Hybrid professional managers in healthcare:

An expanding or thwarted occupational interest?

Abstract

Despite growing interest on the impact of hybrid professional manager roles in public sector organisations, less attention has focused on their population and whether they have advanced as an occupational interest. Using a longitudinal administrative dataset, we explore trends in the growth, characteristics and organisational positions of medical managers in the UK NHS. While they seem to have reinforced their position at the strategic apex of hospitals, especially those with elite status, there is little evidence of their ability to control the jurisdiction of management. This highlights the slow, uneven development of hybrid professional managers as an occupational interest.

Keywords: Hybrid professional managers, NHS, Healthcare; Occupational interests.

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For some time, the goal of increasing the involvement of professionals such as doctors, nurses, teachers and social workers in management and leadership roles has been central to new public management (NPM) reforms (Dent, Bourgeault, Denis and Kuhlmann 2016, Noordegraaf, Schneider, Van Rensen and Boselie 2016). Across many public services internationally, this process has resulted in a growing number of 'hybrid professional managers' who combine professional practice with responsibilities for staff development, planning and budgets. Research on hybrids in different areas, such as healthcare (Cascón-Pereira, Chillas and Hallier 2016, McGivern, Currie, Ferlie, Fitzgerald and Waring 2015) and education (Deem 2007, Gleeson and Knights 2008), highlights the impact of these roles on professional practices and identities. At the collective level, it has also long been suggested that hybrid professional managers could represent an emerging occupation or interest group within public sector organisations (Montgomery and Oliver 2007, Sarto, Veronesi and Kirkpatrick 2019). In healthcare, for example, peak associations have been established, such as the American Association for Physician Leadership, the Faculty of Medical Leadership and Management in the UK and the Royal Australasian College of Medical Administrators in Australia. Implied by this is that, as an emerging occupation, hybrid professional managers may increasingly seek to assert their control over the jurisdiction of management.

However, while the importance of 'professional management projects' (Kragh-Jespersen 2006) has been noted, we know less about their progress or likely success. According to Abbott (1988), for any emerging occupation (including hybrid managers) to professionalise, it needs to

assert control over a particular jurisdiction of work and knowledge. This, in turn, must proceed both in the wider field arena, for example with the establishment of associations and certification programmes, and, crucially, *within* organisations, where an occupation must also assert control over tasks and techniques. For the latter to occur, groups such as clinical, social services or academic managers would need to colonise a large proportion of 'management' roles to achieve critical mass and advance their occupational interests. Ideally, this process would extend to all areas of what Mintzberg (1993) terms 'middle line' (line management) and 'strategic apex' management, although it may be more restricted in the case of more specialised 'technostructure' and 'support service' management roles. But how likely is it that this will occur? While associations claiming to represent hybrid professional managers have been formed in many countries (see above), how far have the interests of this group advanced within organisational settings?

Thus, a key question is whether hybrid professional managers are likely to advance in terms of critical mass and influence within organisations, to the point where they may lay claim to the wider jurisdiction of management itself? Addressing this question is important for public management researchers, not least because of the ongoing international policy focus to increase the role of professionals in management and leadership roles. Nevertheless, our understanding of this phenomenon remains limited. In healthcare, for example, while there is a substantial (and growing) corpus of research on the practices and shifting identities of hybrid professional managers (for example Cascón-Pereira, Chillas and Hallier (2016), McGivern, Currie, Ferlie, Fitzgerald and Waring (2015)) and their career narratives (Bresnen, Hodgson, Bailey, Hassard and Hyde 2019), much of this work is understandably qualitative and cross sectional, focusing on a small numbers of cases. By contrast, less attention has been given to the wider population level

and to how far (if at all) hybrid professional managers have developed as an occupational interest group.

In this paper, we seek to address this gap in the research relating to the development (or not) of hybrid professional managers as an occupational interest group within public sector organisations. Specifically, we focus on the illustrative case of medical managers (hereafter MMs) in the UK National Health Service (NHS). In recent years, there has been considerable policy interest in extending medical engagement in management (Kirkpatrick, Bullinger, Lega and Dent 2013, Numerato, Salvatore and Fattore 2012), but also concerns about feasibility and progress. Dickinson, Ham, Snelling and Spurgeon (2013; 120), for example, note 'many barriers to involving doctors effectively in leadership roles' in the NHS, and conclude that 'in most organisations a step change is needed to overcome them'. For this reason, the case of MMs is theoretically interesting and useful for addressing wider concerns about hybrid professional managers as an emerging occupational interest.

To investigate these concerns, we draw on a range of previously under-used longitudinal administrative data sources including the Directory of NHS Management. This data is used to profile the current population of MMs and then consider how this profile has changed over an eleven-year period (following an overhaul of occupational roles in the NHS in 2007), between 2007 and 2018. An important caveat is that our analysis focuses only on formal management and leadership roles in the NHS and not on leadership as an activity or process that is 'distributed' within teams of professionals (Ham, Clark and Spurgeon 2011), which cannot be captured via secondary sources. Nevertheless, we argue, this approach has merit in terms of quantifying, for the first time, the nature and characteristics of the population of MMs and assessing how far this group has advanced (or not) their occupational interests over time.

In what follows, we first review the literature on the development of hybrid professional manager roles generally. We then introduce our data, methods and findings relating to trends over time before drawing lessons for scholarship, research and practice.

Re-stratification and the development of hybrid professional managers as an occupational interest

A useful starting point for conceptualising hybrid professional managers, such as MMs, as a discreet occupational interest (or even emerging profession) is Freidson's seminal account of 're-stratification' (1985, 1994). In response to external regulatory and financial pressures, Freidson argues that professions such as medicine, accounting and engineering, are reorganising themselves internally along functional lines. Specifically, this has led to the emergence of 'administrative elites' within the professions, who become more involved in the coordination and direction of rank-and-file practitioners. Membership of this administrative elite might extend to all professionals involved in hybrid professional manager roles, including 'quasi managerial practitioners', 'managing professionals' and 'professionally grounded general managers', as well as members of top management teams (Causer and Exworthy 1999; 84-85). The latter two categories are often formalised with specific job descriptions and pay scales and, in some cases – such as doctors who hold CEO roles – may involve limited or no continued involvement in professional practice. By contrast, 'quasi managerial practitioners' would sit at the opposite end of the continuum, as practicing professionals with leadership responsibilities but sometimes no formal job description (see Kirkpatrick (2016) for a full discussion).

As mentioned, the development of administrative elites could have implications both for the identities and practices of hybrid professional managers and for the emergence of new

occupational interests. Regarding the former, Freidson notes how members of administrative elites play a more active role in 'setting standards, reviewing performance, and exercising supervision and control' (1985; 26) and may come to identify 'as much, if not more, with the type of professional organisation they represent as with the practicing profession' (1994; 142). Over time this process may also have implications for occupational formation (McGivern, Currie, Ferlie, Fitzgerald and Waring (2015; 427). Montgomery (1990), for example, argues that senior doctors specialising in the administration of medicine are engaged in a 're-professionalizing effort', as a group, to shift their commitments and loyalties towards the management of organizations. Similarly, Domagalski (2008; 123) refers to elite groups of medical administrators as a 'professional-managerial class' who have taken on 'managerial identities' and 'proclaim their allegiance to the institutional framework in which they are employed rather than to the medical profession'. Most recently, Noordegraaf, Schneider, Van Rensen and Boselie (2016; 1113) have linked these trends to the 're-configuration' of professionalism and the emergence of 'organizational professionals' who view management work not as 'separate from medical work', but rather, 'part of medical work'.

As such, it is possible that re-stratification will be associated with attempts by senior cadres of professionals to control the jurisdiction of management, which, in most contemporary public sector organisations, has grown in importance (Kurunmäki 2004). To be sure, the motivations for this strategy are likely to vary between professional groups. In healthcare, for instance, one might see marked differences between nursing and medicine. In the case of nursing, accessing management roles is partly a response to blocked career mobility (Spyridonidis and Currie 2016) or even as a means of clawing back organisational territory from general managers. The latter might also apply to MMs who although less concerned about career

progression, may view participation in management as a strategy for controlling resources and other strategic contingencies, such as the governance of patient safety (Waring and Currie 2009). Ultimately, this might even be associated with what Hunter (1992; 557) termed '"provider capture" of the management agenda'.

Either way, it is possible that re-stratification could trigger the emergence of discreet occupational interests and, ultimately, professional aspirations. As noted, the latter could take the form of a distinct 'professionalization project' (Muzio, Aulakh and Kirkpatrick 2020), leading to the establishment of associations and even in some cases, certification programmes. In medicine, for example, the American Academy of Medical Directors was formed as early as 1975 to educate and certify medical managers, most recently morphing into the American Association for Physician Leadership, with 10,000 members (Montgomery and Oliver 2007).

The success of these initiatives will be linked partly to the strategies of peak level associations and the degree of recognition they achieve (Ferlie 2018). However, equally important is how far (if at all) the occupational interests of hybrid professional managers also develop *within* organisations that employ or host professionals (Ackroyd 1996). According to Sandholtz, Chung and Waisberg (2019; 1350), 'establishing and defending a jurisdiction requires effort at two levels: the field level, where professionals engage in collective action to seek monopoly closure; and the organisational level'. Organisations represent critical sites for what Anteby, Chan and DiBenigno (2016) term 'doing jurisdictions', the work of establishing and then extending claims over particular task areas and techniques. Following Barley and Tolbert (1991; 6), this might be understood in terms of the 'occupationalisation of organisations', a process which 'involves vesting authority over particular organisational functions or domains in established or fledgling occupational groups'.

In the case of hybrid professional managers, this process of developing occupational interests within organizations means colonising management roles at different levels of the hierarchy (Montgomery 2001). Indicators of success might be the growing size of a nascent occupation, whether it achieves critical mass, and the breadth of its involvement across different management functions. In reality, there is likely to be a ceiling for how far this colonisation process, especially with regard to specialist roles (such as those linked to technical or support services). Nevertheless, the expectation would be that hybrid professional managers, as a group, will grow in size over time and come to occupy a larger proportion of roles in what Mintzberg (1993) terms the middle tier and strategic apex.

Crucially, success might also be gauged by how far hybrid professional managers are able to colonise roles that are close to the 'corporate core' of organisations (Brint 1994). This implies access to senior positions, such as membership of boards or holding CEO roles with strategic oversight and greater influence. In addition, while senior positions within organisations may help groups such as hybrid professional managers access resources and leverage authority, this will be enhanced even more by the relative position of those organisations within their field (Greenwood, Raynard, Kodeih, Micelotta and Lounsbury 2011). The latter observation highlights the importance of status orders within fields that rank organisations in terms of their centrality and importance. In crude terms, more 'central' organisations are in a given field (such as a public healthcare system), the greater their power and access to 'positive privileges' (Battilana 2011; 821). In this regard, the development of occupational interests of hybrid professional managers should also be assessed in terms of seniority and the extent to which this group is able to colonise key positions within organisations that are more central and enjoy higher status.

Medical managers as an emerging occupational interest

As we saw, healthcare is a prime site for emergence of hybrid professional managers as an occupational interest. In many countries, MMs have formed occupational associations and, in some cases, developed new forms of certification (Ferlie 2018, Sarto, Veronesi and Kirkpatrick 2019). According to Montgomery and Oliver (2007; 674), in the US 'the profession of physician executive had been well recognized and taken for granted in the field'. In the UK, the greater involvement of doctors in management and leadership has also been strongly encouraged by policy makers (Moralee and Exworthy 2018). This has especially been the case in light of the growing evidence linking medical engagement in leadership and management to improvements in patient care (Geerts, Goodall and Agius 2020, Sarto and Veronesi 2016). Indeed, it has been suggested that, in recent years, medical leadership has shifted 'from the dark side to centre stage' (Ham, Clark and Spurgeon 2011; 11).

However, at the same time, there are likely to be significant obstacles to the development and expansion of groups such as MMs as an occupational interest *within* organisations. Writing over 15 years ago, Fitzgerald and Ferlie (2006; 170) found 'only a very limited professionalization process' in the NHS, with MMs lacking a 'coherent work identity or credentialised knowledge base'. Ham, Clark and Spurgeon (2011) draw similar conclusions about medically trained CEOs in the NHS, who they describe as 'keen amateurs' with limited incentive, training or sense of collective purpose.

Obstacles to the development of MMs as an occupational interest are apparent both on the supply and demand side. The former include the occupational culture of medicine, fostering clinical individualism (Freidson 1988) and a general 'wariness of managerial work' (Blumenthal,

Bernard, Bohnen and Bohmer 2012; 515). Even when some doctors overcome their socialisation to become 'willing hybrids' (McGivern, Currie, Ferlie, Fitzgerald and Waring 2015), they face other challenges that might limit their willingness to commit to management careers in the longer term (Bresnen, Hodgson, Bailey, Hassard and Hyde 2019). This is especially true when organizational support for MM roles is weak and where there is an absence of financial incentives or opportunities for extra training (Ham, Clark and Spurgeon 2011, Moralee and Exworthy 2018). At senior levels, accounts of the experience of MMs highlight the reputational risks and the 'harsh almost bullying performance culture' of many hospital boards (Vize 2016).

Turning to obstacles on the demand-side , it is likely that the jurisdiction of management within hospitals will be contested by other professionals, such as nursing (Kirkpatrick, Kragh-Jespersen and Dent 2011), or non-clinical general managers with specialist expertise (Kurunmäki 2004). In the NHS, the latter expanded their numbers following the Griffiths report in 1983 (Kirkpatrick, Altanlar and Veronesi 2017). More recently, general managers have further consolidated their position with initiatives such as the NHS Graduate Management Training Scheme which has helped to reinforce their knowledge base and sense of occupational identity (Hyde, Granter, Hassard and McCann 2016). As such, it is possible that the career interests of these non-clinical managers will directly conflict with those of MMs who, in the process, may be crowded out. This is especially possible in situations where management roles require certain kinds of technical expertise, which is harder for MMs to acquire.

Hence, in the context of healthcare, there are questions about how far MMs, as an occupation, will be willing or able to extend their control over the jurisdiction of management. Yet, while there has been considerable research on the practices and shifting identities of hybrid professional managers in healthcare, we know far less about the wider population and trends

over time. Specifically, what is the size and profile of MMs as an occupation in healthcare organizations and how far, if at all, has it grown and extended its influence? As we noted earlier, the latter may also be assessed by focusing on the organisational position of MMs, both in terms of seniority and the extent to which they are (collectively) better placed within higher status, central organisations.

Data and methods

In the analysis that follows, we draw on a mix of official NHS statistics (mainly accessed through NHS Digital) and a commercial database (the Database of NHS Management) supplied by the industry leader: Wilmington Healthcare Ltd. Although referenced in previous work (Walshe and Smith 2011), this database has only recently been interrogated systematically to analyse the nature and impact of NHS management (see for example Kirkpatrick, Altanlar and Veronesi (2017)). Collected and published since 1991, a new updated version is published every four months, with the latest edition available at the time of the analysis for this study (May 2018) comprising information on more than 30,000 managers. In the database, a 'managerial' role is assigned to any individual with decision making power, specifically in relation to budgeting, financial management and allocation of resources. As such, the data captures both general (or 'pure play') managers and hybrid clinical (professional) managers (i.e., doctors and nurses' managers). MMs are identified in the database by their salutation (Dr) and, in most cases, the presence of a General Medical Council (GMC) registration number.

As noted, a potential limitation here is that this database will not include all doctors who are involved in more operational, occasional leadership activities without a formal designation of manager. According to some estimates (Buchanan, Denyer, Jaina, Kelliher, Moore, Parry and

Pilbeam 2013), this latter grouping is quite substantial. However, since 2014, the database has been expanded to include more of these operational management roles, notably those of 'Clinical Leads'. Given the commercial focus of the database (used to disseminate information to key decision makers), great importance is placed on matching the NHS occupational codes and ensuring that population coverage is as accurate as possible, with regular (quarterly) updates and double checks with service providers.

The cumulative database used in this study spanned eleven years (from 2007 to 2018), although in the case of clinical leads, it was possible to only compare five years of data (2014-18). On average, for each year the Database of NHS Management provides information relating to between 450-500 NHS organizations, effectively the whole population in England, Wales and Scotland (Northern Ireland not included). Using this data, it is possible to identify over 100 different management roles and differentiate between sub sectors (England only), such as acute care trusts, mental health trusts and primary care organizations such as clinical commissioning groups (CCGs), responsible for primary care and commissioning services. Also included are managers employed in central functions such as NHS England or Local Health Boards in Wales (accounting for 3,359 cases in 2018). Given changes in the classification of management roles in 2007, to ensure consistency we focused primarily on eleven years of data.

Prior to investigating the database, a number of job roles less relevant to this analysis, such as chairs of committees, were excluded as we found cases where the same individuals held multiple roles (only one role being counted). Given the more recent addition of operational leadership roles - clinical leads - in the database (since 2014), in some calculations this group is analysed separately. Lastly, where necessary, the information from the Database of NHS

Management was matched with other data sources drawn from the national repository – NHS Digital – relating to workforce characteristics (see Kirkpatrick and Veronesi (2019)).

Analysis design

Our analysis of this data proceeded in three stages. First, we explored the nature and profile of MMs, as a group or nascent occupation in the whole NHS, for one year (2018) along a number of dimensions, including its overall size, composition and distribution by organisational type and sub sector.

Second, we considered trends over time to address our central concerns about whether or not the occupational interests of MMs have advanced (or not) in terms of size, or critical mass, scope and power base. For this analysis, to ensure a meaningful comparison, we focused only on the specific sub sector of acute care hospital trusts in England. While this sub sector did undergo changes - notably the shift in many cases to foundation trust (FT) status (Kirkpatrick, Altanlar and Veronesi 2017) - the population of organisations (trusts) remained relatively stable, making it possible to identify a paired sample of 151 organisations for the years 2007 and 2018 (or 2014-2018 in the case of clinical leads). These two years only were employed for comparative purposes.

The aim of this analysis was to assess the extent to which the occupational interests of MMs had advanced over the time period in question along a number of dimensions, including their relative size as a proportion of all managers, and their relative position across different functions and levels of management. To assist with the latter, we classified MM roles using Mintzberg's (1993) four categories of 'strategic apex, middle line, technostructure and support functions' (see also Kirkpatrick, Altanlar and Veronesi (2017) for a previous application). As

noted earlier, our expectation here was that given the specialist nature of some management roles, there would be an obvious ceiling to how far MM roles might grow, with progress being far slower in specialist management functions. Nevertheless, it was assumed that MMs would become a more significant grouping over time and that this would also apply to the strategic apex level of hospital trusts (board membership).

In the third and final stage of our analysis, we sought to further address the concern about the organisational position of MMs. As noted earlier, this relates to the relative centrality and status of the organisations (acute trusts) where MMs, as an occupational interest, are most concentrated. To assess this concern, we used two proxies for organisational centrality. First, we differentiated between the teaching or non-teaching status of acute trusts. While there are big variations within each category, in the UK teaching hospitals, involved in medical education and research, are generally perceived as being higher status, elite institutions (Battilana 2011). Second, we focused on the extent to which acute trusts had undergone a process of 'corporatisation' (to achieve foundation status). According to Lindlbauer, Winter and Schreyögg (2016; 2) 'corporatisation represents a change in legal form that separates service delivery from traditional government agencies while keeping the organization in public hands'. In the UK and elsewhere, because this process is associated with higher performance (or at least the perception of it) and formal autonomy, it also implies greater reputation and centrality (Kirkpatrick, Altanlar and Veronesi 2017, Saltman, Durán and Dubois 2011). In both cases (teaching status and corporatisation), we at looked at whether trends in the development of MM roles (in terms of size, scope and power base) were more pronounced than in organisations that were more peripheral (or lower status) in the field.

For this part of the analysis, we applied a Panel Corrected Standard Errors (PCSEs) estimation approach based on nine years of data (2009-2017). As a statistical technique, PCSE is robust to potential contemporaneous correlation of errors across observations and unit heteroscedasticity. In time series cross-sectional designs, error terms may not be independent among different time periods (i.e., possible serial correlation). Accordingly, PCSEs estimations were employed with lagged dependent variables and the Prais–Winsten Generalized Least Square (GLS) method, where the errors are assumed to follow a first-order autoregressive process (Beck and Katz 1996). This estimation approach makes it possible to incorporate time-invariant variables such teaching and specialist trust statuses.

Using this approach, our estimations focused on two key dependent variables: MMs as a proportion of managers, and MMs as a proportion of managers at the strategic apex level. As noted, the main explanatory variables of interest were the teaching status of hospital trusts and, as an indicator of corporatisation, whether they had attained foundation trust (FT) status or not. Instead of a dichotomous variable, the latter was captured by the proxy 'number of years as foundation trust'. The use of a continuous variable better models the effect of changes generated by the process of corporatisation over time in particular in relation to shifts in MMs representation (Kirkpatrick, Altanlar and Veronesi 2017). In the regression estimations, we also included a number of controls to account for the possible impact of other factors that might influence the level of involvement of MMs in management. These controls included the specialist status of trusts, their size (natural log of the number of beds), the number of units, their case-mix, the percentage bed occupancy, admissions (natural log of admissions deflated by case-mix), and the geographical location of trusts.

Nature and profile of medical management in the NHS

As mentioned, our first step was to provide an overview of the nature and profile of MMs, as an occupational grouping in the NHS, based on the final year (2018) of the Database of NHS Management. We start by offering an indication of the size of the MM cohort, before looking at its characteristics and sources of variation.

Overview

In 2018, there were 25,119 managers (not including clinical leads) in the NHS as a whole. Turning to regional variations, the majority of managers were unsurprisingly employed in England (21,624), with 2,477 and 929 in Scotland and Wales respectively. If the role of clinical lead is included, the total number of managers in the NHS as a whole (for 2018) rose to 27,484. Nevertheless, as suggested by previous research, this overall figure for managers is small in comparison to total employment in the NHS (around 2%) (Kirkpatrick, Altanlar and Veronesi 2017).

Turning to MMs as a sub-category, the Database of NHS Management indicates that in the NHS as a whole, 3,829 management roles were held by doctors. This amounts to 15.2% of all managers in the service and, in England only, to 3.2% of the medical workforce. Such figures suggested a relatively low level of participation in management roles, although this increased slightly when more operational, clinical leadership roles, were included. In 2018, there were 2,721 clinical leads in the NHS (over 80% operating in the English acute care hospital sector), the vast majority of whom were doctors. When these roles were added, the number of doctors formally involved in management rose to 6,090, or 22% of all managers.

Further analysis revealed considerable variation between NHS organisations in the level of involvement of doctors in management roles. For example, Table 1 (Panel B) shows that in acute care trusts in England (157 in 2018) MMs (not including clinical leads), as a proportion of all managers, ranged from between 3.4% to approximately 36% (median 15.6%). These variations were also quite marked in the case of clinical leads, where numbers varied from an average of zero to 46 (median 12).

Personal characteristics

Although the Database of NHS Management provides only limited information on the characteristics of MMs, it was possible to explore differences in terms of gender, previous management experience and career profiles. Concerning gender, interestingly, our analysis found that on average, women made up a majority (around 57% - up from roughly 54.3% in 2007) of managers in the NHS as a whole and 48.6% (marginally up from 48% in 2007) of those in strategic apex roles, such as membership of boards. This largely confirmed the trends noted in earlier research highlighting rising levels of female participation (Ellwood and Garcia-Lacalle 2018). By contrast, women accounted for a smaller proportion of the MM population: 23.3% in the NHS as a whole.

Turning to the experience of MMs, we calculated the number of years each doctor appeared in the Database of NHS Management. This revealed an average number of years for managers (clinical and non-clinical) in the NHS as a whole of 7.32 years, but slightly lower for MMs (6.40 years). When looking at acute care trusts only, MMs served nearly as long - an average of 5.84 years (see Table 1 Panel B) - as did managers as a whole (6.81 years). Where

MMs at the strategic apex are concerned, average experience was even longer at 7 years, with a maximum of 22 years.

Interestingly, this analysis showed that, as a cohort or emerging occupation, MMs had lower labour market mobility within the NHS than did managers as a whole. For all managers, on average, 42.8% had worked in other NHS organisations. By contrast, only 33.4% of MMs had previously held management roles elsewhere in the NHS. As such, the implication is that MMs are, to use Gouldner's (1957) terminology, essentially 'locals', with the bulk of their management careers served within the same organisations. This is mainly explained by the consultant status of a majority of MMs, which means they are less likely to switch organisations for contractual reasons.

Variation of medical managers by region, sector and role type

As previously noted, in 2018, MMs (excluding clinical leads) represented 15.2% of the management population in the NHS as a whole, although this figure varied by region, sub sector and role type. Concerning regional differences, the proportion of MMs was lower in Scotland (11.7%) and Wales (12.9%), than in England (15.3%). Focusing on sub sectors (in England only), participation rates were markedly lower in mental health services (10.5%) than elsewhere. Interestingly, the proportion of MM roles was also lower in CCGs (circa 14%), compared to acute care trusts (16.8%), despite the fact that, since 2012, considerable emphasis has been placed on transferring management responsibilities (for commissioning and budgets) to GPs.

Concerning the question of how MM roles varied by job function or level, our analysis revealed some interesting contrasts. In 2018, the top five roles (in descending order of magnitude) were as follows: Clinical Lead (2,609); Clinical Director (1,665); Medical Director

(579); Non-Executive Director (184); and Chair of CCGs (173). Apart from clinical leads and the role of GP Executive Committee Member, which no longer exists, this list of roles has not changed dramatically since 2007. As mentioned, we sought to classify MM roles using Mintzberg's (1993) four categories of strategic apex, middle tier, technostructure and support functions. Strategic apex, for example, included 13 job types, combining all board directors (such as CEOs, Chairs and Medical Directors) and other senior management roles. The results of this analysis showed that for the NHS as a whole, the vast majority of MM roles were located either within strategic apex (41.4%) and middle line functions (48.9%). For the latter, the percentage increases to nearly 68% if clinical lead roles are included. By comparison, as one might expect, MMs were far less well represented in technostructure and support services management roles (only small numbers in each case).

Trends in the development of MM as an occupational interest

In this section, we explore the central question of how far, if at all, MMs have extended their involvement in management roles over time. As mentioned, this analysis concentrated on comparative trends between 2007 and 2018 (or from 2014 in the case of clinical leads) focusing on a paired sample only of acute hospital trusts in the English NHS. Table 1 provides descriptive statistics relating to the whole population of acute trusts at two points in time, which varied between Panel A (N=189) and B (N=157), largely as a result of mergers. Table 2 then summarises the results of t-tests relating to a smaller (paired) sample of acute trusts (151), indicating percentage changes over time and whether differences were statistically significant. As can be seen from these tables, our analysis focused on a number of specific dimensions relating to the size (or critical mass) of the MM population in terms of numbers and proportions,

the scope of MM, in terms of the spread across management roles, and indicators of its power base in NHS organisations. For the latter, we looked at how far MMs had colonised senior management roles in the strategic apex of hospital trusts and at any changes in their experience, which might indicate growing levels of engagement with management.

TABLE 1 ABOUT HERE

TABLE 2 ABOUT HERE

Turning to the findings of this analysis, a headline statistic from Table 2 (Panel A) is that, while the raw number of MMs basically remained at the same level, there was a statistically significant drop in the average proportion of MMs to all managers - from 19.2% to 16.5% - and of the medical workforce in acute trusts (-16.8% decrease). Interestingly, between 2007 and 2018, the average number of managers (clinical and non-clinical) per trust rose by over 11 %, suggesting that while new roles had been created, MMs had not kept pace in expanding their share. As such, a key initial observation is that there has been no significant expansion in the overall level of involvement of doctors in MM roles over time. Of course, in reality there are limits to how far the participation of MMs might grow, especially in certain specialised management functions (e.g., finance, marketing and HR). Nevertheless, this relatively static picture is surprising. Implied by this is that the occupational interest of MMs has not advanced in terms of critical mass and, if anything, the opposite may apply. This conclusion also holds for the sub sample of clinical leads, where there was a statistically significant decline in number of almost 8% between 2014 and 2018. With regard to variation between types of acute trust, the overall downward trend applied to Foundation Trusts (Panel B), but not entirely to teaching hospitals (Panel C).

Notwithstanding these conclusions, other trends reported in Table 2 suggest that MMs, as a cadre, have consolidated their position. Firstly, consolidation is indicated by the fact that the diversity of MM roles (or the scope/breadth of their involvement) has increased slightly over time. While in 2007 the average number of roles in each acute trust occupied by doctors was 7.3, by 2018 it had risen (by almost a fifth) to 8.68. This change, which is statistically significant, suggests that MMs have successfully colonised a growing spectrum of management roles and, as an occupation, are marginally less siloed than has been the case previously. However, these shifts are also relatively small given the increasing number of roles at both middle line and strategic apex which MMs could conceivably occupy.

Second, our analysis points to changes in the relative level of management roles that MMs are involved in across the NHS. Importantly, there is a marked increase in the number of doctors involved in strategic apex management roles, including membership of boards. In the NHS as a whole, this has risen from 1,424 in 2007 to 1,586 in 2018 (or from 35.4% to 41.4% of all MMs). The same upward trend was also apparent in the paired sub sample of acute care trusts, where the average number of doctors in strategic apex roles increased from 1.68 to 3.4 between 2007 and 2018. As can be seen in Table 2 (Panel A), this translates as a statistically significant increase of over 100%. Therefore, while MMs have seen no increase in numbers overall, they have concentrated their position within the 'strategic core' (Brint 1994) of public sector hospitals. This trend is also suggested by descriptive statistics relating to the number of acute trust CEOs with medical backgrounds, rising from only one in 2007 to eight in 2018.

As a further indicator of the power base of MMs, we looked at changes in their tenure in management roles. The logic here is that longer experience is indicative of growing commitment to management and – through enhanced knowledgeability – the potential ability to influence

decisions. Average experience of MMs rose significantly by over 43%, from 4.07 years in 2007 to 5.85 years in 2018 and was even higher in Teaching trusts (with a 53.7% increase). This indicates a greater level of commitment to management roles and a deepening of the knowledge (and maybe influence) of those who hold them. However, we found less evidence to suggest that this process had increased the labour market mobility of MMs as a distinctive cadre with transferable skills. Between 2007 and 2018, the proportion of MMs who had worked in other organisations remained static at approximately one third.

TABLE 3 ABOUT HERE

With reference to the final stage of our analysis, we looked at whether the occupational interests of MMs had advanced further in organisations that were in a more central position in the field, in terms of elite status. To recap, this analysis used PCSEs estimations to explore trends over nine years (2009-2017). Specifically, we looked at whether the MMs as a proportion of all managers and of strategic apex managers was greater in two areas, both indicating elite status: teaching hospitals and trusts that had undergone corporatisation (FTs).

The results of this analysis are reported in Table 3, showing the impact of these two explanatory variables and other controls. As reported in the table, teaching trust status has a positive and significant association with the proportion of managers with a medical background and on the proportion of MMs in the strategic apex. Similarly, years as FT status has a positive and significant effect on the proportion of strategic apex managers, but not on the overall proportion of MMs in management as a whole. Perhaps unsurprisingly, past levels of MM

involvement are strongly associated with future levels (see coefficient and statistical significance of the first lag of the dependent variable).

Taken together, these trends can be read as a further indicator of the increasing organisational power of MMs as an occupational interest which is most concentrated in those elite NHS organisations that are central to the field. This conclusion is also borne out by Table 2 (Panel C) which highlights a significantly larger rate of growth of MMs at the strategic apex of teaching hospitals between 2007 and 2018 when compared to other trusts.

Discussion and conclusion

A key point of departure for this paper was the possibility that emerging groups of hybrid professional managers in public sector organisations might be in the early stages of professionalisation, laying claim to the jurisdiction of management. In the case of medical managers (MMs), this has led to the formation of professional associations and new initiatives in education and certification that seek to remake professionals (Montgomery 2001, Noordegraaf 2011) and align their interests more closely with the concerns of management and leadership (Martin and Learmonth 2012). This process has also received considerable support from policy makers who view enhanced medical leadership as a means of improving quality and controlling resources – turning poachers into gamekeepers (O'Reilly and Reed 2011).

However, building on Abbott's (1988) observations about the dual nature of professionalisation (see also Sandholtz, Chung and Waisberg (2019)), any attempt to professionalise hybrid professional management would also need to be linked to the development of occupational interests within organisations that employ or host professionals. This process involves monopolising particular task areas or techniques within organisational settings. For that

to occur, hybrids would need to colonise an increasing number and proportion of management roles, including at the strategic level, to achieve critical mass and influence.

In the event, our analysis, focusing on MMs in the UK NHS, revealed that this group had only partially extended their occupational interests within healthcare organisations. Crucially, we found no evidence at the population level that MMs had advanced in terms of critical mass or proportional representation. Clearly, , there are limits on how far MMs might occupy more specialist management functions (such as technostructure or support services). However, this accounts only partially for the sluggish development of MMs as an occupational interest, especially given the scope to expand into middle line and strategic apex roles. As such, our results arguably highlight both demand and supply side obstacles to professionalization. Specifically, they draw attention to the unwillingness of many doctors to make the transition into management (Bresnen, Hodgson, Bailey, Hassard and Hyde 2019) and to the potential competition from other occupations, including (non-clinical) general managers and nurses (Kirkpatrick, Kragh-Jespersen and Dent 2011). In addition, these findings might be explained by the wider context of austerity in UK public services and 'potentially catastrophic' labour shortages for clinicians, including senior doctors, recently highlighted in a BMA report (BMA 2020).

An important caveat here is that, while MMs have not grown numerically as an occupation, they may now exert slightly more influence over management decision-making than before. This is suggested by the upward trend in the proportion of MMs at the 'strategic core' (Brint 1994) of NHS organisations, especially those more central to the field. The latter is suggested by the higher representation of MMs in management in Foundation Trusts and teaching hospitals. Following Battilana (2011), the elite status of these organisations increases

their access to resources and, by implication, the influence of MMs who occupy senior positions within them.

Looked at from this perspective, one could argue that MMs are in a stronger overall position within NHS organisations than previously, despite their limited numerical growth. This, in turn, might be interpreted as an alternative strategy on the part of the medical profession for retaining their overall dominance. Specifically, it could indicate that medical professionals have been content to delegate the bulk of management work to subordinate occupations (Currie, Lockett, Finn, Martin and Waring 2012, Jacobs 2005), while they themselves focus mainly on securing influence at the highest levels. However, this idea that medical professionals have deliberately side-tracked management roles through delegation can only be inferred from our data. Nor should we exaggerate the trend towards greater strategic influence of MMs. While the proportion of doctors at board levels has risen, this shift is hardly dramatic, especially when compared to other healthcare systems, where doctors have long occupied senior roles (Kirkpatrick, Bullinger, Lega and Dent 2013).

These conclusions have wider implications for theory and research. First, we contribute to debates about re-stratification and the professionalisation of hybrid professional manager in public sector organisations. As we saw, a growing number of studies have focused on growing professional aspirations of hybrids, forming associations and, in some cases, establishing new forms of certification. In the healthcare field, these trends are apparent in many countries including the US (Montgomery and Oliver 2007), the UK (Moralee and Exworthy 2018), Italy (Sarto, Veronesi and Kirkpatrick 2019) and Australia (MacCarrick 2014). However, less attention has been given to the parallel development of hybrids as an occupational interest *within organisations* and the degree to which it has colonised management roles. Focusing on the case

of MMs in the UK NHS, we address this gap and advance knowledge both empirically and theoretically. Empirically, we provide the first major analysis of how MMs as an occupational interest group have developed over time at the population level. Theoretically, we also note important constraints on this process, how occupational interests may be thwarted both by demand and supply side constraints.

Second, and more tentatively, our analysis contributes to wider debates about the development of professions in contemporary society. It is often assumed that the uptake of hybrid roles will have implications for practices and values, aligning these more closely with organizational priorities (McGivern, Currie, Ferlie, Fitzgerald and Waring 2015, Spyridonidis and Currie 2016). For some, this signifies a trend towards collaborative community (Adler, Seok-Woo and Heckscher 2008) or even a 're-configuration' of professionalism, reconciling it more closely with organisational concerns (Noordegraaf 2011). At face value, our analysis lends support for these ideas. The extended tenure of MMs and their increased involvement in strategic roles could be interpreted both as a shift in professional commitments and levels of engagement with management. However, the fact that MMs as an occupation have not grown substantially in numbers or critical mass is also a reason for caution. In particular, it suggests that that older patterns of 'institutionalised separation between medical and management roles' (Brown 2000; 68) are perhaps more robust than previously assumed. While in the longer term the professions may well become increasingly hybridised and reconfigured (Noordegraaf 2011), our analysis suggests that this process is likely to be slower and more contested than assumed.

When drawing these conclusions, it is of course important to highlight certain limitations and directions for future work. Although we have been able to chart general trends in the development (or under-development) of MM roles in the NHS, given our data one can only

speculate about the reasons for these trends. In future, more work using case studies will be needed to understand why occupational interests of MM have advanced in some roles and organisations but less in others. More qualitative work will also help to assess the significance of informal leadership roles held by doctors (not covered by our data) and how far these have increased, or not, over time.

In addition, further research might look at the experience of other professions and other national contexts. While the experience of MMs in the UK is a useful illustrative case, there are obvious limits to how far one can generalise. For example, it is open to question whether the pattern observed with doctors also applies to 'state mediated' professions such as nurses, social workers or teachers that are more dependent on organisations for employment and patronage (Dent, Bourgeault, Denis and Kuhlmann 2016). In the case of nurses, the quest for upward mobility could mean that the supply side obstacles to colonising management roles are less acute (Spyridonidis and Currie 2016). On the other hand, because of their lower status in the professional hierarchy, nurses may struggle to gain the same access to strategic apex roles (demand constraint). Similarly, it would be useful to look at comparative trends, especially differences between health systems. It is notable, that (non-clinical) general managers have been employed in larger numbers in the UK than other European contexts, such as in Scandinavia and Italy (Kirkpatrick, Bullinger, Lega and Dent 2013). Such variations could mean that in these public health systems MMs face less competition from general managers and, as a result, are better able to control management decision making (see Kurunmäki (2004) in relation to Finland).

Lastly, there are questions about the likely impact of hybrid professional managers on the performance of public sector organisations. As noted, there has been growing support from

policy makers for the goal of engaging professionals in management and leadership roles. In the case of healthcare, Ferlie (2018; 278) argues that the qualities of MMs could 'rebalance the agendas of health care organisations to prevent capture by over narrow financial objectives'. In this regard, our results suggest a mixed picture. In some ways, the greater involvement of doctors at board levels may represent a positive development, likely to enhance performance (see Sarto and Veronesi (2016) for a summary). However, against this, the sluggish development of this occupational interest group overall could be viewed as a missed opportunity. Either way, further research is needed to understand the conditions which foster the growth of hybrid professional manager roles in public sector organisations and subsequently to explore their impact on both financial and quality outcomes.

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TABLES

Table 1. Descriptive Statistics: Acute Care Trusts only

Panel-A: 2007 (N=189)					
Variable	*Mean*	*Median*	*Min*	*Max*	*St.Dev.*
Number of Managers	65.61	59.00	31.00	186.00	23.74
Number of Medical Managers (MMs)	12.79	11.00	2.00	49.00	7.24
MMs as a proportion of managers	18.97	18.31	3.13	39.29	6.44
MMs as a proportion of medical workforce (2009)	3.13	2.58	0.11	20.62	2.20
Average number of roles held by doctors	7.13	7.00	2.00	15.00	2.41
Strategic Apex MMs	1.70	1.00	0.00	8.00	1.23
Average Experience of MMs (years)	4.07	4.00	0.67	10.67	1.55
Number of doctors as Clinical Leads (2014)	14.45	12.00	0.00	47.00	9.51
Panel-B: 2018 (N=157)					
Variable	*Mean*	*Median*	*Min*	*Max*	*St.Dev.*
Number of Managers	75.03	68.00	33.00	198.00	29.23
Number of Medical Managers (MMs)	12.97	11.00	2.00	55.00	8.36
MMs as a proportion of managers	16.83	15.63	3.39	35.53	6.64
MMs as a proportion of medical workforce	2.32	1.96	0.40	8.99	1.42
Average number of roles held by doctors	8.72	9.00	3.00	15.00	2.37
Strategic Apex MMs	3.59	3.00	0.00	20.00	2.55
Average Experience of MMs (years)	5.84	5.72	2.50	13.17	1.49
Number of doctors as Clinical Leads	13.69	12.00	0.00	46.00	9.30

Note: *Significant at 5% confidence level. All values are calculated as averages at the organizational level.

Table 2. Paired Samples T-tests: Acute Care Trusts only

	2007	***2018***			
Panel-A: Paired Sample T-tests (2007-2018)					
Variable	*Mean*	*Mean*	*% Change*	*t-statistics*	*N.*
Number of Managers	66.68	74.13	+11.17	3.48*	151
Number of Medical Managers (MMs)	13.09	12.47	-4.74	-0.99	151
MMs as a proportion of managers	19.21	16.52	-14.00	-4.21*	151
MMs as a proportion of medical workforce (2009-2018)	3.03	2.52	-16.83	-4.00*	148
Average number of roles held by doctors	7.30	8.68	+18.90	5.15*	151
Strategic Apex MMs	1.68	3.40	+102.38	9.89*	151
Average Experience of MMs (years)	4.07	5.85	+43.73	9.67*	150
Number of doctors as Clinical Leads (2014-2018)	14.82	13.68	-7.69	-2.29*	153
Panel-B: Foundations Trusts only (2007-2018)	*Mean*	*Mean*	*% Change*	*t-statistics*	*N.*
Number of Managers	62.98	71.59	+13.67	3.13*	81
Number of Medical Managers (MMs)	12.68	12.44	-1.89	-0.28	81
MMs as a proportion of managers	19.74	17.16	-13.07	-2.72*	81
MMs as a proportion of medical workforce (2009-2018)	3.28	2.44	-25.61	-5.01*	81
Average number of roles held by doctors	7.25	9.02	+24.41	4.61*	81
Strategic Apex MMs	1.67	3.58	+114.37	8.74*	81
Average Experience of MMs (years)	4.11	5.86	+42.58	6.89*	81
Number of doctors as Clinical Leads (2014-2018)	13.24	12.40	-6.34	-1.10	81
Panel-C: Teaching Trusts only (2007-2018)	*Mean*	*Mean*	*% Change*	*t-statistics*	*N.*
Number of Managers	82.64	109.45	+32.44	3.33*	22
Number of Medical Managers (MMs)	19.73	21.55	+9.22	0.75	22
MMs as a proportion of managers	23.44	20.22	-13.74	-2.08*	22
MMs as a proportion of medical workforce (2009-2018)	1.84	1.62	-11.96	-1.57	22
Average number of roles held by doctors	8.23	10.64	+29.28	3.00*	22
Strategic Apex MMs	2.14	5.09	+137.85	7.06*	22
Average Experience of MMs (years)	3.78	5.81	+53.70	6.98*	22
Number of doctors as Clinical Leads (2014-2018)	23.78	20.04	-15.73	-2.14*	22

Note: *Significant at 5% confidence level. All values are calculated as averages at the organizational level.

Table 3: The development of medical management roles in organisations central in the field - Coefficients for PCSE estimations (2009-2017).

	Dependent Variable	
Variable	*MMs as a proportion of managers*	*MMs as a proportion of managers at the Strategic Apex level*
First lag of the dependent variable	0.818*** [0.062]	0.720*** [0.086]
Teaching Trust	0.783*** [0.230]	0.796* [0.486]
Specialist Trust	0.592 [0.889]	0.646 [0.881]
Years as Foundation Trust	-0.018 [0.019]	0.166*** [0.063]
Size	0.189 [0.363]	0.034 [0.392]
Number of Units	-0.103** [0.053]	0.117* [0.062]
Case-mix Index	-0.026 [0.085]	0.008 [0.185]
Bed Occupancy	1.966 [1.638]	1.234 [2.880]
Admissions	-0.002 [0.002]	-0.002 [0.005]
SHA Dummies	YES	YES
Observations	1,104	1,104
Number of groups	150	150
R^2	0.70	0.58
Wald (chi^2)	33900***	1664***

Note: Errors are assumed to be heteroskedastic and correlated across panels. Panel-corrected standard errors are in brackets. All estimations include a constant and Strategic Health Authority (SHA) dummies, which are not reported due to space reasons. Significance at * p<0.10, ** p<0.05, *** p<0.01.