The role of hospital design in the recruitment, retention and performance of NHS nurses in England
86% of Directors of Nursing say that hospital design is ‘very important’ or ‘important’ in nurses’ performance, with the most crucial aspect being the design and organisation of the internal hospital environment – 93% say that this is either ‘very important’ or ‘important’.

CABE/PwC study 2004
The Government is undertaking the largest healthcare building programme for a generation, aiming to build over 100 new hospitals by 2010. By the time the current hospital programme is complete, CABE estimates that one in four nurses and one in four patients will be affected.

As well as this investment in buildings, there has been a massive increase in NHS staff, especially nurses. Since 1997, the number of qualified nurses working in hospitals and the community has increased on average by 10,704 a year to 364,692, with a range of new responsibilities and skills, and that number is set to increase further as the Ten Year Plan is completed. The buildings in which they work will play an important part in the government’s ability to deliver its planned improvements and to develop a larger, more highly skilled, flexible and motivated healthcare workforce.

The Commission for Architecture and the Built Environment (CABE) launched its Healthy Hospitals campaign, calling for radical improvements in the design of hospitals, in November 2003. CABE believes that improving the design of public buildings is fundamental to improving public services and that well-designed healthcare buildings can lead to better health outcomes. CABE’s major new report, ‘The role of hospital design in the recruitment, retention and performance of NHS nurses in England’ provides evidence that well-designed hospitals have a significant influence on the performance of nurses in their work and have a positive impact on their recruitment and retention. The research also shows that nurses are acutely aware of the role that hospital design plays in their everyday work and, consequently, want a greater say in shaping their working environment.

Whilst there are a number of studies that examine the influence of the workplace on office staff, less research has been done on the effect that the healthcare environment has on the staff, particularly nurses, working within it. Much of the information to date about design in hospitals is focused on patients. Recent CABE research, for example, indicates that space, access to natural light and fresh air are crucial design factors affecting patients and their recovery. This document is a summary by CABE of research carried out by PricewaterhouseCoopers (PwC) LLP during 2004.

1 From Staff in the NHS 2003, Department of Health
2 www.nhs.uk/nationalplan
3 See results of Healthy Hospitals public vote from February 2004 at www.healthyhospitals.org.uk
WHY NURSES?

Nurses are the lifeblood of any hospital. The NHS in England employs about 350,000 qualified nurses and midwives. Over the past 10 years, recruitment and retention of nursing staff has taken on crucial importance; therefore any research that demonstrates that the working environment has an impact on nurses’ recruitment, retention and performance is of importance to the future success of the NHS.

In carrying out the research for ‘The role of hospital design in the recruitment, retention and performance of NHS nurses in England’, three major strands of work were undertaken:

> a review of existing literature on the importance of design, and on recruitment, retention and performance
> a series of qualitative focus groups with nursing staff held throughout England
> a major quantitative survey of 479 Directors and Assistant Directors of Nursing throughout England

‘You stay with the hope of better things to come.’

Nurse, Bury CABE/PwC study 2004

NURSES AND THEIR WORKING ENVIRONMENT – THE EVIDENCE

‘The outline and shape of a ward can influence how a group of nurses works – this has an effect on both management style and infection control issues.’

Nurse, Leeds CABE/PwC study 2004

Whilst the findings of this study indicate that hospital design has the greatest impact on the performance of staff, followed by their recruitment and retention, it also recognises the complex links between all three. Overall the research findings show that:

> well-designed healthcare buildings contribute to enhanced performance and motivation, leading to better health outcomes for patients
> good design is a factor in nurses’ choice of hospitals
> a focus on internal design should be a priority – in particular the organisation of space on wards and units, storage and lighting (both natural and artificial)
> nurses want to be consulted about design, believe they can play a positive role in improving the design aspects of the areas in which they work and that consultation should begin early in the process

4 CABE’s remit is England; focus groups were held in London (2), Leeds, Birmingham, Bury St-Edmunds and Bristol
THE IMPACT OF HOSPITAL DESIGN ON RECRUITMENT OF NURSES

Nursing staff make up approximately one-third of the NHS workforce. A review of the UK nursing labour market in 2003 found that over 20,000 nurses are leaving the workforce annually. The proportion of nurses over 55 increased from 9% to 15% between 1991 and 2001 and, between 1999 and 2002, the numbers of managers and healthcare assistants grew by 33% and 46% respectively, whilst the number of nurses grew by only 12%.

Although estimates of the shortfall differ, there is general acceptance that there is a recent serious shortfall, which tends to be highest in high technology specialisms and varies by region, with London and the South East experiencing the highest vacancy rates. While the three month vacancy rate has been falling from a peak in 2000, it continues to remain around 3% for qualified nursing staff; although this situation may appear to be improving, over the same time period the number of non-UK trained nurses has been increasing as has expenditure on non-NHS (ie agency) nursing staff.

These trends are reflected in the findings of this research which found that 84 per cent of Directors of Nursing say that they have experienced some degree of difficulty with recruiting nursing staff.

Attracting the right person to the right job helps to ensure the delivery of high quality patient care. 78 per cent of Directors of Nursing say that hospital design impacts on the recruitment of nursing staff, with external space (39 per cent ‘very important’) and internal environment (37 per cent ‘very important’) the most influential design factors on recruiting nurses.

It is interesting to note that nurses surveyed feel that the first impression of a hospital matters, both outside the building and within it. A hospital’s ‘civic value’ – how its design impacts on and engages with the local community – is a concern that is important to nurses. A hospital is one of the most valuable assets within the local community; working in the healthcare environment and with patients every day, nurses have a great understanding of the impact of a hospital locally and how it reflects, positively or negatively, the value placed upon both staff and patients.

‘You get an impression when you walk in – for example if it looks scruffy this may reflect the management style.’

Nurse, Leeds CABE/PwC study 2004

Other factors influencing the decision as to whether to join a hospital or not include its location, the quality of staff facilities, parking provision and the availability of public transport, as well as family-friendly facilities and workspace in wards and patient areas.

‘Nurses constantly see how the design of their working environment impacts on staff and patients. Having to walk along miles of corridors every day and care for patients in airless, poorly designed wards has a negative impact on healthcare professionals and is not conducive to a quick recovery for patients. Campaigning to place this higher up the healthcare agenda is crucial and could make a dramatic difference to the experience of both patients and nurses alike.’

Dr Beverley Malone, General Secretary of the RCN
THE IMPACT OF HOSPITAL DESIGN ON RETENTION OF NURSES

‘The only communal space is in the lift; it’s not very communal.’
Nurse, London CABE/PwC study 2004

63 per cent of Directors of Nursing say they have some degree of difficulty with the retention of nursing staff. While good management attitudes, achieving positive patient outcomes and getting on well with colleagues are the main factors in staff retention, the design and maintenance of hospitals are also important factors, not least as they give a clear indication of the value placed on them as members of staff by their management.

A key message from the study indicates that, although nurses in the focus groups say they have been consulted about hospital design, there is a widespread feeling that it is a superficial process. Many suggest it is carried out so that ‘a manager can tick a box to say it has been completed’ and nurses feel frustrated when their ideas are not taken on board.

Overwhelmingly, nurses feel that those using specific care units should be consulted about their design before building work starts.

‘It’s great to involve staff, but are they listening? We often don’t know what has been taken on board until the build is complete and we have moved in.’
Nurse, Leeds CABE/PwC study 2004

‘The people who solve the problems [in hospitals] will be those who deal with them every day.’
Nurse, London CABE/PwC study 2004

Interestingly, the research reveals a number of contradictions between opinions amongst nurses and Directors of Nursing on the same subject. For example, Directors of Nursing tend to rate the provision of staff facilities somewhat lower than the general opinion expressed by nurses who see them as very important.

‘Having somewhere where you can go to have a cup of coffee, pay some of your bills…it makes you feel that your needs are being taken into consideration in the design process, rather than as an ‘add-on’.’
Nurse, London CABE/PwC study 2004

‘A lot of things are not designed correctly, but to put it right afterwards costs even more money.’
Nurse, London CABE/PwC study 2004

‘Often the doctors and consultants grab the juicier rooms and the nurses are left with what’s left.’
Nurse, London CABE/PwC study 2003
‘I have been to two different hospitals – one where there is nothing but corridors and a mish-mash of things added on and staff morale is low. There is another hospital close by which is well laid out and nicely designed and staff morale is much better.’

Nurse, Bristol CABE/PwC study 2004

Elements of hospital design that raise community spirit, including provision of facilities such as banks and crèches, are particularly important in terms of retention. Nurses believe design that encourages good communication might create longer-term commitment to a hospital.

Furthermore, nurses say that public spaces that encourage interaction and communication influence retention, particularly those that create an atmosphere in which nurses feel part of the bigger corporate body rather than just a discrete unit within it. Nurses think that shared areas such as shops, a staff canteen and a welcoming entrance are key to this success.

Visible security is also cited by nurses as important – nurses say where they feel safe, they are more likely to stay and also highlight that security is important to patients. This is echoed by Directors of Nursing, who cite the availability of secure parking as important to retention.

Factors that would encourage staff to leave a particular unit or hospital include constant alterations to buildings and reallocation of areas for different uses.

‘[Nurses] will leave if they are treated like that and moved into smaller and smaller spaces; they will just simply move to the hospital down the road.’

Nurse, Birmingham CABE/PwC study 2004

Nurses appreciate working in an area which is being used for the purpose for which it was designed; they are highly critical of situations in which an area was built for one purpose but is being used for another. The logical and rational organisation of space and equipment is seen as highly important in relation to staff retention – from too little space to work in and doors too small to allow easy movement of beds, to the location of equipment and insufficient electrical points. Designing for flexibility is therefore an important consideration, given the changing nature of care within the NHS.

The research highlights that, in seeking to improve design, trade-offs will undoubtedly occur, and that issues raised by nurses may conflict with other clinical demands. For example, the benefits of daylight and a good view could conflict with having clinical facilities adjacent to one other and cutting the distances staff need to travel around the hospital. The decision to minimise travelling distances might generate a design that is more compact and deep plan, reducing the opportunity for glazing and thus preventing views and natural daylight.
THE IMPACT OF HOSPITAL DESIGN ON PERFORMANCE OF NURSES

The relationship in a number of sectors between the organisation and layout of workplaces and levels of employee fatigue and stress is becoming increasingly clear. In this study, 86 per cent of Directors of Nursing say that hospital design is ‘very important’ or ‘important’ in nurses’ performance, with the most crucial aspect being the design and organisation of the internal hospital environment – 93 per cent say this is either ‘important’ or ‘very important’.

‘If you get exhausted in working in those sorts of conditions you get low, then depressed and morale goes.’

Nurse, Birmingham CABE/PwC study 2004

Nurses view flexible working space as highly significant to their performance, that rooms and wards can be too functional, making them inflexible and only suitable for very specific purposes. Of particular importance is the layout and use of space – for example, so that nurses can observe patients as well as move around easily and perform procedures. The distance travelled between tasks can also contribute to performance and fatigue.

‘A large proportion of our job is observation, and if we can’t see a patient easily that’s one of our senses that is rendered useless.’

Nurse, London CABE/PwC study 2004

Constant exposure to artificial light, in particular fluorescent tube lights, is commonly mentioned by nurses as one of the most draining aspects of working on a ward. The capacity for nurses and patients to control the air temperature, rather than rely on hospital air conditioning systems, is seen as important, as is having the ability to open windows.

‘It makes you happier to be working in a nice environment, pleasant view, sufficient daylight and the possibility of opening a window for fresh air.’

Nurse, Bristol CABE/PwC study 2004

‘Natural light is so important when you are working. It is so much more restful on your eyes, it makes it easier to read notes and other patient information.’

Nurse, London CABE/PwC study 2004

The particular stresses associated with nursing mean that dedicated areas for staff rest and relaxation during the working day are beneficial. Attractive outside spaces, gardens and landscaping are aspects of a hospital’s design that both attract and retain nursing staff, especially relevant where the spaces allows staff to spend time away from their day to day work.

This might also extend to providing space for confidential discussions with patients and relatives, and between staff members. Often, if a staff room exists, it is the only place available to hand over between shifts and staff are trying to hand over to one another in the same space; rooms are frequently communal and used by doctors, ward and clerical staff and for meetings, leaving staff with nowhere to go.
'Ideally the staff rest area should be away from the ward area...so that staff actually get the chance to go away from the work area to relax.'
Nurse, London CABE/PwC study 2004

‘It would show that they care about us, as staff in a hospital, by having a place where we can relax.’
Nurse, London CABE/PwC study 2004

Storage space is seen to have a particular impact on the ability of nurses to be able to work efficiently, with examples given of equipment having to be stored in inappropriate places such as patient bathrooms, with additional problems brought about by equipment being stored away from where it is needed.

‘Equipment should have a place to live, not be stored in front of an exit or in a corridor.’
Nurse, Birmingham CABE/PwC study 2004

Nurses feel that the location and quality of staff facilities – lockers, showers, on-site banks, canteen and crèche facilities – are very important elements of their working environment, contributing to their ability to focus on their work by allowing them to carry out non work-related tasks easily.

The quality of fixtures and fittings is also seen as important with many nurses highlighting what they consider to be ‘cost-cutting’ measures that result in inferior quality fittings – door frames and locks, taps that do not encourage good infection control practices and sinks that are not big enough.

‘You go into the staff toilets and turn the tap on by hand, but you have to turn it off by hand – you’ve just washed your hands because they were potentially going to contaminate a patient – how do you turn it off without recontaminating your hands?...There is no logic, no rational thought at all.’
Nurse, London CABE/PwC study 2004
‘Most [hospitals] are a mixture of good and bad, but there is an infuriating reluctance to learn from past successes – each new building seems to start from scratch.’

Consultant, Healthy Hospitals website 2004

CABE is raising awareness across the NHS, government and PFI consortia of the importance of the designed environment in patient care and staff recruitment, retention and performance.

These findings add to the existing evidence base on the impact of workplace design in the public sector. Other recent research for the Department for Education and Skills (DfES) on school buildings shows that good design impacts positively on the pupil experience. This new research with nurses will inform policy makers about nurses’ views on hospital design, thereby assisting the Government in its commitment to ensuring that its building programme delivers a well-designed, high quality environment for the 21st century, as well as contributing to the success of the NHS Improvement Plan.

If you are involved in procuring or managing a healthcare building, are you:

> Consulting nurses and giving real weight to their opinions alongside those of their colleagues?

> Developing small scale as well as large scale solutions to the problems raised by nurses about the design of their working environment?

> Looking at best practice when thinking of building a new hospital or unit and learning from the mistakes or successes of the past?

CABE’s digital library describes in detail a range of large and small scale health buildings – www.cabe.org.uk/library

CABE’s ‘Creating Excellent Buildings’ is a comprehensive guide for clients of buildings of all types, including healthcare. Find the guide at www.cabe.org.uk
Full copies of the report, 'The role of hospital design in the recruitment, retention and performance of NHS nurses in England', by PricewaterhouseCoopers (PwC) LLP are available at www.cabe.org.uk

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