

**BRIDGING THE DIVIDE – COMMERCIAL PROCUREMENT AND
SUPPLY CHAIN MANAGEMENT: ARE THERE LESSONS FOR HEALTH
CARE COMMISSIONING IN ENGLAND?**

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ABSTRACT. Current English health policy is focused on strengthening the 'demand-side' of the health care system. Recent reforms are designed to significantly enhance the capability and status of the organisations responsible for commissioning health care services and, in so doing, to address some of the perceived problems of a historically provider/supplier-led health system. In this context, commissioning organisations are being encouraged to draw on concepts and processes derived from commercial procurement and supply chain management (SCM) as they develop their expertise. While the application of such principles in the health sector is not new, existing work in the UK has not often considered the role of health care purchasers in the management of health service supply-chains. This paper describes the status of commissioning in the NHS, briefly reviews the procurement and SCM literature and begins to explore the links between them. It lays the foundations for further work which will test the extent to which lessons can be extracted in principle from the procurement literature and applied in practice by health care commissioners.

INTRODUCTION

The English¹ National Health Service (NHS) provides universal access to comprehensive health care that is funded through general

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taxation and free at the point of delivery. The NHS is an important national institution both symbolically, as a representation of 'British' values, and economically, as the employer of around 1.3 million people (Department of Health, 2005a). As such, it is often portrayed and understood as a single, bureaucratically managed organisation, responsible for directly providing healthcare services via facilities managed locally, but ultimately owned, operated and staffed by the state. However, this common image simplifies what is in reality a more complex, and significantly less integrated entity. One particular feature of the NHS that is often overlooked as a result, is the fact that it is a purchaser, as well as a direct provider, of health care services.

At one level the purchasing role of the NHS is obvious. Given that NHS organisations do not manufacture their own drugs, medical devices, IT equipment, cleaning products or stationary, it is clear that these and other commodities must be procured from external suppliers. What is sometimes less well understood, however, is that in England NHS services are themselves 'purchased' and not simply administered through a devolved hierarchy. That is, although funding for health care is raised centrally, it does not then flow directly from the Treasury out to hospitals, health centres and other providers. Instead, it is allocated to intermediary NHS bodies (in England currently known as Primary Care Trusts, or PCTs), which act as third party payers. These organisations are responsible for assessing local health needs and prioritising the allocation of resources accordingly. PCTs secure the services required to meet those needs and priorities by agreeing and managing contracts with a range of healthcare providers. This strategic planning, procurement and monitoring role is referred to as 'commissioning' (Woodin, 2006).

This internal separation of purchasing and providing roles within the healthcare system was first introduced in the UK in the early 1990s, but the NHS had been dealing with external markets long before that (Ovretveit, 1995). This is because a significant proportion of the services available 'under the NHS' are not, and never have been, directly provided by NHS bodies at all. Almost all NHS funded primary care services (e.g., those provided by General Practitioners, dentists and community pharmacists), for example, are delivered by small businesses operating as contractors to, not employees of, the NHS. Therefore, far from being a monolithic provider of healthcare, the NHS is perhaps better understood as a network of multiple,

extended supply-chains, with purchaser and provider relationships operating as critical coordinating mechanisms at every level, both internally and across its organisational boundaries.

In England, this view of the NHS is becoming more salient as competition and choice are promoted as routes to service improvement (LeGrand, 2007). In order to achieve the 'provider plurality' (Department of Health, 2005b, 2005c, 2005d) required if patients are to be offered choice and personalisation, the Government has been encouraging new entrants to the supply-side of the healthcare system. As a result it is likely that an increasing proportion of the health services funded through the NHS will be provided by non-NHS organisations in future.

In summary, while the NHS's purchasing role is not new, the relative importance of its dual purchasing and providing responsibilities is changing. The NHS is increasingly required to buy not just goods but also services, and to purchase these not just from internal markets, but from an increasingly diverse cross-sector network of suppliers. The effectiveness of the NHS as a purchaser has therefore become critical to its success.

Correspondingly, the focus of political and managerial attention is shifting to the demand-side of the system. Following a period of heavy investment in NHS provision from 2000 onwards, policy-makers are now experimenting with a new set of structures, rules and incentives which, in combination, are designed to significantly strengthen the power and influence of NHS commissioners (Department of Health, 2005c). The strategy for transforming the NHS from a provider-led to a commissioner-led system includes dramatically increasing the knowledge, skills and capacity of individuals and organisations responsible for commissioning at a local level. In this context, there is a growing desire to learn about purchasing experience and competence in the commercial world. This includes learning from other approaches to healthcare purchasing specifically (in particular practices used by health insurers), but also more generally from procurement, supply-chain management and market management as practiced in other sectors. This approach has a degree of validity. If NHS commissioning involves the procurement of healthcare services from external providers and the management of healthcare supply-networks, it seems entirely logical for commissioners to turn to experts in

purchasing and supply-management as they seek to improve their own performance. We argue here, however, that there are several caveats to this proposition.

The first is that there are significant and important differences between buying commodities and commissioning human services. While manufacturing a product may involve an intricate assembly of parts, providing a healthcare service (for example a series of interventions to treat a disease such as cancer) involves a much higher-order coordination of facilities, equipment and human labour. Furthermore, the 'product' (in this case improved health and wellbeing) is often intangible. As in the case for all professional services, therefore, in healthcare purchasing activities such as specifying requirements, monitoring quality and assessing standards of delivery are notoriously problematic (Smeltzer & Ogden, 2002).

A second, related issue is that the professional (in particular medical) dominance of healthcare systems has a significant and complex impact on supply chain management activities (Kahan & Testa, 2007). In healthcare systems frontline professional staff effectively take purchasing decisions through the referrals they make, the tests they order, and the drugs they prescribe. Despite the observed shift in recent years away from classical professional archetype (P²) organisations to Managed Professional Business (MPB) archetypes in the face of competitive pressures (Cooper et al., 1996), healthcare professionals remain relatively unconstrained by managerial procurement or commissioning policies and continue to have substantial control over medical decisions concerning the care of patients (Friedson, 1986). While all supply chains may be shaped by power relations and the activities of various interest groups, the dominance of certain professionals within the NHS may constrain the activities of healthcare purchasers to a unique degree.

The final, and perhaps most fundamental point to make, is that within the NHS, the purchasing of services is only one aspect of the commissioning task. As public authorities, PCTs (the local healthcare commissioners) are civic institutions with a community leadership role (Williams et al., 2007). They are responsible for investing public resources in order to improve the overall health and well-being of a defined population and for reducing health inequalities within that population - not simply for securing the supply of health care services in response to expressed demand. One of the implications of this is

that commissioning is an inherently political task. It involves making major social policy decisions regarding the distribution and rationing of public resources, and the role of the state in enabling and constraining individual behaviour. Again, while commercial organisations will likewise have strategic objectives that extend beyond the efficiency of their supply-chains, they do not face the competing priorities and ‘wicked issues’ that shape the decisions and actions of public service commissioners.

Thus, while the theory and practice of industrial procurement and supply-chain management may appear relevant to NHS managers at present, it is not necessarily straightforward to identify which elements of this will actually be applicable to health service commissioning. If knowledge transfer is to be valid and valuable, therefore, it is important to ensure that any analysis looks beyond surface commonalities, and takes seriously the divide: the distance between commercial models based on the production, distribution and retail of commodities, and public management activities concerned with the co-ordination and improvement of complex human services.

The current article aims to begin the process of bridging this divide, that is, ascertaining the extent to which there might be learning from the commercial sector which could assist commissioners as they develop their role. It prepares the ground for research which will follow by clarifying key concepts and contextual factors in both health policy and management, and in the procurement / supply-chain management (SCM) literature. This literature review intends to determine whether there are particular areas where synergies between the two fields may emerge and provide useful lessons for health service commissioners. The article first describes the function and evolution of NHS commissioning in more detail and summarises the current policy position. In part two we explore procurement and supply chain management research as it has previously been applied in the health care sector and consider its limitations from the perspective of NHS commissioners. We then build on this to incorporate other aspects of the literature in the procurement and supply management fields in an attempt to identify key themes that may be salient to NHS commissioning and, therefore, appropriate subjects for further research.

HEALTH SERVICE COMMISSIONING IN ENGLAND

NHS commissioners purchase health services from both internal and external markets. Some NHS services (e.g., primary care) have always been contracted out, but the internal purchaser-provider split was not introduced until the early 1990s. Since then, even services managed by the NHS itself (in particular hospital services) have been organised through a variety of quasi-market mechanisms. As Mays and Hand (2000) identify, a belief in the power of markets and competition to reduce costs and improve the responsiveness of health care providers clearly played a significant part in the development of this policy in both the UK and New Zealand (where a similar model was adopted). In this regard, the reforms provide a classic example of the impact of New Public Management and rational-choice/new-institutional economics on UK social policy in the 1980s and 1990s (Dawson & Dargie, 2002; Peck & Dickinson, 2008).

Despite early rhetoric which suggested a change of direction (Department of Health, 1997), under new Labour the purchaser-provider split has not only been retained but has been radically extended. Although the organisations on the 'demand-side' of the system have been through several re-organisations, their purchasing role has been ever more clearly defined. Recent policy has emphasised that commissioning should be seen as the core function of PCTs (Department of Health, 2005b), and that further reform and improvement of the NHS now depends on 'world class' commissioners (Department of Health, 2007c). To support this shift towards a demand-led system, a number of new policies have been introduced over the past decade, policies designed to increase the use of market mechanisms and to give commissioners more teeth. This includes introducing external competition (in particular, buying in additional capacity from the independent sector to drive down waiting times for elective procedures); allowing NHS providers to become semi-autonomous Foundation Trusts (with freedoms to operate more like businesses); changing payment regimes so that funding is not tied up in block-contracts with monopoly providers; and giving patients the right to choose where they receive care (see Ham [2007a] for a summary of these reforms).

Yet, this revitalisation of purchasing and market-based reform tells only part of the story of contemporary English health policy.

There is growing recognition, for example, that the future cost and impact of the health system will depend as much on effective public health interventions and the extent to which individuals engage in protecting and managing their own health, as on the efficiency and productivity of health care provision (e.g., Wanless, 2002). In this regard health service commissioners have a crucial role to play in facilitating upstream interventions such as encouraging individuals to adopt healthier lifestyles, and influencing the decisions of other agencies which have an impact on the socio-economic determinants of health (e.g., education, housing, transport and leisure service providers). The appropriate mechanisms for organising activity here are more likely to be networks and partnerships than competitive markets.

Even in those areas of healthcare provision where competition may be more appropriate and productive (e.g., one-off elective procedures), providers still need to operate as part of an integrated supply network in order to ensure access to emergency services, to provide the necessary infrastructure for comprehensive medical training, and to ensure that patients experience their referral and care pathways as 'seamless'. As a result, there are strong forces within the health system pushing towards the development of more integrated health and social care (see Glasby and Dickinson [2008] for summary). There is also a significant policy emphasis on shifting the location of care from institutions to communities, particularly in the case of services for people with chronic long-term conditions such as diabetes (Department of Health, 2006). Leading health policy commentators have recently pointed out that while using competitive incentives to increase hospital activity and throughput makes eminent sense if the priority of the health system is to reduce waiting times for hospital care (as it was in the NHS a few years ago); however policies that promote competition between institutional providers may be less constructive when the objective is to avoid hospital admissions by providing care closer to home (Ham, 2007b).

Thus, health care commissioners in England face a set of complex, pressing and perhaps unique challenges. They are required to purchase high quality health services that meet the expectations of modern consumers, but also to engage in much broader activity to improve health and reduce health inequalities. In so doing, they are expected to work in close partnership with a wide range of other public and non-statutory sector bodies, and to develop integrated

services which optimise the use of resources and maximise economies of scale. At the same time, commissioners are being encouraged to stimulate both internal and external health care markets, and to use market-based levers to encourage competitive behaviour and challenge the status-quo.

These potentially competing agendas are reflected in the recently published *World Class Commissioning* framework (Department of Health, 2007a, 2007b) which sets out the vision for an NHS led by 'world-class' commissioners and identifies the competencies that such organisations will require. As illustrated in Table 1, several of the 11 competencies refer to civic leadership, collaboration and engagement, while others directly invoke the use of markets and contracts and the need for procurement skills.

Given the complexity of their task, it is perhaps unsurprising that concern has been expressed over the capacity of PCTs to deliver (e.g., Bramley-Harker & Lewis, 2005; Walshe et al., 2004). Most fundamentally, the Department of Health itself has made clear that it does not believe the knowledge and skills required for world class commissioning can all be found within the NHS at present.

In 2006, the Department of Health advertised for suppliers able to provide commissioning-related support services to PCTs. Following several false-starts and delays, the Framework for External Support for Commissioning (FESC) was established. Under this agreement, PCTs can calloff commissioning-support services from a range of providers including McKinsey and Co., Humana, BUPA, United Health Europe, and ten other private sector consultancy and insurance companies. There is a clear assumption within the Department, that the commercial sector holds expertise relating to commissioning (or at least to the various phases of the 'commissioning cycle') that is absent or under-developed in the NHS.

It is this environment that has propagated commissioners' growing interest in approaches to procurement and supply chain management as utilised in the commercial sector. Commissioners are asking searching questions (can, and if so how can supply markets can be structured so as to exploit competition while retaining collaboration and stability; what scope do purchasers have to manage markets and supply chains when their power is constrained

TABLE 1
World Class Commissioning Competencies

<ol style="list-style-type: none"> 1) Be recognised as the local leader of the NHS 2) Work collaboratively with community partners to commission services that optimise health gains and reductions in health inequalities 3) Proactively seek and build continuous and meaningful engagement with the public and patients, to shape services and improve health 4) Lead continuous and meaningful engagement with clinicians to inform strategy and drive quality, service design and resource utilisation 5) Manage knowledge and undertake robust and regular needs assessments that establish a full understanding of current and future local health needs and requirements 6) Prioritise investment according to local needs, service requirements and the values of the NHS 7) Effectively stimulate the market to meet demand and secure required clinical and health and well-being outcomes 8) Promote and specify continuous improvements in quality and outcomes through clinical and provider innovation and configuration 9) Secure procurement skills that ensure robust and viable contracts 10) Effectively manage systems and work in partnership with providers to ensure contract compliance and continuous improvements in quality and outcomes 11) Make sound financial investments to ensure sustainable delivery of priority outcomes
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Source: Department of Health (2007b).

by political activity, professional interests and other factors beyond their control; what are the risks and benefits associated with outsourcing organisational functions as compared to developing capacity and expertise in-house?), and it is clear why they are looking beyond their own horizons for answers. While buying-in and contracting-out are clearly not new activities in the public sector, for obvious reasons other industries have been at the forefront of theory and practice in this field.

However, while commissioners recognise - and indeed appear to welcome - the potential to learn from research carried out in other sectors, they are also wary of attempts to import frameworks that

may not take account of their particular context and constraints. In the current environment it is likely that PCTs are right to exercise some caution. The 'FESC' organisations referred to above, and others entering the 'commissioning support' market can be expected to consume large amounts of NHS resources over the next few years. These organisations and other parties therefore have a vested interest in demonstrating that there are lessons to be learned by the NHS in their areas of expertise, and/or that they are better placed to undertake certain commissioning activities on behalf of PCTs². In this context, there is a risk that some of the challenges associated with the transfer of concepts and techniques from one sector to another and of the outsourcing of business activities to external experts, will be under-played.

One of these challenges in the case of procurement and SCM research is that some of the evidence-base within other sectors is limited itself. Due to the commercial sensitivity of information regarding performance of supply-chains and the impact of procurement innovation, it can be difficult to access detailed and accurate data on related costs and outcomes (Zsidisin, Panelli & Upton, 2000). Furthermore, even where there may be evidence that certain approaches 'really work' for the commercial sector, they may not be transferable to the NHS for a wide variety of reasons, as discussed above.

So, health care commissioners currently face a dilemma. How do they differentiate between evidence and expertise that could be genuinely useful as they set about sharpening their purchasing edge, and rhetoric that fails to take into account (or at worst deliberately ignores) the specific contextual and political factors that will always limit the achievements to be gained through improved procurement (however much improved it is). This paper aims to identify concepts and evidence that may be helpful in addressing this dilemma and to find useful applications of theory for practice. While this may represent the first attempt to examine current commissioning policy in this way, it is certainly not the first time ideas from SCM have been applied to healthcare management challenges. The following section outlines the ways in which academics and practitioners have already transferred thinking between these fields, but also explains why this is insufficient in understanding the commissioning role.

PROCUREMENT AND SCM RESEARCH IN THE HEALTH CARE SECTOR

Research into procurement and SCM in the health care sector is not new. In particular, there has been significant work on:

- i) The application of principles derived from supply-chain management and other industrial production processes to the analysis, understanding and improvement of health care delivery processes (e.g., Towill, 2006; Towill & Christopher, 2005; Keen, Moore & West, 2006)
- ii) The analysis of procurement and purchasing activities carried out by (or on behalf of) health care delivery organisations (primarily hospitals) (e.g., Cox, Chicksand & Ireland, 2005; Schneller & Smeltzer, 2006)

Literature falling within the first of these categories is not necessarily concerned with the purchasing, logistics, materials or supplies management activities of health care providers at all. Rather, it applies insight and 'best-practice' techniques from these areas to the management of care processes and patient pathways. Common examples include work that explores the introduction of lean production principles into health care organisations (e.g., Fillingham, 2007; Ben-Tovim et al., 2007), and presents the flow of patients through phases of a treatment episode as analogous to "product flow" in an industrial context, "... with corresponding value-added activities in the pipeline and similar valid concerns regarding quality management and delivery cycle times" (Towill & Christopher, 2005, p. 230). Such thinking has been highly significant in the work of organisations such as the Institute for Health Improvement (e.g., 2003, 2005) in the USA, and the NHS Institute for Innovation and Improvement in England (e.g., Mathieson, 2006a, 2006b), bodies which exist to promote continual improvement in health care by cultivating and disseminating improvement concepts, and providing methods, tools and resources to support their implementation.

The second strand of work identified above does focus more directly on the sourcing, specification, procurement and handling of goods and supplies required by health care providers (e.g., medical devices and equipment, pharmaceutical products, ICT, catering and cleaning products etc.). Within this there are many sub-themes, including work on the procurement of specific medical technologies and interventions (e.g., Phillips et al., 2007), adoption of procurement

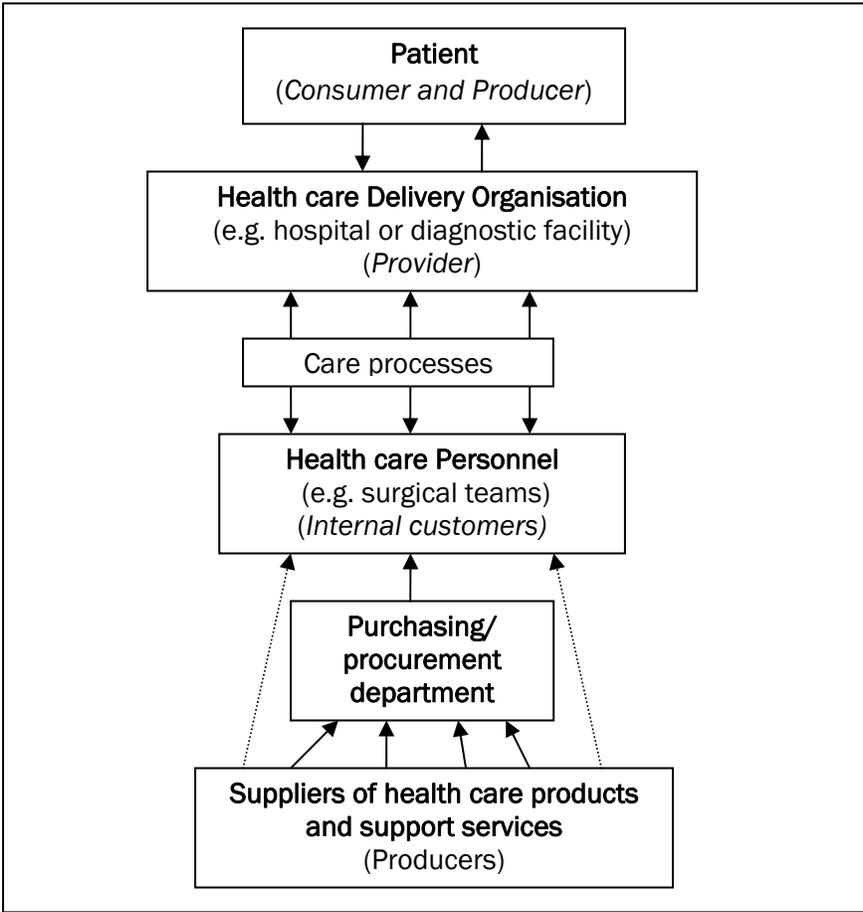
innovations within the health care sector (e.g., Zheng et al., 2006) and the effective (or otherwise) organization and infrastructure of health care procurement agencies (e.g., Cox, Chicksand & Ireland, 2005).

Clearly, these two strands of work are valuable in their own right, and are also complementary. For example, the efficiency with which supplies are obtained and distributed within a health care organisation is likely to be critical to the achievement of smooth patient flows. When brought together, therefore, this literature can help to illuminate and integrate several levels of the health care supply-chain. It considers both the flow of *patients* (acknowledged to be co-producers - whereby patients help to define and sometimes even deliver their own health services as in the case of an individual's weight loss management program - and not simply passive consumers of health services) and *products* into and through health care *provider* organisations (or networks of such organisations) as illustrated in Figure 1.

Less common within the literature, however, is consideration of the wider health system as an extended supply chain, including the payers, purchasers or commissioners of health care services, as well as patients, providers and suppliers. Exceptions to this appear to be found mainly in work focusing on the US system. Burns and colleagues (2002) for example identify purchasers, as well as providers and producers as key players within the US health care value chain (see Table 1). Having articulated this, however, they go on to focus primarily on the flow of money, products, and information between producers, providers and their intermediaries - rather than the government, employers, insurers and Health Maintenance Organisations active in the downstream portion of the chain.

Pitta and Laric (2004) also identify third-party payers as key participants within the health care value chain and in this case do discuss the ways in which these actors may add to or detract from the overall value derived from that chain. Again referring to the US context, however, the activities of these agents are presented as primarily transactional (collecting premiums, prescribing approved procedures, processing information and reimbursing costs). More recently, Ford and Hughes (2007) have examined attempts by employers and group healthcare purchasers in the US to influence

FIGURE 1
Delivery-Focussed Healthcare Supply-Chain: Patients, Providers, and Producers



Suppliers' behaviour through the use of collaborative product commerce techniques (Table 2). Such work is, perhaps, the closest the supply-chain literature has come to examining the type of proactive purchasing activities carried out by commissioners in the NHS.

In the UK itself, however, the health system does not appear to have been conceptualized in this way; as a supply- or value chain that

TABLE 2
The US Health Care Value Chain

Purchasers	<i>Fiscal Intermediaries</i>	Providers	<i>Product Intermediaries</i>	Producers
Government	<i>Insurers</i>	Hospitals	<i>Wholesalers</i>	Pharmaceutical & Biotechnology manufacturers
Employers	<i>HMOs</i>	Physicians	<i>Mail order distributors</i>	Medical device Makers
Individuals	<i>Pharmacy benefit managers</i>	Integrated delivery networks	<i>Group purchasing organizations</i>	Medical suppliers
Employer coalitions		Pharmacies		Information technology firms

Source: Burns et al. (2002).

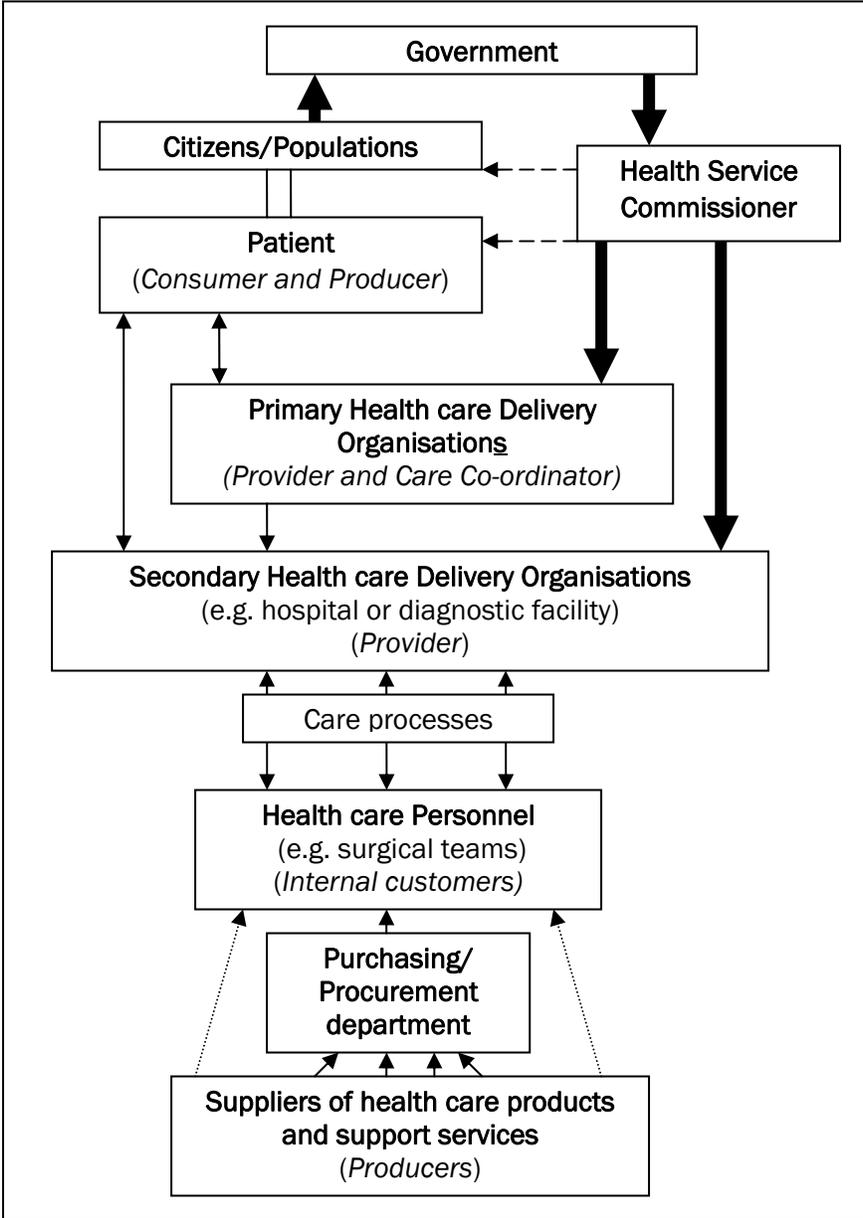
links not only the patient, producer and provider but which includes the commissioning organization as a critical agent, and which ultimately extends back through the government to the taxpayer (see Figure 2).

In summary, while previous work applying procurement and SCM expertise to health care management contains much that is of value, it does not meet the requirements of NHS commissioners seeking to identify and relate such learning to their specific task. This is because:

- i) It has tended to take the health care *provider* as the focus of the research, assuming it (rather than the purchaser) is the entity responsible for managing the supply-chain. This has created a limited concept of the health care supply-chain as constituting the relationships between patients, providers and producers;
- ii) Where the broader concept of the value-chain has been invoked, and a wider range of participants within such chains identified, the analysis has tended to focus on the US rather than the UK system, where the roles and responsibilities of payers and purchasers differ significantly.

The absence of similar work in the UK to date is not surprising. In an insurance-based system the part played by the third-party payer

FIGURE 2
Extended Health System Supply-Chain: Commissioners, Citizens, Patients, Providers and Producers



(insurer, health plan etc.) in facilitating and controlling individuals' access to health services is clear and well-understood. In contrast, with health services funded through central taxation and free at the point of delivery, the role of local commissioning agencies is far less visible. Indeed, it is likely that a great deal of the English public would have difficulty articulating what the role of a PCT is. As Glasby, Smith and Dickinson (2006, p. 2) suggest, "[H]ealthcare is synonymised with identifiable local hospitals, rather than the more anonymous and ever-changing PCT.... this means that health, for much of the population, is symbolised by the provider (and especially hospital, as opposed to community provider), rather than the commissioner."

Thus, procurement and SCM experts who have examined the NHS have, perhaps inevitably, replicated the behaviour of the public, politicians and policy-makers in privileging the supply over the demand-side of the health care system. However, at the time of writing, the English Department of Health is displaying an unprecedented determination to change this situation and place the spot-light firmly on commissioners as the representatives of the NHS at a local level. The current research aims to reflect this changing policy emphasis, and initiate a corresponding realignment of academic interest and effort.

In the next section of the article we begin this process by revisiting the procurement and SCM literature from the perspective of a health service commissioner. Given that this body of work has grown enormously in recent years, we limit this analysis to identifying and synthesizing key themes, and highlighting those most relevant for further exploration.

PROCUREMENT AND SUPPLY CHAIN MANAGEMENT RE-VISITED

This section briefly explores the evolution of procurement and SCM literature with a view to extracting significant themes applicable to commissioning. As the literature itself has grown both in significance and complexity, the procurement function itself has grown in stature and complexity as a business function within organisations. Indeed, there is now recognition that the integrated series of events which involves determining what needs to be bought, how that is sourced, how it is contracted for, managed internally, monitored and disposed of actually forms one of the foundations of organisational success. Current procurement management frame-

works still tend to derive from a linear and step-based definition of the activities required from determination of need to the disposal of product. An early text on the subject outlined the procurement process as usually involving:

- The determination of what to buy, the physical and performance specifications of the goods or services to be bought and the quantity to be obtained;
- The identification and selection of potential sources of supply;
- The qualification of sources and of the products they will supply;
- The design of the request-for-proposal and the solicitation of bids;
- The negotiation of prices, terms and conditions with selected vendors and the allocation of purchase amounts among them;
- The monitoring of supplier performance and the conduct of ongoing supplier relations (including a long list of items here);
- The establishment of procurement strategies, control systems and performance measurement systems;
- Sometimes the management of inventories of purchased parts, materials and supplies; and
- Often the disposal of waste and scrap (Corey, 1978, p. xvi).

Despite the fact that this and other early work in the field (Westing et al., 1976; England, Leenders & Lewis, 1975; Webster & Wind, 1972; Karass, 1970, 1974) did not identify procurement as a critical strategic function, with hindsight it is clear that together, purchasing techniques combined with consideration of buyer beliefs and behaviour and the function of negotiation, were the building blocks for a much more important role for procurement in organisations.

Work on procurement (and what was to be SCM) also drew heavily on “materials management” – a topic that came into common usage and practice in business during the 1960s. The term highlighted the fact that there were economies to be gained by coordinating the related activities of production planning and scheduling, purchasing, shipping, storing, handling, and controlling of materials put into the manufacturing process. There was an important connection being made between purchasing (the process

of buying defined as an operational activity that should obtain the proper equipment, material, supplies, and services of the right quality, in the right quantity, at the right price and from the right source) and material management (van Weele, 1994). In turn, materials management was integrated into the operations management field, which began to connect the strategy of organisations with the supply chain (Waller, 2003). Similarly, Logistics contributed the elements of inventory management, scheduling, distribution, transportation systems to the theory underpinning SCM (Christopher, 2004; Cooper, Lambert & Pagh, 1997). As suggested earlier, it is this aspect of the literature which has most clearly influenced health care management to date. For this reason we will not explore this further within this paper and will instead turn to areas which have been less extensively explored.

SCM evolved in part from the Operations Management discipline – an evolution that began to address the gap between the focus on internal firm operations and the growing need for a global outlook to deal with competitive pressures of comparative advantage. This was driven by rapid changes in information technology that enabled more effective communication among businesses in the new globalised environment. Supply chains have always existed in industries and organizations, but the term SCM was introduced in 1982 as a consulting solution and it grew in business circles as a new way of forming companies' strategic approach to markets. Many researchers built on the work of Kraljic, whose 1983 article, "*Purchasing Must Become Supply Management*," became one of the foundational pieces of work in the growing field. The nature of SCM research has been examined by many scholars (see for example Croom, Romano & Giannakis, 2001; Ellram, 1991; Giannakis & Croom, 2001, 2004; Harland, 1996) and is described as a multivariate discipline encompassing a large number of different literatures and research areas.

In addition to these types of activities and service sectors, there has been substantial work to synthesize and conceptualize the procurement and SCM fields, all the while not losing the strength that arises from interdisciplinary and multi-theoretical approaches (Carter et al., 2000; Cox, 1996; Ellram & Carr, 1994; Giunipero & Pearcy, 2000; Lamming, 1999; Leenders, Fearon & England, 1989; Mol, 2003). In this section we focus on what may be the most useful areas of research to draw upon, given the context of health care

commissioning and its development needs as laid out in the introductory sections.

Public Procurement

The emergence of work on public procurement (e.g., Knight et al., 2007, Thai & Piga, 2007) allows us to begin to shape a new area that draws on theory and practice underpinning the commercial sector and theory and practice underpinning the public sector. What we know to be important for commissioning in England (as identified by the world class commissioning agenda) is the development of market stimulation, provider innovation and managing contracts from the demand-side of the purchaser-provider equation. These elements, if achieved, are viewed as the catalyst for not only improving commissioning, but to making England the world leader in effective health service provision. This compares similarly to the view in the commercial sector that procurement is a catalyst not only for supply cost reduction and assurance, but also for market expansion, product innovation and compliance (The Aberdeen Group 2005). Thus, to a limited extent, the emphasis on commissioning in the NHS is mirroring a global shift in focus towards the strategic role which procurement plays within the function of successful commercial organisations.

Service Procurement

Given our interest in service commissioning, it is interesting to note that there has been little attention paid to, and academic work focused on, service procurement and SCM. As earlier suggested, the discipline's literature is not entirely devoid of research on the procurement of services but it is an area that is only now coming to the forefront as one of importance and interest. This work has its foundation in the problems organisations have experienced with outsourcing, especially in the public sector where the ethos of the private sector can be problematic in ensuring that citizens are treated in concert with the philosophy of equity and transparency. Bryntse (1996) explores the nature of the purchasing function in the purchasing of public services and identifies that the service delivery process itself is key, as well the interaction with the service user. Ellram, Tate and Billington (2004) apply product-based manufacturing models to developing a framework for services supply but go much further in their 2007 work to unpack the barriers to

improved services purchasing. However, this work is still very much focussed on IT, legal, staffing, and call centre-type services delivery and sophisticated work on human services (such as health and social care) is yet to emerge in the extant procurement and supply management literature.

Outsourcing and Core Competence

The SCM literature has been criticized for lacking clear theoretical and conceptual schema to delimit its boundaries. Within it there are numerous sub areas that each in their own right form important elements of the procurement research environment. One such example is the work done on sourcing, outsourcing, and contracting-out (e.g., Giannakis & Croom, 2001) and links of these functions in terms of core competence (Pralahad & Hamel, 1990). Clearly this area of work will have much relevance in terms of NHS commissioning, given that PCTs are expected to at least separate out their provision and commissioning functions organisationally, if not to let go of providing these services entirely. There may therefore be much to learn from this field not only in terms of 'make or buy decisions' (what to outsource), but also what types of skills and knowledge commissioners need to maintain as core competence, and which commissioning activities may be provided by other organisations (such as those on the FESC).

In this last respect there is much that can be gleaned from work that has been done on procurement and supply management competency in organisations. The issue of organisational and individual capacity in procurement is one that has risen on the agenda both in the private and public sectors (Innovation in Procurement Research Group et al., 2006; Schiele, 2007; Johnson, Leenders & McCue, 2003). For example, IBM brought a greater number of engineers into their procurement organisation in order to be able to better understand their supply base and help interpret it in ways that might benefit the organisation (John, 2005). In terms of commissioning, an analysis of the type of individuals being hired for commissioning roles could shed light on whether the aspired core competencies will be achieved or not. Within the public sector, Knight et al. (2005) report interviewees stressing that when managing supplies within the NHS, it is important that personnel have knowledge of the wider system and how decisions may impact upon wider structures. Similarly, commissioner knowledge levels need to

be addressed to understand the potential trajectory of their organisations.

Market Management

Public service market management is addressed in concert with contract management in the work of Brown and Potoski (2004). This work looks at what vendors do to address market problems (using a U.S. case study of refuse services) and could be built upon to examine the English health service markets, with a view to adapting lessons for practitioners. Kelman (2002) has looked at how strengthened strategic contract management must be embedded in public organisations. This has resonance with the World Class Commissioning agenda and could be assessed with a view to underpinning the development of commissioning in health care, although the degree to which market management in this sense is recognisable in the commercial sector may be open to debate.

Collaboration and Innovation

The SCM work on sourcing options as it relates to market differentiation and cost leadership (Cox et al., 2003) has elements that could be reframed to help commissioners conceptualise how providers are linked in a value chain (public sector value based on user satisfaction and achievement of outcomes as opposed to pure economic value). Similarly, recent work on service purchase and risk management (Ellram, Tate & Billington, 2007) is well placed to be used to underpin the building of new frameworks for managing contracts in the multiple-accountability environment of integrated commissioning in the public sector.

Summary

Ultimately though these areas are not discrete and to some degree draw on and overlap with one another within a wider field. We suggest that the factor which may be of greatest importance and the framework which underpins a number of these areas is that of power. As noted previously, the unequal power relationships between patients, commissioners and providers of health services have been critical factors in the failure of commissioners to achieve change in the past. The work of Cox, Sanderson and Watson (2000) has been invaluable to the commercial sector in providing tools for unpacking

power relationships and understanding sourcing relationships. Elements of these concepts could be used to map the new commissioner-led institutional structure of the NHS, and to provide a stepping stone to develop new practice for market management in this different environment.

CONCLUSIONS

As this work is developed further, the approach will involve the development of 'conceptual scaffolding' for the themes within procurement and supply management that apply to the modern context of commissioning in England. Each of these identified elements will be framed with a view to determining which aspects are, or can be applied to the environment of health care commissioning. We expect to see new key issues arising, barriers to improving commissioning emerge, and we intend to develop a fresh theoretical underpinning for the practice of commissioning.

This paper has provided an overview of the fields of health care commissioning and procurement/SCM within the commercial sector and given the key factors which seem to be emerging as central within the current commissioning context, and suggests that there are a number of areas which may be worthy of further investigation and provide important lessons for health care commissioners. This article represents a first stage in a research project which seeks to draw lessons from the SCM/procurement literature and present these as useful and applicable in the practice of health care commissioning. To our knowledge, this has not been done before and is especially relevant because those responsible for planning and purchasing health and other public services must change and improve their thinking and practice in light of the complex and shifting environment of health care in England.

As a next stage, drawing on what has been set out in this paper, the particular areas and sectors which we think will be particularly fruitful in drawing lessons for health care commissioning are:

- *Services procurement*. This area clearly has resonance with the roles of health service commissioners, although work has tended to predominantly concentrate on professional services (IT, legal services etc), rather than the more complex personal services.

- *Core competence and outsourcing*, particularly in relation to how commissioners might obtain procurement capacity and use FESC to support their activities, without undermining their essential activities as commissioners.
- *Collaboration*, both vertically and horizontally: how SCM can be used to promote improvement and innovation through vertical links; and, market manage suppliers through stimulating and shaping a system of providers through horizontal links.

Ultimately though the factor which may be of most relevance in terms of health care commissioning and which runs throughout the areas and sectors outlined in the previous section is the issue of power and this has recently become a framework which has been employed with some success to analyse SCM/procurement in a range of areas.

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NOTES

1. Although the NHS covers the whole of the UK, health policy in the four countries has diverged significantly since 1997. The policies and developments referred to in this article apply mainly to England.
2. It should be noted that such parties include the employing institution of the three authors, which itself undertakes consultancy work for the Department and many NHS organisations.

REFERENCES

- Ben-Tovim, D.I, Bassham, J.E., Bolch, D. & Martin, M.A. (2007). "Lean Thinking across a Hospital: Redesigning Care at the Flinders Medical Centre." *Australian Health Review*, 31 (1): 10-5.
- Bramley-Harker, E. & Lewis, D. (2005). *Commissioning in the NHS: Challenges and Opportunities*. London, UK: NERA Economic Consulting.

- Brown, T.L. & Potoski, M. (2004). "Managing the Public Service Market." *Public Administration Review*, 64 (6): 656-668.
- Bryntse, K. (1996). "The Purchasing of Public Services." *European Journal of Purchasing and Supply Management*, 2 (4): 193-2-1.
- Burns, L.R. & Wharton School colleagues (2002) *The Health Care Value Chain: Producers, Purchasers and Providers*. San Francisco: CA: Jossey-Bass.
- Carter, P.L., Carter, J.R., Monczka, R.M., Slaughter, T.H. & Swan, A.J. (2000). "The Future of Purchasing and Supply: A Ten Year Forecast." *Journal of Supply Chain Management*, 36 (1): 14-26.
- Christopher, M. (1992). *Logistics and Supply Chain Management: Creating Value - Adding Networks*. Dorchester, UK: Dorset Press.
- Cooper, D.J., Hinings, C.R., Greenwood, R. & Brown, J.L. (1996). "Sedimentation and Transformation in Organizational Change: The Case of Canadian Law Firms." *Organization Studies*, 17: 623-647.
- Cooper, M.C., Lambert, D.M. & Pagh, J.D. (1997). "Supply Chain Management: More Than a New Name for Logistics." *The International Journal of Logistics Management*, 8 (1): 1-11.
- Corey, R. (1978). *Procurement Management - Strategy, Organisation and Decision-Making*. Boston, MA: CBI Publishing Company, Inc.
- Cox, A. (Ed.) (1996). *Innovations in Procurement Management*. Boston, MA: Earlsgate Press.
- Cox, A., Chicksand, D. & Ireland, D. (2005). "Sub-Optimality in NHS Sourcing in the UK: Demand-Side Constraints on Supply-Side Improvement." *Public Administration*, 83 (2): 367-392.
- Cox, A. & Hines, P. (Eds.) (1997). *Advanced Supply Management*. Somerset, UK: Earlsgate Press.
- Cox, A., Ireland P., Lonsdale C., Sanderson J. & Watson G. (2003). *Supply Chain Management: A Guide to Best Practice*. London, UK Financial Times/Prentice Hall.
- Cox, A., Sanderson, J. & Watson, G. (2000). *Power Regimes - Mapping the DNA of Business and Supply Chain Relationships*. Somerset, UK: Earlsgate Press.

- Croom, S., Romano, P. & Giannakis, M. (2001). "Supply Chain Management: An Analytical Framework for Critical Literature Review." *European Journal of Purchasing and Supply Management*, 6 (1): 67-83.
- Dawson, S. & Dargie, C. (2002). "New Public Management: A Discussion with Special Reference to UK Health." In K. McLaughlin, S. Osbourne and E. Ferlie (Eds.), *New Public Management: Current trends and Future Prospects* (pp. 34-56). London, UK: Routledge.
- Department of Health (1989). *Working for Patients* (Cm555). London, UK: The Stationery Office.
- Department of Health (1997). *The New NHS: Modern, Dependable* (Cm. 3807). London, UK: HMSO.
- Department of Health, The Information Centre (2005a). *NHS and Social Services Workforce Statistics: Staff in the NHS 2005*. London, UK: Author. [Online]. Available at www.dh.gov.uk. (Retrieved on April 23, 2008).
- Department of Health (2005b). *Department of Health Departmental Report - The Health and Personal Social Services Programmes* (Cm6524). London, UK: The Stationery Office.
- Department of Health (2005c). *Commissioning a Patient-Led NHS* (Cm6268). [Online]. Available at www.dh.gov.uk. (Retrieved on September 4, 2006).
- Department of Health (2005d) *Health Reform in England: Update and Next Steps* (Cm6268). [Online]. Available at www.dh.gov.uk. (Retrieved on June 2, 2006).
- Department of Health (2006). *Our Health, our Care, our Say* (Cm6737). London, UK: The Stationery Office.
- Department of Health (2007a). *World Class Commissioning: Vision*. (Gateway Reference 8754). [Online]. Available at www.dh.gov.uk. (Retrieved on December 9, 2007).
- Department of Health (2007b). *World Class Commissioning: Competencies*. (Gateway reference 8754). [Online]. Available at www.dh.gov.uk. (Retrieved on December 9, 2007).

- Ellram, L.M. (1991). "Supply Chain Management: The Industrial Organisation Perspective." *International Journal of Physical Distribution and Logistics*, 21 (1):13-22.
- Ellram, L.M. & Carr, A.S. (1994). "Strategic purchasing: a history and review of the literature." *International Journal of Purchasing and Materials Management*, 2: 10-18.
- Ellram, L.M, Tate, W.L. & Billington, C. (2007). "Services Supply Management: The Next Frontier for Improved Organisational Performance." *California Management Review*, 49 (4): 44-66.
- Ellram, L.M., Tate, W.L. & Billington, C. (2004). "Understanding and Managing the Services Supply Chain." *The Journal of Supply Chain Management*, 40 (4): 17-32.
- England, W.B., Leenders, M.R. & Lewis, H.T. (1975). *Purchasing and Materials Management*. Homewood, Ill.: R.D. Irwin.
- Fillingham, D. (2007). "Can Lean Save Lives?" *Leadership in Health Services*, 20 (4): 231.
- Friedson, E. (1986). *Professional Powers: A Study of the Institutionalization of Formal Knowledge*. Chicago, IL: The University of Chicago Press.
- Ford, E.W. & Hughes, J.A. (2007). "A Collaborative Product Commerce Approach to Value-Based Health Plan Purchasing." *Supply Chain Management: An International Journal*, 12 (1): 32-41
- Giannakis, M. & Croom, S. (2001). "The Intellectual Structure of Supply Chain Management: An Application of the Social Network Analysis and Citation Analysis to SCM Related Journals." Paper Presented at The 10th International Annual International Purchasing and Supply Education Research Association Conference, April 8-11, Jonkoping, Sweden.
- Giannakis, M. & Croom, S. (2004). "Toward the Development of a Supply Chain Management Paradigm: A Conceptual Framework." *The Journal of Supply Chain Management*, 40 (2): 27-36.
- Giunipero, L.C. & Percy, D.H. (2000). "World-Class Purchasing Skills: An Empirical Investigation." *Journal of Supply Chain Management*, 36 (4): 4-13.

- Glasby J. & Dickinson, H. (2008). *Partnership Working in Health and Social Care*. Bristol, UK: Policy Press.
- Glasby J., Smith J., & Dickinson, H. (2006). *Creating 'NHS Local': A new relationship between PCTs and local government*. Birmingham, UK: Health Services Management Centre.
- Ham, C. (2007a). *When Politics and Markets Collide: Reforming the English National Health Service*. Birmingham, UK: Health Services Management Centre
- Ham, C. (2007b). *Clinically Integrated Systems: The Next Step in English Health Reform?* London, UK: The Nuffield Trust
- Harland, C.M. (1996). "Supply Chain Management: Relationships, Chains and Networks." *British Journal of Management*, 7 (Special Issue): S63-S80.
- Institute for Health Improvement (2003). *Optimizing Patient Flow: Moving Patients Smoothly Through Acute Care Settings* (Innovation Series White Paper). Boston, MA: Institute for Health Care Improvement
- Institute for Health Improvement (2005). *Going Lean in Health Care* (Innovation Series White Paper). Cambridge, MA: Institute for Healthcare Improvement
- Innovation in Procurement Research Group, Bristol Business School at the University of the West of England, the Chartered Institute of Purchasing and Supply in association with Oracle and the Office of Government Commerce (2006). "I-Innovate Research Project." [Online]. Available at <http://www.uwe.ac.uk/bbs/research/iresearch/iinnovate.shtml#intro>. (Retrieved on February 5, 2008).
- John, G. (2005, Summer). "The Practitioner as Salesman." *CPO Agenda*. [Online]. Available at <http://www.cpoagenda.com>. (Retrieved on March 05, 2006).
- Johnson, P.F., Leenders, M.R. & McCue, C. (2003). "A Comparison of Purchasing's Organisational Roles and Responsibilities in the Public and Private Sector." *Journal of Public Procurement*, 3 (1): 57-74.
- Kahan, S. & Testa, W.A. (2008, March). "The Value Chain Case for Health Care Reform – A Conference Summary." *Chicago Fed Letter* (No. 248). [Online]. Available at www.chicagofed.org/

- publications/fedletter/cflmarch2008_248.pdf. (Retrieved on April 4, 2008).
- Karass, C. (1974). *Give & Take: The Complete Guide to Negotiating Strategies and Tactics*. New York: Crowell.
- Karass, C. (1970). *The Negotiating Game*. New York: Crowell.
- Keen, J., Moore, J. & West, R. (2006). "Pathways, Networks and Choice in Health Care." *International Journal of Health Care Quality Assurance*, 19 (4): 316-327
- Kelman, S. (2002). "Strategic Contract Management." In J. Donahue and J.S. Nye (Eds.), *Market-based Governance* (pp. 88-102). Washington, DC: Brookings Institution.
- Knight, L., Harland, C., Walker, H. & Sutton, R. (2005) "Competence Requirements for Managing Supply in Interorganizational Networks." *Journal of Public Procurement*, 5: 210-234.
- Knight, L., Harland, C., Telgen, J., Thai, K.V., Callender, G. & McKen, K. (Eds.) (2007). *Public Procurement – International Cases and Commentary*. London, UK: Routledge.
- Kraljic, P. (1983) "Purchasing Must Become Supply Management." *Harvard Business Review*, 61 (5): 109-117.
- Lamming, R. (1999). "The Future for Purchasing: Developing Lean Supply." In R. Lamming and A. Cox (Eds.), *Strategic Procurement Management: Concepts and Cases* (pp. 47-66). Boston, MA: Earlsgate Press.
- LeGrand, J. (2007). *The Other Invisible Hand: Delivering Public Services through Choice and Competition*. New Haven, NJ: Princeton University Press.
- Leenders, M.R., Fearon, H.E. & England, W.B. (1989). *Purchasing and Materials Management*. Homewood, IL: Dow Jones Irwin.
- Mathieson, S. (2006a, June 8). "NHS Should Embrace Lean Times." *The Guardian*. [Online]. Available at www.guardian.co.uk. (Retrieved on February 10, 2008).
- Mathieson, S. (2006b). "Wait Watchers." *Health Service Journal*: 4-7. [Online]. Available at www.hsj.com. (Retrieved on October 19, 2006).

- Mays, N. & Hand, K. (2000). *A Review of Options for Health and Disability Support Purchasing in New Zealand* (Working Paper). Wellington: New Zealand Treasury.
- Mol, M.J. (2003). "Purchasing's Strategic Relevance." *Journal of Purchasing and Supply Management*, 9 (1): 43-50.
- Ovretveit, J. (1995). *Purchasing for Health: A Multidisciplinary Introduction to the Theory and Practice of Health Purchasing*. Buckingham, UK: Open University Press
- Peck, E. & Dickinson, H. (2008). *Managing and Leading in Inter-Agency Settings*. Bristol, UK: Policy Press.
- Phillips, W.E., Knight, L.A. & Caldwell, N.D. (2007). "Policy through Procurement: The Introduction of Digital Signal Process (DSP) Hearing Aids into the English NHS." *Health Policy*, 80 (1): 77-85.
- Pitta, D.A. & Laric, M.V. (2004). "Value Chains in Health Care." *The Journal of Consumer Marketing*, 21 (7): 451-464.
- Pralahad, C.K. & Hamel, G. (1990). "The Core Competence of the Corporation." *Harvard Business Review*, 90 (3): 79-91.
- Schiele, H. (2007). "Supply-Management Maturity, Cost Savings and Purchasing Absorptive Capacity: Testing the Procurement-Performance Link." *Journal of Purchasing and Supply Management*, 13 (4): 274-293.
- Schneller, E.X. & Smeltzer, L.R. (2006). *Strategic Management of the Health Care Supply Chain*. San Francisco, CA: Jossey-Bass.
- Smeltzer, L.R. & Ogden, J.A. (2002). "Purchasing Professionals' Perceived Differences between Purchasing Materials and Purchasing Services." *Journal of Supply Chain Management*, 38 (1): 54-70.
- Thai, K.V. & Piga, G. (Eds.). (2007). *Advancing Public Procurement – Practices, Innovation and Knowledge-sharing*. Boca Raton, FL: PrAcademics Press.
- Towill, D.R. (2006) "Viewing Kaiser Permanente via the Logistician Lens." *International Journal of Health Care Quality Assurance*, 19 (4): 296-315

- Towill, D.R. & Christopher, M. (2005). "An Evolutionary Approach to the Architecture of Effective Healthcare Delivery Systems." *Journal of Health Organization and Management*, 19 (2): 130-47
- Van Weele, A.J. (1994). *Purchasing Management: Analysis, Planning and Practice*. London, UK: Chapman & Hall.
- The Aberdeen Group (2005). *The CPO's Agenda: Strategies for Procurement Transformation*. Boston, MA: Author.
- Waller, D.L. (2003). *Operations Management: A Supply Chain Approach*. London, UK: Thomson.
- Walshe, K., Smith, J.A., Dixon, J., Edwards, N., Hunter, D.J., Mays, N., Normand, C. & Robinson, R. (2004) "Primary care trusts – premature reorganisation, with mergers, may be harmful" *British Medical Journal*, 329: 871-872.
- Wanless, D. (2002) *Securing our future health: taking a long-term view*. London, UK: HM Treasury
- Webster, F., Wind, Y. (1972) *Organisational Buying Behaviour*. Englewood Cliffs, NJ: Prentice-Hall.
- Westing, J., Fine, I., Zenz, G. (1976) *Purchasing Management, Materials in Motion*. New York: Wiley.
- Williams, I., Durose, J., Peck, E., Dickinson, H. and Wade, E.(2007) "How can PCTs shape, reflect and increase public value?" Birmingham, UK: Health Services Management Centre.
- Woodin J. (2006) "Health Care Commissioning and Contracting." In K. Walshe and J. Smith (Eds.), *Healthcare Management*. Maidenhead, UK: Open University Press.
- Zheng, J., Bakker, E.F., Knight, L.A., Gilhespy, H., Harland, C.M. & Walker, H.L. (2006) "A strategic case for e-adoption in healthcare supply chains", *International Journal of Information Management*, 26 (4): 290-301
- Zsidisin, G., Panelli, A. & Upton, R. (2000). "Purchasing's Organisational Involvement in Risk Assessments, Contingency Plans and Risk Management: An Exploratory Study." *Supply Chain Management: An International Journal*, 5 (4): 187-198.