CONCEPT OF EVIDENCE-BASED PUBLIC PROCUREMENT

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Summary
This paper provides multi-disciplinary theoretical underpinning for the conceptual development of evidence-based public procurement decisions, based on established theory, solid evidence and proof of effectiveness. It provides an initial conceptual framework for evidence-based public procurement, based on contingency theory that evidence required will vary according to key drivers of difference. Evidence requirements also relate to the role of public procurement being performed. It concludes that empirical research currently being conducted will test and allow development of the framework; population of it with live examples will give rise to a taxonomy.

Key terms
Public procurement, evidence-based management, conceptual development

Educator and practitioner summary
This paper provides guidance on how to evidence public procurement decisions according to key drivers of difference relating to degree of impact on citizens and the extent of impact. Different roles for public procurement also require different evidencing. Educators are encouraged to take a contingency approach to public procurement. Practitioners are guided on appropriate organisation and resources for purchasing decisions according in different situations.

Introduction

The field of purchasing and supply has, to some extent, researched and practised evidence-based approaches for decades. Work back in the 1960s on vendor evaluation (Smith et al 1963) provided a framework of different 'models' of evaluation; these became known as forms of 'vendor rating', providing a post contract evaluation of vendors according to their performance, predominantly in terms of quality, delivery, price and service. Pre-contract evaluation was termed 'supplier appraisal' and involved appraising suppliers on their capability and capacity. These forms of evidence were used in contract award and performance evaluation, feeding back into further potential contract award. Whilst private sector adopted supplier appraisal and vendor rating, public procurement adopted compliance and accountability to provide evidence (accountability) of compliance with regulation and legislation and efficient use of public funds to various committees, commissions and watchdog agencies tasked with monitoring public procurement performance. More recently 'value for money' has dominated many nations' approaches to public procurement, causing evidence of 'value' to be required in addition to efficiency (Harland et al 2007, forthcoming).

However, whilst different types and forms of evidence have been considered in purchasing decision making, decisions have still been based on buyers' experience and judgement of how best to incorporate different types of evidence into the decision

making process. There has been little consideration of how other disciplines incorporate evidence into decision-making, and little development in our field of the 'science' of decision making.

This paper responds to the recent interest in evidence-based management (Pfeffer and Sutton 2006) and is structured as follows: first the literature on evidence-based approaches is reviewed, leading to an examination of what evidence-based purchasing might be. The changing disciplinary contexts in operations management, with the introduction of 'service science' and in purchasing and supply, with the emergence of a 'supply management' discipline are considered. Then the findings from a recent international study on public procurement are examined. A synthesis across these is performed to provide an initial conceptual framework for evidencing value in public procurement decision making. In the next section, the current clarion call for evidence-based management is reviewed.

Evidence-based management

The movement towards evidence-based management was heralded by Pfeffer & Sutton (2006), who asserted the need to base management decisions on established theory, solid evidence or proof of effectiveness rather than substitutes to decision-making such as belief and 'dogma', 'hype' and marketing, own personal experience, or as they exclaim 'mindless mimicry of top performers'.

The process of evidence-based management can be summarised as follows. First, the research question should be formulated, and then the relevant research findings and other types of evidence should be sought and acquired. Following this an assessment of the validity, quality, and applicability of the evidence is performed. The evidence should to be presented in a way that will make it likely to be used in the decision-making process. The application of the evidence in decision-making will then be implemented (Kovner & Rundall, 2006, Gray, 2004).

A number of issues have caused considerable debates in the evidence-based management literature. These include questions like 'what type of evidence can be incorporated in evidence-based management?' (Kovner & Rundall 2006) and 'How can evidence-based management research be used among decision makers?' (Shortell 2006). Furthermore, how might evidence-based management be successfully implemented and the benefits of the application accrue to the organization? As evidence-based management is so new, it is not surprising that there are not yet rigorously researched responses to these questions. However, some guidance might be sought from other evidence-based approaches that predate evidence-based management, namely law, medicine and policy.

Evidence-based law

Irrespective of the basis of a legal system being on case law and precedent or statute, historically courts have been presented with evidence in the prosecution and defence of cases. The content of the evidence used in law has changed over time as new technologies provide new forms of evidence, such as DNA, forensics and surveillance technologies. There are different sources of evidence, such as witnesses, testimony,

documentary and physical evidence, like a weapon (Twining, 2003). Different types of evidence provide varying degrees of confidence; for example, finger prints and DNA provide high degrees of confidence relating to identification of individuals. However, other types of evidence, such as expert medical opinion can, and have been, proven later as being unreliable. There are strict rules in most legal systems concerning what can and cannot be submitted as evidence.

The process of evidence-based law typically involves a lengthy investigation and gathering of evidence, an assessment of whether there is a case to answer, a decision to try a case, the presentation of the evidence, the use of the evidence to present cases for the prosecution and defence, and a decision by judge or jury. In countries using a case law system, previous cases and their outcomes are used as evidence of precedent for a legal decision in similar circumstances. As previous decisions are overturned through appeal processes, the body of evidence of case history is constantly changing.

Evidence-based medicine

The movement towards evidence-based medicine was initiated by David Sackett and his colleagues at McMaster University in Canada in the late 1980s, prompted by observations of unexplained wide variations in clinical practice patterns, poor uptake of therapies of known effectiveness, and persistent use of treatments and techniques known to be ineffective (Gray 2004, Belsey & Snell 2003, Sackett et al. 1996, Kovner & Rundall 2006). Evidence-based medicine aims to provide clinicians and patients with choices about the most effective care, based on the best available research evidence (Glasziou & Haynes, 2005). It was increasingly highlighted that basing decisions on 'empiric evidence' in place of personal experience, colleagues' opinions, or reasoning and intuition would help prevent current clinical practice from adopting ineffective, harmful or unaffordable treatments or procedures, as well as reduce the variation in the provision of healthcare (Gray 2004, Belsey & Snell 2003). It was also believed that the use of scientific evidence in healthcare would 'free' resources currently used in the provision of ineffective treatment, ensuring more effective and equitable care provision (Norheim, 1999). Glasziou & Haynes (2005) highlighted a broader role for evidence-based medicine, concerning itself with the processes of changing care in addition to evaluating the clinical content of care. Along similar lines, Belsey and Snell (2003) referred to evidence-based medicine as part of the multifaceted decision-making process of ensuring clinical effectiveness.

Practising evidence-based medicine requires the integration of individual clinical expertise with the best available external research from systematic research (Sackett et al. 1996). Porzsolt et al. (2003) refer to this incorporation in decision making as the 'synthesis' of internal and external evidence. They emphasize that it is the explicit use of valid external evidence coming from randomised controlled trials, combined with the prevailing internal evidence resulting from the patient's situation and clinical judgement that defines a clinical decision as "evidence-based" (Porzsolt et al. 2003). However, the process of this incorporation remains unclear (Greenlagh 2003).

What is evidence in evidence-based medicine?

Evidence-based medicine uses studies of high relevance and methodological quality in order to provide independent validated advice and evidence about treatment options and clinical procedures (Haynes 1991). Empirical evidence is defined as evidence derived from formal and systematic clinical research (Tonelli 2006). In experimental terms, outcome measures of absolute and relative benefit can be used to measure effectiveness of one intervention against another. The clinical endpoints mainly investigated are mortality, morbidity and quality of life. To generate these endpoints, the research methodology has to be valid and reliable.

In testing a hypothesis, observational and experimental methods could be implemented. Gray (2004) explains that in observational research, the researcher observes a population or group of patients and manipulates data about those subjects. Forms of observational research could be qualitative research, surveys, and controlled case studies. In experimental research the intervention under investigation is performed at the instigation of the researcher. The most powerful type of experimental study is the randomised controlled trial (RCT), and therefore a systematic review of more than one RCT would be of high methodological quality. An RCT is a study with two patient groups, one treatment and one control group; patients are randomly assigned to the groups. RCTs are very costly to perform and there are risks associated with them as patients are being experimented on with new treatments that may prove harmful. There are also ethical issues that arise, such as not treating some patients with the technology for the sake of trials (University of Michigan 1999), and being satisfied with patient capability to understand fully potential risks they are taking on. In evidence-based medicine, the systematic review traditionally relies on a rigid 'hierarchy of evidence' that is used to determine which pieces of research are included in the final synthesis, and which are excluded. Typically, only experimental designs are included (Cochrane Collaboration, 2001). Table 1 shows a classification of the evidence adapted from Belsey & Snell (2003).

Ranking classification of evidence descending in terms of credibility
I Strong evidence from at least one systematic review of multiple well designed randomised controlled trials.
II Strong evidence from at least one properly designed RCT of appropriate size
III Evidence from well-designed non-randomised trials, cohort studies, time series, or matched case-controlled studies.
IV Evidence from well-designed non-experimental studies from more than one centre or research group.
V Opinions of respected authorities, based on clinical evidence, descriptive studies or reports of expert committees.

Table 1: Ranking classification of evidence in medicine (Adapted from Belsey and Snell 2003)

However, the validity and utility of this traditional evidence hierarchy is being questioned as it oversimplifies the complex nature of research, underplays the value of non-experimental research, and ignores the contribution of qualitative research. Sackett & Wenneberg (1997, p.1636) emphasize that "each method should flourish, because each has features that overcome the limitations of others when conformed to questions they cannot reliably answer." Grossman & Mackenzie (2005) also question the labeling of the RCT as the 'gold standard', as methodologies lower in the hierarchy might be more appropriate in some circumstances. Sackett & Wenneberg 1997 highlight that different research questions require different kinds and methods of research and different evidence. Although evidence-based medicine calls for the integration of some alternative kinds of medical knowledge as well as patient goals and values into clinical decision making (Sackett et al. 1996), it remains unclear by what process clinicians are to balance what may be conflicting warrants for action coming from sources other than published clinical research, such as personal experience, pathophysiologic understanding of disease, the preferences of individual patients or other 'non-evidentiary' sources (Tonelli 2006, Greenlagh 2003). Moreover, there is an ongoing debate on the use of a hierarchy of evidence as it implies that empirical evidence, especially when of high quality, should be viewed as so compelling as to obviate the need to consider clinical experience or understanding of the particular patient in a clinical decision (Tonelli 2006). The notion of a general priority of empirical evidence was challenged by doctors, many of whom pointed out the limitations of attempting to apply knowledge gained from population studies to the care of individual patients (Tanenbaum 1993; Horwitz 1996).

The learning from evidence-based medicine for public procurement is particularly important for procurement in public sector healthcare provision, but has wider applicability to evidencing procurement decisions across complex public sector systems. The recognition in medicine that strict adherence to single, scientific methodologies is not always appropriate supports some form of contingency approach to choice of evidencing method. Chronologically evidence-based policy followed on from evidence-based medicine in the development of evidence-based approaches to decision making; it is in this field that qualitative approaches feature more in evidencing than in medicine.

Evidence-based policy making

The role of evidence in decision-making has been increasingly emphasised in the policy domain. Policy making is a political process that tends to be driven by beliefs of politicians and the value they place upon different types of decision-making (Gray 2001, Shaxon 2005). Although evidence can be used during policy making, some policies have been formulated without considering it (Gray 2004), but current governments are requiring more evidence. For example, the 1999 Modernising Government White Paper noted that government must "produce policies that really deal with problems; that are forward-looking and shaped by the evidence, rather than a response to short-term pressures, that tackle causes not symptoms," (Cabinet Office 1999 in Shaxon 2005, p. 102). This has been reflected in a rise in public funding for evidence-based policy

research (Packwood, 2002). Tools that aim at improving the chain of causality between evidence and advice have since been developed (Shaxon 2005).

What is evidence- based policy making?

Evidence-based policy making is defined as the integration of experience, judgement, and expertise with the best available external evidence from systematic research. Thus it moves towards policies based on "the opinions and judgement of experts that constitute high quality valid and reliable evidence" (Davies, in Shaxon 2005, p. 105). Evidence-based policy research seeks to provide evidence about the operation, impact, outcome and effectiveness of public policy interventions, used to inform public policy formulation and implementation (Bambra 2005). Key objectives of evidence-based policy research are discovering what works, why and for whom it works, through assessing whether new and existing policy interventions are effective and efficient in achieving desired policy goals. Policies should be effective as resources of time and financing are scarce (Davies & Smith 1999; Macintyre & Petticrew, 2000; Campbell collaboration, 2001).

What is evidence in evidence-based policy making?

The literature on evidence-based policy is diverse and ranges from the quality of evidence research to its implementation in practice. The quality of evidence in evidence-based policy has gained much attention; the developing technique of systematic reviews in the field of social policy continues to generate controversy. Evidence in policy making is defined as any information that helps to turn a department's strategic priorities and other objectives into something concrete, manageable and achievable (Shaxon 2005). In determining what kind of information would be needed to synthesize the evidence and satisfy a diverse array of stakeholders with different perspectives on value and effectiveness in the process of turning broadly scoped goals, Levitt (2003) states that such evidence needs to be broad and designed to cover all possible opinions, judgement, analyses, and hard facts. Gray (2001) shows that the nature of evidence could be either the experience of what happened in the past, and/or derived from research findings. Shaxon (2005, p. 102) clarifies that "good evidence-based policy making is not simply about creating a vast database of everything and then cherry picking the best, or most accessible or most immediately relevant information"; rather new ways of using and interpreting information is developed as people's understanding and interpretation change, and more evidence is provided. Consequently, this leads to a dynamic evidence-base; if the evidence-base is changing, then so must the ways in which we manage, filter and use it for policy.

Challenges in evidence-based policy research and policy making are inherent in the nature of policy. The social and political context in which policymaking takes place is characterised by multiple stakeholders and perspectives. There are therefore two major challenges to evidence-based policy research; first is synthesizing high quality experimental research, and second achieving a balance between rigour of research and timeliness. The concern of evidence-based policy with effectiveness, and its preferred methodological approach - the systematic review- have their major roots in evidence-based medicine (Macintyre and Petticrew, 2000; Campbell Collaboration, 2001). However, it is argued that the evidence hierarchy, with its tight methodological exclusion

criteria, cannot be transferred to evidence-based policy research without the danger that every review will conclude that there is no experimental evidence on most topics (Bambra 2005). Alternative approaches acknowledge that there are large gaps in evidence that can only be covered by non-experimental and qualitative research evaluation. These approaches abandon the idea of any sort of a hierarchy and call for a database of evidence (Bambra 2005, Petticrew and Roberts, 2003).

The conflicting objectives of making decisions only based on rigorous research, and making timely decisions chimes with the challenges faced in procurement. Intuitively, as the implications of purchasing decisions vary, then the rigour of evidencing should also vary. We now turn to purchasing to examine current evidencing approaches in use.

Current evidencing approaches to purchase decisions

Financial evidencing approaches

Purchasing in a complex project environment, such as purchasing Heathrow airport's fifth terminal, typically involves approaches that evaluate return on investment (ROI). ROI methods have been used for decades (e.g. Ridgway, 1956). There are many quantitative economic value added approaches to evidencing value of alternatives (see Ferguson & Leistikow, 1997, for a review). Teece (1992) specifically linked return on investment to innovations; early adopters of new technologies do not necessarily reap improved financial performance. This is particularly appropriate when considering purchasing a new information system, for example. However, assessing value of proposed purchases requires evidence beyond financial evidence; Ittner & Larcker (2003) discuss how organisations wish to manage performance areas that are not solely financial. Also, focusing solely on financial evidence can lead to short-termism in decision making (Johnson & Kaplan 1987). The operations strategy literature indicates that a longer term, more strategic perspective is required in some situations (Hayes & Wheelwright, 1984; Hill, 1989).

Operations management evidencing approaches

Operations management authors tend to focus on a number of operational performance criteria, typically quality, dependability, cost, speed and flexibility (Skinner, 1969; Hayes & Wheelwright, 1984; Slack et al, 2001). These criteria mirror those used in purchasing to evaluate supplier performance over time i.e. vendor rating (Smith et al, 1963; Lee and Dobler, 1977; Stevens, 1978; Monczka & Trecha, 1988; Timmerman, 1986; Krause and Scannell, 2002). Vendor rating models were classified broadly into 3 types – categorical plans, which applied judgement of performance against specified criteria, weighted points plans which assigned quantitative scores to performance criteria and weighted them according to criteria importance, and cost ratio plans which attempted to examine costs of purchases over their life. Whilst vendor rating was focused on evidencing performance of suppliers, the ratings could then be used in subsequent purchase decisions to enable choice between suppliers of substitutable products.

The service quality literature introduced less tangible aspects of service performance, such as courtesy and credibility (Parasuraman et al al, 1988), but again this was focused on evidencing performance of suppliers, rather than helping to evidence value in a

purchasing situation containing choice. Recently service management researchers, such as Aleda Roth and Chris Voss, have been striving to bring more 'science' into service management, responding to IBM's call for "a more systematic approach to services innovation" (Horn, 2004).

Kaplan and Norton (1992, 2005) developed the 'balanced scorecard', a tool that has been further developed and applied in operations management. The balanced scorecard uses a range of operational measures in addition to financial measures, particularly relating to the range of stakeholders relevant to a decision. By considering a broader number of criteria it aims to prevent decisions being taken in one part of the organization at the expense of another area. Neely et al (1997) have developed the balanced scorecard approach and applied it to operations management settings.

Public procurement evidencing approaches
The International Research Study of Public Procurement (IRSPP, Harland et al, 2007 forthcoming) provided a seven stage framework of public procurement, in Figure 1. This addresses the complexity of purchasing for the public sector as it provides seven different roles of public procurement, each of which would require different evidence to demonstrate that role is being played effectively.

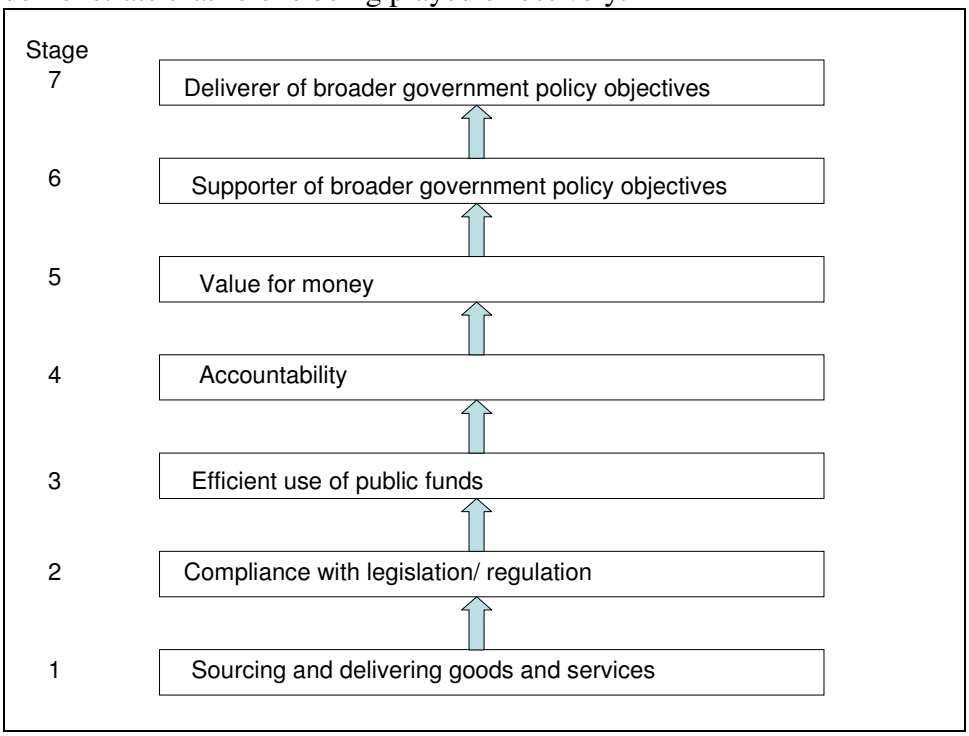

Figure 1: Seven stage framework for public procurement *Source:* Harland et al (2007, forthcoming)

IRSPP highlighted that different nations are at different stages of development of their public procurement. Many European nations are particularly focused on value for money approaches and efficiency. The UK Efficiency Review (Gershon, 2004) of public sector called for a focus on generating efficiency savings in public procurement, to release resources back to front line services. Hence, evidencing public procurement decision

making in the UK has been dominated by providing evidence of efficiency savings. However, in other nations, such as South Africa, where public procurement is being used to deliver broader government objectives, notably Black Economic Empowerment, then evidence of the number and value of contracts placed with black owned businesses is driving public procurement decision making.

Conceptual development of evidence-based public procurement

Evidence-based purchasing could, conceptually, relate to evaluating suppliers pre-contract, suppliers' performance over time, the quality of the purchasing process, relationships, supply chains, networks and supply systems/ sectors. These different units of analysis require different types of evidence to make evidence-based decisions. However, in evidence-based law, medicine, policy and management, the focus is on each case – what evidence is required to try a particular legal case, to diagnose and determine the treatment of a particular patient, to decide if a proposed policy appears reasonable or to take a better management decision. Therefore, the focus here is on purchasing specific goods and services, to answer the question 'what evidence is required to improve purchasing decision-making'? A common interest across all evidence-based approaches is how to use different types of evidence, to synthesise across them and, applying judgement, make a decision. Evidence-based medicine, policy making and management deal with choices – there are alternative treatments, policies and management decisions and choice between them has to be made. Extending this to purchasing, we are therefore interested here in 'what' should be purchased, rather than 'how,'or 'from whom'. This applies to purchase decisions involving choice between substitutable options, particularly those which are complex, multi-dimensional decisions with many different criteria to be considered.

The novel contribution of this paper lies in the combination and synthesis of evidence-based approaches with evidence from public procurement research. The Healthcare Industries Task Force (HITF) is a body set up by UK government to address the fact that healthcare innovations are not being adopted as quickly and effectively as they are in other nations. Representatives from industry, academia and healthcare have joined to form this task force to improve innovation in healthcare. An initial conceptual framework was created for HITF and further developed to represent the complex space that healthcare purchasing decisions are taken in; this is provided in Figure 2.

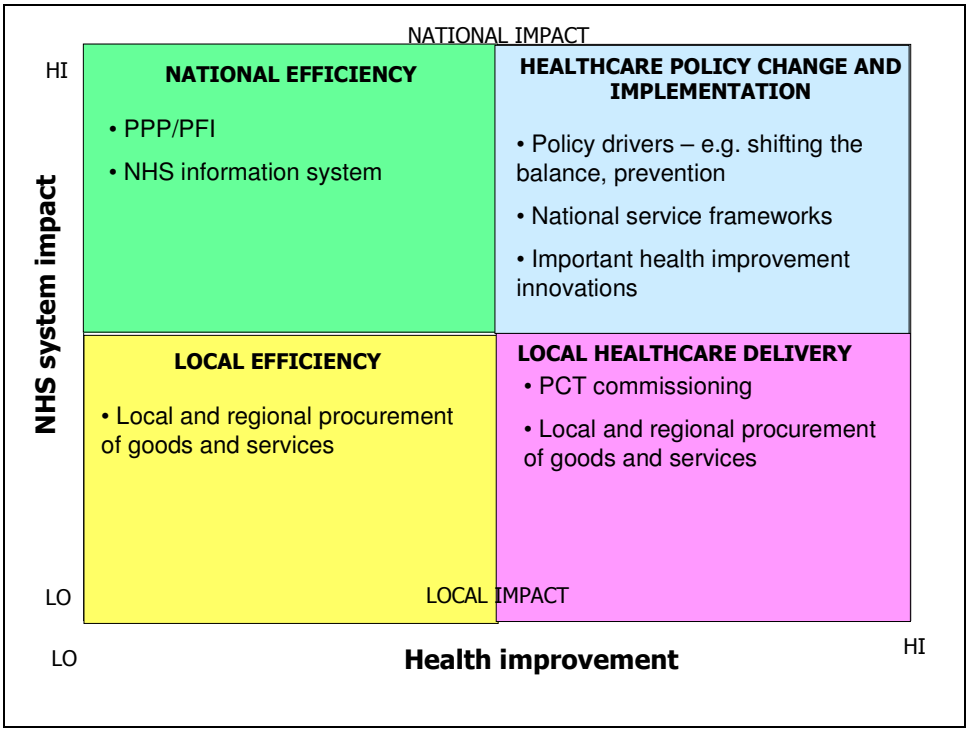

Figure 2: Initial conceptual framework for evidence-based purchasing in healthcare
Source: Harland and Gardner (2006)

The two variables that form the axes of the 2x2 matrix were derived from exploratory research with the Centre for Evidence-based Purchasing within the NHS Purchasing and Supply Agency. This research involved investigating how healthcare innovations were being evaluated, and brainstorming what other evidence might be required. The degree to which an innovation might deliver direct health improvement should impact on whether evidence of health improvement is required. The extent of impact of the purchase of an innovation should impact on the type of evidence required and the amount of resource that should be invested in providing that evidence. Using the findings from IRSPP relating to different roles of public procurement, the initial conceptual framework for evidence-based purchasing in healthcare was developed further to provide an initial framework for evidence-based public procurement, shown below in Figure 3. Here we can see that different roles of public procurement relate to different parts of the framework. Procurement relating to the infrastructure of the public sector to improve local efficiency (bottom left hand box) will involve public procurement practitioners working in local or regional teams to make efficiency savings. Quantified evidence of efficiency savings should be collected and provided to local budget holders. Where larger, national infrastructure purchases are being made (top left hand box), these may well support broader government objectives; for example, the NHS information system procurement is intended to enable records to follow patients, enabling them to have more choice of where their healthcare might be provided. Such large, significant projects are often high profile and would involve public procurement practitioners working in integrated national project teams with a range of project management, financial management and project specific skills and expertise being provided from different areas

of government and the industry. The evidence required would be multi-dimensional, including financial and economic evaluations.

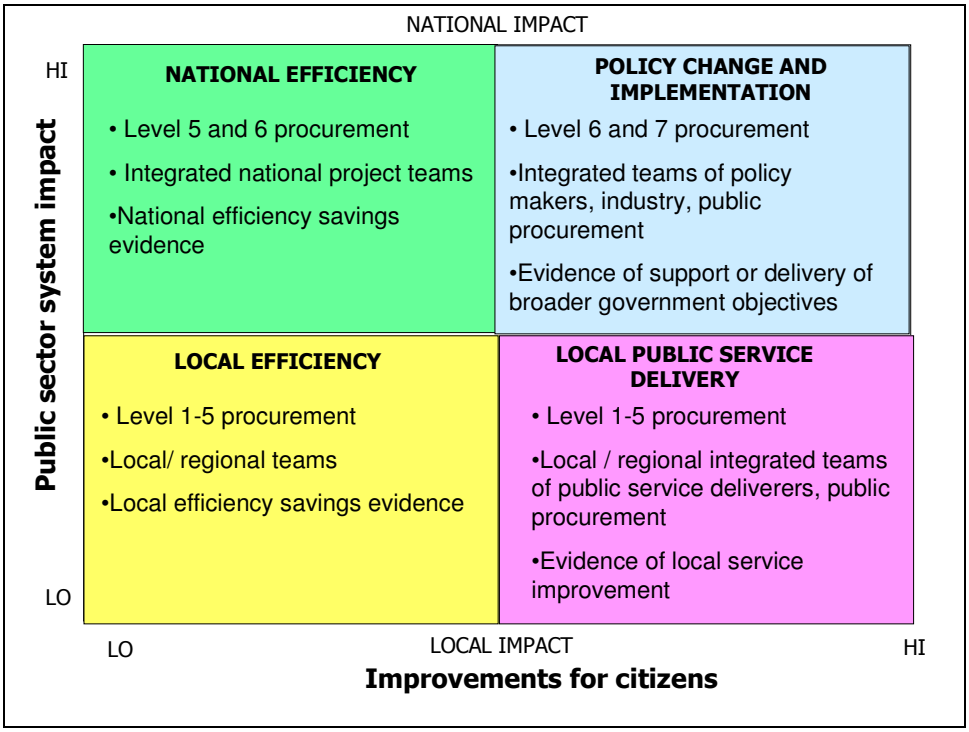

Figure 3: Initial conceptual framework for evidence-based public procurement

The bottom right hand box involves procurement that changes and improves local public service delivery; for example, the procurement of a village by-pass/ relief road. Here public procurement practitioners would have to work alongside groups representing the community and the environment, town planners and local government bodies, such as a parish council. In these sorts of procurement exercise, consultation is an important and lengthy process to ensure that the various stakeholder groups are involved and their views represented. Evidence here is multi-dimensional and would involve qualitative evidence in addition to financial and economic evidence. It would be likely that citizen surveys, focus groups, and community meetings would be used to collect evidence and to communicate the progress of the procurement. Trade-offs would be required between stakeholder groups; for example, environmentalists may want to block progress whereas local developers would support the proposal. In addition to sensitivity to stakeholder groups, the procurement activity would involve an agreed process, with sufficient notice being given to interested parties to have their views heard appropriately.

The top right hand box is where public procurement is part of the process of policy change and implementation, Here the role of procurement is to support or deliver broader government objective. For example, the commissioning of healthcare services from of an independent treatment centre, as opposed to a public sector provider, delivers the broader government objective of plurality of provision of public services. Here policy makers would be involved in the procurement activity, along with the industry, as well as public procurement practitioners (although in practice, public procurement practitioners are

often left out of involvement in these arrangements and ministers and policy makers conduct the exercise without procurement expertise being involved). Evidence here would include policy implementation and its consequential impact on the public service provision and its quality. Large scale public surveys, such as those commissioned from MORI, might be included, as might evidence of inter-departmental collaboration, and ministerial support.

Theoretical development of evidence-based public procurement

This initial conceptual framework is currently being tested and developed through empirical research. Live, longitudinal projects have been commenced with a shared methodology to examine the current evidencing approach, brainstorm appropriate additional evidencing, implement those additional evidencing approaches, and evaluate the impact of the evidencing on the decision. Four live projects in healthcare innovation have been started – evidencing the value of a new blood glucose monitor, a new digital imaging device, a new technology for wound closure and healing, and an entirely different treatment pathway for chronic water retention involving fluid being sucked from the body rather than dispersed through diuretics. Prior to this research the main content of evidence was in the form of a technical evaluation, the results of which were communicated to the appropriate dispersed buy groups in the public health sector, who then made their own decisions on whether to purchase the innovation or not. In this research technical, economic and procurement evaluations will be made and provided to regional collaborative procurement hubs that are starting to procure for and on behalf of local healthcare providers. In addition another project on evidencing the value of management consultancy procurement has been started. Through a number of empirical projects, the initial framework will be tested and populated with examples, providing a taxonomy of evidence-based public procurement.

Conclusions

It appears that there is a movement within academia and practice towards more systematic decision-making in a number of fields. Calls for increased resource to collect, analyse and use evidence more rigorously have been made in medicine, health and social care and policy making practice. As evidence-based management receives more research attention, it appears likely that a crop of evidence-based approaches will spring up in the functional areas that make up the broader management discipline. It is vital for our field to learn from other fields if we too are to pursue greater methodological rigour in providing evidence to support purchasing decision-making.

Evidence-based medicine is well down the track of examining and understanding appropriate approaches to evidencing decisions. However, in that field medical professionals cling to their scientific roots and still hold up the randomised controlled trial as the gold standard for providing evidence. Whilst this is appropriate for research in large populations, such as drugs trials, other healthcare professionals providing more customised care packages find themselves at odds with the mainstream science based view of research. In these situations decision makers must consider many more dimensions relating to the patient, their carers, their life ambitions and the quality of their lives. More qualitative, observational and case based approaches are required to support

informed decision making, but sharing that research is problematic in a research community whose publications are dominated by positive evidence from RCTs.

There are direct parallels for purchasing academia and practitioners. The continued dominance of quantitative methodologies in purchasing research and in evidencing purchasing decisions in practice still cause a dearth of purchasing knowledge and decisions informed by a broader set of evidence. This exacerbates the gap between policy and practice in the public sector where political leaders pursue broad sets of objectives and purchasing decisions are still driven by savings.

The review of existing evidencing approaches being used in purchasing amplifies the chronological development of a field that initially focused on private sector purchasing decisions and has more recently broadened its research into public procurement. The findings of the International Research Study of Public Procurement have emphasised the very different roles that procurement professionals sometimes have to play in the public sector; evidence is required to support decisions in those roles and that evidence is very different to that required in a transactional contract award in a private sector setting. As these roles can be policy making or policy supporting, our field should look to evidencing approaches used in policy making more generally and be prepared to deal with complex data sets containing different types of data that are challenging to compare.

This paper has proposed evidence-based purchasing, particularly for the public sector, to collect, analyse and use evidence from a number of sources and of a number of types - quantitative, financial and economic in orientation, as well as qualitative, social, quality of life types of evidence to incorporate broader stakeholder views. These developments will impact on practice, through more rigorous collecting and use of a broader range of evidence. They will also impact on the emerging discipline of supply management (Harland et al, 2006), bringing more science and methodological rigour into the field.

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