‘OPAQUE ACCOUNTING TALK’

HOW DOES A HOSPITAL ESTABLISH COST CONSCIOUSNESS AMONG CLINICIANS

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‘Opaque Accounting Talk’: How does a hospital establish cost consciousness among clinicians

Abstract

This qualitative study explores how a hospital communicates accounting information to clinicians to establish cost consciousness in clinical decision making. A single case study was conducted in two departments in a Swedish hospital with interviewees spanning from clinicians to top management. The study synthesizes existing literature on ‘accounting talk’ and conceptualizes the phenomenon as the theoretical lens. Two primary contributions are made, firstly, a high degree of contextualization and disaggregation of accounting information makes it intelligible and thus fosters a cost conscious mindset. Secondly, accounting information does not necessarily have to be explicitly communicated to positively impact clinicians’ attitudes toward fostering cost consciousness in clinical practices. Hence, we introduce the concept of ‘opaque accounting talk’; meaning that accounting information remains opaque in the communication and thereby allows clinicians, driven by a strong professional ethos, to subconsciously absorb accounting information and thus influence their cost consciousness. A framework is developed to further understand how accounting talk can be designed to guide a strong medical profession toward becoming cost conscious.

Keywords:
Hospital, accounting information, accounting talk, cost consciousness, decision making

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1. Introduction

Managing the balance between medical needs and financial resources in hospitals has been an enduring challenge for decades. In a context where the supply seems to never equal the demand, a plethora of initiatives in line with New Public Management ("NPM") principles (Hood, 1995) have been implemented over the years to discipline resource utilization, increase the efficiency, and try to integrate an economic mindset among medical professionals, what has been referred to as the concept of 'accountingization' (Power & Laughlin, 1992). However, these types of initiatives have often faced skepticism and resistance from a strong medical profession (e.g. Abernethy & Stoelwinder 1995; Bourn & Ezzamel 1986; Coombs 1987; Jacobs, 1995; Jones & Dewing, 1997; Kurunmäki et al., 2003; Lapsley, 1994; Lowe & Doolin, 1999), underpinned by a view that accounting controls in healthcare pose a threat to their autonomy (Jacobs, 2005; Lapsley, 1994; Lowe & Doolin, 1999), hence conflicting with the strong professional values (Coombs, 1987), and informal control mechanisms (Abernethy & Stoelwinder, 1995), that guide the medical professionals in their work.

In the existing literature, it is established that hospitals are inherently complex to manage, in part due to the diversity of professional groups (Gebreiter & Jackson, 2015), as well as the different logics adhered to by these stakeholders (Reay & Hinings, 2009; Pettersen & Solstad, 2014). Studies like that of Reay and Hinings (2009) showed that the medical profession's values of providing appropriate patient care can coexist with the financial logic despite the institutional complexity. However, there seem to be varying opinions in the literature. In some cases, the integration of accounting practices has been accepted to some degree by the medical profession and influenced clinical activities (Jacobs, 1998; Kurunmäki, 2004; Kurunmäki, 1999; Kurunmäki et al., 2003), hence contributing to an increased understanding of the link between accounting and care, in line with the intention of accountingization. In contrast, many studies have also confirmed how similar attempts in other settings involving various types of accounting controls resulted in effects like increased resistance and polarization (e.g. Jacobs, 2005; Järvinen, 2006; Lapsley, 1994; Lowe & Doolin, 1999), absorption of responsibilities by selected managers to protect the medical core (Jacobs, 1995) as well as intraprofessional differences in the embracement of accounting practices (Blomberg, 2003; Gebreiter, 2022; Jackson et al., 2014).

According to the existing streams in the literature, there does not seem to be a clear theoretical understanding of how to appropriately implement accounting within healthcare to foster financial awareness, despite multiple attempts to establish this. However, while the answer is not clear, the long-standing challenge of effective resource utilization in healthcare is pervasive and it has not diminished, rather the opposite, as advancing medical capabilities and unfavorable demographic trends in Western society further increase the financial pressure on the healthcare system (OECD, 2023). In designing strategies for coping with these circumstances, it thus becomes important to

ensure effective resource utilization. In addition, since clinical decision making primarily drives hospital expenditures (e.g. Abernethy & Stoelwinder, 1995; Jones & Dewing, 1997; Pettersen, 2004), it is essential to consider how clinicians[1] absorb accounting information[2] in communication.

Although the literature on management accounting in healthcare covers a spectrum of themes, to date, few papers have directly addressed how communication of accounting information to clinicians affects the attitudes toward cost consciousness and its impact on professional work. Concerning the challenges raised by OECD (2023), zooming in on the communication can render novel insights into the existing literature and widen the perspective on how cost consciousness can be established in hospitals, a type of organization characterized by institutional complexity (Pettersen & Solstad, 2014) and strong professional identities (Abbott, 1988). While cost consciousness lacks a clear and coherent definition (Velasquez et al., 2015), we draw on Kurunmäki (1999, p. 121), stating that it pertains to "the economic judgment of healthcare operations", which will be referred to in this study when assessing clinicians' attitudes toward cost consciousness. Against this background, the following research question is formulated:

> *How is accounting information communicated to establish cost consciousness in hospital-based clinical decision making?*

To answer the research question, a single qualitative case study was conducted in two different departments in a Swedish hospital. Interviews were held with the hospital's top management as well as managers and clinicians in the respective departments, thereby gaining a more comprehensive understanding of attitudes toward cost consciousness in clinical practices from various organizational levels. Besides the enduring challenge of resource constraints in healthcare, in 2024, hospitals in Sweden are experiencing increased financial pressure following various macroeconomic effects and a surge in inflation. The question of effective resource utilization in the sector is at the top of the agenda to cope with increased budget deficits, and our hospital is not an exemption. Following this setting, in order to understand how cost consciousness is established by using accounting information, we synthesize the existing literature on 'accounting talk' (Ahrens, 1997; Bukh et al., 2021; Carlsson-Wall et al., 2016; Englund et al., 2013; Jönsson & Solli, 1993) and conceptualize the phenomenon as our theoretical lens (Lukka & Vinnari, 2014). From our synthesis, we identify two tactics, contextualization and disaggregation, used to make accounting information intelligible for the recipient, a core characteristic in the existing literature for enabling accounting talk.

[1] Clinicians refers to healthcare professionals who provide direct patient care, including but not limited to doctors, nurses, and assistant nurses

[2] Accounting information refers to information of a calculative and financial nature

This study makes two primary theoretical contributions. Firstly, by revisiting the discussion on management accounting in healthcare with a new lens, we contribute to the literature (e.g. Coombs 1987; Jacobs, 1995; Kurunmäki et al., 2003; Lapsley, 1994; Lowe & Doolin, 1999) by showing how the tactics of contextualization and disaggregation can be utilized to make explicit accounting information perceived as intelligible in communication to clinicians. Our findings suggest that there are varying degrees on which explicit accounting information can be utilized, with consequences for how receptive the clinicians are to adopt a cost conscious mindset. Initiatives that combined a high degree of contextualization and disaggregation resulted in the information becoming intelligible as it was customized to the operational context, thus having a more positive impact on the attitudes toward cost consciousness. On the other hand, when one of the tactics was abandoned or not communicated at an appropriate level, then the accounting information was not perceived as intelligible, and consequently, it did not facilitate a cost conscious mindset.

Secondly, we extend the literature on accounting talk (e.g. Abrahamsson et al., 2016; Ahrens, 1997; Baker et al., 2022; Bukh et al., 2021; Carlsson-Wall et al., 2016; Englund et al., 2013; Hall, 2010; Jönsson, 1998; Jönsson & Solli, 1993) and identify a new form of communication to make accounting information intelligible, namely 'opaque accounting talk'. In this form of accounting talk, the message is framed around the operational context, using the tactics of contextualization and disaggregation. However, accounting information is not explicit. Instead, it remains opaque in communication. By using 'opaque accounting talk', the sender can evoke a subconscious absorption of accounting information. Hence, as a result, the recipient can become receptive to the underlying financial rationale for making cost conscious decisions, even if the accounting information is not mobilized explicitly. Moreover, our findings also suggest that the use of accounting talk can simultaneously be deployed as opaque- and explicit, depending on the recipient of the message and what they perceive as intelligible. Hence, this finding suggests that opaque accounting talk is not necessarily a substitute for traditional accounting talk.

The upcoming sections of this study are structured as follows: Section 2.1 presents previous literature on management accounting in healthcare. Thereafter, in section 2.2, we synthesize existing literature on accounting talk and conceptualize the phenomenon as our theoretical lens. Section 3 presents the methodology, including the research design, case study, data collection, and analysis; then, we conclude by discussing the authenticity and plausibility of the research. Later, in section 4, the empirics are presented and analyzed using the accounting talk lens. In section 5, we revisit the existing literature through a new lens, compare it to our findings, and present a developed framework. Finally, section 6 presents a summary of the conclusions, practical implications, limitations, scope conditions, and further research.

2. Literature Review

2.1. Management Accounting in Healthcare

2.1.1. Accountingization in Healthcare and Clinicians' Initial Skepticism

The strive for increased accountability, quality, and efficiency in the public sector led to a plethora of reforms during recent decades, commonly gathered under the umbrella term New Public Management (Hood, 1995). Accounting gained a central role in this new approach to the management of public organizations as a way to steer and evaluate organizational performance, referred to as the concept of accountingization (Power & Laughlin, 1992). While these new reforms and management practices impacted all types of public organizations (Hood, 1995), hospitals added a layer of complexity (Gebreiter & Jackson, 2015). Gebreiter and Jackson (2015) highlighted that the diversity of professionals working in hospitals, ranging from doctors to medical technicians, nurses, and accountants, presented an organizational setting that could be challenging to steer even when accounting was not considered. Furthermore, even though hospitals have been using calculative and record-keeping practices throughout history, for instance, records on patients and operational matters (Gebreiter & Jackson, 2015), the reforms following NPM initially faced resistance from the medical profession, as shown in numerous studies (e.g. Abernethy & Stoelwinder 1995; Bourn & Ezzamel 1986; Coombs 1987; Jacobs, 1995; Jones & Dewing, 1997; Lapsley, 1994).

A recurring theme in early studies focused on accountingization in hospitals was the apparent tension between competing attitudes that were accentuated when accounting information was given an increased influence on clinical practices. For example, Bourn and Ezzamel (1986) asserted that a strong medical profession perceived the incorporation of management accounting into their medical domain as a potential threat that could lead to de-professionalization and diminish their medical autonomy. Further research has underscored resistance to implementing traditional management controls within the medical field due to concerns about their professional autonomy (Kitchener, 2000), as well as clinicians' reluctance to engage with accounting control practices (Bourn & Ezzamel, 1986; Jones & Dewing, 1997; Kurunmäki et.al., 2003; Lapsley, 1994). Moreover, the medical profession has also used accounting tools in ways that deviate from what was intended. Lapsley's (1994) examination concerning the implementation of accounting systems in the UK healthcare sector showed that accounting controls primarily served as a legitimization tool during the initial initiatives pursued by the National Health Service. In practice, this meant that operational decision making remained relatively unaffected and thus was not controlled nor guided by accounting information. The author described this situation by referring to the separation of roles and tasks, meaning clinicians could retain their professional autonomy, a factor considered

crucial for the medical profession (Jacobs, 2005; Kitchener, 2000; Lapsley, 1994; Lowe & Doolin, 1999).

In the same vein as Lapsley (1994), Jacobs (1995) presented how another management control system, the budget, was intended to function as a means to steer a New Zealand hospital toward accountingization. Given the intrinsic functions of the budget to increase operational visibility and accountability, the hospital management aimed to influence clinical decision making through an emphasis on financial controls. Following this, clinical directors were given increased budgetary responsibilities in a decentralized effort to overcome conflicting attitudes among the medical profession and management concerning accounting controls. However, rather than integrating the budget into the organization to bridge the economic and medical perspectives, thereby implementing management's agenda, selected clinical directors absorbed all financial responsibilities. As a result, they served as gatekeepers, ensuring that accounting information did not affect the clinicians and thus preserved the situation at hand (Jacobs, 1995).

Another study on a similar topic as Jacobs (1995) is that of Lowe and Doolin (1999), who looked at how increased accounting controls were supposed to influence clinicians in their daily practices by examining the implementation of a casemix accounting system (DRG) within a public hospital in New Zealand. The system's purpose was to gather more granular financial information to increase managerial control over clinical activities. Moreover, management aimed to make the financial implications of clinical decisions visible as a way to impact the clinicians' behavior. However, the system encountered resistance from clinicians who perceived it as threatening their medical autonomy rather than functioning as a facilitating system to alter their behavior. This resistance stemmed partly from the perception that the system's objective was to monitor clinicians to allow for inter-clinician comparisons and partly from the view that management used it to justify decisions with financial arguments rather than prioritizing medical values (Lowe & Doolin, 1999).

In line with previous studies, Abernethy and Stoelwinder (1995) also identified difficulties balancing two competing attitudes: economic and medical. Their study of an Australian university hospital showed that management control systems with bureaucratic characteristics, such as budget controls, can interfere with a hospital's operational core, primarily guided by informal control mechanisms, such as norms and values derived from their role as clinicians. Moreover, in line with this, the results pointed toward a reduced role conflict when professionals with strong medical values were less confronted with diagnostic output controls impacting their clinical practices. Instead, Abernethy and Stoelwinder (1995) emphasized that hospitals could increase the probability of goal congruence by acknowledging informal control mechanisms, such as the organizational culture, and by incorporating the profession's values into the design of management control systems. In doing so, they could potentially bridge previously distinct goals.

An early study by Coombs (1987) presented an additional view following his study of accounting control systems in two Swedish hospitals. He found evidence supporting both the divergent views among doctors and administrators, as well as convergence in some respects. For instance, the doctors acknowledged the potential value of implementing a cost management system to optimize the use of resources and induce change in selected areas in alignment with bureaucratic control mechanisms. However, skepticism was raised about relying on accounting techniques for planning medical activities. Arguments regarding medical development and the importance of medical judgment were seen as problematic to incorporate into an administrative outlook. Thus, Coombs (1987) concluded that doctors showed dual stances toward accounting control systems, ultimately making it challenging to unify the two spheres fully. This view was thereafter supported by later articles confirming this difficulty as they found resistance among clinicians toward letting accounting controls permeate the clinical core (Bourn & Ezzamel, 1986; Jacobs 1995)

2.1.2. Gradual Acceptance of Accounting and Strategies to Cope with It Emerged

Later studies, like that of Kurunmäki (1999), provided a more nuanced view, adding to the discussion regarding establishing cost consciousness in healthcare. She shed light on how healthcare reforms, in line with market forces, influenced clinicians' attitudes toward adopting management accounting. The new reforms in Finnish healthcare meant that resources provided to each hospital, previously distributed according to a planning system, should instead be allocated according to a competition-based system. Part of the vision was to alter the power dynamics within the hospital sector and diminish the clinicians' capital and self-control over resource consumption by introducing efficiency and cost-based techniques. Although a subset of the clinicians criticized the initiative, the study showed that the increased emphasis and use of accounting techniques and economic reasoning still got traction and influenced clinicians cost consciousness (Kurunmäki, 1999).

Kurunmäki's (1999) study confirmed that accounting information could influence clinicians, demonstrating that accounting does not inherently conflict with the medical profession. Along this line, a more balanced view was also presented by Jacobs (1998), who studied the introduction of management accounting techniques, such as cost- and budget reports, in another context, a general practitioner association. In contrast to several articles (e.g. Abernethy & Stoelwinder, 1995; Bourn & Ezzamel, 1986; Coombs 1987; Jacobs 1995; Jones & Dewing 1997; Lapsley 1994), the economic rationale did not conflict with the medical one in this setting. Rather than being seen as a threat, the reports functioned as tools that enabled benchmarking and facilitated further medical learning. According to Jacobs (1998), an essential factor for why the medical profession embraced accounting tools was because they were not forced upon them by management. Instead, they were developed and thereafter used by other doctors who understood the profession's core values. Hence, Jacobs' (1998) study illustrated that the medical profession was not

necessarily in conflict with management accounting as a way to guide and evaluate operational decision making. However, to convince clinicians to adopt accounting tools, establishing credibility within the profession and acknowledging its core value was a critical first step.

Early studies have underscored clinicians' reluctance to engage with accounting and management control practices (e.g. Abernethy & Stoelwinder 1995; Bourn & Ezzamel 1986; Coombs 1987; Jacobs, 1995; Jones & Dewing, 1997; Lapsley, 1994). However, later studies indicated that a plurality of divergent perspectives can simultaneously exist and be sustained over time (Kurunmäki, 2004; Kurunmäki et al., 2003; Llewellyn, 2001). Kurunmäki et al. (2003) conducted a comparative study between intensive care units in Finland and the United Kingdom ("UK"), revealing that while the intensive care departments faced similar clinical challenges, the role that accounting information played in decision making differed. In the UK, decisions were made based on the clinicians' expertise and values without directly involving accounting information. Management accountants' role, in turn, was primarily to preserve strong medical values and decisions by retrospectively making sense of actions taken by clinicians and justifying these for management. Thus, management accounting primarily served the function of 'legitimation' (Kurunmäki et al., 2003). In contrast, in Finnish intensive care, accounting had a more fundamental role in clinical decision making, supporting the argument for accountingization. The clinicians became clearly influenced by accounting practices, and they embraced the role of "clinical-management-accountants" (Kurunmäki et al., 2003, p. 116), reflected in practices such as the central role played by the budget and the use of a financial vocabulary by clinicians. Moreover, the management accountants' professional status in a specific context impacted the opposition to integrating accounting information into clinical practices. While it was seen as strong in the UK, in Finland, on the other hand, where the management accounting profession was less pronounced, it led to a scenario where clinicians were more inclined to assimilate accounting information (Kurunmäki et al., 2003).

Later, Kurunmäki (2004) built on her earlier paper and examined the conditions that enabled the observed 'hybridization' within the Finnish setting. Kurunmäki (2004) noted a shift in clinical decision making as clinicians began to integrate accounting information, thereby contributing to the hybridization of the profession. Through her comparative study, she identified greater integration of management accounting practices in Finland due to the weak accounting profession (Kurunmäki, 2004). The evidence points toward hybridization within the field, with Llewellyn (2001) providing additional support for this perspective. She studied the dynamics among clinicians occupying management roles and discovered their capability to balance a set of values derived from both the medical profession and management discipline. Their medical expertise enabled them to meet management goals while maintaining respect from their professional peers, unlike managers lacking a medical background (Llewellyn, 2001). On the other hand, some scholars advocated for an opposing view, suggesting polarization (Jacobs, 2005; Järvinen,

2006). Jacobs (2005) built upon Kurunmäki's (2004) findings and further studied the relationship between the medical profession and accounting. In his study, the empirical material gathered from interviews with clinicians across various jurisdictions indicated that those in the UK were less inclined to become hybridized, reinforcing the findings of Kurunmäki (2004). This reluctance stemmed from an unwillingness to take a senior managerial role that required them to learn accounting skills, based on the concern that acquiring these would mean abandoning their medical profession (Jacobs, 2005).

Carr and Beck (2022) adopted a different perspective on using accounting practices in healthcare by focusing on the power dynamics and decisions made under prolonged economic pressure in a hospital. Following a budgetary crisis in the Irish healthcare sector spanning over four years, they identified how external effects facilitated and initiated change from within. In the initial stage of the crisis, accounting information, such as the budget and various activity plans, became essential sensemaking tools used by all professions to establish an understanding of the clinical and financial reality. By filling this role, accounting practices gained increased acceptance among the medical profession. Furthermore, using accounting information interactively facilitated collaboration among administrators and medical professionals, leading to budget reductions without sacrificing service quality (Carr & Beck, 2022).

As previously outlined, it is evident that tensions exist between the medical profession and accounting controls, primarily due to concerns regarding professional autonomy (Jacobs, 2005; Lapsley, 1994). However, studies have indicated that even within strong professional groups, nuances exist in the adaptability and willingness to increase cost consciousness and use of accounting information (Blomgren, 2003). Following the introduction of NPM principles in Swedish hospitals, shifting attitudes among nurses were found to be dependent on the type of position held within that professional group. Nurses with administrative leadership roles tended to be more receptive to the increased integration of accounting controls, whereas those focused solely on caring perceived financial discussions as a threat to their professional identity (Blomgren, 2003). These findings highlighted that initiatives aligning with accountingization can evoke different responses within the same professional group, thus potentially impacting clinical activities in various ways.

An additional perspective on the relationship between healthcare and accounting techniques was presented by Gebreiter (2022) who described the gradual incorporation of accounting practices within the medical sector in the UK during the last decades. This expanded perspective showed that the medical profession has been active, rather than passive, in shaping and establishing accounting practices. However, in line with Blomgren (2003), Gebreiter (2022) also highlighted intraprofessional differences affecting the attitude toward calculative practices. In his paper, medical professionals could be divided into two groups. The first one saw medicine as a form of art to be separated from calculative methods. On the other hand, the second group strived to alter

the conception of clinical medicine from abstract and intuitive to more science-based, standardized, and calculative. The medical profession adhering to the latter view was thus more receptive to adopting accounting practices and calculative methods in line with accountingization. Hence, Gebreiter's (2022) study showed that while accounting reforms can affect the power dynamics between accounting and medicine, both intraprofessional and interprofessional relationships must be considered to fully capture the role of accounting in hospital decision making.

Transitioning from Gebreiter's (2022) insights into the variances within the medical profession's approach to accounting reforms, Jackson et al. (2014) provide a concrete example of how these reforms manifested in clinical settings. Their study specifically examined the effects of reforms to increase cost- and budgetary controls on prescribing behaviors in acute hospitals. The paper highlighted that increased financial oversight can alter the internal dynamics among medical staff. In an attempt to preserve autonomy and professional medical judgment, the senior doctors placed restrictions on their junior colleagues and, by doing so, effectively divided the clinicians into two groups exercising different levels of authority within the same profession (Jackson et al., 2014). This scenario underscored the impact of accounting practices on the medical profession, further complicating the interplay between financial considerations and clinical autonomy within hospitals.

As demonstrated, contextual factors influenced the willingness to adopt accounting practices even within a strong profession. Pettersen and Solstad (2014) added to the understanding and complexity of incorporating accounting information in a clinical setting. By examining the management control practices and use of accounting information among clinical managers in different situations, the authors identify three distinct logics employed by the managers: the instrumental logic when communicating with management, the professional logic in relation to clinicians, and the political logic when engaging with external stakeholders (Pettersen & Solstad, 2014). This paper thus showed the importance of comprehending managers' diverse clinical backgrounds and strategies to balance financial interests and clinical considerations across different contexts. A complementary perspective by exploring the coexistence of competing professional and financial logics in healthcare was offered by Reay and Hinings (2009). They studied how clinical managers handled the intersection of financial interests and clinical practices and explored the coexistence of competing professional and financial logics within healthcare. One strategy to manage the competing logics used by the Regional Health Authority ("RHA") was seeking informal opinions from clinicians, where the clinicians could also block proposed changes. In this manner, the RHA incorporated perspectives from the medical profession into its decision making processes. Hence, despite the rivalry of the competing values, the study showed how collaborative efforts and supportive structures enable competing logics to sustainably coexist over time (Reay & Hinings, 2009).

2.1.3. Summary of Existing Literature and Identification of The Research Gap

Several themes have been identified from a literature review on the implementation of management accounting in healthcare, spanning from the mid-eighties (Bourn & Ezzamel, 1986; Coombs, 1987) up until the 21st century (e.g. Blomgren, 2003; Carr & Beck, 2022; Gebreiter, 2022; Jackson et al., 2014; Jacobs, 2005; Järvinen, 2006; Kurunmäki, 2004; Kurunmäki et al., 2003; Llewellyn, 2001; Reay & Hinings, 2009). Some seem to characterize the sector and be relatively static, like the fact that hospitals are inherently complex (Gebreiter & Jackson, 2015), while others, like integration of accounting practices into clinical work appears more fluid, although it has been well-established that introduction of NPM principles (Hood, 1995) in healthcare initially were faced with resistance and skepticism from clinicians (e.g. Abernethy & Stoelwinder 1995; Bourn & Ezzamel 1986; Coombs 1987; Jacobs, 1995; Jones & Dewing, 1997; Lapsley, 1994). Studies have found that factors impacting the difficulties of accountingization in healthcare have been clinicians' perceived risk of losing professional autonomy (Jacobs, 2005; Lapsley, 1994), thus contributing to polarization (Jacobs, 2005; Järvinen, 2006), as clinicians have distanced themselves from the accounting practices they were supposed to integrate into their work. Furthermore, a pattern is that traditional control tools, for example, the budget (Jacobs, 1995; Lapsley, 1994), have been allocated to clinical managers without further consideration of the context they are supposed to lead, characterized by informal control mechanisms (Abernethy & Stoelwinder, 1995). Consequently, managers have, in some cases, acted as gatekeepers and not let the accounting information reach clinicians (Jacobs, 1995), thus not fostering cost consciousness in clinical practices.

However, even when accounting systems have been explicitly linked to clinical practices, it has proven challenging to establish cost consciousness in hospitals (Lowe & Doolin, 1999). In contrast, studies like that of Kurunmäki (1999) and Kurunmäki et al. (2003) showed that accounting techniques and economic reasoning can get traction in a clinical setting. Moreover, when cost- and budget reports were developed, used, and discussed within an association of clinicians (Jacobs, 1998), the accounting tools did not conflict with the medical profession. Similarly, studies like Kurunmäki (2004) and Llewellyn (2001) have shown that hybridization can contribute to balancing clinical and financial considerations. This approach to dealing with different logics in healthcare (Pettersen & Solstad, 2014; Reay & Hinings, 2009), combined with using accounting information interactively to make it meaningful, as observed in Carr & Beck (2022), points to the importance of communication to establish cost consciousness among clinicians.

In summary, most studies on management accounting in healthcare have focused on implementation of systems and processes following accountingization. However, limited attention has been directed toward how accounting information is being communicated to clinicians, despite its apparent importance in changing attitudes in a setting impacted

by different logics. Hence, our study aims to address this need and add further nuance to the existing literature.

2.2. 'Accounting Talk' Conceptualized as a Theoretical Lens

To explore the establishment of cost consciousness in the clinical practices of a hospital, we synthesize existing literature on 'accounting talk' (Ahrens, 1997; Bukh et al., 2021; Carlsson-Wall et al., 2016; Englund et al., 2013; Jönsson & Solli, 1993) and conceptualize the phenomenon as our theoretical lens (Lukka & Vinnari, 2014). Accounting talk, as an overarching phenomenon, typically denotes the communicative use of accounting information customized to an operational context, thereby providing meaning to the recipient of the information (e.g. Abrahamsson et al., 2016; Ahrens, 1997; Baker et al., 2022; Bukh et al., 2021; Carlsson-Wall et al., 2016; Englund et al., 2013; Hall, 2010; Jönsson, 1998; Jönsson & Solli, 1993). The importance of communication for accounting to be meaningful is supported by broader studies of accounting in practice like that of Goretzki et al. (2018), saying that accounting information constitutes framing devices, but numbers do not carry an intrinsic meaning, rather the persuasiveness and meaning behind them depend on how these are mobilized. In contemporary management accounting studies, accounting talk has primarily been seen as the phenomenon to be analyzed (see discussion on 'domain theory', Lukka & Vinnari, 2014), where the mechanisms through which accounting communication unfolds, as well as its effect, have often been viewed through theoretical lenses borrowed from other academic disciplines.

In contrast to previous studies, we aim to utilize accounting talk and conceptualize it as our method theory. While the definition of a method theory is not absolute, Lukka and Vinnari (2014) suggest that it serves the purpose to provide a conceptual system for studying a domain. Moreover, as a theory constitutes "an orienting set of explanatory concepts" (Ahrens & Chapman, 2006, p. 823), the conceptualization of accounting talk enables the examination of a relatively established domain with a new conceptual system. Furthermore, we contend that synthesizing the accounting talk literature is possible since the existing work shares common underlying assumptions, thereby providing a foundation to build on. Moreover, the conceptualization is favorable for our empirical setting due to two main factors. Firstly, the challenges encountered in integrating accounting information into clinical practices, as evident in multiple articles (e.g. Blomgren, 2003; Coombs, 1987; Jacobs, 1995; Jacobs, 2005; Kurunmäki, 2004; Kurunmäki et al., 2003; Llewellyn, 2001; Reay & Hinings, 2009) indicates the importance of exploring the role of accounting communication in this context, an approach that could offer novel perspectives on addressing cost consciousness among clinicians. Secondly, accounting talk has previously been studied in contexts like ours where frontline employees are supposed to make judgments that drive costs and where the knowledge of accounting is limited, for example, a home care unit (Carlsson-Wall et al., 2016) or a social services department (Bukh et al., 2021; Jönsson & Solli, 1993). In

these types of settings, communication thus becomes very central, rendering the lens of accounting talk useful.

One of the first articles published within the field was by Jönsson and Solli (1993) who studied the use of accounting talk to initiate change among managers in a social services department. In an attempt to increase cost awareness and accentuate the need to take more financial considerations into managerial decision making, the department disaggregated accounting information and introduced individual cost reports for each unit manager. Accounting talk, represented by interviews with the managers, was then used to establish an understanding of the design and managerial use of the reports. Throughout this interactive development and learning process contextualization was observed to be necessary to make accounting meaningful in their given context (Jönsson & Solli, 1993). Similar findings were made in Ahrens' (1997) study of two breweries, where accounting information also was made familiar to employees through the tactic of contextualization deployed by the management accountants. For example, in discussions with the sales management, accounting information was intertwined with arguments related to market-related concerns, such as branding initiatives and pricing strategies. Moreover, Ahrens (1997) elaborated on the interrelationship between accounting talk and the broader organizational narrative. He argued that accounting talk not only influences how the organization functions and develops, but also that the mobilization of accounting information in communication is simultaneously influenced by the organizational context (Ahrens, 1997). Hence, the findings of Ahrens (1997) as well as Jönsson and Solli (1993) suggest that the sender must comprehend the organizational reality to use accounting talk.

Metaphors have also been used as a contextualization strategy to make accounting information familiar and reasonable at various organizational levels. Carlsson-Wall et al. (2016) analyzed how a manager in a home-based elderly care unit acted as an internal change agent, utilizing metaphorical representations to increase financial consciousness and change behavior among frontline employees. The metaphors were centered around familiarity and encompassed three core activities. Firstly, the selection of a familiar domain (denoted 'source domain'). Secondly, identifying the unfamiliar domain (denoted 'target domain'), i.e., the area in which change and attention are to be directed, and finally selecting the metaphorical representation that bridged these two domains (Carlsson-Wall et al., 2016). The importance of making accounting information familiar and reasonable for the target audience is hence two underlying assumptions that can be discerned in Carlsson-Wall et al. (2016); in this case, it was achieved by linking accounting information (the unfamiliar domain) to employees' personal finances (the familiar domain). Moreover, the manager combined the tactic of contextualization with disaggregation by breaking down the unit's accounting information to the individual tasks performed by the frontline workers. Hence, the tactics helped to facilitate employees' understanding of accounting information.

Carlsson-Wall et al.'s (2016) analysis shows that accounting talk can create linkages between a familiar and unfamiliar domain, thus changing the mental models of accounting among employees (denoted 'conceptual schemas'). This focus on conceptual schemas is aligned with a broader interest of framing in social interactions, where terms such as schemas and frames refer to individuals' cognitive models which guide them in interpreting and understanding different situations, thus impacting their way of acting (Englund et al., 2013). Following this reasoning, the use of accounting talk could thereby be seen as impacted by the prevailing conceptual schemas within an organization. Moreover, a study showing how conceptual schemas can be changed is that of Bukh et al. (2021) who studied a social services department. The authors interpreted the use of accounting talk through the lens of sensemaking, and like with framing, the overarching concept of sensemaking is also centered around individuals' mental models (Bukh et al., 2021). Managers in Bukh et al.'s (2021) study communicated accounting information in the budget by showing how disaggregated costs had a clear impact on the departments financial outcome and thereafter contextualized these by drawing explicit connections between costs and operational tasks that were previously unfamiliar for the social workers. The process ultimately led to new mental models (denoted 'sensemaking') among the employees as well as enhanced cost consciousness (Bukh et al., 2021), thereby supporting Carlsson-Wall et al.'s (2016) findings that accounting talk can lead to changed conceptual schemas.

Our synthesis of previous research within this field has enabled the identification of a few emergent themes that underpin our conceptualization of accounting talk as a theoretical lens (Lukka & Vinnari, 2014). First, besides serving as a communicative phenomenon to provide meaning to accounting information, it appears to often be used in operational contexts focused on the establishment of financial consciousness (Bukh et al., 2021; Carlsson-Wall et al., 2016; Jönsson & Solli, 1993). Second, the use of accounting talk is not universal or predetermined and a diligent understanding of the operational context seems to be important. Recurring references are made to concepts borrowed from the broader notion of framing and sensemaking in social interactions, such as conceptual schemas and mental models among employees (Bukh et al., 2021; Carlsson-Wall et al., 2016; Englund et al., 2013). These concepts are therefore incorporated into the conceptualization of accounting talk since an understanding of the operational context shapes the appropriate type of communication used in a specific setting, for example in terms of how to contextualize and disaggregate accounting information.

In summary, our synthesis of the literature on accounting talk provides conceptual constructs for understanding how the use of accounting information impacts clinicians' attitudes toward cost consciousness. A core insight is that accounting talk must be customized so it becomes familiar and reasonable according to the recipients' context, hence making accounting information intelligible. Furthermore, through our synthesis, we have derived two available tactics to achieve *intelligibility*: *contextualization* and *disaggregation*. Contextualization refers to customizing the accounting information and

translating it into an operational context that makes sense to the recipient. Disaggregation, in turn, refers to breaking down the accounting information to an appropriate level. Our conceptualization of accounting talk as a theoretical lens is centered around these key tactics, *contextualization* and *disaggregation* to make accounting information *intelligible*, and is used to analyze how communication of accounting information can establish cost consciousness in clinical practices.

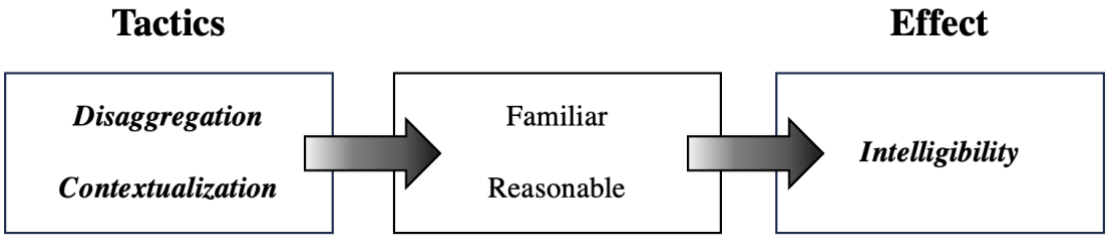


Figure 1. Illustration of the Authors' Conceptualization of 'Accounting Talk'

3. Methodology

3.1. Research Design

3.1.1. Research Approach

A qualitative research methodology was applied since we wanted to get an in-depth understanding of how accounting information affected hospital-based clinical decision making. This choice was suitable as we sought to explore social aspects within a hospital rather than testing hypotheses deduced from previous studies (Ahrens & Chapman, 2006). Furthermore, we applied an abductive approach which can be characterized as a synthesis of the deductive and inductive approaches; however, it should not be seen as a mixture of both (Dubois & Gadde, 2002). The abductive approach enabled an iterative process as we continuously adapted the theory based on the empirical material we collected (Eisenhardt, 1989). Moreover, according to Dubois and Gadde (2002, p. 559) "An abductive approach is fruitful if the researcher's objective is to discover new things [...] rather than confirmation of existing theory." Therefore, given the objective of adding nuance to the existing literature on management accounting in a hospital-based setting, the abductive approach was deemed appropriate.

Being iterative while having an abductive approach was advantageous for us during the research process. For example, the research was initially designed to analyze the relationship between clinicians and management accounting using the theory of institutional logics as the theoretical lens (Lukka & Vinnari, 2014). However, this theory did not fit the observed phenomena during the data collection process, hence, we returned to theorizing and decided on a new and more appropriate lens, in alignment with the iterative process described by Eisenhardt (1989, p. 541), "highly iterative process is to compare systematically the emergent frame with the evidence from each case in order to assess how well or poorly it fits with case data. The central idea is that researchers constantly compare theory and data-iterating toward a theory which closely fits the data."

3.1.2. The Case Study

We decided early on that we wanted to conduct a case study, which is suitable to explore a detailed phenomenon (Yin, 2014). However, we were undecided about whether to pursue a single or multiple case study, hence we reached out to several hospitals in Sweden and conducted informal meetings with finance directors to explore various opportunities. After the initial round of meetings, we identified a number of interesting topics for further investigation and decided to proceed with two large hospitals because they extensively used management accounting. Given our aim to conduct an in-depth examination and gain a deeper understanding, we deemed it necessary for the hospitals to have a well-established finance department, thereby increasing the likelihood of finding interesting areas related to the relationship between clinicians and accounting

practices. In the next phase, we held follow-up meetings with the two selected hospitals to establish a preliminary path forward. We ultimately decided to proceed with one of them, as the other had recently initiated a significant cost savings program, making them less receptive to this type of study as clinicians' attitudes may have been overexaggerated.

An additional factor influencing our decision to go with a single case study was the recommendation put forward by Dyer and Wilkins (1991), advocating for this approach if one aims to achieve an in-depth understanding of a detailed field (see also Eisenhardt, 1989; Yin, 2014). However, a trade-off with a single case study is that we lose the comparative analysis that could be derived from conducting a multiple case study (Dyer & Wilkins, 1991; Eisenhardt, 1989). Since a single hospital does not facilitate comparison, we planned to conduct interviews in two different departments to identify elements for comparison. In the initial discussions with the hospital, (hereinafter referred to as "UniHealth"), they indicated that accounting practices in a clinical setting might differ between surgical care departments, which primarily provide planned healthcare, and emergency departments, which primarily handle urgent situations. Therefore, we decided to choose two distinct departments, (hereinafter referred to as the "Surgical Department" or "SUD" and the "Emergency Department" or "EMD"). However, during the interviews, we did not find any major differences in the use of management accounting with regard to planning opportunities, since the inflow of patients to the emergency department was fairly predictable. Therefore, we decided to explore an emergent topic, that could potentially yield more interesting contributions to the literature, namely how accounting information was communicated to affect clinical decision making. As a result of our abductive approach, we not only decided on a new focus but also abandoned the comparative analysis since this type of communication was not department specific. Another determining factor for selecting UniHealth as the study object was that they could guarantee access to employees based on our pre-specified criteria, including clinicians and managers at several organizational levels in each department. After we had requested access, a list of potential interviewees based on interest and availability was sent to us by the respective department, and we thereafter took contact to schedule face-to-face interviews.

As outlined above, we conducted a single case study of a public large Swedish hospital, which is primarily financed through taxes from the region. In Sweden, there are 21 regions that are partially responsible for outpatient and inpatient care within their respective region. UniHealth provides a full range of highly specialized medical care, research, and education in several areas and employs +10,000 individuals. Moreover, UniHealth is divided into several departments with different operational focus, and we conducted interviews in two of these departments. However, despite their clinical differences, the departments have fairly similar organizational structure, as they are both part of the same hospital. Furthermore, considering the scope and focus of this study, as well as maintaining the anonymity of our study object, we decided not to elaborate on the operational specifics of each department.

UniHealth is primarily managed by a hospital director and deputy directors, alongside support departments such as finance and HR functions. The supporting departments maintain direct contact with the hospital management and provide assistance to the surgical- and emergency department, as illustrated in Appendix A. The finance department is led by a finance director and each department we interviewed had its own controller, working closely with the finance function and the clinical department. Each department is led by a department director who is responsible for clinical practices as well as budget compliance. In addition, both department directors interviewed had been or were still partly clinically active.

Besides a department director, there are unit managers of either doctors or nurses and assistant nurses, as illustrated in Appendix B. The unit managers are 'three-legged managers' meaning they have formal responsibility for budget, personnel, and clinical practices for their respective unit. Furthermore, unit managers for nurses and assistant nurses primarily have an administrative role but occasionally engage in clinical practices outside of their ordinary employment responsibilities. On the other hand, unit managers for doctors still work partly clinically. Moreover, each department has a management team responsible for strategic questions, and it is comprised of the department director, unit managers[3], controller, department developer, and other adjacent functions such as department secretary.

3.2. Data Collection

3.2.1. Semi-Structured Interviews

Following our abductive approach, we deemed it appropriate to collect primary data through semi-structured interviews as it allowed us to be flexible and follow up on emergent topics during the interviews (Brinkmann & Kvale, 2014). These were held primarily face-to-face with three different groups: (i) Clinicians and managers in the emergency department, (ii) Clinicians and managers in the surgical department, and (iii) Finance and management staff in the central hospital unit. Furthermore, the semi-structured interviews were conducted using a qualitative in-depth approach where the foundation for these was a predeveloped interview guide (see Appendix C). As we were being abductive, the guideline was developed throughout the process.

Given enduring financial constraints on healthcare in Sweden, we needed to ensure the interviewees did not believe we were conducting a study focused on shortcomings. Therefore, before each interview, we sent a brief description outlining the scope of the study to ensure that they understood our objective to explore how accounting information affects clinical decision making, rather than focusing solely on financial aspects. Additionally, when meeting with the individuals before the interviews, we aimed to build rapport by identifying commonalities and asking about their daily work. This approach

[3] For the emergency department only unit managers for doctors are included in the management team

was successful since it fostered a positive relationship and helped to facilitate that the interviews proceeded smoothly, without any negative perceptions of the study. Thereafter, as suggested by Brinkmann and Kvale (2014), the interviews commenced with raising ethical guidelines. These included assuring the confidentiality of the participants and hospital and requesting consent for tape recording and storage of data in compliance with GDPR, which all participants accepted. The interview questions were formulated based on Brinkmann and Kvale's (2014) insights that they should be brief and open-ended e.g., "Where do you encounter management accounting in your daily work?". However, this required us to be attentive and listen actively, as open-ended questions are open to interpretation, which we realized when interviewees interpreted some questions differently. Therefore, it became crucial to ask follow-up questions to receive elaborative answers that are needed to answer the posed research question (Brinkmann & Kvale, 2014).

The interview guide was customized according to each participant's role. For example, clinicians were extensively asked about their attitudes toward accounting information, while management and controllers were asked about the communication and use of management accounting. Through this approach, our aim was to gain comprehensive insights into clinicians' attitudes on integrating accounting information in their clinical practices, in alignment with the interpretative perspective of the study (Chua, 1986). A total of 21 tape-recorded and transcribed interviews were conducted, involving 19 interviewees, with a median length of approximately 54 minutes. Among these, 15 interviews were held face-to-face, while the remaining were held digitally. A total of 9 interviews took place in the emergency department, 10 were conducted in the surgical department, and the remaining 2 were conducted in the central hospital unit. The primary interviews were held between February and March 2024, and 2 additional follow-up interviews with the controllers were held in May 2024. For a full list of interviewees, along with their respective department, role, interview duration, and date, please refer to Appendix D.

The data collection process occurred primarily in two phases, where interviews were conducted onsite at the hospital. This facilitated face-to-face interactions and allowed us to observe the visual use of accounting information, such as posters and post-it notes. In the first phase, we conducted 10 interviews, whereby we gained insights into the communication of management accounting and the attitudes toward cost consciousness in clinical practices. Interviews conducted in the first phase were transcribed immediately thereafter, enabling us to learn about the interview style and start the analysis of the empirical material (Brinkmann & Kvale, 2014). Subsequently, in the second phase, we did an additional field trip with an updated interview guide based on promising topics identified during the data processing between the two trips. Such iterative data gathering is in line with the abductive approach and is often preferred in qualitative research (Ahrens & Chapman, 2006). Furthermore, the field trips were intended to complement

the interviews by allowing us to participate in APT[4]-meetings. This would provide us with a deeper understanding of how management accounting is communicated in practice. However, it was not possible since confidential information was communicated during those meetings.

3.2.2. Documents

Qualitative research heavily relies on rich empirical material (Brinkmann & Kvale, 2014). Therefore, we not only gathered data from interviews but also from various types of documents, e.g., budgets. This approach proved advantageous in reaching theoretically valuable interpretations as suggested by Vaivio (2008). Moreover, after the interviews, we requested supplementary material, such as action plans and posters that were discussed during the interviews. The material we received included, for example, a follow-up report for a cost savings action plan detailing the number of computed tomography (CT) scans and lab tests over a specific period. This additional data was requested not only to validate findings but also to introduce new perspectives and identify areas of interest during data collection (Dubois & Gadde, 2002). An interesting aspect gained from these documents was how the controller monitored clinicians' daily decision making to gain insights into whether attitudes actually influenced their behavior. Furthermore, this enhanced our understanding of what the controller communicated to clinicians and increased our knowledge base for subsequent interviews, facilitating more insightful discussions with the interviewees.

3.3. Data Analysis

As previously mentioned we adopted an abductive approach which proved suitable for analyzing the data through an iterative process, as it allowed us to continuously process the data and adapt our method theory (Lukka & Vinnari, 2014) based on the collected empirical material as suggested by previous research (Ahrens & Chapman, 2006; Dubois & Gadde, 2002; Eisenhardt, 1989). During the data analysis, we used a thematic approach, which started by fully transcribing the collected material. The transcription strategy involved one author transcribing and identifying grand themes (e.g., management accounting and financial communication) while the other author later reviewed the transcribed material to highlight more interesting topics for further investigation in subsequent interviews. This strategy served as a means to gain a deeper understanding and find promising topics for the researched phenomenon (Yin, 2014). When the interview material was transcribed and organized into grand themes, we initiated the next phase of the data analysis by discussing various potential areas of interest and settling on a more distinct direction. Subsequently, we started a more detailed categorization, breaking down the broad themes into finer ones, while also noting down potential uses of the material. This approach facilitated an overview, enabling us to identify similarities

[4] A bi-weekly meeting supposed to communicate information from managers to clinicians

and differences in the material collected. Gradually, we gained a more comprehensive understanding of the empirical material which was put in contrast to previous research to identify how we could nuance and extend existing literature. As this process resulted in a somewhat deviation from the initial research focus, two follow-up interviews with controllers were needed to complement the gathered material.

Since our study heavily relies on interviews, we wanted to ensure that we did not neglect any valuable information. As mentioned by Brinkmann and Kvale (2014), transcribing involves a change from oral to written language, which results in the loss of verbal cues (e.g., sarcasm and excitement) which is hard to capture in written format. To mitigate the risk of losing valuable information, we re-listened to the recordings to capture the tone and nuances of the interviewees. During this process we took notes if answers were delivered with elements such as sarcasm, as these subtleties were important for analyzing specific quotes, as evidenced in the empirical analysis. In addition, the re-listening provided us with the opportunity to increase the accuracy of our translations into English, which was particularly important as all interviews were conducted in Swedish due to convenience.

3.4. Research Quality

In line with our chosen research design, we used established quality concepts for qualitative research (Lukka & Modell, 2010) to ensure the quality of our empirical data, rather than traditional criteria used in other types of research (Yin, 2014). Lukka and Modell (2010) suggest examining the 'authenticity' and 'plausibility' to ensure the validity of interpretative studies. The former is often achieved in data collection, where a high degree of authenticity can be achieved by incorporating multiple perspectives from the individuals being studied, while the latter is often attained in data analysis, for example, by prioritizing the most likely explanations and interpretations that "makes sense" (Lukka & Modell, 2010, p. 469) given the data. Hence, authenticity promotes the inclusion of diverse perspectives, while plausibility emphasizes presenting interpretations that are most likely true within the given context.

We applied various strategies to establish authenticity and plausibility in our study. To increase the authenticity of our data collection, a sufficient number of individuals was interviewed to ensure that various perspectives were represented and described thoroughly in the empirics for the reader to judge. Furthermore, collecting documents from UniHealth not only validated the findings but also introduced new data during the empirical collection which increased the authenticity. Our attempt to participate in APT-meetings during the field visits would strengthen the authenticity even further but also increase plausibility as an additional setting for the data analysis would have been beneficial. However, since access was not granted, further strategies were employed to establish authenticity and plausibility, such as conducting follow-up interviews to elaborate on certain findings for the analysis and complement the information gathered

from the initial interviews. A factor that negatively impacted the authenticity of the study was that the full list of potential interviewees was provided by UniHealth based on interest and availability. On the other hand, as they conducted an internal selection process based on interest, we were able to interview individuals comfortable with being interviewed and possessing clear opinions and attitudes, thus increasing plausibility.

In the data analysis, we decided to apply a well-structured thematic approach to the empirical material, as explained earlier. The plausibility was strengthened by transcribing the interviews in full to ensure that no information or perspective was neglected. Furthermore, as we employed an abductive approach, we allowed ourselves to deviate from the initial plan and explore more focused areas along the interview process. Hence, having a well-structured thematic approach was suitable for our study as it increased the plausibility. Moreover, the abductive approach allowed us to apply a variety of method theories to the empirical material, which ensured that we did not stick to a pre-selected theory to explain the findings. Instead, it allowed us to apply a method theory that made sense given the empirical material, thus increasing the plausibility.

4. Empirical Analysis

4.1. Overview of the Management Accounting in UniHealth

In the empirical analysis, we used the conceptual constructs derived through our synthesis of accounting talk (Ahrens, 1997; Bukh et al., 2021; Carlsson-Wall et al., 2016; Englund et al., 2013; Hall, 2010; Jönsson & Solli, 1993) to capture and analyze the two tactics of contextualization and disaggregation to make accounting information intelligible for clinicians in UniHealth.

Management described the governance in UniHealth as decentralized, and they emphasized the importance of letting the departments have clear mandates to make decisions regarding their clinical activities. Furthermore, UniHealth's philosophy is based on 'trust-based management', meaning that decisions are made close to the clinical practice, which also shaped how the finance department worked with management accounting:

> The financial and clinical management is entirely based on the management philosophy that the hospital has. So, we try as much as possible to adapt the financial management to that. Much of what we are talking about here right now is trust-based management. As much as possible, as many decisions as possible should be made as close to those affected by the decisions as possible. (Finance Director, Hospital)

The management accounting was therefore designed in a flexible manner meaning that it could be adapted based on each department's clinical needs, thereby functioning as enabling rather than limiting, in line with trust-based management: "We try to keep financial management as loose as possible so that as many decisions as possible can be made locally [in the departments]." (Finance Director, Hospital). A high degree of decentralization allowed for the accounting information to be customized into a clinical context and as the quote suggests, clinicians played a central role as their daily decisions had a clear impact on the financial outcome. The director of the emergency department emphasized this view: "My view is that in healthcare, a lot of the costs are far out, or the mandate and decisions about the costs are far out." (Department Director, EMD). As indicated by this statement, a certain degree of cost consciousness on the clinic floor was thus a prerequisite for sustainable use of financial resources in UniHealth's decentralized structure. Hence, it could be seen as important for the accounting information to be translated into a clinical context to gain traction among clinicians.

Clinicians' decisions were intertwined with financial consequences, but as described by several interviewees, it was the medical needs that guided them in their decision making rather than financial considerations. This potential conflict between medical care and financial resources could pose a challenge for the department directors and unit managers since they were held accountable for the departments' clinical practices and financial compliance in line with UniHealth's concept of three-legged managers. In order to gain

credibility as a manager, and be able to anchor decisions of a financial nature, it was seen as beneficial to have had a clinical background and let that experience color the way you communicated to clinicians, as described by the hospital director:

> I think it is important to communicate an understanding to the department, to convey that they know what it entails with financial measures. An empathy, a warmth in this conflict between work environment, patient safety, availability, and finances. [...] It is absolutely an advantage to have a clinical background [as a manager]. There is an acceptance that it is harder to achieve if you do not have a clinical background. (Hospital Director, Hospital)

The finance director also commented on the importance of having clinical experience both in terms of expertise and credibility:

> If you [the unit managers] have no background at all in clinical work, then you do not have the credibility to push things through [...] So it is an advantage that they [the managers] have clinical grounding [...] Firstly, because they understand the reality they are supposed to change and lead. Secondly, it is a matter of credibility. Those who are to be led, those who are affected by changes, know that the person talking to them knows what they are talking about. So, I think it is an advantage. I do not think you should govern a reality like this with a heavy hand and with written [financial] documents. (Finance Director, Hospital)

The advantage of having a clinical background could be attributed to their familiarity with clinical practices, as they are expected to manage clinicians in their context. Therefore, it was important for managers to understand the operational context, as it was not seen as reasonable to steer clinicians through strict financial control tools. Even though there were no formal requirements in some managerial positions to remain clinically active, several managers from both the emergency and surgical department expressed a willingness to continue clinical work and viewed it as advantageous for their managerial role:

> I definitely have to keep a small part of the clinical role. I have seen my previous bosses who have had my role. As soon as they have stopped with the clinical work, they have become irrelevant in medical discussions. Pretty quickly, they have been seen as 'has-beens'. And I do not want to be that. I want to be clinically relevant. (Department Director, SUD)

Similar arguments concerning the importance of being up to date to get acceptance were also raised by unit managers for both doctors and nurses: "You quickly lose [clinical relevance when you become a manager]. Both the clinical aspect, but you also lose touch with reality, if we put it that way, a little bit with what is happening out in the clinic." (Unit Manager & Doctor 2, EMD). Furthermore, being present on the clinic floor also established credibility and built rapport with the clinicians: "I think there is a need among the clinicians for the closest manager to be present and experience certain things that they might be experiencing. I have noticed that I can bring some weight to certain matters because I also speak from my own experience." (Unit Manager & Nurse 1, EMD)

In summary, UniHealth's management opted for a decentralized governance structure because costs were mainly driven at the clinical level. Moreover, as the costs primarily relied on clinicians' professional judgment, incorporating cost consciousness into clinical practices was important for UniHealth's trust-based management philosophy to function

in practice. The conflict between financial outcome and clinical performance required three-legged managers to balance the different considerations. Hence, unit managers had an integral role in establishing an understanding of the links between costs and medical considerations among clinicians.

4.2. Clinicians' General Attitudes Toward Accounting Information

Throughout the interviews, it became clear that the medical objective was the guiding principle for clinicians, where factors such as patient care and safety were in focus rather than financial aspects: "It is not finances that govern the priorities, it is healthcare, and that is how it should be, I think." (Nurse 1, SUD). In line with its professional ethos, many also expressed limited interest in the less understandable area covering accounting information. As expressed by an assistant nurse, it was a matter of both lacking interest and, to some degree ignorance:

> Interviewer: Is there a lot of waste at the clinic?
>
> Interviewee: Yes, I mean everything from laundry to surgical dressings to food.
>
> Interviewer: Why do you think that is the case?
>
> Interviewee: I think it is both a lack of interest and ignorance actually [about costs]. People do not care. [...] All blood tests, all medical examinations, they cost, just like when we send patients away. I do not think anyone even thinks about what it costs. (Assistant Nurse 1, SUD)

Another factor besides the lack of interest and ignorance about costs was the difficulty for clinicians to understand how decisions regarding one patient could negatively impact another. These horizontal priorities were not managed in a proper way, which impacted the optimal use of financial resources, as commented by a unit manager:

> Everyone agrees that resources are limited and that we must find the most cost effective way to solve the problem, everyone must strive for that. But it is very unusual for people to be willing to weigh the benefit of what I am doing myself against what someone else is doing. No one wants to give up the benefit they provide to their patients for the sake of allocating that money to someone who could potentially provide greater benefit. Because then my patients would not get the help they need. We have no system whatsoever for managing these horizontal priorities, and this leads to money being used to a very high extent for the wrong things. (Unit Manager & Doctor 1, EMD)

Interviewees also expressed difficulties understanding UniHealth's financing and use of financial resources. Hence, clinicians found it hard to be guided by something they did not understand or were familiar with. According to a nurse, this layer of complexity rendered it challenging to translate clinical decisions into costs that had a meaning at an aggregated level, thus further impacting the attitude toward accounting information.

> It comes money to the region and eventually to the healthcare system, and healthcare then costs. Everything goes into a black hole. If I save on one end, someone else pays more. In the end, it is the same money being consumed anyway. It is completely impossible to understand. Both from

> a health perspective and from a financial perspective, healthcare is so complex that it is very, very, very difficult to, based on the choices we make, see the effects forward. (Nurse 2, EMD).

However, despite comments regarding lack of interest and the complexities of linking clinical decision making to financial effects, a nurse expressed how a cost conscious perspective was supposed to be integrated into their role: “It is part of my profession to make financially sustainable choices. It is basically written into a nurse’s role description, where it explicitly states that one needs to consider health economic aspects. Although I am not sure how many actually do that, I can say.” (Nurse 1, EMD). Moreover, a doctor expressed that even though financial aspects were sometimes discussed, especially in situations regarding very advanced surgeries, it was seldom the deciding factor. “We do not think so much about it [costs regarding treatment alternatives]. I think it is the managers who have to think about what it costs. We should do what is best for the patient.” (Doctor 2, SUD). From a managerial point of view, there were varying attitudes toward dealing with accounting information, albeit it was part of their role description. As previously mentioned, several clinicians decided to remain clinically active also when they stepped into a managerial role. However, it also meant that administrative duties could conflict with the clinical work, as commented by the controller of the surgical department: “There was a unit manager who complained to me once and said, ‘I am a doctor, I am a manager, damn it, I am also an administrator?’” (Controller, SUD).

Communication of accounting information to the clinicians occurred quite infrequently, according to a nurse: “In regional care, we seldom talk about finances, other than acknowledging that the economy is bad at the moment, and then maybe seeing the effects because we are not rehiring nurses or whatever it might be.” (Nurse 2, EMD). This view was further confirmed by another nurse who said that accounting information on the floor had a negative connotation, following the circumstances in which it was usually communicated: ”It [finances] is communicated that ‘now we cannot hire’, for example, a team coordinator due to a hiring freeze. Such things are communicated. [Interviewer: So, it is more negative?] It is when there are problems, exactly.” (Nurse 1, EMD). Additional statements indicated a low emphasis on the accounting information during meetings as a doctor commented: ”We clinicians mostly hear about the budget when the annual closing is done. We mostly find out how much we have gone into the red. [...] It was like that, 40 minutes and then there were two slides about the budget, and now we are in a deficit so we have to save, that was pretty much it.” (Doctor 2, SUD). Furthermore, when discussing the effect of linking clinical decisions and finances, the following quote once again highlighted the internal order of importance, placing medical needs at the top:

> I believe it is positive [to discuss clinical work and finances], but it is still the case that we [the nurses] and the doctors are here for the patients. I believe it is a deliberate choice not to do so. It is because we should be driven by our professional ethics rather than financial incentives. We should make a health-economic assessment of what we are dealing with, but it is still secondary to the patient’s medical needs. (Nurse 1, EMD)

The difficult financial situation that UniHealth faced in 2024 became extra complicated given the Covid-years that recently passed, where the finances were clearly deprioritized: ”So we have ended up in a situation where those who perform care [clinicians] were almost told not to think about the finances. And then we come out on the other side of the three years and then the inflation shock came.” (Hospital Director, Hospital). This view was confirmed by a department developer: “During Covid-19, we did not think about the finances. Then we were just trying to survive and get rid of a pandemic. [...] But then came the backlash afterward.” (Department Developer, EMD). Following a turbulent macroeconomic situation and a surge in inflation, which impacted the financing of UniHealth, the top management thus had to change direction and focus more on cost saving initiatives. The inconsistent communication of accounting information, combined with its occurrence primarily during periods of heightened economic constraints, resulted in notable effects. Firstly, the infrequency of exposure to financial discussions resulted in reduced familiarity with such information for clinicians. Secondly, it led to accounting information getting a negative connotation, thereby rendering it challenging to guide clinicians based on accounting information, as it was perceived as unreasonable.

4.3. The Usefulness of Traditional Control Tools

> So, the steering tool [the budget], if one were to be really formal, and that is what has happened here now that I have started to get a bit tougher, is the budget. ‘Here you have the funds you are allowed to spend’. However, historically, we have never actually stayed within budget. So it has become a bit like that. But formally, the budget is the steering tool. (Finance Director, Hospital)

According to the finance director, the budget was the foremost steering tool. However, as UniHealth adopted a decentralized governance structure, the departments received a lump sum of funds with less detailed guidance on how it should be spent. This allowed greater flexibility in allocating the financial resources to what they perceived as necessary within the budget, as commented by the finance director: “It is not so detailed, where you should spend SEK 20 million on this, you should spend SEK 10 million on that, instead, you rather receive a package of money to spend.” (Finance Director, Hospital). It seems like the top management intentionally designed the budget in a flexible manner to ensure that the departments had autonomy in decision making and assumed responsibility for budget compliance. The director of the emergency department seemed to be aligned with the financial director regarding the budget’s usefulness:

> As I mentioned before, it [the budget] is an immensely powerful steering tool, perhaps the strongest. What emerges at the bottom line says a lot. [...] The budget is something I would not want to be without. But you have to read it in the right way. If I start with the red number at the bottom right corner and look for other red numbers and then act immediately, then you risk making a misstep. But quite often, if you reason and try to understand what lies behind it, if it goes down one week or goes up another week, then we start to wonder, ‘what is the reason?’ That week we had a patient with a lot of tubes, then it was needed for us to deliver quality or save on the total. So yes, it is a control tool but you need to use it in the right way. (Department Director, EMD)

This quote indicates the necessity of using the budget effectively to gain benefits from it, a view which was supported by the other department director: “I think it is quite good. The plan or budget or whatever you want to call it.” (Department Director, SUD). However, the budget’s role as an appropriate steering tool is not entirely accepted further down in the respective departments, as suggested by a unit manager: “I think that the budget might not be the right way to manage. You should steer based on the number of patients. You should steer based on efficiency.” (Unit Manager & Doctor 1, SUD).

Despite the perception of the budget as a powerful control tool, it was rarely met: “It happened to me during the pandemic. Then we received a lot of state aid. Then we even ended up with a surplus.” (Department Director, EMD). During normal circumstances, it thus seemed like the budget was not met, indicating a discrepancy between clinical needs and budgetary constraints. The implications of this were experienced firsthand during interviews where a doctor’s frustration resulted in a view of the budget being an unreasonable steering tool in UniHealth:

> There is an imbalance between the finances and reality. [...] The budget is just a piece of paper. No one knows what things will cost [...] If you cannot adjust the budget and the conclusions around the budget based on those premises, then there is no point in having a budget at all. You must be able to hold those two thoughts in your head at the same time. Yes, you can have a budget to start from, but the budget goals must still be adjustable based on reality, and the reality is also beneficial for the clinic and the operation. (Doctor 2, SUD)

It was evident that the budget was neither disaggregated nor contextualized into the clinician’s operational context, which contributed to a distancing toward the financial control tool. A similar perception was observed at the managerial level, where the budget’s usefulness was also questioned:

> I am a recipient of a number. And when I receive this number, I know that I will not be able to meet this number. And the one who gives me the number knows that I will not be able to meet this number [...] As soon as the January figures come, and they will be decided at some point during the week, we will with precision, just like the past years I have been a manager, be able to predict how much we will exceed the budget. In all honesty, we could have said that two months ago as well. (Unit Manager & Doctor 1, EMD)

The unit manager expressed with confidence an ability to predict the financial outcome better than the budget, which further reinforced the lack of connection to reality that seemed to undermine its acceptance as a communicative tool of accounting information. The budget was communicated solely through numbers without being mobilized in a context, so contextualization did not occur. However, it was still disaggregated to an appropriate level for a three-legged manager with budgetary responsibilities. Even if disaggregation was used, it was not sufficient to gain intelligibility, as supported by another unit manager who believed that the budget was primarily used to have something to show: “Honestly, a lot of it [the budget and action plan] is done just to have something to show, what they call a ‘desk product’. But it is not like we throw money around recklessly.” (Unit Manager & Nurse 1, SUD). It was evident that there existed skepticism

among the unit managers regarding the budget and its relevance due to its detachment from a clinical context as contextualization of accounting information did not occur.

Another aspect that affected the intelligibility negatively was the lack of clear consequences for budget non-compliance: “If I can explain what I have done and explain why I cannot keep to the budget with reasonable explanations, then there will not be any associated reprimands.” (Unit Manager & Nurse 2, SUD). Furthermore, when clinicians were asked about actions taken if the budget was not met, it appeared that no drastic measures, such as closing clinics, had been undertaken, as indicated by a unit manager: ”No [consequences], I mean, we have been getting away with a multi-million deficit year after year. That is some sort of approval.” (Unit Manager & Doctor 1, EMD). The absence of clear consequences was also described as a challenging factor impacting the budget’s role in communicating intelligible accounting information:

> I think one challenge in this is that we have always had a deficit. Especially in the emergency department, you could say, but the hospital has always had a deficit. Then there have been dramatic cost increases. But nothing has ever happened. It is not like a top manager comes in at the end of October and says: ‘Now your money is gone, I am locking this door’. (Department Developer, EMD)

An additional challenge in establishing the budget as an intelligible tool was the infrequent discussions about its importance: “It is a cyclical thing. When I started working, it was all about lean management, budget, budget, budget. Then a new era came and there was no talk about money. Then it was all about accessibility, accessibility, accessibility. [...] I cannot take it seriously; I find it hard to relate to.” (Doctor 2, SUD). The inconsistency seemed to be evident when talking to employees with managerial responsibilities as well: “When you have worked for many years, you are quite used to ups and downs [with financial discussions]. Financially, it has been fairly stable for a few years, now it is a critical situation again. And you know it is going to come back.” (Unit Manager & Nurse 1, SUD). The sporadic budget communication to the clinicians reduced familiarity with accounting information, as they were exposed to that type of communication only during specific periods. However, there have been certain initiatives from top management aimed at increasing cost consciousness by linking the budget to clinical practices in various ways. Although no longer used, interviewees brought up the examples and illustrated clinicians’ general attitude toward steering the profession with financial arguments.

> I usually think it has been pretty bad to make improvements when emphasizing a financial perspective. It is not a motivator. Many years ago, certain measures were linked to the budget. For example, we need to assess if patients have a risk of falling. There is a routine for this assessment, and it should be filled in, and so on. And when it started 15 years ago, then it was linked to the budget. You get a budget, but if you do not do these risk assessments and care plans regarding falls and pressure ulcers and such to a sufficient extent, then you do not get your entire budget. It was completely ineffective. People just got angry. Trying to control such content in healthcare in that way with a kind of budget threat is bad leadership. Because you should assess

> the risk of falls to counteract the risk for the patient, the staff understand that, because that is the core. (Department Developer, EMD).

In this example, clinical practices were explicitly linked to the budget with the aim of steering the clinicians in their daily activities. Implementing budget reductions by not adhering to clinical guidelines was ineffective and resulted in a negative attitude toward financial controls as it was not seen as a reasonable measure. A unit manager provided an additional example:

> Over the years, the hospital has used various incentive funds and queue investments, different types of rewards if you treat a certain number of patients or if you enter a certain code into the medical records. For a while, you had to be diligent about documenting, for example, that you had provided advice on quitting smoking, and it became so trivial that eventually everyone just entered this code and received SEK 350. Such things are a bit, not a waste of money, but I think if you are going to motivate the staff with such things, it should be something that really benefits the patient. (Unit Manager & Nurse 1, SUD)

While the first example demonstrated that budget reductions would occur if certain clinical guidelines were not followed, the second example showed that not even budget increases may be a reasonable method to steer clinicians. Hence, both quotes illustrated that linking the budget to clinical practices had no positive impact on attitudes toward cost consciousness, regardless of whether it involved reductions or increases. A third example, which was still in use, relates to forms being filled in if a patient had been injured in traffic. The clinicians were reminded to fill out forms as the clinic received financial compensation from the Swedish Transport Administration. However, the attitude toward this argumentation appeared to be negative as it was not contextualized to their clinical practices, which reduced the intelligibility of accounting information, as indicated by the following quote, which was said with sarcasm and laughter afterward: "The only positive thing is that we get Friday breakfast from these traffic claim forms." (Nurse 1, EMD)

To summarize, it was recognized that the budget held significance for UniHealth's management team to communicate accounting information in guiding clinical practices to a certain extent. However, it was also evident that the budget faced challenges due to several reasons. Firstly, clinicians found it difficult to accept the budget as a steering tool due to its lack of intelligibility stemming from the infrequent communication of the budget, and a perceived lack of reasonableness given its disconnection from the clinical reality. Secondly, the lack of clear consequences for budget non-compliance led clinicians to view the budget more as a formality rather than a steering tool, further reducing its intelligibility. Finally, explicitly linking the budget to clinical practices was found to have a negative impact, as clinicians seemed to adjust their attitudes based on medical arguments rather than financial considerations. The budget as a communicative tool of accounting information was not intelligible because clinicians did not perceive the information as familiar or reasonable. Despite efforts to link clinical practices to the budget, such measures were not fully customized to the operational context, even if

contextualization occurred to some degree, it was not sufficient to become reasonable or familiar. Hence, it seems like contextualization can occur in different degrees. The same goes for the tactic of disaggregation as the budget seemed sufficiently disaggregated to the unit managers but not to the clinicians working solely clinically. Consequently, accounting talk based on our conceptualization was not evident when communication about the budget occurred in UniHealth.

4.4. Alternative Ways of Facilitating Cost Consciousness

As the interviews progressed, we aimed to gain deeper insights into the attitudes toward cost consciousness among clinicians, particularly when the communication of the budget lacked intelligibility for clinicians. It appeared that managers deployed various strategies to foster cost consciousness. However, establishing a more financially oriented mindset seemed to be difficult:

> I am not really sure how to involve the clinicians on the floor [regarding cost consciousness]. How to increase awareness when you are working with patients, it is not easy. [...] Sometimes you might think that the clinicians would be a bit interested. But I would assume that, generally, the further down on the floor you go, the less you actually know [about the financials]. More than what you can read in the newspaper or see on the news. (Unit Manager & Nurse 1, SUD)

As the clinicians seemed to have limited knowledge about UniHealth's financial situation, it appeared important to establish an understanding of how daily clinical activities affected the financial outcome: "In connection with the year-end we get to see how the budget looks and how much deficit we have had, when it is such fantasy amounts, like being millions in deficit, then those blankets and compresses feel quite insignificant." (Nurse 1, SUD).

The budget deficit was so significant that clinicians struggled to comprehend such large amounts. Given that the accounting information was not disaggregated to an appropriate level, it seemed unfamiliar in comparison to the daily tasks of nurses, i.e., how small expenses, like blankets, can impact such a large deficit. Another nurse commented on the importance of translating accounting information into a language and setting that was familiar to clinicians, i.e., using the tactic of contextualization: "For a few years, there has been a bit more talk about this idea of a financial situation in balance and such, more like some sort of mantra than something that translates into reality for us on the ground. Finances do not mean anything in that sense." (Nurse 2, EMD). The importance of translating numbers and relating them to a familiar context aligns with the definition that accounting talk should customize the accounting information to an operational context to give the numbers meaning; hence, the necessity for intelligibility appeared evident. This was further supported by the finance director, who exemplified how to translate numbers into a familiar setting by using an analogy building on the metaphor of comparing financial considerations in the clinic to household finances:

> Much of what we do is pedagogy, I mean, translating the financial reality into decision makers' realities. Because we have this trust-based system, the [financial] reality can reach down to the nurse meeting a patient. So you constantly have to translate the financial reality into something graspable in their context. And it can be things like household finances, you know, okay, you are going to do surgery, you have two screws to put in the knee, use the cheaper one, because then you have more money for something else. (Finance Director, Hospital)

UniHealth's management and the clinicians agreed that for accounting information to be made intelligible, it needs to be contextualized, i.e., translated into the clinicians' reality. In line with the trust-based management philosophy, the ultimate responsibility for this contextualization relies on managers: "I rely on my management system [for contextualizing finances], with three-legged managers who take responsibility for it and report back." (Department Director, EMD). Moreover, the managers had significant autonomy in how often they were supposed to communicate accounting information to clinicians: "I have not said [to the unit managers] that you must talk about the finances, and I have not defined when you should do it, but I perceive that it is part of the unit manager's responsibility. And it is a part of contextualizing the task in some way, which is actually difficult." (Department Director, EMD). Although contextualization holds significant potential, it was noted that its application can be challenging.

Various concrete initiatives had historically been implemented in UniHealth to increase clinicians' cost consciousness by trying to make abstract accounting information more intelligible: "Previously they put up the cost of 'Mickey Mouse' gloves versus a pair of medical rubber gloves so that you would become aware of what you choose. And it was quite good actually, because there were big differences, I can tell you." (Assistant Nurse 1, SUD). The historical practice of disaggregation, i.e., breaking down financial numbers to a level that makes sense for the recipient by explicitly communicating unit costs, was apparently something that had an impact on cost consciousness. Moreover, the disaggregation of numbers and displaying unit costs for various items also exemplified the tactic of contextualization since these figures were placed in a specific clinical context that aligned with clinicians' daily practices. Such initiatives were reintroduced:

> We have tried quite a bit [to establish cost consciousness] with different surgical dressings, because there can be quite a difference in price. Like, putting up what it costs. This size might cost this much compared to a similar one, which might be half the price. But it is not easy to get the clinicians to think about it. [...] Otherwise, it is often like 'aha moments, wow'. I mean, it is very useful. 'That one you just opened and threw away half of might cost maybe SEK 200'. That is quite a lot of money in a day. (Unit Manager & Nurse 1, SUD)

It appeared that disaggregating numbers and explicitly communicating costs for disposables, in their context, surprised clinicians with how their daily practices could affect the financial outcome on an aggregated level. Moreover, it also seemed to be the most noticeable factor impacting clinicians: "Post-it notes are the most visible thing we do to make people aware [of what things cost]" (Controller, SUD). In addition, the use of labeling costs for everyday communication of accounting information had support on higher organizational levels as well: "And right now, because we are facing this financial

crunch again, we have started putting up post-it notes for everyday savings. Everywhere. We are trying to get people engaged at least." (Department Director, SUD). Furthermore, labeling costs for disposables like gloves and surgical dressings was also a way of contextualizing since the post-it notes were put in a context that made sense for clinicians' everyday decision making and appeared to foster a better understanding of cost consciousness:

> Now we have actually started putting up notes on the different items. This is how much this and this costs, then there is a better understanding because some medications are terribly expensive. Just make sure that you do not accidentally mix them up but rather use them correctly so you do not just have to throw them away. So we try to raise [financial] awareness for the items that are either used in large volumes or are more expensive, so we price them with labels. (Unit Manager & Nurse 2, SUD)

The labels served as a communicative tool for clinicians to understand how clinical practices translated into costs and continuously reminded them of the importance of being disciplined when dealing with more costly medicines in clinical work. Another example provided by a nurse illustrated how disaggregating accounting information and putting it in an operational context can promote cost consciousness:

> I have an acquaintance who worked in another healthcare system where they have private insurance. Then she said that you had to register [material] because the insurance company wanted to know all the costs. So as soon as they made the bed, they wrote it down, as well as all the disposable materials they used, it was like writing it on a checklist. Then I can imagine that we would have become aware of what sheets cost if we had to write down every time we used them. (Assistant Nurse 1, SUD)

By writing up the costs for each disposable, the link between decisions and their financial impact became more understandable, as clinicians were directly exposed to the costs. In this setting, the checklist served as a tool for contextualizing accounting information and actively engaging clinicians in thinking about costs. Efforts to break down such information to the individual level were also made in UniHealth, as described by one nurse: "If each person saves SEK 31 per shift, apparently we [UniHealth] save SEK 100 million. So we should think about not wasting." (Assistant Nurse 1, SUD). Furthermore, both contextualizing and disaggregating abstract financial numbers to clinicians make the accounting information intelligible. However, it seemed like not deploying these tactics resulted in a reluctance toward cost consciousness:

> The finance director posted on the intranet last week, where (s)he wrote something like 'now everyone must pitch in'. There was nothing wrong with it, but it was very vague. And then the comment section exploded. Because you can not just say: now we must cooperate to solve a difficult situation. 'How? What is happening?' I mean, people want a bit more concrete information. (Department Developer, EMD)

Several interviewees highlighted the importance of accounting information being contextualized to their daily clinical practices to understand how their behavior actually impacted UniHealth's financial situation, as stated by a nurse: "The finances must be so simple that those who are going to perform the work that affects the finances understand

the impact they make." (Nurse 2, EMD). This statement suggested that for accounting information to influence clinicians, it must be related to the receivers' reality. Failing to do so may reinforce negative connotations associated with accounting information, as evidenced by the following quote: "I do not think anyone would have found it [accounting information] interesting, they probably would have just gotten angry. It would have been like: 'What am I supposed to do with these numbers?' Because it is so far from what we actually do." (Nurse 2, EMD)

In summary, although establishing cost consciousness among clinicians was seen as difficult, various initiatives in UniHealth had been used to impact their attitudes. One such initiative involving the tactics of disaggregation and contextualization was labeling disposable costs in a clinical context, facilitating clinicians' understanding of how their micro-level decisions influenced the financial outcome. Labeling costs, combined with communicating how disaggregated savings per shift can contribute to significant savings on an aggregated level, seemed to reinforce the intelligibility of accounting information further. Hence, moving from aggregation to disaggregation and vice versa was seen as fruitful in communicating accounting information. Staring out on the aggregated level was seen as too far away from clinical practices ('fantasy amounts'), whereby disaggregation made it more familiar to clinicians. Once this abstract number was brought down and given meaning in a clinical context, it was possible for clinicians to see the link between daily decisions and abstract accounting information.

4.5. Unconventional Ways of Establishing Cost Consciousness

Besides the aforementioned strategies, interviewees on multiple organizational levels frequently referred to a clinical initiative called 'Choosing Wisely'. The initiative emerged as a way to reduce unnecessary tests, treatments, and procedures to use available resources more effectively, thereby improving healthcare and reducing patient risk: "Choosing Wisely is based on the assumption, which is supported to some extent, that 20-30% of the things we do add no value, and we want to address that. To be able to do other things with it [the money]." (Department Director, EMD). During the site visits, we observed posters with five clinical guidelines for selected Choosing Wisely initiatives, such as the following: "Do not take repeated blood tests during illness remission or stable conditions. No proven benefit regarding patient mortality, readmission, length of stay, ICU care, or adverse events." (see Appendix E).

These posters guided clinicians in their daily work and were one example of how Choosing Wisely information was constantly communicated to clinicians using a familiar language. However, throughout the interviews, the initiative appeared to be broader than just these posters and more as an integrated way of thinking in UniHealth: "The department director said that Choosing Wisely applies to every aspect of everything we do. [...] We try to apply it to all clinical decisions, like yesterday we talked about performing surgery on the right patients." (Controller, SUD). Multiple interviewees

explained how patient care was the focus of clinical decision making in line with its professional ethos, and costs were not central in communication, as commented by the hospital director:

> I believe we would not like to see this [Choosing Wisely] as a cost saving initiative, but as a method to provide the patient with the proper care, to conduct the right examinations, to spare the patient things that are not beneficial. It also has a financial effect in many cases. But we do not want it to be the primary driving force. The primary driving force should be to do what is right for the patient. (Hospital Director, Hospital)

The perspective on viewing Choosing Wisely as an initiative centered around a familiar context, namely, medical practices, instead of around accounting information, was evident when a clinician shared: "Choosing Wisely did not start because we needed to save money, it has become a side effect, you could say, that we save money by thinking from that concept." (Unit Manager & Doctor 2, EMD). However, it seemed that appropriate patient care and cost conscious decisions often aligned, thus making it possible to integrate accounting information in clinical activities, as supported by a nurse: "My experience is that health economic aspects and Choosing Wisely almost always correlate" (Nurse 1, Emergency). While the internal communication revolved around patient care, as evident by observed posters and interviews with clinicians, there was a financial thought behind Choosing Wisely, as stated by the finance director:

> There is an indirect financial thought behind [Choosing Wisely]. It is about using every dollar or hour, that is, personnel resources, in the right way. However, it is not formulated around financials but rather as what is best for the patient, which it is, and what is best for those waiting in line for treatment, which it is. But it does have financial consequences. Overall, we often try to manage the finances this way: that improvements in clinical work yield financial gain. (Finance Director, Hospital)

Even if there were cost savings in making clinical decisions in line with Choosing Wisely, it was not used as an argument for clinicians to incorporate accounting information in clinical decision making. Instead, it was framed around what clinicians were familiar with, i.e., doing what is best for the patient, a view which a clinician confirmed: "My feeling or experience is that at the management level, they do not use financial arguments. Instead, they use the Choosing Wisely arguments based on it being better for the patient if you do less." (Nurse 1, EMD). Furthermore, the initiative was seen as advantageous since it was familiar, facilitated by contextualization of how to make a difference in clinical practices:

> It is understandable. You can explain Choosing Wisely quite easily, which makes it understandable for many, and not a goal that is somewhere far away. Instead, each person can truly make a difference. And just making a difference for two patients, we usually say, per shift, then we have saved a lot. If we think about the finances, we have saved quite a bit in a year. (Unit Manager & Nurse 1, EMD)

It was clear that the positive financial effects were not explicitly used as an argument for Choosing Wisely, despite the apparent benefits. Even the finance department referred to patient benefits over financial gains in communication to clinicians: "Cold finance might

not be the best way to communicate [to clinicians]. Often, it [finances] goes hand in hand with what is good for the patient. So, when I communicate, I try to emphasize that aspect a bit more." (Controller, EMD). This way of de-emphasizing the financial benefits in the communication was echoed by a unit manager confirming the impact of Choosing Wisely and highlighted the importance of using clinical language to motivate and steer the clinicians to a desired behavior:

> It has taken quite clear expressions since we started using it [Choosing Wisely] as a strategy. We are still decreasing month by month, two or three years in, regarding how many lab tests we take and how much imaging diagnostics we order without seeing any signs that it has negatively affected the medical quality [...] If I want to get my doctors to stop doing things, I need to motivate it with patient benefit or system improvements, i.e., logistics. 'Your work or the patient's life becomes easier if we choose this path.' If you make the right choices in line with Choosing Wisely, it also costs less in the end [...] You cannot get clinicians to work with strict economic incentives. (Unit Manager & Doctor 1, EMD)

The argument for encouraging clinicians to follow Choosing Wisely guidelines seemed to center around patient care, with financial benefits playing a subtle or non-existent role despite the clear financial advantages. Consistency was also brought up as important for the initiative to get traction. This consistency was reflected in the posters that constantly reminded clinicians about five clinical guidelines centered around patient care. Interestingly, the poster mentioned costs explicitly only once (see Appendix E), even if all guidelines were associated with financial benefits. Furthermore, bi-weekly meetings (APTs) provided a platform for interactive discussions, allowing clinicians to understand the guidelines, ask questions and share insights. Besides this, discussing the initiative in everyday practices was also seen to be important as it facilitated the integration of Choosing Wisely into clinical practices:

> We talk about it [Choosing Wisely], not just once but many times. What we have seen is that when we talk about it, it goes really well. There was a resident doctor who did a study on blood transfusions, that it should only be given above a certain hemoglobin level. Then we were really good at following it. But then we stopped talking about it, and then we were back to where we started. So it is about persistence and repetition. (Unit Manager & Doctor 2, EMD)

Besides regular discussions about the initiative, providing feedback on the clinicians' alignment with Choosing Wisely objectives was also one important form of communication to create motivation: "You want to provide feedback, of course you want to provide feedback. 'You have been really good', we have done fewer x-rays, we have put much less strain on the environment, we have not exposed the patients to radiation, and in the end, we have saved SEK 2 million" (Department Developer, EMD). Despite being an initiative focused on patient benefits in communication, UniHealth was still tracking its financial effects, as explained by the hospital director:

> We do this [follow up the effects] by having the departments present the Choosing Wisely initiatives they have undertaken. It is possible to quantify the savings, for example, like doing fewer radiological examinations, giving blood only when necessary, or decreasing certain tests that do not need to be taken. It is quite concrete to look at. (Hospital Director, Hospital)

As explained, Choosing Wisely could be followed up financially. During the interview with the controller at the emergency department, we were shown an example of a Choosing Wisely report. The controller provided the following comments during the walkthrough of the report: “Here we can see how the radiological examinations have developed, and then you see that it has decreased quite significantly, and the same goes for lab tests, and these are then number of tests, so to speak.” (Controller, EMD). These types of reports were then distributed to unit managers, and the following quote illustrated how this type of communication could look like:

> Interviewer: Is Choosing Wisely communicated based on patient care?
>
> Interviewee: Yes, I would say that. I never emphasize finances that much, but then it becomes a byproduct. But it is communicated that we should not do things that are unnecessary or harmful to the patient, so I would say that is the focus.
>
> Interviewer: How are the discussions about Choosing Wisely between you and unit managers?
>
> Interviewee: I send a report per unit about once a month, including the number of tests or medical examinations done per patient.
>
> Interviewer: Is accounting information always communicated then?
>
> Interviewee: No, I would say never. We focus on the number of tests. So we look at the numbers because prices change all the time, and of course, I keep track of how it is going financially but in communication to clinicians it is the number of tests. (Controller, EMD)

The reports sent to the unit managers included information they were more familiar with, e.g., the number of tests and medical examinations, rather than cost savings. However, it appeared that the controller kept track of how the number of medical examinations impacted the department’s finances. Furthermore, this was supported by another controller when asked about the significance of KPIs that follow how many medical examinations have been conducted: “I do that because I want to see how much money we have saved. So I compare the numbers over time”. (Controller, SUD). Hence, it was clear that the finance department monitored the financial impact of certain Choosing Wisely guidelines even if the financial benefits were not communicated. The reports, including the number of tests and medical examinations, were then distributed to unit managers, who were supposed to communicate the information further down, in line with the trust-based management philosophy:

> It has to be communicated in a way where you see the benefits for the patients and where you see the benefits for the staff as well. That is to say, by not performing this task, you free up time for yourself. You free up time for your other patients. And then we are all satisfied because it aligns with the finances [...] But Choosing Wisely has been quite a significant contributing factor in our success because we have the staff onboard with it. But for them, it is focused on the work environment and well-being, and when that has a positive effect the finances are also positively impacted. (Unit Manager & Nurse 1, EMD)

As the financial effects of Choosing Wisely initiatives were not explicitly communicated to the unit managers, they were rarely visible in discussions with subordinates, even if

their actions resulted in cost savings, as supported by another unit manager: "It [communication of Choosing Wisely] is like you have done something good for the patient and also saved a bit of money, but that is very secondary. Very few feel satisfaction from having saved money in the system" (Unit Manager & Doctor 1, EMD). This way of communicating to clinicians seemed to align with its professional ethos and thereby appeared more reasonable, as commented by a nurse: "The motivation does not come from the financial aspect and money but from the fact that the patient should feel good, the care should be good, and we should have a good working environment." (Nurse 2, EMD)

In addition, as Choosing Wisely seemed to resonate with clinicians, other similar initiatives emerged, namely 'Hospital Home', where patients are cared for in their homes rather than hospitalized. Clinicians had a positive attitude toward the initiative as it improved patient care: "Patients feel better at home. They sleep better, they eat better, and they recover faster. So it is better being at home rather than being hospitalized where there is a greater risk for infections." (Unit Manager & Doctor 2, EMD). Furthermore, the financial benefits seemed to be as evident as for Choosing Wisely: "It [Hospital Home] is very good if you compare it with the standard price for a hospital bed." (Department Developer, EMD). Moreover, Choosing Wisely and Hospital Home shared several similarities regarding their focus on patient care:

> [Interviewer: Is it the same type of communication with Hospital Home as with Choosing Wisely?] Yes, exactly. The clinicians are there for their patients, so I think that should be the communication. It is rare that what is good for the patient is not also good for the finances. (Controller, EMD)

In summary, while the establishment of cost consciousness among clinicians has been difficult, clinical initiatives called Choosing Wisely and Hospital Home have emerged and demonstrated a positive impact on the establishment of cost consciousness. Using the derived conceptual constructs from our synthesis of the accounting talk literature, we identified the tactics of contextualization and disaggregation inherent in the Choosing Wisely and Hospital Home initiatives. For example, Choosing Wisely was contextualized since the guidelines were customized to the clinical context and centered around clinicians' familiar daily practices, which aligns with the underlying logic of prioritizing patient care over financial considerations. Hence, it became reasonable and gained traction among clinicians. Furthermore, contextualization was complemented with disaggregation as the initiative was broken down into five clear guidelines. Combining the two tactics led to Choosing Wisely being seen as understandable and acceptable among clinicians. Interestingly, communication of accounting information about the initiatives was not deployed by the finance department even if the initiative had clear financial benefits. Although accounting information was limited or non-existent in the communication to clinicians, it was evident that clinical decision making was closely monitored to get insight into whether the initiative resulted in clinicians subconsciously absorbing accounting information, thus becoming cost conscious.

5. Discussion

5.1. Pure Accounting Information Does Not Get Traction Among Clinicians

The purpose of this study was to analyze how communication of accounting information to clinicians affects their attitudes toward cost consciousness, an area that has not been directly addressed in the accountingization literature. Multiple studies have analyzed the use of management accounting in healthcare (e.g. Bourn & Ezzamel 1986; Coombs 1987; Jacobs, 1995; Jacobs, 2005; Jones & Dewing, 1997; Kurunmäki, 1999; Kurunmäki, 2004; Kurunmäki et al., 2003; Lapsley, 1994), rendering various outcomes with regard to clinicians' attitudes toward accounting practices. However, our conceptualization of accounting talk allows us to revisit the question of accountingization through a new lens, yielding novel perspectives when compared to our empirical findings. Using our conceptual constructs, we identified that communication of accounting information through the budget in UniHealth, characterized by a low degree of contextualization and a low degree of disaggregation, was not perceived as intelligible, and thus cost consciousness did not get traction among clinicians. Similar patterns of skepticism can be discerned in previous research when the accounting information has been too distant from clinicians' reality. For example, in Lowe and Doolin (1999), the tactic of disaggregation was used to monitor clinical activities by implementing a casemix accounting system, which made accounting information visible to clinicians. However, these measures were not contextualized to a sufficient degree, as management failed to communicate the purpose of the system. As a result, clinicians perceived the control system as a tool for inter-clinician comparison rather than a way to guide them into making cost conscious decisions. Hence, communicating accounting information using a high degree of contextualization appeared important for rendering the information intelligible.

Previous studies have underscored the central role of the budget in the management of healthcare, serving as a way to bridge the management perspective with the medical one and impose control of clinical practices (Abernethy & Stoelwinder, 1995; Jacobs, 1995; Lapsley, 1994). Similar observations were made in UniHealth, as the budget was considered the foremost formal steering tool according to the hospital management. Furthermore, in line with its decentralized governance structure and three-legged managers, budget compliance relied on the unit managers. Despite its formal role as a steering tool, there was an apparent skepticism among unit managers toward the budget, a view also shared by clinicians without managerial responsibilities. The budget was disaggregated down to each unit manager but not to the clinicians' level. Furthermore, an absence of contextualization hampered the translation into intelligible accounting information, similar to what Carlsson-Wall et al. (2016) found in a home care unit before accounting talk was mobilized. On the other hand, constant budget deficits impacted managers' ability to use it for contextualization since it was perceived as disconnected from clinical reality. From this point of view, our findings thereby corroborate Lapsley

(1994, p. 345) in that the budget operated partly as a "myth" since it deviated from its controlling and guiding function, hence reinforcing the sentence: "There is form but not substance".

Our findings also support Jacobs (1995) in that a more decentralized allocation of budget responsibility does not necessarily translate into increased cost consciousness among clinicians if managers act as gatekeepers of accounting information. Unit managers in UniHealth expressed that clinicians should be guided by their professional values and that discussions with them regarding accounting information just negatively affected the work environment. Similar communication patterns were observed in Pettersen and Solstad's (2014) study where clinicians were disconnected from accounting information. However, when explicit accounting information was communicated to clinicians in UniHealth, then it was often framed around the budget and did not transfer into accounting talk due to a low degree of disaggregation and contextualization. Underpinned by the importance of customizing accounting information to the operational reality, the use of the budget in its current form did not transfer into something intelligible for the clinicians. This resistance toward accounting information has been observed in the literature (e.g. Blomgren, 2003; Bourn & Ezzamel, 1986; Coombs, 1987; Gebreiter, 2022; Jackson et al., 2014; Jacobs, 1995; Jacobs, 2005; Jones & Dewing, 1997; Järvinen, 2006; Kurunmäki et al., 2003; Lapsley, 1994), and can to some extent be attributed to the language barrier between accounting terms and clinical terminology, as commented by Coombs (1987).

However, apart from the language differences (Coombs, 1987), we found that the timing of contextualization affects the perception of accounting information. We thereby nuance the view on contextualization in the accounting talk literature (Ahrens, 1997; Carlsson-Wall et al., 2016; Jönsson & Solli, 1993), by addressing an aspect that has previously been overlooked. In UniHealth, explicit accounting information was only communicated to clinicians in situations of financial hardship, like that in 2024 when cost saving initiatives were implemented and communicated in an attempt to manage large budget deficits. This timing contributed to accounting information receiving a negative connotation since it was contextualized during circumstances which made it intertwined with negative consequences for the work environment. Underestimating the importance of timing can thereby reinforce prevailing schemas among clinicians that a financial focus interferes with medical priorities and further complicates the obstacle to establishing cost consciousness in clinical activities. Moreover, timing can be interpreted in relation to two contingent factors seen as important for accountingization to occur, namely: the impact of external effects and the design of the implementation process (Kurunmäki et al., 2003). Albeit these factors should not be considered in isolation, Kurunmäki et al. (2003) address that the implementation of accounting practices in Finnish healthcare was characterized by a consistent long-term trajectory, ultimately leading to an adoption of a financial mindset in clinical practices (Kurunmäki, 1999; Kurunmäki et al., 2003). The establishment of cost consciousness thus requires time, as indicated by (Kurunmäki et al.,

2003), whereby infrequent financial communication and adverse timing do not play in favor of this as seen in UniHealth.

5.2. Aligning Perspectives by Tactics of Contextualization and Disaggregation

Our findings show that explicit accounting information communicated to the profession is often perceived as unfamiliar and abstract. As stated by Coombs (1987), integrating accounting with clinical practices presents a challenge, as clinical language does not easily translate to the concepts of budgeting and cost consciousness. Assertions like this are further supported by broader studies of accounting in practice (Goretzki et al., 2018; Ahrens, 1997), who emphasized that numbers do not inherently provide meaning. Hence, it becomes essential for the sender to frame the accounting information in a way so it becomes intelligible for the counterpart. However, following the findings in accountingization-papers (e.g. Bourn & Ezzamel 1986; Coombs 1987; Jacobs, 1995; Jacobs, 2005; Jones & Dewing, 1997; Kurunmäki, 1999; Kurunmäki, 2004; Kurunmäki et al., 2003; Lapsley, 1994), this insight seems to have been overlooked as more explicit accounting information, without consideration to contextualization and disaggregation, is expected to build knowledge among clinicians, a group characterized by a strong professional ethos with limited interest in accounting information (Coombs, 1987).

UniHealth's efforts to build cost consciousness through explicit accounting information and previous attempts to work with budget threats and financial incentives were examples of such initiatives that did not succeed. However, UniHealth also communicated explicit accounting information in line with the two tactics derived from our synthesis of the accounting talk literature. For example, labeling costs in the clinic was an initiative that showed a high level of disaggregation and was contextualized to everyday practices. Moreover, it was also complemented with communication regarding how small savings made on an individual level, broken down per shift, contributed to large cost savings for UniHealth. These tactics thereby provided meaning to the explicit accounting information and rendered it intelligible for the clinicians in our study to act upon. Our findings thereby corroborate studies like Carlsson-Wall et al. (2016) and Bukh et al. (2021) in showing that accounting talk can be achieved if explicit accounting information is contextualized and disaggregated.

Previous scholars have shown that the attitude toward adopting accounting information in clinical practices can differ among clinicians, depending on the profession and specific role being under scrutiny (Blomgren, 2003; Gebreiter, 2022). In our study, which analyzed the attitudes of clinicians including both doctors and nurses, there was no apparent divergence in the attitude toward financial considerations, neither between professional roles nor within a profession. One theme in the existing literature that became apparent in UniHealth was that of hybridization, a term referring to clinicians who have to balance financial and clinical responsibilities (Kurunmäki et al., 2003; Kurunmäki, 2004; Llewellyn, 2001). According to our findings it was important to still

be clinically active as a three-legged manager in order to be updated with clinical development and seen as relevant among the subordinates. Furthermore, the underlying rationale for hybridization, in the context of establishing cost consciousness, can be further understood when interpreted through the accounting talk lens. As contextualization and disaggregation build on transforming accounting into something familiar and reasonable for clinicians, it requires knowledge of both the clinical context and accounting. Finally, in addition to the literature on hybridization, articles like that of Jacobs (1998) showed that accounting practices like cost- and budget reports, often considered a threat to professional autonomy and clinical practices, were accepted when communicated and utilized in an association of clinicians. Hence, Jacobs' (1998) study accentuated the importance of having credibility as the sender of a message for the accounting information to be reasonable for the recipients. In other words, it is not only a matter of what is communicated, but also by whom. These findings are supported in our study as explicit accounting information, e.g., labeling costs for disposables or savings targets per shift, are made intelligible by the tactics of contextualization and disaggregation communicated by managers considered clinically relevant.

5.3. 'Opaque Accounting Talk' to Establish Cost Consciousness

In addition to the explicit use of accounting information, customized so that it was perceived as intelligible (Ahrens, 1997; Bukh et al., 2021; Carlsson-Wall et al., 2016; Jönsson & Solli, 1993), our findings show that accounting information does not necessarily need to be mobilized explicitly for the recipient to absorb the information. This awareness was, in turn, utilized in a communicative manner of accounting in UniHealth. Along these lines, our study expands upon the early findings by Coombs (1987), who showed that doctors expressed skepticism toward steering medical activities using accounting but simultaneously recognized the value of a system for better resource utilization. Two initiatives in UniHealth, in the form of Choosing Wisely and Hospital Home, were grounded in both of these insights, meaning they aimed to achieve a cost conscious attitude whilst not compromising the professional values. Combining these two considerations aligns with what Pettersen and Solstad (2014) emphasized, namely the importance of understanding different logics and adapting the communication accordingly, thereby facilitating the coexistence of different logics in a healthcare setting (Reay & Hinings, 2009).

Our findings identified that Choosing Wisely and Hospital Home were communicated to the clinicians based on their operational context, and were centered around patient care rather than financial arguments, even if the underlying rationale for the initiatives was to establish cost consciousness among clinicians. In the existing accounting talk literature (e.g. Abrahamsson et al., 2016; Ahrens, 1997; Baker et al., 2022; Bukh et al., 2021; Carlsson-Wall et al., 2016; Englund et al., 2013; Hall, 2010; Jönsson, 1998; Jönsson & Solli, 1993) the communication of accounting information is explicit for the recipient.

Building on this, our study introduces a new way of communicating, referred to as 'opaque accounting talk', meaning that the message is framed around the operational context with accounting information being opaque rather than explicit. The former refers to not communicating accounting information, while the latter refers to letting the information shine through, as in the existing accounting talk literature. Utilizing accounting talk in an opaque manner shares similarities with managing multiple logics in healthcare (Pettersen & Solstad, 2014; Reay & Hinings, 2009) since two logics are combined, but only one of them (the medical one) is accentuated in communication to clinicians, thereby fostering an indirect understanding of the underlying financial rationale.

A further insight regarding the communication of accounting information to foster cost consciousness was that initiatives could be mobilized both in an opaque- or explicit manner, depending on the recipient. For example, with Choosing Wisely, opaque accounting talk was used in communication to clinicians through an emphasis on arguments anchored in clinical practices, thereby drawing on the tactic of contextualization. Moreover, Choosing Wisely disaggregated the overarching concept of "good patient care" into individual tasks outlined by clear guidelines through posters (see Appendix E), thereby making it intelligible and easier to monitor financially. The clinicians' behavior was tracked using KPIs on the number of tests or specific medical examinations. However, the results of these measures were not communicated to clinicians as monetary values, but as absolute numbers connected to clinical activities, further reinforcing the use of opaque accounting talk. On the other hand, UniHealth's controllers translated the number of tests and examinations conducted to accounting information that was later used in communication to higher organizational levels. Hence, traditional accounting talk was used in this regard. Interestingly, our findings show that initiatives underpinned by the same purpose, in this case effective resource utilization to provide good and safe patient care, can at the same time be communicated in an opaque- and explicit manner depending on the recipient, a perspective not directly highlighted in the existing literature on accounting talk (e.g. Abrahamsson et al., 2016; Ahrens, 1997; Baker et al., 2022; Bukh et al., 2021; Carlsson-Wall et al., 2016; Englund et al., 2013; Hall, 2010; Jönsson, 1998; Jönsson & Solli, 1993).

A factor in our study contributing to the use of opaque accounting talk may be attributed to clinicians' high professional status (Llewellyn, 1998), which results from, among other factors, the academic requirements to become a clinician. An acknowledged strong profession could have impacted the general tendency among clinicians in UniHealth to not take financial threats using accounting information seriously, due to a low risk of replaceability. This could be interpreted in contrast to Carlsson-Wall et al. (2016), who studied an attempt to increase financial awareness among home helpers, a group considered a relatively weak profession (Llewellyn, 1998), through the use of accounting talk. In the setting of Carlsson-Wall et al. (2016), the perception of financial threats could be seen as having a higher impact on the employees as the risk of replacement was greater,

thereby making them more susceptible to traditional accounting talk, i.e., through the use of explicit accounting information. Hence, the professions' status could be an underlying characteristic explaining why opaque accounting talk was perceived as more impactful in our setting compared to traditional accounting talk in other settings (Carlsson-Wall et al., 2016).

5.4. Visualization of our Findings in a Developed Framework

To visualize the findings, we have developed a framework (Figure 2) that builds upon our conceptualization of accounting talk with intelligibility as an overarching factor, as in existing literature (e.g. Abrahamsson et al., 2016; Ahrens, 1997; Baker et al., 2022; Bukh et al., 2021; Carlsson-Wall et al., 2016; Englund et al., 2013; Hall, 2010; Jönsson, 1998; Jönsson & Solli, 1993). The framework illustrates how accounting information can be utilized to establish a desired attitude toward cost consciousness and is divided into four characteristics that influence accounting talk: *intelligible* and *not intelligible*, as well as *explicit* and *opaque*. The additional characteristics, explicit and opaque, should not be regarded as alternatives to intelligible; instead, they should be seen as two additional considerations contributing to a further understanding of how accounting talk can be leveraged to establish cost consciousness in clinical activities.

To elaborate, explicit and opaque in the framework refer to whether accounting information is provided when guiding clinicians to become cost conscious. The framework shows that the budget, financial threats, financial incentives, and unclear financial consequences are not considered accounting talk, as the accounting information was not contextualized or disaggregated to the right level in an operational context, thus failing to become intelligible. However, when using the tactics of contextualization and disaggregation, such as labeling costs in the clinic or communicating savings per shift, accounting information becomes more familiar and reasonable, thereby achieving intelligibility, which aligns with traditional accounting talk. Furthermore, the framework illustrates that opaque accounting talk can occur when accounting information is opaque in communication, as observed in initiatives such as Choosing Wisely and Hospital Home, with the intended goal for the recipient to subconsciously absorb accounting information, thus impacting cost consciousness in clinical practices.

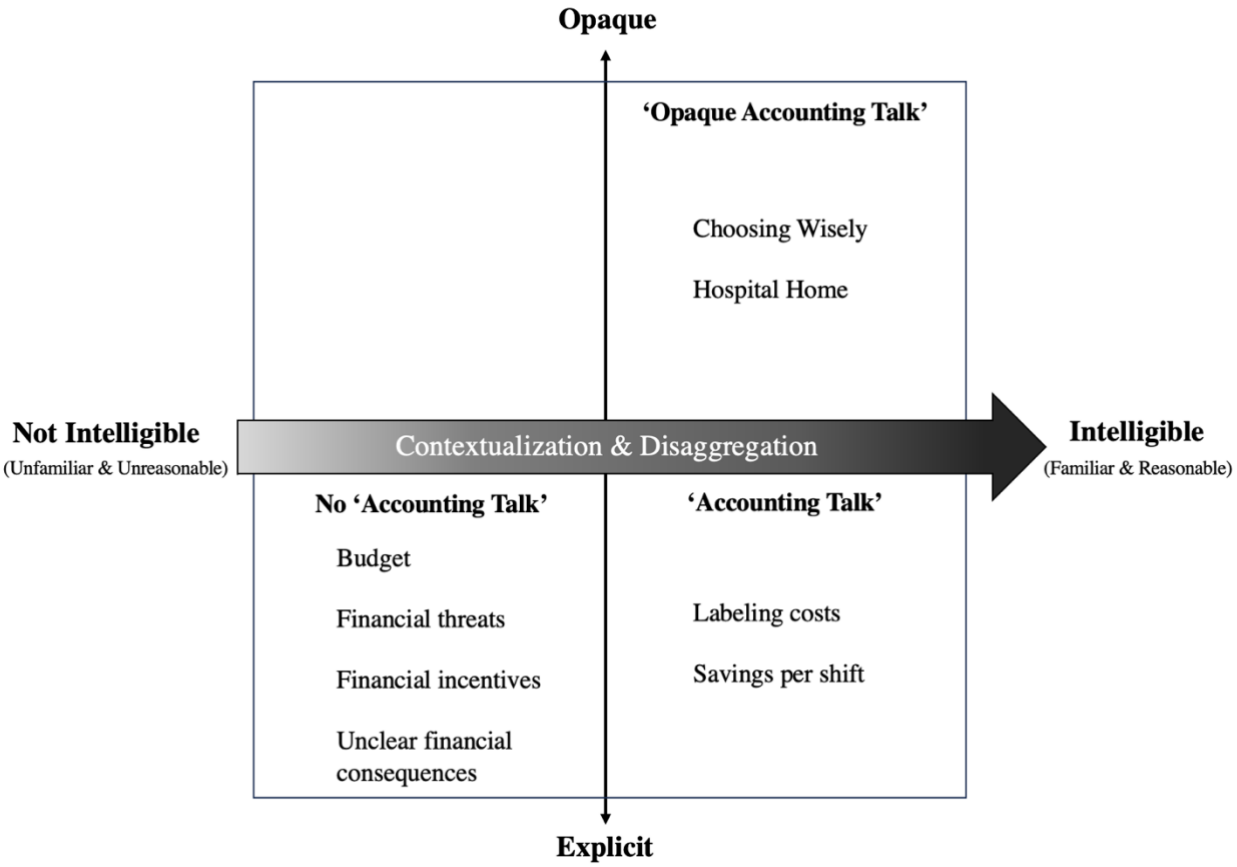


Figure 2. Illustration of the Authors' Developed Framework for 'Accounting Talk'

6. Conclusion

The purpose of this study has been to explore how accounting is used in communication to clinicians to establish a cost conscious mindset. Through a synthesis of the existing literature on accounting talk we conceptualized the phenomenon as our theoretical lens to answer the following research question:

> *How is accounting information communicated to establish cost consciousness in hospital-based clinical decision making?*

We corroborate the existing literature on management accounting in healthcare regarding that traditional communication of explicit accounting information, such as the budget, does not establish cost consciousness among clinicians. Viewed through the accounting talk lens, it became apparent that this finding could be attributed to the low degree of contextualization and disaggregation in the communication; hence, the accounting information did not become intelligible for clinicians. Furthermore, since the communication of accounting information primarily occurred during periods of financial pressure, it carried a negative connotation which further hampered the establishment of cost consciousness.

Moreover, by applying a new lens to a well-established domain we contribute to the existing literature by showing how the tactics of contextualization and disaggregation can be leveraged to make explicit accounting information perceived as intelligible in communication to clinicians. Our findings suggest that there are varying degrees on which explicit accounting information can be utilized, with consequences for how clinicians perceive the adoption of a cost conscious mindset. Initiatives that combined a high degree of contextualization and disaggregation resulted in the information becoming intelligible as it was customized to the operational context, thus having a more positive impact on the attitudes toward cost consciousness. On the other hand, when one of the tactics was abandoned or not communicated at an appropriate level, then the accounting information was not perceived as intelligible, and consequently, cost consciousness did not get traction.

Our study also contributes to the literature on accounting talk which argues that the accounting information should be customized to the operational context to provide meaning to the recipient. In this study, we identify a new form of communication to make accounting information intelligible, namely ‘opaque accounting talk’. In this form of accounting talk, the message is framed around the operational context, using the tactics of contextualization and disaggregation. However, accounting information is not explicit, instead, it remains opaque in communication to clinicians, even if the financial benefits are evident. By using opaque accounting talk, the sender can evoke a subconscious absorption of accounting information among clinicians without explicitly addressing the financial arguments to a recipient guided and motivated by strong medical values. Hence,

as a result, clinicians can become receptive to the underlying financial rationale for making cost conscious clinical decisions, even if the accounting information was not mobilized explicitly.

Finally, our findings also suggest that the use of accounting talk for initiatives underpinned by the same purpose can be deployed both in an opaque- and explicit way, depending on the recipient of the message and what they perceive as intelligible. For example, the finance department can communicate to clinicians using opaque accounting talk to ensure they do not interfere with its strong professional ethos. Simultaneously, traditional accounting talk can be used to communicate the same initiative at other organizational levels. Hence, this finding suggests that opaque accounting is not necessarily a substitute for traditional accounting talk.

This study also has practical implications besides theoretical contributions. Hospitals are characterized by a culture where the expertise of the medical profession has a prestigious status, and clinicians' actions are primarily guided by their professional values rather than financial considerations. However, with advancing medical capabilities in combination with an unfavorable demographic development in Western society, there is increased financial pressure on publicly funded hospitals. Hence, the necessity for a cost conscious mindset in hospitals becomes increasingly apparent to be able to offer good care to a greater number of patients. Various efforts to improve resource efficiency in healthcare have already been well established in the literature, often associated with NPM principles and accountingization. However, it has been proven particularly challenging in a culture where medical priorities often outweigh financial considerations, given clinicians' strong professional autonomy. Nonetheless, it is important to establish a more cost conscious mindset in clinical practices to meet the increased demand for care within a system of limited financial resources.

Following this, our study offers insights into managing such a challenge using accounting talk in different ways, thereby facilitating the adoption of a clinical behavior that indirectly promotes a cost conscious mindset. Therefore, we argue that the managerial implication is that when steering individuals guided by a strong professional ethos, communicating accounting information through accounting talk becomes increasingly important to ensure that the perception of cost consciousness is aligned with a legitimized behavior within the profession. Such an understanding can shape how accounting information is communicated internally. Hence, instead of expecting certain professional groups to absorb explicit accounting information, opaque use of accounting information ('opaque accounting talk') can allow clinicians to adopt a desired cost conscious mindset. These findings may also hold relevance for other organizations with strong professions and similar characteristics.

The findings of this study are subject to certain scope conditions and limitations. Questions regarding the authenticity and plausibility of our findings may arise since we conducted a study focused on one emergency and one surgical department. On the other

hand, the strength of our research design lay in that we conducted interviews at two distinct hospital departments, thus mitigating the risk of drawing conclusions solely from one. However, it is worth noting that since these departments were part of the same hospital, certain findings may be specific to the departments' characteristics rather than representative of broader phenomena. Furthermore, given that our study was conducted at a publicly funded hospital where clinical decisions were not driven by financial motives, the use of accounting talk may exhibit differences when compared with departments within privately operated hospitals also driven by financial objectives. Therefore, it would be of interest to conduct a similar study in types of departments or hospitals with different characteristics to gain a more comprehensive understanding of accounting talk in a hospital setting.

In addition, UniHealth's internal procedure for selecting interviewees may have introduced the risk of respondents aligning their answers with organizational expectations rather than expressing their genuine viewpoints. However, this potential threat to the authenticity was addressed through measures to inform interviewees of the pseudonymity maintained for the hospital, departments, and individuals, alongside our efforts to establish rapport during the interviews to receive genuine answers. Nonetheless, future researchers should assume full responsibility for the selection process and interviewing a larger pool of individuals. Moreover, it would also benefit future research to increase the authenticity and plausibility by conducting direct observations, e.g., meetings, to observe how accounting talk is used in such a context, thereby getting further insights into how accounting information is communicated to clinicians. Another aspect of the study to consider for future research is that it heavily relies on attitudes and the willingness to integrate accounting information into clinical decision making at a specific time. Given that the study was conducted when UniHealth introduced specific measures to reduce costs, the interviewees may have overemphasized negative perceptions toward accounting information. However, this is less likely a factor, as existing literature from several decades indicates a persistent presence of financial constraints in hospitals. Nonetheless, future research should investigate whether significant financial pressure constitutes a scope condition by conducting longitudinal analyses with variances of financial pressure.

Finally, the initial research design aimed to investigate potential differences in management accounting practices between surgical care departments, primarily providing planned healthcare, and the emergency department, which primarily handles urgent situations. However, during the interviews, we did not find any indications that planning opportunities affected the use of management accounting in these settings, as the inflow of patients to the emergency department was fairly predictable. Therefore, we decided to explore other areas that could provide more interesting insights. Nonetheless, a comparison between the two departments warrants further investigation, given initial indications of a greater presence of management accounting in the emergency department, based on two potential factors. Firstly, the emergency department offered

less costly treatment options compared to the surgical department, where treatments were generally more expensive. This variance in cost might explain the greater presence of management accounting in the emergency department. Secondly, patients undergoing surgical care typically pass through multiple departments before reaching surgery. As a result, the need for management accounting may be less pronounced in this context. However, no definitive conclusions can be drawn since we did not fully explore this topic. Nevertheless, exploring the use of management accounting in departments with varying treatment options is an area we suggest for further research.

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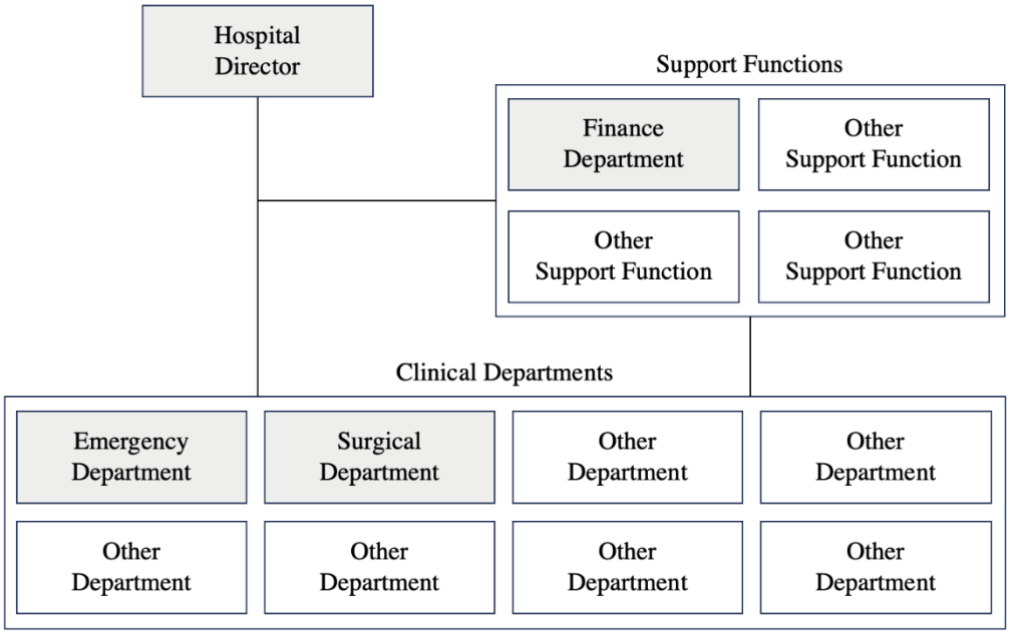
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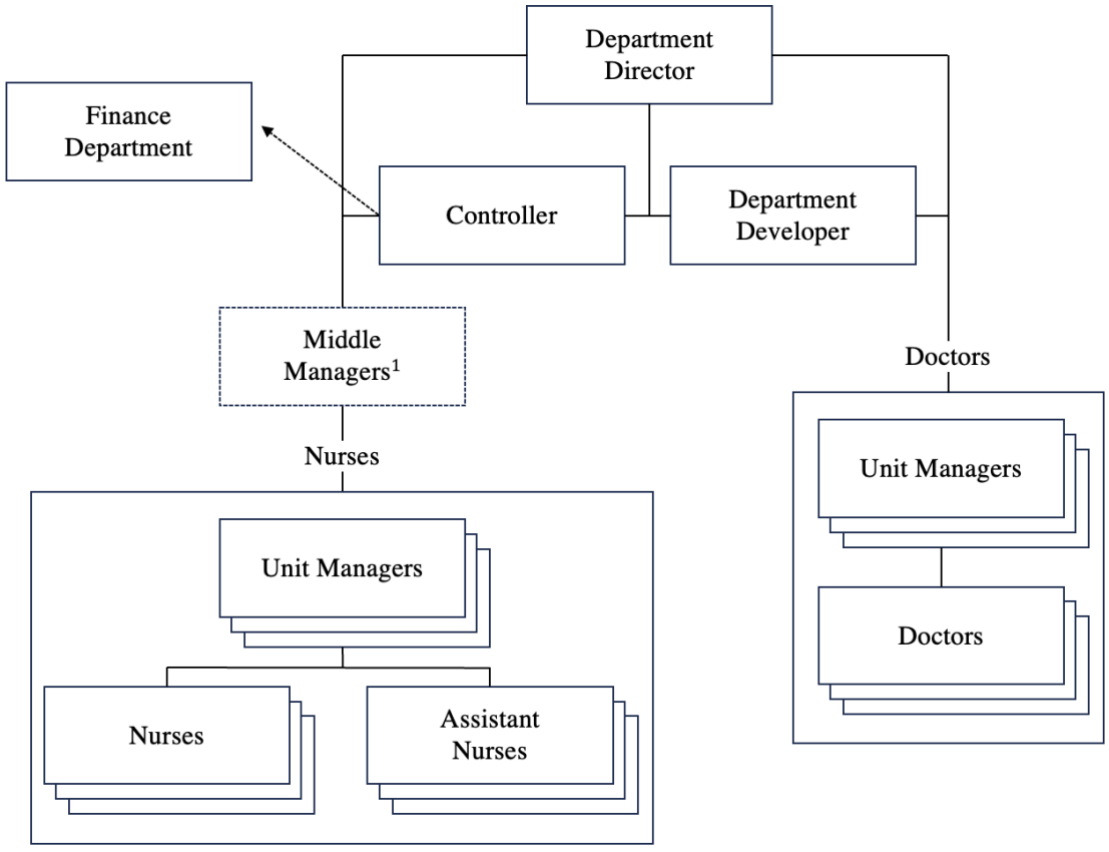
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8. Appendices

Appendix A. Schematic Illustration of UniHealth's Organizational Structure



Appendix B. Schematic Illustration of UniHealth's Department Structure



Appendix C. Illustrative Interview Guide

Interview Phases	**Example Questions**
Formalities	- Introduction to the study - Discuss GDPR regulations - Discuss confidentiality - Discuss recording consent
Introduction	- Tell us about yourself and your current and past role(s) in UniHealth?
Clinical Work	- During a typical workday, what situations do you face where you make clinical decisions? - Are there established documents and guidelines that guide you in your decision making? - How do you make decisions regarding treatment options in your clinic?
Management Accounting	- Where do you encounter management accounting in your daily work? - In what way(s) are you affected by management accounting? - Are there any KPIs that your unit is evaluated on? - Can you give an example of a situation where you experienced conflicting objectives?
Communication	- How is accounting information communicated to you and your colleagues? - How well do you think the financial objectives are integrated into the daily clinical activities?
Ending	- Is there anything that you would like to add based on the topics we have discussed during the interview? - Discuss formalities

Appendix D. Summary of the Interviews

#	Date	Department	Role	Medium	Duration
1	27/02/2024	Surgical	Department Director	In person	60 min
2	27/02/2024	Hospital	Finance Director	In person	56 min
3	28/02/2024	Emergency	Controller	In person	63 min
4	28/02/2024	Emergency	Unit Manager & Nurse 1	In person	54 min
5	28/02/2024	Emergency	Nurse 1	In person	59 min
6	29/02/2024	Surgical	Doctor 1	In person	55 min
7	29/02/2024	Surgical	Nurse 1	In person	48 min
8	01/03/2024	Surgical	Unit Manager & Doctor 1	In person	59 min
9	01/03/2024	Emergency	Unit Manager & Doctor 1	In person	54 min
10	01/03/2024	Surgical	Assistant Nurse 1	In person	54 min
11	08/03/2024	Surgical	Doctor 2	Online	48 min
12	12/03/2024	Emergency	Nurse 2	Online	67 min
13	13/03/2024	Surgical	Controller	Online	74 min
14	13/03/2024	Hospital	Hospital Director	Online	55 min
15	20/03/2024	Emergency	Department Director	In person	58 min
16	20/03/2024	Emergency	Department Developer	In person	54 min
17	20/03/2024	Surgical	Unit Manager & Nurse 1	In person	54 min
18	21/03/2024	Surgical	Unit Manager & Nurse 2	In person	54 min
19	22/03/2024	Emergency	Unit Manager & Doctor 2	In person	48 min
20	03/05/2024	Emergency	Controller*	Online	33 min
21	03/05/2024	Surgical	Controller*	Online	31 min

*Follow up interview

Appendix E. Choosing Wisely Poster

5 DO NOTS

1. IDC

IDC should only be used for patients who meet one of the following:

- Critical ill patients where continuous measurement of urine production is beneficial for the patient
- Pronounced postrenal obstruction and large remaining urine volumes (> 1000ml) which, despite intermittent catheterization, are not deemed to relieve the obstruction
- Peri/post-operative care < 2 days or for urological procedures
- Acute palliative care.

It is not in line with good patient safety to use IDC e.g., in diuretic treatment if the patient can urinate, for convenience reasons, or for evaluating treatment effect.

2. Blood transfusions

Avoid giving blood based on arbitrary blood levels in the absence of symptoms. For stable asymptomatic patients, the threshold should be Hb < 70 g/L. Patients with cardiovascular diseases or active anemia-related symptoms have a threshold of Hb < 80 g/L. Consider instead treatment with iron, folate, B12, EPO

3. Unnecessary blood tests

Do not take repeated blood tests during illness remission or stable conditions. No proven benefit regarding patient mortality, readmission, length of stay, ICU care, or adverse events

4. Proton pump inhibitors (PPIs)

Avoid unless the patient has a clear indication or high risk for GI discomfort. It gives an increased risk for nosocomial infections e.g., pneumonia and Clostridium difficile (3.6x greater risk)

5. CT-brain after fainting

Avoid CT unless the patient has neurological symptoms, seizure activity, or clear trauma. Very low likelihood that CT can explain the cause. Unnecessary radiation and costs

Note: The authors' re-illustration of UniHealth's Swedish poster and its translation into English may lack medical accuracy