

Contested Affordance of a Corporate Change Programme

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Introduction

This paper addresses three phenomena of interest to organizational scholars and practitioners: corporate change programmes; new forms of organising; and knowledge processes in and around organisations. It does so using a case study of the Leicester Royal Infirmary, a large UK NHS teaching hospital, that gained the status of innovator in its sector through the introduction of a reengineering change programme. Business process reengineering (BPR) was involved within senior managers' action designed to meet intensifying demands upon the hospital related to the volume, quality, and efficiency of patient care. As a national pilot site, reengineering was subject to in-depth, empirical analysis between 1995 and 1998. Fuller accounts of the study are provided elsewhere (McNulty and Ferlie, 2002; Bowns and McNulty, 1999) but this account is distinctive as it utilises recent developments within the knowledge-based view of organisations to understand the implementation and impact of reengineering.

Attention to the processes and effects of reengineering uses perspectives that regard knowledge as resource and social process (Eisenhardt and Santos, 2002). From a 'knowledge as resource' perspective reengineering is seen as so-called best-practice knowledge imported into the hospital by senior management to enable superior corporate performance. On the other hand the implementation and impact of reengineering is understood more from the perspective of knowing as a social process in local settings. The distinction between knowledge and knowing and the concept of dynamic affordance (Cook and Brown, 1999) are used within the paper to reveal how the adoption of reengineering was problematic in practice. The reengineering change programme was characterised by plural meanings and contested interpretations of process redesign. Indeterminate core organisational processes, as well as highly contentious patient process redesign interventions suggest the explicit knowledge and prescription of reengineering (Hammer and Champy, 1993) to have been of limited value as an aid to redesign organizational and healthcare processes in this context. Over time, knowing, analysed through redesign interventions and interactions, was more guided by tacit knowledge informed by structural and relational dynamics within the hospital – notably the organisational structure of clinical directorates and clinical specialties and the inability of managers to direct change in organisation and practice within clinical domains. In effect, reengineering was mediated by powerful actors receiving and negotiating reengineering interventions in view of managerial and professional jurisdictions. The associated impact of reengineering was found to be less decisive and more locally variable across the many clinical settings within the hospital than was hoped for at the outset of the change programme: second-order rhetoric gave way to first-order impact that largely converged with established organisational form and performance.

Theoretically, the perspective of knowledge as a transferable objective resource is revealed as limited in practical and theoretical utility. This case encourages a more socialised approach to understanding organisational change and knowledge processes. Specifically, within the developing knowledge based view of organisations the case supports explicit attention to structural and relational dynamics at multiple-levels of analysis to reveal plurality and politics as important influences on organisation learning and knowledge processes. As a more substantive contribution, the case counters hype about the possibilities for effecting big bang-change in organizational form, process and performance. The impact of reengineering

contributes to other evidence that casts doubt on the efficacy of change programmes based on assumptions of relatively unproblematic transfer of ideas and explicit knowledge. The paper is also a novel and additive contribution to our understanding of new forms of organising (Pettigrew and Fenton, 2001). Taking BPR as a high-profile example of a 'process perspective' of organising the paper sheds further theoretical and empirical insight into the development of new organisational forms in practice. The difficulties in this case have important implications for the practice of public health policy in the UK and beyond. Calls to improve integration in the organisation and delivery of public services in several countries resonate with a process organisation ideal articulated by those organisation theorists and practitioners whom pursue greater organisational effectiveness through seamless organising processes. However, this study reveals considerable challenges in effecting a shift from a functional to a process logic of organising (Denison, 1997).

Reengineering as Organizational Form and Change Programme

An underlying transformation process involving a shift from a physical to an information-intensive economy is ongoing implying bureaucratic fragmentation and new organizational forms (Child and McGrath, 2002). Whilst some argue that there is no clear paradigm of future organisation (Djelic and Ainamo 1999), others observe a 'process perspective' emerging as a major challenge to 'functional' principles of organising adhered to for the best part of a century (Denison, 1997). Denison's thesis is that the classic functional approach to organisational design assumed value creation and has as its principal concern resolution of coordination problems associated with enhanced scale of production and attainment of economies of scale. By contrast, 'process-organisation' is one wherein the primary issue of organisational design is creating value, through a relatively non-hierarchical, lateral, coordination of a chain of events taking place inside and outside the boundaries of formal organisations. Organising is understood not as a series of functional units or business units but as a collection of interrelated processes that create value.

Business Process Reengineering (BPR), defined as 'the fundamental rethinking and radical redesign of business processes to achieve dramatic improvements in critical contemporary measures of performance such as cost, quality, service and speed' (Hammer and Champy, 1993:32) is considered to be one of the most high profile ideas related to process organisation (Denison, 1997). BPR established its place in the organisational literature of the 1990's as both a new organisational form and means to effect organizational transformation. Hammer and Champy (1993) prescribe core business process redesign as the central element of an overall change methodology that is: objective and outcome focused; a fresh start; holistic; radical and rapid; and driven from the top-down change down using a process team-infrastructure. Such advice moved Pettigrew (1998) to observe BPR as the latest focus for change programmes which represent focused, often high investment attempts to create system-wide change using pre-packaged products and technologies (Pettigrew, 1998:273).

This prescription resonates with views of knowledge as a transferable resource (Eisenhardt and Santos, 2002). Disappointing results of change programmes and BPR in practice provide pause to reflect on assumptions of knowledge transfer and diffusion implicit in the phenomenon of change programmes. Contemporary theoretical developments are becoming more inclined to understanding organisational learning and knowledge as social processes between individuals and groups influenced by situation and context (Child and Heavens, 2001; Nonaka, Toyama,

Byosiere, 2001; Cook and Brown, 1999). A more socialised understanding of processes of organizational innovation, learning and knowledge creation is less inclined to take-for granted processes of knowledge transfer and creation.

Perspectives on Knowledge

Within a review of literature that comprises a knowledge-based view of the firm, a distinction is drawn between viewing knowledge as resource and a process of ongoing social construction (Eisenhardt and Santos, 2002). The former is adjudged the dominant perspective implying knowledge as an "...objective and transferable resource". The latter is considered a newer and challenging epistemology that seeks to understand knowledge as socially constructed in context. Given this paper's attention to the importation and impact of reengineering with a hospital we are encouraged to utilise insight from both perspectives whilst being most sympathetic to this newer critical perspective and the particular contribution of Cook and Brown, (1999).

Nonaka's work with Takeuchi (1995) and Tyoama and Byosiere (2001) theorises knowledge creation as a multi-layered dynamic social process involving interactions between individuals employing explicit and tacit knowledge. The former is expressed and experienced as formal objective knowledge, specified and context-free, for example, data and formulae. Tacit knowledge is more subjective, personal, rooted in action, procedures and routines. Interaction ('*Ba*') is the foundation of knowledge creation, providing the context or space in which knowledge is shared, created and utilised. Knowledge assets are shared, converted and amplified in a knowledge spiral involving processes of socialisation, externalisation, combination and externalisation (SECI).

Though sharing the same overall perspective on knowledge Cook and Brown (1999) by contrast, regard tacit and explicit knowledge at both individual and group levels as distinct, irreducible forms of knowledge and hence reject the idea of knowledge creation as a process of conversion between types of knowledge. They also contend that not everything individuals do is explicable in terms of the knowledge they possess and that human action does epistemic work of its own. Their theory of new knowledge creation is thus articulated as a 'generative dance' whereby new knowledge is created through the use of knowledge as a tool of knowing in situated interaction within the social and physical world (1999:383). Knowledge in itself does not enable knowing but does provide tools to use in addressing a problem at hand, in interacting with it. Accomplishment requires interaction between knowledge we possess and the activity, with the activity itself as a form of knowing because it is action or practice doing its own epistemic work distinct from the knowledge we possess. Cook and Brown's theory of knowledge is thus rooted in understanding the interaction between knowledge possessed and materials associated with the social and physical world. This epistemology is one that suggests that which we can do and that which we can know are not discovered through abstract experiment but through concrete interaction with the social and physical context or circumstances as a given time. In this way we encounter 'facilities' and 'frustrations' that are properties not of the world but our interactions with it. The concept of 'dynamic affordance' directs attention to situations, materials or designs as resources that afford doing something in interactions with them. Without the dynamic affordance of that interaction there is no learning or enactment of what is learned. Dynamic affordance is what becomes possible when knowledge is used as a tool in the context of situated activity. Interaction dynamically affords both the acquisition of knowledge and the use of knowledge. Once acquired it does epistemic work that

knowledge alone cannot do. Effective interaction with the world requires “honouring” its constraints, discovering what is possible and what is not possible. Dynamic interaction with the world opens up the realm in which knowing takes place: the activity of addressing facilities and frustrations dynamically affords knowing and plays an enormous role in how knowledge (tacit and explicit at individual and group levels) is generated, transferred and used in organisations. This reciprocal interplay between knowledge and knowing bridges epistemologies of possession and practice which is at the heart of the ‘generative dance’.

Combining insight from both perspectives points to a need for this study to address interaction between reengineering as explicit knowledge and organisational context. In particular at how individuals and groups may receive a reengineering change programme in the context of their skills, experiences, sensitivities and negotiate what this means for them, their functioning, further relations and action (Cook and Brown, 1999). Also, how interaction is mediated through organisations’ embedded structural and relational dynamics (Child and Heavens, 2001). The next section thus looks closely at the sector and organisation of central interest in this paper: namely the UK public sector and National Health Service. In short, the sector is presented as highly institutionalised, plural and differentiated contextual conditions.

The Hospital Context: Structural and Relationship Dynamics

Interest in new forms of organising is not confined to the private sector (Ferlie et al, 1996; Powell et al, 1999). The rise of the New Public Management marked a radical break from the old models of Public Administration in its attention to extend managerialism and markets within public services (Ferlie et al, 1996) involving for some convergence with private sector models of management (Dunleavy and Hood, 1994). Movement has been faster in healthcare than other parts of the public sector. Nonetheless, the NHS continues to be strongly located within the public sector and retains a high political profile.

Research about previous policy related attempts over the last decades to change organisation and management processes within health services confirms the durability of local endogenous conditions and arrangements in the face of exogenous pressure for change. As key institutions within the public health sector hospitals operate with dual organising structures that seek to accommodate values of clinical autonomy and managerial control. Large acute teaching hospitals (such as the one studied later in this paper) are organised using a dual structure of clinical directorates and specialties. Clinical directorates are managerially inspired groupings of clinical specialties and service inputs, that seek to link previously unaligned processes of service provision and resource management through explicit business planning and the greater involvement of clinicians within management (Kitchener, 1999; Whittington, McNulty and Whipp 1994). On the other hand, clinical work is organised around specialties that have evolved around anatomical divisions, organs, medical technologies, or patient age groups (Montgomery 1990). Clinical directorates and specialties represent partly complementary and partly conflicting organising logics (Watson, 1994) wherein the mixed ethos of managerial control and clinical autonomy ensures the potential for conflict is high. It is unsurprising to find behaviour within institutions of healthcare often conceptualised in terms of conflicting cultures, values and ideas between managerial and clinical individuals and groups.

Notwithstanding, the new public management there remain some important limitations to managerial control with doctors’ remaining as powerful players, both individually and collectively at hospital level, preserving much control over processes

of admitting, treating and discharging patients (Harrison, Hunter, Marnoch and Pollitt, 1992:18). Such processes are laced with professional competition, collaboration and power differentials. Clinical task specialisation is both a cause and effect of inter and intra profession competition over work jurisdiction (Abbott, 1988). Within healthcare many different professional groups collaborate and compete at national and local levels for turf and professional 'jurisdiction'. Jurisdictional ambitions contain three claims: claims to classify a problem (diagnosis); claims to reason about it (inference) and claims to take action on it (treatment). Within hospitals, doctors not only control the flow of work, but also differentiate themselves into segments (clinical specialties) and resist managerial attempts to make their activity predictable, transparent and standard. Moreover, jurisdictional overlap between the clinical professions is intensified in large and complex hospitals (Abbott 1988: 64-67), and becomes apparent at interfaces between different patient segments or groupings. The extended range of clinical and managerial groups manifest in multiple directorate and specialty organising arrangements of hospitals complicates attempts to introduce managerially sponsored innovations, as there are many different and competing professional lobbies to negotiate with. Trends within medicine towards ever-greater specialisation as the clinical knowledge base expands intensifies the organisational problem of how to reengineer work processes and service provision across a growing number of clinical specialties each of which displays occupational and resource jurisdictions (Abbott, 1988).

These structural and relational dynamics present a very challenging set of conditions for ambitions to effect a reengineered, 'process'-organisation form. Prospects are perhaps encouraged by a hybrid bureaucracy, containing empowered professionals with considerable decision-making discretion, organised around distinctive competencies requiring collaboration across jurisdictions. On the other hand, it's an embedded sector, highly bureaucratised, with plural jurisdictions operating at the interface of multiple boundaries. Much professional work is based on explicit and tacit forms of knowledge that resist easy formalisation and rationalisation. Management cannot direct and manage processes of learning and knowledge creation in ways implied by theories of organizational learning and knowledge (Child and Heavens, 2001; Nonaka et al, 2001). Rather, management plays a modest facilitative role rather than a directive function and has by itself little power to impose radical change. In clinical domains, real power continues to rest with a loose coalition of local clinical groups that are engaged in the incremental development of their own services, so that macro or strategic organisational change across such groups remains highly problematic. Task differentiation and specialisation – values challenged by the process organisation ideal – are core aspects of the dominant professional ideology. Changes to roles and boundaries implied by reengineering are likely to promote jurisdictional disputes of a managerial and clinical kind at the local level. To summarise, the paper has so far introduced reengineering as a resource to effect radical change in organizational process and performance. The remainder of the paper will present data about the introduction of reengineering into a hospital setting utilising developments within the knowledge-base view that suggest this approach to knowledge maybe partial, mechanical and reductionist (Eisenhardt and Santos, 2002).

Research Site and Process

As a flagship experiment in reengineering within UK healthcare, the study was funded from within the Department of Health. The evaluation contained both qualitative and quantitative components, the latter conducted by health economists,

that together yielded complementary conclusions about the effects of the BPR programme on hospital process and performance (Bowns and McNulty, 1999). This paper draws on the qualitative component of the evaluation for which the authors were responsible. To complement the economic analysis, the main purpose of our work was to get inside the 'black box' of the hospital to undertake organisational process research, defined as the dynamic study of behaviour within organisations, focusing on the core themes of organisational context, actions, and sequences of actions that unfold over time (Pettigrew, 1990). Specifically, we sought to explore *how* change took place or did not take place, who supported the change process and who resisted. We were interested in the underlying power resources that were brought to bear to influence the outcomes of the change process. The research thus took place in naturally occurring rather than artificially created or restricted settings.

Complex change processes proceed through interconnected tiers of analysis (Pettigrew, 1990) so reengineering is appropriately analysed as a multi-level change process. Our study proceeded at three interconnected levels of analysis: the corporate centre; the intermediate Clinical Directorate level and a number of clinical settings spread across different directorates. Six clinical settings covering the majority of clinical directorates within the hospital were identified as case studies nested within the overall case study. The study generated detailed accounts of patient process redesign interventions in specialties of: Ear, Nose and Throat; Accident and Emergency; Orthopaedics; Gastroenterology and Gynaecology. The cases enabled detailed analysis of the transformational claims and rhetoric of BPR by focusing on empirically observable change to patient services as key indicators of hospital process and performance. In each case, patient process redesign was viewed as action designed to challenge and change behaviour and role relations amongst actors involved in the provision of patient care.

Specific methods used reflected this prior choice of a more interpretive research design. Between March 1995 and March 1998 we sought to assure high levels of internal validity through undertaking intensive, longitudinal and pluralistic forms of fieldwork. We collected data from four main sources: interview data; documentary and archival data; notes taken from informal conversations; and observational data gathered at meetings. This use of triangulation is an important check on internal validity. This was further enhanced by the presence of two researchers who agreed joint working arrangements. The two researchers on occasions jointly conducted interviews (about 10 per cent of all interviews); worked to an agreed interview core pro forma; experienced meetings of the same clinical groups; commented on each other's case reports and worked jointly on some cases. The qualitative data were also triangulated alongside the quantitative evaluation.

Some 144 semi structured interviews were undertaken within fieldwork. On average, an interview lasted for an hour, with sessions audio taped, transcribed and conversational in style. Differences in accounts quickly became apparent confirming the importance of interviewing a range of different stakeholders (clinicians, nurses, middle managers, trade unionists, management consultants) in addition to senior management (see appendix 1). The sampling strategy included a major component of judgement sampling. We attempted to interview individuals who were revealed as actors in the reengineering process, because of their role, organisational status or experience. Respondents were also sampled at the three levels identified earlier (corporate centre; directorate and clinical setting) and across different occupational groups (clinicians; managers; nurses and management consultants). This strategy included an element of theoretical sampling as an early review of change theory had

sensitised us to the need to track change at multiple levels and to uncover interactions between them. Some role holders were sampled on a uniform basis across the different clinical settings studied (e.g. key clinical managers) so that comparisons could be drawn. Finally, there was an element of opportunistic or snowball sampling as names emerged in the course of final fieldwork.

In process analysis, it is important to balance what people say they do (espoused behaviour) against what they actually do (observed behaviour). So we observed many meetings of groups at the three levels of analysis identified earlier (corporate; clinical directorate and clinical speciality) in order to complement individual interviews. Observation at these meetings enabled us to watch and record in a systematic way the behaviour and interactions of people within decision-making groups related to the reengineering programme. About 50 meetings were observed in total. This was a higher figure than envisaged at the outset of the evaluation as meetings proved to be a fruitful method of data collection. They provided an opportunity to observe group discussions about the progress of the reengineering programme as expressed by many individuals and alternative meanings and interpretations of reengineering within the site.

Processual research should be sensitive to the passage of time: so case studies should be longitudinal rather than cross sectional in nature. History can play an important role as antecedent conditions may determine the fate of the change programme. The local 'prehistory' can be dated to the early creation of Clinical Directorates in the mid 1980s. The collection and analysis of documentary materials was a method for incorporating the past. Archival data were gathered on the history of the hospital, the transition to NHS Trust status, the introduction of Clinical Directorates and earlier quality initiatives. More directly, we used documents to trace the genesis and early development of the BPR programme.

Finally, data were collected through numerous informal conversations ('corridor chat') that took place, facilitated by our presence in the site for a long time. While these conversations were not taped or transcribed, they yielded important data that served as a precursor to an interview, and which were captured in fieldnotes. The evaluation was deliberately designed to be summative rather than formative in nature, so as to maximise national level learning. The local site already had ample learning opportunities through extensive consultancy support and internal management development schemes.

The remainder of the paper presents material from this study. Our overall interpretation of the case is outlined in a fuller research monograph (McNulty and Ferlie, 2002) which outlines narratives (Langley, 1999) of all our cases formed from raw data collected at three levels of organisation and analysed inductively. One problem in narrative based process research is to present material within shorter papers as opposed to longer books. This is particularly the case when one is attempting to establish linkages between the various organisational tiers in what is a complex, multi tier, change process. This paper offers a short narrative that crosses corporate, directorate and specialty levels of analysis, utilizing theoretical ideas that link organizational change to knowledge processes in organizations.

A Contested Change Programme

The following account uses the theoretical distinction between knowledge and knowing and the concept of dynamic affordance (Cook and Brown, 1999) to reveal how the practice of reengineering in this hospital departed from the classical reengineering prescription (knowledge) initially espoused by senior management and

reengineers within the hospital. Dynamic affordance is what becomes possible when knowledge is used as a tool in the context of situated activity (Cook and Seely-Brown, 1999). In this case, the explicit knowledge of reengineering was found wanting as a tool for action when used by those seeking to reengineer organizational and patient processes. In interaction with what senior management called the “clinical heartlands” of the hospital, the practice of reengineering did epistemic work that involved a shift from core organisational process redesign to patient process redesign tailored to imperatives of particular patient groups, clinical specialties and directorates. This shift in approach is central to understanding how and why the change programme proceeded in a fashion quite different to the plans of senior managers whom initially adhered to the classical reengineering prescription in method and purpose. The overall judgement of the process and effects of reengineering in this case is one whereby process redesign interventions were frequently confined to single services, specialties or directorates. Notwithstanding some work in respect of out-patient clinics and diagnostic services there is a lack of compelling evidence of interconnected and coherent patient process redesign across LRI as a healthcare system. Neither did reengineering effect major challenge or change to the pattern of clinical directorates and specialties within the hospital. Over time, reengineering was characterised by an indeterminacy of core processes and a lack of uniformity of pace, breadth and depth of reengineering. The theorised ‘generative dance’ between knowledge and knowing was laden with contests of jurisdiction, uneven effects and a lack of systemic double-loop learning or second-order change aspired to by senior management.

Reengineering as Knowledge

Features of public sector constitution and interaction observed above are apparent in miniature within the case study hospital and represent important antecedent and accompanying conditions of the reengineering programme. In 1990, the Chief Executive who went on to lead the BPR programme was appointed, having previously been a General Manager within the hospital. The hospital was a very early adopter of the clinical directorate structure in 1986, so by the time the BPR programme started in 1994, the site had a developed structure of eight clinical directorates and associated specialties

At one level, the development of reengineering at Leicester Royal Infirmary in 1994 can be traced back to a service quality improvement initiative within the hospital called *Project Sigma* in September 1992. Two of the five Sigma projects, in the specialties of Neurology and Hearing Services resulted in considerably faster treatment and reduced costs. The manager responsible for quality recalled that the diverse results of the first generation of Sigma projects started to “..make sense..” after encountering the concept of BPR during a “Quality Masterclass” run by a University Business School in the Summer of 1993. Major quality gains were interpreted to have flowed from a radical design of the patient process akin to the philosophy of reengineering. Thereafter a small but powerful coalition started to form behind reengineering, comprising of a manager responsible for quality improvement, the hospital Chief Executive, the Hospital Medical Director and the Clinical Director of the Medical Directorate.

At another level, Business Process Reengineering in 1994 coincided with the period when ‘market pressures’ were at their strongest in the NHS. Within the case study locality, the old integrated configuration of local hospitals had been broken up as a deliberate act of policy and there was the real possibility for competition with the other two acute hospitals in the locality, which were now separate NHS Hospital

Trusts. The hospital became the Leicester Royal Infirmary NHS Trust in April 1993. In private, senior managers used the terms “desperate” and “hard-pressed” to describe circumstances of the hospital at that time. It is alleged that in 1992/93 the hospital had a large overspend on budget, a shortage of medical equipment and a hospital site in need of both maintenance and development. These ‘internal’ pressures coincided with ‘external’ demands for improvements in both the volume and quality of health services emanating from national government and local purchasers (health authorities). There was reported a sense of ‘increasing frustration’ of staff, both managerial and clinical, with service provision at LRI. There was also, what a senior manager described as a ‘punishing cycle of annual cost-improvement programmes’.

...we knew our ability to take 1 or 2% off [our costs] year after year and continue to have to improve our volume of services, as well as quality, was just not a realistic prospect (senior manager, august 1995).

The adoption of NHS trust status both crystallized these pressures upon the hospital, at the same time as offering senior management greater freedom and discretion to manage such pressures. These conditions allied to Trust status lent managers a rhetoric to construct a case for change and mobilize resources. Words and phrases such as ‘innovation’ and ‘...greater freedom to organize [our] own affairs...’ accompanied the hospital’s application to become an NHS Trust. Approval of Trust status in April 1993 demanded some explicit statement of strategic direction for the hospital. Production of a concept paper about reengineering coincided with a process by which senior managers and clinicians met to identify and discuss the strategic direction for this new Trust. At least some senior managers and clinicians began to recognize and articulate a gap between practice at LRI and aspirations contained within the hospital mission statement to ‘...become the best hospital in the country...’ (LRI NHS Trust 1994: 2). A senior manager and a board member recalled the circumstances of the Trust prior to the reengineering programme.

...uncertainty of income coming into the hospital was getting greater and yet we were required to produce more and more... we made a connection between the Sigma quality initiative and the strategic direction of the organization... it was a particularly fertile time in terms of organizational change and becoming a Trust (senior manager, august 1995).

I believe there is no way that we could improve the effectiveness and efficiency of this hospital simply by trying to do better than which we already do... quality initiatives so called that we had running when I came here in 1992 ...were simply getting nowhere...terribly worthy but not really making a difference.... This was not getting to the root of the problem. That demanded a fundamental approach and process reengineering is for us that way of doing things differently (member of the Trust board, december 1995).

Business process reengineering is thus here identified as a strategic choice that developed as part of an embryonic process of strategic management amidst a pressurized but energized corporate core of senior managers within a newly created NHS Trust. These managers were simultaneously acting to exploit and mobilize the new found freedoms of Trust status, to cope with the developing pressures and constraints on the hospital, not least the thresholds of patient care quality and activity demanded by local purchasers and the Government. Imperatives associated with the NHS internal market, the Patient’s Charter and the onset of NHS Trust status, were perceived by members of senior management within LRI to require of the hospital more healthcare services, of better quality, whilst meeting cost improvement targets set by national government. Reengineering was perceived by some senior managers as

the 'radical solution' necessary to be able to meet this challenge. Reengineering was thus a strategic choice by senior managers of hospital intended to reconfigure the pattern and performance of work throughout the hospital. It displayed simultaneously reactive and proactive responses by senior managers on behalf of LRI to institutional forces and pressures that were perceived by senior managers as a mix of enabling and constraining conditions.

The reengineering programme that ensued from these antecedent conditions closely resembled, at least initially, the prescription of reengineering gurus Hammer and Champy, (1993) in terms of ambition, organisation and method. From the outset, the reengineering programme was intended to be total rather than partial in its coverage of clinical and non-clinical services within LRI. Following a scoping study in July 1994, the highly publicised ambition was dramatic improvement in all areas of hospital performance by Summer 1996 including reduction of patient process delays and duplication to achieve significant improvements in hospital costs, patient process times and reduced length of stay in hospital. Following reengineering prescription (Hammer and Champy 1993) the intervention was to involve the identification and redesign of core organizational processes over a two-year period. Management consultants (n=approximately 5wte) were appointed to work alongside internal change agents (n=50), seconded from their existing roles within LRI to work in specially created reengineering laboratories (n=4).

Buoyed by progress reengineering both diagnostic services and out-patient services in Autumn 1994, the ambition of the reengineering intervention peaked in early 1995 when reengineering was extended in practice to all patient services within LRI, using a rhetoric of four core processes of: 'emergency entry'; 'patient stay'; 'patient visit' and 'clinical support services'. Mindful of the overall finding outlined above the remainder of this section focuses primarily on the practice of reengineering for 12 months from Autumn 1994.

Reengineering as Knowing

Reengineering initially appeared as an explicit concept by which a group of senior managers interpreted both the results of a previous service quality initiative and organisational challenges facing the hospital. As so-called best business practice there was no shortage of explicit advice and knowledge about how to reengineer. The initial phases of the programme were characterised by reengineers within specially created laboratories working closely with the prescription of reengineering gurus and management consultants to identify and commence redesign of a limited number of core hospital processes. Early artefacts of the reengineering programme, such as the infrastructure of reengineers working in dedicated laboratories developing core process flow diagrams and associated methods of process redesign were apparent as both tacit and explicit knowledge features of the programme. Phrases such as "core process redesign", "baselining", "process-mapping" were explicit and shared by the community of reengineers across the laboratories to frame and articulate initial objectives and methods of change. Reengineers identified a "standard reengineering methodology", involving sequential definition of project scope, baselining/benchmarking of existing performance, visioning the new process, planning change and implementing change, to guide and discipline the programme of redesign within the hospital over a two-year period.

Quickly into the reengineering programme knowing about the practice of process redesign in the context of the hospital was observable. By January 1995, reengineers had developed, through early redesign experiences, new knowledge of

what the context would afford in terms of process redesign. Process redesign would only proceed upon modification of the reengineering methodology to suit the healthcare context. The “standard reengineering methodology” had proven “time-consuming” and “frustrating” between August 1994 and January 1995. “Visioning” was adjudged by reengineers not to adequately engage clinicians who they felt were more engaged within the day-to-day practicalities of providing patient services. Herein lies some initial evidence of the explicit knowledge of reengineering being unable to do all the work necessary to enable process redesign within this hospital setting. The practice of reengineering revealed impediments to process redesign associated with adherence to the explicit reengineering prescription. Interventions thus did epistemic work generating new tacit knowledge at individual and group levels that suggested a need to adapt or customise redesign methods to suit the diverse clinical contexts and communities within the hospital. Notwithstanding, the explicit prescription of core process redesign remained as a key part of the “framework” by which reengineers would facilitate and validate reengineering at directorate level. However, in the course of reengineering practice this was to change dramatically over the period March-September 1995.

Post March 1995 signalled a phase of reengineering practice in what a senior manager described as the “clinical heartlands” of the hospital. Reengineering went beyond outpatient services and diagnostic testing into in-patient elective and emergency care services that account for a considerable proportion of the hospital's work, outcome and costs. A strategy of concurrent change was adopted in place of the phased (sequential) strategy of change and justified by senior management on the grounds of: reducing the chances of creating a partially reengineered organization; managing ‘interaction’ between hospital processes; and challenging “existing departmental and functional boundaries”. It was intended that the scale and scope of the reengineering activity would increase enormously with redesign interventions spanning a wide breadth of the hospital's eight clinical directorates and associated specialties.

In practice, reengineers' quickly learned that identified core processes were being challenged by middle managers and clinicians as somewhat indeterminate and clinician support and involvement in change interventions was a necessary condition of patient process redesign. Interaction between reengineers and managers (both clinical and managerial) at clinical directorate and specialty levels was more characterised by contest and conflicts rather than collaboration. Exercises to “map and redesign core patient processes”, and run “process redesign pilots” revealed a level of affordance of reengineering within and across the clinical settings of the hospital that was more frustrating than facilitating of reengineers aspirations. The dynamic nature of affordance (Cook and Brown, 1999) over the spring and summer months of 1995 was characterised by further shifts of reengineering approach from a standardised methodology to support core process redesign to an approach more customised to imperatives articulated at the level of clinical specialties and directorates. The explicit prescription articulated in the early days of the change programme seemed less and less to inform practice. It appeared by knowing reengineers acquired as they worked with managers and clinicians in the operational, clinical settings of the hospital. Reengineers as individuals and a community of change agents proceeded to work on a more tacit understanding that process redesign needed to be tailored to the needs of particular circumstances patient groups and wants of clinicians. This became apparent observing some work in the specialty of ENT by members of the patient visit reengineering laboratory in June 1995 wherein it was noted that reengineers started to

articulate action on the basis of “care group specific patient processes”. Thinking amongst reengineers became less defined by concepts of core processes and more defined by imperatives associated with specific patient groups. Within the reengineering community some reengineers increasingly talked of the need to be able to redesign care process for particular patient groups from “end to end” of the care process. At the same time, other reengineers lamented the loss of what they termed “core process thinking” within reengineering interventions directed at particular patient groups and clinical specialties.

Thereafter, the practice of patient process redesign was of a different character, scale and scope than that aspired to and conveyed in classical reengineering texts. Reengineering activity proved inconsistent with the standardizing rationale and activities of four separate reengineering laboratories created to focus on a limited number of generic core processes. It was evident that the practice and rationale of change interventions at specialty and directorate was being highly customized to these settings and did not necessarily relate to the core processes previously identified and articulated as a guiding logic. By September 1995 the mass of reengineering change activity and projects appeared to be organized more around imperatives and idiosyncrasies of individual specialties, directorates, patient groups and medical consultants rather than guided by some overarching set of core processes. An associated effect was that major differences were observable in the rate and pace of change across specialties and clinical directorates within the hospital. Across surgical specialties, progress in piloting redesigned patient processes was slow and uneven. Reengineering of in-patient services within the Medical Directorate had not started by autumn 1995. The four core processes of patient stay, patient visit, emergency entry and clinical support had proven in practice to be inadequate as an organising logic to guide the practice of reengineering. Over time we observed reengineering become a programme ordered around specialty and directorate levels, reflecting imperatives and meanings at these levels rather than the logic of core process redesign. The planned methodology for change based around core processes was adapted in the face of organizing forces at the clinical specialty and clinical directorate levels. Further impetus to this pattern of reengineering practice was provided during the autumn of 1995 when reengineering laboratories were dismantled and formal responsibility and accountability for reengineering projects shifted from reengineers in laboratories to clinical directorates. Within a mass of change activity, the anticipated focus on previously identified core processes was lost.

Dynamic Affordance

Between Autumn 1994 and Autumn 1995, we observed how the explicit knowledge of reengineering, initially espoused to order and discipline redesign related interactions and relations, dissolved as an aid to action in this context. The concept of dynamic affordance (Cook and Brown, 1999) helps explain this important turn in the reengineering programme and the associated effects. Cook and Brown suggest that in the social world knowledge must ‘honour’ strength, limitations and character of individuals and groups to engender coordinated and directed action. Equally, knowing must honour knowledge as a tool to be used. The implication here is to direct attention at the relationship between reengineering as knowledge and the setting within which that knowledge is applied. Features of organizational constitution and interaction that stand out as critical in explaining the affordance given to reengineering in the setting of the hospital and the associated effects of the programme are the limits to managerial power and influence in clinical domains and a conflict between the

‘process’ organising logic of reengineering and the ‘functional’ logic of clinical specialties and directorates.

Those leading the reengineering programme grew to understand the considerable tension in practice between, on the one hand, their control over a programme introduced to effect coherent process redesign across the breadth and depth of the hospital, and a need, on the other hand, to engender ownership of and commitment to reengineering interventions amongst managers and clinicians at operational levels of the hospital (clinical specialties and directorates). Notwithstanding senior management’s ability to introduce the change programme into the hospital in the first instance, the case supports previous evidence that even the most senior hospital managers cannot necessarily direct changes to clinical practice and organisation in and around clinical domains. This study reveals that middle managers and clinicians at clinical specialty and clinical directorate levels emerged as important regulators of the rate and pace of the reengineering intervention at clinical directorate and specialty levels. They did so through challenging the idea that patient services could be interpreted as generic core processes to be redesigned and “rolled-out” across specialties. This challenge was facilitated by the organization of the hospital into clinical specialties and directorates as these structural arrangements afforded managers and clinicians positions to interpret, evaluate and negotiate the reengineering agenda. In keeping with the dynamic nature of affordance, within the interaction between reengineering and directorates alliances of clinicians and managers were observed that contradict some stereotypical images of manager/professional relations. The practice of reengineering generated tacit appreciation and understandings amongst some diverse members of directorate and specialties that there were shared jurisdictions and arrangements to defend in the face of pressure to redesign processes.

one of my criticisms of reengineering is that it has a model and everything fits in, instead of changing the model to fit the specialty. They have words and everything fits the words...we very much thought about how we were going to implement things, “who did we need to get on board, and for how long, how we were going to roll it out, what was our strategy for rolling it out”? We took the view very early on that we were not going to develop a generic project (manager, Obstetrics and Gynaecology Directorate, January 1996)

The view has shifted in terms of reengineering. It was first introduced into the Trust very much as a top down thing. Shrouded in mystery, with very little understanding of what it was about. There was a paradigm shift once it was devolved down to the directorates, people took ownership of the projects, they wanted to initiate what was important to them (Consultant Gynaecologist, October 1996)

It was a typical response at directorate and specialty levels that managers and clinicians sought to utilise reengineering and redesign to suit local agendas and preferences. Underlying redesign efforts was a resolution that reengineering, as knowledge and action for change, would be deployed on directorates’ terms and not dictated by reengineers operating outside the directorate. Reengineering was thus accommodated according to whether key managers and clinicians perceived it as helpful to the operational problems of their directorates, specialties, patient processes and jurisdictions. Reengineering thus became inclined to solutions that were more convergent with than transforming of existing resources and jurisdictions. Returning to the earlier debate about organizational form, the epistemology of reengineering practice over time served to reinforce a functional over a process logic of organising (Denison, 1997). Viewed as more inclined to a process philosophy of organising within the hospital, reengineering was practised within an established ‘functional’ structure of directorates and specialties each with distinctive and

enduring managerial and professional jurisdictions. These functionally inclined arrangements with associated resource patterns and demarcations, remained largely preserved and unchallenged by the programme. Processes of preservation and reproduction were played out as the meaning of reengineering was contested and the identification of core business processes effectively challenged as illegitimate and indeterminate (Buchanan, 1997).

The effects of these dynamics were manifest in a variety of ways across the hospital. On the one hand, the Obstetrics and Gynaecology directorate proved to be one of the most progressive directorates in effecting process redesign and was heralded by senior managers and reengineers alike as a high performer in reengineering terms. By contrast, within the Accident and Emergency Department of the hospital, a most strategic department given the hospital's high workload as the only emergency department in the locality, reengineering proved extremely controversial in its objectives and method. Reengineers' 'process' view of the purpose and activities of the A&E department revealed itself in the language and objectives of 'queue management'. It was a concept that was resented and ultimately successfully resisted by A&E doctors whom sought to defend A&E specialty status and the department's role in treating patients attending the hospital.

'...the only important thing in A&E is getting people seen quickly. To get them to the right place. So you could call the whole of A&E queue management'. (reengineer, November 1995).

We are not trying to achieve anything for the area of A&E. We are trying to achieve something for emergency entry. A&E is a department along the emergency entry process...the main aim [for patients admitted to A&E] has been about getting them [patients] from A to B in the quickest possible time for them to reach a [clinical] outcome...the patients' charter has driven that as well [as reengineering] because it has made us look at how patients flow through the department and why there are delays...(senior reengineer, September 1995)

...there was some lack of understanding [by reengineering]. A&E is a specialty in its own right..A&E is very important and has a vital role to play in the hospital structure and it should be regarded as a separate specialty (A&E doctor, December 1996).

The conceptual distinction between knowledge and knowing (Cook and Brown, 1999) helps reveal here a considerable gap between the theory and practice of reengineering in this setting. In effect, reengineers through action discovered what they could and could not do to progress process redesign within and across clinical settings of the hospital, and this new knowledge differed considerably from prescriptive classic reengineering ideas about what they should do. Over time reengineers acted to progress redesign in a way that compromised and diverged from initial guiding principles of reengineering in order to mobilise necessary support amongst middle managers and clinicians. Though a pragmatic gesture this observation reveals how both the organisation and impact of the reengineering programme were transformed by managers and clinicians operating within specialty and directorate arrangements. The interaction between people, ideas and context that is central to knowledge processes in and around organisations was shaped by the embedded arrangements of clinical directorates and specialties. These arrangements were preserved as managers and clinicians, through their actions and interpretations, challenged standardising process redesign concepts in favour of more customised solutions that threatened less existing clinical and managerial jurisdictions. In relative power terms the programme acceded to these arrangements leaving the pre-existing pattern of specialties and clinical directorates, with associated resource patterns and demarcations, largely preserved and unchallenged. Over time, the reformative spirit implied by BPR as a social technology for change was weakened as the initial strategic intent dissolved and the vision of core process

redesign was lost. In effect, reengineering represented an attempt to develop a process philosophy of organising within a hospital organised on the basis of an embedded 'functionally' inclined structure of directorates and specialties each with distinctive and enduring managerial and professional jurisdictions. This explanation portrays the importance of interests and politics as central to the dynamics of affordance between knowledge and knowing.

Further, our multiple case studies reveal that associated with this macro interaction between the corporate level programme and directorates were further micro dynamics at the level of specialties and directorates that considerably shaped the practice and impact of process redesign interventions at specialty level over the whole four-year period of study. The closer one gets to clinical service settings and personalities associated with them, the more one could observe how both relations and conditions within the local service setting and features of the service shape the implementation and impact of planned change interventions. Reengineering is truly shown not as a technical objective knowledge resource but a complex social process. In this context, significant change could not be achieved without the co-operation and support of clinicians. Against the background of medical responsibility for patients, interventions designed to change patient processes had to attract the support of doctors in particular. Clinical support was associated with process redesign that resonated with clinical agendas related to patient care, service development and professional development. Reengineering learned that in clinical domains process redesign could not be justified to clinicians as an exercise in costs-reduction.

Medical support or resistance for process redesign may be public, overt or nascent. A minimal condition of success for any intervention requiring change in roles, routines or responsibilities of clinicians is that it successfully overcomes, objections real or potential, publicly or privately expressed, of medical consultants. An important part of the influence process by those leading process redesign is persuading medical consultants not to veto, undermine or obstruct interventions. The process of selling re-engineering to clinicians through formal communication exercises designed to deliver the visions and missions of a small group of people removed from operational levels was often limited in impact. Reengineers learned that formal, top-down communication does not guarantee support for change. To a large degree interesting doctors in re-engineering involves persuasion, that is often informal, one consultant at a time, and iterative over time. Furthermore, clinical commitment to change, ownership of change and support for change constantly need to be checked, reinforced and worked upon. Influence by persuasion calls for great skill, and persistence, especially when it is being done by individuals with perceived lesser status, expertise and experience than doctors. The cases of elective Gynaecology, Gastroenterology, Medicine and Orthopaedics exhibited many of these features. By contrast a slow rate and pace of change at patient process level was associated with: externally-led change; a narrow base of change leadership including reliance on a single clinical champion; limited clinical-managerial partnerships; imposition of intervention objectives; culturally-alien language; disruptive and intrusive change methods; poor consultation with stakeholders within the process; and an approach to change which was unnecessarily confrontational. Such were observed in cases of patient process redesign involving the A&E department and the specialty of ENT.

Change Programmes

In the context of a debate about the interaction between knowledge and knowing a worthy discussion to conclude with concerns prescriptions of change programmes as

mechanisms to affect organisational change. The re-engineering programme was extremely ambitious. This reflected the orthodox re-engineering view that aspirations should be high and that change should commit to achieving rapid, dramatic results. On the one hand, the transformation ambition for this reengineering change programme, allied to the investment in an infrastructure of internal and external change agents dedicated to re-engineering for a period of time, had catalytic qualities in terms of promoting the need for change, providing some energy for change, developing and adapting methodologies for change. In this context however high ambition, coupled to publicity about the programme, generated tensions and problems within the process of change. In many instances, the ambition, objectives and self-publicity generated by the re-engineering programme, led to cynicism toward re-engineering, rather than interest and enthusiasm amongst the corpus of managerial and clinical staff within the hospital. The programme was frequently charged by those within the hospital with trying to do too much too soon. The pressure on re-engineers to set targets quickly and achieve 'quick-hits' encouraged action at the expense of learning and reflection. Re-engineering was a programme often caught between being radical and being realistic about what could be achieved. A&E is one important area of the hospital where re-engineers were criticised for being in a 'rush to pilot' and being 'short-termist' in their actions.

The purpose and ambition of the programme was challenged by some senior clinicians as being based on a narrow and limited experience of re-engineering outpatient services and clinical support services. Re-engineering laboratories were busy places in which great energy and effort were expended on analysing and redesigning processes. However, the re-engineering laboratories were flawed concepts in terms of progressing change in a number of respects. The composition of laboratories was perceived by many doctors to be deficient in terms of expertise, status and knowledge of their members. Whilst the likes of business managers, clerks, nurses, and some professionals allied to medicine were seconded to work full-time within laboratories, doctors were unwilling to be suspend clinical practice to become full-time members of the laboratories. With one or two exceptions, doctors did not suspend clinical practice to become full-time members of the laboratories. Those within the laboratories therefore expended a lot of effort trying to engage doctors in the work of laboratories. The effort yielded some success, for example, some doctors in the specialty of Orthopaedics worked closely with the emergency entry re-engineering team to redesign care processes. However, in general, the engagement of doctors in the work of laboratories was patchy across specialties and even within the same specialty. The staffing composition of laboratories contributed to criticism that those within laboratories were unqualified to redesign processes because of a lack of personal experience or knowledge of a particular specialty or patient service. This argument proved to be one basis on which doctors were able to challenge and regulate re-engineers' efforts to progress change within clinical domains. Ultimately, managers and clinicians at directorate and specialty levels were successful in arguing that the generic core processes could not be redesigned and then 'rolled-out' across specialties.

Management consultants involved as external change agents with the implementation of re-engineering made a number of important contributions, particularly acting as catalysts and transferring skills to re-engineers within the hospital. They had been specifically selected by the hospital to provide methodological and technical support to the process of re-engineering. However, their impact on hospital is seen as limited. In practice, their lack of experience of

hospital processes and the power relations meant that their analytical and catalytic contributions were weakened by their naivety about how to manage change in a NHS hospital. Within the above one can observe an absence with the practice of reengineering the dynamics of trust, shared experience and meanings between reengineers, management consultants, managers and clinicians that are hypothesised as critical to processes of innovation and knowledge creation (Cook and Brown, 1999; Nonaka et al, 2001).

Conclusion

The paper offers an in-depth analysis of one of the first substantial attempts in the public sector in the UK to draw on the theory and practice of BPR. Utilising the distinction between knowledge and knowing and concept of dynamic affordance the paper has observed how a change programme that adopted the radical, ambitious approach exemplified by Hammer and Champy (1993) shifted from a philosophy of rapid organisational transformation towards continuous, incremental change and improvement. The initial concentration on a handful of 'core' processes was replaced by a plethora of more specific, focused initiatives. This is explained in terms of a conflict between functional and process logics of organising and the ability of specialties and directorates to shape the progress and impact of re-engineering efforts. The overall conclusion is that within the hospital reengineering was afforded a more evolutionary and convergent impact.

This finding encourages caution about prescription that promotes in a relatively unproblematic fashion the diffusion of management concepts within and between organizational settings. Getting beyond the rhetoric associated with best-practice concepts and ideas involves studying practice informed by such knowledge. Similar to other management ideas and concepts imported into the NHS during the 1980's and 1990's, such as general management and total quality management, the process and fate of re-engineering within LRI was shaped by features of the setting within which it is was interacting, for example, the politicised nature of healthcare, professionalism, medical autonomy and limits to managerial power and influence. In spite of the allure of the metaphor of starting from a blank-sheet, practice does not remove the process of change, or the care process being redesigned for that matter, from organisational context, with its history, plural values and norms, patterns of co-operation and conflict. The history of reform in the NHS suggests that realising intended effects of planned change in hospitals cannot be assumed especially when it is managerially inspired change within clinical domains.

The experience of LRI suggests that it may be necessary to combine ambition to achieve radical improvements with a more incremental approach to change. Relative to the orthodox re-engineering prescription this means; extended time-scales, and a rejection of rapid models of organisational transformation, however appealing and exciting. Of course, classical re-engineering texts would regard this advice as perhaps losing the essence of re-engineering, but Hammer and Champy did not develop the concept of BPR in contexts where: there are hundreds of product lines (i.e. specific patient care processes); managerial power and influence to lead change from the top of the organisation is so problematic, disputed and ultimately limited by professional freedoms and practices; task specialisation and differentiation are embedded features of organising and managing arrangements.

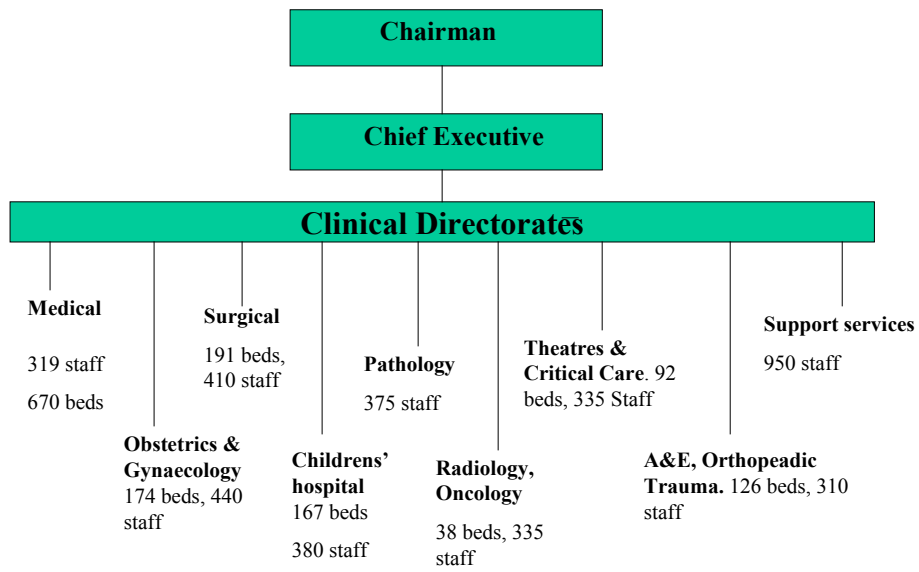
Classical reengineering methodology reflects a top-down model of change management based on assumptions of clear line management and control. In the context of hospital re-engineering, this methodology does not prepare you for the

practical experience of re-engineering. It obscures the reality that transforming organisational performance involves a lot more than redesigning processes, for instance, changing, in a system-wide fashion, roles, relationships, values and organisational forms associated with processes. The changes to the approach to re-engineering within LRI over the period of this evaluation reveal that within hospitals the progress of re-engineering interventions is much more dependent on momentum for change at operational levels of the organisation (e.g. directorate, specialty levels) than perhaps was initially appreciated within LRI. The experience of LRI suggests that it is unlikely that sufficient energy and momentum for re-engineering within directorates and specialties can be generated either by top management selling re-engineering to staff or by the skills and enthusiasm of change agents operating outside of these domains. Neither is momentum generated around a set of core processes generated by individuals outside specialties and directorates. Top management support is a necessary, though not sufficient condition for re-engineering hospital processes. Neither is a programmatic approach of the sort encouraged by Hammer and Champy, and adopted within LRI, a sufficient condition of success. Change programmes require considerable resourcing. Furthermore, unintended consequences of a programmatic infrastructure related to excessive ambition, and dedicated internal and external change agents working exclusively on re-engineering, can create problems which undermine change as much as progress change.

For further theoretical and policy interest the dynamics of reproduction in this case are seen not simply to be of local significance but indicative of a wider contradiction between New Public Management (NPM) arrangements and process organisation ideals apparent in the rhetoric of current public policy. As a high profile national pilot site for BPR within healthcare consistency is observed between the case study and subsequent developments with NHS policy (Cm 4818-1, 2000). Current policy rhetoric in the UK reveals a modernisation effort to redesign organisations to effect improved speed, interdependence and efficiency in the organisation and delivery of public services. Organising ideas akin to a process perspective are apparent within the UK's government's public service modernisation project (Cm 4310: 1999). Improved integration and collaboration within and between agencies, institutions and actors that plan and deliver public services appear as both a critical means and outcome of public policy. Plans produced for different parts of the public sector further define the modernisation agenda. In health, for example, the NHS Plan (Cm 4818-1:2000) represents a statement for reform that articulates redesigning the organisation and delivery of services. The process perspective of organising is seen as emergent within NHS public policy discourse and plans for reform. However, this study and wider observations suggest ironic policy contradictions that render unfavourable prospects for institutionalisation of process organising principles in and around the wider public and healthcare sectors. This case suggests that the present policy aspiration of greater integration clashes with the performance management ethos of the New Public Management and associated functional arrangements, including clinical directorates, that have been firmly embedded in the NHS field over the last decade. In addition, established processes of medical specialisation and differentiation are continuing and the exogenous pressure that could have been placed on the system by the quasi market and assertive customers has been removed. There is little in the way of customer pressure to force 'joined up services'. This combination of factors suggests caution about the prospects of process-based modes of organising emerging as a new dominant logic within UK hospitals and spawning new patterns of professional collaboration and integrated services. The rationalisation of work

processes typically encountered within BPR may be more applicable within simpler settings where there are a confined number of 'product lines' or where generic core processes can be more readily established.

Figure 1.0 LRI NHS Trust Management Structure: Pre and Post reengineering



NB: each directorate headed by a clinical director, supported by a senior nurse and business manager

Appendix 1.0: Interview sample by roles

Chairman
Chief Executive
Executive Director e.g. Human Resources, Nursing, Medical, Operations
Reengineering Programme Leader
Reengineering Team Leader (NB: all four reengineering team leaders interviewed at least once)
Reengineering Team Member
Staff Side Union Representative
Management Consultant
Patient Process Director
Patient Process Manager
Business manager (NB: all business managers interviewed at least once)
Implementation leader
Head of service (specialty) (NB: 90% of heads of service interviewed at least once)
Clinical Director (all clinical directors interviewed at least once)
Consultant (medical), including joint academic and NHS appointments
Clinic co-ordinator
Senior nurse
Sister
Ward Sister
Nurse (various grades of nurse interviewed throughout the evaluation)
Clinical Nurse Manager
Physiotherapist
Occupational Therapist
Pharmacist
Social Worker
Director of Purchasing
Training and Development Manager
Director of Corporate Management (Purchaser organisation)
Associate Director, Human Resources
Specialty Manager
Ward Manager

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