

Briefing

Assessing design quality in LIFT primary care buildings

The LIFT (local improvement finance trust) programme is the largest sustained investment in improving and developing frontline primary and community care facilities in the history of the NHS. The speed and scale of the programme has been considerable, with some design successes. But there is still room for improvement in design quality, with very few excellent schemes. And there are concerns from professionals working in the industry about the policy environment which governs the procurement and funding of LIFT buildings.



Introduction

Launched in 2001 and facilitated by Community Health Partnerships (CHP), the local improvement finance trust (LIFT) programme is designed to allow primary care trusts (PCTs) 'to invest in new premises in new locations, not merely reproduce existing types of service. It is providing patients with modern integrated health services in high quality, fit for purpose primary care premises.'¹

The scheme is run by a LIFT Company (LIFTCo), a joint venture in which the private sector partner has a majority shareholding (60 per cent) and local stakeholders such as the primary care trust, GPs, local authority and CHP have a minority, but significant, stake (40 per cent).

The Department of Health (DH) and CHP collaborated with CABE to survey the design quality of primary care buildings procured under the LIFT initiative. CABE drew on its expertise in investigating design quality in a variety of different sectors, including education and housing. This study assesses the design quality of 20 out of 82 primary care buildings completed at the time of the survey and built under the first three waves of the programme between 2002 and 2006. The findings are intended to inform and support policy developments aimed at achieving high-quality patient and staff environments. Design quality factors are drawn from a representative sample of completed buildings, evaluated, and lessons learnt so far are presented to inform DH policy development on continuous improvement of design quality standards within the primary healthcare estate.

What is design quality and why does it matter?

It is now widely accepted that the impact of our immediate environment – on our productivity levels, our capacity to relax, our ability to easily navigate where we are, and on our ability to interact with each other – is an important factor in the success of the places where we work and live. Good design is crucial in improving health services, delivering efficiency, flexibility of use and simple control of comfort levels to improve the patient and staff experience, including contributing to the positive effects of health and well-being.

Other sectors such as education and housing offer lessons. A survey of school buildings completed by CABE (*Assessing secondary school design quality*, 2006) identified obstacles to design quality, such as getting the initial preparation wrong and not making full use of best practice. More careful consideration is now being made of the end quality of buildings, with compulsory design reviews and the mandatory presence of client design advisors on the projects. Following the publication of CABE's housing audit (*Housing audits*, 2005-2007), all volume housebuilders have design champions and training programmes in place, and local planning authorities have signed up to the Building for Life standard.

Improvements are already under way within LIFT, with improved briefing and specification for more complex facilities, and CABE enablers having been appointed on many LIFT projects, including all fourth wave schemes. This report's recommendations are intended to inform this continuous improvement work.

Encouragingly, the tools for improvement within primary healthcare buildings are well within the grasp of everyone, from policy makers to the users of the new buildings. Consistent ideals, strong leadership and careful and co-ordinated thought and action can deliver excellent buildings on time and to budget. Such principles are just as relevant to other areas of the healthcare estate, such as the development of community hospitals.

'Good design is crucial in improving health services, delivering efficiency, flexibility of use and simple control of comfort levels to improve the patient and staff experience'

About the survey

CABE selected 20 completed buildings from a long-list of LIFT schemes. The sample was balanced by region, size, LIFT wave, context and the number of services delivered. We also sought a spread of LIFT companies and design teams.

A panel of 10 experts in healthcare architecture and service delivery evaluated each building using a specially devised formula, the LIFT quality assessment checklist (LQAC). The LQAC is derived from three existing tools, all widely used in the field and based on extensive evidence-based research:

- **AEDET Evolution (achieving excellence design evaluation toolkit)** is carried out as a matter of course within the health sector. It is mandatory for all LIFT schemes proposed. The requirements for schemes to reach a particular standard in order to be approved are still set by individual projects, and these standards have therefore varied greatly. AEDET itself does specify a standard, and one of the recommendations at the end of this report is that achieving excellence in the design tool scoring is more rigorously applied.
- **ASPECT (a staff and patient environment calibration tool)** is an extension to the 'staff and patient environment section' of AEDET Evolution.
- **DQI (design quality indicator)** is a close relation of AEDET Evolution and is used for a variety of public buildings.

LQAC answers were ranked on a scale of 1-6 and labelled excellent, good, partially good, mediocre, poor or very poor.

One of two core moderators was present together with another panel member at each visit to ensure consistency. Surveyors and moderators discussed the buildings with a range of centre managers, PCT representatives, members of the LIFT companies and architects. A case study comparing environmental performance of two buildings was also done.

Individual interviews took place with six participants in the LIFT process from the buildings surveyed: two representatives of PCTs, two representatives of LIFT companies and two architects of completed LIFT buildings.

Three overall question categories common to both AEDET Evolution and DQI categorise the report's findings:

- **functionality** covers how a building enables users to make the most of services
- **build quality** covers its technical performance
- **impact** covers the factors that affect users' overall experience of the building and therefore of service delivery.

Patient and staff environment and urban and social integration were particularly scrutinised because they typify in design terms some of the main aims of LIFT.

Findings

Forty per cent of the design criteria surveyed was scored as good or better and 7 per cent of these were classed as excellent. The challenge is to ensure that no scheme is less than good and that as many as possible are excellent.

Figure 1 shows how those buildings whose design qualities all perform well within all three categories of functionality, build quality and impact can be described as excellent.

From figure 2 showing the performance of the survey sample in terms of the three design quality categories, it is clear that most fell short of excellent.

The findings suggest that challenges lie in the following areas:

There is scope to increase the proportion of good and excellent schemes. Overall results compare favourably with CABE's audits on schools and housing, as 40 per cent were rated as good or better. However, only two of the buildings

surveyed offered the same kind of design quality as the best primary community health care buildings outside the LIFT programme..

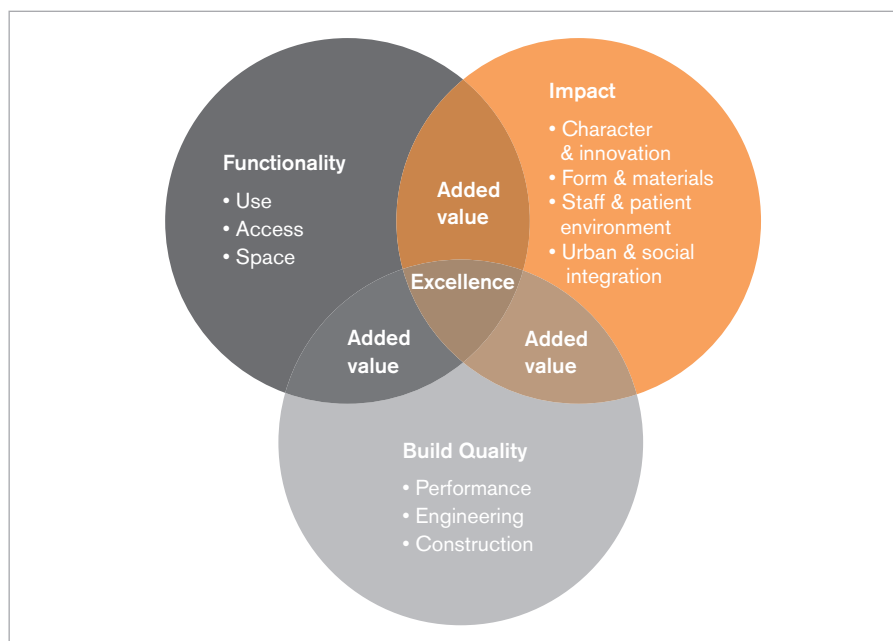
Opportunities for learning should be maximised

A lack of focus was identified in developing and implementing a means of consistently achieving the high standards attained by the minority of schemes across all LIFT schemes. Once learning processes have been embedded in LIFTCOs, improvements can be expected to follow.

Services can be affected

by poor design Most of the new buildings were an improvement on the overcrowded, poorly maintained health centres and GP premises that they replaced. New facilities were particularly good on the provision of lifts, disabled toilets, baby changing facilities and storage. But space provision often fell short of minimum space standards; crucially, consulting and examination rooms came into this category.

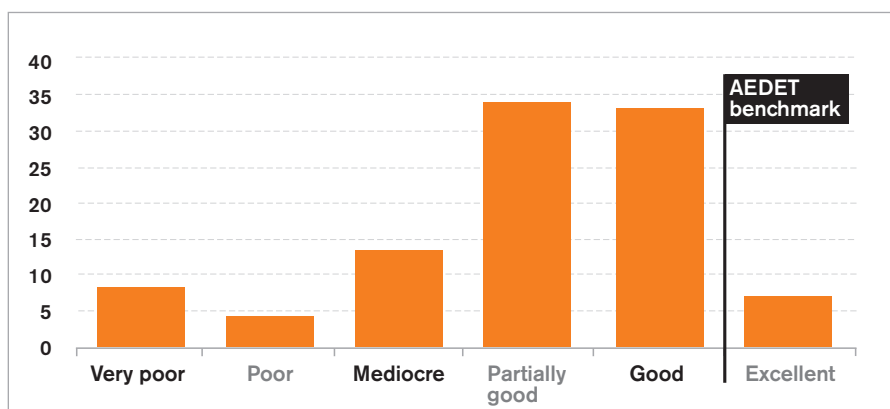
Figure 1 The components for achieving excellence in design



Detailed findings

Most 'excellents' were scored on functionality (12 per cent of design criteria). Next came impact (6 per cent), and then build quality (4 per cent). See figure 6, page 6.

Figure 2 Average percentage scores of buildings surveyed



Findings by LIFT wave

An improving trend within each LIFT wave can be detected, with an increase in the number of schemes assessed as excellent on questions of functionality, build quality and impact.

It is an encouraging sign that some lessons are being learned from wave to wave. However, fewer schemes were assessed as 'good' in wave 2 compared with wave 1, and there was an increase in those

Figure 3 Overall results across impact, build quality and functionality

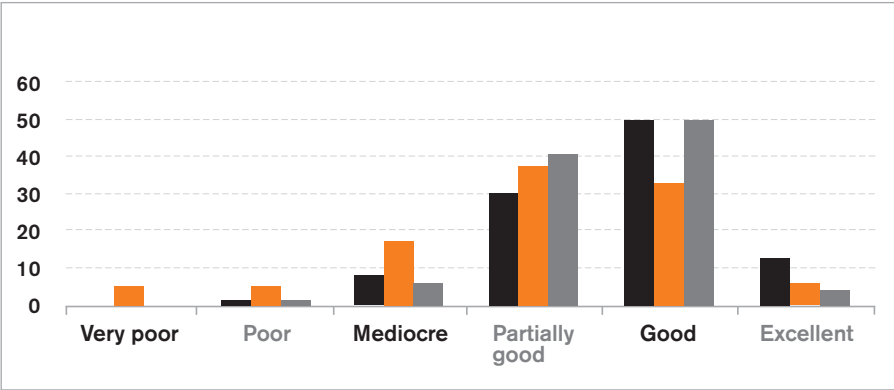
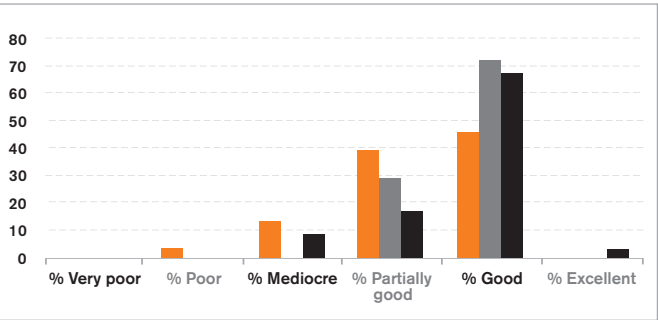
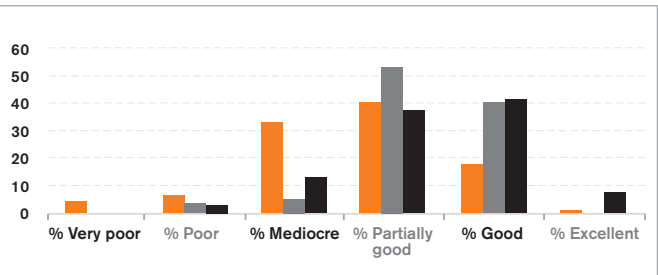


Figure 4 Findings by LIFT wave

Wave 1



Wave 2



Wave 3

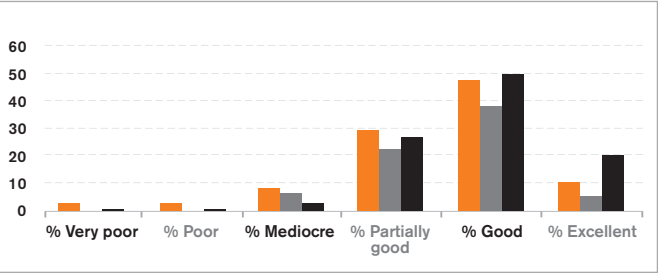
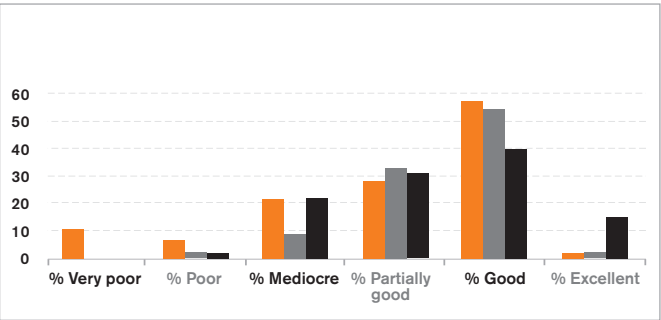
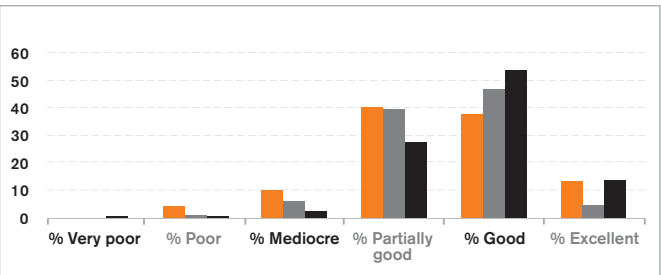


Figure 5 Findings by number of services

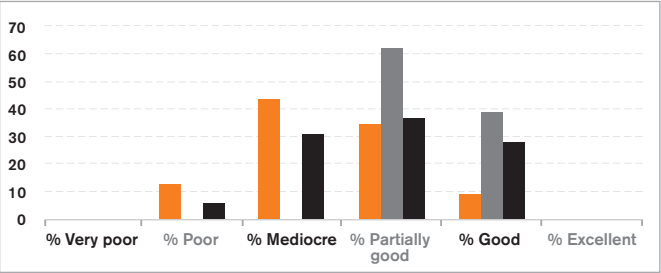
1 – 10 Services



11 – 20 Services



20+ Services



Impact Build Quality Functionality (Number surveyed=20)

judged to be partially good. There were also more schemes with poor and very poor assessments in waves 2 and 3 than in wave 1. This suggests that gaps had grown between those with excellent qualities and those with very poor.

Findings by number of services

One of the main aims of the LIFT programme is to bring a greater range of primary care services together under one roof. The results show that the greater the number of different services involved the harder it appears to be to produce well-designed schemes.

This trend was not absolute. Indeed, more small schemes (with 10 or fewer services) had poor or very poor assessments than medium-sized schemes (10-20 services). However, there is a marked difference between the results for the smallest schemes and the largest ones. Schemes with more than 20 services were assessed as mediocre or poor on a majority (55 per cent) of the design criteria.

Findings by LQAC category

Functionality

Most buildings were judged to be functioning reasonably well, although only a minority came out as excellent. The sensitive issue of patient confidentiality was particularly well considered at reception points, and storage provision was generally an improvement on previous premises, although there was a lack of space for equipment in a significant number of consulting rooms.

Most buildings reflected older patterns of working rather than facilitating the new. Interviews identified a frequent unwillingness on the part of individual practitioners to talk to other tenants at design consultation phase about the development of more efficient care models. There was a noticeable amount of under-used and unused space in some buildings which may offer potential for expansion but may also prove costly for trusts in rent and facilities management fees. Other problem areas included lack of space for equipment in a significant number of consulting rooms and inadequate wheelchair access on pedestrian routes.

Build quality

The buildings were all assessed as partially good or good on the basics of build quality, such as being easy to clean and maintain and having appropriately durable materials. However, only two were judged to be excellent on ease of operation and only one was both judged to be constructed robustly enough and predicted to weather and age well.

Problems with environmental conditions were frequently encountered, with temperatures too high and air movement insufficient. Sometimes windows could not be opened; sometimes they could not be closed; and sometimes they were not provided at all. In many cases it appeared that there was inadequate training for staff about how to ventilate the buildings efficiently and effectively.

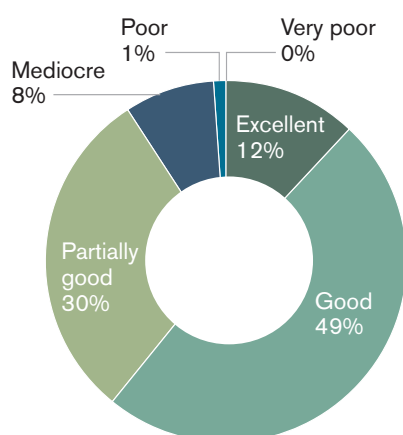
Impact

The impact category covers the factors that affect the overall experience of a building and gives an impression of the standard of service delivery.

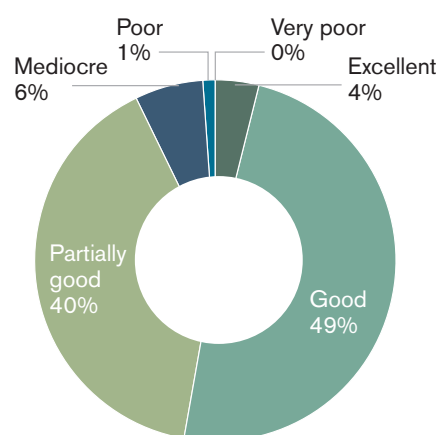
Many of the larger buildings relied on a deep plan layout, resulting in long and institutional corridors,

Figure 6 Findings by LQAC category (Number surveyed=20)

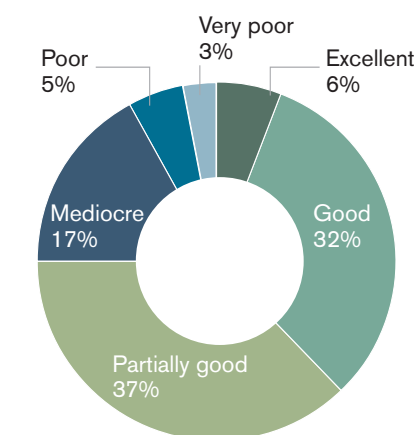
Functionality



Build quality



Impact



with no natural light and a loss of orientation. In a few cases where natural light had been allowed in and an interplay of light and shade created, this lent visual interest and offered a distraction from what can be a stressful situation for patients seeking treatment.

In parts of some buildings care had been taken to create a warm and reassuring environment for patients and staff. Using softer surface treatments creates a less institutional feel. In others ease of maintenance appeared to have taken precedence far beyond patient comfort and the use of hard materials resulted in a clinical feel that was less welcoming.

An integrated reception point is important in giving the impression of a well-integrated service, where visitors can be certain to find assistance. Some buildings had a row of separate reception hatches for different services, giving the impression of services not communicating with each other. This is one of the issues in healthcare provision that LIFT seeks to overcome.

Many of the schemes surveyed had replaced vandalised and run-down health centres with new buildings that made a visual statement of care, interest and involvement in the local community. In many cases, the buildings appeared to be appreciated more for what they were replacing than on their design quality merits.

‘Architects felt that the initial time allowed for design was too short and that financial instabilities were undermining their subsequent work’

Concerns arising from interviews

As part of the survey, structured telephone interviews were conducted with representatives from PCTs, LIFT companies and architects. Many of the concerns raised related to relationships between clients, contractors, architects and all the other parties involved in the project. There was also frustration that the design and quality of the schemes was inextricably linked to the broader policy environment that governs the procurement and funding of these buildings.

The key points arising from these conversations were:

Cultural change does not come automatically

Clients need to invest in the change of culture and attitudes required to meet the health policy aspirations of LIFT by preparing for it together with the future users of the building.

Organisational change could be better managed

The partnerships between public sector users and private sector providers are a main element of LIFT. However, interviewees felt that consistency in relationships between the parties had not been maintained and that financial instability had caused tension.

Not enough learned from other projects

Interviewees identified a lack of awareness of available guidance and good practice and a need for clients to be informed about how to prepare good briefs.

Lack of good sites

Most of the buildings surveyed were sample schemes from the early waves of LIFT that used sites that were available but were in locations difficult to reach easily by public transport or not always

large enough for the required accommodation, car parking and landscaping.

Role of cost in bidder selection

Interviews revealed that the three main components that determine the selection of the preferred bidder are design, cost and partnering. However, bid leaders often find that cost will be the key determinant and design the main compromise.

Pressures on the design team

The position of architects within the supply chain limits their opportunities to develop the overall design, to incorporate the best of good practice and, in particular, to achieve desirable levels of environmental efficiency and comfort. Architects felt that the initial time allowed for design was too short and that concerns arising from financial instabilities were undermining their subsequent work.

Crucial role of informed clients and project champions

In some of the most successful projects enjoying smooth operation and good team working one person within the PCT team had taken on the additional role of project sponsor. Examples included project managers, centre managers and GPs.

Guidance is guidance – not prescription

Guidance is advice for the client to use with his or her informed judgement and according to their relevance in a given situation; in some cases strict adherence to guidance resulted in over-institutional environments, and in others reference was made to guidance that was not relevant to modern service delivery.

Financial uncertainty leads to instability

Uncertainty in funding for some LIFT projects has led to a disruption in working relationships and a

number of redundancies. This has unfortunately reduced opportunities for learning from experience and undermined a process that should be built on partnering and trust.

‘The design process should be used to facilitate further improvement in the delivery of care within new premises’

Major factors affecting design outcomes

The design of a finished product can in the final analysis only be as good as the process for designing it allows it to be. Five key points on procedure emerged from the survey and interviews.

1 Flagship schemes

Favourable media coverage of a few excellent completed schemes can generate complacency, when the quality bar needs to be raised for all subsequent LIFT and other primary care schemes. We must guard against any such complacency within the sector, and be willing to learn from the successes and the failures so far.

2 Site selection

Site evaluations and option appraisals need to be carried out before a choice of site is made. Location is crucial and an assessment of transport needs would help in selecting sites. There needs to be a clear understanding by the client of the effect that site constraints may have on the completed building.

3 Quality of briefing

Producing high-quality, informed briefs is an essential part of any project. Experienced professional input is needed in preparing briefs

that focus on performance requirements for the individual building and the delivery of services.

4 Value for money

Lowest expenditure does not always mean best value for money, especially over the longer term. Results – and completed buildings – could be improved if the pros and cons of similar decisions in terms of capital costs, whole-life costs and quality were fully discussed.

5 Financial pressure on design decisions

Private sector constructors, infection control officers employed by PCTs and facilities managers all have great influence on design quality and building specifications. Quality can suffer when their input is not considered in relation to the good of the whole project. Financial considerations can lead to changes in components and modifications of detailing; infection control requirements can be interpreted too rigidly; and too much weight can be put on the long-term costs of maintenance. A balance should be struck between all considerations; otherwise keeping maintenance costs down can be allowed to override the quality of patient environments.

‘A real opportunity exists to learn from both the achievements and the challenges of the LIFT programme so far’

Recommendations

The following recommendations are aimed at everyone involved in the LIFT programme and in the development of the healthcare estate. They pose a challenge for everyone from the Department of Health, Partnerships for Health

and PCTs, to individual surgeries and community health services.

They are based on the concept of design advantage – that the design process should be used to facilitate further improvement in the delivery of care within new premises. This is proposed through mandatory benchmarking, training and guidance and through a more rigorous evaluation of proposals for projects.

1 ‘Excellent’ benchmark across the board

DH and PfH should investigate the potential for setting benchmark quality standards across the sector and integrating these within their system regulations.

New LIFT and other primary care buildings should always aim to achieve excellence across the board, rather than the good, partially good or mediocre that the majority of the surveyed schemes scored.

Although the use of AEDET Evolution as a design quality tool for assessing schemes in gestation is a mandatory requirement for LIFT, the minimum requirement for excellent scores to be attained for all projects has not always been as rigorously applied as it could have been. Achieving excellent design quality for scheme approval, perhaps using LQAC, should be a standard requirement across the sector and integrated into system regulations, with agreed benchmarks for what counts as excellent, good or poor in terms of overall scoring.

Requiring excellence in this way would encourage the building of more exemplary schemes that will continue to be flexible and fit for purpose in the decades to come. They would continue to serve their communities in line with the original

ethos of LIFT and provide learning opportunities for future primary care building programmes.

2 Evaluate design proposals more rigorously

Design weighting

One of the main ways of achieving excellence over mediocrity would be to give design criteria a greater weighting during the selection of private sector partners. Design is weighted at roughly 12 per cent against partnering services, legal and other issues (which by this point in the LIFT programme it is expected would be standardised). Allowing design a greater weighting and more detailed consideration as a crucial differentiator in the initial selection of bidders would work towards the greater overall provision of buildings that are both functional and which can operate effectively as forums for the provision of health and social care as focal points within the community.

DH and PfH should increase the weighting given to design during the selection of private sector partners to recognise systematically the value of long-term investment in design quality.

Design review

The design of planned LIFT buildings should be reviewed along the lines of those design review sessions by the Department of Health for larger healthcare facilities. This should be part of the approval of all further schemes, similar to the CAGE design review approval system for all BSF schemes in the education sector.

DH should introduce a design review process for schemes proposed under LIFT.

3 Develop a strong project team

A quality, sustainable investment should be aimed for by committed, adequately resourced client teams.

Establishing a good project team is not simply a matter of selecting the right contractor and architect, though of course their expertise is vital. It is also about becoming a good client, about getting the right advice, involving end users and knowing what it takes to build strong, fairly balanced public/private partnerships. CDAs (client design advisors) can facilitate this process in the same way as they already do in the education sector, from project inception through to construction on site.

PCTs should be committed to achieving high quality and getting the right professional advice. Client design advisors should be used and their scope of work clearly defined.

4 Encourage committed individuals

Key individuals can make a vital contribution to overall quality and future operation. On the most successful projects surveyed, one person within the PCT team had taken on the additional role of project sponsor or champion. This role is working well in other areas of the public sector estate such as education and housing, where design champions are mandatory.

Similarly, while new staff and management should have thorough inductions to their new buildings and these should be regularly updated, a nominated individual (the caretaker or centre manager) should be responsible for ensuring an understanding among users of the building systems, particularly in the crucial area of environmental engineering.

PCTs should promote the role of design champions for projects and of building managers for finished buildings.

5 Introduce better training

Training for clients, design teams and building users would range from a comprehensive review of the

available guidelines and standards applicable to the sector through to examples of best practice, for example how details such as storage, landscaping – encouragingly, landscaping is expected to receive greater consideration in future tranches – and reception desks add to the everyday and lasting experience of a building and the services operating within it. Facilities should be designed to enable delivery of the intended model of care, with clinical areas located next to each other where necessary. The long-term cost effectiveness of good design would also be covered.

Clients

Professionally managed workshops should be available to clients at the outset of a project, covering the skills necessary to deliver excellent projects, such as being a good client; choosing the best site; comprehensive and robust briefing to reap long-term benefits; techniques for agreeing and articulating their whole-life facility policies (particularly understanding true long-term value for money); efficient and effective consultation with design teams and stakeholders; and recruiting the right consultants – such as client design advisors – to ensure that appropriate long-term costings have been carefully worked out in relation to design specifications.

These would empower clients by helping them to establish a strong, overarching vision from the very start of the project and to understand how that vision can be maintained within a balanced and proactive public-private partnership.

Users

Building users (including management) would benefit from detailed training on integrating working patterns within new premises. This would include: why and how bringing services together

is beneficial to them professionally as well as to the health sector as a whole; aspects of building planning, visiting other projects and maintaining involvement throughout the building process; and getting the most out of their building and therefore having increased satisfaction in their working lives.

DH and CHP should encourage clients to attend professionally managed workshops at the outset of project. PCTs should ensure that all users receive thorough training in the planning and operation of their new buildings.

6 Conduct post-occupancy evaluations

A comprehensive programme of post-occupancy evaluations to check user satisfaction with their premises would ensure that the project teams involved in future schemes learn from users' experience of current ones. CAGE believes that such evaluations are not a luxury but a fundamental element of any well-run building programme. They are the best and most reliable way to find out whether buildings really work and to learn lessons for the future. They are starting to be used widely in other sectors such as housing and were also conducted on children's centres in the Sure Start programme by the Department for Children, Schools and Families (DCSF).

A real opportunity exists to learn from the LIFT programme so far; post-occupancy evaluation could be part of DH's system regulations, and the results of these should be linked to the awarding of future contracts.

7 Improve design guidance

DH and CHP should develop design guidance to ensure that best practice in design informs all projects proposed under LIFT.

Core design guidance should be made available to serve as a clearly laid-out benchmark based on established good practice examples. This could form an integral part of the client and user training discussed above. It would cover the essential investment of time at strategic briefing stages, the considered development of design ideas, and the importance of change management and how this must go hand-in-hand with the development of the building.

Guidance on achieving acceptable internal environmental conditions in buildings of this type, both through design and thorough continuing management, should also be used.

This would help prevent some of the deficiencies identified in this report being repeated.

Conclusion

CAGE believes that a real opportunity exists to learn from both the achievements and the challenges of the LIFT programme so far. Our recommendations are designed to maximise the contribution that design can make to the environment for delivering services to patients. With the right level of commitment from all involved – from policy makers down to users – we can look forward to a programme in which high-quality design delivers the buildings and services to fulfil the government's ambitious vision for healthcare.

References

1 Department of Health 2007, About NHS LIFT (online) www.tinyurl.com/2s5bjq (May 2007)

This briefing paper summarises the findings of CABE research into the design quality of new health buildings provided under the LIFT (local improvement finance trust) programme. The research is based on a survey of 20 primary care buildings built under the first three waves of the LIFT programme between 2002 and 2006. Using industry-accepted measurements, the research reveals a variable picture of design quality in the new buildings. The briefing highlights areas for close consideration and recommendations for improvement.

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