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Using contractual incentives in district nursing in the English NHS: results from a qualitative study

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Since 2008, health policy in England has been focusing increasingly on improving quality in healthcare services. To ensure quality improvements in community nursing, providers are required to meet several quality targets, including an incentive scheme known as Commissioning for Quality and Innovation (CQUIN). This paper reports on a study of how financial incentives are used in district nursing, an area of care which is particularly difficult to measure and monitor.

Keywords: District nursing; England; financial incentives; health policy; NHS.

In recent years, the English National Health Service (NHS) has been experiencing rising demand across all healthcare sectors. In the context of an ageing population, policy actors see improving access to good quality community nursing as key to reducing avoidable hospital admissions, lengths of stay and, therefore, NHS costs, while at the same time improving the patient experience (NHSE, 2014; 2015). Community nurses work in specialist roles ranging from providing palliative care in hospices, care homes or patients’ homes, mental health and learning disability nurses for adults or children, health visitors working with families and children, custody nurse practitioners working in police stations, or working as part of nursing teams (for example district nurses and community matrons), providing a full range of nursing care to people who are house-bound, therefore serving the most vulnerable and frail NHS users.

Since 2008, health policy in England has been focusing increasingly on measuring and monitoring quality in healthcare services (DH, 2008a). To ensure quality improvements in community nursing, providers are required to meet several quality indicators, which are monitored primarily via contracts, but also by provider submission of quality accounts to regional or national bodies, internally within each provider organization, and through Care Quality Commission inspections. Quality indicators (QIs) can be nationally mandated, regional, or locally selected (DH, 2009). In addition to QIs, commissioners are required to include in their contracts with providers an incentive scheme known as Commissioning for Quality and Innovation (CQUIN), which makes part of providers’ income conditional on achieving pre-agreed quality improvements (DH, 2008b). Since April 2012, CQUIN schemes have been worth a maximum of 2.5% of the overall value of each contract.

CQUINs rely on robust measuring and monitoring processes which can be problematic in an area like district nursing (Davies et al., 2011; Horrocks et al., 2012). Patients are generally older and frail, with deteriorating conditions and co-morbidities that make it difficult to establish meaningful indicators. A further challenge is attributing a change in health status to an intervention delivered by district nurses, since district nurses tend to work alongside other services, agency staff and informal carers (Nancarrow, 2013). Nurses are not with the patient for 24 hours a day, so they cannot directly oversee care to ensure compliance with best practice. Additional challenges include lack of good quality data and weaknesses in IT infrastructure, workforce pressures, and gaps in communication between diverse providers such as, social care, mental health, and primary care (Goodman et al., 2011; RCN, 2013; Foot et al., 2014).

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Since the introduction of the internal market in the English NHS in the early 1990s, the topic of contracting in healthcare has received extensive attention in the academic literature (Deakin, 1996; Flynn and Williams, 1997; Chakley and McVicar, 2008; Petsoulas et al., 2011). Financial incentives and other pay-for-performance schemes are used in NHS contracts, and several studies of such schemes have been published (Roland, 2004; Christianson et al., 2007; Steel et al., 2007; Mannion and Davies, 2008; McDonald et al., 2010; Kristensen et al., 2013). One example is the evaluation of the Advancing Quality initiative in the north west of England which found that, while in the first 18 months of the intervention there was a reduction in mortality for the incentivized conditions, this reduction was not observed in the 42-month period of the programme (Sutton et al., 2012; McDonald et al., 2015). An evaluation of the CQUIN programme found that, in general, the impact of the CQUIN policy initiative was disappointing (McDonald et al., 2013). A review of the literature of pay-for-performance initiatives in the NHS emphasised the lack of robust evidence on the actual effectiveness of such schemes (Lagarde et al., 2013).

This paper reports on a study of how financial incentives are used in district nursing: an area of care which is, as indicated above, particularly difficult to measure and monitor. The paper is unique because, in contrast to previous studies, it focuses exclusively on district nursing care.

In the following section, we provide a summary of relevant theoretical issues on the use of contractual incentives in the public sector. We then describe the methods used, followed by a section on findings. In the last section, we discuss the implications of using CQUINs in district nursing in particular, and more generally in the NHS.

**Contractual incentives in public services**

The introduction of incentives into contracts originates in the ‘principal–agent’ problem, which is the problem of motivating someone (the agent) to act on behalf of and in the interests of another (the principal) (Jensen and Meckling, 1976; Fama, 1983; White, 1985). The contractual relationships between commissioners and providers in the English NHS can be described as an attempt to tackle the principal–agent problem, which is created by the existence of information asymmetry or ‘moral hazard’ between the two parties (Holmstrom, 1979; Lambert, 1983). Within a contract, the principal delegates the agent with performing a task(s) specified in the contract, in return for a pre-agreed financial payment or incentive (Shavell, 1979). The problem arises when, as in healthcare, provision of the service occurs over long periods of time, and the service is often so specialized and asset-specific that it lends itself to ‘gaming’ on the part of the agent (Klein et al., 1978; Williamson, 1985). Limited information on the part of commissioners means that providers can avoid acting in the commissioners’ interest by skimping on quality.

To ensure that the agent delivers the quality of service desired by the principal, the contract needs to include measurable objectives whose performance the principal is able to monitor. As has been pointed out, however, measuring and monitoring healthcare quality is not easy, especially in areas such as district nursing provision (Allen, 2002; Davies et al., 2011; Horrocks et al., 2012; Bowers and Pellett, 2013). Economists argue that the processes of negotiating and monitoring contracts in complex environments involve high transaction costs, incurred in activities such as investing in reliable systems of data collection and significant amounts of staff time in collecting, recording, and analysing information. There are two types of transaction costs: ex ante transaction costs refer to the costs incurred prior to the signing of the contract, such as staff time in specifying and negotiating the terms of the contract. Ex post transaction costs refer to the costs associated with monitoring delivery of the terms of the contract as well as enforcement in case of disputes (Maher, 1997; Ashton, 1998; Marini and Street, 2007).

The principal–agent problem can also be eased by putting in place additional contractual incentives, i.e. additional rewards attached to the achievement of specific goals. Difficulties with measuring and monitoring health outcomes, however, mean that making payment conditional on achieving specific outcomes transfers risk to the agent and therefore such contracts may take longer to be negotiated and agreed on, increasing thereby the ex ante transaction costs (Arrow, 1971; Shavell, 1979).

In light of the difficulties and high transaction costs in selecting and applying financial incentives, some scholars have questioned the effectiveness of, or the need for, using such incentives in the public sector (Berwick, 1995; Burgess and Ratto, 2003; Ferman, 2004; Fisher, 2006; Young and Conrad, 2007). One argument is that public sector workers are intrinsically motivated to

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perform the desired outcomes (for example delivering quality in education or healthcare) without the need for financial incentives (Perry, 2000). In contrast to private sector organizations, public sector employees are motivated primarily by the idea of a 'mission' rather than profit (Besley and Ghatak, 2003). In fact, the introduction of financial incentives may have the unintended consequence of eroding such intrinsic motivation (Kreps, 1997).

A further difficulty in respect of public services is the presence of multiple principals and conflicting goals. In healthcare, for example, service providers are the agents of commissioners, the government, the patients, and the citizens. The priorities of patients or doctors may conflict with those of the government (for example providing the latest treatment versus minimizing costs). Or district nurses may place more emphasis on spending time with patients, as opposed to meeting managerial demands for limiting visit time. Devising appropriate incentives that would satisfy all principals at the same time may be difficult, if not impossible, to achieve.

Furthermore, if the service is complex and multi-tasking is involved, contractual clauses involving financial incentives may place emphasis on what is measurable at the expense of what is less measurable but perhaps of more importance to recipients of the service. Quality may therefore be compromised if employees are rewarded for performing easily measurable tasks (Besley and Ghatak, 2003).

**Methods**

The findings reported in this paper are part of a larger study on measuring quality in district nursing (Horrocks et al., 2017). Here we report findings from interviews with managerial and clinical staff of providers and commissioners, and from focus groups.

First, we conducted a telephone and email survey in which we collected local CQUIN documents from all commissioners across England. Second, five case study sites were selected, each comprising a commissioner and their community nursing provider. The case sites were identified based on the findings of the CQUIN survey, and were selected using inclusion criteria such as geographical location, range and number of local quality indicator schemes, and type of provider organization. In terms of geographical spread, one case study site was situated in the north of England, two in the Midlands, one in south west England and one in south east England. Apart from a private provider, which we were unable to recruit, we included a wide range of provider type (one combined acute and community care NHS trust, two community care NHS providers, one community care social enterprise, and one combined community and mental healthcare NHS provider). Four of our case study sites were located in urban settings with a higher rate of deprivation than the national average; one was located in a rural setting with a lower rate of deprivation than the national average. This purposive sampling provided a variety of contextual data which enabled a level of comparative analysis considered suitable for the purposes of the study. District nurses in rural settings, for example, face some different challenges from those in urban settings.

Methods

The type of organization within which district nurses work impacts significantly on the delivery of care. We conducted 19 interviews with commissioner managers, 23 with provider managers, 10 with community nursing team leaders, and nine focus groups with a total of 45 frontline staff. Participation in focus groups was achieved by inviting district nurses via their team leaders. We observed 20 meetings, in which the selection, measurement and monitoring of quality indicators were discussed.

Data were collected by four team members. Semi-structured interviews and focus groups, which were undertaken using purpose-designed interview schedules, were audio–recorded and transcribed verbatim, while team members took detailed notes during observation of meetings. Data were subsequently anonymized and entered onto NVivo 10 software. Data were open-coded initially to generate concepts which were then discussed and agreed by the research team. Once the codes were agreed, a team approach to coding was adopted, with each researcher coding a particular set of data across the sites. In this way, each team member gained a cross-site perspective. The individual databases were merged regularly into an NVivo master database in order to check progress and assess whether there were any differences in the way codes were being applied. At the end of fieldwork, we conducted 10 dissemination events across the country in order to validate our findings with managerial and clinical NHS staff, as well as service users.

**Findings**

This section is divided into three subthemes relating to the theoretical framework outlined above on transaction costs and use of financial incentives in the public sector.
We focus our findings on specifying and applying local CQUINs in district nursing.

**Ex ante transaction costs**

Participants reported that discussing the detail before finally agreeing the CQUIN scheme could be time-consuming, often three to five months:

> It took us 25 iterations before we got the first spec. signed off. Twenty-five drafts! (Director of quality, provider.)

I'd have no doubt that the CCG have no understanding about the additional workload that puts on organizations. (Manager of quality, provider.)

Policy guidance suggests that commissioners and providers work together in identifying the quality targets to be prioritized in their local area (DH, 2010). The prevailing view from participants, however, was that identification and development of CQUINs was driven by commissioners:

> The CQUINs were really very much designed by the commissioners and then fairly late on, they had a conversation with our contracting team. I think it was really almost towards the very end when they were almost signed and sealed that it became a 'do you want to?' comment. (Manager of nursing services, provider.)

The problem with this was that commissioners might not be familiar with the implications of the incentives, or clear about the objectives the CQUINs were trying to achieve:

> I think one of the biggest issues is commissioners setting up indicators that they don’t actually understand and they have read somewhere or pulled out somewhere and actually defining what it is that you’re counting in the first place. (Business manager, provider.)

Commissioner-driven selection of local CQUINs, and lack of input by providers in the very early stages, could result in unnecessarily lengthy discussions about the appropriateness of indicators and increase transaction costs by protracting the negotiating period.

The high demand on staff time also meant that providers were struggling to contribute meaningfully in selecting appropriate incentives. Some commissioners felt that, despite their efforts to include them, providers were unable to engage fully with developing appropriate CQUIN indicators. One commissioner recounted when a provider had a good CQUIN suggestion but their idea was not operationalized, due to time pressures on its clinical staff. Most commissioners in our study recognized the value of involving providers early in the process of agreeing CQUIN targets, both in order to contain transaction costs and to increase the likelihood of success by achieving ownership of the objectives.

Participants said they needed clear, measurable, and achievable goals. Parties to contractual financial incentives in district nursing needed to avoid introducing targets which were not under the control of those implementing them, for example, reducing avoidable hospital admissions:

> There was a lot of argument about whether we were going to financially incentivize them to actually deliver a reduction. We’re not going to do that now. Because what they’re saying is there are a lot of patients where a district nurse might go in there and couldn’t have done anything to stop that admission, and there are so many variables that are outside of their control. (Senior quality and safety manager, commissioning support group [CSU].)

Commissioners mentioned the need for striking a balance between, on the one hand, agreeing achievable and measurable incentives and, on the other hand, failing to challenge providers by putting in place easy targets:

> We wouldn’t want to make it so easy for them to deliver; but we wouldn’t make it so hard that we can’t get them interested or it’s impossible or we’re spending all our year arguing over whether or not they’ve achieved it. (Assistant director, integrated commissioning, clinical commissioning group [CCG].)

Putting in place measurable quality targets, however, is not easy because of the nature of the service:

> [It is] so difficult to define, actually, the softer side of those interactions—it’s not ‘turn up for clinic, dress your leg, off you go’. There’s so many more different interactions within the patient’s own home that are really, almost impossible to capture. (Programme manager: transformation, provider.)
Ex post transaction costs
In addition to the time and effort spent in developing and agreeing CQUIN indicators, commissioners devoted resources to monitoring them, thus increasing substantially the ex post transaction costs. One participant described some difficulties with monitoring such targets:

"It's difficult to monitor it because it is out and about and delivered in patients' homes. So, it is probably much more problematic than inpatient services and outpatient services...by its nature it is quite hidden and it is difficult to assess how good that's been without relying on your patients to tell you really." (Head of general nursing, provider.)

Monitoring achievement of contractual goals was very resource intensive and, as commissioners lacked the resources for detailed monitoring, they often relied on data they received from the providers without further verification. Referring to the quality report received regularly from the provider, one commissioner said:

"It was good, but it's always good. Whether I believe it or not is a different issue." (GP: clinical member, CCG.)

Occasionally, commissioners supplemented the data received from providers with visits and shadowing of district nurses. Such visits were very useful in giving commissioners an understanding of the challenges in measuring and monitoring the 'soft' aspects of district nursing quality. Even though commissioners had resources for a very limited number of visits and shadowing, one commissioner explained their value:

"I went to this one very isolated farm in the middle of nowhere—it really was. This little old lady, 85, on her own; and it was the only contact she had and actually, the district nurses do have to do a bit of the social thing, and just checking they're all right...they can't just turn up and dress a leg ulcer and then go, there's a lot more to it." (Associate director of community services and primary care, CCG.)

In addition to difficulties with capturing the 'soft' aspects of quality, commissioners and providers faced the problem of poor data quality and IT systems:

"So, the way things are at the minute, it is incredibly time consuming and very cumbersome...if you're doing a lot of switching between pages you're doing a lot of sitting, waiting for your page to load. So, that all adds to time." (Deputy head of nursing, provider.)

"I think it is probably true to say that data in general in community nursing has been of very poor quality, historically." (Associate director of strategic planning and performance, provider.)

Limited resources for collecting and reporting information was an issue in a service which was increasingly stretched by workforce pressures (for example ageing nursing workforce, problems with recruitment, high sickness rates), increases in demand, and complexity of caseload. Consequently, district nurses had to work beyond normal working hours:

"It's an ever-increasingly complex role...so quality, you know, we're trying ever so hard, but we're doing that a lot in extra hours that we're not being paid for." (Nursing team manager, provider.)

This in turn resulted in increased sickness rates and nurses leaving the service. Service managers were caught between the time pressures nurses were under and the need to make them understand the importance of collecting data for the service:

"What we're trying to do is to support them to see...that if you don't input your data at the end of the month it does impact on quality of care...we don't see it reflected in the numbers, commissioners think the work isn't being done or isn't there, therefore they reduce the amount of money that they invest in that service." (Associate director of integrated care.)

Because of difficulties with the formal processes of monitoring CQUIN targets, participants stressed the importance of maintaining flexibility and good relationships:

"Part of what you do in commissioning...it is not just around having a bit of paper and what you sign off and what you monitor, it is about your relationship. So, you can put all of those indicators in place and everything but if you don't have a relationship whereby you can negotiate influence and change, then you know you might as well not bother." (Director of quality, safety, and governance, CCG.)
Using contractual incentives in district nursing

It can be argued that despite the high transaction costs involved in agreeing and monitoring incentivized targets in district nursing, such incentives are worthwhile if they can be shown to improve the service. Participants' reactions about the usefulness of CQUINs, however, were mixed. One perception was that incentives concentrated on the measurable and missed the softer aspects of quality. On the other hand, monitoring quality indicators throughout the year increased service transparency and provider accountability. One provider business manager felt that quality indicators were an essential part of any organization. Although some tangible results such as improvement in preventing pressure ulcers were reported, participants also valued some less tangible outcomes of CQUINs:

What the CQUIN did was give us a focus...and I think that's been one of the most useful things...we decided if we were really going to do something that is quality-driven, that isn't just a number, it's about critiquing what do we do as we go. (Associate director of integrated care, provider.)

Financial incentives would be expected to be successful if the payments were made to the teams implementing them. Importantly, participants, especially nurses, complained that CQUIN funding was often not received by community nursing teams but was used instead elsewhere within the organization. Nursing teams were often required to implement the change without the help of the financial incentive. In one case study site, failure to achieve a CQUIN was due to nurses being unable to attend the requisite training.

If GPs could meet their targets they get a monetary incentive, don't they? I'm sure, it would be nice that if district nursing service meet all their targets that, you know, then ensure that staffing levels are maintained or that extra training is given or...There's some incentive for the nurses on the ground. (Focus group: community nurse.)

The theory on financial incentives indicates that if performance indicators are ‘noisy’, then making rewards very sensitive to performance imposes unnecessary risk on the agent (Besley and Ghatak, 2003). Participants reported that providers were unlikely to agree to CQUINs which were perceived to be unclear or not easy to measure, for fear of losing income. One of our case study sites did not include any CQUINs in their contract in order to avoid the likelihood of losing income in the event of non-achievement.

As has been argued, the use of financial incentives may be less necessary in public services because the motivation and values of the agent may be more aligned with those of the principal than is perhaps the case in the private sector. Both commissioners and providers want to provide good patient care. In the case of district nursing, providing good care took precedence over meeting financial incentives:

When [nurses] feel pulled between delivering patient care and actually recording information, at times when they are busy it will often be the information that is forgotten or left...there's still that issue around what they perceive, what they believe is the most important part of their job, which is about delivering care. (Head of neighbourhood services.)

The academic literature on applying financial incentives in the public sector points to the existence of multiple principals that need to be satisfied at the same time. Setting appropriate incentivized goals may be difficult in the context of conflicting demands. Importantly, some participants mentioned that not only clinical staff but also service users needed to be involved in the selection of appropriate targets to be incentivized:

What we perceive as we’re delivering a quality service may mean something completely different to the patient. So, for us, it might be that we deliver the best possible care according to the latest research, but for the citizen it will be the amount of time you spent with them and how cared for they felt. So we’d be measuring probably completely different things. (Programme manager: transformation, provider.)

Consulting patients in setting contractual incentives, however, is not easy in the context of district nursing where patients are house-bound and can also be frail. Conflicting demands from patients and commissioners may be difficult to reconcile. Commissioners strive to incentivize efficiency which for patients may sometimes translate to less time devoted to their care.
Discussion

Summary of key findings
Achieving quality improvements across the NHS has been a central policy aim by successive governments in England in their attempts to modernize healthcare provision since the early 1990s. Quality of care, however, is a versatile concept which can mean different things to different agents. Its definition often includes factors such as value for money, clinical effectiveness, patient safety and patient satisfaction. Some aspects of quality are easier to measure than others. In the case of district nursing, for example, tangible clinical improvements such as a reduction of pressure ulcers can be demonstrated more easily compared to less tangible outcomes such as patient satisfaction. In addition, as mentioned earlier in the paper, clearly attributing outcomes to specific interventions is especially difficult in the case of district nursing due to the nature of the service.

In 2008, the CQUIN framework was introduced in the NHS in England to incentivize providers to improve quality of care. Since their introduction, however, researchers have questioned the real benefit of CQUINs. As we show in this paper, the use of incentives in district nursing involves high transaction costs in specifying and monitoring incentivized targets. The selection of targets involves lengthy consultation periods both between and within commissioning and provider organizations. Reconciling diverse and often conflicting views on priorities suitable to incentivize, requires substantial time and effort by healthcare staff. With many providers struggling to recruit district nurses, and in the context of severe workforce shortages, commissioners may continue to find it difficult to engage clinical staff in selecting appropriate CQUINs.

Commissioners told us that they lack the data needed to measure healthcare outcomes, benchmarking, and costs, which would help them develop new currencies and payment mechanisms. Monitoring CQUINs is also resource intensive and it becomes more problematic in the context of cumbersome IT systems and poor data quality. CQUINs were meant to be targeted at achieving specific quality improvements by using allocated funding. One of the problems with implementing CQUINs, however, has been that often the money did not reach the nursing teams implementing the change, but it was subsumed under the organization’s general income. Nurses were therefore required to perform additional work with no additional funding. Furthermore, providers are likely to agree to financial incentives that are measurable but which may not necessarily reflect patient preferences.

Strengths and limitations
Our study has some limitations. First, it is not an evaluation of whether the application of CQUINs improves clinical outcomes. Second, the inclusion of only five case studies means that the results may not be generalizable. On the other hand, the research relied heavily on triangulation from many different sources, such as telephone survey, in-depth interviews with managerial, clinical, and lay participants, observation of meetings, shadowing of district nurses, focus groups, and dissemination events with a focus on validation of findings. This triangulation yielded a wealth of rich, contextual information which we hope added credibility to the validity of our findings.

Implications
CQUINs are applied in a context where healthcare providers are compiling and monitoring a host of other quality indicators, such as quality accounts, and key performance indicators. Given the difficulties with applying CQUINs, the question is:

Are they offering value for money or does the effort required to deliver them outweigh the costs?

Our research shows that the benefits resulting from CQUINs are not always clear. While participants referred to some non-clinical benefits, such as promoting accountability and providing a forum for discussion on the priorities of the service, some providers reported that, given the high transaction costs involved in specifying and monitoring CQUINs, they were not worth the effort. Providers tended not to regard CQUINs as a real incentive, since the funding attached to them is top-sliced from the providers’ overall annual income instead of being additional money.

In contrast to previous years, the latest policy guidance introduced longer-term contracts (two years instead of one) and national CQUINs, tailored-made for community nursing. This may contribute towards reducing slightly the ex ante transaction costs. In addition, part of the CQUIN funding (1.5% of annual contract value) has become tied to achieving integrated care working and financial stability within local health economies (NHSE, 2016). Owing to the increased financial risk involved, the latter change might make CQUINs less
Using financial incentives to improve quality in district nursing involves high transaction costs in measuring and monitoring quality. Attributing outcomes to specific interventions is especially difficult due to the nature of the service. If financial incentives are to deliver the policy intention, the requisite funding should be directly received by the teams implementing the change. The application of CQUINs across the NHS needs to be streamlined, with clear targets, strong leadership and ownership by clinical staff. Using financial incentives in healthcare may have the unintended consequence of concentrating on what is measurable rather than on what is valued by patients. These points are likely to apply in other publicly-funded healthcare systems.

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References
Allen, P. (2002), A socio-legal and economic analysis of contracting in the NHS internal market using a case study of contracting for district nursing. Social Science and Medicine, 54, 2, pp. 255–266.
DH (2008a), High Quality Care for All. NHS Next Stage Review Final Report.
DH (2008b), Using the Commissioning for Quality and Innovation (CQUIN) Payment Framework.
DH (2010), Using the Commissioning for Quality and Innovation (CQUIN) Payment Framework.
Holmstrom, B. (1979), Moral hazard and


NHSE (2014), *Five Year Forward View*.


RCN (2013), *Safe Staffing Levels—A National Imperative* (Royal College of Nursing).


