Chapter 7

Procurement Ethics and Telecare Innovation in UK Healthcare

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INTRODUCTION

How public sector resources should be allocated is a perennial issue. The pressure on decision-makers to satisfy competing agendas inevitably results in uneven distribution and inefficiencies in the system. In the UK the Government has sponsored major reports into the failure of the public sector to take up innovations (e.g., The Department of Trade and Industry report *Competing in the Global Economy – The Innovation Challenge* (2003). Another report by the Office of Government Commerce Guidance, *Capturing Innovation – Nurturing suppliers' Ideas in the Public Sector* (2004), made explicit the role Government saw for public procurement in innovation: [public procurement] has "a vital role ... as a lever for stimulating and enabling supplier innovation." Specifically in the UK National Health Service (NHS), attention has been drawn to the late acquisition of innovative new health solutions and the slow pace of technological change (Wanless, 2001).

Times of transition are opportunities for exploratory research. The context of this study is an emerging technology, explored through the lens of an emerging role for public procurement. The technology at issue is one designed to support elderly people remaining in their own homes. [There are other uses such as protecting battered women, monitoring of at-risk babies, chronic condition management, etc., but these are beyond the scope of this study]. The benefits of the technology are avoiding both emergency admissions which are costly for the health service, and the individuals having to give up living in their own home for an institution. As with many innovations, the technology itself is not new or radical; it is its deployment that is radical. Telecare as a description is somewhat misleading, as it

implies the provision of care through telecommunications (ICT). In fact the Greek root "tele" means "far" or "a distance," so it is in essence some form of care provided remotely. We will define it more specifically below but the value of this simple definition is to highlight that the technology employed is the variable rather than the care. [Other forms of distance medicine include telehealth, where an expert opinion (i.e., usually a medical expert) is obtained] (Wooton, 1998). In fact the role of the telecommunications technology in telecare is simply to make a "mass" or volume delivery system for care for the elderly, rather than the one-to-one care associated with physician or "home helper" forms of care provision. It is this combination of technology and volume – telecare is designed to be installed in the users' home – that creates a role for public procurement.

In the UK, health care procurement is largely a public sector activity. The involvement of procurement in telecare is driven by the demographic of ageing "baby boomers" upon the healthcare system. New models of healthcare provision such as telecare or the more interactive and technologically advanced telehealth involve major realignments and reconceputalization of what is healthcare. For example by assisting the individual to stay in their own home telecare has implications for non traditional carers, i.e. non-qualified, healthcare actors such as home carers or helpers. Innovations such as telecare then will redefine aspects of what is healthcare. In the context of the elderly, there will be a move away from the current perception (delivery mode) of healthcare as an "intervention," which takes place in an acute setting such as a hospital. The healthcare system of the elderly, following the telecare model, will be increasingly built around continuity rather than deviations, with an emphasis on monitoring for prevention rather than "cures." Whilst today's concept of healthcare is connected to medical environments, the focus will shift to healthcare as a home and community based activity, with medical sites such as hospitals becoming the deviation, i.e., for exceptional and emergency treatments. This shift in focus and the accompanying technology mean there will be new volume markets for suppliers, and new needs for procurement to satisfy.

In line with these developments, this chapter focuses on the looming impact of telecare explored as one example of public procurement adopting new societal responsibilities. It is suggested that the new demands and practices led by innovative service and

delivery patterns will come into conflict with the physician-based ethics of the traditional healthcare system. The wider issue is whether procurement, in adopting increasingly societal roles, inherits new or expanded ethical issues that accompany societal roles. The field of introducing telecare into UK care for the elderly offers an early opportunity to examine whether such new responsibilities for the profession can be viewed as "value free."

Following this introduction this chapter is in five parts. There is a literature review of which the first part discusses the nature of organizational ethics, positioning purchasing and medical ethics. The second part reports on UK's concern at the lack of innovation in healthcare and activities to promote it. The next section reports our case based and qualitative research methods and why this approach is appropriate. We present a brief case of telecare which forms the basis of the discussion in the next section. Finally conclusions, limitations and the need for further research are presented.

LITERATURE REVIEW

This section commences with a review of the treatment of ethics in two purchasing textbooks of the mid 1990s. Many academics would query the use of text books in a literature review. However textbooks are valuable sources of mainstream ideas, and reflect practitioner views. The choice of the mid-1990s is deliberate as at that time authors of textbooks were grappling with the growth of the supply field (e.g., the lean and partnership phenomena) whilst simultaneously having to accommodate traditional syllabuses and concerns. The resulting textbooks are therefore extremely valuable artefacts for understanding the growth or formation of purchasing topics.

The ethical philosophy underpinning these texts is then explored through teleological and deontological approaches in terms of tw0 extreme positions, consequentialist and non consequentilist ethics. These two approaches are not compatible: consequentialism is associated with managerial ethics, while non consequentialist ethical approaches are central to medical ethics. As discussed below, public procurement in the UK has been given the role of pulling technology into public sector health care. At least with regard to telecare, where technology is being introduced into an area previously dominated by

clinicians (and therefore the ethical values of the medical profession), public procurement becomes part of a potential ethical divergeance.

Ethics in Purchasing

Until recently, the academic literature on purchasing and supply literature has placed little emphasis on ethics. A cursory search shows one publication on ethics in the first eight volumes (1996-2002) of the European Journal of Purchasing & Supply (EJPSM), and none in its successor The Journal of Purchasing & Supply (JPSM), (four volumes, 2003-Jan 2006). This low level of attention to ethics is reflected in the textbooks and supported by the relative equanimity on ethical matters reported by the managers surveyed in the one article published in EJPSM (Cooper, Frank & Kemp, 1997). In their survey, Cooper, Frank and Kemp (1997) found that although the average level of ethical concern was low, within each ethical issue they proposed, there were respondents who rated that ethical issue as highly significant

A popular UK purchasing textbook *Strategic Purchasing and Supply Chain Management* (Saunders, 1994), endorsed by the UK Chartered Institute of Purchasing (CIPS), covered the topic of ethics in three quarters of a page, focusing on four key areas: declaration of interests in supplier firms; fair treatment of suppliers and confidentiality; receipt of hospitality; receipt of gifts. In essence these are all about a purchasing individual or department receiving incentives except for the ambiguity of fair treatment of suppliers and confidentiality. Saunders refers readers to the code of conduct drawn up for its members by the CIPS.

In a popular US textbook of the same vintage, the treatment of ethics is marginally longer, *Purchasing and Supply Management*, (Leenders & Fearon, 1997) but in essence covers the same ground. The emphasis is on courtesy, honesty and fairness – and a procedure. "Purchasing and materials management associations in many countries around the world have adopted their own codes of ethics governing the relationship between supplier and purchaser" (p. 224).

What these Anglo-American textbooks shared in regard to ethics was a commitment to "policies and procedures guidelines concerning the relations between the purchasing officer and suppliers'

representatives" (Leenders & Fearon, 1997, p. 224). If these texts can be taken as representative, then there is a confidence that a set of rules had been devised which could be consulted in the event of an ethical problem. The ethical issue could be effectively quarantined and then an appropriate ethical solution divined. This presentation of ethical issues as distinct and "thou shall/thou shall not" is recognised in their conclusions by Cooper, Frank and Kemp (1997). The ethical issues their survey probed are invariably divided as if between clearly ethical and clearly unethical behaviour. The significance of this perspective is in its ontological fit with the positivism of the survey method. What is being excluded in this treatment though is where decisions about what is ethical behaviour or how to be ethical are multi-faceted and not amenable to clear good/bad distinctions.

In the next section we review two contrasting philosophical perspectives that can underpin how an organization decides what constitutes ethical behaviour: consequentialist (teleology) and non consequentialist (deontology). The next section examines the consequentialist approach to purchasing ethics reported above, and explores the transition to less consequentialist ethics, as presented in a more recent CIPS purchasing code of ethics. The former bases ethical practices upon perception of the likely consequences, the latter approach bases its ethical approach upon perceived principles or duties of the specific situation, not the consequences of any action. (Although consequentialism is not a single ethical doctrine, a general type of doctrine which can take very different specific forms depending on what is held to be good in itself [Craig, 2002, p. 46]).

What brings the discussion back to the practicalities of public procurement involvement in deploying innovation is that the consequentialist perspective of ethics manifests itself through an internal focus. This is because as an underpinning for organizational ethics it translates into wanting to create and deepen shared values (behavioural issues); it is primarily aimed at a company's workers, managers and co-workers. It is led through initiatives such as business ethics programmes, good business practices, etc. (de Colle & Gonella, 2002). Can such company led approaches cope with the societal issues procurement is being asked to lead? Others suggest a more externally focused approach is necessary (de Colle & Gonella, 2002). The emphasis in externally focussed ethical approaches is to understand and communicate with other stakeholders, manifest in

public meetings, transparency and often independently audited reports.

Utilitarianism vs. Deontological approaches

This section draws upon Bowen's (2004) work on an ethically exemplary organization. The relevance of utilitarianism here, a philosophical perspective associated with Mill (1979) is that it reaches [ethical] decisions on the basis of the greatest good (or the least harm) for the greatest number of people. Beyond its simplicity and clarity it has an inherent and familiar appeal to purchasing due to its cost-benefit calculation; Kimmel (1988, p. 63) argues the "cost-benefit" approach is implicit in most forms of professional codes of ethics. (Bowen [2004] goes on to differentiate between two act and rule utilitarianism).

Utilitarianism is often perceived as supportive of the status quo – the majority always win – minorities' (and "maverick" individuals') views are marginalised (Caldwell, 2001). Recent work on "separability" has questioned this assumption though. Ng (2000, p. 299) suggests separability creates social welfare as a separable function of individual utilities. Others have questioned the precision with which happiness can be defined; nevertheless the assumption is that some set of rules, regulations or procedures applied in an indiscriminate (as in universal) manner underpins the ethical positions described above.

The non consequentialist or deontological philosophy is associated with the German philosopher Kant, and argues that the consequences of a decision should not dictate the moral principles of right (Bowen, 2004). Therefore, in total contrast to a form of rules set in stone, such as definitive ethical procedures and codes for purchasing, more analysis and more autonomy, is encouraged. (See Bowen [2004] for a detailed explanation of the deontological position derived from Kant's categorical imperative). Our concern here is only to appreciate the recent turn in ethical procedures and codes for purchasing, before turning our attention to public sector purchasing innovation and ethics.

In the latest purchasing code of the UK CIPS, the basic content of Saunders (1994) and Leenders and Fearon (1997) is relegated to guidance notes. In the "Introduction" (point one), members are

instructed to *exceed* the expectations of the following code (emphasis added). Beyond fine phrases such as "upholding and enhancing" the standard of the profession, an organic quality is added by the emphasis on striving and momentum (achieved through numerous – "ing" verb endings). Rather than a list of mere rules to be obeyed, the intention appears to attempt to be genuinely inspirational.

There is a subtle shift in the ethical code of the new CIPS code and earlier codes reflected in the textbooks. There is a new emphasis on moral autonomy, on the individual having to evaluate, for themselves, but in the light of the code, how to act or perform. "Members should raise any matter of concern of an ethical nature... irrespective of whether it is explicitly addressed in the Code." The absence of a cost-benefit calculation is what pushes the new code toward the non-consequentialist paradigm. The code remains stronger and more explicit on behavioural standards. It is not clear though how the purchasing "professional" would find support if an ethical issue arose involving conflicting values across internal and external stakeholders.

Managerialist versus Medical ethics

Disagreements are predictable between managerialist approaches such as procurement and innovative private organizations, associated with consequentialist ethics, and medical or clinical ethics which are classically non-consequentialist. Medical ethics are an extreme form of where the decision-making autonomy of the individual is paramount. "Physicians, health care's key decision makers, have been guided historically by a normative ethic that provided order among the industry's stakeholders, placing the patient's health concerns above any other concern" (Angell [1993] cited in Elms, Berman & Wicks, 2002, p. 416).

The ethical rights and responsibilities of doctors, consultants and surgeons to follow their own ethical code are so dominant, that aside from internal healthcare debates (Proenca, 2004, Winkler, Gruen & Sussman, 2005) clashes of ethical perspectives with predominantly managerial/consequentialist perspectives have tended to be rather narrowly focused on cost. For example an administrative led initiative to persuade doctors to prescribe cheaper drugs/treatments.

Innovation Promoting Activities

In a report commissioned by the Exchequer, Wanless (2001) reported that the NHS is a late and slow adopter of new technologies, presenting the US as an example of an early and rapid adopter of new technologies. He also compared the diffusion rate once a technology had been adopted unfavourably with that of countries such as Australia, Canada and France (Wanless, 2001; McClellan and Kessler, 1999). Wanless concluded that there was a need for the rapid and consistent diffusion of technologies throughout the healthcare system.

The "Healthcare Industries Task Force" (HITF) has been an outcome of the Wanless Report. Organised by The Association of British Healthcare Industries and the Department of Health, HITF examines, amongst other issues, the difficulties of introducing new technologies into the UK. This initiative has begun to report, and recently HITF has highlighted the need for methodologies that "recognize[s] the different approaches necessary for evaluating "disruptive/transformational" compared to "incremental" "innova-tions" (HITF, 2004, p. 84). It is the disruptive/transformational qualities of two streams of the research reported here that we now turn to, after presenting our research method and epistemology.

RESEARCH METHOD

Our method is based on qualitative case studies (Eisenhardt, 1989; Morgan & Smircich, 1980) as we seek to generate new theory (Eisenhardt, 1989; Sutton, 1997). Again in line with others, we suggest that the flux and change processes at work in healthcare (here we focus on changing demographics) give qualitative approaches advantages over more traditional methods (Elms, Berman & Wicks, 2002; Morgan & Smircich, 1980).

We focus in this chapter on our research in telecare/electronic assistive technology, as this is an area where clinical expertise and formal regulatory barriers are lower than in more clinically defined areas. The research we report upon here draws upon over 60 in-depth face-to-face interviews conducted in four health networks within the UK. The interviewees were selected by means of reputational sampling (i.e., experts in the field highlighted appropriate personnel (Miles & Huberman, 1994). This reputational sampling

resulted in interview coverage of major elements of niche industries; in interviews we were able to cover the majority of NHS PASA recognised firms in the small UK telecare industry.

Our coverage was the result of a theoretical sampling approach, whereby interviews were conducted until theoretical saturation had been achieved, i.e. additional interviews were not contributing new or relevant data (Bryman, 2004; Strauss & Corbin, 1998). In addition to the interview strategy, attendance at relevant committees (such as HITF), internal meetings with NHS PASA and attendance at trade shows were used to add depth and richness to our qualitative data. The combined approach resulted in over 300 hours of contact time between researchers and industrial experts.

Providing long term care to the elderly is an area that the ethical challenge to internally driven, employee and behavioural traditional purchasing ethics is stark. Working with the frail elderly involves a host of stakeholders, notably the patient/user and immediate family. A Delphi study of the top 10 health care ethics challenges facing the public (Breslin, MacRae, Bell & Singer, 2005) found the highest ranked ethical challenges facing the public in health care was disagreement between patients/families and health care providers over treatment decisions.

The procurement challenge is not buying a discrete product at a "best value" price, but the provision of a combined series of services and technology, with a high number of interconnections and handovers, not necessarily in a linear or even predictable manner. To us this is a radical rather than an incremental development as it means a focus on the development of the wider infrastructure rather than the development of a single new technology or application (Phillips, Johnsen, Caldwell & Lewis, 2006).

THE CASE OF TELECARE

The Ageing of the Population

In the EU the proportion of persons aged 65 plus is set to increase from 16% in 1999 to 21% in 2020 and then increase again to 28% in 2050 (Schulz, Leidl & Konig, 2004). The UK Audit Commission (2006) reported the following statistics for the UK: A century ago only one in 20 people were over 65, whereas in 2006 one in six are over 65; and it is anticipated that by 2051, a quarter of

the population will be over 65. This we suggest is a transformational scenario for UK healthcare procurement. Whereas people over 65 are only 16% of the population, they actually occupy almost two thirds of general and acute hospital beds and account for 50% of the recent growth in emergency admissions. In financial terms, the NHS spent around £16 billion on people over 65 in 2003/2004, (43% of the total NHS budget). Social services spent around £7 billion (44% of total social services budget).

Truly innovative health and care approaches are required to deal with this demographic transformation. One major plank of the technology being invested in is telecare. Brown (2003) described telecare as a term given to the remote monitoring of patients through information and communications technologies. In Brown's definition telecare includes systems that incorporate electronic devices that can alert the occupant of a house or a care response system on the occurrence or non-occurrence of predetermined events (ibid). In addition it is seen as having the potential to postpone and divert older people from moving into residential care and possibly hospital. More recently there appears to have been a shift to redefine telecare in terms of outcomes rather than technology. The Department of Health suggested in a recent report that telecare is as much about a philosophy of dignity and independence as it is about equipment and services (DOH, 2005).

In Figure 1 we present a representation of the UK health service. At the far rim of the picture we find the bulk of the elderly population and those "Cinderella" services associated with them; for example wheelchairs (the most common disability) and audiology (hearing impairment) affects 93% of over 80s (Phillips, Knight, Caldell & Warrington, 2006), and telecare. The outer circle of our picture represents the high volume but unglamorous sector of healthcare. Above all, it is about aiding daily living, and therefore suffers from being mundane compared to sectors that intervene and then move on to another patient. In other circumstances and in a different country, Meany (2000, p. 129) has expressed our central point eloquently:

Healthcare in the US historically had focused on the individual patient and the delivery of episodic care through a fragmented system of healthcare providers. The model of episodic care is

based on the assumption that good health is the usual state of the individual patient and that illness is a temporary aberration.

For the elderly this "episodic" view of care may well be inappropriate and suboptimal. We would also add here that this is the

FIGURE 1
The NHS as a System, Selected Factors
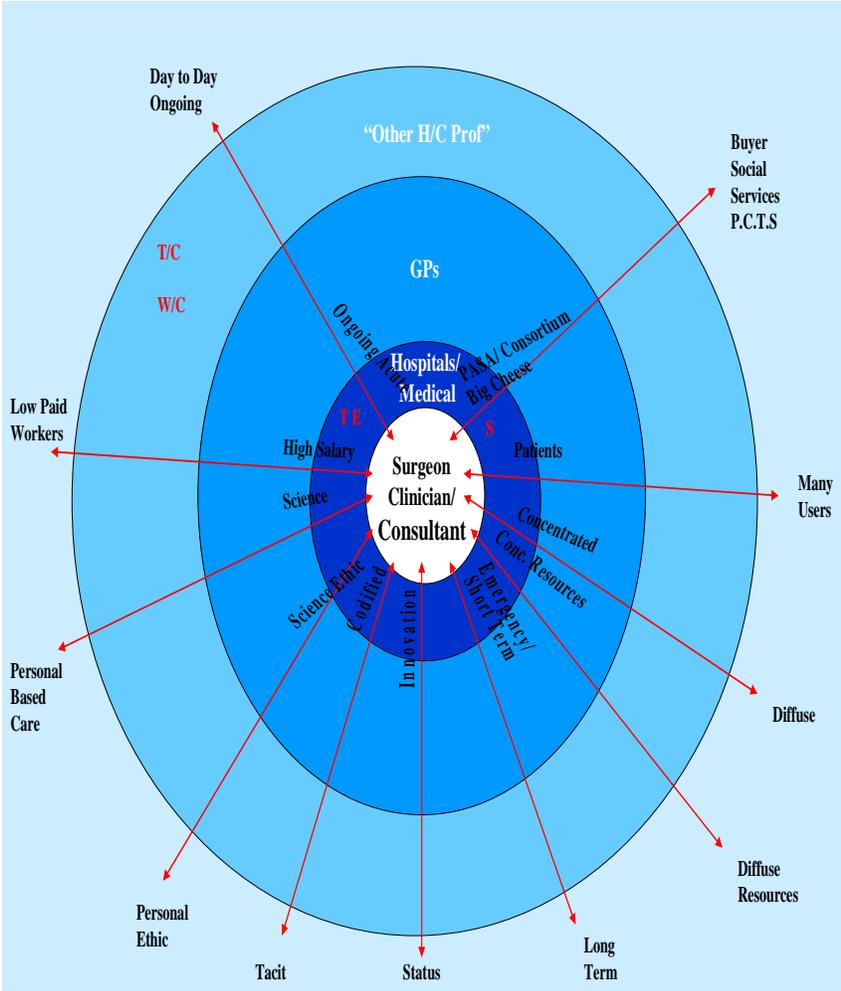
sector of the healthcare system where a vast army of largely unpaid and unrecognized "carers" – family, and especially spouses, work. They perform duties that if unperformed would paralyze the capacity of any healthcare system to meet. The National Census of England, conducted in 2001 gave a figure of 4.9 million people providing some care in England, which extrapolates into an estimated 3.4 million people caring for those over 65. Old age is not an episode, and if these silent carers were given a voice in future health care procurement (indeed in defining what health care is), procurement might face radical new demands. It is this "societal" concern with stakeholders beyond the "company" or the "profession."

DISCUSSION

Classic elements of the innovation literature developed through observing innovation by surgeons and consultants in the use of medical and scientific instruments (von Hippel, 1976; 1978). Without entering another ethical minefield (e.g., surgeon innovation) should the innovation be considered research and be required to go through ethics approval? (See Breslin et al., 2005). What von Hippel observed was a relatively bounded environment. Patients and family carers are unlikely to be able to make informed judgements in such situations. However provision of long term care through technological innovations such as telecare is far less bounded in terms of stakeholders.

The issue is an important one as it is in situations of conflict that ethical values are brought to the fore. There will undoubtedly be small scale conflicts between clinical values and procurement policies, e.g., procurement wishes cheaper alternatives to be used. However much more fundamental conflicts lurk within the coming role of innovation provider that purchasing is being required to perform. It is unlikely that the ethical framework that supported procurement as a cost function will be sufficient in these new societal roles. Mort and Finch (2005) describe the telemedicine literature as largely viewing new health technologies as "value free," i.e., developed untouched by social and political relations. This is arguably the current UK procurement position.

It is impossible here, and anyway well beyond the authors' competence to make explicit all the ways in which technological innovation is not value free, although two issues are highly visible.

The first issue is the degree of organisational and professional change associated with telecare, the second, the increasing medicalization of old age. MacFarlane, Murphy and Clerkin (2006) group the problems of the first issue under "normalisation." That is that "sociological studies of telemedicine that have described the ways in which the introduction of telemedicine services can disrupt medical hierarchies, inter-professional identities, therapeutic aspects of clinician-patient interactions and in so doing, create resistant attitudes among clinicians to these services" (MacFarlane, Murphy & Clerkin, 2006, p.246). According to Jennet, Watson and Watanabe (2000), the main problem with introducing telecare like technologies is non-technical and is related to personal and organisational changes. These changes include "an alteration of established factors such as consultations and referral patterns, ways of payment, specialist support for primary healthcare, cooperation between primary and secondary healthcare. Defining geographical catchment areas, and the "ownership of the patients" (Jennet, Watson & Watanabe, 2000, p. 995).

A second issue is that medical innovations can have profound impacts on definitions of what is "normal," e.g. here, what old age should be like. Kaufman, Shim and Russ (2004, p. 731) state: "Developments in the realms of medical innovation and geriatric clinical intervention impact our understanding of the nature of later life, the possibilities for health in advanced age, medical decision making, and family responsibility." The issues are too large to more than broach here (Estes & Binney, 1989), but Kaufman, Shim and Russ provide three key issues. Firstly that choice slides into routine treatment, secondly that care giving and love are becoming explicitly tied to clinical decisions and that the availability of interventions raises hopes and expectations whilst blurring medical distinctions between care, life enhancement and life prolongation. Our focus here has been not to explain or analyse the issue of changing norms, but to reinforce our argument that involving procurement in societal issues is not value free.

CONCLUSION

In the UK policy statements have called for a new form of health care, centred more around the individuals it serves, and less on the requirements of the providers of healthcare. This shift, as evidenced

here through telecare, will involve some relocation of health provision from health "centres" such as hospitals to the individual at home and in the community. So transformational will the shifts envisaged be that procurement will have to be central to such change. The chapter has argued that if procurement is to adopt societal roles then the case of telecare innovation suggests these new roles cannot be presented as value free. To meet societal objectives, one option would be for public procurement to adopt society-based ethical practices, e.g., through much greater engagement with stakeholders. Our view is that there is a need for research on how public procurement can help meet the needs of ageing of populations across the western world and Japan.

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