The struggles for (and of) network management: an ethnographic study of non-dominant policy actors in the English healthcare system

The coordinating skills of network management are well-documented, but there is little understanding of how network management roles are acquired and sustained. This article reports on a two-year ethnographic study that investigated the introduction of a regional healthcare network in England. It describes the strategies used by non-dominant actors to acquire and sustain network management roles in the face of opposition from more powerful actors. These strategies complement existing theory on network management and offer new theoretical understanding regarding the social position of network managers.

Introduction

Over the last quarter century, networks have become synonymous with public governance. As a 'progressive' alternative to bureaucracy and markets, networks are associated with deliberative policy-making, collaboration, and resource exchange (Ansell and Gash 2003; Klijn and Koppenjan 2012; Milward and Provan 2003; Osborne 2007). Significantly, the literature upholds network management as distinct from traditional forms of public management (Provan and Kenis 2008; Klijn et al. 2010). Where public management is analyzed as functioning *within* organizational hierarchies; network management functions *between* organizations, requiring distinct skills and strategies for engendering inter-organizational collaboration (Klijn et al., 2015). The literature on network management describes, for instance, the tasks of activating and coordinating network relations (Lewis et al., 2008; McGuire 2002), the corresponding skills and strategies of managers (O'Leary et al.

2012), and how variability in managers' position, resources and skills affect network performance (Provan and Kenis 2008; Klijn and Koppenjan 2012).

This article contributes to research on network management in two areas. The first deals with the under-researched processes through which policy actors acquire management roles. Much of the literature describes network managers as appointed through top-down policy drivers (McGuire 2002). However, where policy is interpreted locally there is likely to be ambiguity and where this is the case, network management roles cannot be assumed; rather acquisition is likely to represent a site of contestation. To date, there has been limited attention to this aspect of network management, and yet it is likely that the 'struggles' of acquiring a network management role will influence network formation, coordination and sustainability. Specifically, the perceived legitimacy of managers amongst local stakeholders might recursively influence their capacity to undertake the tasks of network design and management. The question of how policy actors acquire network management roles was the primary impetus for the research reported in this article.

The second contribution developed empirically in response to the early findings. It deals with the question of how policy actors with relatively less influence acquire and sustain network management roles. Where network managers are appointed from organizations or professions with pre-existing authority (Lewis et al., 2008; Müller-Seitz 2012), there is an implicit degree of structural power associated with professional status or organizational prominence (Markovic, 2017). However, aspirant managers with less structural influence or status might adopt particular strategies that accommodate for their lack of status when seeking to acquire and maintain a network management role. The question of how non-dominant actors acquire

and sustain a network management role was developed through preliminary analysis of early findings.

The ethnographic study reported in this article examined the reconfiguration of regional care services within the English National Health Service (NHS). The study was informed, in the first instance, by the literature on network management (Klijn and Koppenjan 2012; McGuire 2002; O'Leary et al 2012) and was attentive to the strategies used to acquire network management roles. In light of early findings, the study narrowed its focus to the strategies of non-dominant policy actors, to develop empirically grounded concepts that offer new understanding of nascent network management (Corbin and Strauss, 1990).

Network management: theory and practice

Klijn and Koppenjan (2012) suggest the literature on network governance reflects at least three disciplinary traditions. Within the field of political science, networks are associated with deliberative and collaborative decision-making (e.g. Ansell and Gash 2008). Within the field of organizational science, inter-organizational networks are analyzed as engendering innovation through coordinated resource exchange (e.g. Paquin and Howard-Grenville 2013). And in the field of public administration networks are pragmatic collaborations to address 'wicked' problems (e.g. Ferlie et al. 2013). Each perspective offers conceptual insights about network formation, organization and sustainability. Within political science, for example, studies describe how collaborative deliberation can be acheived through meta-governance (Huxham 2003; Sorensen 2006). Within organizational science, network 'orchestration' describes how inter-organizational relationships can be 'engineered' (Bartelings et al., 2017). And within public administration, the competences and activities of network managers are

central to inter-organizational collaboration (Edelenbos et al., 2013; Klijn et al. 2010; Provan and Kenis 2008). A number of common assumptions are identified across this literature.

First, there is general agreement that processes of organizing, managing and sustaining networks are distinct from more traditional forms of public management (McGuire 2002). Rather than implementing strategic change within a single organization, where a manager might hold formal authority; network management involves change at the inter-organizational level, where they often have limited authority (O'Toole 1997). As such, coordinating skills and competencies are key to managing the tensions between intra- and inter- organizational relations.

Second, it is acknowledged that network management involves influencing both the 'design' and 'processes' of inter-organizational working (Klijn et al. 2010). The former includes determining network roles, objectives and rules, and engaging with wider governance systems; whilst the latter relates to on-going coordination, facilitating resource exchange, and managing conflict (Kickert et al. 1997; Lucidarme et al., 2016). Key tasks and strategies associated with network management are summarized by McGuire (2002) in terms of (i) 'activation' –identifying and incorporating actors and resources; (ii) 'framing' – facilitating agreement amongst network members about the purpose, norms and rules; (iii) 'mobilization' – developing commitment and coordinated action amongst network members; and (iv) 'synthesizing' – creating an environment that facilitates collaborative interaction and exchange. Additional tasks identified in the literature include: establishing network roles, rules and relationships; shaping a network vision; initiating and facilitating interactions and exchange; and leveraging ideas and practices to address policy problems (Kickert et al. 1997; Klijn and Koppenjan 2012; Milward and Provan 2003).

Third, the literature associates managers' success in realizing the above tasks with their networking skills and competencies. O'Leary et al., (2012) summarize collaborative skills in terms of (i) 'individual attributes' such as diplomacy, trustworthiness and empathy; (ii) 'organization skills' including good communication, supporting group processes through facilitation and effective conflict management; (iii) 'strategic leadership' for establishing shared vision, setting goals and thinking creatively; and (iv) technical tasks related to sharing resources and managing the network. This emphasis on skills and competencies characterizes the broader shift from public 'management' to 'leadership' (Muller-Seitz 2012).

Fourth, external contingencies are shown to influence network management. These can be summarized in terms of (i) the properties of the network itself, such as goal consensus, resource distribution and quality of relationships (McGuire 2002); (ii) the clarity or ambiguity of policy (Klijn and Koppenjan 2012); (iii) the wider regulatory and institutional context, such as competing priorities and obligations (Ferlie et al. 2013); and (iv) historical relationships and competition amongst local actors (Martin et al. 2008). These contingencies require particular management responses; for example, where there is policy ambiguity and a history of inter-organizational competition, managers need to establish a shared purpose whilst resolving conflict amongst actors (Lucidarme et al., 2016; McGuire 2002).

Although there is considerable research and theory on the tasks and skills of network management, relatively little attention is given to how network management roles are acquired and sustained. It is often assumed that managers are appointed through top-down policy (McGuire 2002). Yet, where there is ambiguity in policy or competing claims amongst local policy actors, it might be expected that the network management role is acquired

through bottom-up competition. Policy actors may therefore use particular strategies to negotiate, acquire and sustain these roles, and these strategies might be distinct from the coordinating skills usually associated with network management (e.g. O'Leary et al. 2012). Furthermore, how policy actors acquire their network management roles may have implications for how they subsequently design and manage network relations, and that maintaining their management position depends, in part, on their success in realizing these subsequent tasks. This cyclical relationship between 'acquiring-undertaking-maintaining' network management can be seen, for instance, in Paquin and Grenville-Hughes (2013) study of network orchestration. They describe a recursive process whereby a network manager's perceived standing and legitimacy conditions their ability to engage relevant actors, but where this legitimacy is itself dependent on their ability to engage the appropriate people. In light of this lacuna, the exploratory study presented in this article intended to understand the strategies and skills of policy actors to acquire and sustain roles in network management.

When considering the bottom-up negotiations or 'struggles' for network management, it might be expected that the social position of actors will condition their strategies and skills. Much of the existing research shows that network managers often stem from influential or dominant groups within a given policy area (Muller-Seitz 2012). This might be because government officials select actors according to established expertise, or because dominant organizations lobby decision-makers to delegate responsibility to their representatives. It might be reasonably assumed that those with structural influence are more likely to succeed as managers based upon their (i) access to knowledge or expertise, (ii) access to policy networks or alliances, (iii) control of financial resources, and (iv) reputation, standing or legitimacy within the field (Bourdieu 1989). It therefore becomes important to consider how policy actors' social position within a policy field conditions network management roles.

Foreshadowing the findings reported in this article, further questions can be asked about how 'non-dominant' actors acquire network management positions; i.e. those with a relatively marginal social position, in terms of limited access to expertise, inter-personal connections or reputational standing. In taking an ethnographic approach, this article presents a novel micro-sociological analysis of how non-dominant actors acquire and sustain a network management role.

The Study

The case of major trauma networks

Although the English NHS is sometimes presented as a centralized state-led care system, it has been repeatedly re-structured resulting in an assemblage of governance (Bevir and Waring 2017). Over the last two decades, networks have prevailed in areas such as cancer, cardiac and stroke care, where variability in service delivery and resource constraints have necessitated 'joined-up' working (NHS England 2013a). The introduction of 'regional care networks' has involved moving from a system of relatively independent organizations providing parallel (competitive) services, to inter-dependent organizations providing integrated (complementary) services.

This article explores the implementation of a regional network for the strategic planning and delivery of major trauma care; i.e. emergency treatment for life-threatening injury. The Trauma Audit and Research Network (TARN) estimate that more than 12,000 people die every year in England and Wales after experiencing a traumatic injury, and it is the leading case of death for people under the age of 45. The long-established model of trauma care has been for patients to be treated in the emergency department of the nearest 'local' hospital. In

2007, a National Confidential Enquiry into Patient Outcomes and Death (NCEPOD, 2007) reported that only 40 per cent of major trauma patients received high quality specialist care, largely because local hospitals lack specialist expertise and resources. The report called for a new model of major trauma care in which patients would be treated in regional trauma centers. Concentrating specialist resources in regional centers, and increasing the volume of cases treated exclusively in these centers, gives clinicians greater exposure to complex case thereby enhancing their skills, and in turn leading to improved patient outcomes and less variation in care outcomes (Sleat and Willett 2011).

In 2013, a national 'service specification' for major trauma care recommended the structure, standards of care, and payment tariffs for major trauma care (NHS England 2013b). In this model, care is provided by multi-specialist teams at 'Major Trauma Centres' (MTCs), usually located within the Emergency Department of a large or specialist hospital; around which related triage, intermediate and follow-up services are arranged through a 'trauma network'. As an illustration, patients are usually triaged by first responders (ambulance services) before being transported directly to the MTC, or if unstable, the patient will 'pit-stop' at a local hospital (now designated a Trauma Unit) for stabilization before being transferred to the MTC. After emergency care, and when the patient is stable, they are transferred to other networked 'local' hospitals for rehabilitation or follow-up care.

Although national policies specified the types and levels of trauma care to be provided by MTCs and TUs, they were less specific about network configuration and management. At the regional level, strategic actors translated the policy and defined the network management arrangements that would lead the formation and configuration of the networks. By 2014, 18 regional major trauma networks (MTNs) had been established across England. These were

not directly aligned with existing NHS or political boundaries, but were configured according to factors such as demography and population density, the historical profile of trauma cases, the pre-existing distribution of specialist resources, and the configuration of transport infrastructure. For example, the demands for major trauma care typically differs between metropolitan conurbations and dispersed rural communities. As such, Greater London was configured with four MTNs, each with a corresponding MTCs; whereas the 'Peninsula' network covering Devon and Cornwall has only one MTC. Across these 18 trauma networks a total of 27 MTC, and in excess of 50 TUs, provide major trauma care. Significantly, these networks also vary according to their management arrangements, with some sharing management structures with a local MTC; in others, management functions are 'hosted' within one or more MTC, but with separate governance arrangements; and in others, they are hosted in another hospital or NHS organisation.

Case selection

The study focused on the implementation of a single MTN between 2013 and 2016. The case study was initially selected because it represented a typical MTN in terms of geographical area and demography and more importantly, on the basis of the network being at an early stage in the implementation process, in order to explore the acquisition of network management roles. As discussed below, there are shortcomings with a single case study approach in that comparative research would have allowed for analysis of the factors that might explain the different trajectories taken by managers; but the exploratory approach taken did allow for the identification of the unanticipated topic of network managers' structural position.

The network covered a population of approximately three million people, across 12,000 square kilometers, including one MTC, eight district hospitals and an ambulance service. As noted above, the national policy 'set the scene' for the observed struggles for (and of) network management. The first struggle centered on the selection of the network manager, the second the selection of the region's (MTC) and the connected TUs, and the third centered on the governance and operation of the network. In each instance, the nascent network management arrangements faced criticism and competition from multiple regional actors, many with high degrees of influence and status based upon their professional expertise and reputation. Across these struggles, the study focuses on the work undertaken by non-dominant actors to not only bring together and coordinate a functioning network, but also to acquire and sustain their own position through addressing these tasks.

Study Design

This article draws on an in-depth ethnographic study of the implementation of an MTN in one region of the English NHS. Ethnography is an exploratory research approach that promotes 'rich' understanding of social and organizational processes. The interpretation and explanation of such processes provides the basis for empirically grounded concepts and theoretical propositions (Fetterman 2010). Ethnography is an established methodology within the field of public administration (Cappallero 2017), and although utilized less than other qualitative case methods and quantitative study designs (Opsina et al. 2018), it is well-suited for investigating the 'black box' of network management, especially the situated contests, negotiations and forms of persuasion that bind actors and forge new relations (McGuire 2002).

However, ethnography within policy networks is complicated by the multiplicity of organizations involved; in this case 10 separate healthcare organizations, and over 25 sub-organizational units. Although this study resembles a multi-site case study (Yin 2017), it represents a 'network ethnography' (Marcus 1995) to explore the situated strategies and interactions of network actors and to interpret and explain these strategies in relation to prevailing meanings, cultures and institutions that contextualize actors' social positions.

Data collection and analysis

The ethnography involved over 200 hours of non-participant observations, including extensive fieldwork (18 months) within the emergency department and wards in each hospital, with ambulance crews and rehabilitation centers. Further observations were undertaken with service leaders, administrators and clinical representatives involved in network coordination, including monthly clinical steering groups (total 12), clinical governance meetings (4), and quarterly network board meetings (4). As part of the observations, a large number of ethnographic (in situ) interviews were undertaken. All observations and conversations were recorded in hand written field journals.

In addition, semi-structured qualitative interviews were carried out with 80 individuals from the network including: network leaders and administrators (3), network-wide case managers (9), clinical leaders from the MTC (2), clinical leaders from TUs (8), medical doctors from the MTC (11), nurses and clinical practitioners from the MTC (13), doctors from TUs (12), nurses and clinical practitioners from TU's (9), doctors from rehabilitation units (2), and ambulance service paramedics and managers (11). Interview topics investigated: network implementation; the challenges and issues faced in implementing change; the types of activities involved in managing these issues; and changes in the organization of care along

the pathway. The study received ethical approval through NHS research governance procedures, and all interview participants provided written consent.

Interpretative data analysis involved iterative coding, constant comparison, and thematic analysis (Corbin and Strauss 1990). Primarily, first-order codes focused on the situations and activities of acquiring network management, including contestation, disagreement and the strategies taken. Through constant comparison the consistency of coding and codes was routinely reviewed, and second order codes were developed through grouping similar codes and looking for points of contrast. As described above, the early study findings suggested important differences in the strategies of policy actors related to their social position, which became the refined focus. As such, subsequent data collection and analysis focused on the strategies of non-dominant actors, and third order concepts sought to explain why these strategies were used in relation to the wider field of policy actors and their respective social position.

Findings

Determining Network Management

Despite the national specification for major trauma care, there remained uncertainty about the precise configuration of the network, including the selection of the MTC and the arrangements for network management. This uncertainty set the scene for network formation and the 'pre-work' of local policy actors in staking their claim to the managerial position, and taking onward responsibility for configuring and managing the network. The region's Strategic Health Authority (SHA) - a now dissolved body for regional planning - was responsible for defining network management. The SHA consulted commissioners and

clinical leaders across the region and received a proposal from clinicians and managers within one large teaching hospital to act as *both* network host and MTC; similar to a number of other trauma networks in the country. The proposal emphasized the range of specialist services already managed by the hospital, the reputation of its clinicians, and its advantageous geographical position. However, leaders from across the region were concerned that co-locating network management within the MTC would make governance opaque. Moreover, many were concerned that this particular organization was acquiring too much influence and power in the region, to the detriment of other service providers.

> "you have a real danger of a Major Trauma Centre centric network. You have a center that thinks they're very special and that thinks they're the Network…and what you have to foster in then is it's a system." (Network Manager)

Tensions between regional hospitals and clinicians therefore framed the initial struggles for network management and appeared to center on the potential dominance of one hospital. In addition, there were underlying concerns about maintaining professional reputation amongst clinicians with similar areas of expertise, i.e. emergency doctors and specialist surgeons. During one network governance meeting, for example, a heated exchange was observed where clinical leaders from one regional hospital described another as a 'blackhole' whose gravitational 'pull' was having a negative impact on the wider region.

A counter proposal for hosting the network was made by two managers of an emergency service provider, located within the regional ambulance service. Significantly, one of these managers reflected on the prevailing context of regional competition and set out three justifications to affirm their own position as network manager and appease the concerns of clinical leaders. First, there was an operational case based on the ambulance service's

ongoing responsibilities for triaging, treating, and transporting trauma patients. In effect, this positioned the ambulance service as the conduit of network activity, giving managers greater scope to oversee the 'flow' of activity.

> "we have that umbrella view…. We have that wider view of how the network functions" (Network Director)

> ''We were able to claim that we are a joined-up organization already because we understand the transfers and we move patients between partners…" (Network Audit Lead)

Second, it was argued that as an organizational host the ambulance service offered 'network neutrality' and was 'above' 'hospital politics'. For example, the aspirant managers reiterated the concerns of regional clinical leaders about the dominance of the proposed network hub/MTC, and positioned themselves as outside of local 'geo-politics'.

> "The advantage of it being hosted in somewhere that isn't the Major Trauma Centre and isn't even one of the Trauma Units, does give the management structure, if you like, more of a perception of independence and neutrality" (TU Trauma Consultant)

And third, the case was made that the two proposed managers were experienced network managers. In particular, one was a renowned clinical leader with extensive involvement in national policy-making, and the other an NHS manager with extensive expertise in network governance. Although actors from other hospitals could claim equal clinical or administrative experience, the aspirant managers recognized that few within the region could demonstrate a track record of conjoint leadership. In management meetings they were observed addressing

key dilemmas in a complementary way, one leading on clinical issues, and the other on administration, but usually in a way that supported and endorsed the expertise of the other, and presented a robust and unified defense in the face of opposition.

> "We have a really close doctor/manager relationship…. what I do in the Network is I take the expertise. I'm non-clinical. So, I take the expertise of [name], listen to them, build it, take it back to them." (Network Director)

Based on these claims, and with the apparent consent of clinical leaders from across the region, these managers were selected to take responsibility for the formation, coordination and management of the network. Significantly, they defined their conjoint management roles as 'Network Medical Director' and 'Network Operations Director'. However, their roles were unsettled and they faced significant opposition, not least because of the on-going implications for resource allocation and clinical reputation. The Director of the MTC continued to argue that the network managers should be co-located within the MTC, and that their organizational position within the region remained unclear:

> "it would make sense to me to co-locate a Network function within the MTC but not have the same Network Manager as the Major Trauma Centre's Director, because I don't think that is a great idea, but you know, you've got all the data at the MTC. You've got the link-back straightaway. …I struggle a little bit because I don't know where 'they' are. If you're drawing a picture, where do they sit? They're not an entity." (MTC Director)

In response to the criticisms of the management arrangements observed across the region, the managers continued to emphasize the unique qualities of their joint capabilities as a form of 'reputational framing', especially in public forums and strategic decision-making events.

Furthermore, the perceived neutral 'political profile' of the managers, and their 'operational capabilities' to govern the network, made it increasingly difficult for opposing voices to mount a direct challenge.

Managing Network Design

The network managers faced two initial tasks, which many local actors regarded as a test of their conjoint approach: i) selecting the MTC, and ii) determining which hospitals would join the network and in what capacity. Again, these decisions were mired by regional geo-politics about the relative standing of specialist clinicians working in different hospitals. To address these tasks, the managers devised a formal selection process that involved translating the national specification into a selection criterion, and forming a 'selection committee' comprised of regional hospital managers, national experts, and independent data analysts. Illustrating the conjoint approach, the Clinical Director was able to draw on their expertise to interpret technical requirements and engage national experts, whilst the Manager drew on their experience of organizing similar selection processes, by devising robust and impartial assessment procedures. Their collaborative approach legitimized the selection process, whilst reinforcing the narrative of neutrality.

> "That was our first priority, to draft out a protocol that was, what are we going to do and how are we going to conduct our selection." (Network Director)

For the selection of the MTC, two large teaching hospitals submitted competing proposals. These were assessed by the selection committee. A data analytics consultancy used historical data on travel times and case-mix to model different scenarios for the location of the MTC and network structure. Given the importance of patients receiving care within the '*golden*

hour' timeframe, selection focused on striking a balance between geographical location and range of specialist services. The chosen hospital was arguably more geographically central, but its selection was justified because of its specialist services, as endorsed by national experts on the committee.

> "…that was the only reason that we [Hospital] made the cut as a Major Trauma Centre, because its range of specialties are the deal breakers for major trauma." (Network Medical Director)

The selection process also involved reviewing the region's other emergency departments to determine what levels of care they could provide as TUs. Each submitted documentation detailing staffing and resource profiles, was visited by the committee, and independent 'audit' data was used to assess workload and outcomes. Five hospitals were invited to join the network as TUs, whilst two were demoted to a level that prohibited provision of major trauma care. Only one was recognized as a specialist provider of rehabilitation care.

Throughout the selection process, the managers made a number of key decisions that enhanced the legitimacy and neutrality of decision-making, and significantly, reinforced their network management role. Specifically, the decision to involve regional managers gave the impression of decision-making being inclusive of 'local priorities'; whilst the involvement of national experts and data analysts characterized decision-making as independent and evidence-based. As such, network managers presented themselves as responsible for the selection 'process', whilst distancing themselves from the 'outcomes' of decision-making.

Unsurprisingly, there were concerns across the region about the outcomes of selection, that indirectly called into question the legitimacy of the managers. Again, there was concern that

the MTC was acquiring evermore influence at the expense of other hospitals. Clinical leaders form other hospitals claimed to have equal, if not better outcomes for certain types of trauma care. For example, surgeons in another hospital claimed to be highly experienced in road traffic accidents. Such criticisms illuminated wider concerns about the network model, which for some doctors seemed counter-intuitive, with critically-ill patients transported past their local hospital to the MTC.

> "… the evolution of the Trauma Network has been viewed with some suspicion by my colleagues, which is probably a theme you have encountered before in that if all trauma patients get taken off to the MTC, that could damage trauma care in the [region] rather than enhance it." (TU Surgeon)

Underlying such concerns was a view that the network would reduce the status of the 'district' hospital. Re-categorization as a 'TU' was seen as 'downgrading' and one doctor described how they had gone from '*hero to zero*'.

> "we have a pretty good pedigree of high standard trauma…. The last thing we want in engaging with the Trauma Network, is to allow [named hospital] to become disadvantaged and have a lot of our stuff that we've historically done well, taken off us and treated somewhere else." (TU Surgeon)

It was observed that the network managers met with managers and clinicians from regional hospitals to justify the network model and counter opposition. During these encounters, they referred to national 'volume/outcome data' that showed the potential 'lives saved' (e.g. NCEPOD 2007). They also used prominent patient stories to demonstrate the 'lived experiences' of the new model. During the network launch event it was observed that

stakeholders were provided with emotive accounts of patient death as a result of substandard care. Observations of similar events found that network managers commonly used patient stories and pictures from across the 'pathway' to extol the benefits of the new model. At other events, the two managers, alongside national representatives, also emphasized the collective benefits of patient care, education and research from '*working in new ways together*'. Through these engagement strategies, the managers reframed and justified the network model to local stakeholders.

The network managers also mollified opposition by involving regional specialists in the organization of the network:

> "…the biggest threat, if you like, to the Network working is that it ends up being seen as MTC centric…we do need the peripheral units to be involved, to be active and to be engaged in the Network … we do need the peripheral hospitals to be able to deliver the stabilization and transfer for these patients" (TU representative on Clinical Steering Group)

One strategy was to enable regional doctors to 'rotate' into the MTC, i.e. working several days a month in the MTC, as a means of exposing them to more complex (and prestigious) trauma work. In addition, the managers allocated key 'network functions' to regional hospitals, including responsibilities for training, information governance, and clinical governance. At regular monthly meetings, for example, it was observed how regional representatives acquired more responsibility for reporting on network-wide issues, diminishing the input of both the managers and the leads from the MTC. It seemed significant that network managers saw this as valorizing the expertise of network members.

> "you can't give it all to the Major Trauma Centre. So, we give the transferred stuff to [Hospital 1]. We give the service improvement stuff to [Hospital 2]. We give the pre-hospital emergency medicine stuff to [Hospital 3] so that everybody's got their bit to play in the Network" (Network Manager).

Managing these tensions served to promote a functional network, but also to justify their own position as managers in the face of conflict and disagreement. The success in realizing these tasks was based on the conjoint leaders ability to draw upon their distinct expertise and experience to both understand and respond to local pressures in ways that were seen as effective and legitimate. Central to this process was their ability to be seen as non-directive through 'distancing' themselves from difficult decision, through identifying strategic trade-offs between competing actors, and through drawing upon the reputation of others to legitimize change.

Managing Network Processes

The managers next turned to three cluster activities related to the structure and processes of the network, including: (i) governance structures, (ii) inter-organizational working, and (iii) the operation of the care pathway. In addressing these tasks, the managers developed dual, and at times competing, alliances with other network actors or 'influencers'; whilst also papering over divisions (including those they had exploited and benefited from) by articulating a nurturing and collective narrative of 'working together'.

> "my approach would always be to bring them in, because you're trying to get them to work together aren't you. It would be no good if we went in all-guns-blazing and enforced it because people wouldn't get along." (Network Manager)

The balance between creating alliances and nurturing collective identities was further observed in three prominent areas. The first was the formulation of the network's governance arrangements, including the definition of roles, responsibilities and accountabilities; establishing a dedicated administration unit for reporting to national bodies; and establishing committees for stakeholder engagement and decision-making. One interpretation of these governance arrangements was that they 'consolidated' the central position of network management as the heart of the network, thereby challenging the dominance of the MTC. In justifying these governance arrangements and reporting channels, it was observed that the network manager would make reference to national standards or frameworks, which they had themselves drafted, and that justified the approach taken and reinforced the legitimacy of managerial decisions. As described above, the consolidated position of network administration (outside the MTC) was further justified in public meetings through claims to independence and neutrality.

The second area involved promoting cohesive network relations by emphasizing the shared values and benefits of the network. In various forums the Network Managers emphasized the collective 'good' of the network. In such situations, network managers, usually in alliance with 'dispersed' leaders across the region (Martin et al. 2008), promoted the idea of a regionally branded network that delivered tangible, local improvements. This emphasized the local benefits rather than merely extolling the success of the MTC, as was often the case in national news media.

> "I create the right environment that enables them to tell themselves a story that the Network's good and it's a positive experience, then they're going to engage in it." [Network Manager]

> "I have come to see that, you know, we are greater than the sum of our parts. That's what the network does it draws upon all of our strengths." [TU Clinical Lead]

The third area involved the development of a networked 'care pathway', including procedures for patient triage, hand-over, teamwork requirements, and repatriation and rehabilitation. These tasks again highlighted the important contribution of the conjoint management approach; where the Network Clinical Director could focus on defining and promoting the clinical evidence and reasoning for the care pathway, whilst the Network Manager could focus on the operational and functional rationale. Significantly, the managers also forged allegiance with other specialists, especially those based in the MTC, to further endorse and evidence the proposed pathway. Echoing the work of Lucidarme et al., (2016) these relationships became especially important for countering opposition from across the wider network, such as when ambulance crews did not follow triage guidelines or clinicians within the TUs failed to initiate patient transfer to the MTC.

At the same time, the managers developed alliances across the network to counter the perceived dominance of specialists within the MTC. This was observed when surgical specialists within the MTC sought to introduce a new communication tool without taking account of established network procedures. As one TU clinical leader argued in a steering group: "*I've seen and read enough to convince me that this is not safe or appropriate…and has been introduced by the [MTC] surgeons with inadequate consultation*." There were occasions when collective opposition was both encouraged and endorsed by the managers to counter the dominance of the MCT. This 'alliance building' further illustrates the importance of dispersed leadership across the network, aligned with the conjoint working between the two network managers. That is, other actors were invited to shape network structures and

processes, as a collective endeavor, but this was often based upon an actor's relational ties with either the Network Director or Network Clinical Director, and according to the nature of the task at hand, i.e. managerial or clinical.

Discussion

There is considerable research on the coordinating skills of network managers (O'Leary et al 2012), but limited understanding of how actors acquire network manager roles, and how the processes of acquisition might influence subsequent management activities. The preliminary aim of this study was to look inside the 'black box' of network formation (McGuire 2002) to understand the acquisition of network management positions in the context of policy ambiguity. As this study progressed the focus of enquiry was refined to consider how the social position of actors conditioned their strategies of role acquisition. In particular, the study explored the skills and strategies of 'non-dominant' actors who, in comparison to other policy actors, had limited access to specialist resources, fewer social connections and less reputational standing. With regards to this case study, the nascent network managers lacked the expertise and reputational standing of regional clinical specialists, they lacked access to financial and other specialist resources controlled by hospital managers and commissioners, and they lacked the affiliations of clinicians with similar professional backgrounds. It was within this context that they reflected on the competition and tensions across the region, and developed particular strategies to acquire and sustain their position. In discussing the findings, the article goes beyond delineating 'what' policy actors did, in terms of the tasks and skills of acquiring network management, to look closer at 'how' they developed and used their strategies, and to explain 'why' they used these strategies in the context of their social

position relative to other policy actors, as manifest in their expertise, resources, connections, and reputation (Bourdieu 1989) (see Table 1).

The study focused on three stages in the early life of the network where the struggles for acquiring and of enacting network management were inter-dependent with how the network was configured and operationalized. In particular, the nascent network managers' success in securing and legitimizing their position was dependent upon their achievements in configuring the network, and simultaneously the successful development of the network was dependent upon their ability to secure and legitimize their position.

In the early life of the network, there was ambiguity about network management around which different policy actors mobilized. The success of the nascent network managers in acquiring their position appeared to rely on three linked strategies, each developed in the context of their relatively marginal social position. This marginality appeared to support a central theme from the wider literature that key 'independent' actors are crucial for holding partnerships together (Lewis et al., 2008). By highlighting their 'operational capabilities' within the connective fibers of the network they made a virtue of their strategic location outside of a major regional hospital, whilst seeming to question the position of prominent specialists operating within organizational silos. Similarly, by emphasizing their 'political neutrality' they positioned themselves outside or above the competition that existed between specialists pursuing their own narrow agendas; which demonstrated their ability to both read and use the political landscape to their own advantage. Through 'reputational framing' the nascent managers emphasized how their conjoint approach represented a unique and unparalleled set of skills and experiences in network management that were more relevant to network governance than clinical expertise and exceeded the capabilities of managers located

within organizational silos. These network governance skills are increasingly recognized as important leadership traits in public sector networks (Ricard et al., 2017). Significantly, the managers were able to understand not only the context of regional competition and the different sources of influence held by dominant policy actors, but also their own position relative to these actors, and what compensatory strategies they needed to derive an advantage from their marginal position.

A prominent finding that contributed to both how network management position was acquired, and how it was successfully enacted, was that a 'conjoint' management approach was followed that brought together the complementary skills of different actor. This approach appeared significant in countering the skills, standing and resources of more dominant actors. Where one held clinical expertise and reputation, the other had a profile of regional connections and experience in network management; and the combination of these qualities provided legitimacy across the network. This conjoint approach is little discussed in the literature where more attention is given to the skills of individual managers or leaders (O'Leary et al. 2012). There is growing recognition that network management, like other forms of public management, involves professional-managerial 'hybrids' (author), i.e. where network managers have a professional background that legitimizes their position within managerial and professional domains (Ferlie et al. 2013). The study reported in this article finds, however, that conjoint management was more successful where professional expertise was coupled with administrative experience to take an holistic view of the network and to compensate for the dominance and resistance of other powerful professionals. Although these two actors could be regarded as relatively marginal when working alone, together they presented a level of influence that was unmatched by others.

The subsequent tasks faced by the nascent managers related to determining network composition and membership, and defining governance and processes. These activities were broadly consistent with the established literature of network management and orchestration (McGuire 2003; Paquin and Grenville-Parke 2013), but of relevance to this article was how the strategies followed in addressing these tasks were conditioned by how the network management role was initially acquired, and how they also needed to secure their position in the face of potential resistance and criticism. That is, the study found that managers' fulfillment of network management tasks was conditional on their perceived standing and legitimacy within the region, and at the same time, their standing and reputation was conditioned by how they fulfilled the tasks. This 'Catch-22' was mediated through strategies that were developed in the context of their non-dominant position and in reaction to on-going interactions with more dominant specialists.

Through the processes of determining network composition, for example, managers engaged in a form of 'strategic distancing' where, rather than taking key decisions themselves, they facilitated decision-making amongst other regional actors. This strategy stemmed from an awareness of their own precarious position as newly appointed network managers and a desire to maintain their neutral position and perhaps to avoid direct conflict with influential regional specialists. For example, the use of external 'experts' not only legitimized decision-making but also seemed to be a strategy to counter-balance potential dissenting voices from dominant regional actors. In similar situations, the network managers appeared to adopt a 'backseat' approach to management, based upon guiding and encouraging local actors, and using external figureheads to legitimize change rather than confronting local actors or issuing directives. This 'quiet leadership' (Badaracco 2002) appeared to be especially important for working with dominant actors who are concerned with maintaining their own standing and

reputation, and where network managers do not want to be seen as directly challenging the influence of these actors. In other ways, quiet leadership seemed important when subtly guiding and shaping the collective actions of dominant groups who might be resistant to change.

A prominent strategy of the network managers when faced with opposition from more dominant actors was to engage in negotiations and trade-offs. As shown by Oldenhof et al., (2014), these types of skills are key to justifying managerial status in light of conflicting values and, in this study, for maintaining the involvement of clinicians who saw themselves as 'losing out'. Building on Oldenhof et al. (2014), this study shows how trade-offs happen at the inter-organizational level, for example compensating those who might see themselves as 'losing out' from the network model with new opportunities or responsibilities. This approach pacified resistance from specialist groups and helped to re-configure the division of labor. More significant, however, was the finding that managers appeared to counter potential resistance by drawing upon their understanding of the interests and agendas of regional actors, and as such, they could plan for, or 'stage', these trade-offs in their planning processes.

Alongside trade-offs, network managers used two further linked strategies for dealing with resistance from more dominant actors. The first was to forge 'alliances' amongst competing specialists around different strategic decisions. These alliances compensated for their own marginal position, and also helped to project a united or collective approach, thereby countering opposition from other policy actors who were portrayed as pursing narrow interests. This approach was rooted in the managers' awareness of their own limited connections and their awareness of the persistent competition amongst regional specialists. In

concert with this approach, the network managers fostered a 'collective identity' around the community benefits of the network and, by implication, the idea that resistance was self-serving and counter to the collective good. Again, this appeared to stem from their appreciation of the difficulties specialists face in ignoring public interest or voice. Although the managers claimed political neutrality, they nonetheless used the landscape of inter-organizational and inter-professional competition to their advantage. The use of these strategic alliances, and the ability to play-off 'factions' against one another could potentially damage the position of the network leaders, but this risk was seemingly negated by re-stating their political neutrality and emphasizing the collective identity of the network.

< Insert Table 1 Here >

The strategies outlined above shed light on the 'realpolitik' of network management; that is, the real-world struggles faced by nascent managers in acquiring and sustaining their position in the face of local challenge and competition (see Table 1). In terms of practical learning, the study shows that the strategies of acquiring network management are in many ways similar to the well documented coordinating skills (O'Leary et al. 2012), including for example, diplomacy, effective communication, shaping a shared vision, and in particular, the ability to influence and negotiate. These skills need to be used at different times and in different ways according to the social standing or position of managers, and suggest that an overarching dynamic strategy is needed to deal with local contingencies. In particular, the study offers unique insight into the fluid and contested world of network management (McGuire 2003). The ethnographic approach used in this study affords detailed understanding and interpretation of the situated encounters, struggles and strategies of local policy actors (Fetterman 2009). Moreover, it allows for the identification of unanticipated topics of

enquiry, such as the social position of policy actors, from which grounded conceptual and theoretical ideas can be developed (Corbin and Strauss 1990). Notwithstanding the insight developed from the study, it is important to consider the limitations of a single case study network within a broader national context, i.e. a trauma network within the English NHS; indeed, further case comparisons are warranted including within and beyond the health sector. That said, the study offers conceptual ideas that provide the foundations for further research. In particular, the descriptive strategies could provide the basis for construct development for survey research, whilst the focus on social position could be further explored biographic questions related to policy actors background.

Conclusion

There is considerable research on the skills and capabilities of network management (O'Leary et al. 2012) and how these skills relate to network performance (Klijn et al. 2010), but there is limited analysis of how network management roles are acquired and sustained. This article offers new empirical insight into the fluid and contested processes of acquiring and sustaining network management, focusing in particular on the struggles faced by non-dominant policy actors. The article shows that the strategies developed and used by nascent network managers are a reflection of their social position relative to other policy actors, as expressed in terms of their access to knowledge, resources and reputation (Bourdieu, 1989). Because more dominant policy actors benefit from greater expertise, reputation or social connections, non-dominant actors must develop strategies that elevate their unique attributes and counter the position of their more powerful counterparts. The article also reveals an important inter-dependency between how nascent managers acquire and sustain their role,

which seemed especially important for marginal policy actors. Specifically, the ability of the managers to fulfil the tasks of network formation and coordination was conditional on their perceived standing and legitimacy, and at the same time, their standing and reputation as network managers was conditional on how they fulfilled these tasks. For non-dominant actors, this precarious position frames the struggles faced in acquiring and sustaining the role of network manager; and the struggle for network management is far from over once the position is acquired.

Acknowledgements

To be inserted

References

Ansell, C., and Gash, A. (2008) Collaborative governance in theory and practice. *Journal of public administration research and theory* 18(4), pp.543-571.

Badaracco, J. (2002) *Leading quietly: An unorthodox guide to doing the right thing*. Boston: Harvard Business Press.

Bartelings, J., Goedee, J., Raab, J. and Bijl, R. (2017) The nature of orchestrational work. *Public management review* 19(3) pp.342-360.

Best, A., Greenhalgh, T., Lewis, S., Saul, J., Carroll, S. and Bitz, J. (2012) Large-system transformation in health care: a realist review. *The Milbank Quarterly* 90(3), pp.421-456.

Bevir, M, and Waring, J. eds. (2017) *Decentring Health Policy: Learning from British Experiences in Healthcare Governance*. London:Routledge.

Bourdieu, P. (1989) Social Space and Symbolic Power, *Sociological Theory*, Vol. 7(1), pp.14-25

Cappellaro, G., (2017) Ethnography in public management research: A systematic review and future directions. *International Public Management Journal*, *20*(1), pp.14-48.

Corbin, J.M. and Strauss, A. (1990) Grounded theory research: Procedures, canons, and evaluative criteria. *Qualitative sociology*, *13*(1), pp.3-21.

Edelenbos, J., Van Buuren, A., & Klijn, E. H. (2013). Connective capacities of network managers: A comparative study of management styles in eight regional governance networks. *Public Management Review*, *15*(1), 131-159.

Ferlie, E., Fitzgerald, L., McGivern, G., Dopson, S., Bennett, C. 2013. *Making Wicked Problems Governable?: the case of managed networks in health care*. OUP.

Fetterman, D. 2009. *Ethnography: Step-by-step*. London: Sage.

Klijn, E. H., & Koppenjan, J. (2012). Governance network theory: past, present and future. *Policy & Politics*, *40*(4), 587-606.

Klijn, E.H., Ysa, T. Sierra, V., Berman, E., Edelenbos, J. and Chen, D.Y. (2015) The

Influence of Network Management and Complexity on Network Performance in Taiwan, Spain and the Netherlands, *Public Management Review*, 17:5, 736-764

Huxham, C. (2003) Theorizing collaboration practice." *Public management review* 5(3), pp.401-423.

Kickert, W., Klijn, E-H. and Koppenjan, J. (eds.) (1997) *Managing complex networks: Strategies for the public sector*. Sage.

Klijn, E.H., Steijn, B. and Edelenbos, J. (2010) The impact of network management on outcomes in governance networks". *Public administration*, *88*(4), pp.1063-1082.

Klijn, E.H. and Koppenjan, J. (2012) Governance network theory: past, present and future". *Policy & Politics*, *40*(4), pp.587-606.

Lewis, J. M., Baeza, J. I., & Alexander, D. (2008). Partnerships in primary care in Australia: network structure, dynamics and sustainability. *Social science & medicine*, *67*(2), 280-291.

Lucidarme, S., Cardon, G., & Willem, A. (2016) A Comparative Study of Health Promotion Networks: Configurations of determinants for network effectiveness. *Public Management Review*, *18*(8), 1163-1217.

Marcus, G.E. (1995) Ethnography in/of the world system: The emergence of multi-sited ethnography. *Annual review of anthropology*, *24*(1), pp.95-117.

Markovic, J. (2017) Contingencies and organizing principles in public networks, *Public Management Review*, 19:3, 361-380

Martin, G.P., Currie, G. and Finn, R. (2009) Leadership, service reform, and public-service networks: the case of cancer-genetics pilots in the English NHS. *Journal of public administration research and theory*, *19*(4), pp.769-794.

McGuire, M. (2002) Managing networks: Propositions on what managers do and why they do it." *Public administration review*, *62*(5), pp.599-609.

Milward, H.B. and Provan, K.G. (2003) Managing networks effectively. In *National Public Management Research Conference*, Georgetown University.

Müller-Seitz, G. (2012) Leadership in interorganizational networks: a literature review and suggestions for future research. *International Journal of Management Reviews*, *14*(4), pp.428-443.

National Confidential Enquiry into Patient Outcome and Death (NCEPOD). (2007) *Emergency Admissions: A Journey in the Right Direction.* NCEPOD.

NHS England. 2013a. *Five year Forward View*, London: NHS England. 2013

NHS England. 2013b. *NHS standard contract for major trauma service (all ages).* London: NHS England D15.

O'Leary, R., Choi, Y. and Gerard, C.M. (2012) The skill set of the successful collaborator. *Public Administration Review, 72*, pp.S70-S83.

O'Toole, L.J. (1997) Treating networks seriously: Practical and research-based agendas in public administration. *Public Administration Review*, pp.45-52.

Oldenhof, L. Postma, J., and Putters K. 2014. On justification work: how compromising enables public managers to deal with conflicting values. *Public Administration Review*. Vol.74(1), pp.52-63

Ospina, S. M., Esteve, M., & Lee, S. (2018). Assessing qualitative studies in public administration research. *Public Administration Review*, *78*(4), 593-605.

Osborne, S. (2007) The New Public Governance, *Public Management Review*, vol.8, pp.377-87.

Paquin, R. and Howard-Grenville, J. (2013) Blind dates and arranged marriages: Longitudinal processes of network orchestration. *Organization Studies* 34(11), pp.1623-1653.

Provan, K.G. and Kenis, P. (2008) Modes of network governance: Structure, management, and effectiveness". *Journal of public administration research and theory*, *18*(2), pp.229-252.

Rhodes, R. (2007) Understanding governance: Ten years on. *Organization studies*, *28*(8), pp.1243-1264.

Ricard, L. M., Klijn, E. H., Lewis, J. M., & Ysa, T. (2017). Assessing public leadership styles for innovation: A comparison of Copenhagen, Rotterdam and Barcelona. *Public Management Review*, *19*(2), 134-156.

Robins, G., Bates, L., & Pattison, P. (2011) Network governance and environmental management: conflict and cooperation. *Public Administration*, 89(4), pp.1293-1313.

Sleat, G. and Willett, K. (2011) Evolution of trauma care in the UK: Current developments and future expectations". *Injury*, *42*(8), pp.838-840.

Sørensen, E. (2006) Metagovernance: The changing role of politicians in processes of democratic governance. *The American review of public administration*, *36*(1), pp.98-114.

Yin, R. (2017) *Case study research and applications: Design and methods*. Sage

Table 1: Summary of thematic strategies and social context

Task Focus (what)	**Strategies (how)**	**Social context (why)**
Selection of Network Management	*Operational capability*: emphasize unique ability to manage 'flow' across the network	Marginal position of network leaders relative to central hospital specialists
	Political profile: Emphasize credibility and neutrality by emphasizing destructive competitive amongst other actors	Prevailing context of regional competition and persistence of formal authority structures
	Reputational framing: Emphasize unique experience and skill set of conjoint leadership	Challenging 'resistance' and the prevailing narrative that the MTC should host the network
Managing Network Design	*Strategic distancing*: focus on process and independent	Lack of reputational credibility and need to maintain neutrality

	selection to maintain own neutrality *Quiet leadership*: use figureheads to advocate *Trade-offs*: allocate roles to neutralize and valorize critics	Align with and mobilize regional and national figureheads Shape division of labor through 'staging' negotiations
Managing Network Processes	*Administrative Consolidation*: develop administrative structures around position *Collective identity*: emphasize the collective benefits of change *Alliance building*: competing alliances to manage power imbalances	Need to build and cement central position in the network Community and public voice powerful in countering individualistic professional Limited relational networks of the manager, and need to play-off opponents