Environments for care at end of life: evaluation of the King's Fund Enhancing the Healing Environment Programme

Executive Summary

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Antony Arthur, Associate Professor, Sue Ryder Care Centre for Palliative & End of Life Studies, University of Nottingham
Eleanor Wilson, Research Fellow, Sue Ryder Care Centre for Palliative & End of Life Studies, University of Nottingham
Jonathan Hale, Associate Professor, School of the Built Environment, University of Nottingham
Alex Forsythe, Lecturer in Psychology, Aberystwyth University
Jane Seymour, Sue Ryder Care Professor of Palliative & End of Life Studies, University of Nottingham

Address for correspondence: Dr A Arthur, School of Nursing, Midwifery & Physiotherapy, University of Nottingham, Room B63a Medical School, Queen's Medical Centre, Nottingham NG7 2UH, Telephone 0115 8230890, Fax 0115 8230999, Email: tony.arthur@nottingham.ac.uk

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BACKGROUND

The King's Fund Enhancing the Healing Environment programmes (EHE) aim to encourage and enable NHS Trust teams to work in partnership with service users to improve the physical environment in which they deliver care. Building on EHE programmes conducted in acute hospital environments, mental health and primary care settings, the Environments for Care at End of Life Programme (ECEL) was launched in 2008. The programme had been previously piloted in eight ECEL sites [1].

The lessons learnt from previous EHE programmes, together with the findings of a report by NHS Estates: '*A Place to Die With Dignity: Creating a Supportive Environment'* [2] suggested a real and pressing need for work to improve the environments in which the dying, bereaved and deceased are cared for, making it the focus for this ECEL programme. Unlike most health care architectural initiatives the Enhancing the Healing Environment programme strives to enable the users of the environment, and in this context the term 'users' include both those providing and receiving care, to directly influence the design and implementation of creating a new physical space.

There is an increasing body of literature recognising and highlighting the impact of design [3, 4] as well as the impact of the environment on health and work place outcomes [5-12]. It is argued that good design adds value culturally, economically, environmentally and socially, by increasing quality, image and the use of space [3]. Hence there is increasing recognition that not only new buildings, but the renovation and refurbishment of existing ones, are a vital part of the economy and promote 'health, productivity, neighbourliness and civic pride' [3:259].

Central to the King's Fund EHE programme are:

• the development of a clinically led, multidisciplinary NHS Trust team;

• a grant for each team to undertake a project to improve their service user environment.

The Department of Health invited applications from NHS Trusts to join the programme which resulted in approximately three applications for each available place. Following this competitive process fifteen acute NHS Trusts, two mental health NHS Trusts, two primary care NHS Trusts and one prison service undertook projects within the programme. Projects range from palliative care rooms with dedicated accommodation for relatives, to the creation of bereavement centres and the redesign of mortuary viewing areas. Building works for most of the projects took place over the summer of 2009 with 13 of the 20 projects completing by the end of 2009. Each project was supported by £30,000 from the Department of Health with a minimum £10,000 investment from the relevant Trust. Additional funding from other sources was sought by all teams.

This report summarises the main findings from an evaluation of the ECEL Programme conducted by the University of Nottingham. The evaluation was commissioned in September 2008 by the King's Fund and the Department of Health. The evaluation was guided by a steering group made up of representatives from the King's Fund, Department of Health, NHS Estates and the National End of Life Care Programme. The full report is available on request from the University of Nottingham or the King's Fund.

AIMS OF THE EVALUATION

The aims of this evaluation were:

1. to assess the process of change undertaken in the participating projects;
2. to explore the impact the projects have on the delivery of end of life care;
3. to explore the impact on those using the physical environment;
4. to examine what has been learnt about the way attitudes to death and dying are influenced and changed by the physical environment.

EVALUATION FRAMEWORK AND METHODS

The framework employed for the evaluation was a pragmatic one [13], which takes account of how the schemes developed, were implemented and changed over time, and how they influenced attitudinal and cultural change within their wider organisations.

We employed mixed methods of data collection, yielding quantitative and qualitative data gained from individual team members, project teams, and the programme as a whole. Information about all 20 project sites was extracted from progress reports available at six time points during the programme and collated to determine and compare challenges of project development, implementation, and the costs of completed projects. Progress reports were requested by the King's Fund initially every two to four months between June 2008 and July 2009 with a sixth and final completion report for January 2010. For those projects which were not completed by the end of the evaluation period (May 2010) an edited update report was submitted.

The reports allowed us to compare case study projects with non-case study projects; track progress and slippage within projects; and identify the frequency and timing of reported problems. These documents were gained directly from the King's Fund, and allowed us to chart the progress and development of the projects without placing additional burden on the teams. It should be recognised that what was recorded in progress reports is necessarily selective placing limitations on the kinds of questions that can be asked of the dataset.

This evaluation also provides a more in-depth understanding by undertaking case studies at six selected sites, in order to investigate the process around the production of the documents rather than looking at the documents alone (Table 1 provides an summary of the methods of data collection). The six in-depth case studies were: the remodelling and renovation of three mortuary viewing facilities; two centralised bereavement services; and a palliative care facility in a prison.

Each case study involved:

- A focus group prior to the commencement of building works with team members involved in the projects. Twenty-nine staff from a range of professions took part in six focus groups.

- Individual interviews (n=31) following or near project completion with each member of the six project teams.
- The Achieving Excellence Design Evaluation Toolkit (AEDET) [14] was used to measure building quality, impact and functionality and A Staff and Patient Environment Calibration Tool (ASPECT) [15] was used to assess how the environment was perceived to affect staff and service users' experiences. Both measures were recorded prior to and following building work. Follow-up measurements were restricted to the four case study sites who had completed by the end of the evaluation period.
- An architectural assessment of completed projects by a member of the evaluation team (JH) focusing on understanding the interaction between the functional and aesthetic qualities of the spaces[1].
- In the three sites focusing on mortuary viewing facilities, a mortuary viewing questionnaire was distributed to staff accessing and using the mortuary but who were not members of project teams. The questionnaire was designed to provide a simple means of exploring the impact of buildings and environments on those who use them. Thirty-six questionnaires were completed prior to changes in the environment and 32 on completion of the projects.

Table 1: Summary of data collection methods at each phase and in relation to evaluation aims

Data source	Phase 1			Phase 2			Aims addressed[a]
Mapping from project progress reports	✓	✓	✓	✓	✓	✓	1,2,3,4
Focus groups		✓					1,2
Interviews					✓		1,2,3,4
AEDET and ASPECT		✓			✓		3
Mortuary questionnaire		✓			✓		3,4
Architectural assessments					✓		1

[a]Aims: 1) to assess the process of change undertaken in the participating projects; 2) to explore the impact the projects have on the delivery of end of life care; 3) to explore the impact on those using the physical environment; 4) to examine what has been learnt about the way attitudes to death and dying are influenced and changed by the physical environment.

[1] The architect on the project (JH) who visited the case study sites after completion did not have any contact with the programme itself and this provided a more objective basis on which to conduct these architectural analyses. However as this was a 'one-off' visit to each completed project site this area of the evaluation was not able, nor designed to, pick up on the extent to which the environment had changed.

KEY FINDINGS

Mapping

By the end of the evaluation period (May 2010) 13 of the project teams had completed their projects. For each of these teams it was too early to report any findings from their own in-house evaluations although many stated that they would be able to do this in the future. Many reports included anecdotal evidence of user reaction to their completed projects. The process of collecting visitor comments continued after the opening of new spaces and staff were struck by the positive responses recorded by relatives. Although complaints prior to the projects were relatively rare, positive comments, or 'compliments' were now common place in a way they had not been prior to the work being undertaken. Many comments relating to individual projects, regardless of the type of project, related to the sense of peace that users experienced, often in marked contrast to the wider hospital in which the facility was based. This was an experience many of the team members had explicitly hoped to provide for bereaved family and friends.

All teams reported that throughout their projects support was gained from a variety of sources. All felt supported by their NHS Trust sponsors but the nature of that support could be defined as to whether it was proactive (for eight teams) or reactive (for the remaining 12 teams). Examples of the former include acting as 'champions' for the project and providing encouragement, while in the latter case, sponsors were seen as ways to 'unblock' the process when hurdles were encountered. Apart from NHS Trust sponsors, many of the teams referred to the importance of support from allies made within the NHS Trust that could assist with their project either because of their seniority or their key position within the Trust.

All teams reported a number of challenges throughout the evaluation period. Overall, securing resources was the most frequently reported challenge (by 19 of the teams), followed by time constraints (n=15), location problems (n=12), building issues (n=11) and the attitudes of others (n=11). Challenges presented by working in a team appeared to peak in the middle of the period covered by the first five progress reports. Understandably, problems with building contractors and to a lesser extent, architects and designers were raised as important challenges in the final report. Table 2 show the most frequently reported challenges across the six reports.

Table 2: Types of challenges reported in progress and final reports

	Report						
	One	**Two**	**Three**	**Four**	**Five**	**Final**	**Any**
Resources	4	0	9	13	3	11	19
Time	6	8	11	0	1	6	15
Location	8	8	6	0	0	8	12
Building issues	1	0	0	0	0	11	11
Attitudes of others	1	4	1	0	0	6	11
Teamwork	2	4	7	0	0	3	10
Design issues	2	2	3	0	0	5	10

Of the 13 projects that completed prior to the end of the evaluation period (May 2010), the first was completed in July 2009 and the last in December 2009. Estimated completion dates for the remaining seven projects were between July and September 2010 although all projects were optimistically hoping to complete by November 2009 at the time of the fifth progress report (July 2009). Problems encountered by teams yet to complete their projects included securing agreement to use the space; securing additional funding; disagreements with designers or architects; in one instance the building company to be used had gone into liquidation; unknown structural problems that required revision of designs, as well as the harsh weather during the winter of 2009 and 2010 that affected some garden projects.

The median estimated total cost for the projects increased from £45,000 reported in the first progress report to £117,000 at the last available report with a total estimated cost across the projects of £2.6 million (see Table 3 for changes in cost estimations). The six case studies chosen for the evaluation were broadly representative of the cost and scale of all 20 projects. The most recent estimate of total project cost for each case study site was between £50,800 and £365,000. Funding of £30,000 from the Department of Health and the agreed NHS Trust minimum of £10,000 typically accounted for a relatively small proportion of funding spent on each project and was used as leverage by teams to secure additional monies from a number of sources. These included the NHS Trust itself (12 projects), Trust-related charities (11 projects), external charitable funds (three projects), and own fundraising activities (three projects).

Table 3: Original and updated estimates of total cost of projects

	Completed (n=13)	Yet to be completed (n=7)	All projects (n=20)
Original estimate	£60K (£40K to £220K)	£40K (£40K to £287K)	£45K (£40K to £287K)
Latest estimate	£117K (£50 to £240K)	£116K (£50 to £365K)	£117K (£50 to £365K)
% change from original to latest estimate	38% (-44% to 239%)	41% (25% to 300%)	40% (-44% to 300%)

AEDET & ASPECT

Although case study teams were dealing with different physical spaces and highly individualised projects, scores from the measures of building quality, impact and functionality (AEDET [14]) and how the environment is perceived to affect staff and service users' experiences (ASPECT [15]) were broadly consistent across teams. Across all sites where these measures were used, greatest improvements in scores were seen in the specific areas of: (i) character and innovation; (ii) form and materials; and (iii) staff and patient environment. Similar findings were observed from the mortuary viewing questionnaire.

Mortuary viewing questionnaire

At the three mortuary case study sites questionnaires were distributed to health and social care professionals using the facilities both before and after the physical change. Changes in semantic

differential scores showed positive improvements for all three sites, and feedback from additional comments illustrated the impact of the improvements that had been undertaken.

Case studies[2]

The narrative accounts from the focus groups and interviews were used to gain an understanding of the ways in which (1) projects were conceptualised, designed, implemented and have been used by staff, patients and carers; and (2) projects impacted on the culture of the wider care environment and influenced behavioural and attitudinal responses to death and dying.

Initial drivers

In the baseline focus groups with the six case study teams before building began, the magnitude of change required was clearly revealed, with teams talking about the need to compensate for the poor quality of the environment and the negative impact they perceived this had on the care of service users.

> *...people come to the mortuary department with trepidation and fear, and not only because they're having to go and see a deceased loved one, but because of the sort of general conception of what a mortuary is …So we have to work twice as hard to try and keep them calm. Try and show that actually we're a caring environment, and we're trying to be supportive and we're there to help them. (Phase one focus group)*

Comments from relatives of the deceased were also a driver for initiating the changes. However a number of elements led to their initial application to participate in the programme. These included a will to improve and develop their facilities, particularly in end of life care. For some team members developing end of life care was part of their role in the NHS Trust and the programme became an opportunity to give their ideas momentum and reality, sometimes after years of trying to make small improvements. Teams felt that NHS Trust staff, and the community they served, failed to recognise that hospital was a place where many people die. Prior to participation in the programme, teams felt that end of life and bereavement care had not been a priority for their NHS Trust and this had manifested itself in neglect of the physical environment.

Entry onto the programme allowed consolidation of team members' emergent visions for change and gave teams confidence and space to consider going beyond the 'safest and cheapest' option and instead think broadly and creatively about what might be achieved in their particular areas for the benefits of service users if further funding could be accessed. For all the teams the important thing was to create something 'special' that could demonstrate that the Trust valued not only its patients but the staff working in those environments. The way in which the King's Fund programme was delivered in venues atypical of those that team members had been previously accustomed to, two things were achieved. First, participants reported that they felt 'special' and valued. Second, the message that environment was crucial to well being and could impact significantly on service delivery to service users was communicated.

[2] An outline of the case study sites and details of their projects can be found in Appendix A.

The standards that are delivered in the workshop with the King's Fund in terms of how they treat us as a group of participants, it's high quality, it's imaginative, ...it enhances thinking …of what we're delivering in terms of [the] project, but raises [awareness of] what we want for our service users and our patients as well. We want to expect high standards of everything, and you can see the difference it makes. Certainly if we'd been doing it in [an] old centre and we hadn't been able to have the time together to do things in a nice environment, it makes you realise why the environment's so important. (Phase one focus group)

All the teams engaged with both service users and other staff members to help develop ideas about what they would want and often took these contributions forward by including patient representatives in their wider teams and steering groups. The teams were often surprised by the level of interest and the number of people that attended open days to view the current facilities, and recognised their own Trust staff were often users of the facilities. However teams did encounter negative attitudes towards their projects. These often stemmed from a sense that money was being wasted in an area of healthcare that might be considered a low priority, and on physical enhancements when there were more deserving claims on limited funds, in particular for staff and equipment.

The team

Variation in the composition of teams did not vary considerably in terms of which NHS Trust departments were represented and this is partly in response to the King's Fund's recommendations in relation to team mix. However, the level of seniority did vary, and the more successful model seemed to be one of vertical integration whereby those with influence at senior NHS Trust levels worked within teams alongside those who had close and frequent contact with service users and providers. For many clinical staff, working so closely with artists, and, in particular, staff from estates departments, gave them an insight into worlds of which they had little knowledge. All case study participants felt that at each stage of the process having direct estates involvement in the project was crucial.

Good teamworking was considered an essential ingredient for success in all projects. The key aspect of learning identified by the teams over the time they had been involved in the projects was the opportunity to work with a range of people they would not normally work so closely with. This helped them to gain a clearer understanding of other people's roles and the challenges others face in delivering their part of the service. A number of teams highlighted the need to work to each of their members' strengths in order to meet the needs of the project.

Teams credited much of their good teamworking during the lifetime of the projects to their initial residential visit as part of the King's Fund programme, although opportunities to get away from their usual work environment were seen to contribute to team bonding and driving the project forward. A particular challenge for the teams was when a team member either left the organisation or their role within that organisation changed. Teams chose not to replace members who left after formal approvals for the projects were given in January 2009, so teams occasionally had to work with either one less member or less input from that member as new roles limited the amount of time they could contribute to the project.

You've got to gel as a team to make it work. Because if you don't gel as a team you're not going to get people giving the extra mile, you won't get the commitment, and the King's Fund does the team building very well. In that that's the first thing you do when you go off for one of these weekends is do all sorts of weird and wonderful things together where you're exposing yourself as a personality as well. (Phase two interview)

Wider support for the teams came from a range of additional sources. Case study sites varied in how they arranged this from co-opting other members as required to formalising a peripheral team that lasted for the duration of the programme alongside the core project team. Teams would often try to engage this wider group by including them where possible in King's Fund events and procurement decisions. Membership often considered useful to have as part of a wider supportive team included expertise in purchasing, fundraising, architecture, communications and publicity, as well as sponsors and additional staff from estates/capital planning and service providers/users from the project area.

Only one of the case study teams had a service user representative as part of the core team although some of the projects not selected as case study sites also included service users within their teams. Several other teams consulted with service users. Although this input was considered of enormous benefit and consultation with service users was felt to be a key part of this type of renovation, incorporating a service user into the wider team was not without its difficulties, particularly due to the sensitive and often emotional nature of these projects. Therefore careful consideration needed to be given to how and when such inclusion could best be achieved, not only from the perspective of the team but also for the service user.

One of the additional challenges teams encountered over time was maintaining the enthusiasm for and momentum of the project alongside busy work schedules. King's Fund days helped to regenerate this enthusiasm but ultimately when back on site the teams themselves had to find ways to keep the project on track. Key to this again seemed to be the skill mix and the dynamics of the teams. All talked about different people taking responsibility at different times either when their particular skills were required or when other team members were more restricted in the time they could spare.

Negotiation and compromise

All teams had to navigate and negotiate a number of bureaucratic and political processes within their Trusts, these predominately related to the spaces they were trying to acquire. Communication, informing people and keeping them informed seemed to be an important part of achieving and maintaining individuals' support and commitment to the project. For one of the projects the location of the bereavement suite in the main entrance to the hospital was a political issue the team had to negotiate.

Teams felt they often needed backing to negotiate these higher levels of bureaucracy within the Trust and drive their projects forward. This support was often achieved by making links with a senior member of staff, such as by involving them as a sponsor, working with a patient panel or from the King's Fund themselves. The teams identified the King's Fund as having the credibility within their NHS Trust to help 'open doors' for their projects. They also recognised that offers of support from the two key members of the King's Fund programme team were genuine and forthcoming. However

awareness of this seemed to promote sufficient confidence within the teams for them to navigate most challenges without calling on the King's Fund.

Design plans developed and grew over time and liaison between architects, estates and facilities placed great demands on the team. Some teams found it challenging working with outside contractors such as builders, artists, and architects. Understanding the processes that needed to be in place to put the project out to tender and managing differing agendas between the teams and the outside contractor was also a challenge. Teams needed to negotiate the tension between ensuring quality and meeting deadlines. It was felt contractors often used a different language hence teams struggled to translate their vision of the project. The role of team members from estates became key in these negotiations. However those from estates sometimes felt this was related to naivety by other team members in assuming that contractors would be able to translate their vision when insufficient detail had been provided in the first place. For some projects not being able to convey their vision or have it understood by their architects and builders resulted in a number of the smaller details having to be changed such as door handles, disability rails and paint colour.

> *And I'll give the architect his due, they drew up things that fitted with what we wanted in terms of the space of the rooms and the reception areas, but it was the translation of the finer detail that they just went into hospital mode. …It's like the architects have got this thing called the blue book and only looked in there, and they wouldn't, they couldn't think outside that there might be other suppliers who could do something different for this project. (Phase two interview)*

Getting the balance between striving for the most ambitious plan and what was feasible and practical within the budget and timeframe was a struggle for all the teams. Different teams took different tacks on how and when to compromise. Some felt that continuing to strive for their ultimate project was the most important aspect. However for other teams compromising on their ideal and achieving a workable project within the allocated resources of time, space and money took precedence. Teams recognised that their plans had to change over the build period with unexpected costs sometimes requiring other areas to be curtailed. Team members from estates were then considered the 'voice of reason' that kept the team grounded, so that their aims were achievable.

Work in progress

Mortuary staff found the period of building and renovation to be the most challenging. At this point in the process all had to explain to families why the service was not available and what contingencies were in place. Finding other suitable areas to hold viewing was particularly difficult and many staff felt this challenged the way they were able to provide support during that time. All the case study sites that had completed by the end of the evaluation period experienced minor setbacks often described as 'snagging' where small problems remained unresolved until after the formal opening. Examples of this included glass work not in place and making do with temporary fittings while waiting for mistakes to be rectified. However during the building periods several projects encountered unforeseen structural problems within the environment they were working, these often led to delays and had cost implications.

Teams had to be flexible in their ideas so that the project could change as it developed. This was key to some projects as teams recognised seeing something in the 'flesh' is different from a design plan

and may be different to expectations. However sometimes getting contractors to work to this flexibility was a challenge for the teams. At other sites, teams recognised that they had not been specific enough in their attention to the finer details of the design or that decisions made about these details had been lost along the way.

Impact

The recent policy drives for improvements in end of life care had prompted a number of NHS Trusts to give greater attention to work in this area. Projects were seen as both part of, and a catalyst for, this ongoing work. Projects intentionally and unintentionally created dialogue about end of life care and started people thinking about how services were delivered. Staff talked about the undervalued role of the mortuary viewing areas in the hospital. Prior to work taking place, staff were often embarrassed by the environment they worked in and actively discouraged viewings in the mortuary. The mortuary teams had made the most of the attention of the Trust board and taken them to visit the mortuary areas, often somewhere they had never been before.

At a number of sites getting other hospital staff to see the project and understand its importance was a key part of raising the profile of end of life care and open days were well received and well attended. Some NHS Trusts incorporated new areas in the training and education of staff. Providing tours and open days has opened up these facilities and the projects have been a catalyst to encourage other hospital staff to come and see the areas so they have a clearer understanding of how and what care is provided.

> *I think right across the Trust it's raised awareness of bereavement care, and certainly on the wards now, you know, the ward sisters and nurses would hang on to bodies for relatives to view on the ward, so that they didn't have to go down to the mortuary. Now it's so beautiful that it's helping with the flow. …which is important, and is better for relatives because they're in an area where they can be cared for and looked after, not on a ward where everybody can see them coming and, you know, can see their distress so it is much better. (Phase two interview)*

Projects often prompted a review of current process and practices with some NHS Trusts updating the way end of life care services were organised and delivered. These kinds of benefits were evident throughout the projects. Teams however recognised that work would be ongoing in order to make real cultural changes in the way end of life care is viewed in the hospitals. Participants noted that these projects were just part of a process of greater recognition that many people die in hospital and that care of the deceased and their families goes beyond the point of death. Those working in the clinical areas where the projects had taken place had commented on how the improved environment had enabled them to deliver better care. Staff from all teams reported that the new environments gave the appearance of spaces where the deceased and the bereaved could be cared for rather than simply 'processed'.

Some respondents felt undertaking the project had given them a new perspective and openness to art. They had better understanding of the kinds of things 'art' might include and how they might be used in the hospital setting as well as the impact of their use. Across all 20 sites, the projects had raised the profile of art and design considerations, with a number of teams believing that their project had demonstrated to their NHS Trust how important the environment is to patients, relatives

and staff. The teams felt their projects now acted as a 'benchmark' for new facilities and building work.

Some knock on effects with estates departments were noted, with some design ideas being taken on in subsequent building projects. These were particularly evident at sites where the wider estate and purchasing teams had been closely involved in the project and were better able to understand the vision the teams were striving for. However some participants from estates felt that without their colleagues experiencing the King's Fund programme directly any real changes would be unlikely.

> *There's sometimes when you have to be practical - I don't see you could ever roll out for a whole hospital. You can take a lot of the ideas and improve a hospital project definitely, and there has been the art and those sorts of things. (Phase two interview)*

All teams spoke of the personal learning gained from the experience of working on the project and this is further reflected in the reports submitted by all 20 teams. Many talked about renewed enthusiasm for their jobs, greater confidence and additional skills. This kind of personal development allowed team members to recognise their own skills and achievements over the course of the programme. For some these skills had been learnt despite an initial resistance, particularly those unused to group interaction, team building and public speaking. For more senior members of the teams seeing the development of more junior colleagues was a particularly rewarding process. Many respondents talked about their pride in the project and achieving their goals as well as recognition of their drive to improve service in these areas which had previously gone unnoticed. This 're-energised' team members to continue in their daily roles with a renewed thinking about what they might achieve in the future.

Although the timescale of the evaluation of the programme was such that it is not possible to identify longer term outcomes there are indications that the effects on staff who undertook the programme will have ripple effects for other NHS Trust staff. Several teams talked about how they are now providing input to other environmental development projects by sharing their knowledge and expertise. Teams were deservedly proud of the fact that they had been invited to join NHS Trust committees, speak at meetings and won awards in connection with their projects.

Programme feedback

In general feedback for the programme and the programme team was highly positive. All the team members were generous in their praise of the King's Fund programme team and the programme itself. They recognised the value of taking time out from their normal work environments to focus on the projects. Teams frequently referred to the initial programme residential as fundamental to the process of team building and project development, despite some team members finding some of the exercises a real challenge.

> *I've never ever been on such a good development programme. That first [residential] particularly …They've got some hard work to do afterwards because that's what bonds you, gels you, I don't know what it is, whether it's the singing or the fact that you're working [so hard] for however many hours it is, 72 hours and I don't know, but they do it beautifully. (Phase two interview)*

The sessions on lighting and colour were highly praised for being interesting and useful by all the teams. The visit to the Tate challenged some people again but was generally well received and helped people to view art in new ways and in relation to their own projects. Visits to previous project sites helped teams to cement their own styles, development from the programme allowed teams to look at these projects critically and establish which aspects they liked and disliked. The diversity of the teams meant that they incorporated people with different levels of experience of management, hence pitching sessions on this element is a particular challenge for the King's Fund programme. In their suggestions to improve the programme participants from the teams would have liked help with dealing with external contractors such as artists, builders and architects.

DISCUSSION

This was a pragmatic evaluation of a highly complex programme and inevitably there are limitations of our evaluation that must be taken into account when interpreting our findings. Due to the timing of the programme and the evaluation, and the slippage in timescale of the projects, it has not been possible to say anything definitive about the long-term consequences of the work that has been undertaken by the project teams. Teams were already beginning to report positive feedback from service users and staff working in the location of the projects. Follow-up of the projects in this programme would be of benefit to establish the long-term effects of these physical developments.

Others' views of the programme and process are evident from the study but inevitably filtered through the accounts of the team members themselves. This evaluation was an in-depth look at how the programme fostered the development of twenty teams to create a new space in a relatively short time period. We decided at the outset that our focus should be the teams and their members. The views of patients and families would be an important addition to this study. However this study has highlighted the importance of the work environment for NHS Trust staff. Many felt embarrassed by their previous surroundings and in some cases felt it impeded their ability to do their job to the standard they would wish. The projects have helped staff to feel valued in roles often overlooked in hospital settings and allowed them to provide the high level of care for which they strive.

Our findings from the case study sites are consistent with our analysis of the progress and final reports. The use of focus groups during the first phase of the analysis and individual interviews in the second allowed for insights at both team and team member level. Particularly key to the delivery of a successful project was the combination of getting the 'right' team and a supportive Trust in which the project took place. These aspects coupled with guidance from the King's Fund programme allowed for imaginative projects that were able to make the most of the inevitably limited space available in hospitals. The King's Fund encouraged and empowered teams to strive for high quality design, move away from a clinical emphasis, and produce a visual change that had impact across the Trust. From their work with the King's Fund programme project teams themselves recognised the importance of the physical environment and tried to pass on this learning in their Trusts.

All were challenged by the time limitations of their 'day job' and working on this additional project, and it must be recognised that many team members went above and beyond their paid work hours in order to deliver their projects. Many derived substantial learning from working with contractors and in navigating the bureaucratic processes within their Trusts. Gaining and maintaining support for

their projects across both senior and ground level staff was essential to a successful outcome and teams needed to engage with both staff and the public in order to champion their projects. The projects had a number of effects beyond the aesthetics for service users. Policies and procedures were often revised, education on end of life care was provided, the profiles of these previously undervalued areas were raised, and a greater understanding of art and design was gained. The projects demonstrated that a visual change can create a more powerful impact than organisational change.

RECOMMENDATIONS

1. The particular methodology that the EHE programme uses delivers changes in the physical healthcare environment, and raises awareness of the importance of the environment on the delivery and receipt of services. Therefore continued investment in the EHE programme should be considered a cost effective way of providing NHS Trusts with an exemplar of how a multi-disciplinary team can effect change on the physical healthcare environment.
2. NHS Trusts should maximise the benefits gained by staff who have been part of EHE projects and where possible and appropriate utilise their experience to inform other renovation work within their NHS Trust.
3. The EHE training programme may wish to consider the inclusion of specific training on negotiating and managing the process of working with outside contractors such as artists, architects and builders.
4. Training for staff at all levels should aim for a greater understanding of the importance of the physical healthcare environment and the effects of the environment on patient outcomes.
5. Staff teams that are charged with undertaking projects relating to the physical environment should not only be 'horizontally' integrated across departments, but 'vertically' integrated so that those with direct experience of service provision are working with those with sufficient influence within the organisation to effect change.
6. Healthcare organisations need to foster better channels of communication between estates staff and those delivering care. There needs to be a two-way process that raises awareness between these two staff groups whereby clinical staff have a greater awareness of what estates staff 'do' and how they can influence decisions about the physical environment.
7. Most deaths occur in hospital, and end of life care pathways have not always recognised the role that hospital mortuaries play in end of life care. This may in part be due to their physical location, their appearance, and that mortuaries are often considered to be places where the deceased and bereaved are processed rather than cared for. Greater attention therefore needs to be paid to the pivotal role that mortuaries play in end of life care and what impression its appearance will leave on the bereaved.
8. The physical route, that a bereaved relative takes in order to undertake administrative processes necessitated by the death, should be simple, contained, and avoid areas that may cause further distress such as refuse collection points.
9. Environments of care at the end of life should strive for a reassuring atmosphere of calm contemplation that is culturally and religiously neutral and is not overtly and unnecessarily clinical.

10. There is a dearth of validated measures of how the physical environment affects healthcare users and providers. AEDET and ASPECT are widely used measures in the NHS though more commonly used for larger scale projects and new hospital buildings rather than renovations of existing space. Therefore there is a need to develop reliable and valid measures that can detect how smaller scale changes in healthcare environments affect health outcomes.
11. Additional evaluation of the impact of the King's Fund programme should be undertaken to identify and assess the longer term outcomes of the changes that have been made to the physical environments in these NHS Trusts.

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APPENDIX A: CASE STUDY SITES

Mortuary viewing facilities

The main report provides an architectural analysis of the each of the case study sites (with the exception of the prison site) including a description of the new facilities under the headings 'how it works' and 'how it feels'. All three sites where the mortuary viewing areas were renovated (Salisbury, North Bristol and Newham) provided improved spaces for not only viewing but also waiting/reception areas, refreshment facilities and private outdoor spaces. Following the architectural assessments at these sites, specific recommendations have been made to inform future revisions of the relevant Health Building Note (HBN) [16]. These recommendations relate to the location of mortuary viewing facilities, entrances, signposting, and environmental conditions.

Salisbury

The existing mortuary facilities were located at the back of the hospital, and were accessed internally via a long, dark, oppressive corridor or externally past the hospital laundry, both of which had been identified in feedback as inappropriate for the newly bereaved. The team reported the viewing areas as functional but outdated. Hence the team's aim was to improve the approach/entrance to the mortuary and the interior décor and overall feel of the family and viewing rooms. The team intended to relocate the entrance to the facilities and provide allocated parking as well as create additional space with a glass roofed entrance that could be used, to collect property, as a waiting area, and for a visiting Registrar. The renovation has coincided with a change in the provision of bereavement services at this site, relocating all provision to this one place.

Before


After


North Bristol

Each of the two North Bristol sites (Frenchay and Southmead) has a mortuary which provides viewing facilities for the newly bereaved. The post-mortem functions at each site were relocated to a large regional facility at the start of this project but staff were keen to keep viewing facilities on site at both hospitals for those wishing to view the body. Both mortuary viewing areas were in a state of disrepair. At Frenchay (pictures shown) facilities were housed in a rundown timber structure with poor access. At Southmead the mortuary is located on a busy road and had no private outdoor space. Inside both facilities were dated and dark. The team aimed to provide updated, comfortable spaces for the newly bereaved at both sites. Outdoor garden areas, waiting areas and refreshment facilities were also incorporated so that families and friends did not feel rushed and were allowed time away from the body during their visit. Access to the mortuary at the Frenchay site was improved when a new route into the mortuary was provided with dedicated parking for visitors and private outdoor space.

Before

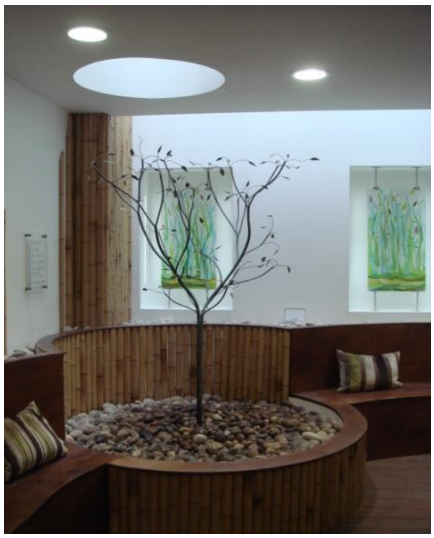
After


Newham

At Newham the mortuary is located on the central corridor of the hospital and was made up of a small, dark viewing space and a cramped waiting room that is also used as a staff office. The team reported wanting to maximise the space available and bring in natural light making a dedicated place where there is time for reflection and peace that is pleasing to people of all cultures. They also wanted to create an area where the Registrar could be on site. The renovation of an office to the rear of the facility allowed the person using the waiting room as an office to relocate, freeing the space for use as a waiting area for families and registration of deaths. The team also wanted to create an indoor/outdoor space by knocking through to an external area and creating a covered garden and providing natural light. A dated viewing area in the A&E department was also upgraded.

Before

After



Centralised Bereavement Services

The upgraded services at Cambridge and York now provide a suite of spaces dedicated to bereavement care. Spaces are provided for an on-site Registrar, property collection, counselling and private waiting areas. For these projects identifying and then securing appropriate space raised particular challenges. Each project required more room than they currently had allocated and much of their negotiation took place early on in their project development to identify and secure additional space. Both projects also involved relocating other staff from these acquired spaces.

Cambridge

At Cambridge, bereavement services were run out of a small cramped area, that was not easily accessible and required the newly bereaved to wait in a public corridor. The team therefore aimed to relocate and centralise the hospital's bereavement services provision. There was not enough scope within the hospital to relocate staff offices, so the emphasis was on improving the environment for relatives. Staff would remain in their current location but would use the old bereavement counselling room as additional office space. Focus was therefore on providing services for bereaved relatives in one co-ordinated area, creating a private waiting area and providing rooms for counselling and registration. Attention was also to be paid to the current relatives' room in the Accident and Emergency department in order to bring this in line with the proposed new suite.

Before

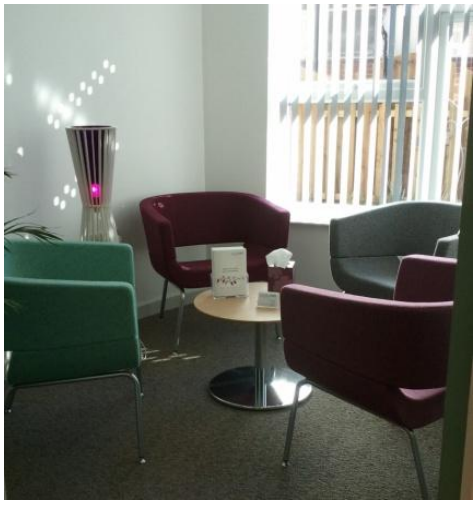
After

York

At York, bereavement services were delivered from a small office. The challenge faced by the team was to create an environment where the bereaved would not have to visit several different sites within the hospital to collect the death certificate and the belongings of the deceased. The project team secured a number of additional rooms and direct access to some dedicated outdoor space in order to create a bereavement suite with a garden. The suite now includes a reception, private waiting area, a garden area, a Registrar's office and a counselling room. Work at this site was not completed by the end of the evaluation period (May 2010). The official opening of the suite was held in September 2010.

Before

After



Prisons

Albany

HMP Albany is one of three prisons on the Isle of Wight and currently houses Category B and C sex offenders and vulnerable prisoners serving sentences of four years or more. A new prison hospital has recently been built on site at Albany to serve the population of the three Isle of Wight prisons. The prison hospital provides a number of hospital cells for 'inpatient care' as well as 'outpatient' services. In light of this new build, initial ideas were to use two of the cells in the newly built prison hospital building and transform them for use by prisoners considered to be at the end of life. These two cells and adjoining shower room would work in conjunction with a garden area. These areas aimed to provide a covered quiet area for rest and reflection for dying prisoners and their families away from the main hospital. Although the cells have been secured for use by palliative care prisoners, redecoration is anticipated to be completed by the end of 2010. Focus for this project has been on the garden area. This garden area features a coloured glass dome, providing a feature and cover when needed. The garden utilises prisoner sculptures in the walls of the planting beds and willow arches to give height and focus. Seating is provided and access is available from the hospital block situated next to the palliative care cells. The garden was not completed by the end of the evaluation period, however work finished in August 2010.

This team encountered a number of specific additional issues. In particular these related to the practical security issues of gaining access to the site and bringing materials into the prison; and working across two organisational cultures (the NHS and the prison service).

Before

After