisions as one aspect of management practice. Public-hospital employment in France may be expected to reflect both healthcare needs and political prerogatives, as the director of French public-hospital Boards (at the time of our data) was a local politician. Controlling for the greater healthcare needs in high-unemployment regions, we ask whether local unemployment has a different effect on public-hospital employment than on that of other hospital types.

Our work is particularly relevant to the debate over the role of competition in improving hospital productivity. Bloom and Van Reenen (2007) suggest that poor management practices are more prevalent in firms that are faced with less product-market competition. Our work here underlines the potential presence of other factors that may distort the link between competition and hospital productivity.

^{*} Corresponding author. PSE (UMR 8545), 48 Boulevard Jourdan, 75014 Paris, France. E-mail address: cmilcent@pse.ens.fr (C. Milcent).

Our paper is also closely related to the literature on healthcare providers (Brekke et al., 2012; Chalkley and Malcomson, 1998; Ellis and McGuire, 1986; Mougeot and Naegelen, 2008). One strand of this literature has focused on competition in healthcare (Gowrisankaran and Town, 2003; Propper et al., 2008; Shortell and Hughes, 1988; Volpp et al., 2003). In recent years, policymakers in many countries have experimented with various ways of increasing the effective competition in healthcare in order to raise productivity. A mainly US literature has suggested that under certain conditions (regulated prices and observable quality) competition may improve quality (Kessler and McClellan, 2000), even though the consensus in the literature is not complete. The effect of competition on mortality is likely to depend on the reimbursement rate (Shen, 2003). If hospitals are underpaid for patients with a given insurance, such as Medicare patients, they have little or no incentive to compete for them by improving quality. Recent pro-competitive hospital reforms in the UK have been argued to have increased quality (Cooper et al., 2011; Gaynor et al., 2013). Bloom et al. (2015) exploit political concerns over one particular policy, healthcare provision, and use the share of marginal political constituencies around each hospital as an instrument for the number of nearby competing hospitals. Politicians in the UK almost never close hospitals in politically-marginal constituencies, which produces greater hospital competition in areas with more marginal constituencies. This competition is shown to result in better hospital management.

In France, healthcare provision is mixed: the providers of outpatient care are largely private, while hospital beds are mainly public or private non-profit. In the private sector, for-profit hospitals compete with each other. Until the 2000s, the public sector was largely immune from standard market forces. A global budget was adopted for public-sector hospitals, mainly based on their historical budget rather than being related to their real level of activity. This changed over 2004 to 2008, with the gradual introduction of a prospective payment system based on hospital activity (diagnosis-related groups, or DRGs) to promote efficiency by competition. In a DRG-based system with fixed prices, the competition is on quality. A hospital does well by admitting many patients and releasing them at as low a cost as possible with an attractive level of quality.

The financial situation of the public system has deteriorated since the 1980s, and the DRG-pricing system on its own offers no way of controlling the volume of care. To avoid radical increases in the volume of care, the introduction of DRG-based pricing was accompanied by a fixed global budget envelope for hospital spending. According to the Law on the financing of social security (LFSS), this budget is voted on annually by the French parliament. With this fixed budget there is no way for total costs to rise. The incentive to admit as many patients as possible through a competitive market is even stronger than without the fixed budget. This DRG-based payment rule was introduced across the whole set of hospitals, all of which are now reimbursed according to the same rules. The competitive market is now composed of public-sector hospitals (State-owned hospitals and Not-for-Profit hospitals) and For-Profit hospitals.

The outcome we consider here is employment in 2006–2010 panel data on the universe of French hospitals; we in particular ask how this is related to local unemployment. We are able to exploit two features of French hospitals to identify a particular relationship between public-sector employment and local unemployment. First, there are three different hospital types: For-Profit, Non-Profit, and Public hospitals. Non-Profit hospital staff are managed in the same way as staff in the private sector, but at the same time Non-Profit hospitals have a public-service mission in the same way as hospitals in the public sector (See Section 2.1). Second, we appeal to the pro-competitive reform that was fully-implemented in all hospitals in 2008. We thus ask *i*) whether there is a link between hospital employment and local unemployment, according to hospital ownership, and *ii*) if so whether the implementation of the DRG-based system affected this relationship.

Our analysis of employment incorporates hospital fixed effects to

control for time-invariant hospital attributes that may determine their employment. In further sensitivity analysis we also incorporate time-varying within-hospital variables. For-profit hospitals can decide who they treat, while this is not the case for public and NFP hospitals due to their public-service mission. We find that public hospitals employ more staff than do private and NFP hospitals, conditional on size and the illnesses treated; we also show that this employment gap is systematically correlated with local unemployment.

The above two results are found in Clark and Milcent (2011). However, the analysis there was cross-sectional, using only one year of data (1999). The key potential concern is then that of unobserved heterogeneity between hospitals. We here show that this relationship between public-hospital employment and local unemployment holds also using within-hospital variation.

The second question is whether the implementation of this DRG-based system affected the relationship between unemployment and public-hospital employment. We estimate employment equations both before and after the introduction of the pro-competition hospital reform using the same hospital fixed-effect model as above. The reform was expected to reduce the gap in hospital staff per bed according to ownership: this is indeed what we find. However, the reform has not completely broken the link between public-hospital employment and local unemployment, with local deprivation playing a key role. We find that the reform worked as expected in less-deprived areas: it reduced employment and eliminated its correlation with local unemployment in public hospitals. On the contrary, in higher-unemployment areas public-hospital employment continues to be counter-cyclical.

The remainder of this paper is structured as follows. Section 2 explains the French context and the reform that took place in the years up to 2008. The data are described in Section 3, and Section 4 presents the empirical results. Section 5 discusses a number of extensions and robustness checks, and Section 6 concludes.

2. French hospital types and the introduction of competition

2.1. The French hospital system

We here first present the French public health-insurance system, and then set out the different types of French hospitals according to their ownership.

Public National Health Insurance (the *Sécurité Sociale*) is compulsory in France, and covers all of the resident population; it is financed by employee and employer contributions as well as increasingly via taxation. This public insurance is a single-payer system: this eliminates any concerns about potential cost-shifting behaviour by providers, negotiation between providers and payers, or different reimbursement schemes for different patients. The reimbursements cover almost all medical services in hospital, except for the additional fixed fee per day for catering and accommodation and particular requirements (such as having a private room): over 80% of inpatient-care costs whatever the sector are covered by public insurance.

In this paper, 'hospitals' refers to all healthcare establishments with an acute care unit. As in many countries, France has both private- and public-sector hospitals. There are two broad types of the latter, according to whether they are non-profit (NFP) or State-owned hospitals (SOH). We shall refer to these three hospital types as NFP, private and public (or SOH), for simplicity. All three hospital types have a non-negligible share of the French healthcare market. As a rough guide, considered in terms of full-time equivalent employees in our current data over the 2006–2010 period, State-owned hospitals accounted for just over 80 per cent of this sector, with the corresponding figures for NFP and private hospitals being 6 and 12 per cent respectively.

Hospital location is mainly historical. Any attempt to establish or relocate a hospital has to be accepted by the French regional health organisation. This is a long process with a number of complex constraints and parameters. We will therefore mostly take the location of

Download English Version:

https://daneshyari.com/en/article/7328213

Download Persian Version:

https://daneshyari.com/article/7328213

<u>Daneshyari.com</u>