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Corporatisation and the Emergence of (Under-Managed) Managed Organisations: The Case of English Public Hospitals

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Ian Kirkpatrick

University of Warwick, UK

Ali Altanlar

University of Leeds, UK

Gianluca Veronesi

University of Leeds, UK

Abstract

An enduring feature of New Public Management in many countries has been the move to create more autonomous, ‘complete’ organisations such as universities, hospitals and social service agencies. Often referred to as ‘corporatisation’, this process is assumed to be leading to the emergence of new organisational forms with dedicated management functions and a greater focus on strategy. However, these assumptions remain largely untested and rely heavily on ‘technical’ accounts of organisational re-structuring, ignoring the potential influence of institutional pressures and internal political dynamics. In this paper, we address this concern focusing on the case of acute care public hospitals that have undergone corporatisation (to become Foundation Trusts) in the English National Health Service. Using administrative data spanning six years (2007–2012), the analysis shows that corporatisation is having mixed effects. While it is associated with a shift in the *focus* of managers to strategic concerns, it has not led to an expansion of management functions overall. Both tendencies are found to be mediated by institutional pressures, in the form of media scrutiny, and, indirectly, by the involvement of clinical professions in management. These results advance ongoing debates about the emergence of new organisational forms in the public sector, highlighting the limitations of technical accounts of change and raising the possibility that corporatisation is leading to organisations that are both more managed and *under-managed* at the same time.

Keywords

contingency theory, corporatisation, institutional theory, management

Corresponding author:

Gianluca Veronesi, University of Leeds, Maurice Keyworth Building, Leeds LS29JT, UK.

Email: G.Veronesi@lubs.leeds.ac.uk

Introduction

An enduring characteristic of government reforms over the past two decades has been moves to increase the (formal) autonomy of public organisations such as hospitals, universities and civil service agencies (Lægread, Roness, & Rolland, 2013; Vining, 2011). In its most developed form, this reform programme has been described as a process of ‘corporatisation’. Whereas privatisation implies the selling off of public assets, ‘corporatisation represents a change in legal form that separates service delivery from traditional government agencies while keeping the organisation in public hands’ (Lindlbauer, Winter, & Schreyögg, 2015, p. 310). Such change is assumed to have many benefits, principally giving managers enhanced freedom to pursue service innovation and making public services more ‘business like’ (Bejerot & Hasselbladh, 2013; Verbeeten & Speklé, 2015).

In organisational terms, the significance of these reforms is that they are thought to herald a growing convergence between public and private organisational forms. According to Nelson and Nikolakis (2012, p. 367), the trend is towards ‘explicitly corporate-like structures that directly mimic private sector enterprise’. Whereas many public services previously lacked a specific organisational identity, corporatisation transforms them into ‘complete organisations’ (Brunsson & Sahlin-Andersson, 2000) with the promise of greater autonomy to compete in the market-place just like commercial firms (Bilodeau, Laurin, & Vining, 2007). However, what remains less clear is how far this formal and status change has also led to a restructuring of the management of public sector organisations. In particular, has corporatisation gone hand in hand with the development of ‘management’ as a specific group or function similar to private firms?

To address this concern it is important to make a distinction between what Diefenbach (2009, p. 894) terms ‘management’ and ‘managers’, or between ‘management’ as a general process and ‘management as a distinctive occupation’ (Grey, 1999, p. 562). On the one hand, there seems to be little doubt that public sector reforms have increased the volume and intensity of *management* as a general process. Moves towards corporatisation, have accompanied the development of performance monitoring systems and may have exaggerated the demand for professionals to devote more time to administration and leadership activities (Bejerot & Hasselbladh, 2013). Yet, what remains far less clear is whether this greater emphasis on *management* as a process has coincided with the development of ‘management’ as a ‘distinctive occupation’? The latter consists of people who take on formal management roles (with relevant job titles) and devote all (or the bulk) of their time to the activity of controlling and coordinating the work of others. Falling under this category are various line managers, including professionals taking on ‘hybrid’ roles (such as Head Teachers or Clinical Directors) and also more specialist (support) roles associated with financial control, planning, monitoring, procurement and human resources. In the past, most public services – especially those dominated by professionals – operated with only limited support from this kind of dedicated management (Ackroyd, Kirkpatrick, & Walker, 2007). A key question now, however, is whether moves towards corporatisation have altered this picture. Have new organisational forms emerged which differ not only in their formal governance and status, but in the composition of their management functions, with a greater visible presence of staff who are formally designated as ‘managers’?

To date, there has been considerable ambiguity in the literature regarding this question. On the one hand, many accounts assume (either explicitly or implicitly) that new management functions have developed. Diefenbach (2009, p. 894), for example, argues that the growth of ‘management’ as a ‘separate and distinct organisational function’, represents one of the central motifs of New Public Management (NPM) and links this to ‘the creation of (new types of) managerial posts and positions, emphasising the primacy of management compared to all other activities and competencies’. Other commentators note a more direct link between corporatisation and the development of management functions. According to Brunsson and Sahlin-Andersson (2000, p. 727), ‘in order to

strengthen local coordination and control, many public services have established management teams, and a number of new middle management positions have been created'. Similarly, Aidemark and Lindkvist (2004) report that Swedish hospitals moving to limited company status had developed a more overt 'administratively regulated hierarchy', with the number of finance managers increasing threefold (p. 313).

However, while these claims are frequently made, there have been few (if any) studies that seek to verify this growth in the number of managers following corporatisation. Nor is it clear precisely *why* one might expect corporatisation to lead (or not) to the development of management functions. Most accounts of this process operate within what Reed (1989) labels a 'technical' frame, linking changing structures and practices to technical imperatives, such as increasing competition or changing workloads. As a consequence, we know less about the wider institutional or (internal) political factors that might shape the development of management functions (Bejerot & Hasselbladh, 2013).

In this paper, our aim is to address these concerns, focusing on the relationship between corporatisation and the development of management functions. We seek to advance understandings of this phenomenon both theoretically and empirically. Theoretically, we explore how explanations of the relationship between corporatisation and the development of management functions can be enhanced by drawing on additional insights from neo institutional theory (Greenwood & Hinings, 1996; Greenwood, Raynard, Kodeih, Micelotta, & Lounsbury, 2011). This approach highlights the way in which technical imperatives to develop management functions are potentially mediated by the influence of competing institutional logics and by internal political dynamics within organisations.

In the main body of the paper we, then, empirically investigate these assumptions focusing on the acute care public hospital sector in England as an illustrative case of corporatisation. The English National Health Service (NHS) has been at the forefront of reforms, pioneering the creation of hospitals – Foundation Trusts (FTs) – as 'independent Public Benefit Corporations' modelled on co-operative and mutual traditions and run by their own boards (Anand, Exworthy, Frosini, & Jones, 2012; Saltman, Durán, & Dubois, 2011). We use a variety of administrative data sources to investigate the impact of FT status on the development of management functions along two key dimensions: a) changes in size (the proportion of managers to staff) and; b) changes in focus (highlighted by a shift towards more strategic roles).

In what follows, we first review the relevant literature before turning to a description of our data, research context, methods and primary results. As we shall see, the findings indicate that corporatisation (in the English FT case) is having mixed consequences for the development of management functions. These results, we argue, have implications for how we explain change and for the wider question of how far 'new' forms of organisation in the public sector are converging with the model of private firms. Specifically, they highlight the possibility that corporatisation is leading to the emergence of organisations that are both more *managed* and, what we term, *under-managed* at the same time.

Theoretical Concerns and Hypotheses

Technical perspectives

A starting point for technical explanations of public sector re-structuring (including corporatisation) is that the 'existence of management reflects certain economic and technical necessities' (Grey, 1999, p. 562). This approach draws heavily on mainstream 'contingency theories' of structure, highlighting the influence of variables such as size, task complexity and environmental

conditions in shaping organisational design (Reed, 1989). In recent years, these ideas have been applied extensively in studies focusing on the antecedents of structure and performance in public organisations (Andrews & Boyne, 2014; Villadsen, 2016). However, where the issue of corporatisation is concerned, most reference has been made to contingency theories focusing on the relationship between strategy and structure, notably deriving from the classic work of Chandler (1962) and later Williamson (1985). According to Chandler, the development of management functions in capitalist enterprises is linked primarily to the contribution these make to efficiency, helping to lower (overall) unit costs through more effective administrative coordination.

These ideas about the technical necessity for management functions have been employed most fully in debates about the emergence of the ‘multi-divisional’ (or M-form) structure. Essentially, the M-form structure moves away from the previous ‘functional’ (or U-form) configuration, achieving greater flexibility and more effective strategic coordination by scaling down central headquarter roles and devolving operational decisions to business units or ‘autonomous profit centres’ (Hill, 1985, p. 733). Also emphasised is how more autonomous operating divisions – ‘scaled-down U-form firms’ (Hill, 1985, p. 733) – may need to expand their management capabilities. While the M-form structure has the benefit of more effective overall coordination, this happens at the expense of economies of scale. As Yingyi, Roland, and Xu (2003, p. 3) explain, within self-regulating units typical of the M-form: ‘local managers can more easily solve the coordination problem by making good use of local information, but then the advantages of specialisation are not fully appropriated and there is a *duplication of local coordination*’ with, ultimately, a rise in administrative costs (see also Mintzberg, 1993).

A further consequence of the M-form logic is that it implies a shift in the *focus* of managers. While the M-form may allow greater autonomy for operating divisions, it generates intensified ‘performance pressures’ and a stricter accountability regime for these divisions which, in private firms, are transformed into loose-tight arrangements such as profit centres competing for resources (Hill, 1985). According to Williamson (1985, p. 127), in this environment ‘operating chiefs’ became more engaged ‘in efforts to expand the size and prominence of their respective operating divisions’. To do so, it also means strengthening management capabilities within each division, especially those associated with strategy (Mintzberg, 1993).

Returning to the specific case of public sector re-organisation, numerous parallels have been drawn between this logic of the ‘divisionalised’ organisation and moves towards corporatisation and agencification (Bilodeau et al., 2007; Nelson & Nikolakis, 2012). Just as capitalist firms have devolved control to business units, in public services the focus has been on ‘reconfiguring the boundaries of government agencies by reducing the scope of traditional government bureaucracies’ (Bilodeau et al., 2007, p. 120). This idea has been strongly associated with the notion of ‘disaggregating’ public organisations (Hood, 1991) and various OECD calls for governments to differentiate between ‘operational’ and ‘strategic’ autonomy (Verbeeten & Spekél, 2015, p. 955).

These parallels between public sector restructuring and the M-form raise questions about whether corporatisation will generate similar pressures to ‘duplicate local coordination’ or, in other words, expand management functions. On the one hand, it might be argued that this will not necessarily be the case. While the M-form logic in the private sector is driven by the expanding size and complexity of capitalist enterprises, this is less true in the public sector (where there has been a re-configuration of existing operations), suggesting that the challenges of coordination may be less acute. It is also possible that new demands associated with the delegation of operational autonomy following corporatisation will be met in other ways. Tasks associated with management and coordination might, for example, be delegated to professionals and support staff at lower levels who perform these functions, but without formal ‘management’ job titles.

However, against this assumption are arguably stronger reasons for assuming that corporatisation will lead to changes both in the size and nature of management functions. First, the development of new organisational forms replicating many of the features of private corporations implies a shift in the status of public organisations, transforming them into ‘complete organisations’, ‘by installing or reinforcing local identity, hierarchy and rationality’ (Brunsson & Sahlin-Andersson, 2000, p. 721). Whereas in the past management functions in public bureaucracies tended to be ‘dispersed’ between professionals, senior administrators and a ‘wide range of “functional” managers’, located at higher levels in the hierarchy’ (Bach & Winchester, 2003, p. 33), under corporatisation they are *formally* pushed down to operational levels. Indeed, a primary objective has been to enhance ‘management decision-making competency’ at lower levels, ‘shifting decision-making competency from external actors to the agency itself’ (Bejerot & Hasselbladh, 2013, p. 1365).

Second, one might question the idea that these demands to strengthen management can be met just by transferring decision rights to lower levels within organisations that undergo corporatisation. A key obstacle to such delegation are historical weaknesses in management and leadership training in public sector organisations, especially in more specialised areas such as finance (Broadbent & Guthrie, 2008). These weaknesses mean that some management functions are hard to delegate and may even require the recruitment of specialist experts from the commercial sector. It is also possible that the shift to quasi markets and competition – the NHS being an exemplary case – has further increased demand for this kind of specialist expertise, generating higher administrative and transaction costs overall in public services (Lane, 2000). Hence, there are reasons to assume that some of the predictions of technical accounts regarding the challenges of ‘duplicating coordination’ in divisionalised organisations will apply in the context of public sector reforms. Specifically, this leads us to hypothesise that:

Hypothesis 1 (H1): Public sector organisations that have undergone corporatisation will increase the size of their management functions.

In addition to this, it might be argued that public services undergoing corporatisation will face similar pressures to business units in divisionalised organisations to *re-focus* management work on more strategic activities. In part this follows from the points made earlier about the shift towards more ‘complete’ organisations, which replicate private firms in terms of their governance structures, for example, with the creation of executive boards (Cornforth, 2003; Farrell, 2005). A demand for more resources to be devoted to strategy may also be exaggerated by the need to plan services in a more uncertain, competitive environment, and the enhanced performance demands generated by control from the centre (Bilodeau et al., 2007). The latter has been especially marked in those countries where corporatisation has gone hand in hand with increased accountability to meet targets and ‘naming and shaming’ through the publication of rankings or league tables (Verbeeten & Spekklé, 2015). In these situations, investment on strategic capabilities may also be linked to increased workloads associated with externally facing boundary management and information gathering to ensure compliance (Bevan & Hood, 2006). We, therefore, further predict that:

Hypothesis 2 (H2): Public sector organisations that have undergone corporatisation will shift the focus of management functions towards more strategic concerns.

The mediating impact of the institutional and internal political contexts

In this section, we turn to how the arguments presented so far, drawn mainly from contingency theory, may be further qualified by an understanding of the wider institutional context and political

dynamics within organisations undergoing corporatisation (Bejerot & Hasselbladh, 2013). These influences on restructuring have, of course, been widely acknowledged in the organisation theory literature and are also frequently combined. Greenwood and Hinings (1996), for example, bring together elements of ‘old’ and ‘new’ institutionalism to differentiate between ‘market’ and ‘institutional contexts’ of organisations. Whereas the former implies very similar pressures to those described above (under ‘technical’ accounts), the institutional context draws attention to the fact that ‘organisations are not simply the product of increasing technical sophistication ... but result from the increasing rationalisation of cultural rules, which provide an independent basis for their construction’ (Scott, 2008, p. 43). Greenwood and Hinings (1996) also suggest that these exogenous influences may be further mediated by the internal ‘political’ conditions of organisations. Specifically, this is by ‘precipitating dynamics’ such as the level of ‘interest dissatisfaction’ and ‘value commitments’ of key stakeholders (p. 1033).

This more inclusive model of change clearly has potential to qualify some of the assumptions and predictions we have made so far. On the one hand, it draws attention to the importance of legitimacy in shaping management decisions and to the possibility that at any one time organisations may face competing institutional demands (or logics), which result in internal tensions and selective forms of adaptation (Greenwood et al., 2011). On the other hand, it suggests that the way in which these institutional demands are perceived and acted upon will depend very much on the value commitments of key stakeholders and relative influence of ‘internal coalitions’ *within organisations* (Pache & Santos, 2013, p. 976). As such, it raises the possibility that while public organisations may face technical imperatives to enlarge management functions and re-focus on strategy (H1 and H2 above), the extent to which this occurs will be mediated by the nature of institutional pressures and intra-organisational dynamics. In what follows, we explore these concerns in more detail and elaborate two further hypotheses.

Institutional context. First, with regard to the institutional dimension, it is possible to note logics that both support and challenge moves to expand management functions in public organisations. On the one hand, NPM reforms clearly underscore the need to develop ‘managers and management’, as we noted earlier (Diefenbach, 2009). In recent years, ‘strategy’ has also obtained an elevated status as a necessary and legitimate activity of public managers (Kornberger & Carter, 2010).

However, at the same time, it is important to highlight alternative institutional demands that may push in the opposite direction. Important here are popular stereotypes of managers as a highly paid, largely ‘self-serving’, ‘rent seeking’ elites. In the English NHS, for example, successive governments have made open pledges to reduce the number of ‘men in grey suits’ – as notoriously described by Alan Milburn, a former Secretary of State for Health (Burgess & Currie, 2013). A perceived need to restrict the number of so-called ‘fat cat’ managers in public services (including the NHS) has also been articulated by third party ‘information intermediaries’ (Zavyalova, Pfarrer, Reger, & Shapiro, 2012), notably by the media (King’s Fund, 2011). In areas such as health, growing media scrutiny has also been fuelled by rising public concerns about ‘performance failure’ and the role that over-paid, over-zealous managers are assumed to have played (Currie & Suhomlinova, 2006).

This kind of media pressure, one might argue, could have a direct impact on the willingness of senior decision-makers in organisations that have undergone corporatisation to develop management functions. In the wider literature, the role that media scrutiny can play in influencing organisational behaviour is increasingly recognised (Aharonson & Bort, 2015; Bednar, Boivie, & Prince, 2013; Desai, 2014). Media scrutiny refers to ‘the amount of public attention a firm receives from the media’ which may be critical in terms of ‘establishing legitimacy’ and an ‘organization’s perception of the benefits of conformity or resistance’ (Aharonson & Bort, 2015, p. 303). Studies have

emphasised the role the media can play in actively setting or framing news agendas (Desai 2014) and how this sometimes directly influences management decisions (Bednar et al., 2013). It has also been suggested that these pressures may be greatest in organisational fields – such as in the public sector – where there have been prior performance failures (Lægreid, Opedal, & Stigen, 2005).

Hence, it might be argued that these media pressures will make managers in public organisations increasingly sensitive to external criticism with possible implications for the policies and practices (including staff recruitment) they feel able to adopt. This, in turn, might be especially pronounced in organisations that have undergone corporatisation, where increased formal autonomy is likely to coincide with greater accountability, pressure to perform and ongoing media scrutiny (Exworthy et al., 2011). In this context, one might argue that institutional pressures, in the form of media scrutiny, to restrict the growth of management functions (including higher paid strategic roles) will be especially pronounced. Specifically, this leads us to hypothesise that:

Hypothesis 3 (H3): The relationship between corporatisation and the development of management functions will be mediated by media scrutiny on public sector organisations.

Internal political dynamics. Consistent with the arguments made earlier, a further caveat relates to how the relationship between corporatisation and the development of management functions may be shaped by internal politics. Important here is the level of support, or value commitment, for different policy options or directives among key stakeholders and their power to leverage change (Greenwood & Hinings, 1996; Greenwood et al., 2011). In public services such as health care, these dynamics are heavily influenced by the relative power and interests of managers and professionals (Battilana, 2011). On the one hand, managers may view moves towards corporatisation (with greater formal autonomy) as an opportunity to expand their own career prospects and power base (Diefenbach, 2009). Consequently, managers, in pursuit of their own elite interests (Grey, 1999), may support the expansion of new management functions, especially the more prestigious (and better rewarded) strategic roles.

However, the extent to which these aspirations can be realized will also be shaped by the relative influence of professionals and the extent to which they have sought to ‘capture’ management, by becoming more involved in various hybrid roles (Waring & Currie, 2009). Such involvement could have mixed consequences for the development of management functions. On the one hand, professional (public) services have tended to be ‘bureaucracy-lite’ (Hales, 2002), ‘inverse pyramids’ (Mintzberg, 1993), with only a very limited reliance on managers to coordinate services. This legacy could ensure that professionals will tend to push for the concentration of management resources closer to the operating core (or middle tier), away from what they consider to be more abstract and less relevant ‘strategic’ concerns (with consequences for H2). On the other hand, any increase in the involvement of professionals (seeking to control or capture management) could, perversely, serve to increase the overall size of the management function by generating more hybrid roles. Either way, one might expect that the nature and development of management functions in organisations will be shaped by the relative influence and involvement of different internal stakeholders – managers and professionals. This might be especially true in the context of corporatisation, where the increase in formal autonomy and associated threats and opportunities might galvanise these stakeholders to actively try to control management and shape its development both at the outset and in subsequent years (Aidemark & Lindkvist, 2004). As such, our final hypothesis is that:

Hypothesis 4 (H4): The relationship between corporatisation and the development of management functions in public sector organisations will be mediated by internal political dynamics.

Research Context

Turning to our empirical case, NPM reforms in the English NHS have been ongoing for some time, with all hospitals (or groups of hospitals) given enhanced autonomy as self-managing ‘trusts’ at the beginning of the 1990s, alongside moves to introduce an internal market, formally separating purchasing (later commissioning) from provider roles (Lane, 2000). This process was accelerated after 2003, with the introduction of a new organisational form: FTs. Conforming to the model of corporatisation described earlier (Lindlbauer et al., 2015), FTs remain part of the NHS (and hence in public ownership), but are re-designated as public benefit corporations with significantly more formal autonomy than the other NHS trusts (Allen et al., 2012). Governance arrangements have also been transformed with all FTs required to establish two tier governing board structures, including the traditional board of directors (comprising executive and non-executive members) and an elected board of governors made of various local stakeholders including staff and patient representatives (Exworthy, Frosini, & Jones, 2011).

The process of becoming an FT is lengthy (it takes at least one year from application to authorisation), demanding and not unfrequently ends up with rejection on the first attempt. Applying trusts need to show that they have a number of controls, checks and assurances processes and procedures in place, ranging from trust financial viability to effective quality and safety checks. Most importantly, authorisation to become an FT is conditional on performance, this initially being branded as a form of ‘earned autonomy’ (Allen et al., 2012). The independent regulator, Monitor (responsible for providing authorisation), concentrates on the efficiency of organisational processes and the fitness-for-purpose of the governance arrangements. Each applying trust is required to present a business plan and a long-term financial model, which are independently assessed by Monitor (see *The Guide for Applicants* (Monitor, 2013)). Part of the financial evaluation also involves looking at whether workforce plans are able to support the delivery of the strategic plan, although this does not include specific guidelines for management staffing levels.

Importantly, these changes place new demands on the management of acute hospitals. FTs are formally granted enhanced freedom to develop services locally, recruit staff, retain operating surpluses and even borrow from the private sector. FTs are also more able to allocate resources according to longer term strategic priorities and are intended to be less focused on complying with immediate performance targets (Exworthy et al., 2011). In combination, these demands mean that FTs are expected to operate in a significantly more complex environment than non-FTs and become more business-like (Allen et al., 2012). But while these changes imply a need for enhanced management systems and capabilities, it remains less clear how far (if at all) this has impacted on the specific development of management functions within FTs.

Methods

Data sources

To address our four main hypotheses we drew on a mix of official statistics on NHS employment (mainly supplied by the Health and Social Care Information Centre – HSCIC) and a commercial database (the NHS Directory) supplied by industry leader Binley’s. The latter provides a detailed breakdown of NHS managers, by job function and organisation. This database has been collected and published since 1991. A new updated edition of the Directory is published every four months with the latest edition used in our study (64 – May 2012) containing more than 30,000 individuals and over 100 job functions (including clinically qualified managers). The data is in the first place provided by the relevant NHS organisation and then double-checked by Binley’s. A team of 40 individuals is responsible for making sure that omissions, mistakes and so forth are corrected on a

Table 1. Sample breakdown by hospital trust type 2007–2012.

Year	Sample size	Number of FTs	Number of Specialist Trusts (all)	Number of Specialist FTs	Number of Teaching Trusts
2007	168	56	20	11	24
2008	165	68	20	12	22
2009	162	83	20	13	25
2010	162	88	20	16	27
2011	163	93	20	16	27
2012	158	98	19	18	26

regular basis. Over time, the job titles and responsibilities of managers in the Directory have been changed and matched according to the official NHS codes to ensure greater reliability and transparency. Specifically, Binley's define as a manager any individual with decision making powers, in particular in terms of budgeting, financial management and allocation of resources. This means that data captures both general (or pure play) managers and what Noordegraaf (2007) terms 'hybrid' clinical managers (for example doctors and nurse managers within clinical directorates), who made up approximately 31% of the whole manager population.

In addition, through the HSCIC, we accessed a number of publicly available repositories of information on hospital trusts such the Hospital Episode Statistics database (providing information on the activity of trusts, such as patient admissions), the National Workforce Data Set (which offers a detailed breakdown of a trust workforce characteristics) and the Hospital Estates and Facilities Statistics (providing information on outsourcing of non-clinical services). We also used the NHS Reference Costs Data Set (a repository of information used to establish prices for NHS-funded services in England) to develop indicators of 'market forces' (see below). Finally, to address H3 (the tenor of media scrutiny), we manually generated a dataset containing the number of media hits for each acute trust based on information drawn from the Lexis-Nexis media database.

Sample description

We analysed data spanning six years (2007–2012) that incorporate management structure, FT status, and a variety of control variables at the organisational level. Initially we had data starting from 2002, but were unable to fully use it due to changes made in the method of classifying job titles which limited comparability over time. Table 1 provides an indication of the sample characteristics over the period of investigation. The sample size ranges from 168 acute care hospital trusts in the first year (2007), to 158 organisations in the final year (2012). The reduction in the sample size is mainly due to mergers of hospital trusts. The total number of observations stands at 978 over the six-year period.

Dependent variables

To address H1, exploring the impact of corporatisation on management size, we looked at the proportion of managers relative to all staff in hospital trusts as a proxy, assuming that higher proportions would indicate an enlarged management function. The former relied on the identification of managers in the Binley's NHS Directory. For each management role we double checked the Binley's classification with the NHS occupation code and did not find any evidence of a mismatch. As noted, this measure includes a significant number of clinical-manager hybrids, mainly within clinical directorates.

The total number of employees for each organisation was gathered from the Workforce National Data Set by looking at the total number of Full Time Equivalent (FTE) employees per organisation per year. For each hospital trust, the workforce is divided into the following categories: doctors; qualified nursing, midwifery and health visiting staff; qualified scientific, therapeutic and technical staff; qualified ambulance staff; support to clinical staff; and, lastly, infrastructure support (which include central functions, estates personnel, senior managers and managers). Because these statistics refer to contracted, establishment positions, they included those individuals who might have been temporarily absent (e.g., on sick or maternity leave).

In order to test H2, we constructed two other dependent variables using Mintzberg's (1993) four categories of 'strategic apex, middle tier, technostructure and support functions'. The first variable measures the ratio of managers classified within the 'strategic apex' to the total number of managers in a trust. For both nominator and denominator we relied on the Binley's NHS Directory. In total, 13 job roles (e.g., CEO, chair, medical and nursing directors and so forth) were classified in the strategic apex category, which comprised all board directors and the most senior management roles, including their personal staff. The classification of the roles was independently conducted by two of the authors with no appreciable differences. The groupings were then compared to identify differences in the categorisation processes, after which a common list was agreed.

The same procedure was then followed to calculate the ratio of 'middle line managers' (comprising managers who sit in a direct line of formal authority between the strategic apex and the operational core) to the total number of managers in an organisation. In total, eight job roles were included in the middle manager category (mainly clinical directors and associated service managers). Although taking on different forms, clinical directorates (representing clinical specialties or groups of specialties) account for the bulk of middle tier management roles, including hybrid clinical managers.

Independent variables and mediating factors

The main explanatory factor for H1 and H2 is corporatisation, which is proxied by having achieved FT status. As noted earlier, since 2003 a growing number of trusts have been re-configured through a process of authorisation into a more independent organisational form in relation to the management of resources and strategic orientation (Exworthy et al., 2011). Accordingly, Table 1 shows that the number of FTs almost doubles in the six year under investigation (from 56 in 2007 to 98 in 2012).

To explore the impact of corporatisation over time, we created a variable that measures the numbers of years as FT for each FT in the sample. The rationale for this was that the variable 'Years as FT' captures the changes undergone within the hospital trust as formal autonomy in decision making is put into practice over time. Implied here is that there could be a lagged effect of having more freedom and independence in decision-making and that shifts in the nature of management functions may take time to emerge. As a robustness test, we additionally ran the main regression analysis by employing a modified version of the variable 'Years as FT' that takes into account the year prior to achieving the formal authorisation from Monitor. This is based on the assumption that change processes have to be undertaken within the organisation prior the formal submission of the application for FT status.

Finally, to explore the mediating effects of media scrutiny and internal political dynamics (H3 and H4), additional variables were constructed. With regard to media scrutiny (H3), we looked at the total count of headline and lead paragraph media hits for each hospital trust on the Lexis-Nexis database over the period of investigation. We included all the newspapers and other news outlet

published in English and captured both positive and negative media scrutiny. This value was then winsorized at the 95th percentile (21 media hits) to deal with extreme values. For H4, relating to the influence of different internal stakeholders, we calculated the ratio of hybrid managers (essentially any clinician with a managerial role as recorded in Binley's) to the total number of managers in each hospital trust. This category cuts across our other dependent variables (ratios of middle and strategic apex managers). In line with the earlier discussion, we assumed that a higher proportion of hybrid managers might signify attempts by professional stakeholders to control, or capture, management roles, with the possible consequences (for size and strategic focus) of management functions.

Control variables

To confirm the explanatory power of corporatisation, a variety of control variables (from the HSCIC data repository unless otherwise specified) were introduced in the regression model. First, we differentiated between generic acute care trust and trusts that provided specialist services (such as being a children's hospital, an orthopaedic centre and so forth). Specialist Trusts have different operational demands to generalist trusts and, in the later years of our study, a majority had become FTs. Second, we employed a dummy variable identifying Teaching Trust status. This was to account for organisational activities linked to education and training which might also create different requirements for management. Third, we considered the impact of size on management. As customary in health management research, we controlled for size by using the number of beds available for overnight patient stay and then splitting the sample into four (size) categories using the 25th, 50th and 75th percentiles to better model the impact of size, for instance in relation to a possible non-linear relationship between size and management functions. Comparatively similar results were, nevertheless, obtained using a natural log-transformation of the total number of beds.

For our fourth control, structural complexity, we used the number of units (or sites) from which services are provided, with each case having at least two sites or more. We also considered the complexity of the services provided by trusts, using the number of clinical directorates as a proxy (both measures derived from Binley's). In both cases, we assumed that different levels of complexity led to different managerial characteristics. As a fifth control we accounted for the overall level of operational demand on trust activity (and, hence, on management characteristics) by using the ratio of the total number of admissions with the total number of FTE staff. Sixth, we accounted for the possibility that the number of managers employed by trusts might be influenced by the level of outsourcing of non-core activities such as estates and facilities management (information from Hospital Estates and Facilities Statistics).

An additional set of controls were included to handle possible exogenous factors. Here, we considered the possible competition levels among hospital trusts in a certain catchment area, the assumption being that greater levels of competition might increase the demand for management expertise. This was proxied by calculating the Herfindahl Index of providers' concentration based on the number of admissions for each hospital trust in contiguous areas. To further explore the impact of external context on management characteristics, we included the NHS market forces factor (from the Reference Costs database). This comprises an internal indicator of 'unavoidable' cost differences between hospital trusts (for example, labour or estates costs) based on their geographical location, with the assumption that operating in more 'expensive' areas could limit the ability to recruit more managers. A correlation table of all the variables employed in the study is available on request.

Empirical approach

Our empirical model can be represented through the following estimation equation:

$$Y_{it} = \alpha + \beta_1 X'_{it} + \beta_2 Z_{it} + \beta_3 C_{it} + \varepsilon_{it} \quad (1)$$

where Y_{it} is the management related dependent variable of hospital, i , in year t ; X'_{it} is a vector of i^{th} hospital level explanatory variable relating to being a FT at time t ; Z_{it} is the hospital level control variables for hospital, i , at time t ; C_{it} is context related control variables (i.e., concentration and market forces factor) for hospital, i , at time t ; α is the constant; β_1 , β_2 , β_3 are vectors of parameters to be estimated; and ε_{it} is the remaining error term.

We used time series cross-sectional (panel) data with hospital trust-year cases, which increases the number of observations and the degree of freedom and therefore improves the efficiency of the parameter estimates. We utilised Panel Corrected Standard Errors (PCSEs) estimations to handle possible 'contemporaneous correlation' of the errors (i.e., being correlated across trusts within the same time period) and 'heteroscedasticity' (i.e., having unequal variances across different subsets of hospitals).

In a time series cross-sectional design, error terms may not be independent among different time periods resulting in a possible 'serial correlation' problem (Hicks, 1994). This means that for each individual trust the association between independent and dependent variables in the last year of analysis could be driven by (or at least being correlated with) the relationship between variables in the previous year and so forth. Hence, we obtained estimations with lagged dependent variables as controls and employed Prais-Winsten GLS (Generalized Least Square) method, where errors follow a first order trust-specific autoregressive process (Beck & Katz, 1996).

Mediation analysis

To test H3 and H4, namely the mediating effects of media scrutiny and political dynamics on the relationship between corporatisation and management characteristics (size and configuration), we employed a single-mediator model (MacKinnon, Fairchild, & Fritz, 2007). In its simplest form, mediation consists of adding a third variable (M), to the relationship between independent (X) and dependent variable (Y), under the assumption that the mediator is in a causal sequence between the two variables. Consequently, it is assumed that X causes the mediator, M, and M causes Y, and thus there is a mediation path between X and Y through M (MacKinnon et al., 2007). To establish mediation, we employed the widely used causal steps approach outlined by Baron and Kenny (1986). The first step requires a significant relationship between the independent variable (FT status) and the dependent variable(s) (management size and configuration). Second, there has to be a significant relationship of the independent variable with the hypothesised mediating factors (media scrutiny and internal political dynamics). Subsequently, the third step involves testing the relationship between the mediating factors and the dependent variable(s) in the presence of the independent variable. Mediating factors have to be significant predictors for the mediating effect to be present. Finally, the coefficient relating the independent variable to the dependent variable(s) must be larger (in absolute value) in the regression model without the mediating factors (i.e., the first step) than the coefficient relating the independent variable to the dependent variable(s) in the regression model with both the independent variable and the mediating factors predicting the dependent variable(s) (i.e., the third step) (Baron & Kenny, 1986; MacKinnon et al., 2007).

Results

Descriptive statistics

Table 2 reports the descriptive statistics for the estimation sample over the period 2007 to 2012. In the last year examined (2012 – see Table 1), the panel included 158 hospital trusts, of which 98 were operating as FTs. There were 19 Specialist Trusts and 26 Teaching Trusts. In the estimation sample, on average, these organisations provided acute care using in excess of 800 beds, comprised around four units, had their clinical operations managed through seven clinical directorates, and employed around 3,900 FTE individuals.

Strategic apex and middle management tiers respectively represented around 27% and 33% of all managers. Interestingly, the percentage of the number of managers per total staff was only around two per cent. As a comparison, Office of National Statistics figures for the whole UK (2012) record that Managers, Directors and Senior Officials (SOC1) made up 9.5% of the workforce, falling to 8.3% if the ‘other’ category (SOC125) – comprising managers employed in small medium sized enterprises – is excluded. By this measure hospital trusts appear, relatively speaking, to have very small management functions, a point also made recently by the King’s Fund (2011) in relation to the NHS as a whole (including central functions).

The trend analysis (not tabulated but available on request) indicates that in the English acute care hospital sector, the number of staff has progressively increased since 2007 while the proportion of managers relative to staff has moved in the opposite direction. Specifically, in 2007 the average total number of staff per trust stood at roughly 3,500 FTE whereas the average total of managers amounted to around 59 FTE individuals. Conversely, in 2012 the average number of staff employed per organisation had risen to 4,200 FTE – an increase of 20%. In comparison, the average number of managers per trust had grown to roughly 68 FTE which corresponds to a more

Table 2. Descriptive statistics ($N = 978$).

Variable	Mean	Median	Min.	Max.	St. Dev.
Foundation Trust	0.497	0.000	0.000	1.000	0.500
Years as a Foundation Trust	2.039	0.000	0.000	9.000	2.551
Managers-to-staff (%)	2.009	1.779	0.506	11.305	1.109
Strategic apex to all managers (%)	27.306	26.761	9.677	55.556	6.687
Middle line to all managers (%)	32.947	32.258	6.061	75.484	10.879
Media scrutiny	4.132	2.000	0.000	21.000	5.662
Hybrid managers to all managers (%)	30.728	30.386	7.843	61.111	7.272
Specialist Trust	0.122	0.000	0.000	1.000	0.327
Size-1	0.261	0.000	0.000	1.000	0.439
Size-2	0.262	0.000	0.000	1.000	0.440
Size-3	0.244	0.000	0.000	1.000	0.430
Size-4	0.233	0.000	0.000	1.000	0.423
Number of Units	3.799	3.000	2.000	16.000	2.088
Number of clinical directorates	7.007	6.000	1.000	27.000	4.253
Outsourcing	34.645	26.030	0.000	100.000	28.670
Teaching trust	0.154	0.000	0.000	1.000	0.362
Concentration	0.084	0.069	0.041	0.170	0.037
Market forces factor	1.000	0.969	0.886	1.279	0.069
Demand	21.252	22.205	0.778	75.474	5.374

modest increase of approximately 15%. Thus, the average ratio of all-managers to staff proportionally decreased by 9% over the period investigated. This trend is analogous in FTs and the rest of the trust population, meaning that the ratio of all-managers to staff has decreased in both organisational types. With regard to two of the management categories built on Mintzberg's (1993) classification, the ratio of managers in the strategic apex to all-managers slightly decreased by circa 1.2%, whereas the ratio all middle line managers to all-managers went down by less than 1%.

Effect of being a Foundation Trust on management

Turning to our first two research hypotheses, Table 3 reports the results of PCSEs estimations calculated with first lags of the dependent variables. Where H1 is concerned, against expectations and despite their increased autonomy following the corporatisation process, FTs appear to have *fewer* managers (relative to their staff) than non-FTs. This holds when controlling for other aspects such as trust size, specialist and teaching statuses, complexity and so forth and is statistically significant at a satisfactory confidence level ($p < 0.05$). Although this finding needs to be treated with the usual caution, it suggests that, contrary to expectations, corporatisation (in our case, the move to FT status) does *not* lead to a significant expansion in management functions proxied by an increase in the proportion of managers. Indeed, if anything, the opposite appears to be the case.

Where H2 is concerned, our results are more in line with current 'technical' assumptions. As showed in Table 3, we find that FTs are more likely to have a higher proportion of managers in the strategic apex at the expense of the middle tier management when other possible explanatory factors are taken into consideration. The opposite phenomenon is of course true for non-FTs. Indeed, the trend analysis suggested that for the latter the size of the middle tier management has ballooned in the six years under investigation, whereas the ratio of the strategic apex to total number of

Table 3. Coefficients of Panel Corrected Standard Errors (PCSEs).

Variable	Dependent variable		
	Managers to staff (%)	Strategic apex to all managers (%)	Middle line to all managers (%)
Years as a Foundation Trust	-0.0093** (0.0045)	0.0860** (0.0418)	-0.1701** (0.0702)
Size-2	0.0189 (0.0450)	0.2820 (0.3693)	0.2582 (0.5263)
Size-3	-0.0418 (0.0568)	-0.4177 (0.3252)	2.3480*** (0.6201)
Size-4	-0.0778 (0.0652)	-1.0686** (0.3776)	2.0020*** (0.7658)
Specialist Trust	0.6000*** (0.1081)	0.9554** (0.4373)	1.2167* (0.6956)
Number of units	0.0141** (0.0068)	-0.2410*** (0.0571)	0.2077** (0.1049)
Number of clinical directorates	0.0053** (0.0023)	-0.1303*** (0.0287)	0.3643*** (0.0495)
Outsourcing	-0.0010** (0.0005)	0.0064 (0.0046)	-0.0002 (0.0089)
Teaching Trust	0.0805* (0.0438)	0.3982 (0.3323)	-0.3179 (0.6627)
Concentration	-0.4206 (0.3107)	2.6641 (3.4562)	7.8927 (5.0823)
Market forces factor	-0.0196 (0.1756)	-0.1178 (1.7588)	4.6805 (3.0714)
Demand	0.0317*** (0.0089)	-0.0002 (0.0204)	0.0225 (0.0392)
Year dummies	YES	YES	YES
Number of observations	805	805	805
Wald Chi ²	4501.06***	2344.38***	3450.68***

Notes: * = Significant at the 10% level ($p < 0.10$) ** = Significant at the 5% level ($p < 0.05$) *** = Significant at the 1% level ($p < 0.01$) Standard Errors in brackets. Year dummies are omitted for space reasons. All estimations include a constant and first lags of dependent variables, which are not reported for space reasons.

managers has progressively decreased. We also obtained qualitatively similar results (not reported but available on request) when running the regression estimations with the main independent variable 'Years as FT' including the year prior to authorisation.

With regard to the control variables, Specialist Trusts have a greater ratio of managers to staff as well as greater ratios of strategic apex and middle line managers to all managers. Teaching status and demand for services have a positive impact only on the ratio of managers to all staff. Moreover, larger trusts seem to have a lower ratio of strategic apex managers and greater ratio of middle line managers. The number of units and the number of clinical directorates are significantly, positively linked to the ratio of managers to staff and the ratio of middle line managers to all managers but negatively associated with the ratio of strategic apex managers to all managers. Lastly, the analysis suggests that contracting out of services has a negative impact on the ratio of managers to staff, whereas market concentration (i.e., less competition) and location-driven operational expenditure do not seem to have any significant effect.

Mediation effects

Turning to the impact of mediating factors (institutional pressure and internal politics) on the main relationships, H3 and H4, our analysis was conducted in two stages. First, Table 4 reports the relationship between our two main proxies (media attention and the hybrid manager ratio) and 'Years as a Foundation Trust'. This reveals that the corporatisation process has a significantly positive impact on the level of media scrutiny on the organisation (i.e., FTs are more likely to attract media coverage). Perhaps more surprisingly, Table 4 reveals that the overall ratio of hybrid managers to all managers is negatively affected by FT status. What this suggests is that the corporatisation process

Table 4. Impact of years as a Foundation Trust on the mediating factors.

Variable	Dependent variable	
	Media scrutiny	Hybrid managers to all managers (%)
Years as a Foundation Trust	0.0804* (0.0485)	-0.1047** (0.0541)
Size-2	-0.3128 (0.3981)	0.2228 (0.4235)
Size-3	-0.6263 (0.4022)	0.9787** (0.4954)
Size-4	-0.5002 (0.4574)	0.9644* (0.5880)
Specialist Trust	1.5304** (0.6609)	0.9784* (0.5872)
Number of units	0.2100*** (0.0676)	-0.1580* (0.0819)
Number of clinical directorates	-0.0317 (0.0283)	0.2251*** (0.0433)
Outsourcing	0.0037 (0.0043)	0.0032 (0.0065)
Teaching Trust	0.3786 (0.3897)	0.6400 (0.5612)
Concentration	-4.2082 (3.0677)	0.0730 (4.0179)
Market forces factor	6.7459*** (2.6161)	7.0639*** (2.4751)
Demand	-0.0088 (0.0292)	0.0761** (0.0308)
Year dummies	YES	YES
Number of observations	805	805
Wald Chi ²	747.69***	1333.22***

Notes: * = Significant at the 10% level ($p < 0.10$) ** = Significant at the 5% level ($p < 0.05$) *** = Significant at the 1% level ($p < 0.01$) Standard Errors in brackets. Year dummies are omitted for space reasons. Estimations are gathered using Panel Corrected Standard Errors (PCSEs). All estimations include a constant and first lags of dependent variables, which are not reported for space reasons.

Table 5. Coefficients of Panel Corrected Standard Errors (PCSEs) with the addition of the mediating factors.

Variable	Dependent variable		
	Managers to staff (%)	Strategic apex to all managers (%)	Middle line to all managers (%)
Years as a Foundation Trust	-0.0071 (0.0047)	0.0904** (0.0419)	-0.0926 (0.0678)
Media scrutiny	-0.0064*** (0.0025)	-0.0463*** (0.0171)	0.0010 (0.0300)
Hybrid managers to all manager (%)	0.0026* (0.0014)	-0.1029*** (0.0180)	0.3880*** (0.0306)
Size-2	0.0071 (0.0443)	0.2928 (0.3743)	-0.3617 (0.5170)
Size-3	-0.0570 (0.0566)	-0.5099 (0.3510)	1.4239** (0.5978)
Size-4	-0.0933 (0.0646)	-1.1817*** (0.4062)	1.6436** (0.7150)
Specialist Trust	0.5864*** (0.1057)	1.1563** (0.4577)	0.9324 (0.7085)
Number of units	0.0144** (0.0071)	-0.2845*** (0.0571)	0.3611*** (0.1014)
Number of clinical directorates	0.0042* (0.0023)	-0.0807*** (0.0269)	0.1940*** (0.0489)
Outsourcing	-0.0011** (0.0005)	0.0104** (0.0046)	-0.0110 (0.0077)
Teaching Trust	0.0995** (0.0447)	0.5383* (0.3056)	-0.5309 (0.6420)
Concentration	-0.4104 (0.3285)	2.4935 (3.3366)	9.9424* (5.2669)
Market forces factor	0.1585 (0.1885)	0.8723 (1.7843)	3.6922 (2.7080)
Demand	0.0318*** (0.0089)	-0.0011 (0.0211)	0.0300 (0.0392)
Year dummies	YES	YES	YES
Number of observations	805	805	805
Wald Chi ²	4655.57***	2762.25***	2870.97***

Notes: * = Significant at the 10% level ($p < 0.10$) ** = Significant at the 5% level ($p < 0.05$) *** = Significant at the 1% level ($p < 0.01$) Standard Errors in brackets. Year dummies are omitted for space reasons. All estimations include a constant and first lags of dependent variables, which are not reported for space reasons.

is leading to a *reduction* in the number of clinicians involved in managerial roles and, we might assume, in the influence that they have in shaping the development of management functions.

Building on these findings, the second stage of the mediation analysis is reported in Table 5, which looks specifically at the last causal step of the analysis (Baron & Kenny, 1986). Starting with the size of management functions, the findings show a full mediating effect of the two proxies for institutional pressure and internal political dynamics employed in this study. As can be seen in Table 5, the coefficient of the variable 'Years as a Foundation Trust' becomes insignificant in comparison to the analysis that does not include the mediating factors (see Table 3). Specifically, FTs were earlier found to be more likely to attract media scrutiny (Table 4) which, in turn, is revealed to have a significant and negative impact on the ratio of managers to staff, essentially decreasing the relative number of managers. Where the involvement of clinicians in managerial roles is concerned, the mediation path is relatively more complex. As we might expect, Table 5 shows a positive association between the ratios of hybrid managers to all managers and all managers to staff (to some extent explained by the impact that hybrids have on enlarging the middle tier of management). However, this positive impact is largely negated in FTs because of the finding (reported in Table 4), showing that clinical involvement in management also tends to be lower in FTs. As such, the results provide full support for H3 and H4 as far as the impact of the corporatisation process on the size of management functions.

Moving on the mediating effects of institutional pressure and internal political dynamics on the shift in focus of management functions, the analysis provides only partial support for the impact of our proxies. While the level of media scrutiny is negatively related to the strategic apex measure,

it does not appear to significantly mediate the impact of FT status (i.e., the coefficient of ‘Years as FT’ remains significant) on this specific management ratio. A similar picture emerges with regard to H4, focusing on the involvement of clinicians in managerial roles. As with media scrutiny, our proxy for internal political dynamics (the hybrid ratio) has a negative effect on the development of strategic apex management functions, but does not significantly mediate the impact of the corporatisation process on this specific management ratio (Table 5). As we might expect, clinical involvement does act as a mediator of FT status in the case of the ratio of middle line managers to the total number of managers (‘Years as a FT’ becomes insignificant in comparison to the analysis that does not include this mediating factor – see Table 3).

Discussion and Conclusions

A starting point for this paper was the debate about the re-structuring of public organisations and trends towards ‘corporatisation’ (Læg Reid et al., 2013; Vining, 2011). We noted how this process has generated a performance culture, leading to increased management control over, formally more autonomous, public organisations and the work of professionals (Verbeeten & Speklé, 2015). However, while these tendencies point to the emergence of ‘new’ organisational forms that converge with private firms, questions remain about how far this also applies to the characteristics of ‘management’. While corporatisation may have led to organisations that are *more overtly managed*, has it also resulted in a larger number of *managers* employed in them as a ‘distinctive occupation’ or function?

Focusing on the empirical case of English public hospitals (using FT status as a proxy), the results of our analysis show that corporatisation is having mixed effects on the development of management functions. First, contrary to what one might expect – especially from technical accounts of divisionalised organisations – H1 was not supported. Instead, we found that the shift to FT status has a *negative* impact on the size of management functions, despite challenges associated with an apparent ‘duplication of coordination’ (Yingyi et al., 2003). By contrast, our analysis did offer strong support for H2 regarding the relationship between corporatisation and the re-focusing of management functions towards strategy. This change is consistent with ‘technical’ (Reed, 1989) explanations of management which, drawing parallels with the M-form, note how autonomous operating divisions need to engage in more strategic planning activities to stay afloat. In the public sector, it also underscores the trend towards developing board level governance arrangements and the additional work associated with satisfying the demands of regulators and other external stakeholders, such as commissioners (Klenk & Pavolini, 2015).

Turning to the question of what factors might mediate the relationship between corporatisation and management functions, we found partial support for H3 and H4. Where the overall *size* of these functions is concerned, the analysis revealed an indirect mediating influence of competition between internal stakeholders (political dynamics). Specifically, the results showed that while the greater influence of ‘hybrid’ professionals does tend to have a positive impact on management numbers, in FTs the opposite was true mainly because of the lower involvement of clinicians in formal management roles. This latter result is surprising given wider assumptions in the literature about the expanding role of professionals in management and leadership across most public services (Noordegraaf, 2007; O’Reilly & Reed, 2011). While corporatisation may have ‘symbolic effects’ (Lindlbauer et al., 2015) that could reinforce professional engagement with management, this does not appear to have translated into greater participation in formal management roles.

By contrast, a more direct impact was found with the level of media scrutiny – our proxy for the competing influence of alternative institutional logics on decision-making. In line with previous research (Aharonson & Bort, 2015; Bednar et al., 2013; Desai, 2014), this suggests that sensitivity

to the media is one of the prime reasons for why decision-makers in FTs might have chosen not to increase the size of their management functions. It also chimes with more specific research focusing on the management of FTs noting the unwillingness of some senior managers, under the media, political and regulatory spotlight to exercise their autonomy (Exworthy et al., 2011). Anand et al. (2012, p. 215), for example, suggest that FTs remain embedded in a 'web of accountability' and conclude that 'the increasingly exposed position that some hospital managers find themselves in appears to have encouraged behaviour that is sometimes risk-averse – counter to the general policy aim of promoting innovation'.

By contrast, our analysis finds weaker support for the mediating influence of media scrutiny and internal political dynamics on the *focus* of management functions following corporatisation. As recorded in Table 5, both of these variables are individually found to have a significant and negative impact on the proportion of strategic apex managers to all staff. However, given that there is no statistical evidence of a mediating effect on FT status, neither variable is sufficiently influential to alter one of the main findings reported under H2. As such, while there is some sensitivity to media scrutiny, this is not sufficient to reverse other tendencies pushing senior decision-makers in FTs to move more (management) resources into strategic level activities. Where the influence of hybrids is concerned, the lack of a significant mediation effect can also be explained by the generally lower levels of involvement of professionals in management within FTs.

These results, we argue, highlight two main contributions to theory and research on the organisational consequences of public management reforms. First, we contribute to ongoing debates concerning the emergence (or not) of new organisational forms. As noted earlier, moves towards corporatisation and agencification are frequently understood as stages along a continuum, from regular public organisations – subject to political control and semi-anonymised within a wider bureaucracy – through to fully privatised, independent firms (Bilodeau et al., 2007; Vining, 2011). Looked at it in this way, corporatisation is associated with a shift towards more 'complete' organisations (Brunsson & Sahlin-Andersson, 2000), implying 'changes in governance and organisation structure' along this continuum (Nelson & Nikolakis, 2012, p. 368). Yet, what our results suggest is that where the characteristics of management are concerned, this process is subject to an *uneven development*. On the one hand, the development of the strategic apex (H2), is consistent with the altered status of public organisations (following corporatisation) with more emphasis on boards, governance functions and the outward trappings of autonomy. By contrast, the so called move towards more complete organisations is not reflected in the growth of discreet management functions (as indicated by the combined results relating to H1, H3 and H4). Thus, implied by this finding is greater continuity than might be expected between these 'new' organisational forms (following corporatisation) and the older 'bureaucracy-lite', 'custodial', approaches to organising public services (Hales, 2002). This is not to suggest that these emerging organisations are under-managed, in terms of internal processes and increased controls over professional work. Rather, what our results suggest is that they may be *under-managed*, in terms of formal roles dedicated to this task. An intensification of management control, it would appear, has occurred without a marked increase in the number of managers employed as a 'distinct occupation'.

A second important contribution of this study is in terms of how one might theorise these changes. As noted, in most recent accounts of corporatisation, changes in organisational structure are understood primarily through the lens of a technical perspectives, especially contingency theory. This broad explanatory framework has also been applied to research focusing on organisational structures and performance more generally in public services (Andrews & Boyne, 2014; Villadsen, 2016). However, what our analysis suggests is that to fully understand the development of management functions, attention must also focus on the institutional and internal political dimensions of change. In particular, our research suggests that senior decision-makers in FTs may

be hyper sensitive to the legitimacy of their decisions and how these are perceived by the public. This is manifest in political and media stereotypes about unaccountable and overpaid ‘men in grey suits’, ‘pen pushers’ and ‘death by bureaucracy’ (King’s Fund, 2011). It also chimes with the influence of public choice ideas, emphasising a ‘distrust of the permanent bureaucracy – its objectives and/or its perceived biases in staffing positions and promoting career public servants’ (Aucoin, 1990, p. 235). In this context, technical imperatives to develop enlarged management functions are counter-balanced by institutional pressures (translated through media scrutiny) which seem to push in the opposite direction. Although hard to assert using quantitative data (see below), our analysis suggests that this leads to risk aversion by senior decision-makers in FTs which is, to a lesser extent, compounded by the influence of coalitions of clinicians within the management of each hospital.

When drawing these conclusions three main caveats and directions for future research need to be considered. First, more work is needed to deepen our understanding of other factors that might mediate the development of management functions. One possibility here is that *existing* managers in FTs have been required to do ‘more with less’, effectively stressing the system. Some evidence for this comes from increasingly high levels of management turnover and stress in the NHS, consistent with the depiction of management roles as ‘extreme jobs’ (Greener, Harrington, Hunter, Mannion, & Powell, 2013). Related to this is the prospect that clinical professionals at lower levels (not classified as ‘managers’ in the Binley’s dataset), have been required to perform more management tasks informally. While professional involvement in (formally defined) management roles tends to be lower in FTs (see above), this does not rule out the possibility that a greater volume of administrative tasks (for example, basic record keeping and compliance work) has increased at operational levels. This trend may also be accelerated by the development of control systems and technologies in the NHS (and in other public services), which increase the capability of policy makers and senior managers to regulate practice and effectively control at a distance (Evetts, 2011).

Second, it would be helpful to develop a richer understanding of the *process* of management decision-making with regard to staffing and how institutional pressures and internal political dynamics impact on this. Especially useful here would be more qualitative studies that look at the specific contexts in which such decisions are made and how competing priorities are negotiated in situ. Lastly, more research is needed to investigate whether our results from the English NHS are replicated elsewhere, in other public services and countries. The NHS could be a special case given the fact that greater efforts have been made here than, say, in education or social care, to recruit (non-clinical) managers from outside the sector (Ackroyd et al., 2007). A broader concern is whether this model of change applies equally to other countries that have followed alternative reform trajectories. While there is a trend towards increasing corporatisation across European hospital sectors (Saltman et al., 2011), this may or may not lead to the same dynamics of change observed in the English NHS.

Notwithstanding these caveats, the study reported here makes an important contribution to both theoretical and empirical knowledge of the impact of NPM reforms. We break new ground in highlighting the uneven development of management functions within public organisations that have under-gone restructuring and, for the first time, raise the possibility that these organisations may be both ‘more managed’ and ‘under-managed’. Furthermore, while more work is needed to fully explain these trends, our analysis underscores the need to move away from exclusively technical accounts of re-structuring to give more weight both to institutional pressures and the role of intra-organisational dynamics. In both respects, this paper advances ongoing debates about the emergence of new organisational forms in the public sector, highlighting pathways of evolution that are different to those that have so far been described in the literature.

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Author biographies

Ian Kirkpatrick is the Monash Warwick Professor of Healthcare Improvement & Implementation Science (Organisational Studies) at Warwick Business School, United Kingdom. Ian joined Warwick in May 2016 after previously working at Leeds University Business School, where he served as Director of the Leeds Social Science Institute. His research interests are in the management, organisation and performance of professional services, both in the UK and internationally.

Ali Altanlar is Assistant Professor at Leeds University Business School, United Kingdom. His research interests centre on the application of data analytics and advanced quantitative methodologies on the study of management, governance and performance of professional organisations and more generally in public services. Specifically, his research has to date mainly focused on the health care sector.

Gianluca Veronesi is Associate Professor at Leeds University Business School, United Kingdom. His research mainly focuses on the governance of public sector and non-profit organisations with particular attention to the health care sector. He is specifically interested in exploring the relationship between governance structures and mechanisms and organisational performance in terms of both efficiency and effectiveness.