An Evaluation of the Practices of, and Barriers to, Continuous Improvement through Learning on NHS LIFT Projects

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Abstract: The Department of Health (DoH), which is responsible for maintaining the overall health of people living in England through the National Health Service (NHS), introduced the Local Improvement Finance Trust (LIFT) initiative in 2000 to reverse the declining state of primary care infrastructure. The initiative involves partnerships between diverse public and private sector organisations to deliver improvements in facilities that will be suitable for modern primary and social care services over a 20 – 25 year period. The initiative contractually demands for continuous performance improvement from the demand and supply sides, but the attainment still remains elusive.

This paper is aimed at describing the investigation into the practices of, and barriers to, the achievement of continuous improvement through learning on NHS LIFT schemes. The investigation is part of a study aimed at developing a continuous improvement framework that will ensure that current and relevant knowledge is captured and reused during the execution of long-term partnering (LTP) relationships. The methodology adopted for the investigation involved semi-structured interviews with ten senior officers of six organisation working across three LIFT schemes following the review of relevant literature.

The study revealed that *ad hoc* procedures were mostly used for capturing lessons learned during the planning and implementation of the various LIFT projects. Although a variety of techniques and few technologies were being employed in capturing relevant project knowledge, the study revealed that the reuse of the captured knowledge have been largely ineffective. The key barriers to the achievement of continuous improvement on NHS LIFT projects identified include distrust and lack of mutual understanding, difference in *modus operandi* and timeframes of the key participants, lack of clarity and communication, lack of appropriate skills and competencies; and adversarial contexts.

Keywords: Barriers, Continuous improvement, Learning, NHS LIFT, Primary care, Social care.

1. Introduction

Although about ninety per cent of patients' contact with the National Health Service (NHS) is for primary care services, investments in the sector were on a fragmented and piecemeal basis and characterised with many small-scale developments (National Audit Office (NAO), 2005). As a result, the quality and condition of many primary care buildings has been poor and unsuitable for the delivery of modern care services. The most recent survey data from the Department of Health (DoH) revealed that as at 2000 only 40% of primary care premises

were purpose-built; almost half were either adapted residential buildings or converted shops; less than 5% of General Practitioner (GP)'s premises were co-located with a pharmacy and around the same proportion were co-located with social services; and around 80% were below the recommended size (DoH, 2000).

The DoH announced the establishment of the local improvement finance trust (LIFT) in 2000, a major new initiative of sustained investment, to reverse the declining state of primary care infrastructure across England. One of the key objectives of the initiative is to bring together the various local stakeholders, interests and users that comprise the local health economy in order to seek to remedy some of the deficiencies in the existing arrangements and contribute to delivery of the investment targets identified within the NHS Plan.

The execution of LIFT schemes involves intricate processes and complex interactions amongst and between large supply chains with constantly changing members depending on which public sector participant commissions the project. Communication of vital knowledge and information between the different stages of these projects and across the disparate groups that are involved offers a significant challenge in terms of efficiency, effectiveness and interface management. The attainment of the contractual requirement for both the demand and supply sides to continuously improve performance also remains elusive (NAO, 2005). Specifically, the NAO report was critical about the inconsistencies in the evaluation and performance measurement arrangements, and emphasized the need for strengthening the accountability framework.

Moreover, the argument that the transient and often one-off nature of construction project teams is the major disincentive for structured capturing and reuse of relevant knowledge generated during project executions cannot apply to long-term relationships such as the LIFT schemes. Nonetheless, the call for capturing and reusing construction project knowledge in future phases and projects has attracted varied responses from the academia and industry. On the one hand, researchers and practitioners have searched for related good practices that have been successfully adopted and implemented in other industries, principally from manufacturing and to a lesser degree the service sectors. The underlying assumption being that borrowing something that has gained acceptance in other industries, rather than inventing a new solution, is easier to exploit (Towill, 2003). On the other hand, good practices originating from other industries or other construction projects have been rejected on the basis of being inappropriate because the characteristics of construction and of each project are perceived as "unique". While these two contrasting views may not be necessarily mutually exclusive, the authors have adopted Lillrank's (1995) suggestion that good practice adopted elsewhere can be exploited, provided that it is sufficiently adapted to the new situation.

1.1 Aim of the paper

The study reported in this paper is part of a research aimed at developing a continuous improvement framework that will ensure that current and relevant project knowledge is captured and reused during the execution of long-term partnering (LTP) relationships. The study focuses on the strategic partnerships involving public and private sectors in the development of primary and social care facilities and services under the NHS LIFT programme as typical LTP relationships. However, this paper is aimed at investigating the barriers to achieving continuous improvement on the LIFT projects.

2. Research Methodology

Following an initial literature search and preliminary interviews to familiarise the research team with recent work carried in related areas and industries, and on the background of the LIFT programme, the research adopted a qualitative research methodology in order to gain a detailed insight into the current practices. The approach involved semi-structured interviews with ten senior staff from six organisations working on three LIFT schemes. Six of the interviewees were from the public sector and include three Project Directors, two Project Managers and one Director of Primary Care from a lead PCT; while the remaining four were from the private sector and include a *LIFTCo*. Chair, a *LIFTCo*. General Manager and two external advisers. The three LIFT schemes had varying characteristics both in terms of the size and mix of stakeholder composition and project sizes, as summarised in Table 1.

Table 1: Characteristics of the LIFT schemes involved

Scheme	Number of Public sector organisations in LIFTCo.	Total cost of projects under 1st tranche
1	8 (4 PCTs, 3 LAs and 1 NHS Trust)	£20.39 million
2	12 (6 PCTs, 3 LAs, 2 NHS Trusts, and 1 Ambulance Service)	£45.6 million
3	5 (4 PCTs and 1 LA)	£34.75 million

Additional supporting documentations were also provided and used as supplementary information, and these were analysed and evaluated. Whilst the authors have sought to be fair and accurate in conveying the informants' responses, it should be noted that the sample size is relatively small and thus, the findings may not be necessarily reflective of the entire LIFT programme at large.

3. The Local Improvement Finance Trust (LIFT) initiative

The local improvement finance trust (LIFT) is the new approach designed by the DoH to deliver a step change in the quality of community-based primary and social care facilities and services. According to NAO (2005), the aims of the initiative include helping in:

- bringing significant improvements to the GP premises;
- supporting co-location of healthcare professionals;
- forging links between primary and social care;
- indirectly resolving GP recruitment and retention problems;
- shifting services away from the secondary care level;
- assisting in achieving good chronic disease management; and
- enhancing "Patient Choice" by providing patients with more choice over how, when and where they receive treatment.

Under the initiative, the DoH has provided a start-up fund of £195 million and aims at leveraging up to £1 billion of private investment in primary care between 2000 and 2010 (DoH, 2001). To date, 51 LIFT schemes have been approved in four waves. All the 42 schemes under the first three waves have reached financial close, and several are proceeding

towards second and subsequent financial closes, with a total capital value (for initial buildings) of over £700 million (DoH, 2005). As at December 2005, almost 50 facilities have become operational, and over 50 more are expected to open in 2006 (DoH, 2005).

3.1 The Structure of LIFT

Under the LIFT initiative, the DoH has established a national joint venture, *Partnerships for Health* (PfH), with Partnerships UK plc (PUK). For each locality, a *private sector partner* (PSP), a consortium of diverse specialties, is identified through a competitive procurement and then a local joint venture, LIFT Company (*LIFTCo.*), established between the local stakeholders (such as Primary Care Trusts – PCTs and the Local Authorities – LAs), PfH and the PSP. Figure 1 shows the structure of a typical LIFT and the recommended shareholding limits.
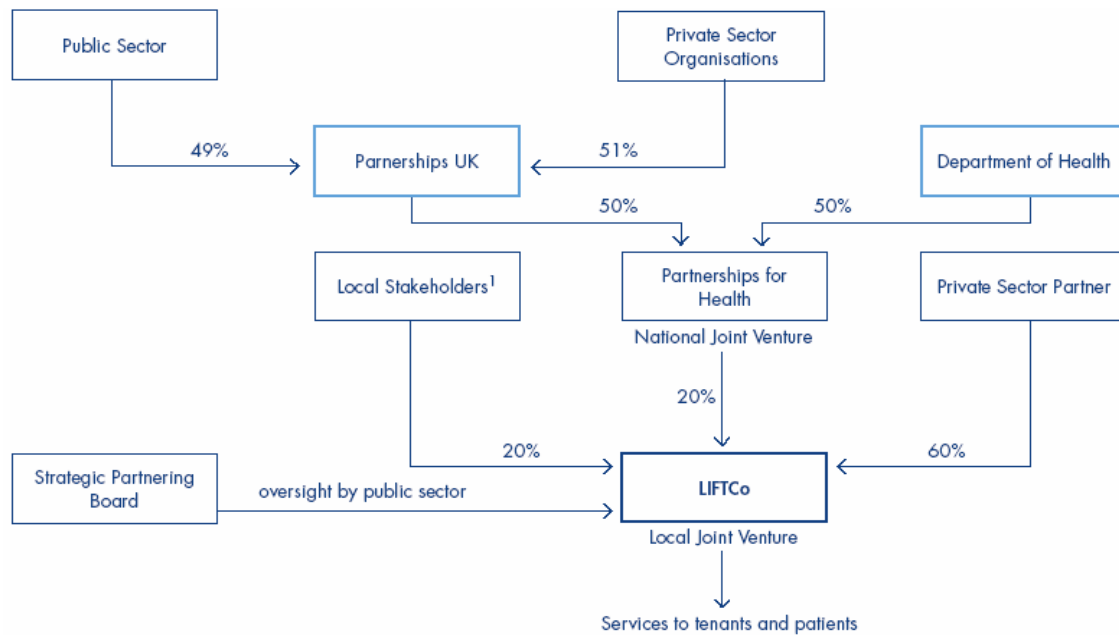

Figure 1: Structure of LIFT (Source: National Audit Office (NAO), 2005)

The *LIFTCos*. are set-up as Public-Private Partnerships (PPPs) in the form of limited liability companies under Strategic Partnering Agreements (SPAs) to deliver investment and services in local care facilities over the 20 - 25 year periods. The public sector *Strategic Partnering Boards* (SPBs) formed between the core statutory bodies in the local health and social care community (i.e. PCTs and LAs) and representatives of other interests (such as medical and dental practitioners, and voluntary sector groups) are responsible for monitoring the performance of the *LIFTCos*. and for identifying their future workloads. Each *LIFTCo*. has the exclusive right to provide new primary and social facilities and/or services commissioned by the public sector participants within its locality so long as the SPB is satisfied that the proposals meet the approval criteria and the participant's key requirements; i.e. are affordable and demonstrate value for money (VFM).

4. Continuous improvement

The continuous improvement philosophy adopts the stance that creating a development process is never completed (Oakland, 1995) and that improvements only occur if attempts are made to learn from new information generated by the process itself rather than the product (Cooper et al, 2005). The process is commonly associated with the *plan-do-check-act* (PDCA) cycle, with each phase of the cycle playing very important role in sustaining improvement in an ongoing fashion. Tenant et al (2002) recommended the development of an organisational culture and management style to support the continuous improvement of daily working practices, management of change against the achievement of appropriate quality targets, and training of teams in problem solving, use of quality tools and techniques. Although LIFT is "local" by nature and operates under varying social and economic landscapes thereby creating difficulty in applying lessons learnt elsewhere without appropriate contextualisation, construction projects are largely similar at micro level in terms of processes and resources. Consequently, some of the lessons and knowledge generated during their execution can be reused in future phases and projects. Tan et al (2005) identified the types, nature and characteristics of project knowledge that can be reused, and are grouped into the following categories:

- *Process Knowledge* – This is the knowledge pertaining to the execution of various stages of a construction project. The types of reusable project knowledge belonging to this category include briefing, design, tendering and estimating, planning, construction methods and techniques, and operation and maintenance knowledge.
- *Knowledge of Clients* – This covers the knowledge about clients' specific requirements, their internal procedures and business.
- *Costing Knowledge* – This knowledge is about the costs of alternative forms of construction and the whole life cost of an asset.
- *Knowledge of Legal and Statutory Requirements* – Regulatory requirements change over time. This knowledge covers the requirements and responsibilities imposed by regulations and the best practices to address these requirements.
- *Knowledge of Reusable Details* – Reusable details comprises standard design details, specifications and method statements. These details may be reused with adaptations. They help to avoid recreating similar details from scratch and also lead to time and cost savings.
- *Knowledge of Best Practices and Lessons Learned* – These are the proven ways of working that contribute to the success of projects, and the mistakes made that must be avoided in future projects.
- *Knowledge of Performance of Suppliers* – The suppliers referred to are consultants, contractors, subcontractors, material suppliers and others who have contributed services or goods to a project. The capture of this knowledge facilitates better selection of suppliers for future projects.
- *Knowledge of Who Knows What* – This is the knowledge on the skills, experience and expertise of each of the members of staff. It helps to locate the right people with the right knowledge for the sharing of knowledge, particularly the tacit knowledge which is difficult to codify.
- *Other Types of Knowledge* – This knowledge category includes knowledge about competitors, risk management, key performance indicators, and other specific types of key knowledge.

The approaches used for capturing and sharing knowledge has been categorised as Knowledge Management (KM) techniques (non-IT tools) and KM technologies (IT tools) (Al-Ghassani, 2003).

4.1 KM technologies

KM technologies, such as custom-designed software applications, can be very useful for capturing and sharing explicit project knowledge and help in connecting people who are geographically dispersed (Tan et al, 2005). For construction projects, examples include groupware such as Lotus Notes^{TM} which can facilitate the storage and dissemination (via the notice board function) of information and codified knowledge (such as the most up-to-date regulatory requirements and standard procedure for design). Another common groupware used is the IBM Quickplace^{TM} which is also used to enhance the interactions and communication between the project participants. Project extranet is another technology that can provide a platform for effective sharing of project information between project participants that may be geographically dispersed.

4.2 KM techniques

KM techniques such as post-project reviews, trainings, meetings and documentations of standard procedures remain important in the capture of reusable project knowledge (Al Ghassani, 2003). These approaches depend heavily on face-to-face interactions and are mostly restricted to the project participants that are co-located in the same office or organisation. Consequently, their efficiency and effectiveness are greatly undermined when project participants are geographically dispersed.

5 Interview Results and Discussion

In analysing the interviews, opinions are categorised and comparisons are made across the three schemes. Where applicable, differences in opinion between those from the public and private sectors are also highlighted. In complying with the confidentiality requirements, the authors have as much as possible tried to keep the views anonymous.

5.1 Practices of Continuous improvement

Many of the interviewees acknowledged that due to lack of effective coordination between the strategic and operational levels of management, the benefits of long-term partnerships were been inhibited. Across the three schemes, although the interviewees recognised the importance of learning from project-to-project and from other schemes, there were no any formal structures to facilitate effective knowledge sharing or capturing in the format that it can be effectively re-used in subsequent phases or projects. Lessons learnt reviews were carried out at both strategic and operational levels in one of the schemes, but the reviews were restricted to the commissioning process only. The schemes have been generally more of inward-looking relying on reflective and audit trailing techniques through the governance departments but the interviewees also recognised the need to go broader by encouraging learning from other LIFT schemes and through the use of a more systematic and structured

approach. One of the interviewee opined that *"by holding meetings within the LIFT buildings, a lot of lessons for improving the future schemes can be generated"*.

The interviewees also acknowledged that there is no single technique or technology that is sufficient or capable of meeting all the requirements of capturing and sharing knowledge in any project or from project to project.

5.2 KM technologies

The interviews reveal that the Activity DataBase (ADB), a briefing, design and equipping package, is being used to provide the PCTs, Architects, health planners and consulting engineers with access to an integrated database of healthcare built environment data. The ADB uses its internal graphical editor and interface with AutoCAD to provide data in both textual and graphical formats. Although two schemes have project websites, they are not used as a platform for exchanging project information and knowledge between the participants. It was also established that some of the individual organisations use some form of common platform for internal sharing information, but there was no reported use of any other groupware or custom-designed software application for sharing and capturing project knowledge across the participating organisations working on a project

5.3 KM technologies

Although they were mainly used to satisfy contractual requirements, post-project reviews were being conducted on the projects under the three schemes within six months after the buildings have been opened. The scope of knowledge aimed to be captured in the reviews is usually wide and include various types of project knowledge, and are represented in the forms of best practices, lessons learned, do's and don'ts. Overall, only one scheme followed a systematic procedure for assessing lessons from all the stakeholders through the project life cycle using the in-house project assurance framework and through the Office of Government Commerce (OGC) gateway reviews. The reviews undertaken by the other two schemes were rather uncoordinated and *ad hoc* covering both strategic and operational levels. Post-project reviews however do not generally facilitate the effective sharing of the learning/knowledge captured because the reports are often not in the format that the lessons can be easily reused. Also, the time lapse between the discovery and creation, and the capture and sharing of knowledge leads to loss of important insights and does not allow the current project to benefit from it. Moreover, the reviews were mostly undertaken at such times that the useful lessons may have been forgotten or the projects participants have moved out of the partnership or have been tied up with pressure of other projects.

5.4 Future-proofing of facilities

Furthermore, since one of the central objectives of LIFT is to move down a number of services that are currently being provided at the secondary care level to the primary care level, it is necessary to create facilities that are relatively flexible and easy to adapt to meet the requirements of the evolving service needs. This would require both innovative design techniques and the use of modern and sustainable construction methods and materials. However, the interviewees across the three schemes indicated that inadequate attention was paid to the exploration of effective future-proofing of the facilities. The current practices rely

on dealing with the flexibilities through equipment and workforce reconfiguration rather than through the walls. The approaches involve the construction of some multi-purpose rooms where a number of procedures can be undertaken, and through creation of flexibilities in working hours of staff and introduction of hot-desking in the use of the facilities.

5.5 Barriers to achieving continuous improvement on LIFT projects

The key barriers identified by the interviewees, which if removed are capable of improving performance and facilitating continuous improvement, include:

1.   Distrust and lack of mutual understanding

These two themes of distrust/suspicion and lack of mutual understanding were interwoven in most responses, often leading to other obstacles. For example, as one interviewee put it, *"there can be lack of information and discussion due to lack of trust – if nothing is shared in the partnerships, then they are not really partnerships"*. Another commented that: *"understanding the other sectors is sometimes the biggest issue. One example is where the public sector partners are unable or unwilling to talk about the 'commercial concerns' or when the public (especially civil society organizations) thinks that the profit-motive of the private sectors that stake enormous resources over a long period of time is 'evil', these can get in the way of practical cooperation"*.

2.   Different *modus operandi*

Linked to lack of mutual understanding is the fact that there is often what one interviewee described as: *"'culture clashes' caused by different methods of working, different accountabilities, and divergent objectives"*. Another interviewee expressed concern over the on-going reforms in the NHS which has created in a situation: *"where people spend more time in understanding the requirements and impact of the reorganisation than doing the work, and these often results in frustration"*.

3.   Different time-frames

A number of the interviewees spoke about the frustration of partners operating on different time-frames. One interviewee commented that: *"the 'lead time' is often so different between each of the sectors that this can lead to problems. For example, the private sector partner tends to be slow to move up to the point that it has made a decision and then it wants action and delivery instantly, whereas the public sector is often quick to engage but then gets stuck in bureaucracy and it can take a long time to get funding even when they are committed in principle and the funding is technically available"*. Another interviewee commented that: *"partners do not always appreciate or have sufficient patience for the time commitment that is needed to make partnerships work effectively"*.

4.   Lack of clarity and communication

The lack of clearly defined or communicated goals, roles and responsibilities was another obstacle cited by many of the interviewees. According to one interviewee, *"failure to agree all the difficult details ab initio can be a major obstacle"*.

The lack of clarity can lead to differing analysis of what each partner can, or should, bring to the table, and unequal or unmet expectations. Most of the times also, there is dearth of adequate operational policies that reflects demographic and service requirements over time.

5.   Lack of appropriate skills and competencies

Insufficient or inadequate skills for building effective partnerships were cited as another obstacle. The necessary skill sets and competencies cited by the interviewees ranged from technical and managerial to behavioural and attitudinal. They included: expertise in healthcare, development, design, construction and facilities management, sound project management, ability to tackle unconventional problems, analytical ability, results-orientation, good at risk analysis, visionary and leadership skills, cultural sensitivity, transparency, creativity, flexibility, willingness to compromise, diplomacy, commitment, patience, empathy, negotiation, mediation and facilitation abilities, collaborative mindset, strategic thinking, interpersonal communications, strategic thinking, coaching and capacity building skills, and broader understanding of politics, global issues and the environment.

Furthermore, although independent advisors for design, QS, legal and financial advisors have been appointed on all the schemes, there were inadequate healthcare professionals with the right planning skills to support the recent changes in the NHS. One of the interviewees remarked that: *"the current crop of health planners do not possess the required expertise to support the reforms taking place in NHS, and so there is a dire need for new talents"*.

6.   Adversarial context

Finally, there are the obstacles created by the broader enabling framework. Besides the legal process is often time consuming and costly. One of the interviewees commented that *"the context in which the partnership operates is critical. If the local environment - political, social, and economic - is not conducive to growing the partnership, it has little chance of succeeding. Moreover, since the challenge of sustainable development is a complex one, where results may take five to ten years to manifest themselves, a stable environment is important"*.

Other interviewees spoke explicitly about demands from government and public in the face of constantly changing policies and non-inclusion of the other supply chain partners under the partnering ethos as major obstacles to building effective and long-term partnerships.

6. Conclusions and Recommendations

This paper describes the investigation of the practices of, and barriers to, the achievement of the contractual requirement for continuous improvement on NHS LIFT schemes. The methodology adopted for the investigation involved semi-structured interviews with ten senior officers of six organisation working across three LIFT schemes.

Given the long-term and partnership features of the LIFT initiative, the interviewees advocated that the project participants need to devise ways of learning from current practices in order to be able to continuously improve the performance of current and future projects. However, the study revealed that *ad hoc* procedures were mostly used for capturing lessons learned during the planning and implementation of various LIFT projects. Although a variety

of techniques and few technologies were being employed in capturing relevant project knowledge, the study revealed that the reuse of the captured knowledge have been largely ineffective. The key barriers to the achievement of continuous improvement on NHS LIFT projects identified include distrust and lack of mutual understanding, difference in *modus operandi* and timeframes of the key participants, lack of clarity and communication, lack of appropriate skills and competencies; and adversarial contexts.

The study noted that the success of the partnership would depend on the achievement of a balanced position that recognises both the needs of the public sector, for example in securing long-term value for money (VFM) and proper accountability, and the needs of the private sector to be able to, for example achieve a reasonable commercial return on investment and to manage risks that it will be taking.

The study also recommended that it would be beneficial to develop templates for capturing relevant project knowledge generated while conducting the strategic reviews at the appropriate process stages, and in a format that can facilitate their reuse in subsequent phases or projects. The interviewees also recommended that the following considerations can immensely facilitate the mitigation of the identified barriers:

- openness, transparency and clear communication to build **trust** and **mutual understanding**;
- **clarity** of roles, responsibilities, goals and "ground rules";
- commitment to **core organizational competencies**;
- application of the same **professional rigour and discipline** focused on achieving targets and deliverables that would be applied to governing, managing and evaluating the partnerships;
- **respect** for differences in approach, competence, timeframes and objectives of the different partners;
- focus on achieving **mutual benefit** in a manner that enables the partners to meet their own objectives as well as common goals of the projects; and
- understanding the **needs of local partners and all users**, with a focus on **building their own capacity and capability** rather than creating dependence.

6.1 Future Works

As part of future works, the research will develop the following:

➢ a process map for the LIFT procurement process showing clear information flows, deliverables, approval and strategic review points; and identifying the appropriate skills mix (in terms of roles and responsibilities) that are required to satisfy each of process activities;

➢ templates for capturing relevant project knowledge generated while conducting the strategic reviews at the appropriate process stages, and in a format that can facilitate their reuse in subsequent phases or projects; and

➢ a comprehensive continuous improvement framework.

The proposed framework will provide a platform on which learning, followed-through from planning, design and construction into occupancy, and post occupancy could become a natural part of project delivery.

7. Acknowledgements

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