

## Achieving patient-focused maintenance services/systems

MAY, D. and CLARK, L.

Available from Sheffield Hallam University Research Archive (SHURA) at: https://shura.shu.ac.uk/1065/

This document is the Accepted Version [AM]

#### Citation:

MAY, D. and CLARK, L. (2009). Achieving patient-focused maintenance services/systems. Journal of facilities management, 7 (2), 128-141. [Article]

#### **Copyright and re-use policy**

See <a href="http://shura.shu.ac.uk/information.html">http://shura.shu.ac.uk/information.html</a>

#### Achieving patient focused maintenance services/systems

#### **Abstract**

Category: Research paper

#### Purpose of this paper

The aim of this study was to identify and investigate the contribution made from the estates services to the quality of the patient experience from the perspective of all estates staff ranging from front-line staff to Directors of Estates and Facilities. The work was exploratory in nature due to no known earlier studies in this area.

#### Design/methodology/approach

A postal questionnaire was distributed to a non-random self-selecting group of NHS estates staff therefore those staff working in the areas of maintenance, engineering, building, gardening and general office estates management. 920 questionnaires were distributed to the 46 NHS Trusts. There were 202 responses, which was a return rate of 22%.

#### **Findings**

It was clear that overall estates staff did consider their job/service to be important to the patient experience, 94% of respondents indicated they did. This was further confirmed by 82% of estates line managers considering their job to be important to the patient experience.

In terms of how estates felt they contributed to the patient experience, there was a range of responses, however the main reason highlighted was the recognition that the hospital could not function without the service being provided, i.e. the maintenance of essential services, water, power and the general infrastructure. Estates departments perhaps need on patient awareness of the services they provide and the importance of them in making the hospital function.

#### Research limitations/implications

The results presented provide a useful insight into how Estates departments in the NHS perceive their contribution to the patient experience. However, they are not without limitations. Firstly, the sample size was relatively small and secondly non-random sampling techniques were used.

#### What is original/value of paper

The findings suggest a number of avenues for future work. The most obvious would be to investigate the level of awareness from patients regarding estates services in the NHS.

#### Key words

healthcare, estates management, patient experience, consumerism

#### Introduction

Consumerism in public services is not a new concept. The early 1990's saw the Citizen's Charter (Prime Minister, 1991) outline the role of the individual towards public services. This was one where the citizen becomes a customer. The NHS Plan (Department of Health) published in 2000 was the current Governments attempts to reintroduce the idea of consumerism in the NHS, "the NHS Plan outlines the vision of a health service designed around the patient." The NHS Plan advocated patient services tailored to individual needs and a shift towards a patient-orientated experience.

The introduction of "Patient Choice" (Department of Health, 1994) has lead not only to an internal market, but also a culture of consumerism. This is where the patient is the consumer as purchaser rather than democratic consumerism where the consumer is not the purchaser but is actively engaged in defining the service (Hugman, 1994).

How can facilities and estates services in the NHS demonstrate a contribution to a patient-orientated experience within a "consumerist" public service? For FM services such as food and cleaning the impacts are more obvious, and despite the lack of research in the area it is clear how these can contribute and improve the patient experience. In recent years hospital food services have shifted from a product-orientated focus to a "holistic" food experience which is recognised as contributing to patient treatment (Altan, 2007).

One area where the link between service and patient experience is not so clear are those services provided by the "estates" professions - builders, maintenance engineers, electrical engineers, gardener/groundstaff etc. While no one could argue that the services provided by these members of staff are not critical - for example the hospital electric or gas supply being shut down would have disastrous consequences - the actual impact on the quality of the patient experience, from the patients' perspective, is hard to describe or assess.

In spite of the importance of the service in the operation of the hospital there has been virtually no research looking at the impact of estates services on the patient experience. The purpose of this study was to take an inductive approach in order to carry out a pilot piece of work.

#### Study aims + objectives

Due to the lack of research and published literature available an inductive and exploratory approach was adopted - this is one where data is collected and theory is developed as a result of the research. Bryman and Bell (2003) describe an inductive stance where theory is the outcome of research. Inductive research can also be used when the field of work has little or no published material.

Inductive research is also more exploratory in nature and open-ended. Again due to the lack of empirical work conducted using estates services as the focus, this study took on an exploratory line of inquiry. Exploratory research is conducted when there are few or no earlier studies, the aim of this type of study is to look for patterns or ideas (inductive) rather than testing or confirming a hypothesis (deductive). Exploratory research is used to gain insights and familiarity with the subject area for further investigation at a later stage. Typical techniques to collect data can include both qualitative and quantitative methods and due to it being very open rarely provides conclusive answers to problems but gives pointers to future research (Collis and Hussey, 1997).

The aim of this study was to identify and investigate the contribution made from the estates services to the quality of the patient experience from the perspective of all estates staff ranging from front-line staff to Directors of Estates and Facilities. The front-line and management staff included in the study were those identified under the *National Profiles for Estates and Maintenance Staff* (Department of Health, 2006).

The central research question for the study was:

"Do estates and maintenance staff in the NHS consider the services they provide contribute to the quality of the patient experience, and if so how."

The key objectives of the study were to investigate:

- If front-line estates staff perceive the services they provide as contributing to the patient experience
- If estates managers perceive the front-line services as contributing to the patient experience
- How estates services can contribute to a quality patient experience
- Differences in responses from front-line staff and estates managers, in relation to their contribution to the patient experience.

The area of facilities and estates management in the NHS covers a vast and complex range of services. It is also an area that is becoming increasingly focused on during empirical studies (May and Pinder, 2007). Hospital cleanliness and the food related services (Altan, 2007) and the impact of the health of the patient are of particular interest. However, for this study as outlined above, the focus is purely on the services provided by the estates departments. This includes the services that are concerned with the maintenance of the building fabric and associated plant.

#### Methodology

In order to meet the above objectives a simple questionnaire was designed and distributed to front-line estates staff and estates/facilities managers/directors. Questionnaires were sent to the key contacts and clients of the research team at NHS Trusts in England and Wales. We asked these key contacts to distribute the questionnaires to a sample of staff from the estates departments at their Trusts. This sample was therefore, non-random through self selecting/natural sampling techniques. The key contacts were encouraged to include as wide a range as possible of their estates workforce with the caveat that for the purposes of this piece of research the estates staff we would like to sample were those working in the areas of maintenance, engineering, building, gardening and general office estates management etc. We asked that they excluded staff that may come under the "Estates Department" but work in areas such as switchboard, car parking, decontamination etc. This approach may present sampling bias, however without a full sampling frame this was considered the best approach.

The questionnaires for all estates staff were self-completing paper based and sent with a returns envelope so responses remained anonymous. The responses were analysed according to Agenda for Change bandings so comparisons could be drawn between front-line staff and managers/directors.

The study was considered to be a service/practice evaluation, and as such does not come under the existing Research Governance Framework for Health and Social Care (Department of Health, 2005). The study was effectively evaluating current practice with the intention of generating information to inform decision-making. However, it was anticipated that there were no major ethical issues associated with the study. The research did not involve patients or any medical intervention. A simple non-sensitive questionnaire was distributed, consent to take part in the study was implied by the return of the questionnaire. Good practice in relation to ensuring confidentiality and making the data anonymous was followed.

#### **Findings**

The findings from the survey are presented below. A total of 920 questionnaires were distributed to the 46 NHS Trusts. There were 202 responses, which was a return rate of 22%. We achieved the aim of having responses from a wide range of Estates staff from different professions and functions and a wide range of seniority levels from front-line staff through to Senior Managers and Directors (see Figure 1).

#### Respondents' details

The spread of roles from staff responding to the questionnaire is confirmed in the Agenda for Change (AfC) bandings of participants. Table 1 below illustrates the profile title for each A4C band.

Profile Title	Agenda for Change Band
---------------	------------------------

Estates Support Worker	1
Estates Support Worker Higher Level	2
Estates Maintenance Worker	3
Estates Maintenance Worker (higher level)	4
Maintenance Supervisor	4
Estates Officer Entry Level	5
Estates Maintenance Worker Specialist	5
Estates Maintenance Worker Team Leader	5
Fire Safety Officer	5
Estates Officer (Operations)	6
Estates Officer (specialist Services)	6
Estates Officer (projects)	6
Estates Manager (Operations)	7
Estates Officer Specialist (Specialist Services)	7
Estates Manager (projects)	7
Estates Manager Higher Level (projects)	8A-8B
Estates Manager Higher Level (Operations)	8A-8B
Head of Estates/ Assistant Head of Estates	8C-D
Director of Estates and Facilities	8D-9

Figure 1 shows that respondents ranged from AfC band 1 to band 9 with the largest number of respondents (31%) being in AfC band 4. The AfC Band 4 relates to the Estates Maintenance Worker (higher level) and Maintenance Supervisor profiles.

Figure 1 Agenda for Change bands of respondents

### **AfC Banding**

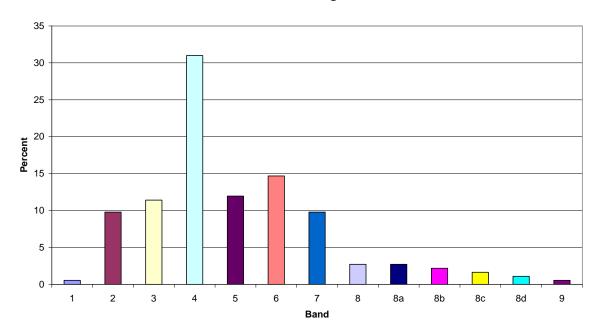
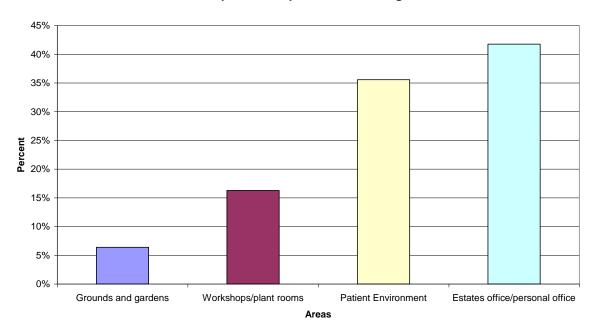


Figure 2 Where respondents spend their working time

#### Where respondents spend their working time



Respondents were asked to indicate the percentage of their time that was spent in the four areas shown in Figure 2. As can be seen over 40% of their time was spent in an office environment and only 36% of time was spent in the patient environment. These data was further analysed according to respondents AfC band and the results are shown in Figure 3 below.

Figure 3 Where respondents spend their time according to their AfC band

#### Where respondents spend their time according to AfC band

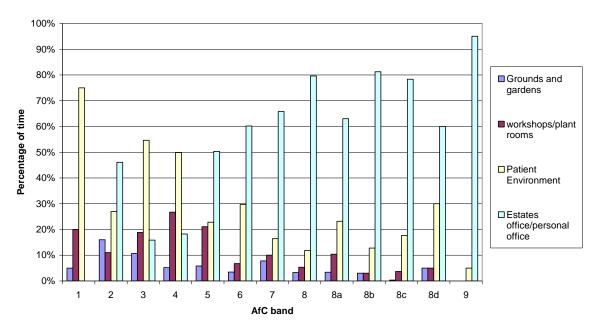


Figure 3 shows that the higher a respondents AfC band the more time they tend to spend in an office environment and the lower their AfC band the more time they spend in a patient environment. The only exception to this is AfC band 2, (AfC band 2 relates to the Estates Support Worker (higher level) profile) these workers spend the majority of their time in an office environment.

Figure 4 Length of time respondents have worked for the Trust

#### Length of time worked at the Trust

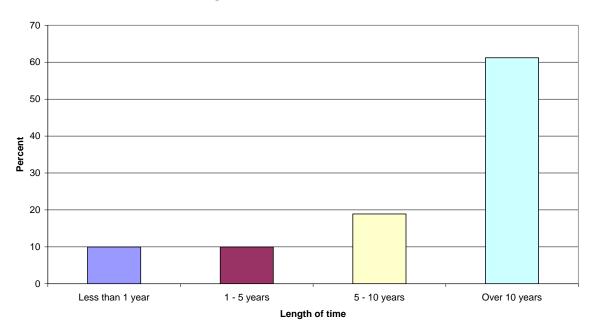
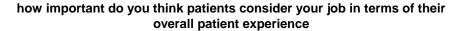


Figure 4 shows that 62% of respondents have worked for the Trust for over 10 years illustrating that Estates staff have great loyalty to their Trust.

#### **Patient Experience**

This section of the questionnaire investigated how important respondents believed their job/service is to patients, how satisfied they considered the patients are with their job/service and how much communication they had with patients.

Figure 5 How important do you think patients consider your job in terms of their overall patient experience



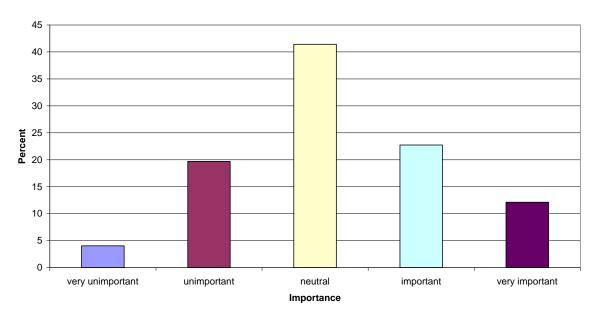
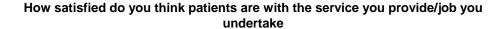
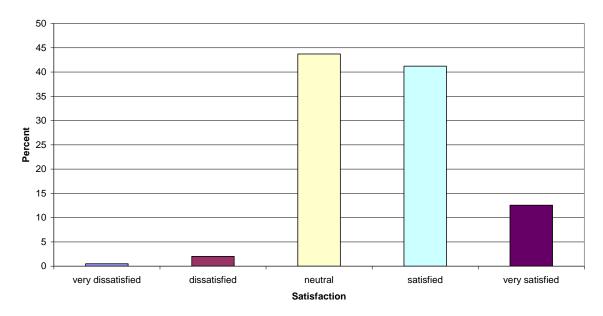


Figure 5 illustrates that Estates staff have a fairly neutral view as to the level of importance they believe patients have of the services they provide.

Figure 6 How satisfied do you think patients are with the service you provide/job you undertake





When it comes to how satisfied Estates staff believe patients are with their job or service the largest single response is that patients have a neutral view of their work, which matches the findings from how important Estates staff consider patients view their job. However, these findings differ when we look at the percent who believe patients are satisfied or very satisfied with their work. 54% of respondents believe patients are either satisfied or very satisfied with their work and only 2.5% believe patients are dissatisfied or very dissatisfied with their job or service. This suggested that Estates staff believe patients have greater satisfaction with their work than the importance they place upon it.

#### Communication with the patients

The next two questions were asked to discover levels of communication between patients and Estates staff and whether there was any relationship on the impact of the patient experience.

Figure 7 Do patients talk to you about your work?

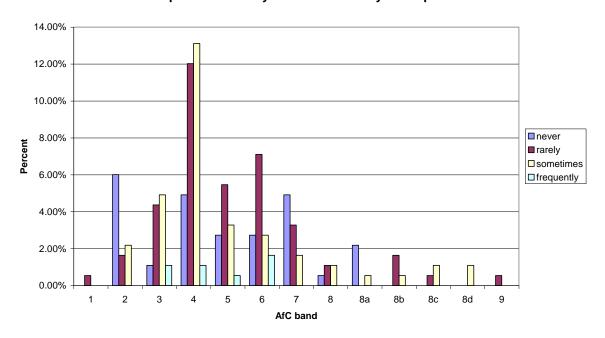
#### 16.00% 14.00% 12 00% 10.00% never ■ rarely 8.00% □sometimes □frequently 6.00% 4.00% 2.00% 0.00% 1 2 3 5 6 8 8a 8b 8с 8d 9 AfC band

#### Do patients talk to you about your work

Overall nearly 40% of respondents indicated that patients spoke to them rarely about their work and a further 40% said sometimes. 14% said patients never spoke to them about their work and only 7% indicated that patients frequently spoke to them about their work. Figure 7 shows this information broken down to the respondents AfC band. Those that have frequent conversations with patients about their work are all in bands 3, 4 and 5 which is not surprising as bands 3 and 4 as they indicated that they spend 55% and 50% of their time in the patient environment respectively. Those in band 5 spend 23% of their time in the patient environment and 50% in the office. There were responses that Estates staff never talked to patients about their work from nearly all bands from band 2 - 8b which again is not surprising given that those in band 2 indicated that they spend 46% of their time in the office and those in band 6 upwards spend over 60% of their time in the office. What is perhaps most surprising is the responses for the low and high ends of the AfC bands. Those in AfC band 1 indicated that they spend 75% of their time in the patient environment but only rarely spoke to the patients about their work. Those in AfC bands 8c, 8d and 9 spend 18%, 30% and 5% of their time in the patient environment respectively but indicated that they sometimes spoke to patients about their work. Does this mean that when they are in the patient environment they are there to communicate with the patients rather than undertake a specific role or task like other Estates staff?

Figure 8 Do patients talk to you about their stay in hospital?

#### Do patients talk to you about their stay in hospital



Fewer Estates staff indicated that patients spoke to them about their stay in hospital than they do about the estates staff's work. Only 4% indicated that patients frequently talk about their stay in hospital, 32% indicated sometimes, 40% rarely and 24% indicated never.

Figure 8 shows the levels of communication between patients and estates staff (in relation to the patients stay in hospital) according to the AfC band.

#### Importance of the Estates Staffs' job

Figure 9 shows whether Estates staff believe their line manager considers their job/service they provide to be important to the patient experience.

Figure 9 Line Managers' opinion

## Do you think you line manager considers your job/the service you provide to be important to the patient experience

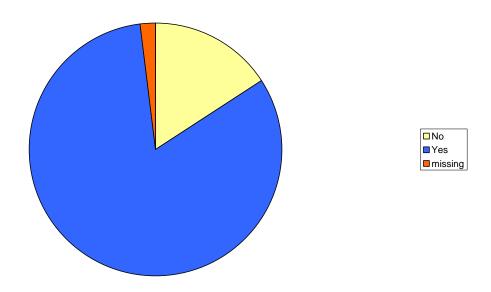


Figure 9 shows that 82% of Estates staff believe their line manager considers their job or service to be important to the patient experience. 16% did not believe their line manager thought their job or service to be important and 2% did not answer the question.

Figure 10 Do you think your line manager considers your job/the service you provide to be important to the patient experience according to AfC band

# Do you think your line manager considers your job/the service you provide to be important to the patient experience

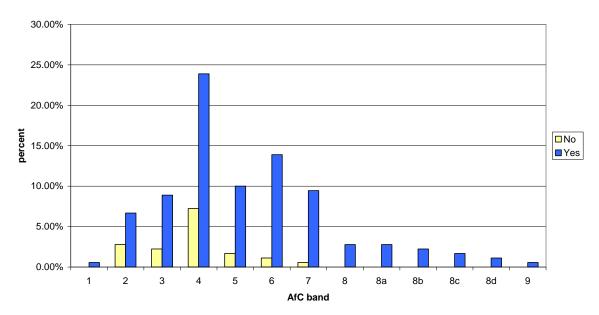


Figure 10 gives illustrates the AfC bands, showing in which bands Estates staff believe their line manger considers their job or service to be important to the patient experience and those bands where they do not. Figure 10 shows it is the lower AfC bands where Estates staff believe their line manager does not consider their job or service to be important.

Respondents were asked to explain why they did or did not believe their line manager considered their job/service to be important. The three categories that received the most comments as to why Estates staff believe their line manager considers their job/service they provide to be important to the patient experience are:

- Recognises the importance of our work, what we do and how it benefits others
- Patients are at the centre of what we do/patient focused/must solve problems straight away
- Our service is important to patient needs, recovery and safety

Figure 11 Trust Boards' opinion

# Do you think the Trust Board considers your job/the service you provide to be important to the patient experience

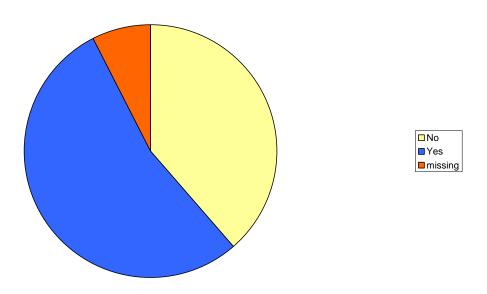


Figure 11 shows Estates Staffs' opinions as to whether the Trust Board considers the job/service they provide is important to the patient experience.

54% of Estates staff believe the Trust Board considers their job or service to be important to the patient experience. 39% did not believe the Trust Board thought their job or service to be important and 7% did not answer the question.

Figure 12 Do you think the Trust Board considers your job/the service you provide to be important to the patient experience according to AfC band

## Do you think the Trust Board considers your job/the service you provide to be important to the patient experience

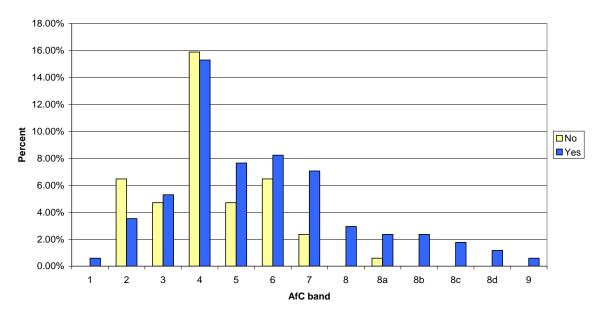


Figure 12 gives respondents AfC bands, showing in which bands Estates staff believe the Trust Board considers their job service to be important to the patient experience and those bands where they do not. As can be seen, it is the lower AfC bands where the negative responses come from, in particular AfC band 2 where 65% of respondents did not believe the Trust Board considered their job/service to be important to the patient experience. For bands 3 and 4 the responses were approximately 50:50. In all other bands more staff believed the Trust Board considered their job/service to be important to the patient experience than did not, especially in bands 8b and upwards where all respondents believed the Trust Board considered their job/service to be important.

Figure 13 Estates Staffs' opinion

## Do you consider your job/the service you provide to be important to the patient experience

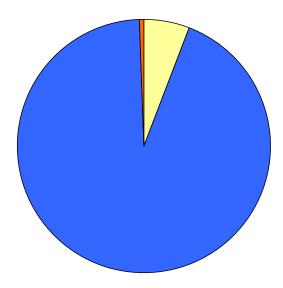


Figure 13 shows Estates Staffs' opinions as to whether they consider the job/service they provide is important to the patient experience. 93.5% of Estates staff consider their job or service to be important to the patient experience. 6% do not and 0.5% did not answer the question. These findings are interesting when compared to Figure 5 which shows "How important do you think the patients consider your job in terms of their overall patient experience". In this graph 40% of Estates staff thought patients believed their job had a neutral impact on the patient experience, only 35% believed their jobs were important or very important and 24% believed patients thought it was unimportant or very unimportant. Therefore, Estates staff view their jobs/roles as more important to the patient experience than they think patients view their jobs.

Figure 14 Do you consider your job/the service you provide to be important to the patient experience according to AfC band

# Do you consider your job/the service you provide to be important to the patient experience

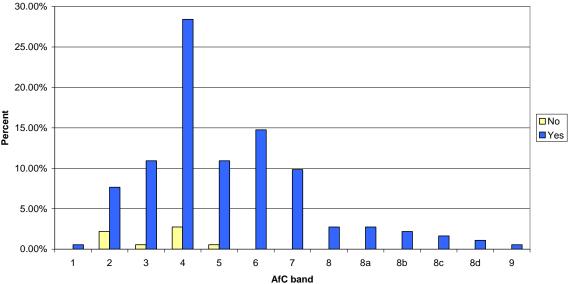


Figure 14 gives respondents AfC bands, showing in which bands Estates staff consider their job/service to be important to the patient experience and those bands where they do not. As can be seen, it is the lower AfC bands where the negative responses come from, in particular AfC bands 2 and 4 where 22% and 8% of respondents in each of these bands did not consider their job/service to be important to the patient experience. In AfC bands 3 and 5, 5% of respondents did not consider their job/service to be important. In all other bands all respondents considered their job/service to be important to the patient experience.

#### Conclusion

This study has focused on identifying and investigating the contribution made from the estates services in the NHS to the quality of the patient experience. This was from the perspectives of all Estates staff ranging from front-line staff to the Directors of Estates and Facilities. The study drew upon the current work from Altan (2007) that looks at the contribution of the catering and food services on the consumerist concept. Specifically the focus for this study was:

- If front line estates staff perceive the services they provide as contributing to the patient experience
- If estate managers perceive the front line staff as contributing to the patient experience
- How Estates staff can contribute to a quality patient experience
- Differences in responses from front-line staff and estates managers, in relation to their contribution to the patient experience

It was clear that overall estates staff did consider their job/service to be important to the patient experience, 94% of respondents indicated they did. This was further confirmed by 82% of estates line managers considering their job to be important to the patient experience. Although senior staff appeared to have more confidence in their contribution to the patient experience.

In terms of how estates felt they contributed to the patient experience, there was a range of responses, however the main reason highlighted was the recognition that the hospital could not function without the service being provided, i.e. the maintenance of essential services, water, power and the general infrastructure. Estates departments perhaps need on patient awareness of the services they provide and the importance of them in making the hospital function.

From the perspective of the estates staff, (for all respondents, therefore including both trade staff and office staff) over 40% of their time was spent working in an office environment and 36% of time was spent in a "patient environment."

The results presented provide a useful insight into how Estates departments in the NHS perceive their contribution to the patient experience. However, they are not without limitations. First with respect to the sample size, this was relatively small compared to the actual number of estates staff working in the NHS. According to data (NHS Estates, 2003), there are approximately 12,000 "maintenance and works" staff in the NHS. So even using this approximate figure, the sample size of 202 returned questionnaires is small. Second, the sample was not taken using random sampling techniques. The questionnaire was only sent out to existing contacts from the research team, and therefore is not representative of the whole of the NHS Estates workforce. In addition to this the participants returning the questionnaire were self-selecting, so this may also contribute to any potential sampling bias. Lastly, there is the relatively subjective nature of the study due to the questionnaire asking for managers' perceptions. This may not mirror actual reality on the ward and patient perspectives.

What does this mean in terms of future research? A larger scale survey using estates staff across the whole of the NHS would mean more a more representative sample and therefore results that could be generalised - although obtaining an accurate sampling frame may prove difficult. A follow up study may also be useful obtaining further in-depth data using a qualitative line of inquiry with estates staff at all levels.

However, the most obvious scope for future work would be to investigate the level of awareness from patients regarding the estates services provided in the NHS, particularly around the idea they are perceived as a crucial yet "invisible" service. In doing a follow up study it would not only help investigate patient perceptions of the estates services, but also raise awareness of such services. However, paradoxically it could be argued that that fact that the estates department are viewed as "invisible" suggests they are functioning and delivering services in a correct manner - if a patient is aware of the estates department it may be because something has gone wrong.

From recent studies it is becoming clear that patients are aware of facilities, or soft FM, services (Cole, 2004) and awareness has increased, particularly on the back of the patient choice work (Taylor et al., 2004; Miller and May, 2006; Coulter at al., 2004). However, there is little evidence to suggest that patients are aware of the services that estates departments provide in the NHS, and more importantly, how crucial they are in ensuring that hospitals continue to operate. The issue here for senior staff in estates departments is the need to raise the profile of their services amongst patients.

In order to build a complete picture of the estates department, it would be important to survey the other non-clinical and clinical staff who rely and receive estates services. However, whilst the researchers would be interested in exploring this, it is beyond the remit of this piece of research which was just looking at the contribution of estates services from the perspective of estates staff.

This research has therefore shown that Estates staff do consider the services they provide contribute to the quality of the patient experience. However, this feeling is more strongly held by senior Estates staff than it is by front-line staff. The majority of the comments that were received as to how Estates staff can positively contribute to the quality of the patient experience concerned making the patient at the centre of what they do, being patient focused and wanting to provide a good service for the patient.

#### References

Altan, M. (2007), Relationships between human resources and marketing practices of a major contract caterer active in acute hospitals in the U.K. and the Netherlands, unpublished PhD work

Bryman, A., and Bell, E. (2003), Business Research Methods, Oxford University Press, Oxford

Clark, L. (1999), "Multi-skilling for success", Facilities, Vol. 17, No 7/8

Cole, A. (2004), "Better late than never", FM World, pp 18-9

Collis, J. and Hussey, R. (1997), *Business Research: A practical guide for undergraduate and postgraduate students*, Palgrave MacMillan, Hampshire

Coulter, A., Henderson, L. and Le Maistre, N. (2004), *Patients' experience of choosing where to undergo surgical treatment*, Picker Institute Europe, Oxford

Department of Health (2000), The NHS Plan: a plan for investment, a plan for reform, HMSO, London

Department of Health (2004), Choose and Book: Patients choice of hospital and booked appointment - Policy framework, HMSO, London

Department of Health (2005), Research Governance Framework for Health and Social Care, HMSO, London

Department of Health (2006), *National Profiles for Estates and Maintenance* [online], last accessed 23 June 2008 at: http://www.dh.gov.uk

Hugman, R. (1994), Consuming health and welfare. *In Authority of the Consumer* (Keat, R., Whiteley, N. & Adercrombie, N. eds), Routledge, London

May, D. and Pinder, J., (2007), The impact of facilities management on patient outcomes, *Facilities*, Vol 26, Number 5/6 pg 213-228

Miller, L. and May, D. (2006), "Patient choice in the NHS: how critical are facilities services in influencing patient choice?", *Facilities*, Vol.24, No.9/10, pp. 354-364

NHS Estates (2003), Working for the Future: An Invitation to Shape a National Workplace Strategy for Efm: A Document Seeking Views on How a Strategy should be Developed, HMSO, London

Prime Minister (1991), The Citizen's Charter: Raising the Standard, HMSO, London

Taylor, P., Pringle, M. and Coupland (2004), *Implications of offering "Patient Choice" for routine adult surgical referrals*, Dr Foster Limited, London