Advancing Innovation with Managers in the NHS organisational environment (AIMING) project

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1. Executive Summary

Introduction

This report covers the findings of research on the 'share and spread' of new care model (NCMs) innovations within the North East of England (NE), and in particular the role of 'middle managers' in the adoption and/or blocking of innovation, with a view to understanding the wider innovation environment for health and social care in the NE region.

Approach

The report is based on the analysis of documentation from the national Vanguard programme and data collected through a combination of interviews with key NE Vanguard project stakeholders, and subsequently a wider range of 'middle managers' working in health and social care organisations in the NE. The theoretical frame was derived from a review of innovation in health settings by Greenhalgh et al. (2004) which has had a major role in shaping current policy and practice for innovation programmes in the NHS (including the current Vanguard programme).

Sociological

Prominent in our research was a belief, on the part of the 'middle managers' interviewed, in the concept and efficacy of NCMs and innovation as a legitimate response to the demands of a pressurised system. However, from their perspective this was not without challenges and many expressed concerns over the new or extra work created through Vanguard activity. This included a range of new responsibilities and risks including a sense of personal risk related to a legacy of 'heroic' leadership styles, a competitive risk in the context of pressures to commodify NCMs, and the risk of an overemphasis on positive reporting emerging from requirement to formalise 'share and spread' activity.

Ecological

A pervasive theme in our analysis was the ecological or environmental factors surrounding the introduction of NCMs. Endemic short-termism was seen to be coupled with a legacy of professional or activity based structures, those thought to undermine a required systems focus that would emphasis care outcomes above professional or organisational delineations. This was partially exemplified by the apparent disjuncture between the short-term innovation funding streams and the creation of longer-term sustainability in the health and social care system. In parallel with the NCM work the existing system, with known tensions between

commissioners and providers, was evidently problematic. For providers risks were associated with the trialling of NCMs, given that they may not be fully implemented, yet at the same time providers expressed an apprehensive desire to know more about the concrete directions of travel from commissioners. Meanwhile, 'feeding the beast' of management information on the progress and success of an innovation as well as other performance requirements, was seen to detract from the day to day work of nurturing innovative and integrative work in a given locality.

Processes in context

Managers observed that the processes of implementing NCMs relies largely on local readiness for innovation. Their experiences told of relatively simplistic communication improvements as providing inspiration for the mobilisation of learning, which when coupled with calls for a patient-centred approach, tended to supersede financial concerns and workforce pressures. Such developments created focal points for respondents, establishing shared purpose and localised integration. In cases of successful localised integration managers then reported that the subsequent 'share and spread' requirement, beyond the core Vanguard project, was encouraging and could facilitate the sharing of successful NCM examples beyond the North East of England.

Participation in innovative activity

One of the overarching aims of Vanguards is the improvement of health and social care integration. The evidence from the NE work with 'middle managers' working in local systems uncovered that social care organisations (including Local Government partners) were generally feeling undervalued in what they perceived as primarily health-centric programmes. The paradox for these organisations, working outside the mainstream health service arena, is that they considered themselves to be more responsive than NHS colleagues to the need to innovate and improve within tight resource constraints. One challenge for managers from all sectors was the clash between the requirement of the innovations to change from traditional roles and responsibilities. This was set against the difficulties that potentially temporary change brought in, and notable a difficultly in situating accountability and responsibility within and between organisations and sectors.

Conclusions

In terms of the determinants of this study, we found that innovation is rarely a simple process of adoption for 'middle managers'. The challenges for them are defined primarily by the local systems in which they operate and the wider pressurised environment, both of which are largely beyond their control. Our research confirmed that there were different interpretations of what NCM innovation means across both hierarchical and horizontal networks. The national management of the Vanguard programme, with a received emphasis on packaged perspectives on particular innovations such as NCMs, can act as a diversion of resources from the cultivation of supportive local environments for systematic and workforce inspired innovation. In spite of this our work found strong evidence for horizontal networks which had established collaborative innovation at local level for purposive and meaningful systems change. Local action required system readiness for NCMs, and the prospect of engaging with 'the beast' was opportunistic in the context of subversion by self-described systems 'pirates', as a contribution to local 'big picture' work.

Recommendations

Based on our overall findings, our recommendations are that:

A. A scoping activity is undertaken to investigate the potential resources, scale and scope of a regional innovation environment to support regional and local innovation activities
B. In parallel, the STPs should work with the NEVE steering group and key partners (including Universities, NECS and AHSN) to initiate and seek resources for collaborative action in order to set the agenda for a regional approach to sustainable service innovation.

2. Introduction

This report covers evaluation research on the innovation environment within the North East of England and in particular the role of middle managers in the adoption and/or blocking of innovation and new care models (NCMs). This evidence is necessary to understand the innovation environment in the North East (NE), and how the learning and mechanisms for 'share and spread' of innovation from NCMs funded from NHS England (NHSE) in the North East might be improved.

Innovation in the NHS continues to be a challenge. Programmes of service improvement have seen significant investment since the turn of the century. Yet, still there is a strong sense that the promises of innovation in services have not yet made widespread difference to the daily activity of the NHS. This report explores the environment for the diffusion of innovation of new care models. It evaluates this from the perspective of one particular set of key stakeholders ('middle managers') in the context of the Vanguard programmes in the North East, and with particular reference to the 'share and spread' responsibility.

The manner in which the Vanguard programmes have been commissioned, with grants and support available through NHSE to selected groups via an application process, illustrates that they are predicated on demonstrable innovations, both clinical and operational; where new care and organisational models may provide efficiencies and improvements in the long-term and with significant potential for wider diffusion across NHS England. The NHS Five Year Forward View (NHS England, 2014) outlines objectives to improve population health, reduce costs per capita and develop more effective patient centred care. In this sense, the Vanguards are effectively conduits for a broader strategic objective in health and social care policy, organised as short-term and selective trialability spaces (Ovretveit *et al.*, 2002) for the nurturing and spreading of innovation, as a regulated and properly managed process (see *Figure 1*). Yet, as we will report on here, notwithstanding the orderly and planned manner in which the Vanguards have been commissioned and publicly understood, there is much to learn from the innovation environment in which they are taking place. Here interest turns to the negotiated and adaptive aspects which support or block outcomes of interest associated with the Vanguard programmes, and in regard to the innovation environment in the NHS NE more broadly.

This research sought to answer the following questions in regard to the innovation environment in the North East of England:

1. What are the barriers and drivers to the diffusion and adoption of new care models for middle managers working in the NHS and stakeholders in partner organisations?
2. What organisational and contextual factors play a role in blocking and/or driving innovation?
3. How do NHS managers in partner organisations find out about new care models and other innovations? What are the mechanisms for sharing of innovation?
4. What is the conceptual model for innovation and associated processes for innovation including the roles, responsibilities of the stakeholders involved?

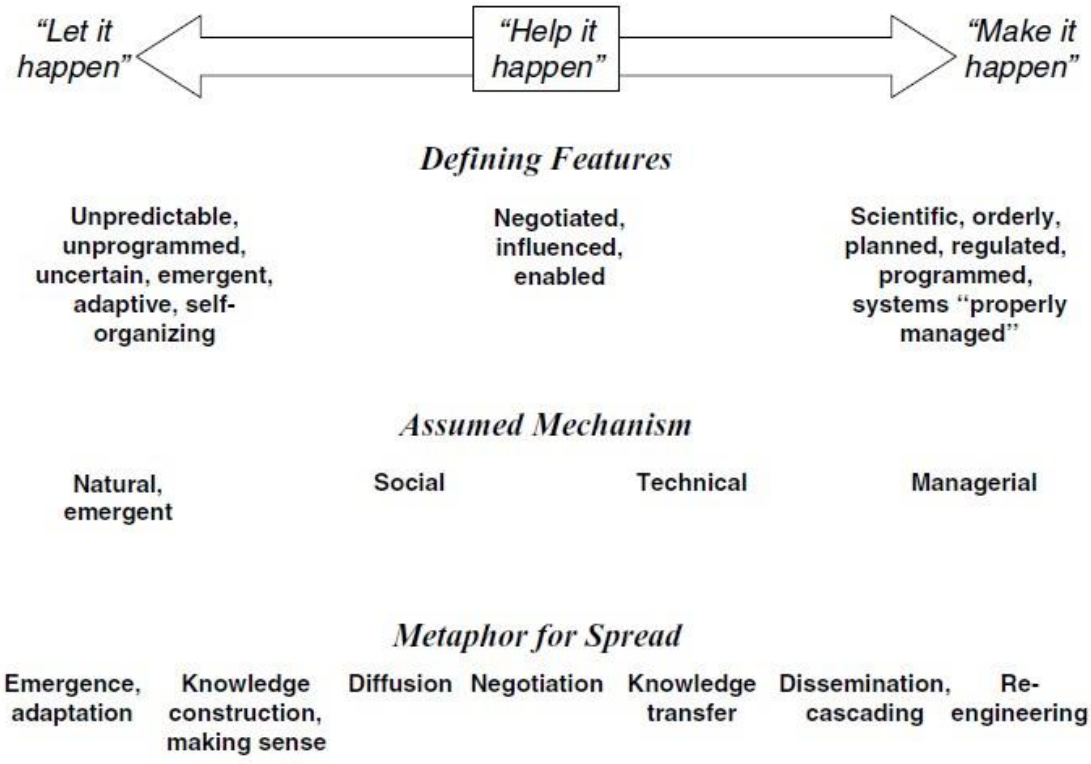

Figure 1 – Conceptual and Theoretical Bases for the Spread of Innovation in Service Organisations (from Greenhalgh et al. 2004)

In considering the drivers and barriers to innovation in the health services, we are faced with a need to understand the organisational environment and its effects upon staff and services in order to draw adequate conclusions about how possible improvements may be made. For this report we address the diffusion and realisation of innovation as a highly adaptive process,

through which influences from above and below are negotiated; where both organisations adapt to innovations and innovations adapt to organisations (see *Figure 1*). It follows that due consideration is afforded to the organisational, social and political factors that are important with respect to the organisational environments in which innovation is adopted, or arises, and the role of middle management in facilitating or blocking NCMs.

3. Approach

This section discusses the research methods that were employed for this work. Firstly, documentary analysis was carried out on the strategic context with which the Vanguard programmes took shape in order to develop an overview of the broader strategic objectives behind them. For this we examined materials from national and local sources such as NHS England (2017a), The King's Fund (2017), NHS Confederation (2017), Voluntary Organisations' Network North East (2017), the NE Vanguard's own publications and partner's websites. We then went on to conduct a total of 33 in-depth qualitative interviews, 6 of which were conducted with the leads of the North East Vanguards, and 27 of which were with middle managers identified by each of the Vanguard leads. With due respect to the complexity and differentiation between each Vanguard, ranging from the development of a single accountable care organisation (ACO) to improving links between hospitals, community services and care for older people, our aim was instead to identify the common themes among them with a view to addressing the innovation environment in which they have taken shape. Interviews were transcribed and then coded in line with conceptual bases concerning the spread and sustainability of innovation in health service delivery and organisation (Greenhalgh et al. 2004). In particular we focussed on five areas of investigation that were highlighted after the initial interviews with the Vanguard leads, detailing the most important areas for investigation in regard to the innovation support environment.

These five areas of investigation are as follows:

Sociological Factors - The particular experiences, histories and perspectives of those working within an innovation context. The strength or weakness of social networks (patterns of friendship, advice, support and communication), shared meanings and values.

Ecological Factors - The interaction between the programme and the wider organisational context in which it takes place and how they influence each other.

Processes in context - The unique features and processes in a given context that allow for, or hinder innovation.

Participation – Who, what and why people are involved and how much discretion or influence they have over the process.

Examining the determinants – Considering the determinants that produce (or fail to produce) the outcome of interest in a given organisational context.

The sections below address each of these areas of analysis before moving on to making conclusions and recommendations towards the end of the report.

4. Sociological Factors

Important in the analysis of any Innovation Support Environment are the different perspectives, values and histories that different groups or individuals bring to the working environment. The Vanguards do of course involve many partnerships and alliances which bring together different organisational, as well as professional disciplines and cultures, as for example, between health and social care.

The majority of our sample is made up of individuals who have extensive experience in either health, social care or third sector work, employed variously through NHS foundation trusts, local authorities or partnership organisations. Many of these respondents had over 20 years of experience in their professions, with the majority having been involved in clinical care or frontline social care at some point in their careers, and thereafter moving to management positions or short-term Vanguard appointments.

4.1 'Belief' in NCMs within a pressurised system

Among the middle-managers that we interviewed, are current theme that we covered with respondents was the reception of new collaborative working initiatives related to the Vanguards and among the workforce. Key here, and in organisational contexts ranging from Multi-Disciplinary Teams (MDTs) to Organisational Development (OD) and integrative work with General Practitioners (GPs), were comments and observations about attitudes and capabilities concerning integration. Some respondents highlighted younger professionals as those more likely to be responsive to innovation initiatives. However, at the same time, this was juxtaposed with a perceived lack of experience among younger professionals, which was considered necessary in order to perform the work;

> I think the younger [NHS staff] seem to have more of a…perhaps a different attitude a bit. I don't know whether they are open to integration is necessarily the way to put it. But, they are just not as set in their ways and I think some of the older [NHS staff] in particular just want to carry on, not rock the boat and change too much before they retire (Project Manager)

> Some people when they're in the later part of their career, because they're experienced, don't actually want to do this sort of stuff. So that's our challenge, we've got young ones who are quite keen, but they haven't got the experience (Community Matron)

For some respondents the responsiveness of younger staff to NCMs was attributed to a different educational history, with a greater appreciation of less hierarchical management styles. Within

a pressurised health system with limited human and financial resources, those deemed more open to change were often addressed as those who held a greater 'belief' in the potential of NCMs;

> . . . joined up working is extra work, and that extra work is not going to be, like, a week, it's going to be a few years of actually proactively…you're proactive with people before they get ill but you've still got all these people here who are already ill. And actually then you're taking on more workload when we're actually really struggling for staff. So, how do you get somebody who's already firefighting on a day to day and take on this and be enthusiastic about it and change the way they look at things and change the way they work? So, I think there's so much pressure on people on the day to day that it's a real challenge to introduce the new ways. Some people really believe in it, I don't want to sound prejudiced, but it tends to be the younger people because I think they've come through a different kind of education around things, or they're quite new. . . (Project Assistant)

Key here is the distinction between every day and challenging work responsibilities ('firefighting') and what are considered to be proactive attitudes towards change. Belief in NCMs as described above can be understood as a willingness to accept a degree of work intensification ('extra work') in order to develop longer term strategic objectives that may alleviate stress on the system.

4.2 Concerns over new responsibilities and risk

Themes about age and stage of career were common. Nevertheless, more experienced managers also expressed a sense of personal risk concerning the leadership responsibilities expected of them through the Vanguard programmes. Risk aversion, as one respondent commented, was understood to be a legacy of 'heroic' leadership styles thought to be common within the NHS;

> [Managers in the NHS areas say] 'I don't really want to plug into this because I don't have the answers, and I've been a manager or a leader for so long and I'm supposed to have the answers, and people are looking at me.' So it's a bit of a hangover from the health service in recent years has had . . .a heroic style of leadership. So people who were either not turning up [to Vanguard meetings] or saying that there was something wrong, once you got under it, it was actually a fear of being found out almost (Programme Facilitator)

A related issue in this sense surrounded the 'sharing and spreading' of NCMs. Risk in this sense was attributed to a competitive organisational environment within which some managers would be happy to share only complete, tested and 'packaged' NCMs. Here, the more uncertainty associated with a given innovation in its generative stages, the less likely the innovation or new care model will be deemed suitable for sharing (Greenhalgh *et al.*, 2004). It is only the 'shooting

star' (CCG project worker) like innovations that are deemed to have high impact across a wider footprint;

> . . .just because we're doing them [NCMs] and I'm talking about them doesn't mean that I want to put that out in the public domain. And Ifeel like I've spent fifteen months saying, 'hold it, hold it, hold it. Right, now we're ready to share', because we're sure about what we're saying'. . .as clinical people you don't want to put anything out there unless you're absolutely sure about what you're saying because we're in an evidence based world. . . (CCG project worker)

For some it was considered unhelpful to be within an organisational context where one should be sure about the efficacy and evidence base of what is being shared; where attention is reserved for the positive and packaged aspects of a given care model (Greenhalgh *et al.*, 2004). It was the 'warts 'n' all' (Project Manager) mode of learning that is preferred from this perspective, addressed as a more sincere approach to learning in the achievement of outcomes of interest;

> Well, I'll be honest with you. I went to one [sharing] sessions we did some time ago. . .there was a presentation from [us] about what we were doing,which was all very good, all positive. . .but I said to my boss afterwards, I said, 'Well, we're not telling themwhere we have problems, where we went wrong. It all came out very positive, fantastic.' . . . For me, the learning is not as much [about] the positive stuff, but. . .the barriers we might hit and how we circumvent those barriers (CCG project worker)

In this case a tendency towards positive reporting, spurred on by what respondents described as a competitive and judgemental organisational context, was thought to undermine the potential learning outcomes for 'sharing and spreading' across NHS England.

4.3 Rejecting 'sharing and spreading' and identifying 'system pirates'

The notion of sharing and spreading itself was also considered for some to be inconsistent, indicative of an unrealistic preference for products and a focus on glossy PR exercises. Again respondents highlighted a preference for a 'warts and all' approach to learning, as opposed to what was considered to be a misplaced and naïve emphasis on the lifting and mapping of NCMs directly into to other areas of the national system;

> Well, we rejected spreading. I had to give an update on spread and I said, can I just start off by saying that. . .we've rejected the notion of spread. I said, 'it doesn't work like that'. . . So, I reject the glossy stuff. . .because a lot of that is PR. I don't like PR. I like telling our story and our story is about challenges and our story is about people being resistant and our story is about not yet getting it right but it is also about making some really significant progress. It

> just hasn't fed through to what they [NHS England] want to see it, which is a 20% reduction in non-elective admissions and the healthcare system done on the cheap, it's just not going to happen (Development Facilitator)

A related issue here was the perceived complexity of the Innovation Support Environment, something that broader strategic perspectives, it was argued, failed to account for. Progress and innovation in this sense was considered to be at odds with the strategic objectives of NHS England. Complexity was therefore understood as multifaceted responses from people and organisations in a given local health and social care system in response to broader strategic objectives;

> I also had an argument with a chap. . .from NHS England. I really like [him] but I just don't agree with him. . . He basically says the demographic is the same across the North East. . . 'So, therefore if you've got the model right there, then really there should be, if we're talking about the NHS, there should be a way of implementing that right the way across' I was like, 'that's really interesting. . . you haven't got a clue mate'. This is not about a difference in demographics. . . What we've got are different players in the system and health and social care is the most complex environment to work within (Programme Facilitator)

From the perspective of some of our middle management respondents, the sharing of innovation should necessarily be a more informal process, led by those who are frustrated and unfulfilled by the limitations of the current system. Resistance to financial and bureaucratic pressures in this sense was addressed as something that may spawn the germs of innovation, located among individuals who are willing to contest the constraints of the system. These individuals, as one middle manager noted, were addressed as 'system pirates';

> Pirates, system pirates and you find then at all levels and once you find one, you give them the opportunity [to innovate], because often they don't realise they're a pirate. A pirate is somebody who is prepared to challenge the status quo and break the rules, in the best interest of their patient. . . It's about finding innovators, it's about finding people who are passionate about their role. . . and are frustrated by the system's inability to allow them to fulfil their potential. . . you give them a new reality, you give them a new space to be able to express themselves and fulfil their potential (Development Facilitator)

This kind of logic centres on the identification of individuals who are engaged in the co-production of systems, creating locally owned and locally driven programmes on the ground. From this perspective, innovation is necessarily locally co-ordinated and understood, as these two middle manager respondents commented;

> So, we have locality leaders and we have personalities, and so it is different in every system that you go to, and you need to work with people who want to play with you. Go, start with those people and then other people will join, but they're different in every system (Programme Facilitator)

> I call them pirates, people who are obviously passionate about something and being able to plug them into where they can use that energy. They might have been even seen as naysayers the first year and kept out a little bit (Development Facilitator)

4.4 Elevating the patient above the system

Throughout almost all of our interviews with middle managers, we observed a strong patient centred discourse that appeared to transcend concerns about workforce, financial pressures and centralised bureaucracies. The patient in this sense was addressed as the individual towards which all efforts should be directed, especially in regard to the success of NCMs;

> You've got to have staff on board that will believe that what they're doing is the right thing for the patient and the right thing to change the system. If you're not on board with that, no matter what you do, it won't work

For some respondents a limited focus on patient experience, understood to have been neglected due to more formal bureaucratic obligations, meant that knowledge about the perceived real progress and application of new NCMs was limited;

> I would like to see more emphasis placed on the patient outcome measures. So less about bed reduction, less about financial savings and more about benefits for the patient. I think we missed a trick last year around involving patient groups and saying, 'right okay, this is what you had before, this is what you've got now. What's the benefits for you?' (Service Manager)

> . . . let's really make the patient clear. Who is the patient? Who is the client? What do they need? Who is the best person to do it? Because, what you get is a fight over who fills in the form, whether they pay for it, you know [whether] it is badged health or social care (Project Manager)

Within the context of integration between professional groups and sectors, the concept of the patient was also understood to provide a common focal point, enabling professional boundaries to be broken down around a common purpose;

> Fundamentally it's about creating better patient outcomes, and there is the common currency in health and social care, is patient outcome. So, it doesn't matter what organisation you work for, everybody would, I would suggest, want to see that. . . Once you've got that common currency and you put that to one side, that's your shared purpose (Team Manager)

A patient centred approach, as some noted, facilitated communication across structural boundaries, producing shared networks of responsibility that were considered to be key for the success of NCMs. For some, a patient centred approach transcended strategic objectives and targets, and appealed to a deeper social awareness of the needs of the population;

> . . . you start to look at things from an organisational perspective and everybody works within their organisation because they believe they're doing the best for their patient in their chosen sphere. . . When you work in a new model, one [sector/department] doesn't take priority over another. They are all equal in terms of their contribution to patient care. . . It was very clear to me that the quality of patient care was dependent upon either the patient or their advocate managing the system, rather than the system managing itself for the benefit of the patient and this leads to inequality, inequality of provision, an inequality of access. . .I can't bear those that shout loudest get the best access to care (Service Facilitator)

Fundamental to the Innovation Support Environment in this case is a belief that placing patient needs at the centre of the system, rather than addressing patients as service users in receipt of care, prompts equal access across the population, thus promoting a supportive environment for innovation to flourish within the system.

5. Ecological Factors

In the following section we move on to expand upon the Ecological Factors that emerged during our research. Of note here are the reciprocal interactions between the Vanguard programmes and the wider organisational settings in which they have taken place (Greenhalgh *et al.*, 2004), and the perceived issues therein.

5.1 System requirements and short-termism

For some middle managers, typically representing providers, a perceived systematic tendency in commissioning that rewards activity and professionalism, rather than system outcomes and system requirements, was thought to be outdated;

> So, services are still commissioned based on service specifications, rather than system specifications or system outcomes. Organisations are still paid on activity, rather than outcomes. Workforces are recruited based on historical, professional requirements rather than system requirements. So, the workforce hasn't evolved (Development Facilitator)

Views such as the above highlighted concerns over structural issues that in turn underpinned some of the sociological factors discussed above, such as for example, a perceived misalignment between day to day firefighting responsibilities and the extra time required to

make proactive efforts towards innovation.

A further ecological issue in this sense, for some middle managers, was a perceived uncertainty or a disjuncture between short-term Vanguard funding and the creation of a more sustainable care system in the long-term;

> I mean as much as I think it's been great that the Vanguard has had a lot of money put towards it. It does feel sometimes, 'Oh gosh, there's all this money that we're trying to spend quickly.' And, I think that also, it's that non-recurrent where, 'You've got to spend it.' And then is it really sustainable? Because if we're spending it quickly but yet it's not going to be there in the future, then it just feels sometimes . . . is it money well spent to actually create sustainable change? It does somehow sit a bit uneasy (Project Manager)

Uncertainty concerning the longer-term ambitions of NCMs and the associated organisational resources required to sustain them, was a recurrent theme, as this respondent explained;

> It's a bit like you're riding your bike for the first time, you've got your stabilisers on, haven't you? So, you tootle along, so your stabilisers are your vanguard sort of thing; so, you tootle along and then somebody comes one day and your stabilisers have gone and you go out and you just go, "Bang!" Straight on your side, so it's that sort of feeling, isn't it? It's just that anxiety that, 'Yes, we've got this far…' With all these systems developed . . . so this planning meeting will run by itself without us, and that process will run without us and that will. But, if there's no-one there to help facilitate that. . . in all of those groups, everyone is cut right back from an efficiency perspective so there's no slack in the system any more, everything is as efficient, more or less, as it can get, at this moment in time, and no organisation has that spare capacity to fill that gap (Matron)

The short-term scope of the Vanguard projects and funding meant that, for some, the pace of change encouraged 'defensive' responses towards scrutiny, and the sharing and spreading of NCMs;

> I think the challenge has been the speed we've had to go at because it's a time limited programme . . . So I think I would say the hardest thing has been the speed, people wanting to see results, people wanting to hear about what you're doing before you're ready to tell them . . .it's been hard work to keep people at bay because everybody has wanted things to be fast (CCG Project Manager)

A hesitancy to share and spread appears to be directly related to a perception of risk and a packaged (rather than process) conception of innovation, yet underpinned in this instance by structural issues related to what are understood to be short-term project timelines and deadlines.

5.2 Uncertainty and tensions between providers and commissioners

Some of our middle manager respondents, representing providers, expressed concerns about the applicability of NCMs, where the separation between the planning and implementation stage was, as this respondents commented, thought to be unclear;

> . . . what we haven't had is any structured discussion as a provider, about how that [NCM] could be achieved. So, they [the Vanguard team] are developing pathways and yes, the clinical staff need to be involved in that. But, then they [the clinical staff] are getting mixed messages. Because they are thinking this is being developed and this is the way we are going to do it, but actually it is just a plan. I have had to, quite a few times, say to them, it is just a plan. Until the CCG come to the providers and say, 'this is what we want', it is just made up really (Trust Clinical Manager)

An apparent confusion or tension between commissioning and providers in this case mirrors the findings of previous NHS innovation programme evaluations, such as the Integrated Care and Support Pioneers Programme(PIRU, 2016). The co-designing of NCMs between providers and commissioners in this case appears to create a context of uncertainty, with the providers seeking clarity and commitment with respect to the future implementation of NCMs. As another respondent commented;

> We are part of the steering group. We are asking the questions, but we are not getting the information, necessarily from the steering group about what's happening, and the outcomes. I wouldn't expect them to come until they are ready to come with something and say, 'right, this is what the best' (Trust Business Manager)

In some of the Vanguard areas that we investigated, relations between commissioners and providers were seemingly good. However, in other areas there were reports of historical tensions that, in light of new and more open approaches to innovation and NCMs, had begun to improve. Nevertheless, in some Vanguard areas providers expressed concern about maintaining contractual arrangements and income, whereas commissioners were concerned about provider monopolies forming, and a lack of engagement in the Vanguards from providers. The Vanguard programmes, in some areas, were thus viewed as arenas in which many of these established structural tensions could be intensified, or favourably modified. As one of our commissioner respondents commented with respect to their experience of the commission/provider relationship;

> . . . it doesn't become a very innovative conversation because it just becomes all about money. And I think while you're protecting your organisation and

> you're talking about money, you lose the rest of it . . . And what we try and do is say, 'Look, we want to work towards outcomes. We want to know that you're a quality provider and that you'll deliver this but we equally want some flexibility for how things change and how can we work together.' So, I think sometimes if we spend too long on fighting over money, we kind of lose the plot really of what we're really here (CCG Project Manager)

The well-known structural tensions between commissioners and providers, often attributed to increasing contractualisation (PIRU, 2016), appears in this case as a structural barrier to a more open and trusting dialogue. The innovation environment in this case would appear to benefit from longer term and more established partnerships, for example, through the creation of an Accountable Care Organisation (ACO).

5.3 Feeding 'The Beast' and innovating on the side

A common theme in our interviews with middle managers was their perspectives on the administrative and evaluative context in which the Vanguards were taking place. Here, the term The Beast was used by a number of respondents to denote the bureaucratic evaluative context; something that required regular nourishment and could revert attention away from the more important tasks of the day;

> I think it's really difficult, isn't it, with anything like this . . . we then put all our energy into this thing called Vanguard that it almost takes your eye off the ball with what you should be doing anyway. Because there is a bit of a beast to feed . . . if somebody gives you money, inevitably, they want to know what you're doing with it. But I think then we get distracted with doing all that metrics and logic models and writing templates that you kind of lose the focus of what you're trying to deliver (CCG Project Manager)

In this view 'investing' in evaluative practices is not considered to be the means by which to achieve sustainable NCM outcomes. Rather, they are seen to preclude meaningful engagement and delivery of work. For some, a balance could be maintained between necessary administrative and evaluative obligations and the local work involved in creating NCMs, as this middle manager commented;

> Feed the beast, and we feed the beast to keep them quiet and we then go and 'do' … we're the mavericks because we then go and stir up the system. . . [Myself and my colleagues are] pushing back at the beast, going 'they [staff] are doing it right, give them time to evolve, that's really rewarding'. The concern is that the funding is going to go, that's going to be it and I don't want to overstate the work that has been done, but I would suggest that we've offered an awful lot of drive and passion and then we've identified people,

> like-minded people and we've encouraged them and supported them (Service Facilitator)

Such comments highlighted the processes and hierarchies in place that may, at times unintentionally, prevent learning from being spread beyond a given local. N evertheless, empowering the workforce to identify new ways of working can accelerate the spread of innovation through more informal means, where staff are given the support and encouragement to think and act differently.

Relatedly and of note here were examples from respondents that appeared to evade more formal structures and hierarchies, yet were focussed on the development of networks of shared values and principles for the purposes of supporting NCMs;

> I'm doing it definitely without permission. . . what I've done is I've sniffed out other practitioners within [our area] and I've gone and made connections with them. So I know a couple from the local authority, there's some in [the foundation trust], at the CCG, and we've now got a network . . . so it's place based rather than organisational. So I'm hoping the legacy I can leave is that we've got a list of people, we know what assets we've got in terms of their skills, personality, what drives them, what connections they have. And so we're going to map out the connections that they have across [our area] and then we're going to try and agree a framework, how we all work together and have a shared purpose (Programme Facilitator)

The nurturing of horizontal networks, such as in the example described above, can be more effective for spreading peer influence and the re-framing of meaning(Rogers, 1995).Innovation that is more formal and planned is more likely to occur through vertical hierarchies (Greenhalgh *et al.*, 2004), which according to many of our respondents, is something that necessary has to be negotiated and distanced in order to create space for the nurturing of innovation locally, by empowering system 'pirates'.

6. Processes in context

Important in the analysis of any innovation environment is to develop a deeper appreciation of the processes by which innovations are implemented or sustained (or not), and of course how they may be enhanced. Examining processes also counters a package orientation to innovation in health service delivery, thus developing a more nuanced picture of the innovation environment.

6.1 Readiness for innovation

For many of our middle manager respondents, over-complicating sharing and learning in alignment with more formal pilot initiatives was often judged to be unproductive and unsustainable. From this perspective it was at times the more simplistic communicative interventions that provided inspiration for learning;

> The problem with the NHS is that it does lots of pilots .What I've been trying to do is stop the team from doing something too complicated and intricate, that it just isn't sustainable or spreadable. . . we've got down things like WhatsApp as a communication tool. That works really, really well. So, there's 35 people in the group . . . I had one [Whatsapp message] just now, about prescribing an anti-coagulant in a 102 year old, and was asked, 'What does everyone else think?' Then you suddenly get these responses coming back to them, 'Well, I've had a similar situation,' Suddenly, not only are you getting the information that you need, but you're almost subliminally educating people (Lead Pharmacist)

Creating an open and shared space for support and learning in this instance appears to evade professional power struggles in favour of a patient centred approach to care. Softer non-structural examples such as the above illustrate the potential for shared purpose and cultural change, where clinical risk is mitigated through collective peer support.

6.2 Sharing and spreading horizontally and vertically

A further example of such an intervention was given by another middle management respondent. In this case all of those involved in a NCM were encouraged to understand one another's roles and professional practice at a more nuanced level, through shadowing;

> I think it was more needing everyone to understand everybody else's roles, so what we did was, we did a mass exercise in working with each other. We had a big programme and everybody had to go out with the urgent care nurses, the intermediate care nurses, telecare, re-ablement, everybody had to do it, and have a few hours in the hub as well. So, we had to all shadow each other, and it took about three months to do it because it was daily, every shift, everybody was shadowing each other, so it was quite a big thing to get done. . . It broke down lots of barriers because we were talking to each other, saying hi in the corridor where previously you were walking past thinking I wonder who she is. So, it's helped tremendously (Integrated Care Manager)

The intervention creates spaces for learning, sharing and preparedness, but it also serves to develop autonomy among frontline teams, thus bestowing them with a shared purpose and allowing greater potential for improved patient centred care. Sharing and spreading in this sense is again locally understood and organised. Yet through the success of such processes on the ground, interest is also generated from above, as this respondent went on to comment;

> . . . we have an awful lot of people come and visit from different parts of the country. We've always got people up here looking at our practices and sharing. . . I've been down to Manchester and to London as well. . . There's a lot of sharing of practices happening (Integrated Care Manager)

Developing a supportive organisational environment for innovation in this case encourages sharing and spreading both vertically and horizontal across the system. Formal obligations, when more easily codified and translated into new domains (such as for events and expos) are then viewed as egalitarian processes and opportunities to share knowledge, as opposed to being viewed as invasive evaluative and bureaucratic obligations. In this case locally owned programmes tend to produce more useful examples for the sharing and spreading of innovation across the national NHS system.

7. Participation

A key point in the analysis of any innovation environment are issues around participation, taking account of the views of different groups and partners working together in the such an environment. The identification of barriers and openings to participation are fundamental to the development of collective goals and cohesive cultural working environments.

7.1 Health and Social care integration (or not)

A common theme in our research was the perceived cultural differences and historical disparities between health and social care, as well as the positive stories of how they have come together through the Vanguard programmes. A perceived professional hierarchy, often described as healthcare being above social work, and social workers feeling undervalued, was a regular theme that many of our middle manager respondents commented upon;

> . . . just really interesting that they saw [social care workers] some of the [Vanguard] leads in the team as ice maidens and queens and they were lowly peasants . . . and it's fascinating that social care have a different mindset to health because their budgets have been slashed and burned. And the healthcare budget has, in the context, been relatively protected. So we've now got real experts [social care workers] in system leadership and being innovative in the social care teams, but they're not being listened to or valued (Programme Facilitator)

What was described as an unconscious bias towards health professions and practices appeared, at times, to be undermining the potential for collaborative working and shared purpose. The value of social workers and voluntary workers, as those with greater experience of financial pressures and upheaval at the harsher end of austerity, was considered to be untapped in these organisational circumstances;

> What about the third sector, as in charitable, voluntary? What about social care? There's no-one in this room, it's all health driven. So I do think there's an unconscious bias that actually it's a health problem, when really it's a community problem because there's lots of great ideas and resources assets sitting in the localities and in the community in the voluntary sector that we're not tapping into yet (Development Facilitator)

Experience of greater historical upheaval was also thought to be of benefit from a social care perspective, where a continual necessity to be adaptable to change was considered advantageous in the context of the Vanguards;

> . . . we need to make incremental steps and changes to the way we think. And I think sometimes. . .particularly in health. . .because we [social care] moved around in the eighteen years I've been here. I've been in many different offices, I've been in many different teams and we're adaptable. We're used to that way of working. I think maybe in the health service, they don't have those similar kind of changes . . . some people find that a bit more difficult to adjust . . . they say, "This is our role. We've always done it this way. Why change?" (Social Care Head of Service)

The prospect of integrating health and social care under the roof of one organisation was, for some, something that would require significant cultural change in order to develop a more collective organisational identity;

> If we want to have person-centred practice, why are we disagreeing so much? . . . because if we're going to move into one organisation, we have to start changing the culture, changing the mindset of the organisation to think more collectively rather than [as] individual organisations (Social Care Manager)

7.2 Locating responsibility and accountability within the system

The integration of different professions and organisations through the Vanguard programmes, especially in regard to health and social care, at times appeared to create confusion over where responsibilities lay within the system. As this respondent commented;

> I'm just a social worker, I didn't know what they [The Vanguard team] were talking about, I had to get them to translate and tell me what they'd decided afterwards. But, there was no coming together and I would say things to Vanguard, like, 'We need some help now.' And they'd say, 'That's the providers that need to do that.' And I'd say, 'Well what are you guys here for?' . . . We could have done with some better planning (Social Care Head of Service)

Relatedly, for some middle managers the decision around taking on more responsibility for providers was described as a discretionary matter, where one may reject more responsibility

based on unfair remuneration, or take on more responsibility in order to be at the forefront of innovation and change. As this Locality Manager highlighted;

> I think there's a mix between some providers who will say, 'Actually we wouldn't want the responsibility of taking those tasks on that would be increased responsibility. We don't receive enough money to be able to make that viable.' I think there are other providers who are thinking, 'Actually yes, this would be better for the person receiving the care but actually, if you look at the work that some of the Vanguards are doing . . . this is the direction that we're going in . . . if we want to be a sustainable business, we maybe need to change sooner rather than later.' But I think that would be a mix between the providers (Social Care Locality Manager)

The suggestion here is that those on the provider side who are seemingly willing to deal with financial uncertainty in the short term, may appear more engaged with programmes such as the Vanguard, in the hope of achieving longer term sustainability in a changing system. Yet, at the same time it was suggested by some middle managers in social care that for clinicians, relinquishing responsibilities would weaken professional boundaries;

> There are some clinicians who, whilst they acknowledge that it will be better for the person to have one individual meeting their care needs, they will not let go of their professional boundaries . . . There is still a reluctance I think from health to delegate some of those tasks because of. . . professional boundaries . . . culture, but also that risk of who remains accountable (Social Care Service Manager)

The mixture of professional boundaries and financial uncertainty appears in these instances as causes for concern for the integration of health and social care. Sharing and spreading locally in these case is dependent on the development of clearer lines of responsibility, certainly in regard to the integration of professional boundaries. Nevertheless, these comments also illustrate that when innovations are perceived to have clear and unambiguous advantages in their effectiveness, they are more easily adopted by those who perceive future prospects and sustainability in the system (Greenhalgh *et al.*, 2004).

8. Conclusion - Examining the determinants

In this final section we move on to consider key determinants for strategic outcomes of interest emerging from our research, both structurally and culturally, within the innovation environment in the North East of England NHS. We relate these determinants to the questions posed at the beginning of this report, in order to draw conclusions in relation to these enquiries.

A principle finding is that there are a variety of different interpretations of what innovation means within the health and social contexts we investigated, where different concepts and models are negotiated and often contested. Innovation emerges and is diffused in different ways across different hierarchical and horizontal networks; for example, through formal bureaucratic and evaluative channels and through informal local networks of shared purpose, enterprise and necessity. A clear barrier to diffusion in this sense is an over emphasis on an upwards *packaged* orientation to innovation, consequential of what was described as short-termism, a judgemental and hierarchical evidence-based culture, and difficulty among middle managers in areas of the system to accept to new proactive leadership responsibilities over and above their day to day responsibilities. On the other hand a clear driver for diffusion, both locally and nationally, is the establishment of less hierarchal local practices, and the creation of shared purpose and mutual networks of learning, which are clearly fundamental to the success or failure of the NCMs in the locals we investigated. Success in the local sense brings with it a willingness to engage with more formal national platforms.

Our investigation therefore highlights that a sustainable local innovation environment is necessary before the spread of innovation can take shape across a wider geographical footprint. There are a range of complex structural, cultural and historical factors at play in the innovation support environments we investigated. Importantly, a risk adverse culture, both at the personal and organisational level, produces a context within which positive reporting is emphasised in relation to the Vanguard programmes; where at times it appears risky to share or even involve oneself in the full extent of the formal innovation procedure. Formulating *system readiness* in this sense concerns the steps necessary, both structural and cultural, to incorporate a wider appreciation of complexity of innovation, and with particular reference to some of the ecological factors we have highlighted (e.g. uncertainty and tensions between providers and commissioners, professional perspectives as opposed to system perspectives, a disjuncture between pilot programmes and longer term sustainability of the healthcare system). The co-production of innovation systems at the local level involves a greater appreciation of

complexity among local actors. Some of our respondents highlighted, for example, that it is difficult to foresee or understand how such complexity can be mapped onto a wider geographical footprint given the specific features of local health and social care systems, and how they can be related (or not) to strategic NHS national criteria.

What is most interesting and significant in our investigation is that successful NCMs were established in local areas that more often viewed themselves at odds with broader strategic NHS objectives. 'The Beast', as some respondents commented, was something to be negotiated and distanced from in order to produce locally organised patient centred care for and on behalf of local citizens. Health and social care innovation in this sense was sustained by a deeper social awareness of the needs of the local population. The discourse of patient centred care in this sense was described as a unifying principle that could be deployed to connect established professions and sectors. Nevertheless, as we have also highlighted, a patient centred discourse is often difficult to reconcile when structural financial barriers remain a significant barrier to innovation, and where long term sustainability often appears just out of reach.

9. Recommendations

The story here is a familiar one concerning the complexity of bringing NCMs into challenging (often multi-agency) contexts. Innovation in this sense is easy to say but much harder to do even when supported by the significant resources in a national programme such as Vanguard. The duty and resources to 'share and spread' innovation in the NHS is not the same as widespread uptake and the experiences of the Vanguard programmes. Clearly there is limited capacity in the system for absorbing new and/or innovative ways of delivering care. One of the observations made here was that 'polite interest' is as far as interactions around many projects went, in terms of transferring innovations into neighbouring NE areas.

The apparently 'teflon' nature of the NHS and wider care systems in response to service innovation is a long running issue. The rationale for applying the Greenhalgh model in this case was to provide a lens through which to explore the wider innovation environment in which the NE Vanguard programmes are situated. The keen emphasis from interviewees to highlight sociological and ecological aspects brought into question the relatively transactional notion of processes and participation as imagined and proscribed by the centre. This was summed up through responses to the term 'share and spread', personified as 'the beast', with the 'piracy' of messy and contingent innovation work in specific localities. Innovation in this sense was not a universally 'good thing' for all of those working in local health and social care contexts.

Our recommendation is that although there is a pressing need to continue the work of innovating services in order to improve the health and social care of people, families and communities, there is also a pressing need for investment in work to build and sustain the system to support innovation. Such an effort needs to be beyond programme specific and localised efforts at service reform, while at the same time refraining from the 'one innovation fits all' notion which permeates national initiatives. The obvious locus of this are the STPs. However, STPs cannot own this agenda alone. They may have the authority but they do not have the capacity nor the focus. There is an opportunity in the NE region to carry out an initial scoping activity of the regional innovation environment and in parallel initiate the foundation of a collaboration between key organisations (including NECS, AHSN and the Universities and other bodies such as the Business Innovation Centre, RTC, the local LEPs etc), with a stake in innovation at a systemic level.

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