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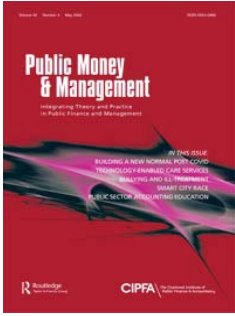
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# Clinicians' informal acquisition of accounting literacy in UK clinical commissioning groups

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## IMPACT

This article offers practitioners important insights into the way clinicians can be engaged in the management of funds through situated learning in the workplace. Situated learning has the potential to foster accountability by engaging clinicians in meaningful and goal-driving activities and to stimulate the acquisition of accounting literacy informally. When clinicians work alongside accountants, learning takes place informally. A context needs to be created in which clinicians and accountants can work together to achieve common goals. This has been achieved in clinical commissioning groups (CCG) in the UK.

## ABSTRACT

This article discusses how clinicians acquire accounting literacy informally by working alongside accountants, highlighting how participation in different activities situated within specific contexts fosters informal learning. Data were gathered from interviews, document analysis and participant observation. The study has identified three processes of acquiring accounting information informally; attachment to managers, hearing the same information repeatedly and participation in goal-driven activities. Interdependency between the clinicians and accountants and their shared version have been the two key factors in clinical commissioning groups (CCG) facilitating the informal learning process.

## KEYWORDS

Accounting information; Clinical Commissioning Groups (CCGs); informal learning; situated learning theory

## Introduction

Successive UK governments have introduced a number of neoliberal New Public Management (NPM) reforms within the National Health Service (NHS). In most instances, this has been driven by the intention to encourage healthcare professionals to adopt more business-like thinking and practices through actively participating in management (Vassalou, 2001; Jones & Mellett, 2007). Various management tools have gained importance in facilitating the management of healthcare services, with accounting being a key one (Jones & Mellett, 2007). The growing costs of providing healthcare services have rationalized the significance of these tools in promoting efficiency, effectiveness and value for money in terms of mobilizing resources and delivering services (Malmlose, 2019). According to Malmlose (2019), healthcare expenditures in OECD countries rose from 9.2% to 12.4% of GDP between 1995 and 2014. In light of this substantial increase, many governments have promoted reforms designed to enable clinicians to take on responsibilities that involve making financial decisions while maintaining the quality of care.

Scholars have observed that clinicians tend to have a limited interest in accounting information upon which financial decisions rely and have attributed this to factors, such as their educational background, age and experience (Kralewski et al., 2005). Nevertheless, studies investigating how clinicians acquire accounting literacy via training, coaching and other informal means in their workplaces, as well as their commitment to using accounting information in their decision-making are scarce (Oppi et al., 2019; van Helden & Reichard, 2019). Furthermore, despite considerable attention being devoted to theorizing about

workplace learning, the latter remains relatively under-researched in public sector contexts (Rashman et al., 2009; Visser & Van der Togt, 2016). This article addresses these gaps in the literature by employing situated learning theory as the theoretical basis for the analysis.

Various NPM reforms have been promoted in the NHS with the aim of encouraging clinicians to use accounting tools, such as managing a budget. The assumption was that, by using these tools, clinicians would learn, on the job, how to use resources rationally without reducing the quality of care (see Lapsley, 2001). However, studies examining how clinicians learn to use accounting tools in the workplace are scarce. In this article, we identify the process involved in clinicians' informal learning when they work with accountants on the boards of UK clinical commissioning groups (CCG).

## Informal learning at work and situated learning theory

As part of the NPM reforms, governments have introduced benchmarking, performance measurement, performance budgeting and other accounting measures in the public sector and healthcare management. Along with improving efficiency and effectiveness in the delivery of healthcare services, many of these reforms are also intended to promote learning (Moynihan & Landuyt, 2009). However, some scholars argue that these reforms, in particular those relating to accounting, are being used to control the activities of professionals (Evetts, 2009). Although such measures are now widespread in other areas of the public sector, the healthcare sector has been a testing ground for

them (Tucker et al., 2007). It has been pointed out that introducing these measures will also result in changes in individual thinking and behaviour through informal learning (Jorge et al., 2020). Thus if public institutions are to use formal approaches to encourage informal learning, it is therefore essential to unravel the process of informal learning in a workplace where professionals are expected to work alongside colleagues from different professions.

Informal learning can be defined as a kind of learning that is typically integrated into work routines and is characterized as learning from experience (Watkins & Marsick, 1992). Scholars have outlined several characteristics of informal learning, including non-didactic; embedded in an organizational context within meaningful activities and highly socially collaborative; removed from external assessment; initiated by learners' interest or choice; and enhanced by proactivity, critical reflectivity and creativity (Callanan et al., 2011; Watkins & Marsick, 1992). Informal learning involves participation in work-related tasks. However, it can take different forms, including learning from more experienced and knowledgeable colleagues, managers or other professionals through social interaction, experimentation and reflection (Preenen et al., 2014; Sadeghi, 2020). Furthermore, it involves engaging in practical activities, not necessarily driven by the learning intention; rather, learning is achieved as a by-product of working (Eraut, 2004). Additionally, participation in work activities fosters learning through collaborative initiatives, such as shadowing, solving problems as a group, coaching, hypothesis testing and mentoring (Colley et al., 2002). Thus, what is learned from this process is determined mainly by the learners' curiosity, self-direction and the work environment.

Scholars have conceptualized workplace learning as taking place within two environments: expansive and restrictive learning environments (Fuller et al., 2012). Expansive learning environments encourage the integration of individuals by involving them in different activities that foster learning in the workplace (Fuller & Unwin, 2004). Expansive learning takes place in an environment that facilitates cross-boundary working activities, problem-solving and dialogue. This results in a new cultural pattern and new forms of work activities (Engeström, 2001). By contrast, environments that restrict participation in multiple communities have the effect of limiting employees' access to training and hindering learning. In addition, the extent to which individuals engage in learning differs and their desire to be involved in learning activities is influenced by their experience, aspirations, personal background, and environment. Understanding the practical process of informal learning and the extent to which an environment can foster learning contributes to the theoretical debate on informal learning in the public sector.

### Situated learning theory

Our study draws on situated learning theory to gain further insight into workplace learning (Billett, 1996; Fuller & Unwin, 2011). The theory was developed by Lave and Wenger (1991) and it concerns the way situated learning occurs in workplace activities—mainly through social co-participation. Therefore, it is claimed to be well-suited to exploring informal learning in a work context, given its

ability to capture a situation involving learning through experience, in which knowledge and skills are acquired by participating in situated work activities in collaboration with other workers (Billett et al., 2015).

Implicit in the theory is the importance of the social context and the cultural environment in which the learning occurs. The particular circumstances in which the knowledge is applied makes the learning unique, and this also helps with the absorption process. Workplace learning is claimed to be stimulated by customers' expectations, technological advancement, resource scarcity, and job characteristics (Coetzer & Perry, 2008). Rather than examining the cognitive processes involved in knowledge acquisition, the theory looks at the kind of social engagement within the contexts in which learning takes place, and how learning is facilitated. Cognitive and situated learning theories use two different units of analysis. Cognitive learning theory focuses on the individual as the unit of analysis and attempts to explain how knowledge acquisition occurs inside the person's mind by emphasizing that learning involves a cognitive process (Cobb & Bowers, 1999). It involves the transmission of abstract knowledge through education and training in a formal educational or training context.

In contrast, situated learning is fundamentally situated in a collaborative environment, resulting from the product of activities and contexts in which it occurs (Brown et al., 1989). For instance, Brown et al. (1989) used the example of how people learn a language to argue that words are best understood in a context. Furthermore, situated learning theory conceptualizes learning as something that happens when people engage in goal-driven activities, for example clinicians' involvement in CCG boards.

### Clinical commissioning groups (CCGs) as learning environments

Prior to the creation of CCG boards, a plethora of reforms had been introduced that were intended to improve the functioning of the UK healthcare system. However, when CCGs were established, they resulted in a far more expansive environment containing more features that could informally facilitate workplace learning than previous initiatives. Before CCGs, most commissioners lacked the skills needed to commission services effectively (Dickinson, 2015; Glasby, 2012). Dickinson (2015) claims that the skills of commissioners play a key role in enhancing the success of commissioning. Therefore, the question that arises is to what extent have clinicians learned from previous reforms, given that they were not held accountable for financial decision-making by commissioning bodies?

A white paper in 2010 set the target of reducing administrative costs in the NHS by up to 45% over four years. An important aspect of achieving this target involved eliminating bureaucracy by making clinicians, particularly general practitioners (GPs), more accountable (Department of Health, 2010). However, this reform differed from prior reforms in terms of expectations, structures and the way that it operated. In terms of learning, it introduced some key factors that could stimulate workplace learning which had been absent from previous reforms. In the context of the NHS, prior to the creation of CCGs, clinicians were less exposed to the pressures that could stimulate learning

about financial management. For instance, the first reform (popularly known as the fundholding scheme) awarded funds to GPs based on their activities during the previous year (Bailey & Davidson, 1999). The major change effected by the reform was the introduction of a channel through which to facilitate financial activities.

The second reform, the introduction of primary care groups (PCGs), brought most services together under the same budget and then employed GPs as advisers, but not as leaders (Wilkin & Coleman, 2001).

PCGs were subsequently transformed into primary care trusts (PCTs), designed to be free-standing, as they gained in experience. Following the transformation of these bodies into PCTs, many GPs wanted more power and a greater say in how they were run.

Next, practice-based commissioning (PBC) was created in response to GP demands. However, PBC also failed to function as intended because the GPs lacked the necessary skills to manage resources. Additionally, tensions arose between GPs and PCT administrative staff due differences between them in terms of organizational sense-making (Checkland et al., 2009). Thus, an important objective underlying the creation of the CCGs was to give clinicians the voice they needed to shape activities.

The Health and Social Care Act, 2012 created CCGs based on the following three key ideas:

- Allowing clinicians to lead.
- Providing clinicians with a platform for exercising commissioning power.
- Enabling clinicians to redesign services to improve cost-efficiency and quality while considering the needs of the local population.

According to the Health and Social Care Act, CCGs could be established by combining two or more GP practices. The GPs had to appoint an accountable officer and develop a constitution before registering the CCG with the Clinical Commissioning Board (CCB). The policy made it mandatory for every GP practice to be a member of a CCG. Board members were elected by the member practices of a CCG, and they also determined how many members would be represented on the board.

The policy document gave GPs the power to lead by specifying that the chairperson must be a GP. It also designated the following key positions: an accountable officer, two lay members, a secondary care doctor, a registered nurse, two or more other individuals to handle financial issues and GPs (the number of GPs on the board is decided by the member practices). Therefore, it gave clinicians the power to hold a majority on every board. In addition, so long as the basic requirements were met, they could decide on the board's composition. As a result, clinicians have become increasingly exposed to accounting information and are therefore in a position to decide how the budget should be allocated and spent.

## Research method

For the purpose of this study, CCGs in Essex and Suffolk were selected, mainly due to their proximity and access to interviewees. Data for the study were gathered through semi-structured interviews, observation of participants and

document analysis. The Health and Social Care Act, 2012 and the 2010 white paper were analysed to generate comprehensive insights into the main arguments behind the creation of CCGs and the reasons for handing over responsibility for managing the budget and finance to clinicians. Document analysis helped us identify the responsibilities and power that clinicians would be expected to exercise on the board, the level of control that clinicians had with regard to financial decisions, clinicians' duties and the level at which they were accountable for decisions taken.

Twenty-four semi-structured, qualitative face-to-face interviews were conducted between October 2019 and March 2020, in order to collect in-depth information on clinicians' views, thoughts, feelings, and experiences with regard to acquiring accounting literacy. Potential participants were recruited through snowball sampling.

Former GPs, current GPs, pharmacists and nurses involved in CCGs were interviewed. All the GPs and nurses interviewed had more than 20 years of experience. The interviews started by asking participants open-ended questions about their motivation for joining the CCG, including their knowledge about the CCG before joining it. Next, we explored how clinicians learned to read and understand accounting information when working alongside accountants. It is worth noting that accountants working on the CCG are not meant to teach clinicians how to do accounting or deal with other financial issues. Hence, we considered the views of accountants irrelevant for the purpose of our study, given that the focus of the article is on informal learning. The interviews lasted between 45 to 90 minutes and were recorded (with the participants' consent) and immediately transcribed. During the interviews, participants were assured that their identities would remain anonymous when the data were presented.

Lastly, participant observation was conducted to observe the way in which clinicians used accounting information in their discussions. The aim was to find out how clinicians presented their arguments, how they asked questions, and whether they were interested in understanding the arguments presented by managers.

Transcribed data were carefully reviewed to check and ensure the accuracy of information by listening to the audio version and re-reading the data. The data were then coded using NVivo software. The coding was based on the questions asked in the semi-structured interviews. Questions were classified by areas of inquiry, so as to develop themes from these. NVivo was then used to check for the frequency of keywords. The data were then reduced, keeping only the information relevant to the research question.

## Empirical findings

Nurses and pharmacists generally hold the view that GPs are more exposed to accounting information due to their involvement in managing various GP practices and that they should be more knowledgeable about accounting-related concepts and tools. It has therefore been claimed that GPs are better positioned to acquire accounting skills than other clinicians. Thus, nurses and pharmacists assume that GPs should already have an understanding of accounting concepts prior to joining the CCG. A general

misconception about GPs' awareness of the relevant accounting concepts was therefore noted.

Some of the GPs who were interviewed acknowledged that they had some level of understanding of accounting prior to joining the CCG, although the majority were unaware of the importance and application of accounting information. As GP partners, a number of them had acquired basic accounting skills in practice. For instance, commenting on their knowledge of accounting concepts, one GP explained:

*What you have in a GP surgery is ... legacy and succession planning. If I come into a surgery, say I am a new doctor, there will be a doctor who has been there for 20 years, and he would have done the accounting for 20 years. So, what usually happens is there is a 70-year-old guy who is about to retire and a 30-year-old guy who is about to come in. So, the 30-year-old guy gets taught by the 70-year-old guy, the 50-year-old guy, the 40-year-old guy, how to run a practice.*

This statement implies that accounting skills are acquired through succession and the handing over of knowledge. Senior GPs pass on their accounting skills to junior colleagues through informal means. Clinicians, mainly GPs, made the point that they had picked up basic accounting skills over time. An underlying issue resulting from this is that adverse and unhelpful practices could also be handed over from one generation to another. However, the respondents denied such allegations, claiming instead that bad practices are usually challenged rather than accepted.

The different sets of clinicians on CCG boards handle their duties differently. However, many similarities between them were observed in the way that they acquire accounting literacy. For instance, GPs mentioned their limited accounting skills and their dependency on accountants. They explained that, even though they owned the businesses, their understanding of accounting information was limited:

*Most of us, even if we run practices, we have practice accountants who do the services for us.*

Different clinicians explained the varied routes by which they had learned about CCG duties. Some were given information by their predecessors, whereas others had picked up accounting knowledge when they were on duty. For example, one GP's experience was:

*Initially, when we join, we are given a kind of brief training, and then you are attached to a manager to help you on how to read the budget and to understand what the bottom line is, what is positive, what is negative, then as time goes on you pick up a lot of things, and then you ask questions.*

A chief nurse remarked:

*I have sort of picked it up as I go along ... CCGs have not provided any training for clinicians to understand accounting issues.*

Additionally, a chief pharmacist stated:

*When I started with the organization, my predecessor was a pharmacist, so she explained things to me... I just ask the accountants any questions when I am unsure.*

Clinicians said their knowledge of accounting was based on the experience they acquired by carrying out CCG duties over time, reflecting Lave and Wenger's (1991) description of situated learning in the workplace as involving individuals learning by engaging in practical activities.

Interviewees also mentioned the role played by accounting departments in shaping their understanding of accounting and management. Many of them tended to accept the explanations they were given by the accounting department because they found them to be relevant and useful. However, some informants were of the view that the explanations offered by the accounting department gave them few, if any, choices. They felt obliged to accept what they were told by accountants due to their lack of accounting knowledge prior to joining the CCG. Commenting on this issue, a senior GP in charge of medicine management stated:

*I think the other downside, you are very much influenced by those managers or accountants who you actually get their view and take on, as opposed to 18 or 20 people around the room who might have a slightly different view.*

Many GPs were of the opinion that accountants and managers involved in preparing accounts should provide them with financial analysis and recommendations for financial decision-making. For instance, one GP explained:

*GPs do not need any accounting training to carry out their day-to-day tasks. They are not provided with training of any form. To understand accounting as a clinician is called micro-management. Accountants and managers will do analysis and put the decision into scales and what the clinician will do is to look at the analysis of service needs that has been done and look rationally, then make decisions. You don't need to have accounting knowledge.*

Given that GPs are more concerned about delivering effective healthcare, some of them perceive accounting training as irrelevant. However, managers and accounting departments emphasised the importance of considering whether accounting training sessions were of interest to clinicians before organizing them. A number of clinicians claimed that each group on the CCG board was meant to complement one another. They were of the view that the explanations provided by accountants should therefore be trusted. Consequently, accounting training had little appeal for them. For instance, commenting on GPs' limited interest in training, a GP, serving as the head of a medicine management committee, stated:

*We [GPs] all feel we work professionally in a really safe environment that actually somebody can put their hand up and say: 'I really don't understand this. Can you take me through it?' You could do that in public meetings with your peers without being embarrassed. That is one of the great strengths of this profession.*

During the interviews, a number of other clinicians also acknowledged that they were not interested in participating in formal accounting training. It was specifically mentioned that the finance department had organized some accounting training sessions but most of the clinicians were uninterested in attending them. For example, a mental health lead commented:

*We did talk about giving the governing body and the executive sort of training to help them understand finance, and we did organize some short sessions run by the finance team, although nobody was interested in the training ... we haven't repeated that for the last two to three years, but it is always on offer.*

Although most GPs, nurses and pharmacists claimed that they do not need accounting skills to perform their various roles effectively, they also acknowledged that they are different from doctors working in hospitals. However,

shedding light on such distinctions between them and other clinicians working in the NHS in the UK is beyond the scope of this study.

## Discussion and conclusions

Drawing on the theoretical insights gained from situated learning theory, in this article we have shown how clinicians informally acquire accounting literacy as they work alongside accountants and managers on a CCG board. With the establishment of CCGs, clinicians found themselves at the forefront of designing and shaping healthcare services in the UK. It was generally expected that clinicians would find it challenging to manage budgets and finance, as their role had formerly been confined to advising executives on previous commissioning bodies (Wilkin & Coleman, 2001). However, placing clinicians centre stage meant that they were then forced to manage scarce resources and design services efficiently to meet patients' expectations. On a CCG, clinicians are situated in a different work environment to that which they are used to, and have to collaborate with managers and non-clinicians in shaping day-to-day commissioning activities (Lave & Wenger, 1991). The new job requirements and responsibilities assigned to clinicians have proved to be central in fostering workplace learning (Coetzer & Perry, 2008). For instance, the target set in the white paper meant that clinicians were expected to reduce administrative costs by 45% and cut bureaucracy while promoting quality improvement and accountability (Department of Health, 2010). In this context, clinicians are required to take on tasks that had not previously been part of their routine activities, thereby allowing them to participate in financial and managerial activities in a situated context (see Lave & Wenger, 1991).

Recent studies have shown that clinicians are capable of learning on the job (Van Dam & Ford, 2019; Wolfson et al., 2019), assuming that organizational interdependency triggers the desire to seek new ways of doing things (Billett, 2001). This article has provided insights into a situation where clinicians' proactive views differed from the expectations of the reform, as clinicians were forced to account for the funds allocated to their catchment area. Clinicians were attached to managers who could educate them about the politics of and budgeting process involved in commissioning. When working on the CCG, clinicians have to stay within the allocated budget, which is something new to them. Our findings demonstrate that working in a situated context has increase clinicians' understanding of accounting concepts. Our study therefore adds to the existing literature (for example Van Dam & Ford, 2019) by illustrating how clinicians have continued to rely on the accounting explanations provided by accountants and administrators rather than participating in the formal accounting training that would enable them to become accounting literate.

However, our findings also show that clinicians, mainly GPs, are keen to understand the financial implications of their activities. They participate in committees where decisions are made. The CCGs offered clinicians an expansive learning environment, encouraging them to participate in activities, including promoting interaction, collaboration and involvement in different teams (Cobb &

Bowers, 1999). We therefore argue that situational learning factors, such as trust and an environment in which clinicians can freely ask questions to other groups and managers, can play a key role in fostering informal learning. In this regard, CCGs have provided clinicians with an environment in which they can learn while communicating with and listening to managers in the course of their day-to-day activities. The new work routine and collaborative environment that the CCG offers have created a context in which the knowledge acquired can be put into perspective (Brown et al., 1989) and which enables clinicians to learn informally (Callanan et al., 2011; Watkins & Marsick, 1992). Recent public sector accounting research has shown that collective participation in certain projects can enhance actors' accounting knowledge (Jorge et al., 2020).

However, this is rarely discussed in the context of CCGs. The unique way in which the CCG functions and how this facilitates learning is reflected in this study. However, one caveat in the learning process appeared to be the emergence of a situation whereby the managers and other non-clinicians presenting the information to clinicians might choose to conceal anything that they believed could result in conflict.

In particular, our findings show three informal learning processes that occur when clinicians work alongside accountants and managers. First, clinicians are often guided or taught by a manager or a predecessor. The second one concerns feeling free to raise questions without fear of being prejudged. The third process involves listening to the same information repeatedly by participating in committee meetings. For example, when GPs joined a CCG board, they were attached to managers who introduced them to commissioning politics, including the importance of budget allocation and service planning, whereas pharmacists and nurses were informed about these matters by their predecessors. This guidance not only contributed to familiarizing clinicians with the politics of the CCG, but also its decision-making procedures, and the expectations of the reforms (Vince & Broussine, 2000). During such discussions, they gained insights into budget development, the planning of activities, and performance evaluation. The informal knowledge and understanding acquired through this process also helped to boost their confidence in terms of processing and applying accounting information.

A key contribution of this study concerns generating insights into how clinicians can learn basic accounting concepts by being active in the workplace, for instance by asking questions during meetings, and listening to the explanations provided by accountants and managers. The task of commissioning was regarded as challenging and new to clinicians (Preenen et al., 2014; Billett, 2001). However, clinicians in CCGs wanting relevant, necessary information led them to interact, collaborate and build relationships with accountants and managers. These practices were instrumental in promoting informal learning. Learning therefore tended to take place in the working environment (Marsick & Volpe, 1999) because the focus was on doing what was best for the local populations who use the healthcare services.

The structural characteristics and culture of the CCG have enabled learning to occur as a situated learning process. For instance, similarly to other groups, clinicians are striving to

deliver better healthcare services and improve the well-being of the population. Having similar visions and sharing these with different groups in the workplace is of paramount importance for employee learning (Sinkula et al., 1997). Employee learning is further promoted if complying with the organizational vision increases the likelihood of success and personal development for the employees (Tannenbaum, 1997). In this regard, the application of situated learning theory has provided an important insight into why clinicians on the CCG preferred to learn informally by engaging in activities collaboratively and interactively rather than choosing to undertake formal accounting training. Therefore, co-participation, the learning context and culture are indispensable in promoting informal learning in a workplace. Together, the culture, the environment and the day-to-day routines trigger the learning process within an organization by aligning visions and fostering trust between different stakeholders (Fuller & Unwin, 2011); CCGs are a striking example. Learning will then become integrated into the work process, and the knowledge acquired will continue to be spread informally. However, the study has a few limitations, thereby offering avenues for further research to elaborate on our understanding of the acquisition of learning by clinicians. For instance, given that this study is limited to explaining how clinicians acquire accounting knowledge informally, and does not address the ways in which they may learn consciously, further studies should explore the formal process of learning, as well as the unintended consequences of acquiring accounting literacy, particularly the tensions that may arise when balancing clinicians' values and their need to acquire accounting information. Further research is also needed to shed light on how accounting literacy could improve commissioning, and what kind of accounting knowledge is most needed for effective commissioning. It is equally important to investigate the content of what is learned and the purpose of learning, due to the fact that informal learning does not have any particular pattern or syllabus. Finally, although the purpose of this article is to investigate the process by which clinicians acquire accounting skills informally, our findings have clearly demonstrated that accountants need to be more explicit and consistent when communicating accounting information to clinicians, so as to make the informal learning process more effective.

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