**Introduction**

Spend on global healthcare is estimated to rise from $7 trillion in 2015 to a staggering $8.7 trillion by 2020 as the world’s major regions are predicting spend increases ranging from 2.4% to 7.5% (Deloitte, 2017). Despite its significance, professional procurement in the health industry is often immature and not strategically integrated (Nachtmann and Pohl, 2009). There is a recognition in the wider procurement literature of a conceptual shift from a narrow focus on prices paid to a wider value-based perspective encompassing innovation achieved through collaborative relationships (Corsten and Felde, 2005). Relationships and interactions stimulate the creation of value and improve organisational performance (Jaakkola and Hakanen, 2013), beyond price savings achieved only through iterative reductions in suppliers’ profit margins. Accounting for value beyond suppliers’ prices is essential (Anderson et al., 2000), as the single-faceted relentless pursuit of annual price-oriented savings in healthcare is not sustainable (Pritchard, 2012). For procurement, the longer-term value perspective is closely aligned to the concept of total cost of ownership (Wouters et al., 2005). Effective procurement practices are critical to an organisation’s success, yet in the healthcare industry, procurement often overlooks contemporary views of value creation (Walker et al., 2008).

In this paper we investigate the antecedents of the dominant adoption of price-based aggregation over value-based procurement approaches in the United Kingdom’s (UK) National Health Service (NHS). The NHS is facing its most significant financial challenge in its 69-year history. The estimated aggregate deficit of NHS providers and commissioners for 2015/16 stood at £1.85 billion, a threefold increase on the previous year (Dunn et al., 2016). Public procurement’s role is to ensure regulatory compliance, prudent use of the public purse, and third-party delivery of contracted goods and services (Russell and Meehan, 2014). The financial challenge demands NHS procurement extends these responsibilities to contribute to closing the deficit gap. Mature and emergent procurement practices have the potential to offer value-adding responses to advance healthcare policy challenges, yet academic research is still limited in scope (van Raaij et al., 2013). Value in healthcare is defined as the patient health outcomes achieved per pound spent (Porter and Teisberg, 2006). Notwithstanding the sheer size of the financial deficit, the organisational complexities and scale of the NHS provide major challenges for the effectiveness of public procurement (Grudinschi et al., 2014).

To meet the challenging financial shortfall, the dominant procurement approach endorsed by successive UK government policies pushes for national and regional procurement aggregation. Solutions are packaged as “collaborate more”, “standardise products”, and “leverage spend”, where iterative price reductions are assumed to stem from collaborative scale economies of product prices. Unfortunately, these overly simplistic solutions take a myopic view of market drivers and conflate spend with potential savings. The predominance of aggregated approaches to leverage spending power can stifle a move towards longer-term perspectives of value.

Public sector organisations, including the NHS, are facing unprecedented demands to become more efficient and effective against a backdrop of austerity, financial cutbacks and the rising demand for services (Piening, 2013). The Resource Based View (RBV) of the firm highlights the importance of resources and capabilities for an organisation’s survival, growth, and overall effectiveness (Wernerfelt, 1984). The tangible and intangible resources comprise a mix of physical, human and finance capital (Barney, 1991). RBV has its empirical roots in the private sector but is increasingly being applied as a lens to study how public organisations use resources and capabilities to deliver public value to its stakeholders (Piening, 2013) and deliver efficiency in increasingly dynamic environments (Szymaniec-Mlicka, 2014).

RBV predominantly considers an organisation’s competitive advantage in terms of its financial performance, or market share, relative to its competitors (Burton and Rycroft-Malone, 2014). Through an RBV lens, competition in public contexts can be seen through other aspects of organisational performance including efficiency and value-for-money (Porter and Teisberg, 2006). Focusing only on narrow price considerations limits procurement’s ability to deliver strategic value. In contrast, aggregated procurement strategies, where spend is centralised across business units, are driven by economies of scale. Aggregation assumes the primacy of fixed unit production costs, and tends not to account for other aspects of value, nor the temporal complexity of value through the full procurement cycle (Pinnington et al., 2016). Aggregated procurement continues to play an important role in balancing power dynamics and brokering knowledge across networks (Meehan and Bryde, 2015), but broader value-based approaches are important if organisations are to maximise procurement’s strategic value contribution within turbulent environments.

In this paper we answer the call for rich research on understanding the influence of external stakeholders on public organisations’ dynamic capability to adapt and deploy resources to deliver value (Pee and Kankanhalli, 2016). We adopt RBV as a lens to explore the extent to which NHS resources support the strategic adoption of value-based procurement in light of the competing priorities that stem from the public policy environment (Harvey and Kitson, 2015). The empirical case study across six NHS organisations explores stakeholders’ ideological assumptions (Alvesson and Sandberg, 2011) and the extent to which price and value-based procurement approaches are adopted. From the case we draw out stakeholders’ perceived barriers that prevent the mobilisation of resources to adopt value-based procurement. Hermeneutic analysis, an innovative method in purchasing and supply management research (Russell and Meehan, 2014), adds a rich, critical analysis of the political antecedents of the barriers emerging from the case.

A core contribution of the research is the use of a novel hermeneutic method alongside a case study to unpick the often-invisible antecedents of conflicting procurement approaches and unproductive relationships that stem from government policy. These long chains of causation impact perceptions, relationships, preferences and opinions (Postrel, 2009), suppress innovation, and create barriers to development. Through combining these methods, we extend the explanatory reach of RBV by considering the policy drivers that lead to resource constraints and stifle dynamic capabilities in public organisations, often over long timeframes. The results illuminate the significant role of public policy on procurement’s ability to drive value, an area rarely explored. Exposing these hidden barriers, and how they are formed, is critical in understanding the potential of value-based procurement and the reasons for its low uptake.

**Literature review**

This research uses RBV to understand the adoption of value-based procurement. The concepts of value and RBV are presented, against which we position a critical

review of the theoretical assumptions of aggregation delivered through cooperative procurement, as currently promoted by UK government policy for NHS procurement.

*Value-based procurement*

Supply management’s role in enhancing an organisation’s competiveness through value creation is acknowledged (Kähkönen and Lintukangas, 2012), yet the concept of value in procurement is complex and multi-faceted. There are significant and contested debates not just on the definition of value, but also in the differences between value creation and value capture (c.f. Bowman and Ambrosini, 2000). Added to the complexity in the debates is the under-representation of public procurement in the value literature, which tends towards value as perceived by paying customers, thus providing an uneven representation of the potential conflicts between the commercial, regulatory and socio-economic goals in the public sector (Erridge, 2007). The value concept in public sector procurement is inherently contested (Williams and Shearer, 2011) as diverse stakeholders including political leaders, staff, taxpayers, regulatory bodies and suppliers often have conflicting goals and requirements (Hazlett et al., 2013). Heterogeneity of stakeholders’ wants and needs are compounded by changing political agendas (Propper and Wilson, 2003), creating a volatile environment for defining and delivering value.

Valuable resources form the central pillar of RBV and contribute to an organisation’s competitive advantage (Barney, 1991). In a procurement context, organisations rely on the products and services they buy from their suppliers to improve their own market offering and to increase the overall profitability of their firm (Ulaga, 2003). Value represents the utility received from the products or services purchased in exchange for the price paid for this market offering (Anderson and Narus, 1998). Value and price represent the two essential elements of a market offering. The relationship between prices and value is complex; price changes do not necessarily affect the value, but can change the incentive to purchase one market offering over another comparative offer (Anderson and Narus, 1998).

Value can be generated by capability in three areas: competing and responding to industry level challenges, exploiting relational capabilities, and understanding and responding to customers’ needs (Kähkönen and Lintukangas, 2012). Creating value through procurement is evolutionary and requires longitudinal collaboration (Walker et al., 2008). The supply chain dimension extends the consideration of value across organisations, and also extends the timeframe within which value is considered. In a review of the value literature across the last two decades, Terpend et al. (2008) identify four core parameters of the value concept: operational performance, integration orientation, capability factors and financial performance. Within each of these four areas, there is an assumption that costs and benefits are evaluated over time. The temporal element is reflected in a shift in the extant literature towards the need for longer-term perspectives of value trade-offs (Lindgreen and Wynstra, 2005). Crucially, value from a procurement perspective needs to be considered throughout the life of a contract, not just at the sourcing stage (Pinnington et al., 2016).

Value-based procurement sees a collaborative effort through strategically aligning suppliers’ resources, products, and services to broad outcomes-based goals of the organisation. It explores the full remit of cost/benefit across the range of interdependent activities. Cost/benefit drivers can be at unit, batch, supplier and part levels (Wouters et al., 2005), and the phenomenon of internal value perception dissonance highlights that perceptions/expectations of benefits and sacrifices vary across stakeholders in an organisation, and vary over time (Pinnington et al., 2016).

*Resource based view*

The RBV argues that organisations possess, and have access to, bundles of resources and capabilities that form the basis for organisational survival, growth, and overall effectiveness (Barney, 1991, Wernerfelt, 1984). Resources can be tangible or intangible covering physical assets, human capital, finances and IT, as well as capabilities, skills and knowledge. Under the RBV, an organisation achieves competitive advantage through exploiting resources that create value, and success is sustained through resources being valuable, rare, difficult to imitate and organised to capture value (VRIO) (Barney, 1991). In an extended view of RBV, organisations leverage capabilities to provide value to customers, thus proposing that resource management and value creation are inextricably linked (Sirmon et al., 2007). Value stems from exploiting the combination of complementary and specialised resources and capabilities (Amit and Zott, 2001). Having access to resources is not sufficient to drive value. Organisations must have the capability, capacity and knowledge to utilise the resources effectively (Medcof, 2001).

Under RBV, possessing VRIO resources is not the only way to sustain competitive advantage, but the basic assumption is that value-driving resources are heterogeneous and immobile across organisations. This limits the ability of competitors to adopt similar offerings, at least in the short-term. The heterogeneous distribution of resources accounts for variation in performance, usually measured in terms of financial performance or market share, as RBV originated from the private sector. RBV assumes open competition between organisations within a commercial marketplace but public organisations operate in a tightly managed market, or no market whatsoever (Burton and Rycroft-Malone, 2014). RBV is increasingly being applied to the study of public organisations’ performance, as these organisations also rely on resources and capabilities to deliver value (Harvey et al., 2010, Piening, 2013). Value in public organisations centres on identifying and building strategic capacities to produce the greatest public value for key stakeholders at a reasonable cost (Bryson et al., 2007). In the public sector, RBV does not necessarily focus on competitive market behaviour (Pablo et al., 2007). Value in public contexts becomes a proxy for effective and efficient service delivery that is sustainable in the longer term. Thus, RBV is a useful lens to understand how value, rather than competitive advantage, is created within public organisations (Pee and Kankanhalli, 2016).

Through an RBV lens, competition in public or quasi-market contexts can be seen through other aspects of organisational performance including efficiency and value-for-money (Porter and Teisberg, 2006). Although competitive advantage and value are difficult to define in healthcare and public sector environments, the erosion of traditional sectoral boundaries have created pressures to act more commercially (Harvey and Kitson, 2015), and led to calls for conventional private sector models of strategy to be adopted (Porter and Teisberg, 2006).

Sustaining strategic value requires a capacity to leverage and build resources over time. The lack of direct competition in public organisations and constant demand for their services have led to debates as to whether they face less environmental dynamism (Warner and Bel, 2008), or if the political cycles increase uncertainty and create rapid change (Boyne and Meier, 2009). In the RBV, resources become increasingly important in turbulent operating environments as managing uncertainty requires a potential suite of strategic options (Eisenhardt, 1990), including intra and inter-organisational resource (Fredericks, 2005). As a result of various policy reforms, public sector organisations are subject to economic constraints in their operating environment driven by fixed budgets, uncertain demand, public expectations, and performance targets (Harvey and Kitson, 2015).

While the turbulent environment can result in politicization and complexity (Szymaniec-Mlicka, 2014), the RBV has an internal focus and there is a need to further understand how the political environment influences the dynamic capabilities (Eisenhardt and Martin, 2000) of public organisations. Public procurement organisations have been criticised for lacking crucial resource capabilities to cope with dynamic demands, both internally and across their external networks (Edler and Yeow, 2016). The RBV is used as an explanatory lens to unpick barriers to mobilise resources when faced with turbulence (Foss, 1998), improving our understanding of how resources contribute to strategic value in public procurement.

*Aggregated cooperative procurement*

Cooperative procurement is the dominant policy instrument promoted by successive UK governments to deliver financial value by aggregating procurement volumes. Cooperative procurement involves two or more organisations combining their purchase volume, information, and resource (Schotanus and Telgen, 2007). There is a trend across Europe for public bodies to aggregate regional or national demand through framework agreements within cooperative public procurement groups, with the aim of achieving economies of scale and reducing transaction costs (Albano and Sparro, 2010, European Parliament and Council of the European Union, 2014).

Academic studies identify a range of benefits of cooperative procurement including; net pricing and resource savings (Karjalainen, 2011), transparency, simplification, communication and development of mutual trust (Gobbi and Hsuan, 2015). Barriers to cooperative procurement include, low commitment, supplier resistance, lack of strategic focus, lack of market consideration, poor data (Walker et al., 2013), inappropriate national solutions, poor intra-regional alignment, and resource pressures (Meehan et al., 2016). Despite the range of potential benefits the dominant focus is often price savings (Nollet and Beaulieu, 2003). It has been argued that cooperative procurement groups perform well in relation to pricing and contracting but are less successful in other procurement activities (Burns and Lee, 2008). The assumption is that volume reduces prices; however, in cooperative procurement it is the variety of procurement approaches (Pedersen, 1996), supplier management and overseeing key supply activities (Johnson et al., 2003) that create value, not just the leveraged economies of scale.

Scale economies can be achieved when production comprises a large percentage of fixed costs independent of production levels. Costs are lowered by increasing manufacturing volumes to share fixed costs across more units of output. Manufacturers have the potential to induce higher volume orders through passing on some of this cost saving. Problems arise when the relationship between volume and unit cost is assumed to be linear. A linear relationship means that for every *x* number of units purchased the price reduces by *y*. Following this logic, there would come a point where if you bought enough you would pay nothing, clearly a flawed argument that obscures the economic complexities of pricing. Knowing the minimum and maximum pricing differentials that can be obtained singularly, or collectively, is important for buyers (Schotanus et al., 2009), as is understanding the shape of the volume/price curve, the level of steepness, whether the relationship is continuous or discrete and when diseconomies of scale emerge.

The success of aggregated procurement is inherently linked to the characteristics of the spend category: the more similar products are, the easier aggregation should be. Even within spend categories products and services can be highly heterogeneous requiring diverse practices (Ateş et al., 2015). Achieving scale economies through the standardisation of product specifications is common procurement practice (Berger, 1997), yet there is surprisingly little empirical evidence of its success in cooperative procurement (Gobbi and Hsuan, 2015). A complicating factor is that standardisation should go beyond product specifications alone and consideration should be given to how contracts are serviced and managed. Framework agreements (common in the public sector) allow different authorities to place orders in different quantities, delivered to different locations, with varying levels of contract management. In aggregated procurement, how individual organisations use framework agreements can create conflicts that sub-optimise the value at an aggregated level (Yukins, 2010). Economies of scale require standardised products, standardised contracts and a low heterogeneity of demand to achieve their full potential (Albano and Sparro, 2010). Determining optimal aggregated prices and volumes is complex. Studies comparing against retail prices have limitations as rarely would an individual organisation pay a full retail price (Barbosa and Fiuza, 2011). It is also difficult to assess economic savings achieved as the pre-pooled prices are often unknown (Schotanus et al., 2009), so no relative comparisons are available.

Aggregation potentially lowers profit margins for suppliers and ultimately results in larger but less frequent contracts (Sànchez Graells and Herrera Anchustegui, 2014) that have increased economic and financial requisites (Albano and Sparro, 2010). Small and medium enterprises (SMEs) in particular can face difficulties in accessing these contracts (Albano and Sparro, 2010). The exclusionary effects on suppliers can reduce competition, create barriers to entry for new suppliers, limit flexibility and control (Pazirandeh and Herlin, 2014) and could see further increases in the already rising number of supplier challenges (Arrowsmith and Craven, 2013). Short-term pricing gains may be at the expense of longer-term costs owing to changes in market structures and competition. Similarly, excessive or routinized standardisation of products can reduce supply-side innovation and development (Nellore et al., 2001).

Much of the empirical research on cooperative procurement is set in healthcare contexts where there is an expectation of product standardisation. Aggregated cooperative procurement is seen in healthcare across the United States, Latin American countries, India and New Zealand (Barbosa and Fiuza, 2011). Pooled procurement can reduce costs in pharmaceutical markets (Barbosa and Fiuza, 2011, Ombaka, 2009), although the evidence is not universal (Waning et al., 2009). Furthering the complexity, regional healthcare organisations can often secure the same prices as nationally aggregated contracts, as suppliers set their prices to achieve wider benefits from locally-managed relationships (Pritchard, 2012). The suggestion here is that the price/volume relationship is not linear and that volume is not the only variable at play in optimising value outcomes for buyers and suppliers.

The literature review provides a mixed picture on cooperative, aggregated procurement strategies and its ability to provide VRIO resource advantage. Cooperative procurement can deliver a range of leveraged resource efficiencies (scale, scope and knowledge), yet the evidence is not ubiquitous. Value-based approaches, in contrast, do not have a fixed assumption that volume always reduces prices. This position can wed procurement to solely focusing on reducing suppliers’ profit margins, often at the expense of longer-term product development and relational capital investments. Instead, value-based approaches compare the relative advantages of suppliers’ options considering all elements of costs and benefits across a product’s life cycle. Value-based approaches encourage the sharing of richer information with suppliers to promote the exploration of innovative solutions through the supply chain. Products that offer superior long-term cost benefit are rarely incentivised in price-based approaches (Geitona, 2016). Value-based approaches in comparison integrate suppliers into the value network enabling both parties to develop their own strategic resources.

The RBV suggests the need for organisations to develop long-term procurement capability and capacity, which potentially sits in contrast to the short-term ‘more for less’ efficiency agenda operating in many healthcare systems (Ferlie et al., 2015). Tensions between short returns and longer-term impacts of both value-based and aggregated procurement approaches are unresolved from the literature. Studies of public procurement suggest that unit price savings are still the primary dimension for evaluation and more mature procurement-based value contributions around innovation and sustainability are rarely measured (Patrucco et al., 2016). From a value perspective, results not inputs are the critical component. Shifting the focus from volume and processes delivered to value of outcomes is a central challenge, particularly in healthcare contexts (Porter, 2010). Lacking in the literature is an understanding of why value-based procurement is not being adopted more broadly in this context. To contribute to the debate, we set two overriding research questions:

RQ1: How does the long-term policy environment influence interaction between public procurement and the healthcare market?

RQ2: How does this create barriers for public procurement to mobilise resources to adopt value-based procurement?

**Research Context**

The empirical case study focused on a regional cluster of six NHS Foundation Trusts in England. An NHS Foundation Trust is a legal entity that operates under unique governance arrangements to manage NHS hospitals based on their locality (NHS Choices, 2016). Healthcare supply chains are highly complex with myriad distribution channels (Miah et al., 2013) and a large number of stakeholders who must work together to create value (Boyer and Pronovost, 2010). To illustrate the scale and complexity of the NHS, in England alone (2014 figures), it deals with over 1 million patients every 36 hours and employs circa 150,000 doctors, 377,000 nursing staff, 37,000 managers, and 156,000 scientific, therapeutic and technical staff (NHS Confederation, 2015). Frontline professional staff provide diverse services and take procurement decisions through the referrals made, tests ordered, procedures performed, processes followed and drugs prescribed (Allen et al., 2009).

In the UK, the general population is expected to rise 3% between 2015-2020, with the number of people over 65 to increase by 12% (1.1 million), those over 85 by 18% (300,000), and centenarians by 40% (7,000) (UK Parliament, 2015). The aging population creates a two-fold pressure; demand for healthcare rises, and the proportion of people of working age declines reducing tax income. Thus, it becomes increasingly important to achieve a balance between affordable healthcare and seeking innovation (Geitona, 2016). Despite numerous procurement policies set by successive governments the deficit continues to grow (Dunn et al., 2016).

**Methods**

Senior NHS procurement managers identified a value-based approach as a possible opportunity to respond to the significant pressures on funding, and a research project was commissioned in January 2015. The research was conducted across a regional cluster of six English NHS Foundation Trusts. Healthcare procurement covers the purchasing of care (commissioning) and purchasing for care (NHS procurement) (van Raaij et al., 2013). The context of this research is purchasing for care and the empirical case focused on three procurement spend categories, as classified by Lichtenberger, Neal and Ungerman (2010), including basic indirects (printed products), low-preference clinical items and capital equipment (pressure care products) and high-preference clinical goods and services (orthopaedic implants). Access to organisations, staff and suppliers was provided and facilitated through a regional NHS procurement development hub.

The novel research design has two parts; a case study and a hermeneutic analysis of government commissioned policy documents on NHS procurement. The research provides methodological case variety (Dubois and Salmi, 2016) and constructs research questions through the problematisation of stakeholders’ ideological assumptions (Alvesson and Sandberg, 2011) of price and value-based procurement approaches in the NHS. An overarching question at the core of the case centres on the extent to which procurement practices are effective within NHS supply chains. Problematisation attempts to discover how, and to what extent, it might be possible to think, or act, differently (Alvesson and Sandberg, 2011). The qualitative data collection involved buyers, suppliers, clinicians, operational managers and healthcare professionals, exploring their ideological assumptions and positions, their understanding of value-based procurement, levels of adoption, but also why price-dominant methods persist.

Empirical case data were generated from focus groups, semi-structured interviews, workshops, and discussions at a number of regional events over a six-month period (see Table 1). Dialogical approaches were employed to uncover and understand multiple stakeholder views and assumptions, particularly as costs and value are emotive issues in healthcare. A total of 47 stakeholders took part in the research. The multi-stakeholder approach reduces homogeneous responses to provide broader representation of perceptions (Walker et al., 2013). Focus groups, interviews and discussion meetings lasted approximately one hour, and workshops were half-day events. All except discussion meetings were audio recorded and transcribed verbatim. Detailed notes were taken in the discussion meetings. Procurement Heads provided additional documentary evidence.

**Table 1: Data collection summary**

|  |  |  |  |
| --- | --- | --- | --- |
| **Place** | **Focus** | **Affiliation** | **Method** |
| University of Liverpool, UK | Strategic- Study scope and context | Trust Procurement Managers (4)  Supplier (1)Clinical staff (1)Regional NHS Procurement Leaders (2) | Focus group |
| UK large hospital- Hospital Trust A | Product Category: Pressure Care | Trust Procurement Lead (1)Senior Nurse and bed contact (1) | Interviews |
| UK large hospital- Hospital Trust B | Product Category: Orthopaedics | Trust Procurement Lead (1)Orthopaedic procurement lead (1)  | Interviews |
| UK smaller hospital- Hospital Trust C | Product Category: Print Management | Trust Procurement Lead (1)Information Governance and Records Manager (1)Senior Procurement Manager (1)Medical Secretary Team Manager (user perspective) (1) IT Manager (1) | Focus group |
| University of Liverpool, UK | Multi-products | NHS suppliers- various (17)Regional NHS Procurement Leader (1)  | Workshop |
| Regional, Manchester UK | Product Category: Orthopaedic  | Clinical surgeons (8)  | Workshop |
| UK medium size hospital- Hospital Trust D | Product Category: Orthopaedics | Consultants (2)Procurement manager (1)Regional NHS Procurement Leader (1)  | Focus Group |
| University of Liverpool, UK | Progress meeting and feedback | Regional NHS Procurement Leaders (1 x 6 meetings) | Discussion |

The second stage of the research employed hermeneutic analyses of Government commissioned reports to seek a qualitative, context-rich interpretation of, and explanation for NHS procurement practice. Hermeneutic analysis is a systematic approach to the interpretation of language, whether portrayed in a broad variety of texts, human action and institutions (Diesing, 1991) to extract the symbolic meaning (Ricoeur, 1981). Content analysis is a broad umbrella term for documentary and text analysis, covering both latent and manifest approaches (Dooley, 2016), and tends to simplify and reduce texts in the search for metrics and themes, which can limit the ability to infer human experience or meaning. Hermeneutics focuses on contemporary context and meaning. Although similar to a content analysis, hermeneutic analysis adds a richer insight to this research through interpreting how the policy environment is understood by people within NHS procurement supply chains, through emphasising the criticality of context. Documents are assessed not just for what is said, but also what is not said and with the aim to unveil hidden meaning and power structures. Central to the hermeneutic analysis was to understand the government’s position on the NHS’s intended transition to value-based procurement, and from what power and policy ideologies this stemmed from.

Hermeneutics examines the worldview and context from which a text originates. This is achieved through recreating a historic timeline to position when documents were published, and an interpretative, iterative cycling of each text. Successive iterations of analyses explore different layers or perspectives, building and bridging each part to the wider contemporary context of when the document was written. The ‘hermeneutic circle’ (Gadamer, 1975, Heidegger, 1962) stresses the importance of a contemporary context. The iterative, circling analysis asserts that the understanding of individual parts of a text is dependent on understanding the whole text, which in turn depends on understanding the individual parts.

Hermeneutics is appropriate for public administration research (Balfour and Mesaros, 1994). Other scholars have similarly combined case analysis with analysis of policy documents and commentaries to expose how discourse and multiple logics of healthcare systems create barriers to innovation (Miller and French, 2016), but its use is rare in public procurement research (Russell and Meehan, 2014). Circling between the empirical case data and the environment set by the reports allows challenge to both the socially-constructed norms of procurement practice that are deemed legitimate (Suchman, 1995) and to the reports taken as fact (Lowe et al., 2008). Owing to space restrictions, we confine the texts to the three most salient, influential and recent policy reports commissioned by the UK government that report on NHS procurement and provide policy recommendations. Consultation with the head of the NHS Procurement hub took place to confirm the criticality of the reports. The three documents were deemed to represent critical points in the policy environment relating to procurement strategies, and all are considered highly influential in the NHS as they are government commissioned.

*Data Analysis*

Case study data were coded and analysed thematically. An inductive approach was adopted to understand stakeholders’ assumptions of value-based procurement. Each of the three researchers took part in case study data collection activities, and each independently reviewed the data transcripts to identify emergent themes. Themes were reviewed, discussed and agreed as a team. Stakeholders indicted problems with the current price-dominant approach and focus on aggregation. Whilst the idea of adopting a value-based approach was discussed positively across participant groups, numerous barriers were identified. These barriers were coded and grouped into relational and resource-based barriers. One researcher used NVIVO for the initial coding, which was read and approved by the other researchers. Differences were discussed until consensus was achieved. Interpretations were shared with the NHS project lead to ensure they were appropriate. Themes are detailed in Table 2 in the findings section alongside indicative quotes.

In the hermeneutic analysis we followed a four-stage process: 1) initial reading of the chosen texts; 2) rebuilding contemporary contexts when the texts were written; 3) hermeneutic circling of the texts to meanings and contexts; and 4) conceptual bridging to reveal connections between the texts, contexts and the present (Prasad, 2002). This process allows the literal and figurative interpretations of the texts (Ricoeur, 1981). In stage one of the process the analytical process begins by reading the documents in full, paying particular attention to the language. Language is considered and understanding of the power and context is drawn from alternating between considering healthcare as a whole activity, and between layers composed of individual parts including procurement activity (Gadamer, 1975). Stage two enables the researchers to forms a picture of the historical context, in this case by examining the policy reforms over the past 16 years (see Table 3). In stage three, the documents are read again in relation to this historical context and the researchers sought to also identify what is not said in the texts. In stage four the hermeneutic analysis is considered against the findings from the case study data, and in light of the literature on value-based procurement and aggregation. The research team discussed their findings at each stage until they reached consensus on any disagreements.

**Case study findings**

*Value-based procurement*

All stakeholder groups demonstrated a desire to move to a more value-based approach to procurement and articulated potential numerous benefits of doing so, in theory. Adopting a value-based approach was seen by participants to broaden the view of costs and outcomes and to provide a more comprehensive challenge to delivering efficiencies. Costs and benefits in value-based procurement were considered over a longer timeframe as product features and services purchased impact durability, infection control, re-admissions, treatment time, waste, associated process costs - all of which need to be assessed relative to other alternatives. When discussing value-based procurement, stakeholders identified that supplier-buyer-clinician collaboration improves patient outcomes. Stakeholders perceive value in the healthcare context as *“good, rather than… cheap”* (Clinician*); “making products last longer…making them easier to fit”* (Supplier); focused on patient outcomes such as *“...getting patients out of hospital quicker”* (Procurement) and *“low complication rates”* (Clinician); and relational benefits driven through support, information sharing, developing systems, and training. Interestingly, across all groups while total cost was an important dimension of value, *“price…comes a long way down”* (Clinician). The homogenous view of value was surprising, given the prevailing view in the literature of diverse stakeholders’ views and conflicting goals.

Despite this clarity and consistency of what value means in healthcare, in practice buyers face significant barriers to translating this into value-based procurement. Stakeholders confirmed that there is a lack of consideration of value across the full spectrum of procurement mechanisms, including pre-market engagement, tender notices, contract terms and supplier evaluation. Procurement teams manage tender processes but lack engagement and influence beyond this part of the procurement cycle. Some progress was evident, as many tenders now include a section about added value but this is normally “*zero rated and won't be taken in to consideration”* (Supplier), thus contracts are rarely awarded based on value measures. The perception from stakeholders is that the failure to understand and define value results in sub-optimisation of outcomes, additional costs, opportunism by suppliers, lack of measures, and short-term extras that pay lip service to complex issues.

There was some evidence of procurement promoting non-price based metrics to improve value-for-money. A notable example delivered a total bed management contract in one Trust. This project used value-based thinking to mark a step change in procuring pressure care mattresses and associated products and services to reduce costs and incidents of pressure ulcers. Market engagement with suppliers identified opportunities for standardisation, leasing rather than buying to future-proof products, and restructuring of local supply chains into agile co-operative networks. Close working between suppliers and nursing staff improved staff training, product specifications and resulted in preventative cost avoidance actions. Procurement, clinicians and suppliers meet quarterly to ensure contractual compliance, iteratively review innovations and identify other on-going areas of value. The social capital created from suppliers working with procurement and clinicians forms the cornerstone of value-based thinking. However, the adoption of this approach for this contract was attributed to like-minded decision makers coming together in spite of the culture, rather than because of it. Participants reported that the knowledge gained from this approach, in terms of supplier relationship management, market engagement and contract management, had not been transferred to other spend categories within the Trust, or shared with other procurement groups in the region.

The enthusiasm for value-based approaches was substantial across all stakeholders yet the general feel was that it would be hard to achieve given the pressure to deliver immediate price reductions regardless of the sub-optimisation impacts in the medium/longer term on cost and service. How life cycle value approaches could be financially evidenced was an issue deemed critical to satisfy savings targets, senior managers and politicians.

*Aggregated procurement*

Stakeholders confirmed that the current dominant focus in healthcare procurement was on price reductions; *“there's a lot of pressure on the procurement manager to drive on price only”* (Clinician). Buyers attributed price dominance to the significant internal pressure to deliver financial savings in line with annual targets. Aggregation and standardisation were identified as the recommended methods for driving down prices. Suppliers explained the damage of an aggressive stance on pricing as it can discourage innovation and erode profit margins; *“there’s only so much penny pinching you can do on costs”* (Supplier). In contrast to the focus on patient outcomes and collaboration when discussing value-based procurement, when discussing aggregation all stakeholders spoke only of their own internal perspectives, targets and costs, and feelings of conflict and mistrust of other stakeholders were palpable.

Another common approach adopted was simply renegotiating contracts with current suppliers; *“we’ve always kind of just renewed or renegotiated with our existing supplier… purely based on price”* (Procurement). Procurement strategies driven only on principles of reducing costs of existing suppliers face the challenge of diminishing returns over time, an issue that buyers and sellers struggled with, leading to relationship tensions. Procurement perceived many contracts to already be commercially optimised, resulting in dwindling savings from this price-dominant approach. Buyers viewed aggregation purely in terms of scale economies although suppliers identified wider operational advantages of navigating the structural complexity of the NHS. Aggregation, framework agreements and standardisation remain the primary routes to market and are heavily grounded in the assumption by NHS staff that they are “big players” so should attract competitive prices. Parallel, yet contradictory to this view, is the perception held by many, particular those in buying roles, that suppliers are making excessive profits from NHS contracts and are largely able to control market pricing owing to their dominant positions. Neither of these positions is evidenced systematically by procurement.

An unexpected finding was that despite the dominance of aggregation, procurement teams have reservations of its efficacy that conflict with their perceptions that *“[aggregation] is supposed to be cheaper”* (Procurement). Issues identified include, the time taken as they only progress at the rate of the slowest Trust, inability to agree specifications leading to *“a bit of everything”* on contract lists, heavy resource costs, and importantly the cost savings expected frequently do not materialise. However, many teams felt significant pressure and expectation to continue to comply with moves to push a standardised, aggregated approach.

*Barriers to value-based procurement*

The data revealed underpinning reasons for the divergence between a desire to adopt value-based methods and the dominant focus on aggregation. Table 2 includes the barriers identified, alongside indicative quotes. Participants identified inter-related issues that fall into two categories; relational barriers and resource barriers. Relational barriers are myths, mistrust and perceptions of procurement. Resource barriers are capacity issues (resource shortages) and capability issues (gaps in knowledge).

For relational barriers, myths are prevalent in NHS relationships that prevent the transition to value-based procurement. The deep-rooted historical legacy of low-level procurement activity has allowed myths to establish. Examples of myths include: procurement is inefficient and do not understand products; clinicians do not care about price; and suppliers are making excess profits. Whilst there may occasionally be the case, the generalisation of these myths prevents cooperation between stakeholder groups, resulting in a sub-optimised system. Suppliers, procurement, clinicians and other stakeholders all shared similar stories and experiences that displayed elements of mistrust of each other, and a lack of understanding and empathy of others’ roles. Relational issues also limit the motivation for change of all stakeholders.

Another predominant myth in the data is that aggregation always saves money in healthcare procurement, with many reporting that the complex process of standardising and cooperating across Trusts often costs more than it saves. The lack of financial savings were attributed to the ineffectual relationships that made collaboration and inter-organisational agreement difficult, lack of commercial understanding of the market and supply-side pricing structures, insufficient resource to manage potential savings through the life of a contract leading to scope creep, short-term financial budgets, and under-investment in strategic procurement development and resource.

Procurement perceives that negative perceptions from internal stakeholders and financial structures limit value approaches. Procurement reports to Finance in the NHS. Driven by the funding changes, the NHS adopts annual budgets from which Finance Directors derive annual procurement savings targets, devoid of underpinning market intelligence around suppliers’ cost structures, risks or opportunities. The ambitious savings targets set for procurement by finance suggests that suppliers are opportunistic and/or procurement is ineffective. The pursuit of annual targets drives behaviours focused on the delivery of short-term cash releasing savings at the expense of longer-term financial benefits. Consequently, suppliers and clinicians view procurement as predominantly price-focused and the source of many problems, and commonly avoid involving buyers in negotiations in efforts to introduce value-based approaches. When buyers are finally notified of product and contract changes agreed between clinicians and suppliers, delays are incurred by procurement completing due diligence, perpetuating the myth that procurement are inefficient. The view common across stakeholders is that NHS power stems solely from the size of its' spend, and cost reductions are considered only at the tender or renegotiation stage.

**Table 2: Barriers identified in data analysis**

|  |  |  |
| --- | --- | --- |
| **Category** | **Theme** | **Representative Data Examples** |
| Relational | Myth | *“Surgeons want the best product they can use, procurement want the cheapest product… and that's normally a head-on collision” (*Supplier).*“That's where they [clinicians] think that we're delaying things because we only find out when everything's done and dusted, then it all comes to a halt, because we're having to do something to kind of rectify the problem, but if they did it right from the start... we'd be doing it as quickly as we possibly can within the remit that we've got”* (Procurement).*“The value in the collaborative procurement is that you all standardise your requirements… but that takes a lot of work to get peoples’ information back and then decipher from that... your standard list. What usually happens… is it ends up with just a full list and you don't make the benefits, because there's no difference”* (Procurement). |
| Relational | Mistrust | *“The consultants are happy with the different mix of products that are in there, with their clinical outcomes that they're getting, it doesn't make sense to kind of poke the beehive”* (Procurement).*“[Discussing supplier pricing] I'm not sure whether you call it being innovative or it's actually smoke and mirrors”* (Clinician).  |
| Relational | Perceptions of procurement | *"I can't imagine anyone actually leaves school and says I want to go into NHS procurement"* (Clinician).“*They've tendered incorrectly. They've gone out and looked at the wrong thing [price]”* (Supplier).“*They do waste money don't they? I see it everywhere*” (Supplier). “*It's a really difficult area to work in [procurement] because you're not part of a division... so you've almost got to build relationships and kind of rely on those to get you the authority*” (Procurement). |
| Resource | Capacity | *"It is the aspiration; we would love to be able to properly manage all of the contracts that we have in the department"* (Procurement).*“I put a proposal in to one Trust that would make a significant saving on the contract, saved about 25%, but all it needed was some stakeholders from their side to engage and make the changes and they were like we haven't got the resource at the minute to do that”* (Supplier). |
| Resource | Capability | *"They [clinicians] know a lot more about the market and the main players within that market, because we are juggling that many balls, which is really unfortunate"* (Procurement).*“Procurement person said.... ‘I've worked out how to save money, we're not going to have a head on the hip’ and I said, ‘so you're going to remove the key component from the hip...?’, and immediately he clicked and I thought, Jesus, what are we doing... the patient wouldn't be able to walk and these were decisions that these people were trying to make”* (Supplier). |

Resource barriers are evidenced in the lack of capacity and capability to provide the full range of standard procurement activities. Contract management was extremely rare and was not seen as a core process. Buyers perceived contract management as taking up time and capacity in an area with already stretched resources. Owing to a lack of supplier relationship management, suppliers frequently circumvent procurement to discuss development issues and innovations. Some suppliers have on-going, close working relationships with internal stakeholders, particularly in clinical areas. This is partially attributed to procurement’s lack of clinical knowledge and is more common with high-preference clinical goods and services, such as orthopaedic implants, but was also seen across non-specialist goods. Buyers’ detachment is used to justify their lack of commercial management of suppliers and there is no on-going assessment of supplier performance, cost improvement targets, risk profiles, financial viability, administrative efficiency, or corporate responsibility.

Buyers have a lack of knowledge of value drivers within product categories and assumptions are made on the primacy of volume to drive savings. The recording of savings is considered too complex where there are intangible aspects of value. Existing volume-based approaches are invariably not evidenced either and the lack of contract management leads to unrealised potential savings. Resource capabilities and capacity of procurement are not currently strategically aligned to stimulate value-based approaches. The barriers discussed in the case study findings are inter-related and thus unlikely to be overcome simply by adding more resources or developing training programmes to improve the capabilities of existing resources. Fundamentally, the relational barriers prevent the collaboration between stakeholders necessary for a value-based approach. The antecedents of these relational barriers are explored further in the hermeneutic analysis.

**Hermeneutic Findings**

This section reports the findings from the hermeneutic analysis of the Government commissioned reports that set the tone, culture and priorities for NHS procurement. The hermeneutic interpretation is situated against the timeline of recent key NHS reforms (Table 3) to illuminate how the stakeholders’ perceptions are embedded in the history, politics and culture that shaped them.

*Background to the texts and context*

In 2013 regional procurement development hubs were established in response to the National Audit Office (NAO) (2011) and Public Accounts Committee’s (PAC) (2011) criticisms of inadequate procurement capabilities to deliver, and evidence, value-for-money. The NAO and the PAC are audit institutions for the UK government; the NAO is a parliamentary agency focused on generating financial savings and the PAC assesses the efficiency and effectiveness of government departments’ spend (Russell and Meehan, 2014). The regional hub used in this research provides procurement support to Trusts across the region, and facilitates (but does not run) aggregated framework agreements. NHS Procurement has received unprecedented attention from the media and government departments in recent years. Successive governments have commissioned reviews to outline actions to be taken to improve efficiencies. The NHS policy environment creates pressures to deliver cost-savings, ensure patient safety and comply with EU procurement regulations.

Table 3 outlines the key NHS reforms from 2000-2015. Hermeneutic understanding sheds light on how cultural messages over time are concealed and revealed, distorted and dominated by particular groups and ideologies (Roberge, 2011). Thus, interpreting the historic policy environment formed a key stage in the iterative hermeneutic process. The various healthcare reforms illustrate the political and ideological undertones of successive governments.

**Table 3: Timeline of NHS reform 2000-2015**

|  |  |
| --- | --- |
| **Year** | **Key reforms** |
| 2000 | The NHS Plan is published. Outlines a strategy for increased resource by 2010 into the NHS and a move towards performance management. New model of financing agreed through the Private Finance Initiative |
| 2001 | Blair begins second term as Prime Minister (Labour). Commission for Healthcare improvement created to formally assess NHS hospitals’ performance. The Health and Social Care Act formalises the NHS Plan. |
| 2002 | Strategic Health Authorities (SHA) and Primary Care Trusts (PCT) replace District Health Authorities, legislated in the NHS Reform and Health Care Professions Act |
| 2003 | New contracts for GPs and consultants. Standardisation of pay and conditions as part of the Agenda for Change |
| 2004 | 10 Foundation Trusts are established with more control over budgets and services |
| 2005 | Blair begins third term as Prime Minister (Labour). Commissioning a patient-led NHS report recommends a step change by introducing practice-based commissioning. Budgets all set to ‘indicative only’ with PCTs continuing to hold the funds |
| 2006 | SHAs reduced from 28 to 10. PCTs fall from 303 to 152 through regional mergers to reduce overheads costs. Payment by results National Tariff introduced |
| 2009 | NHS Chief Executive Sir David Nicholson’s annual report warns the NHS to prepare for unprecedented efficiency savings of between £15bn-£20bn between 2011-2014 |
| 2010 | New UK Coalition government formed (Conservatives and Liberal Democrats). Cameron becomes Prime Minister. The Robert Francis Inquiry report into standard of care at Mid-Staffordshire NHS Foundation Trust is published. The Department of Health accept all 18 recommendations. A public enquiry is launched. Equity and Excellence: Liberating the NHS report pledges to stop the top-down reorganisation of the NHS |
| 2011 | Health and Social Care Bill is introduced. Networks of GP commissioning groups to buy care on behalf of communities. SHAs and PCTs to be abolished. Public Health England, a new body, to lead on public health nationally, with local authorities to lead locally. Healthcare market to be opened up to private and voluntary sector  |
| 2012 | Establishment of Clinical Commissioning Groups and the NHS Commissioning Board. Doctors take industrial action over changes to NHS pensions – the first doctors’ strike for the first time in almost 40 years |
| 2013 | Agreement between the Department of Health and the Association of the British Pharmaceutical Industry to provide assurance that prices on most of the branded medicines for the NHS would stay flat over the next two years  |
| 2014 | The Five Year Forward View outlines its 5 year strategy to reduce health inequalities, improve care quality and meet an estimated £30bn gap in funding by 2020/21 |
| 2015 | Greater Manchester announces plans to become the first English region to get full control of its health spending, as part of an extension of devolved powers. The Conservative party form a majority government. Health pledges include the implementation of the Five Year Forward View, seven-day GP access, 5k more GPs and additional NHS funding by 2020 |

*(Adapted from: Nuffield Trust, 2016)*

As illustrated in Table 3, from 2000, NHS reforms are many and extensive. The year 2007 is the first since 1993 without major reform highlighting the complex and dynamic environment. Under the UK’s ‘New Labour’ government (1997-2010), the ideological themes emerging from their reform agenda shows an initial predominance of efficiency and internal markets based on creating competition between parts of the NHS. Public service efficiencies are conceptually rooted in New Public Management (NPM) drawing on functionalist, private sector management techniques (Hood, 1991). Under NPM, service entities are disaggregated into their consistent parts to analyse unit costs, manage performance and control output while markets and competition are used to allocate resources (Radnor and Noke, 2013). The internal NHS “market” promoted a move from whole-health-system effectiveness, and despite the rhetoric of patient choice, the power and dominance of individual hospitals was strengthened through structural change (Hands, 2010). The top-down sustained structural changes in the NHS suggest a preoccupation by successive governments with control, rather than a focus on service quality to patients and preventative health. It should be acknowledged that the most significant reorganisation of the NHS came after 2010, despite the coalition government’s pledge to stop the top-down reorganisation of the NHS.

Table 3 illustrates that finance and costs are the mainstays of successive reform agendas in the NHS. The associated language in government policy shifts from public-private partnerships (from 2000), through efficiency and competition (from 2009), to choice (from 2011); yet the political drivers arguably remain constant – costs are levers of control. Costs (and procurement) are portrayed by government policy in an overly simplistic manner, belying the inherent structural complexity of the NHS and its service provision. The three selected texts analysed in the next section were considered in light of these broader political issues and ideologies.

*Hermeneutic analysis of texts*

*Document 1: Department of Health (2012), NHS procurement: Raising our game*

This report details how criticisms of procurement from the NAO (2011) and the PAC (2011) reports are to be addressed. The report sets a target procurement saving of £1.2 billion from over £18 billion per annum spend in England’s NHS Trusts 2010-11. Missing from the report is the detail of how this target is arrived at, in which categories of spend the savings should be focused, how the target might be achieved in practice, or how markets and suppliers might be affected. Despite noting in this report that suppliers wanted to focus on long-term value, and recognising that procurement should be outcome-focused and responsive to creative ideas from their supply chain, the approaches suggested are predominantly inward-facing (as opposed to market engaged) and price focused (as opposed to total cost focused). Although not stated specifically, what is clear from the report is the message - procurement is inefficient and pricing across all markets is volume driven. This limited economic perspective presents four solutions to achieve the leap from inefficiency to ‘world class’ procurement: aggregation, collaboration between trusts, standardisation of tender processes and internal price benchmarking. The four solutions have partial merit but how these individually contribute to the £1.2 billion saving target is not explained. The four solutions make many unqualified assumptions and present contradictory policies; for example it encourages buying from SMEs although this is likely to be incompatible with national-level aggregation.

*Document 2: Department of Health and NHS England (2013), Better Procurement, Better Value, Better Care: A Procurement Development Programme for the NHS*

Additional detail from the 2012 report is provided but the message and language is largelyunchanged. This report sets a procurement savings target of £1.5 billion but it is unclear if this is anadditional target or a stretch of the previous target. Multiple targets and unclear baselines create confusion. Specific examples are provided wheresavings could be made through product standardisation or price sharing across trusts. Examples relate to specific products (gloves, sutures, lubricants) rather than pushing for the development of category strategies. Some larger savings identified, for example £230 million onprocuring non-permanent staff, are indicative of wider policy failings around staffing and recruitment, but are positioned as procurementinefficiencies. Similar language to the first document is evidenced as again four initiativesare presented to move procurement from a position of inefficiency and ineffectiveness to‘world class’: interventions for immediate productivity gains, data transparency across trusts,clinical procurement review partnerships, and improvements to leadership and procurementcapability. The focus is again on “relentless focus on costs” (p3) through refusing anyinflationary rises from suppliers, aggregation, and price benchmarking between trusts.How the optimal price/value life cycle decisions are to be evaluated through thebenchmarking is unclear.

Within this ‘relentless’ price pressure environment, suppliers are also expected to be innovative, growing, vibrant and healthy – seemingly incompatible aspirations. Data sharing between Trusts implicitly creates inter-organisational competition, illustrating the dominance of the NPM ideology highlighted in the context analysis of Table 3. Competition between Trusts centres on lowest prices paid. Engagement with suppliers is recommended but is limited to ‘top’ suppliers. Interestingly, ‘top’ is defined in the report by levels of contract spend rather than a supplier’s quality, criticality, innovation or value initiatives. This report had explicit legitimacy as it had ministerial support of the Parliamentary Under-Secretary of State for Health and led to the appointment of Lord Carter to review the productivity of NHS hospitals.

*Document 3: Lord Carter of Coles (2015), Review of Operational Productivity in NHS providers (interim report)*

Lord Carter was appointed in June 2014 by the government Health Secretary to chair the NHS Procurement and Efficiency Board. Working with 22 NHS providers across England, Carter’s report reviews the opportunities for efficiency savings across the NHS. The report suggests savings of up to £5 billion per annum by 2019/20 could be delivered, including £1 billion from improvements in procurement. The report marks a positive acknowledgement towards procurement’s potential supply chain role centred on value. In contrast to previous reports it explicitly recognises the complexity of NHS costs and the need to change how procurement (and clinicians) work with suppliers. Yet, despite this steer towards a value-based approach, the report’s recommendations revert to aggregation as the solution for procurement, predominantly through the aim of a single national catalogue for NHS products and sharing of procurement services. How the longer-term value is to be achieved by procurement is not explored, despite initial positivity.

The texts, in conjunction with the historical policy environment build a picture of procurement not achieving maximum productivity and failing to maximise its market power. Aggregated procurement and relentless price pressure are promoted to secure financial power and control. National-level standardisation and price comparisons force procurement into a myopic internally focused function. Price comparisons are beneficial but the principal purpose should not be on comparing different organisational units *per se*, but on enabling and driving improvements in value, and developing procurement as a strategic VRIO resource. The role of market analysis, contract management or how suppliers might react and shift to the proposed policies are not discussed in any of the reports.

**Discussion**

In this section the case data and hermeneutic analysis of the government’s antecedent reform agenda are combined to explore procurement’s focus on prices paid, despite the apparent willingness of all stakeholders to adopt longer-term value-based approaches. Policy-level drivers that lead to resource constraints and stifle the ability to mobilise and strategically leverage resources are explored, an area under-theorised in extant RBV studies.

The hermeneutic analysis highlights a policy environment steeped in politics, financial control, and dynamic conflict-ridden change. Procurement is repeatedly presented as inefficient and out of control; a position reinforced by the legitimacy of government reports. Legitimacy cognitively embeds assumptions and norms (Suddaby and Greenwood, 2005), shaping perceptions and setting boundaries of acceptable practice and beliefs (Berger and Luckmann, 1992). Legitimacy is achieved in this case through ministerial and policy support despite the lack of involvement of procurement specialists and experts. The legitimacy of government-supported aggregation makes it difficult for alternative approaches to gain traction within the NHS. To adopt value-based procurement that integrates supply chain innovation, organisations require supportive resources, organisational cultures, capabilities, infrastructure, and processes (Heitmueller et al., 2016).

Cost reduction targets are presented without context or reference to, market drivers, reduced capacity, increased demand, nor the complexity of the NHS. Cost reduction without regard to the patient outcomes can obscure value leading to dangerous, self-defeating consequences (Porter, 2010). Purchase decisions in healthcare can be enormously consequential with irreversible effects that make them qualitatively different from suboptimal purchases in other markets (Blumenthal and Stremikis, 2013). Procurement currently plays an important compliance role in navigating the EU Procurement regulation landscape but could contribute further strategic value through deploying commercial skill across the full procurement cycle. In terms of the RBV, there is potential for procurement-clinician collaboration to develop a strategic intra-organisational knowledge-based resource to identify, drive and sustain value through the supply chain. The broad support for value-based approaches suggests this potential, but the RBV obscures the pre-existing, deep-rooted relational barriers that stem from the sustained negative positioning of procurement from government-backed reports, that can block this progression.

The policy environment creates challenges in balancing the message of the real need for cost reduction in the short term with the potential for value-based approaches in the longer term. The trajectory of change in the context of these mixed logics is necessarily uncertain (Miller and French, 2016). Under the RBV, environmental turbulence underlines the need to strategically manage resources to enable a suite of options that can be drawn from and leveraged to enable adaption (Eisenhardt, 1990). Organisations that can mobilise resources when faced with turbulence are those that can sustain value (Foss, 1998). Despite the changing landscape the strategic deployment of procurement approaches has not changed. For the NHS the turbulent environment appears to increase its politicization that serves to keep procurement on a legitimised, government-preferred route of aggregation, despite its undesirability for key stakeholders and disappointing results in practice. A key point here is that aggregated procurement carries an assumption of a ‘once and for all’ solution, yet healthcare in comparison is dynamic and in constant flux.

Government expectations are that spend and resource aggregation reduce prices and encourage supplier innovation. The focus of government policy is on repositioning procurement’s market power, rather than investing in procurement’s strategic development. The RBV suggests that leveraging resources and capabilities form the basis for organisational effectiveness (Wernerfelt, 1984). Exploiting VRIO resources allows organisations to capture value (Barney, 1991). An assumption in RBV is that organisations develop strategic resource capacity, but also have the maturity to understand how, when, and why these resources can be deployed. Procurement maturity, rather than contract size contribute to more sustainable activities (Meehan and Bryde, 2015). In RBV terms, aggregation could make the NHS’s spending power a VRIO resource in selected categories, if it was evidence-based, targeted and underpinned by a wider procurement strategy. However, the under-investment in procurement’s development coupled with negative stakeholder attitudes have led to a lack of capacity and capability to develop the required commercial strategies, preventing the strategic mobilisation of this potential resource.

Annual financial targets, government rhetoric and reform fuel the price-based assumptions as they pay little recognition to procurement’s potential longer-term value contribution beyond price. There is some evidence that the reports are an accurate reflection of some parts of NHS procurement as when, where, and how, value is created and captured is currently ill defined in tenders or contracts. Despite stakeholders’ acknowledgement of its lack of success, aggregation is still promoted, entrenched in the government-promoted view that all markets are volume driven. The wider implication of policies over-simplifying aggregation as a solution in complex, dynamic supply markets, is that the message negatively impacts procurement’s profile with clinicians and suppliers. The four-step solutions offered imply an easy process to deliver world-class procurement. Failure to deliver these seemingly simple world-class reductions creates myths that procurement is at fault and is ineffective. Negative perceptions prevent collaborative relationships and resource coordination between organisational units and external partners, essential components in the RBV (Fredericks, 2005).

Current NHS procurement practices sustain and encourage power-based win-lose perceptions of buyer-seller relationships, in contrast with moves in the purchasing and supply management literature towards collaborative innovation (Corsten and Felde, 2005), and the strategic positioning of purchasing (Lindgreen and Wynstra, 2005). Aggregation runs the risk of excluding new/smaller suppliers who might struggle with the scale of tenders, thus creating conditions that support the status quo for large, prominent suppliers. Aggregation, if not managed strategically considering the full procurement/cost cycle, can create a myopic reductionist position to prices, iteratively seeking reductions in supplier margins year-on-year. While this can creates the illusion of change, ‘less bad’ does not equate to being ‘good’ and is not sustainable long-term. The policy environment impacts public procurement’s interactions with the healthcare market. Negative positioning and price-based short-term targets encourage suppliers and clinicians to exclude procurement from decision-making, thus removing the potential for commercial oversight. Positive internal relationships are critical to the value agenda (Matthyssens et al., 2016). Sustaining power-based relationships limits procurement’s ability to mobilise internal resources and build shared knowledge resources across internal stakeholder groups.

Competition in public sector contexts is conceptualised in the RBV literature as inter-organisational efficiency performance benchmarking and value (Pee and Kankanhalli, 2016). As evidenced in the hermeneutic analysis, competition in the NHS is underpinned by a political ideology centred on gaining control of financial levers that has led to adversarial approaches between Trusts. The absence of shared learning in the bed management contract provides evidence of an insular, internally competitive culture. In this competitive environment there is a risk that quality-based performance indicators become marginalised by purely financial metrics (Harvey et al., 2010). RBV is built on an assumption of heterogeneous resources across organisations. Public sector environments constrain heterogeneity through prescribing uniform resource standards and options (Oliver, 1997), seen in the NHS through government pressure to agree product catalogues nationally, limiting procurement options. These pressures limit resource diversity and deployment and run counter to the potential of VRIO resources.

*Managerial and policy implications*

Over a long timeframe government policy has created and reinforced attitudes of poor procurement. The challenge for policy makers is that they need to highlight the significance of the financial deficit, which is exacerbated by poor procurement control, as well as creating a supportive environment for change and innovation. Policy needs to reflect more accurately the cost/value landscape of supply markets, set against the changing capacity and demand for healthcare services overs time. Value in healthcare is broadly defined as the patient health outcomes achieved per pound spent (Porter and Teisberg, 2006). In the NHS, defining value and cost against patients’ health outcomes is a critical departure from traditional approaches that assess procurement ‘success’ only against previous prices paid for products and services. This is important as it represents a shift in procurement’s role, from a focus on price efficiencies disaggregated from other parts of the value chain, to the development of strategic procurement resources with capability to identify, create and capture value across internal and external supply chains. Many of the barriers to value-based procurement in the NHS are located outside of procurement and pre-exist the current situation. Senior procurement managers need to develop mechanisms to build control and influence at a policy level.

Saving money through economies of scale is necessary but not sufficient to address the funding crisis across the public sector. The role of aggregation in providing routes for supply-side innovation that are scalable for commercial viability is overlooked in current practice but could provide a solution that bridges current regional structures and value-based goals. Procurement needs to broaden its field of vision and influence, working actively with the supply base and internal stakeholders. The myths stemming from policy documents need to be challenged. Senior procurement managers must work more effectively with national policy makers to highlight the damage of persistent criticism and move instead to increase the involvement of procurement professionals in exploring a range of procurement strategies. Specifically, there is a need to operationalise longer-term outcome-focused criteria within tenders and contracts, to promote the integration of suppliers’ innovation into the supply chain. Open innovation models shift away from the traditional assumption that clinicians alone are able to devise, develop, and diffuse innovative solutions in healthcare (Bullinger et al., 2012). Diverse stakeholders, including supply chain members need to be engaged and governed in these new value-based approaches (Thune and Mina, 2016). Procurement can play a leading role here, but this requires trust and credibility across stakeholder groups, a task impeded by negative policy environments.

In public sector environments the RBV needs extension to capture how the political environment influences dynamic capabilities (Eisenhardt and Martin, 2000). External pressures over time can limit the potential for value-based procurement. As procurement resource is expected to shrink through regional or national structures, so too does the investment in its development. Investment in resources and training to improve procurement capabilities are necessary in order to release the potential savings from adopting a value-based approach. However, this alone is unlikely to be enough, due the relational barriers identified. Productive relationships are of growing importance in purchasing and supply management research (Obloj and Zemsky, 2015). One suggestion to begin breaking down barriers is to expand category management practices to build buyers’ market knowledge and develop targeted relationships with suppliers and clinicians. A successful example can be seen in the total bed management contract detailed in the case study. Annual budgets and short-term savings targets stifle the opportunity for value-based approaches. Whilst savings targets are necessary to handle the deficit, Finance Directors need to offer procurement some flexibility to consider costs and benefits over a longer time frame. There is a broad cautionary lesson here of accounting for unintended consequences of any change in strategy at an operational level.

One of the limitations of this research is that it does not study solutions to these complex problems. There is consensus across participants, that value-based procurement should be adopted in healthcare. This research has identified what the barriers are, but much more work needs to be done to identify what actions can be taken to overcome these barriers. For the relational barriers researchers might consider using social capital theory to develop a deeper understanding of the issues of conflict and mistrust. Conducting a cost benefit analysis of increasing strategic procurement resources and capacity would be a beneficial addition to this work. Future research is required to compare the savings from aggregation against adopting a value-based approach when tendering a variety of healthcare products and services. Building this evidence base is necessary in order to justify the investment in resources required.

**Conclusions**

The research improves our understanding of why healthcare procurement is struggling to adopt a value-based approach, despite overwhelming stakeholder support. Moving from efficiency measures focused on price alone to effective patient health outcomes achieved per pound spent (Porter and Teisberg, 2006) is important in the UK’s NHS as many contracts are already commercially optimised, resulting in diminishing returns over time. The research demonstrates how the legitimising effect of political reports and ideologies over many years sustains price-based markets, which in turn reinforce the status quo of large dominant suppliers and can exclude new or small suppliers. These exclusionary effects can reduce the longer term potential for innovation and new competition. The constant pressure from government policy rhetoric attributes the financial challenges largely poor procurement, yet there is a lack of evidence to back these claims, or the proposed government solution of aggregation.

The results contribute to the conceptual development of value-based procurement. Value-based approaches have a fundamentally different worldview of procurement’s role based on wider time, cost and scope considerations. Despite the lack of adoption, stakeholders across the supply chain shared a clear view on what value-based approaches could achieve, and the focus for improvement centred on patient outcomes, collaboration, and total cost across a supply chain. The homogenous view of value challenges the prevailing view in the literature that diverse stakeholders’ have conflicting goals in public sector contexts (Hazlett et al., 2013, Propper and Wilson, 2003, Williams and Shearer, 2011). Stakeholder conflict only emerged in the context of price and volume dominant approaches suggesting the limited ability of whole scale aggregation approaches to deliver longer-term value, supply chain integration and social capital.

Critically, cost reduction is still at the centre of value-based procurement, but it is contextualised, temporal and multifaceted. Our research adds support to studies that posit that healthcare procurement often overlooks contemporary views of value creation (Walker et al., 2008), and public procurement focuses on unit price savings rather than value over time as measures of success (Patrucco et al., 2016). Interestingly, the focus on unit price savings creates barriers for cooperative, aggregated procurement, not just for value-based procurement. When broken down to an individual unit or annual budget level, the scale economies and savings demonstrated at an aggregated corporate level can appear small, are less transparent, and are not always identifiable. The results of this research highlight the need for longer-term accounting timeframes to account for costs and benefits beyond price. Conceptual models of value need to consider how different stakeholder groups can assess aspects of value over time, not just at the sourcing stage.

The findings demonstrate the theoretical boundaries of adopting RBV in a public sector context. Public procurement organisations have been criticised for lacking crucial resource capabilities to cope with dynamic demands, both internally and across their external networks (Edler and Yeow, 2016). We use the RBV to add explanatory support for the resource immobility in public procurement; the lack of strategic positioning, weak dynamic capabilities and lack of capacity provide reasons for lack of uptake of value-based procurement, despite high levels of multi-stakeholder support. Under an RBV lens, organisations must have the capability, capacity and knowledge to utilise the resources effectively (Medcof, 2001). Our results show that the RBV is still limited in its adaptation since it fails to address the exogenous pressures of government policies on resources, market dynamics, and relationships. We contribute to an extended consideration of the RBV in public organisations through identifying the role of the historic policy environment over time in determining and legitimatising an organisation’s strategic direction.

The hermeneutic approach provides a unique insight and understanding of how governments reports, and their implied legitimacy, have shaped NHS procurement with respect to power and language (Kinsella, 2006) to expose how the explicit and implicit meaning of politically powerful reports impact behaviour (Ricoeur, 1981) in relation to the price-dominant procurement. Novel or alternative methods can challenge assumptions and help scholars be more impactful through uncovering previously hidden mechanisms at play in the development of strategic procurement (Knight et al., 2016).

The findings show the importance of extending the RBV to consider pre-existing, antecedent policies that impact resource mobilisation. We unpick the roots of current price-based procurement approaches and show how the political environment sustains them, despite support for a different value-based direction. The political mechanisms have a wide reach, influencing the development of strategic resources, resource mobilisation, stakeholder attitudes and markets. The longstanding policy environment is not currently represented in the RBV, as its starting position is an organisation’s current resource base, looking forward to where it could be. The RBV assumes an organisation’s strategic development is constrained only by current and future variables. The implication is that resources are malleable to change and the historical social and political context is extraneous. Our study challenges this view, at least for public organisations, where decisions, directions and attitudes are products of a deeply etched, ideological context that serve to constrain progress. The RBV in isolation struggles to account for the lack of adoption of value-based procurement. Extending RBV to also examine the role of pre-existing policy environment underpins our call for future public procurement studies to incorporate policy variables into the contexts of enquiry. Consideration of the political environment can help to account for the complex regimes of public procurement as part of the broader context of historical, and on-going, social and political change.

The extant value literature is predominantly set in private sector buyer-seller or seller-customer contexts, and they carry an assumption that all organisations can adopt value-based procurement approaches. Our case research highlights the resource and relational barriers to this transition in a public environment. Intra-organisational cooperation is a key ingredient in the value agenda (Matthyssens et al., 2016, Pinnington et al., 2016). The results reveal the myth-making power dynamics and legitimating devices at play at a policy level that create persistent relational barriers to value-based approaches. Identifying the barriers’ antecedents is important to prevent focusing on symptoms rather than causes. Solutions need to pay attention to the wider political issues that create and sustain relational barriers in the first place. The role of the external environment adds to the nuance of our understanding of the transition from price-based to value-based procurement and opens up a new avenue for future public procurement research.

In the NHS the position on costs has dominated, messages that reinforce procurement’s lack of maturity (Patrucco et al., 2016) and weigh heavy into the very psyche of healthcare and procurement professionals. Cost pressure is unsurprising given the size of the financial challenge, but patient outcomes, not costs are more effective drivers of change in healthcare (Heitmueller et al., 2016). Shifting the focus to value of outcomes remains a central challenge in healthcare (Porter, 2010), and will persist while structures and cultures are entrenched in, and legitimised by, narrow cost and control ideologies. External policy pressures are perceived by procurement to provide high-level pressure to deliver annual savings, without consideration of how these are to achieved or the longer-term consequences, and thus work counter to the longer-term perspective of value-based approaches (Lindgreen and Wynstra, 2005). The growing financial challenges underpin the criticality for revitalising public procurement. Procurement, like the wider public sector, is, and will continue to be in a state of flux. The broad support for value-based approaches by key stakeholders suggests the potential for its adoption. However, as shown in this paper, while the RBV provides a useful lens to consider the development and mobilisation of strategic VROI procurement resources, it can obscure the pre-existing, deep-rooted relational barriers. In public procurement environments, the significant legitimising impact of the policy environment can effectively block the progression to more sustainable procurement approaches, and requires consideration if procurement is to contribute strategically.

**References**

ALBANO, G. L. & SPARRO, M. 2010. Flexible strategies for centralized public procurement. *Review of Economics and Institutions,* 1**,** 1-32.

ALLEN, B., WADE, E. & DICKINSON, H. 2009. Bridging the divide-commercial procurement and supply chain management: Are there lessons for health care commissioning in England? *Journal of Public Procurement,* 9**,** 505-534.

ALVESSON, M. & SANDBERG, J. 2011. Generating research questions through problematization. *Academy of management review,* 36**,** 247-271.

AMIT, R. & ZOTT, C. 2001. Value creation in e‐business. *Strategic management journal,* 22**,** 493-520.

ANDERSON, J. C. & NARUS, J. A. 1998. Business marketing: understand what customers value. *Harvard business review,* 76**,** 53-67.

ANDERSON, S. W., GLENN, D. & SEDATOLE, K. L. 2000. Sourcing parts of complex products: evidence on transactions costs, high-powered incentives and ex-post opportunism. *Accounting, Organizations and Society,* 25**,** 723-749.

ARROWSMITH, S. & CRAVEN, R. Supplier litigation behaviour in the United Kingdom: A preliminary assessment based on perspectives of legal advisors. Public Procurement: Global Revolution VI, 2013 University of Nottingham. 1-27.

ATEŞ, M. A., WYNSTRA, F. & VAN RAAIJ, E. M. 2015. An exploratory analysis of the relationship between purchase category strategies and supply base structure. *Journal of Purchasing and Supply Management,* 21**,** 204-219.

BALFOUR, D. L. & MESAROS, W. 1994. Connecting the local narratives: Public administration as a hermeneutic science. *Public Administration Review,* 54**,** 559-564.

BARBOSA, K. & FIUZA, E. 2011. Demand aggregation and credit risk effects in pooled procurement: evidence from the Brazilian public purchases of pharmaceuticals and medical supplies. *FGV-EESP C-Micro Working Paper,* July**,** 1-49.

BARNEY, J. 1991. Firm resources and sustained competitive advantage. *Journal of management,* 17**,** 99-120.

BERGER, A. 1997. Continuous improvement and kaizen: standardization and organizational designs. *Integrated Manufacturing Systems,* 8**,** 110-117.

BERGER, P. & LUCKMANN, T. 1992. The social construction of reality. *NY-1966*.

BLUMENTHAL, D. & STREMIKIS, K. 2013. Getting real about health care value. *Harvard Business Review blog network* [Online]. Available: https://hbr.org/2013/09/getting-real-about-health-care-value [Accessed 30/7/2015].

BOWMAN, C. & AMBROSINI, V. 2000. Value creation versus value capture: towards a coherent definition of value in strategy. *British Journal of Management,* 11**,** 1-15.

BOYER, K. K. & PRONOVOST, P. 2010. What medicine can teach operations: what operations can teach medicine. *Journal of Operations Management,* 28**,** 367-371.

BOYNE, G. A. & MEIER, K. J. 2009. Environmental turbulence, organizational stability, and public service performance. *Administration & Society,* 40**,** 799-824.

BRYSON, J. M., ACKERMANN, F. & EDEN, C. 2007. Putting the resource‐based view of strategy and distinctive competencies to work in public organizations. *Public administration review,* 67**,** 702-717.

BULLINGER, A. C., RASS, M., ADAMCZYK, S., MOESLEIN, K. M. & SOHN, S. 2012. Open innovation in health care: Analysis of an open health platform. *Health policy,* 105**,** 165-175.

BURNS, L. R. & LEE, J. A. 2008. Hospital purchasing alliances: utilization, services, and performance. *Health Care Management Review,* 33**,** 203-215.

BURTON, C. R. & RYCROFT-MALONE, J. 2014. Resource based view of the firm as a theoretical lens on the organisational consequences of quality improvement. *International journal of health policy and management,* 3**,** 113-115.

CARTER, P. 2015. Review of Operational Productivity in NHS providers (interim report).

CORSTEN, D. & FELDE, J. 2005. Exploring the performance effects of key-supplier collaboration: an empirical investigation into Swiss buyer-supplier relationships. *International Journal of Physical Distribution & Logistics Management,* 35**,** 445-461.

DELOITTE 2017. 2017 global health care outlook: Making progress against persistent challenges. Deloitte.

DEPARTMENT OF HEALTH 2012. NHS Procurement: Raising our Game. London: Crown Copyright.

DEPARTMENT OF HEALTH & NHS ENGLAND 2013. Better Procurement, Better Value, Better Care: A Procurement Development Programme for the NHS.

DIESING, P. 1991. *How Does Social Science Work?,* Pittsburgh, University of Pittsburgh Press.

DOOLEY, K. J. 2016. Using manifest content analysis in purchasing and supply management research. *Journal of Purchasing and Supply Management,* 22**,** 244-246.

DUBOIS, A. & SALMI, A. 2016. A call for broadening the range of approaches to case studies in purchasing and supply management. *Journal of Purchasing and Supply Management,* 22**,** 247-249.

DUNN, P., MCKENNA, H. & MURRAY, R. 2016. Deficits in the NHS 2016. The King's Fund.

EDLER, J. & YEOW, J. 2016. Connecting demand and supply: The role of intermediation in public procurement of innovation. *Research Policy,* 45**,** 414-426.

EISENHARDT, K. M. 1990. Speed and strategic choice: How managers accelerate decision making. *California Management Review,* 32**,** 39-54.

EISENHARDT, K. M. & MARTIN, J. A. 2000. Dynamic capabilities: what are they? *Strategic management journal,* 21**,** 1105-1121.

ERRIDGE, A. 2007. Public Procurement, Public Value and the Northern Ireland Unemployment Pilot Project. *Public Administration,* 85**,** 1023-1043.

EUROPEAN PARLIAMENT & COUNCIL OF THE EUROPEAN UNION 2014. Directive 2014/24/EU of the European Parliament and of the Council of 26 February 2014 on public procurement and repealing Directive 2004/18/EC,.

FERLIE, E., CRILLY, T., JASHAPARA, A., TRENHOLM, S., PECKHAM, A. & CURRIE, G. 2015. Knowledge mobilization in healthcare organizations: a view from the resource-based view of the firm. *International Journal of Health Policy and Management,* 4**,** 127-130.

FOSS, N. J. 1998. The resource-based perspective: an assessment and diagnosis of problems. *Scandinavian Journal of management,* 14**,** 133-149.

FREDERICKS, E. 2005. Infusing flexibility into business-to-business firms: A contingency theory and resource-based view perspective and practical implications. *Industrial Marketing Management,* 34**,** 555-565.

GADAMER, H.-G. 1975. Hermeneutics and social science. *Philosophy & Social Criticism,* 2**,** 307-316.

GEITONA, M. 2016. Assessing the value of medicinal innovation in an era of increasing austerity. *Social Cohesion and Development,* 7**,** 39-51.

GOBBI, C. & HSUAN, J. 2015. Collaborative purchasing of complex technologies in healthcare: Implications for alignment strategies. *International Journal of Operations & Production Management,* 35**,** 430-455.

GRUDINSCHI, D., SINTONEN, S. & HALLIKAS, J. 2014. Relationship risk perception and determinants of the collaboration fluency of buyer–supplier relationships in public service procurement. *Journal of Purchasing and Supply Management,* 20**,** 82-91.

HANDS, D. 2010. *Inspiration, Ideology, Evidence and the National Health Service, Inaugural Professorial Lecture, Visiting Professor in Health Policy and Management, The Welsh Institute for Health and Social Care.* [Online]. The University of Glamorgan, delivered on 9th March 2010. . Available: http://www.sochealth.co.uk/national-health-service/healthcare-generally/history-of-healthcare/inspiration-ideology-evidence-and-the-national-health-service/ [Accessed 13/10/2015].

HARVEY, G. & KITSON, A. 2015. Necessary but not Sufficient…: Comment on'Knowledge Mobilization in Healthcare Organizations: A View from the Resource-Based View of the Firm'. *International journal of health policy and management,* 4**,** 865-868.

HARVEY, G., SKELCHER, C., SPENCER, E., JAS, P. & WALSHE, K. 2010. Absorptive capacity in a non-market environment: a knowledge-based approach to analysing the performance of sector organizations. *Public Management Review,* 12**,** 77-97.

HAZLETT, S.-A., MCADAM, R. & WALKER, T. 2013. The role of operations management in public sector policy and practice alignment: a local government analysis. *Production Planning & Control,* 24**,** 988-1001.

HEIDEGGER, M. 1962. *Being and Time... Translated by John Macquarrie & Edward Robinson*, London.

HEITMUELLER, A., BULL, A. & OH, S. 2016. Looking in the wrong places: why traditional solutions to the diffusion of innovation will not work. *BMJ Innovations,* Published Online First 25 March 2016.

HOOD, C. 1991. A public management for all seasons. *Public administration,* 69**,** 3-19.

JAAKKOLA, E. & HAKANEN, T. 2013. Value co-creation in solution networks. *Industrial Marketing Management,* 42**,** 47-58.

JOHNSON, P. F., LEENDERS, M. R. & MCCUE, C. 2003. A comparison of purchasing’s organizational roles and responsibilities in the public and private sector. *Journal of Public Procurement,* 3**,** 57-74.

KÄHKÖNEN, A.-K. & LINTUKANGAS, K. 2012. The underlying potential of supply management in value creation. *Journal of Purchasing and Supply Management,* 18**,** 68-75.

KARJALAINEN, K. 2011. Estimating the cost effects of purchasing centralization—Empirical evidence from framework agreements in the public sector. *Journal of Purchasing and Supply Management,* 17**,** 87-97.

KINSELLA, E. A. 2006. Hermeneutics and critical hermeneutics: Exploring possibilities within the art of interpretation. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research,* 7**,** Art. 19, http://nbn-resolving.de/urn:nbn:de:0114-fqs0603190 accessed 23/1/2014.

KNIGHT, L., TATE, W. L., MATOPOULOS, A., MEEHAN, J. & SALMI, A. 2016. Breaking the mold: Research process innovations in purchasing and supply management. *Journal of Purchasing and Supply Management,* 22**,** 239-243.

LICHTENBERGER, S., NEAL, E. & UNGERMAN, D. 2010. How sourcing excellence can lower hospital costs. *Health International* 10**,** 18-29.

LINDGREEN, A. & WYNSTRA, F. 2005. Value in business markets: What do we know? Where are we going? *Industrial Marketing Management,* 34**,** 732– 748.

LOWE, S., ELLIS, N. & PURCHASE, S. 2008. Rethinking language in IMP research: Networking processes in other words. *Scandinavian Journal of Management,* 24**,** 295-307.

MATTHYSSENS, P., BOCCONCELLI, R., PAGANO, A. & QUINTENS, L. 2016. Aligning Marketing and Purchasing for new value creation. *Industrial Marketing Management,* 52**,** 60-73.

MEDCOF, J. W. 2001. Resource‐based strategy and managerial power in networks of internationally dispersed technology units. *Strategic Management Journal,* 22**,** 999-1012.

MEEHAN, J. & BRYDE, D. J. 2015. A field-level examination of the adoption of sustainable procurement in the social housing sector. *International Journal of Operations & Production Management,* 35**,** 982-1004.

MEEHAN, J., LUDBROOK, M. & MASON, C. 2016. Collaborative public procurement; Institutional explanations of legitimised resistance. *Journal of Purchasing and Supply Management,* 22**,** 160-170.

MIAH, S. J., AHSAN, K. & MSIMANGIRA, K. A. 2013. An approach of purchasing decision support in healthcare supply chain management. *Operations and Supply Chain Management,* 6**,** 43-53.

MILLER, F. A. & FRENCH, M. 2016. Organizing the entrepreneurial hospital: Hybridizing the logics of healthcare and innovation. *Research Policy,* available online; in press.

NACHTMANN, H. & POHL, E. A. 2009. The state of healthcare logistics: cost and quality improvement opportunities. Center for Innovation in Healthcare Logistics, University of Arkansas.

NATIONAL AUDIT OFFICE. 2011. The procurement of consumables by NHS Acute and Foundation Trusts Available: http://www.nao.org.uk/publications/1011/nhs\_procurement.aspx [Accessed 16/1/2015].

NELLORE, R., CHANARON, J.-J. & SÖDERQUIST, K. E. 2001. Lean supply and price-based global sourcing—the interconnection. *European Journal of Purchasing & Supply Management,* 7**,** 101-110.

NHS CHOICES. 2016. *The NHS in England.* [Online]. Available: http://www.nhs.uk/NHSEngland/thenhs/about/Pages/authoritiesandtrusts.aspx [Accessed 13/10/2016].

NHS CONFEDERATION. 2015. *Key statistics on the NHS* [Online]. Available: http://www.nhsconfed.org/resources/key-statistics-on-the-nhs [Accessed 12/10/2015].

NOLLET, J. & BEAULIEU, M. 2003. The development of group purchasing: an empirical study in the healthcare sector. *Journal of Purchasing and Supply Management,* 9**,** 3-10.

NUFFIELD TRUST. 2016. *The history of NHS reform* [Online]. Available: http://nhstimeline.nuffieldtrust.org.uk/ [Accessed 21/10/2015].

OBLOJ, T. & ZEMSKY, P. 2015. Value creation and value capture under moral hazard: Exploring the micro‐foundations of buyer–supplier relationships. *Strategic Management Journal,* 36**,** 1146-1163.

OLIVER, C. 1997. Sustainable competitive advantage: Combining institutional and resource-based views. *Strategic management journal,* 18**,** 697-713.

OMBAKA, E. 2009. Current status of medicines procurement. *American journal of health-system pharmacy,* 66**,** s20-s28.

PABLO, A. L., REAY, T., DEWALD, J. R. & CASEBEER, A. L. 2007. Identifying, enabling and managing dynamic capabilities in the public sector. *Journal of Management Studies,* 44**,** 687-708.

PATRUCCO, A. S., LUZZINI, D. & RONCHI, S. 2016. Evaluating the Effectiveness of Public Procurement Performance Management Systems in Local Governments. *Local Government Studies,* available on line, in press**,** 1-23.

PAZIRANDEH, A. & HERLIN, H. 2014. Unfruitful cooperative purchasing: a case of humanitarian purchasing power. *Journal of Humanitarian Logistics and Supply Chain Management,* 4**,** 24-42.

PEDERSEN, J. 1996. Product standardization: playing to win. *Vivo,* 14**,** 15-20.

PEE, L. & KANKANHALLI, A. 2016. Interactions among factors influencing knowledge management in public-sector organizations: A resource-based view. *Government Information Quarterly,* 33**,** 188-199.

PIENING, E. P. 2013. Dynamic capabilities in public organizations: A literature review and research agenda. *Public Management Review,* 15**,** 209-245.

PINNINGTON, B. D., MEEHAN, J. & SCANLON, T. 2016. A grounded theory of value dissonance in strategic relationships. *Journal of Purchasing and Supply Management,* (in press).

PORTER, M. E. 2010. What Is Value in Health Care? *The New England Journal of Medicine,* 363**,** 2477-2481.

PORTER, M. E. & TEISBERG, E. O. 2006. *Redefining health care: creating value-based competition on results*, Harvard Business Press.

POSTREL, S. 2009. Multitasking teams with variable complementarity: Challenges for capability management. *Academy of Management Review,* 34**,** 273-296.

PRASAD, A. 2002. The contest over meaning: hermeneutics as an interpretive methodology for understanding texts. *Organisational Research Methods,* 5**,** 12-33.

PRITCHARD, J. 2012. *Muddy waters: making sense of the healthcare supply chain in the era of reform*.

PROPPER, C. & WILSON, D. 2003. The use and usefulness of performance measures in the public sector. *Oxford review of economic policy,* 19**,** 250-267.

PUBLIC ACCOUNTS COMMITTEE. 2011. Treasury Minute 35th Report Available: http://www.hm-treasury.gov.uk/d/hmt\_minutes\_29\_32\_reports\_cpas\_july2011.pdf [Accessed 16/1/2015].

RADNOR, Z. J. & NOKE, H. 2013. Conceptualising and contextualising public sector operations management. *Production Planning & Control,* 24**,** 867-876.

RICOEUR, P. 1981. *Hermeneutics and the human sciences: Essays on language, action and interpretation,* Cambridge, Cambridge University Press.

ROBERGE, J. 2011. What is critical hermeneutics? *Thesis Eleven,* 106**,** 5-22.

RUSSELL, C. & MEEHAN, J. 2014. Exploring legitimacy in major public procurement projects. *Journal of Public Procurement,* 14**,** 419-461.

SÀNCHEZ GRAELLS, A. & HERRERA ANCHUSTEGUI, I. 2014. Impact of public procurement aggregation on competition. Risks, rationale and justification for the rules in Directive 2014/24. *Research Paper No. 14-35.* University of Leicester School of Law.

SCHOTANUS, F. & TELGEN, J. 2007. Developing a typology of organisational forms of cooperative purchasing. *Journal of Purchasing and Supply Management,* 13**,** 53-68.

SCHOTANUS, F., TELGEN, J. & DE BOER, L. 2009. Unraveling quantity discounts. *Omega,* 37**,** 510-521.

SIRMON, D. G., HITT, M. A. & IRELAND, R. D. 2007. Managing firm resources in dynamic environments to create value: Looking inside the black box. *Academy of management review,* 32**,** 273-292.

SUCHMAN, M. C. 1995. Managing legitimacy: Strategic and institutional approaches. *Academy of Management Review,* 20**,** 571-610.

SUDDABY, R. & GREENWOOD, R. 2005. Rhetorical strategies of legitimacy. *Administrative Science Quarterly,* 50**,** 35-67.

SZYMANIEC-MLICKA, K. 2014. Resource-based view in strategic management of public organizations–a review of the literature. *Management,* 18**,** 19-30.

TERPEND, R., TYLER, B. B., KRAUSE, D. R. & HANDFIELD, R. B. 2008. Buyer–supplier relationships: Derived value over two decades. *Journal of Supply Chain Management,* 44**,** 28-55.

THUNE, T. & MINA, A. 2016. Hospitals as innovators in the health-care system: A literature review and research agenda. *Research Policy,* available online, in press.

UK PARLIAMENT. 2015. *Political challenges relating to an aging population: Key issues for the 2015 Parliament* [Online]. Available: https://www.parliament.uk/business/publications/research/key-issues-parliament-2015/social-change/ageing-population/ [Accessed accessed 02/06/2016].

ULAGA, W. 2003. Capturing value creation in business relationships: A customer perspective. *Industrial Marketing Management,* 32**,** 677-693.

VAN RAAIJ, E., SCHOTANUS, F. & VAN DER VALK, W. What do we know about purchasing health care? A systematic literature review and research agenda. 22nd IPSERA Conference, 2013 Audencia Nantes School of Management. 1115-1124.

WALKER, H., HARLAND, C., KNIGHT, L., UDEN, C. & FORREST, S. 2008. Reflections on longitudinal action research with the English National Health Service. *Journal of purchasing and supply management,* 14**,** 136-145.

WALKER, H., SCHOTANUS, F., BAKKER, E. & HARLAND, C. 2013. Collaborative procurement: a relational view of buyer–buyer relationships. *Public Administration Review,* 73**,** 588-598.

WANING, B., KAPLAN, W., KING, A. C., LAWRENCE, D. A., LEUFKENS, H. G. & FOX, M. P. 2009. Global strategies to reduce the price of antiretroviral medicines: evidence from transactional databases. *Bulletin of the World Health Organization,* 87**,** 520-528.

WARNER, M. E. & BEL, G. 2008. Competition or monopoly? Comparing privatization of local public services in the US and Spain. *Public Administration,* 86**,** 723-735.

WERNERFELT, B. 1984. A resource‐based view of the firm. *Strategic management journal,* 5**,** 171-180.

WILLIAMS, I. & SHEARER, H. 2011. Appraising public value: Past, present and futures. *Public administration,* 89**,** 1367-1384.

WOUTERS, M., ANDERSON, J. C. & WYNSTRA, F. 2005. The adoption of total cost of ownership for sourcing decisions––a structural equations analysis. *Accounting, Organizations and Society,* 30**,** 167-191.

YUKINS, C. R. 2010. A Versatile Prism: Assessing Procurement Law through the Principal-Agent Model. *Public Contract Law Journal,* 40**,** 63-86.