

LIFT cost model

Primary healthcare is undergoing a quiet revolution, creating a network of one-stop shops. Simon Rawlinson of Davis Langdon examines the LIFT initiative and the new wave of healthcare buildings it is funding

Introduction

More than 90% of contact with the National Health Service occurs in the primary sector, in GPs' or dentists' surgeries, pharmacies and other local facilities. The primary sector is a sprawling estate, with, for example, more than 9000 GPs' surgeries. In terms of fitness for purpose, the building stock is poor. Only 40% of GPs' surgeries are purpose built and 80% are under-size. This is a significant barrier to health service reform, and the NHS plan has targeted 3000 upgrades and the construction of 500 new one-stop shops in the primary sector. The NHS is also keen to transfer services from the acute hospitals to the local primary sector.

The Local Improvement Finance Trust initiative has been designed to carry out this change in local healthcare delivery by leveraging in private funding for the construction and maintenance of modern, integrated facilities, to provide an extended range of healthcare services in more accessible locations.

In its initial phase, which involves 52 consortiums, LIFT is expected to channel £1bn of public-private investment into the primary sector. More investment will follow during the 20- to 25-year lifespan of the LIFT agreements. Most of this investment is being focused on inner cities, where facilities are at their poorest, the needs are greatest and where the shortage of GPs and other health professionals is most acute.

New buildings are key to primary healthcare reform, not only to improve access to care in the most needy areas, but also to aid the development of a healthcare model that is focused on the local delivery of more complex care, and the integration of a wide range of health and social services provision. The requirements of LIFT are challenging for clients, developers and designers, but have the potential to make dramatic improvements in the delivery of healthcare in the community.

Changes in primary healthcare – what you need to know

The NHS plan aims to make health services more customer-focused and the strengthening of service delivery at a local level is a key element of the strategy. The anticipated benefits of this approach include easier access for the public to a wider range of healthcare, reduced pressure on acute services and improved career opportunities for staff throughout the primary sector. Expansion of preventative care services and management of chronic conditions outside of hospitals are particular priorities in the plan.

Key elements of the primary care model that will have an impact on new buildings include:

- **Integration of the health and social services** Integration will not only occur between primary and acute healthcare, but also across a range of services including general practice, dentistry, pharmacy, social services, and voluntary services such as the Citizen's Advice Bureau.
- **Co-location** Healthcare providers will be co-located so that patient lists and resources can be pooled to support the delivery of specialist services in areas such as cardiac care. This will also give GPs and nurses the opportunity to develop and use specialist skills.

■ **Customer focus** The aim of customer focus is to make being cared for easier. It requires greater emphasis upon putting patient needs – such as personal dignity, comfort and convenience – first.

Many existing buildings used as surgeries are unsuitable for the delivery of the new care model. Typical problems include the age and size of buildings, their lack of flexibility and adaptability, poor accessibility, inappropriate location and inconvenience in terms of parking or proximity to public transport. Technical limitations might also include suitability for the accommodation of new technology. Furthermore, in many surgeries, a legacy of underinvestment can often result in poor quality environments for both staff and patients.

As the key drivers for development are co-location of services and improved accessibility, the new primary healthcare programme is creating demand for a new range of multifunctional buildings in town- and city-centre locations. The challenges involved in developing these schemes not only include working with multiple clients and difficult brownfield sites, but also in the development of innovative design solutions for a brand new approach to healthcare and social services delivery.



This £18m LIFT health centre by Penoyre & Prasad in Middlesex unites modern facilities and high design standards

Design considerations

Healthcare buildings are always a design challenge as they can have a considerable impact on the treatment experience of patients. In addition to dealing with the needs of patients who are often at their most sensitive or vulnerable when visiting the surgery, LIFT companies are developing relationships with recently established primary care trusts which may not be fully informed of the condition of the estate, and are working with health professionals who may not be ready to shift to new ways of working in larger, group surgeries. Furthermore, as LIFT schemes are mostly promoted in relatively deprived inner-city areas, the nature of the sites on which they are developed can be a significant factor in the development of the design solution.

Despite their small value, LIFT projects have intensive briefing requirements. Relationships with the users are crucial. Because LIFT schemes change the way that care is delivered and involve a multi-user client, the briefing sessions may be the first time that many issues with the new method of operation are identified and discussed. Using operational examples to illustrate how the new design may change the way care is delivered can be very helpful at this stage.

"Kerb appeal" is an important element of the design in the early stages of the LIFT process and is helpful in getting both a positive response from the client and securing planning permission. However, bidders must ensure that their initial proposals are affordable, as their income will be determined by the benchmark rents paid by GPs and other tenants.

Although operational issues will inevitably be the main driver in the ultimate design, the "consumerism" agenda is making an impact. This agenda aims to improve patients' and visitors' experiences of the NHS by promoting the importance of their comfort and convenience and by recognising that a high-quality building can have a positive impact on their health and wellbeing. Participants make use of the NHS Estates' "Achieving Excellence Design Evaluation Toolkit" checklists to validate the designs at each stage. Issues that the project team need to address in terms of patient focus include:

- Environmental quality – using layout, daylight, finishes, fittings and building services to provide a welcoming, comfortable environment
- Security
- Access, waiting and circulation – the creation of a sequence of spaces that guide patients and staff to their destination within the building in a logical manner
- Call systems and way-finding to guide patients to consulting rooms

- Appropriate privacy levels, especially in public areas such as reception
- Quality of external works and landscaping, which now plays an active part in the therapeutic model for such centres.

New buildings also have an important role in conveying to staff and patients a positive image of the NHS and in communicating the intent of the local healthcare community to raise standards and to encourage active participation in healthcare. The civic contribution of these buildings to their neighbourhood and the extent to which they become actively used community facilities are also important factors of success.

On the operational side, the key challenge is to efficiently deliver the new model of care. As most LIFT schemes involve the combination of services in a larger building, many of the issues centre on appropriate use of shared space and the creation of clear "pathways" to enable staff and patients to progress through and between the different services that might need to be visited as part of an extended consultation. One of the consequences of this new model is that, in particular with larger schemes, patients are likely to spend more time in a centre on multi-purpose trips, so signage and comfortable waiting areas are important. As guidance does not exist for these "in-between" spaces, designers need to ensure that they have made sufficient provision and they must defend these aspects of the design from short-term value-engineering proposals. Other key functional considerations include:

- Integration of multiple clients and service tenures into one building
- Reduced operating costs. LIFT companies are responsible for the operation and maintenance of the buildings and should have an interest in reduced running costs. Natural ventilation is the preferred option, but many spaces will require cooling and mechanical systems will be specified. In some urban locations and because of requirements for controls and so on, there is in practical terms little cost difference between natural and mechanical ventilation
- Design for flexibility and adaptability. Flat slabs, defined service zones and other design solutions allow for change of use and reconfiguration during a scheme's 20- to 25-year service life, without the loss of the initial cohesion of the design
- Ease of maintenance and cleanliness
- Provision for technology and "future-proofing" – making provision for increasing use of local diagnostic systems and "telemedicine" through the specification of the IT infrastructure and allowances for secure storage for equipment.



LIFT: A public-private partnership

The LIFT initiative has been developed as a mechanism for long-term joint ventures between local healthcare providers and private sector services with a remit to deliver investment and property-related services over terms of 20 to 25 years. Although there are some parallels with PFI, LIFT has been designed to be more flexible so that the needs of a wide range of smaller tenants (GPs, osteopaths, social services and so on) can be accommodated and so that the service provider can respond to changing requirements over time.

The main characteristics of a LIFT deal are:

- **Public-private partnership** A LIFT company is a partnership of a private sector service provider, representative organisations within the local health community such as the primary care trust (PCT) and local authority, and the national adviser/investor Partnerships for Health. The service provider has a 60% stake and local participants and PFH each hold 20%. The local participants' stake may come from land transfer, either in terms of development sites for new schemes or vacant plots following decant from existing buildings. The PPP jointly plans and delivers the healthcare requirement.
- **Services provided** A LIFT company's services are largely limited to the provision of maintained and insured accommodation and equipment. LIFT deals do not typically include for "soft" services such as cleaning or reception

services, although schemes in the fifth wave may include a broader range of FM and possibly the provision of clinical and other health services. LIFT companies also have the discretion to include commercial elements such as retail, health and fitness centres or residential units to a scheme if this contributes to affordability.

- **Payment** Income to the LIFT company is on a payment-by-results model. However the availability criteria are less stringent than for PFI schemes and, in practice, rent would only be withheld if elements of the building were actually unusable. The LIFT company contracts directly with GPs and so on using a flexible lease agreement. Rent increases are typically pegged to the retail price index.
- **Active partnerships** A major difference between LIFT and the PFI is that LIFT is designed to be an incremental partnership. Over the 20- to 25-year term, the LIFT company will jointly draw up strategic service development plans with clients in response to local health need. Once the plan is in place, an exclusivity deal gives the LIFT company first refusal to develop all new projects, subject to affordability tests. The refurbishment or reconfiguration of existing properties also counts as a new project.
- **Market testing and accountability** One of the great benefits of the LIFT approach is the simplification of the public sector procurement process and the bundling of projects to attract

bids from investors and contractors. Once appointed, the LIFT company is required to demonstrate value for money using benchmarking and periodic market testing of facilities management services costs. Value for money is demonstrated by, for example, the regulation of rents paid by GPs to the LIFT company by local district valuers.

- **Exit strategy** The LIFT company is responsible for the risk of residual value and retains all property transferred or developed at the end of the term. This gives the LIFT company and its clients the flexibility to extend the agreement, sell the estate or start again.

Key beneficiaries of the LIFT approach include:

- **Healthcare providers** Doctors and other providers gain access to facilities that support modern, integrated health and social care provision, in high-quality working environments that are properly maintained and serviced. This should support the recruitment and retention of staff into the primary sector. In addition, flexible lease terms also provide better management of property risk for GPs and others.
- **Healthcare commissioners** PCTs benefit primarily by having access to buildings that support joined-up healthcare delivery and that contribute to the regeneration of the local health economy through the provision of a wider range of healthcare services. Simplified



The Luton NHS Walk-In Centre by David Morley Architects set new standards in healthcare design in terms of kerb appeal

procurement and batching of projects may in time reduce the administrative burden associated with development and maintenance. Better-designed buildings will also contribute indirectly to better healthcare over time.

■ **Service providers** For the 10 or 12 established service providers, LIFT has provided a new relatively low-risk opportunity in the healthcare market. The PPP approach gives the service provider greater involvement in identifying development opportunities and input into long-term planning of the build programme. Once appointed, exclusivity reduces the costs and risks of bidding for new work and the services element maintains the relationship with client groups. The flexibility to incorporate elements of commercial or residential in the development enables good returns.

Overall, LIFT is a framework that should deliver much-needed investment into the previously neglected primary health sector. However, as with all new ventures, the establishment of LIFT companies has not been easy and many projects are only now getting off the ground. Land availability, planning and affordability continue to be major challenges, as is the amount of initial investment (in terms of both time and money) required from the service provider and design team in order to effectively develop a building that responds to this highly complex brief.

Costs	element cost	cost/m ² gfa £	% of total cost
Substructure	923,700	109.51	6.67%
450 mm diameter reinforced concrete piling 1955 m ² @ 165 Reinforced concrete slab to basement area (565 m ²) and ground floor with vapour barrier, insulation; underslab ducts and drainage 1955 m ² @ 165 Extra for formation of lift pits Item @ 17,000 Reinforced concrete retaining walls to basement, including temporary sheet piling; blockwork lining wall 450 m ² @ 370 Allowance for excavating basement and disposal of materials; breaking out obstructions; dewatering 1900 m ² @ 50			
Frame and upper floors	1,434,000	170.01	10.36%
Reinforced concrete frame, 7.2 × 7.2 m grid; 200 mm thick flat slab; insitu concrete shear walls 8435 m ² @ 170			
Roof	214,400	25.42	1.55%
Inverted roof coverings, polymeric roof coverings, insulation; flashings and copings 1955 m ² @ 80 Mansafe system Item @ 15,500 Extra for polycarbonate rooflights; 800 diameter; flashings 15 @ 1,100 Allowance for entrance canopies Item @ 26,000			
Stairs	354,000	41.97	2.56%
Precast reinforced concrete stair cases; including fine smooth finish to exposed surfaces 6 @ 10,000 Balustrades, 1.1 m high, glazed with profiled timber handrails; average rate used 665 m @ 400 Profiled timber handrails 150 m @ 120 Miscellaneous metalwork; cat ladders; open mesh flooring in risers and so on Item @ 10,000			
External walls, windows and doors	1,525,700	180.88	11.02%
Aluminium faced multicoloured curtain walling; sealed double-glazed units; insulated composite cladding panels; secondary steel supports and internal proprietary liner panel 2520 m ² @ 320 Coloured render system on mesh, insulation, dpm and metsec backing wall 1260 m ² @ 210 Aluminium framed windows 95 m ² @ 360 Perforated clay tile rain screen cladding complete including vertical and horizontal support rails 1300 m ² @ 190 Entrance door unit; aluminium-framed glazed doors; automatic operation 2 @ 16,000 External doors; aluminium framed; polyester coated; to match windows 10 @ 3,100 Free-standing screens to roof plant; louvre panels as required 650 m @ 170			
Internal walls and partitions	600,000	71.13	4.33%
Concrete blockwork; head restraints, movement joints 2000 m ² @ 45 Plasterboard partitions; two layers of 12.5 mm wall board to both sides; including 25 mm insulation and skim coat finish 7350 m ² @ 55 Internal glazed screens; blinds 225 m ² @ 470			
Internal doors	424,800	50.36	3.07%
Flush doors; beech veneer; fire rated; solid core; veneered frame; vision panel and ironmongery; average rate for single leaf 325 @ 850 Glazed doors and screens; fire-rated; frames, fittings and ironmongery; average rate for double door in opening 2550 mm high 22 @ 3,000 Riser cupboard doors; beech veneer; fire rated 66 @ 1,250			
Wall finishes	174,000	20.63	1.26%
Emulsion paint to wall surfaces generally 17250 m ² @ 3 Ceramic wall tiling 150 × 150 mm 900 m ² @ 50 Single layer plasterboard dry lining 12.5 mm thick, to blockwork or metal studs 5150 m ² @ 15			
Floor finishes	496,200	58.83	3.58%
Screed; latex self levelling screed 15 to 25 mm thick 8435 m ² @ 12 Ceramic floor tiling 600 × 600 mm to ground floor atrium 435 m ² @ 100 Non slip vinyl sheet flooring; skirtings 315 m ² @ 36 Linoleum sheet; skirtings 1100 m ² @ 41 Carpet; softwood skirtings 5500 m ² @ 42 Carpet and nosing to stair cases serving ground to third floors 4 @ 11,000 Allowance for entrance barrier matting Item @ 20,000			
Ceiling finishes	276,400	32.77	2.00%
Suspended ceilings; 600 × 600 mm clip in metal tiles 4170 m ² @ 40 Plasterboard MF suspended ceilings and bulkheads; generally 1280 m ² @ 47 Plaster to soffit of reinforced concrete slabs 1900 m ² @ 16 Painting to plasterboard ceilings and bulkheads; generally 3180 m ² @ 6			

Costs	element cost	cost/m ² gfa £	% of total cost
Furniture and fittings	563,600	66.82	4.07%
Supply and install group one medical equipment (fixed furniture); fit only group two and three medical equipment (loose furniture): Reception area, desks and fixed furniture (average cost used) 13 @ 8000 Cafe, servery counter and fixed furniture, catering equipment by others 2 @ 9000 Waiting area 13 @ 1300 Consulting room 60 @ 1600 Treatment room 18 @ 1100 Podiatry 3 @ 3100 Dentistry 4 @ 25,000 Audiology 2 @ 30,000 Family room 12 @ 300 Office room 34 @ 200 Classroom 4 @ 900 Meeting room 14 @ 60 WC 27 @ 400 Records/store 12 @ 500 Utility room 9 @ 2000 Allowance for additional fittings and furniture Item @ 90,000			
Sanitaryware	166,000	19.68	1.20%
Sanitaryware generally 200 @ 830			
Disposal installations	98,500	11.68	0.71%
Waste, soil and vent pipework 200 @ 330 Extra for lift sump pumps Item @ 7200 Rainwater installation 8435 m ² @ 3			
Hot and cold water installations	335,200	39.74	2.42%
Cold water plant room installation; storage and booster unit 8435 m ² @ 6 Hot water plant room installation; gas-fired water heaters, pumps and so on 8435 m ² @ 11 Hot and cold water distribution pipework, insulation 8435 m ² @ 18 Allowance for water treatment Item @ 40,000			
Space heating, air treatment and ventilation	1,527,000	181.03	11.03%
Chilled water plant room installation; air cooled chiller; pumps, pipework distribution in plant rooms and risers Item @ 210,000 LTHW plant room installation; boiler and flue; pumps, pipework distribution in plant rooms and risers Item @ 79,000 Air-handling units; total combined capacity 10 m ³ /s; duct mounted heating and cooling batteries Item @ 83,000 Chilled water distribution; pipework; valves; insulation, trace heating 3900 m ² @ 55 LTHW heating; LST panels and trench heaters; pipework; valves; insulation 8435 m ² @ 31 Air curtains and door heaters; generally Item @ 11,000 Supply and extract ductwork installation serving active chilled beams 3900 m ² @ 43 Extra for enhanced attenuation measures in ductwork Item @ 16,000 Active chilled beam installation 3900 m ² @ 60 Thermal insulation to ductwork 8435 m ² @ 18 Allowance for packaged cooling systems to IT rooms Item @ 10,000 Allowance for dedicated ventilation systems (7 systems) Item @ 21,000 Dirty extract system 8435 m ² @ 8			
Electrical installations	945,100	112.05	6.83%
Incoming supply and main LV panel Item @ 48,000 Submains distribution, busbars in risers, distribution boards and isolators; including electrical supplies to main plant 8435 m ² @ 20 Lighting: standard luminaires, wiring, containment, accessories 8435 m ² @ 38 Allowance for emergency lighting 8435 m ² @ 6 Allowance for external lighting Item @ 28,000 General small power, including cabling, trunking and socket outlets 8435 m ² @ 35 Allowance for standby power and UPS Item @ 34,000			



Cost breakdown

The cost breakdown details a large joint service centre scheme housing GP, dentistry and social services in a single building located on a tight urban site. Gross floor area totals 8435 m² and the accommodation includes 60 consulting rooms. Internal circulation is a key aspect of the design and the building design is based on two wings of largely cellular space arranged around a top-lit enclosed "street", providing space for reception and waiting areas, cafes and other public facilities.

Because of the site conditions, much of the building is sealed and there is extensive ventilation and cooling based on the use of active chilled beams. The services installation also includes an extensive data infrastructure.

The ACAD diagnostic and treatment centre in north-west London, designed by HLM Design and Avanti Architects, employs airy circulation spaces and clear numerical signage



The costs also include for the supply and installation of fixed furniture, excluding loose furniture classed as group two and three medical equipment. Rates in the model are at fourth quarter 2005 price levels, based on a contractor's GMP contract, for a project let in outer London. Costs of demolition and site preparation, supply of type two and three medical equipment, external works and services, professional fees and VAT are excluded.

Rates in the model may need to be adjusted to account for specification, site conditions, procurement route and programme. Care should be taken in applying general location factors to health service projects with a high proportion of specialist systems and proprietary equipment.

Costs	element cost	cost/m ² gfa £	% of total cost
Gas installations	11,000	1.3	0.08%
Incoming gas supply, including steel pipework, valves and so on Item @ 11,000			
Lift installations	136,000	16.12	0.98%
Electric traction lift; 10 person; serving 4 floors 2 @ 30,000 Electric traction lift; 10 person; serving 6 floors 2 @ 38,000			
Protective installations	20,600	2.44	0.15%
Lightning protection system Item @ 8000 Earthing and bonding Item @ 12,600			
Communication installations	625,800	74.19	4.52%
Data and telephone pathway and cable infrastructure 8435 m ² @ 31 Fire detection and alarm system 8435 m ² @ 12 Security system; access control and intruder detection; wiring and equipment 8435 m ² @ 14 CCTV system Item @ 31,000 Patient call system; LED signboards Item @ 71,000 Public address system Item @ 10,000 Induction loop system Item @ 19,000 Video/display monitor system in public areas Item @ 14,000			
Specialist installations	378,300	44.85	2.73%
Building management and automatic control systems 8435 m ² @ 42 Gas scavenging systems to dental rooms Item @ 11,000 Compressor and vacuum installation to dental rooms Item @ 13,000			
Builder's work in connection	102,000	12.09	0.74%
Forming holes, chases and so on Allowance @ 2.5% Item @ 102,000			
Preliminaries and contingencies	2,513,000	297.93	18.14%
Management costs, site establishment and site supervision Contractor's preliminaries, overheads and profit @ 18% Item @ 2,040,000 Testing and commissioning of building services installations Item @ 70,000 Contractor's contingency @ 3% Item @ 403,000			
Total construction cost – building only	13,845,300	1641.43	100.00%

Location factors

The cost breakdown is based on a price levels current in outer London and should be adjusted by the following location factors for schemes in other regions. Care should be taken in applying location factors to projects with a high proportion of specialist systems and proprietary equipment.

Inner London	1.06	Yorkshire and Humberside	0.90
Sout-east	0.98	North-west	0.92
South-west	0.93	Northern	0.92
East Midlands	0.90	Scotland	0.89
West Midlands	0.90	Wales	0.89
East Anglia	0.95	Northern Ireland	0.75

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