

Networks in Health Care: a Comparative Study of Their Management, Impact and Performance

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Abbreviations

Abbreviations in general use

AGGR	Advisory Group for Genetics Research
AIDS	Acquired Immune Deficiency Syndrome
ANT	Actor Network Theory
BASHH	British Association for Sexual Health and HIV
BHIVA	British HIV Association
BPR	Business Process Reengineering
BRC	Bio-medical Research Centre
CEO	Chief Executive Officer
COP	Community of Practice
CSCI	Commission for Social Care Inspection
DGH	District General Hospital
DoH	Department of Health
DSM	Department of Sexual Medicine
DTI	Department of Trade and Industry
ECOP	Epistemic Community of Practice
EOLC	End of Life Care
FTE	Full Time Equivalent
GKP	Genetics Knowledge Park
GMC	General Medical Council
GP	General Practitioner
GSF	Gold Standards Framework
GSFCH	Gold Standards Framework for Care Homes
GUM	Genito Urinary Medicine
HIV	Human Immunodeficiency Virus
ICT	Information and Communication Technology
IOG	Improved Outcome Guidelines
KIF	Knowledge Intensive Firm
LA	Local Authority

LCP	Liverpool Care Pathway
MCN	Managed Cancer Network
MDT	Multi Disciplinary Team
MedFASH	Medical Foundation for AIDS and Sexual Health
MREC	Main Research Ethics Committee
NIHR SDO Organisation	National Institute for Health Research Service Delivery and Organisation
NHS	National Health Service
NICE	National Institute for Clinical Excellence
NOP	Network of Practice
NPM	New Public Management
NSF	National Service Framework
NVivo	Proprietary computerised qualitative data analysis tool
PCT	Primary Care Trust
PFI	Private Finance Initiative
QOF	Quality Outcomes Framework
R and D	Research and Development
SAP	Single Assessment Process
SCD	Sudden Cardiac Death
SHA	Strategic Health Authority
SME	Small and Medium Enterprise
SSD	Social Services Department
STD	Sexually Transmitted Disease
STI	Sexually Transmitted Infection*
TQM	Total Quality Management
UK	United Kingdom

Abbreviations specific to the case studies

BTH	Big Teaching Hospital
CCN	County Cancer Network
EG	Executive Group
EH	Eastern Hospital
ELSI	Ethics, Law and Social Science

ENB	Executive Network Board
LDP	Local Delivery Plan
LSP	Local Strategic Partnership
MD	Medical Director
ND	Network Director
NMT	Network Management Team
NSSTG	Network Site Specific Tumour Group
OPG	Older People's Group
TPC	Teenage Pregnancy Coordinator
UCN	Urban Cancer Network
UTG	Urology Tumour Group
WH	Western Hospital
WP	Work Package

Chapter 1 Introduction

Should health care services be organised through hierarchies, markets or networks? The choice of governance mode is a fundamental question in health policy. Here we assess the nature and impact of network forms in the English National Health Service (NHS) and provide evidence to inform future policy choices.

This initial chapter of the report introduces the study's aims and objectives. It argues networks in health care are an important research theme, given their high policy and managerial relevance, and provides 'signposts' for the remaining chapters.

1.1 Aims and objectives of the study

This report contains the findings of a study undertaken between 2005 and early 2009 on the nature, evolution and impact of networks in the English NHS. It was part of a wider programme on networks in health care funded by the National Institute of Health Research Service Delivery and Organisation programme (NIHR SDO). We undertook eight case studies of different health networks, with pairs of cases selected from four sectors: new genetics technologies (a clinical science), cancer services (a clinical service); networks in sexual health (related to the public health function); and elderly care services (a client group).

The objectives of the study as specified in our initial protocol were as follows:

1. to identify key network characteristics (e.g. organisational, managerial or membership) to develop a typology of professional and clinical networks;
2. to investigate the differences between more and less managed forms of network;
3. to describe the origin and evolution of the different types of network structure and process over time and to examine the context, content and processes of network policies and practices;
4. to describe the extent to which new Information and Communication Technologies (ICTs) contribute to network based forms of health care;
5. to ascertain the factors which contribute to network performance, success factors and high impact;
6. to identify promising lessons for policy and practice and identify appropriate management styles and skills.

1.2 Markets, networks and hierarchies: three governance modes

We will first of all orientate the study within organisational analysis: this is a social science study into the organisation of health care. Markets, networks and hierarchies are seen as three alternative modes of organisational coordination (Thompson et al, 1991; Thompson, 2003) which suggest distinctive management styles and skills. Simply put, within hierarchically based organisations (such as in the army), the command is the basic instrument of control. In markets, transactions between producers and consumers are governed through price (or in more sophisticated versions, a price/quality mix). In networks, coordination is achieved through mutual informal contact, negotiation and adjustment within a high trust social community or 'clan' (Ouchi, 1991), such as a profession.

In practice, there are hybrid forms between these three ideal types, including in the NHS itself (Exworthy et al, 1999). Thus the 'managed network' form mixes hierarchies and networks (as in NHS Managed networks) (Addicott et al, 2006, 2007). Our theoretical perspective highlights the important role of organisational forms and modes of governance.

1.3 Background – increasing relevance of network forms

Why is a study of networks in health care important? The growth of network based organisations will be considered in Chapter 2. There has since the mid 1990s been increasing use of NHS managed networks (e.g. managed cancer networks). This is an important break with the previously dominant quasi market model.

These changes to governance have repercussions for requisite management skills and style. Network-based management involves the development of network based *managers* and network based *managing*. Aim 6 is to identify promising management practice.

1.4 Structure of the report

After this introduction, Chapter 2 considers the literature on the growth of network based forms and issues raised.

Chapter 3 reviews theories of the growth of the network based organisation. Many analytic perspectives are evident and the chapter will assess which theories are most valuable in understanding NHS-based networks.

Chapter 4 considers the study's methods, both overall research design and at a more operational level. It will outline methodological problems encountered and how we addressed them.

We then move into empirical chapters, organised along the following lines:

Chapter 5 summarises the basic 'story' of the eight case studies to orientate the reader to the basic case material. We include basic cross case analyses.

Chapter 6 considers the performance assessment theme of the study.

Chapter 7 develops a typology of the networks studied.

Chapter 8 comments on the role of Information and Communication Technologies (ICTs) in the networks.

Chapter 9 presents material on management and leadership skills and styles in the networks.

We then present chapters which relate to themes which emerged from the literature review.

Chapter 10 considers the question of organisational and interorganisational learning.

Chapter 11 considers health policy networks as arenas with many different co located professions and agencies, including theoretical issues which arise.

Chapter 12 presents material on the possible rise of governmentality and soft bureaucracy as a novel control mode, including theoretical issues which arise.

Chapter 13 considers implications of the study for NHS policy and practice.

Chapter 14 draws out the overall conclusions from the study and considers future research needs.

Chapter 2 The growth of network based forms of organising and management

This chapter considers the *empirical* growth of network-based organisations (a review of theory follows in the next chapter). We here review the literature on the empirical growth of network based private firms; then in UK public policy and finally within health care. Changes in the NHS can only be understood given these wider trends.

2.1 The growth of the network-based firm

We start with changes in the organisation of the private firm. The influential 'Post Fordist' literature suggests a decline of the large, vertically integrated firm of the mid twentieth century (the so called 'Fordist' car firm) and the growth of network-related features within and between firms. These new features include: joint ventures (including public private partnerships), value adding partnerships, strategic alliances, preferred providers, franchising, contracting out using relational contracts, and consortia (Thompson, 2003). Japanese firms appear lower on hierarchical/bureaucratic forms but higher on network forms (Dore, 1987) when compared to Anglo American firms.

New industrial districts display clusters of co-located 'high tech' Small and Medium Enterprises (SMEs), notably Silicon Valley in California which can be taken as a key example from the 1970s onwards. These network based forms may be functional in fast moving sectors or where there is sophisticated, niche or volatile consumer demand, as in high fashion. Distinctive network based regional economics emerge such as the Emilia Romagna fashion district in Italy. Such networks involve the creation and circulation of knowledges. Richer networks between government, universities, public research institutes and high tech firms (the so called triple helix) drive economic innovation. Science parks at the periphery of Universities (such as Silicon Fen near Cambridge) are good examples, as is the biotechnology sector. Local Venture Capitalists finance start ups, as in Silicon Valley (Thompson, 2003), rather than mainstream banks.

The large firm shrinks and changes but does not disappear (Sabel, 1989). Instead, it becomes a 'quasi disintegrated firm', outsourcing secondary functions under contract but retaining core functions in house such as Research and Development. There are high trust relations between the downsized main firm and its subcontractors: trust building is central to the functioning of networks (Thompson, 2003, p15).

2.2 The driver from information and communication technologies – the network society and electronic government?

Are new and distributed Information and Communication Technologies (ICTs) (the internet, e mail and the world wide web) driving a transformational shift to network based economies and societies (Castells, 1996, 2001)? Of particular interest is Castells' account (1996, Ch3) of the role of ICTs in the network enterprise.

'the complexity of the web of strategic alliances, of subcontracting agreements, and of decentralised decision making for large firms would have been simply impossible to manage without the development of computer networks; more specifically, without powerful microprocessors installed in desktop computers linked up with digitally switched telecommunication networks'

(Castells, 1996: p169)

Major advances in ICTs in the 1990s allowed remote, computer based and interactive work processes to become usable on a large scale. These technologies 'fit' with the new basis of competition: successful organisations generate knowledge and process information efficiently, retain flexibility; innovate rapidly and customise (Castells, 2001, p77).

Castells (2001) draws out some implications of computer networks for civil society and the State. Networked social movements (such as patient groups) may use the net to create alternative sources of information or to enrich public participation (as in Amsterdam's Digital City experiment). Castells focuses on the security needs of the State against cyber attack from hackers and does not analyse 'e government'. Critics argue that Castells is too technologically determinist (Thompson, 2003).

Other authors trace wider implications of ICTs for e government. Margetts (2005) argues that 'virtuality' in government leads public organisations to (i) develop a virtual rather than direct link to clients and citizens, (ii) move to internal virtuality as the organisation hollows out with information systems replacing middle management and (iii) create virtual networks of interorganisational relationships. Margetts notes that it is easier to find private than public sector examples of these trends.

Snellen (2005) notes that public services may find it difficult to make client information available because of legitimate patient confidentiality issues (e.g. in sexual health services). Different agencies need to come to an agreement (e.g. health and social care) about a joint IT system before information can cross organisational boundaries. He asks: can e-government really develop local democracy, through interactive policy making and the co production of public services with users and citizens?

F. Webster (2006, pp210-212) suggests new ICTs can increase surveillance systems operated by government, melding disparate databases (for example, linking health care with criminal justice databases). Here is a concern with the sinister prospect of the 'surveillance society.' Webster is

sceptical of technological determinism, stressing the role of local context in shaping and taming new ICTs.

2.3 UK public policy and management – the rise of managed networks

Traditional provider based networks have been long present in UK public policy. Medically dominated policy networks in the NHS are a clear case of a 'professionalised network' (Rhodes, 1997, p38). This form serves the interests of a powerful profession, is strongly linked upwards to the State through a 'professional bureaucratic' complex isolated from other networks. This network form is stable with restricted membership. The close links between the Department of Health, the NHS, the General Medical Council (GMC), the Royal Colleges and an apparatus of expert advisers is a good example. These are informal policy networks rather than formal vehicles for service delivery.

A second stream of literature - going back to the 1970s - reflects on the search for effective coordination between public agencies (e.g. between health and social care). There have been experiments with facilitated groups, action learning or other interventions (Huxham, 1996). This stream drew on community development ideas, picked up by new health care purchasing organisations of the 1990s (Ferlie and Pettigrew, 1996).

Thirdly, and as part of the network governance narrative of public management reform associated with New Labour (see next chapter), there have been since 1997 attempts to enhance inter agency cooperation through networks of a more managed nature.

In the policy domain, Cm 4310 (1999) argued that the New Public Management era (see Chapter 3) had been characterised by an excessive concern for efficiency with too little attention to developing an effective policy process. Laterally, many complex policy areas facing 'wicked problems' such as poverty, crime and anti drugs policy required work across conventional organisational boundaries (we will explore this 'wicked problems' argument in more detail later). There was insufficient buy-in to reform from professional staff who needed to be re-engaged. 'Joined up government' was to be a key objective of a reformed policy process, along with an outcome-orientation, evidence based policy making, creating a learning organisation and a more futuristic and outwards looking direction. The text supported more lateral models of public management which crossed organisational boundaries. However, there was a continuation of target setting, performance measurement and management to ensure that public services 'delivered' in exchange for greater investment.

Within network governance, 'collaboration' (Sullivan and Skelcher, 2002) replaced competition as a guiding principle. As Newman (2001) indicates, new policy instruments such as pooled budgets and shared governance were introduced to help cross boundary working. Examples (Sullivan and Skelcher, 2003) include: major cross functional initiatives (such as SureStart); joint initiatives with long time horizons (such as the ten year

New Deal for Communities) and area based action zones (including Health Action Zones). The diffusion of good practice was encouraged through learning networks, such as Beacon Councils (Rashman and Hartley, 2002) and NHS learning networks. A final development was the creation of overarching Local Strategic Partnerships for meta-network management, given the problems caused by many individual networks.

2.4 Applications in health care settings

Can these general trends towards network based organisations also be found in health care settings?

The Post Fordist hospital?

Organisational dynamics in health care may indeed be similar. We see the decline of the traditionally dominant role of the acute hospital with a growth of networks and partners around it as more routine work is devolved to primary care and other settings. Private sector and voluntary sector providers take on outsourced work from a traditionally public sector dominated delivery arm as separate commissioning roles emerge.

As Perri 6 et al (2006) remark, this shift may be linked to the rising importance of the chronic disease paradigm. This relocates health care away from the acute hospital and towards community based multi-disciplinary teams (for example, for older people). Services support people living with enduring conditions who spend much time in the community interspersed with short stays in hospital. The chronic disease paradigm involves linking with social as well as health care organisations and crossing organisational and professional boundaries. There are some reports of experiments to a networked style of management on the provider side (Bate, 2000).

Health care networks and a weak driver from Information and Communication Technologies?

New informational technologies could create such changes in the health care workplace (Webster, F, 2006) as: more rapid transfer of information and images across space (telemedicine); the easier transfer of information across traditional organisational boundaries (an integrated patient record system); new working patterns such as virtual teams and homeworking; new forms of customer service (e.g. NHS Direct) and new forms of blended education and training which include on line tutoring or video-based teaching.

However, empirical evidence suggests ICTs are a weak driver of a shift to network based organisations in health care. Nettleton and Hanlon (2007) traced potential effects of new ICTs for health care services. Their empirical work suggested that patients were making use of ICTs (e.g. searching the internet for information about their condition) but in order to be a 'good patient' rather than a 'time waster', and they still needed and relied on health professionals in a traditional way. Finch et al (2007) examine

telemedicine and telecare, pointing out that potentially radical new technologies often fail to embed themselves into routine health care delivery. Telemedicine is if anything 'disappearing' as a new mode of service delivery, succeeded by a broader notion of e health involving other staff (often nurses) in managing chronic disease.

Investment in Information Technology infrastructure was part of the modernisation strategy (Department of Health 1998a), including the National Programme for Information Technology. Electronic Patient Record implementation has been complex and delayed (National Audit Office, 2007). ICTs have played an important role in NHS modernisation initiatives such as the national patient booking programme (Neath, 2007). We will explore how powerful ICTs are as a driver of service change in the empirical cases.

Network governance, 'modernisation' and health care

Health care exhibits the wider public management reform trends reviewed above. Reflecting moves to multi layered governance, Scotland and Wales have acquired territorial powers in health policy. Some health care functions are contracted out to private and third sector providers (e.g. long term residential care; elective surgery), subject to audit and regulation but not vertical line management. Foundation NHS Trusts are a quasi autonomous organisational form.

The NHS Plan (Department of Health, 2000a) outlined the modernisation framework: in exchange for extra resources, the NHS would undergo reform. Collaboration, learning, evidence based practice, quality improvement and the diffusion of good practice were major policy themes, as was partnership and network based working between different agencies. Performance management was retained to bear down on key objectives such as waiting times where demanding targets were set.

Process thinking, service redesign and integrated patient pathways

The NHS has imported new ways of management thinking from the private sector, including Total Quality Management (TQM) in the late 1980s (part of the 'Japanisation' of UK organisations), followed by Business Process Reengineering (BPR) (Hamner and Champy, 1993; McNulty and Ferlie, 2002) and now 'Lean Thinking' (Papadopolous and Merali, 2008). These ideas all stress the lateral redesign of work processes to minimise delays for the patient. They have been more recently promoted by the NHS Modernisation Agency. The work of Don Berwick and his group (Institute for Healthcare Improvement (IHI) Boston) has generated evidence-based literature on systems improvement (Berwick, 1989, 1996). This stream of writing is soft in tone, orientated to continuous improvement rather than 'big bang change' and strong clinical ownership. It drew on ideas about a learning organisation in health care, using repeated 'Plan Do Study Act' cycles to generate rapid but incremental improvements. Networks are seen as a governance mode able to diffuse good practice and rapid learning.

2.5 Concluding discussion – the growth of network based organisations

This chapter has pointed to an empirical growth of network based organisations in the private sector, the UK public sector and health care alike. These shifts move beyond traditional professionalized policy networks and require further investigation. NHS managed networks have existed for almost a decade now so the time is ripe for an assessment.

Key questions arising from this review for case study work include:

- How radical is the shift to the network mode?
- What type of networks are emerging? What has happened to traditional professionalized networks? How pervasive is the new Managed Network Form?
- Are these networks high on Organisational Learning capacity?
- How fundamental are the transformations created by new ICTs?
- What do network managers do? What are the skills and style needed to manage networks effectively?
- Performance assessment? What are the objectives of these networks? How might we make a judgement about performance levels? What explains variation in performance and impact?

Chapter 3 Network based organisations – a literature review

We now move from describing empirical trends towards network-based organisation to reviewing possible explanatory theories. There is a bewildering variety of theoretical perspectives on offer, associated with different social science disciplines. We will also consider other network typologies, particularly the Perri 6 et al, 2006 review for the NHIR Service Delivery and Organisation programme.

We deliberately undertook an initial and personal (rather than systematic) literature review of a variety of social science theories of networks early in the life of the project, which then informed the design of the interview pro forma and of empirical work. A personal review approach was favoured because of the theoretical (rather than empirical) emphasis of the review (unlike the emphasis of conventional systematic reviews), the wide variety of different theories that expounded and interpreted with some care and the importance of monographs (which are not easily picked up in a systematic review based approach) as well as articles to the review.

Two researchers wrote two initial literature reviews: the first reviewed the organisational literatures on networks and the second political science literatures. The findings of the theoretical reviews are summarised here and also developed further by the lead author (the PI) in terms of locating them better in a coherent theoretical overview. The two early literature reviews informed the construction of the interview pro formas and case study templates and, more broadly, sensitised team researchers when they were working in the field to a variety of possible theoretical approaches. These were then revisited in team discussion in the final stages of the project, in an inductive exercise which sought to integrate case study data and theoretical interpretation. We did not then adopt a purely grounded theoretical/inductive approach, but framed our investigation around concepts which emerged from early literature reviews.

3.1 Theorising the rise of the network based firm

Boltanski and Chiapello (2004)'s analysis of the management writing of the 1990s argues that the expanding literature on the network based firm is in itself a major development. Theories of Japanese firms pose a challenge to received Western management models. They suggest that the underlying values in this networks literature are anti-hierarchical and developmental: the rise in education levels of managers means that they desire greater self actualisation and personal development at work. So we need to distinguish between normative and empirically grounded arguments for networks.

Boltanski and Chiapello (2004) see the following themes as dominant in this literature stream:

'lean firms working as networks with a multitude of participants, organising work in the form of teams or projects, intent on customer satisfaction, and a general mobilisation of workers thanks to their leaders' vision.'

With 'vision based leadership', workers are mobilised and given meaning in their work, so that direct management compulsion becomes less important (see the later 'soft bureaucracy' literature A high commitment, high performance, organisation can (perhaps even should) be created on the basis of strong worker support.

Theoretical perspectives on the rise of the network based firm include:

(i) Post Fordist flexible specialisation

The transition from a 'Fordist' to a 'Post Fordist' mode of production is characterised by new principles of flexible specialisation rather than mass production (Amin, 1994), with an upskilling of the workforce. This shift is driven by new technology, but also by a growing importance of knowledge in production, stagnation of old markets and more sophisticated and segmented consumer markets. It requires a skilled and flexible workforce capable of rapid change. Network based forms of production accelerate the rapid organisational learning needed in volatile markets. Such production is often undertaken by Small and Medium Enterprises (SMEs) that cluster together in new industrial districts (Sabel, 1989) rather than large firms. Jessop (1994) explores the emergence of a post-Fordist State. The Keynesian Welfare State is taken as an analogue of the Fordist private corporation, both of which went into crisis in the late 1970s. The new order can be termed '*the hollowed out Schumpeterian workfare state*'. It is a *Schumpeterian workfare state* in that it promotes organisational, process and market innovation in open economies, stressing competitiveness and labour market flexibility and reducing social costs. It is *hollowed out* because there is a loss of functions by the national state and a growth of supranational regimes, regional and local governance. Hoggett (1996) applies these post Fordist concepts to new modes of 'loose-tight' control in UK public management.

(ii) From the M form to the N form?

A different analysis emerged within organisational and management studies, often undertaken by scholars located in Business Schools, with a normative stance more allied with capitalism. There is a stronger concern with the performance of network based organisations and with communicating research to practising managers to help them manage network based firms.

Operating within a strategic management perspective, Pettigrew et al (2003) (also Pettigrew and Fenton, 2002) examine whether there is a transition from the M form of organising (the multi divisional structures of Du Pont and General Motors of the 1920s) to a new Network based form, consistent with a shift to a knowledge based and post industrial form of capitalism. They find some evidence of such a shift but also variation in international trajectories and local hybrids. The central movement is the de-

layering of middle management and greater operational and strategic decentralisation to profit centres. There are more lateral or project based modes of working, bridging the traditional vertical lines in the M form corporation. There is increased emphasis on building a learning organisation. The Human Resources function takes a more strategic role in fostering richer horizontal processes. High profile and value driven leadership (rather than neutral 'management') sees organisational wide mission building as a core activity.

3.2 A knowledge based view of the organisation

A rationale advanced for network based organisations is their supposed higher ability to accelerate organisational learning and diffuse knowledge. The move to network forms is driven by the New Competition's requirement to access knowledge, to learn and to innovate rapidly. Here is a knowledge based view where cognitive criteria and 'intangible assets' move centre stage.

The Knowledge Intensive Firm (KIF) is an important organisational form (Alvesson, 2004) in expanding sectors such as science and management consultancy. He defines the form (pp1/2) as follows:

'broadly it relates to large firms employing substantial numbers of people working for complex tasks that call for autonomy and the use of judgement, possibly rendering traditional forms of control inadequate or only partly adequate.'

There is here a move from bureaucracy and standardisation to ad hoc organisational forms which are flatter and more network based. The mode of organisation may be personalised in that self-motivated and self-organising 'star' individuals play a key role, where they attract important clients and bring in new revenue streams (as in management consulting). There are extensive communication systems and a high use of groupwork to solve problems incrementally. However, the bias towards collegiality, consultation and distributed leadership may be confined to the knowledge/professional elite (e.g. partners in management consulting or primary care) with marked power distance between senior and junior staff.

KIF control systems extensively use soft rules, reliance on cultural control, the 'management of meaning' and the creation of a common identity and culture to replace traditional top down hierarchies and management styles: *'control targeted at the values, ideas, beliefs, emotions and self image of people characterises much management in KIFs'* (Alvesson, 2004, p129). Nonaka's model of the (Japanese) knowledge creating company stresses an ability to connect tacit and explicit forms of knowledge through *'redundancy – 'the conscious overlapping of company information, business activities and managerial responsibilities'* (Nonaka, 1996, p26) which creates dialogue and common cognitions. This is different from the traditional Western orientation to the clear division of labour and efficient specialisation. Knowledge creation is here not just the province of a group of Research and Development experts but an entire linked organisational knowledge system.

Communities and networks of practice

The more cognitive literature on 'communities of practice' (COPs) (Wenger, 1998) also addresses learning related themes. A community of practice is (Lave and Wenger, 1991: p98):

'participation in an activity system about which participants share understandings concerning what they are doing and what that means in their lives and for their communities'

COPs emerge from work groups engaged in similar day to day work practices (Wenger, 1998) with frequent local interaction. These work groups possess shared identity and occupational meaning. Knowledge may be easily transferred within COPs, as members understand and trust each other, effectively learning about tacit work practices. Conversely, knowledge may be difficult to transfer across COPs which form a knowledge boundary. Boundary crossing, boundary work, and 'boundary objects' become important within the COP perspective. Brown and Duguid (2000) distinguish between COPs and Networks of Practice (NOPs) (Ormrod et al, 2007). NOPs do not share the localized identity of COPs but are looser epistemic networks across geographical space. Scientists form an epistemic NOP (Knorr-Cetina, 1999), as do the professions. These NOPs are shaped by common fundamental cognitions, norms and beliefs, common socialisation and active knowledge sharing mechanisms (e.g. conferences). Professions typically create single disciplinary NOPS which exclude even the neighbouring professions.

The notion of *Epistemic Communities of Practice* (ECOPs) (Knorr Cetina, 1999; Ferlie et al, 2005) helps explain the failure of evidence based clinical innovations to diffuse readily in the NHS. They often 'stuck' when they encountered a boundary between two different health care professions (such as medicine and nursing) or even segments within the same profession (such as hospital consultants and general practitioners). Not only were there occupational role boundaries but these combined with underlying epistemic boundaries. The health care professions generated distinctive knowledge bases or research paradigms: they could not share knowledge where there was no commonly validated knowledge to share.

A recent development has been work on explicit knowledge-management processes. Quintas (2005) examines knowledge-management processes that occur across the external boundaries of an innovating organisation as it is increasingly embedded in networks or supply chain relationships. A crucial competence is an organisation's internal ability to acquire information from outside and to turn it into useful knowledge – that is its 'absorptive capacity' (Cohen and Levinthal, 1990). Knowledge is not a commodity that easily transfers between collaborating organisations:

'the case studies confirm that knowledge sharing between specialisms becomes difficult if not impossible without specialisation bridging measures such as redundant or overlapping knowledge..'

(Quintas, 2005, p267)

So effective knowledge-sharing between partners in a network may depend both on high 'absorptive capacity' and effective boundary-spanning mechanisms. We note the empirical failure of the knowledge perspective to model observed behaviour in NHS managed cancer networks (Addicott et al, 2006, 2007), as the softer knowledge transfer agenda was crowded out by harder edged restructuring.

3.3 Professionals, professional dominance and managerialisation

We now consider a distinctive trait of health care organisations alluded to previously – the presence of the traditionally dominant profession of medicine, located alongside other health care professions. Professionalised networks are common within health care, historically of a closed or tacit nature (Freidson, 1970; Rhodes, 1997). Freidson (1970) elaborated the underpinning concept of professional dominance of health care, although there is a debate about whether this has been challenged by recent marketisation or managerialisation.

Professions are 'clannish' occupations, where reputation within the intra professional network is a critical resource. Individual professionals identify more with 'the invisible' college (Crane, 1972) of peers than their employing organisation: the colleagues are more important than the managers. They escape from managerial control through participation in external professional networks which can be mobilised when needed. Nor is the professionalized organisation necessarily egalitarian, as a strong professional elite may emerge which has centrality within informal networks and which exerts powerful sources of patronage.

Leicht and Fennell (2001) highlight many Post Fordist arguments within the new 'neo entrepreneurial' workplace, but what are the specific implications of the neo entrepreneurial workplace for professional work? Professional expertise may increasingly be bought in on a project basis. It may be 'captured' and standardised by new technology, such as algorithm driven approaches to diagnosis in medicine. However they see a convergence between managerial and professional principles, driven by the increased claims and power base of senior management. Their analysis of the changing American hospital field since the 1980s concluded:

'our results don't suggest that professionals are being deskilled or that managers are going to be downsized out of existence. Instead, we see the roles of professionals and managers evolving towards a common set of themes that the neo entrepreneurial workplace model is designed to highlight: greater teamwork, accountability and prerogatives exercised in contexts where there are unprecedented abilities to monitor and sanction performance.'

Harrison (2004a, 2004b) argues that professional dominance in the UK NHS has declined since the 1980s, with the rise of general management, but also the introduction of consultant revalidation and appraisal, new contracts (such as Personal Medical Service contracts in primary care), and new regulatory bodies (such as the Commission for Healthcare Audit and Inspection (CHAI) and the National Institute for Health and Clinical

Excellence (NICE)). We need more evidence as to the real significance of these shifts (the first internal market phase had limited impact; appraisal may be more developmental than performance related).

So there is a debate about whether professional dominance (and by implication traditional professionalized policy networks) found in health care has been eroded by managerialisation and marketisation. Some literature on neo entrepreneurial organisations suggests that these novel forms may result in an alignment between managerial and clinical principles.

3.4 Professionals, organisations and social capital

Elite professionals benefit from high social capital within networks. Burt (2005) defines 'social capital' as follows (p4):

'social capital explains how people do better because they are somehow better connected with other people. Certain people are connected to certain others, trusting certain others, obligated to support certain others, dependent on exchange with certain others. One's position in the structure of these exchanges can be an asset in its own right.'

For Bourdieu (1984), high social capital was a preserve of elites that used it to reproduce their advantage, including the elite professions such as medicine and law who build up a social (and cultural) capital of social connections, honourability and respectability to win societal confidence. Medical elites may have access to higher social capital than health care organisations have to corporate social capital. We explore this argument in the clinical genetics cases which involve medical academic elites. Burt's (1992, 2005) work contributes the core idea of 'structural holes'. Some actors build social capital and power by connecting previously disconnected networks and acting as 'social brokers' or linkers. New ideas emerge from moving across structural holes and this can lead to visionary thinking.

3.5 Science and technology studies, including Actor Network Theory

A Science and Technology Studies perspective examines the behaviour of scientists and the careers of scientific innovations (particularly relevant to our two clinical genetics cases). This sociologically grounded perspective examines the social construction of science and day to day scientific work processes within labs (Latour and Woolgar, 1986). The diffusion of new health care technologies is highly socially embedded (A. Webster, 2006). Latour and Woolgar suggest that a key aspect of scientific career building lies in repeated 'cycles of credibility' or reputation building which enables elite scientists both to secure the resources needed for scientific work and to place articles in major journals. Collins (1982)'s work on the diffusion of TEA lasers (getting the new laser to work in practice) points to the importance of tacit work practices in labs, transferred better through strong social ties (informal scientific networks) than a written manual. An influential strand within Science and Technology Study has been Actor Network Theory (ANT), used to theorise patterns of scientific innovation and

more broadly network based forms of organisation (Thompson, 2003). ANT emerges from the pioneering work of two French sociologists, Callon (1986) and Latour (1987). Thompson (2003, pp72-73) suggests that the ANT perspective blurs distinctions between the social and the technical, or even the human and the non human.

ANT examines the 'enrolment' of interests in scientific networks which may lead to a 'black boxing' of a particular form of science. ANT argues that findings are 'black boxed' – become uncontested facts – when an unstoppable coalition of interests is mobilised in support. Laboratories have the power to define reality, at least under certain conditions (Latour, 1987). Controversially, ANT also argues that the network consists of 'actants' – both human and non human elements. There is a collage of actants within an actor network which include 'immutable mobiles' (they might include a scientific instrument, an IT system or a joint protocol). Whilst 'fixed' in one sense, they are also made 'mobile' as they move around and are rearranged within the network. Callon and Law (1989, 58-9)'s notion of translation suggests:

'we define translation as a process in which sets of relationships between projects, interests, goals and naturally occurring entities – objects which might otherwise be quite separate from each other – are proposed and brought into being.'

It is through translation that various actants are aligned. An interesting application of ANT in the NHS is Singleton and Michael's (1993) analysis of the introduction of cervical screening in primary care. They argue that the evidence for the utility of cervical screening was marginal and that it was uncomfortable for women. GPs were initially ambivalent about cervical screening and complained it was difficult to get higher risk women screened. Yet GPs were gradually enrolled in the cervical screening network and eventually cervical screening achieved 'black box' status.

3.6 Policy networks – a political science perspective

The review now moves to theories more rooted in political science. Political scientists are often more interested in the democratic accountability of networks than their steering, which is a more managerialist perspective. They analyse the State (including the NHS) rather than the firm, although some post Fordist ideas have crossed into public policy analysis.

Public policy networks

We start with Rhodes's (1997) and Marsh and Rhodes (1992) work on 'policy networks' which lies within the institutional approach to politics. Rhodes (1997, p9) starts with the observation that all governments face many interest groups and thus require intermediary mechanisms for bargaining and agreement seeking processes. A sub-government emerges not directly controlled by Parliament or political parties. So central government consults with local government; the Department of Health with the health care professions. Policy networks emerge which define the rules of the game, who is represented in the process (reflecting and reinforcing

the distribution of social and political power) and which items rise up political agendas. Different types of policy networks have distinctive effects. A 'tight' policy network may constrain the policy agenda, leading to policy continuity: Policy discontinuity is more likely in larger and looser networks. Marsh and Rhodes (1992) and Rhodes (1997) develop a typology of different network forms (see below), including the professionalized network of which the NHS is the ideal type.

3.7 Public management reform - the New Public Management and Network Governance

The public policy and management literature highlights macro level reform processes across the UK public sector in the 1980s and 1990s which are still embedded. These macro reforms make developing strong networks more difficult or at least more complex.

The New Public Management

The New Public Management (NPM) narrative (Hood, 1991; Ferlie et al, 1996) argues that the UK has seen a fundamental shift away from the traditional public administration form towards a new NPM form. The NPM model was based on a mix of empowered management (the NHS introduced general management in 1985), markets or quasi markets (introduced in the early 1990s) and performance measurement (the growth of the Audit Commission from the 1980s). While the NPM was initially associated with ideas of 'liberation management' (letting managers manage at the operational level, under a strategic framework), in practice the dominant UK strain was top down and highly managed. Performance management lies at the heart of the UK NPM. Associated with the New Public Management was the rise of the Audit Society (Power, 1997) with an expansion of auditing and checking activities. The NHS regulatory field is both complex and crowded. An audited public sector may produce a strong internal rather than outlook focus, a value for money orientation, the rendering of elaborate retrospective accounts designed to demonstrate compliance, and strong risk aversion.

Moran (2004) highlights the rapid shift in the governance of UK medicine from a traditional pattern of self regulation via the General Medical Council and 'club government' to increasing interventions by an assertive State. He sees this as a turn not to post modernism (as some authors claim) but to high modernism, with an erosion of old network forms (p36).

The hollowing out of the state and the network governance reform narrative

Rhodes (1997) advances the 'hollowing out of the state' argument. This argument addresses major changes in the UK nation state since the 1980s – the movement of functions up to the European Union; down to newly devolved jurisdictions (Scotland, Wales and to some extent London) and outwards from central departments to special purpose agencies. One effect

is the multiplication of actors within policy domains, with more complex, polycentric, policy networks.

There is a debate about whether 'hollowing out' has reduced the steering capacity of the centre (Rhodes, 1997). On the one hand, the loss of operational control may be balanced by reassertion of strategic control by the centre: it does less; better. It does not row; but it steers. The centre may use new modes of indirect control through audit, regulation or appraisal (e.g. introduction of appraisal for consultant clinicians) to compensate for loss of direct control.

On the other hand, the centre may lose strategic control over the new regulatory agencies which are captured by the new private sector service deliverers. Contracts may turn out to be a weaker governance mechanism than hierarchy and generate unexpected long term effects (e.g. the 'selling on' of Public Finance Initiative 30 year contracts). The multiplication of actors produces large and complex networks which are difficult to steer, including more private sector actors (such as chains of nursing homes).

The Dutch School of public sector network research

The Dutch school of network analysis is an interesting alternative to UK analyses which are more New Public Management (NPM) dominated (perhaps reflecting the national experiences). Kickert et al (1997) suggest that policy networks are seen within political science as a factor in policy implementation failure. They are seen negatively as a non-transparent and impenetrable form of interest group representation which blocks innovation and threatens democratic legitimacy. The NPM wave represented one reaction to implementation failure by strengthening the steering capacity of the centre and reducing autonomy for local actors.

'Governance' is an alternative response to closed networks seen in some Continental Western European jurisdictions (such as the Netherlands). It is described as the 'directed influence of social processes', including but going beyond purposeful interventions by the State, the limits of which are increasingly recognised. There is an attempt within such policy networks to generate greater collective capacity for action. There is some scope for shaping interactions within the network through skilled management.

Kickert et al (1997) develop theory about managing complex public networks. They see the manager as moving from system controller to mediator, process manager and network builder: '*management in networks is about creating strategic consensus for joint action within a given setting*' (p167). Although the network manager lacks the power of hierarchical command, they can influence the rules of the game or the structure of the network. They have some action space.

Klijn (2005) points out that the Hollow State poses a governance problem. How does policy implementation take place given a fragmentation of actors with mutual inter dependence? The network perspective develops analytic tools to address this problem, such as the characteristics of the network, explication of network rules and frames of reference or indeed internal

power balance. It also develops prescriptive theory in relation to network management strategies likely to be effective.

The network governance narrative of public management reform

As Chapter 2 indicated, the public services 'modernisation agenda' of the late 1990s was associated with a tilt back to networks (Newman, 2001) and away from New Public Management. Newman (2001) comments on the post 1997 shift to multi level government, consistent with the Hollowed Out State thesis, with the growth of horizontally organised government in Scotland, Wales and London. Labour tried to strengthen partnership working both at local level (e.g. the 1999 Health Act made collaboration mandatory) and national levels. Markets were curtailed and replaced by networks (health care being an emblematic example). These networks were 'joined up' so that policy responses were more coherent. While public agencies still took on a commissioning rather than a providing role, there was a greater emphasis on not for profit providers (and social entrepreneurs) than standard for profit providers. The rhetoric shifted from competition to collaboration and from direction to inclusion, reengaging with public service professionals. Policy reflected 'what works', within the spirit of Evidence Based Policy making.

Such trends created complex networks (at multiple layers and with non traditional actors) that might display weak steering capacity. So there was a countervailing attempt to balance such networks by a still directive centre. New central mechanisms were used to coordinate policy: for example, sector wide 'summits' to bring all key actors in a policy field together; the appointment of the national Clinical Directors or 'Czars' in health policy (p107). Strong reporting lines upwards and systems of performance management continued (through the Strategic Health Authorities). New information and communication technologies created new modes of remote control, supervision and performance management.

The network governance literature suggests network forms may be particularly effective in tackling 'wicked problems'. The concept is taken from social planning (Rittle and Webber, 1973) referring to problematic social situations where: there is no obvious solution; many individuals and organisations are involved; there is disagreement amongst the stakeholders and there are desired behavioural changes. Public policy problems are 'wicked' (Clarke and Stewart, 1997) where they go beyond the scope of any one agency (e.g. health promotion strategies) and intervention by one actor not aligned with other actors may be counter productive. They require a broad response, working across boundaries and engaging stakeholders and citizens in policy making and implementation (Australian Public Services Commission, 2007).

Sullivan and Skelcher (2002) consider 'cross cutting themes' – a term which shares many features with wicked problems. They point to high organisational fragmentation in the public sector following on from the hollowing out/NPM cycle of reforms. Their image of the 'congested state'

(Skelcher, 2000; Sullivan and Skelcher, 2002) suggests high levels of fragmentation combined with plural and multi level governance, requiring significant resources to negotiate their delivery. The increasing number of UK networks and partnerships after 1997 attempts to increase system wide capacity to achieve 'cross cutting outcomes' in hollowed out policy arenas:

'cross cutting issues are those which have a fundamental effect on well being yet continue to defy the actions of government to address them...they cannot be tackled successfully by a single agency, nor will disjointed action have any real effect'

(Sullivan and Skelcher, 2002, p56)

3.8 'Good' network management in public and health services

More managerially orientated writers have examined the tasks, characteristics and behaviours of 'good' network based managers. Ferlie and Pettigrew (1996) identified the characteristics of 'good' networkers in NHS purchasing organisations.

- strong interpersonal, communication and listening skills; an ability to persuade; a readiness to trade and engage in reciprocal rather than manipulative behaviour; an ability to construct long term relationships;
- the ability to cross various boundaries; an ability to 'speak different languages'; an ability to act as interpreter between different groups; to be credible with a range of different groups;
- tolerance of high levels of ambiguity and uncertainty; a long-term as well as a short term view; a good strategic sense, vision and ideas; an ability to reflect on experience and conceptualise; a capacity to learn quickly and to adapt in new situations;
- an ability to impart knowledge to others; to act as teacher and mentor; an ability to transfer knowledge from one setting to another; an ability to convey requisite standards and attitudes (Norm setting);

While these dimensions appear 'softer' than those found in traditionally vertically organised settings, NHS purchasers were performance managed from above and had targets to achieve so that networks co-existed with a performance orientation.

Kickert et al (1997) also examine possible strategies for network design and management. Network management (p167-170):

'takes place in a context where there is no shared opinion on which way to go. There is no clear goal or set of goals from one actor which can be taken as a guideline for managing activities within interaction processes within policy networks. Nor is there a clear hierarchy at which the manager stands at the top and can profit from a clear authority line. Last but not least, network management is not characterised by clear decision procedures on which the manager can rely...management in networks is about creating strategic consensus for joint action within a given setting'

Network management is a 'weak' form of steering with high uncertainty (the governmental attempt to steer networks is less developed in the Dutch

than UK case). Yet there are some resources available for network management. There may be cognitive interventions (e.g. furtherance of a common language; problem reframing) to reshape the initial (perhaps sectional) ideas of and interactions between actors. 'Good' network management leads to improvements in interactions within networks. They list intermediate process indicators of what might constitute an 'effective' network such as achieving win-win situations, reduced transaction costs and activating actors and resources in a joint process.

Goldsmith and Eggers (2004) argue that the network form is becoming increasingly important in American public services. Networks link public with private sector actors as public service delivery is 'hollowed out'. They explicitly address the question of network design and management. The initial design of the network can itself be fateful including: setting expectations; selecting appropriate activation tools; choosing the right structure and determining the continuing role of government in the network. A strong integrator is a critical component of a well designed network.

Once it has been set up, how can a network be effectively integrated. Sustaining a network over time requires long term relationship building and the creation of deep ties. Joint governance structures and agreed performance standards help. The governance structures should capture the need for innovation and manage change within the network, sharing knowledge effectively amongst the various parties.

The question of requisite management skills and styles requires more investigation.

3.9 Evidence based medicine, governmentality and 'soft bureaucracy'

It is possible that from the mid 1990s onwards a new basic configuration of forces has been emerging in UK health care which does not fit either with new public management or network governance narratives and which has not yet been fully analysed.

Contrary to the managerialist thesis, clinicians (rather than the businessmen and economists prevalent in the 1980s) once again wrote important health policy documents in the 1990s. The Calman Hine Report (Department of Health, 1995) (both authors were Chief Medical Officers) argued cancer services were better organised as a network than a quasi market. Scally and Donaldson's (1997) paper on clinical governance (Donaldson was later to become a Chief Medical Officer) used ideas from quality management and 'soft' approaches to introduce new modes of clinician control.

The Evidence Based Medicine movement brought into the health policy arena powerful ideas from bio-medical research. It accelerated and institutionalised in the late 1990s, spilling over to ideas about Evidence based Policy and Management. We see the increasing volume of appraisal

activity undertaken by National Institute for Clinical Excellence (NICE); the rolling out of evidence based National Service Frameworks and standards together with outcomes guidance; and increased funding for the National Institute for Health Research (NIHR). It is difficult for clinicians to contest the legitimacy of these guidelines and some even welcome them. These developments are enduring, of broad scope and scale and have been under analysed.

We need to characterise this new arena and its typical control regimes. A new knowledge/power nexus may be emerging where codified evidence becomes both an institutionalised and more legitimated form of authority than a managerial command, a market price or indeed bargaining and consensus generation in a tacit network. Such power is cognitive or theoretical rather than material and is 'softer' than traditional political power. Although this knowledge is produced by small cognitive elites, it may become societally pervasive if scientific 'advice' and norms are institutionalised across whole fields.

Foucault and 'Governmentality'

How might we explain such a form theoretically? One possible theoretical perspective derives from Foucault's (1973, 1974, 1977, 1991, 2007) work, best known for his account of the transition between the pre modern and early modern period in France around 1800. His work sprang from an interest in systems of thought, leading to a distinctive theory of power and rule radically different from conventional pluralist or Marxist approaches. He analysed the development of early modern states and societies, including the simultaneous emergence of novel knowledge bases (e.g. social medicine and psychiatry), 'carceral' or jail like institutions (e.g. prisons, clinics and asylums), together with associated techniques and practices. His theory of power is concerned with obedience, self regulation and the acceptance of authority by the ruled. For Foucault, modern states moved away from rule by crude physical force to more sophisticated governance based on (shaped) consent. Contemporary neo liberal rule where traditional line hierarchies erode in favour of looser modes of high commitment organising has also been seen through this prism (Clegg et al, 2002).

The emergence of the mental hospital around 1800 (Foucault, 1973) is a major example, as is the early public health function designed to combat epidemics associated with the emergence of the first 'clinics' for medical patients. Potentially risky populations are surveyed and classified by emergent groups of experts, with deviant elements identified for 'reform' within new spatially segregated organisations. Issues of control over the body ('bio power') are central. These new organisational sites are underpinned by novel discourses and an emergent science that make them difficult to challenge (the power/knowledge nexus). They depend on a system of professions and expertise for legitimated functioning: both the knowledge base and the legal power of psychiatrists underpin their ability to section patients to mental hospitals and to protect the public (as well as treat the patient), as the State requires them to do. These disciplinary discourses are internalised by their subjects who then may become docile

and self regulating: so such shifts in the basic identity of the self are important.

Dean (1999) explores Foucault's core concept of 'governmentality.' This refers to the 'conduct of conduct' or any more or less calculated means of the direction of how we behave and act. He offers the following definition of government as 'governmentality' (p11):

'any more or less calculated and rational activity, undertaken by a multiplicity of authorities and agencies, employing a variety of techniques and forms of knowledge that seek to shape conduct through working through our desires, aspirations, interests and beliefs for definite but shifting ends and with a diverse set of relatively unpredictable consequences, effects and outcomes.'

This definition shifts our perspective from the political institutions of the nation state to attention to the government of human conduct broadly, by various agencies and using knowledge and technique to influence 'practices of the self' and underlying identities. Of course, such attempts to shape conduct may meet resistance or even 'counter conducts' from affected actors such as clinicians.

Governmentality (Foucault, 2007: p108) incorporates two key processes involved in the construction of the early modern state. First, it refers to:

'the ensemble formed by institutions, procedures, analyses and reflections, calculations and tactics that allow the use of this very specific, albeit very complex, power that has the population as its target, political economy as its major form of knowledge and apparatuses of security as its essential technical element.'

Secondly, it refers to:

'the development of a series of specific governmental apparatuses on the one hand, and on the other a development of a series of knowledges.'

In this power/knowledge nexus, emergent political/medical knowledge and associated proto professions become an integral part of the early modern state's capacity to govern (e.g. public health medicine helps govern epidemics; psychiatry helps govern mental illness). The third core Foucauldian concept is that of the self and of changed identity (Townley, 2008) produced through governmentality: so the discipline of the penitentiary (Foucault, 1977) brings the offender to repentance and a reformed life. The new 'carceral' institutions monitor and reshape human conduct, moving it back towards social norms. They do this by producing a set of micro practices which constantly survey, classify, discipline and reform (e.g. daily timetables in schools and prisons; detailed records of the behaviour of mental patients. His most famous image is of the prison 'panopticon' whereby the architecture of the penitentiary enables a jailor constantly to survey all inmates but not to be seen by them.

Foucault (2007) develops a further important notion of 'bio power' as applied to populations. 'Bio power' (Gordon, 1991) refers to: *'a politics concerned with subjects as members of a population'* where government seeks to reshape deviant or problematic human conduct across a population (e.g. sexual behaviour). For example, a growing social medicine perspective, knowledge base and associated techniques of intervention

augments the State's capacity to respond to collective health problems such as a high epidemic rate, epidemics and poor diet (Foucault, 2007). The focus of the power/knowledge nexus here moves from the traditional concern with the individual or the family to the governing of the whole population.

'Governmentality' explains how the modern state 'governs at a distance' through shaping the 'conduct of conduct' rather than using direct physical force. More subtle authority emerges. There may be resistance to governmentality, leading to 'counter conducts.' However, power relations are underpinned by specialist knowledge (e.g. public health; criminology; psychiatry) that make power legitimate and difficult to challenge. The surveillance of the field by a physical or now electronic 'panopticon' is a source of discipline. New ICTs may provide a powerful surveillance capacity for the organisational centre (Zuboff, 1988). Foucault is interested both in 'macro physics' (new institutional sites and bodies of knowledge) and 'micro physics' (particular practices and techniques).

While these ideas may at first glance appear somewhat historical or abstract, it is important to note that they have been applied to current organisations and specifically health care organisations by a cluster of writers. In the general field of organisation studies, Reed (1999) asks: are we seeing a shift from a Weberian bureaucratic mode of control based on principles of hierarchy and the rationalised office ('the iron cage') to Foucauldian mode, based on the 'gaze' and surveillance by the all seeing and reformative panopticon (Reed, 1999)? Panopticon control refers (p28) to the widespread diffusion of specialised techniques of surveillance and control which construct a new order. Panopticon control consists of a loosely connected series of discourses and micro practices (p29):

'at the theoretical core of Foucault's model lies a processual analysis of organisational control based on a network of spatial, temporal, observational and normative practices dedicated to the internalised self surveillance and discipline that largely dispenses with the externally imposed controls so strongly emphasised in Weber's model.'

Surveillance based organisations transform disordered individuals into obedient subjects by various techniques which include: continuous and remote supervisory observation; hierarchical ranking and distribution; pedagogic internalisation and normalising judgement (from superiors about what constitutes good conduct). This melange of techniques can produce internalised self surveillance and self discipline. As Reed (p31) argues:

'this form of continuous, unobtrusive, and pervasive surveillance combined with internalised, cultural, self management and discipline has provided the theoretical benchmark against which the emergence of a new organisational control regime that radically breaks with its bureaucratic predecessor has been analysed in recent years.'

Panopticon control produces a new fragmented form of control in which alternative sources of meaning and resistance are suppressed and deflected: *'the sovereign power of the ruling class, power elite or technocratic cadre seem conspicuous by their absence'* (p39). This control form is flexible and mobile, possessing a mix of 'tight loose' control properties functional in less static organisations (e.g. new information and communication technologies may replace a de-layered middle

management). New ICTs are seen as representing a potential new form of 'electronic pantopticon' whereby the field is kept under constant surveillance by the remote but all seeing centre. This mode of control is well suited to more network based forms emerging in both large firms and public agencies. Reed highlights several possible shifts – which echo the literature already reviewed – to support this thesis. Reed notes (1999, p27) that the UK public sector is shifting to more 'localised', targeted and modest forms of political intervention in which delegated control and regulated autonomy are key themes, as in the case of 'high performing' NHS Trusts and now Foundation Hospitals.

Reed himself is sceptical that a major shift is occurring 'from the cage to the gaze', and points to the resilience of the bureaucratic form and of conventional power relations. Hybrid control schemes may be emerging which mix Foucauldian and Weberian elements.

Courpasson (2000) applies this perspective in a study of how senior managers control professional elites (p142):

'existing legitimate authority perpetuates itself by incorporating soft practices and articulating these with hierarchical and bureaucratic processes...games and soft controls are influenced by prevailing authority...an ambivalent structure of governance, within which domination is not essentially exerted by...violence, direct punishment or local hierarchical supervision, but through sophisticated managerial strategies'

Strategies for dominating the elusive, tacit and ambiguous world of professionals but doing it legitimately include: (i) importing management techniques to test and prove claims of professional success such as explicit appraisal and (ii) objectifying personal responsibility such as centralised assignment letters. This 'soft' control achieves legitimacy amongst professionals in an entrepreneurial organisation without external managerial coercion

Courpasson and Dany (2003) describe a 'democratic-bureaucratic' form of governance in which *'morality is rationalised and used as ways of promoting obedience'* (p1232). They argue that 'high fliers' are more likely to obey commands they believe legitimate. Commands which have moral force (such as evidence based practice, reduction in health inequity) provide 'soft coercion'. Townley (2008) recently analysed the dynamics of another public service (the UK criminal justice system, especially the rise of performance management systems there) as a new disciplinary management technology within a Foucauldian framework.

Applications of Foucauldian ideas to the health care sector

An interesting development over the last fifteen years has been the application of Foucauldian ideas by a cluster of authors to current health care organisations or indeed other public services setting (see Townley 2008 on the UK Criminal Justice System). In an early text, Johnson (1995: p11) sees the rise of the professions such as public health and psychiatry as part of governmentality, linked to the surveillance, disciplining and reform of disordered populations. The professions were a core part of the formation of the modern State. The obedience of the subject to the

discipline/knowledge nexus is reinforced by professions' legitimacy. The State has historically licensed and sheltered the medical profession, and more recently attempted to reform and liberalise it. On the other hand (Johnson, 1995: p11) the medical profession helps to construct official reality, adding to a capacity for governmentality within the public realm. The governmentality perspective has been used to conceptualise recent UK policy developments in specific fields of clinical governance and patient safety.

Examples of the governmentality perspective as applied to health care organisations

Clinical Governance Systems

Flynn (2004) has applied governmentality ideas to an analysis of new NHS clinical governance systems. He sees clinical governance (Scally and Donaldson, 1998; Department of Health, 1998) as an important shift in the traditional relationship between the state and the health care professions.

Flynn quotes the definition of the Department of Health (1998b, para 3.2):

'a framework through which NHS organisations are accountable for continually improving the quality of their services and safeguarding high standards of care by creating an environment in which excellence in clinical care will flourish.'

The Department of Health (1998) saw quality improvement as linked to improved professional self regulation (Flynn, 2004, p13):

'health professionals having the ability to set their own standards of professional practice, conduct and discipline. However it is noted that in order to justify this freedom and to maintain patient trust, professionals 'must be openly accountable for the standards they set and the way in which these are enforced.'

Clinicians are co opted and required to participate in self surveillance and control (such as consultant appraisal), different from standard bureaucratic control. There is a 'loose' system of self regulation but within a 'tight' framework of accountability upwards. The clinical governance regime is backed by legal power and newly created national agencies that can and do intervene in failing sites. Flynn (p19) argues:

'in organizational terms, bureaucratic and Taylorist principles of regulation are potentially redundant once managers and professionals routinely engage in self assessment and performance appraisal'.

Flynn sees clinical governance as an example of governmentality in action, based on audit, regulation, self surveillance but also with a steering role for the State. While clinicians and professional bodies help set standards, State agencies intervene in cases of suspected failure. Flynn (2004, p25) concludes:

'clinical governance is thus a specific example of governmentality in practice. Medical professional expertise is an essential aspect of the management of health risks, but its regulation requires that clinicians engage in their own surveillance and self-management. Injunctions to accept responsibility for improving quality and accountability for performance demonstrate the adoption of discourses informed by total quality management and excellence in organisations. But these discourses and

practices are different from modern bureaucracy precisely because they entail discretion, entrepreneurship, flexibility, normative commitment and self discipline rather than obedience to rules and management directives.'

Governmentality by network in English primary care (Sheaff et al, 2004)

Sheaff et al (2004) explore within case studies of 12 sites the potential development of new control modes in UK primary care with the creation of Primary Care Groups and then Trusts from 1997 onwards. This was potentially a significant shift away from the old model of professional dominance evident since 1948, as it was supported by a cluster of developments in the policy domain (NICE, NSFs, clinical revalidation and clinical governance systems). It was noticeable that senior doctors retained an important role in the 'new' systems, however, and change was not simply imposed by managers. They noted that the new technical discourse around clinical governance could itself operate as a power medium which was seen as legitimate as it was presented as science and quality led. There were also attempts to make professional practice 'more transparent to the gaze' and increase surveillance from the PCT of the practices (e.g. prescribing).

Sheaff et al (2004) concluded there appeared to be an emergent form of governmentality through network evident. More continual scrutiny of GPs was replacing the occasional gaze of the old system, with more comparative/directive 'technologies of power' developing which were focussed on mainstream clinical practice. Professional discipline was being exercised more collectively and through a 'corpocracy', with practice in individual practices becoming more transparent. Collective control was exercised through durable, semi formal, local peer networks, with a new clinical managerial stratum emerging as a centre of leadership. While Foucaudian theory emphasises sanctions as a source of docility, however, they found the presence of a legitimating discourse and positive incentives to be more important.

Patient safety and the changing regulation of medicine

Waring (2007) applied the governmentality concept to new regulatory machinery (National Patient Safety Agency; National Reporting and Learning System) in the emergent field of patient safety. He sees these systems as providing managers with an expertise and 'gaze' in which to engage in medical regulation through surveillance. Where doctors seek to adapt their practice to this field, they further engage in self surveillance which may negate the need for overt management. We may not see the expansion of the domain of management over medicine, but rather the domain of management within medicine. His study of the introduction of safety systems found the new 'official' systems reporting to managers were marginalised by doctors (there was non cooperation in incident reporting) in favour of adaptive regulation and the development of pre existing professionally controlled systems to new questions of safety. This was an example of self surveillance and governmentality in action, eroding the direct capacity of managers to control or even to survey.

The introduction of a Casemix Information System

Nor is the Foucaudian literature on health care organisations parochially UK specific. Doolin (2004)'s study of the introduction of a casemix information system in a New Zealand hospital used a Foucaudian framework. The new information system enabled management to try to increase their electronic surveillance of clinical practice and local variances, combined with the enrolment of senior doctors as clinical managers capable of challenging clinical practice from within the medical profession. However, such managerially defined categories and scrutiny were not accepted by resistant clinicians who failed to comply with demands for information (engaging in successful 'counter conduct' in Foucaudian terms) and the long term impact of the system was not great, especially as the managerial system soon moved on to still newer reforms and lost interest in the casemix system.

Long term developments in the health policy domain which may be consistent with Foucaudian analysis

There are various long term developments in the UK health policy domain over the last fifteen years or so which appear to be consistent with such Foucaudian forms of analysis and indeed may have inspired their greater use:

- The institutionalisation of Evidence Based Medicine and the production of an increasing number of transparent and comparative norms and guidelines; the development of a power/knowledge nexus;
- The establishment of clinical governance and other systems which emphasise 'responsible autonomy' and a self regulation/credible threat of intervention mix;
- The growth of clinical managerial hybrids who may have acquired a 'reformed' managerial identity in addition to their initial clinical identity and who may be normatively committed to a quality/service improvement agenda;
- Governance through and scrutiny by a formalised and professionalised network which has the capacity to take disciplinary action;
- Powerful new ICTs and reporting systems which mean that the field is under the perpetual gaze of the remote but ever watchful centre.

3.10 Existing typologies of networks

Policy networks

Marsh and Rhodes (1992) and Rhodes (1997, p38) developed a typology of policy communities/networks, arranged along a tightly/loosely integrated dimension. The typology distinguished between:

(i) policy/territorial community: characterised by a high degree of stability; a restricted number of participants; high vertical interdependence with central government; but low horizontal articulation across to other networks. They are found in major functional areas (e.g. education) or territories (e.g. Scotland). We note that territorial networks may have grown in significance since the round of devolution reforms. This form was a major mode of policy making centred on Whitehall departments.

(ii) professional network: these networks are also stable, have restricted membership, display strong vertical interdependence but weak lateral articulation. Distinctively, they also serve the interests of a dominant profession. Medicine's ability to construct and staff clinical advisory machinery to advise the Department of Health is an extreme case.

(iii) intergovernmental network: these have limited membership, limited vertical interdependence and extensive horizontal articulation. Examples would be the representative associations of Local Authorities, from which (for example) trade unions are excluded.

(iv) producer network: these have a fluctuating membership with limited vertical interdependence and serve the interests of the producer.

(v) issue network: these are unstable, with many members and limited vertical interdependence. Temporary single issue campaigns are a good example.

Policy network configurations link to issue outcomes as they shape the distribution of political power. Some networks may be more powerful and closer to government than others. A professionalized network may ensure professional dominance within the world of 'subgovernment.' A key question is whether health care networks have moved away from the old pattern of professionalized networks to other forms.

Typology of networks in health care

Perri 6 et al (2005) developed a typology of health care networks, having themselves reviewed an extensive literature. Their logic produces a four cell matrix of network forms as follows:

- *Hierarchy (strongly regulated and strongly integrated)*: This form has a core which represents the authority of regulation to the periphery as well as a marked boundary. There will be weaker bilateral ties amongst junior members but stronger multi lateral ties between more senior members who form a network elite. It has a strong bureaucratic and Weberian flavour.
- *Isolate (strongly regulated and weakly integrated)*: This form has a periphery but no significant internal core, so that the core that regulates is outside the network. This leaves only the sparsely bonded individual who has few bonds of internally facing accountability. It produces temporary celebrities or stars but has weak collective action potential and a poor ability to tackle complex problems.

- *Individualism (weakly regulated and weakly integrated)*: Here there is no significant group boundary or central power system so there are significant opportunities which can be exploited by entrepreneurial individuals who seek to link disconnected actors to maximise influence and reward. Brokers span boundaries and structural holes. There may be an excessive emphasis on self interested and instrumental action.
- *Enclave (weakly regulated but strongly integrated)*: This form has no distinct core or periphery as members are structurally equivalent: there is strong group identity and notion of peer based relations. This network form is dense, with strong internal ties between members but sharp inequality between members and non members. There is intense mutual support internally but confrontation with externals. Clinically dominated networks may fall into the enclave category.

They apply this typology to the growing literature on health care networks. This literature suggests a 'continuum' of network forms ranging between 'loose' and 'tight' (e.g. managed clinical networks). A common assumption within the health care management literature that the 'tight' (most managed) form is desirable is to be investigated.

Perri 6 et al distinguish between health care networks as follows:

- *Learning and informational networks*: These are the most common form of networks in health care, bringing together individuals and organisations to share information and develop best practice guidelines through 'soft networking'. They may be sponsored by a profession or a government or research agency. They may not necessarily advance towards integrated service delivery structures.
- *Coordinated networks*: This form seeks to develop new forms of integration between professionals and organisations based on a redesigned process, such as a care pathway or joint assessment process. However, the financial and clinical responsibilities of the parties involved remain separated and not subject to a binding contract. At the more managed (hierarchical) end of the spectrum (e.g. managed clinical networks in Scotland), these networks begin to manage clinical work more directly, as in the UK's managed clinical networks. However they also seek to retain strong professional involvement.
- *Procurement networks*: The USA demonstrates a health care system which is insurance rather than taxation based, market driven and fragmented. A policy response has been a move towards 'integrated health care networks' to provide all elements of the care continuum from health insurance, inpatient and outpatient care and long term health maintenance. The literature suggests that only limited integration has been achieved, especially in clinical work practices given issues of different cultures and work practices.
- *Managed care networks*: This highly managed form attempts to create a fully integrated network to establish durable and long term relationships between partners in the network. An example is Kaiser Permanente (USA) which subcontracts with preferred providers but which emphasises primary and non institutional

care provision in purchasing a comprehensive care package for its population.

3.11 Concluding discussion

This necessarily long and complex chapter has reviewed academic perspectives on network forms of organisation, drawn from a range of different social science disciplines and approaches. The review puts empirical cases in a more theoretical framework. Can we identify some broad themes and debates within the literatures?

Clearly the post Fordist literature has had major influence. This literature heralds the growth of a significant new organisational form. While new ICTs are sometimes seen as important, authors differ as to whether they are the prime technological driver (as Castells argues) or whether that is too determinist a view. The knowledge based view of the network based organisation has been widely influential as networks are seen as high on learning and knowledge sharing capacity. Knowledge may flow well inside professional communities of practice, but badly between them.

The sociology of the professions literature classically specified professional dominance as a key characteristic of health care organisations. Recent critics have suggested this may have been eroded by marketisation and managerialisation, but this has also been disputed. Clearly we need to be alert to the role played by health care professionals in networks. The recent literature suggests new formulations which get past the standard professions (vs) the State binary opposition. Re-stratification within the medical profession may encourage the development of clinical managerial 'hybrids'.

Political science based literature suggested fruitful models and concepts, such as the 'hollowing out of the state' and the 'network governance' literatures. They remind us that network reforms sit in a long history of wider UK public management reforming.

There is a debate in organisational studies about a possible transition from Weberian to Foucauldian control modes. The governmentality perspective has already been applied to recent NHS developments and is potentially theoretically fruitful.

Chapter 4 Study design and methods

'It is our contention that case study research is a valuable and developing research design with significant potential to contribute to organisational studies and to the formation and implementation of policy. As a design, it particularly lends itself to the exploration of complex 'how' and 'why' questions, as well as improving our understanding of the organisational behaviour embedded in the social context of which 'it' is a part'

(FitzGerald and Dopson, 2009)

The study uses a qualitative or interpretive design, specifically comparative and processual case studies of 8 health care networks. This chapter considers why we adopted this research design first of all as an overall epistemological and methodological choice and then considers the operational methods utilised in the study. It then outlines some methodological issues which arose in the field and how we responded to them.

4.1 Interpretive and qualitative methods – comparative case studies

As our objectives related to interpretive 'how' and 'why' questions rather than 'how many' or measurement based questions, the design chosen was a mainly interpretive or qualitative methodology (Yin, 2003). Such a design is well adapted to explore organisational processes through time and the meaning that organisational actors attach to their actions. Qualitative designs often contain an element of induction as well as deduction, so that findings and concepts can rightfully emerge in the course of the study as well as being identified and tested from the start, as in deductive or hypothesis based studies.

Some qualitative designs are purely inductive as in grounded theory (Glaser and Strauss, 1967) and forms of ethnography, but others (such as our study) mix some deductive and inductive elements and are not purely grounded theoretical. The literature review outlined in Chapter 3 provided early theoretical direction and helped inform the construction of an agreed interview pro forma and template for case writing. The early case template for writing up case studies was refined in iterative team discussions later in the study in order to relate more strongly to theory and ensure that the mass of qualitative data was reduced in the most productive manner. The identification of 'strong' theories which attracted empirical support in the cases was undertaken in the final stage of the study and forms the basis for the discussion in the later theoretical chapters in this report.

As outlined in Chapter 3, a key task was to review streams of theoretical literature early. This was undertaken through two personal reviews of organisational studies and political science literatures on networks so that the team was sensitised to possible theories before field work. We

undertook a set of case studies where the fundamental unit of analysis was the history of the network and its associated organisations (rather than a cohort of individuals or a small group). The organisational case study is a basic method of qualitative social science (FitzGerald and Dopson, 2009). While some critics suggest it is impossible to generalise from the single case, others commend the method for its ability to build theory, at least where strong induction takes place (Eisenhardt, 1989; Eisenhardt and Graebner, 2007). A move from single to multiple case designs may also increase external validity and aid theoretical induction from process data (Langley, 1999), as does a careful strategy of case selection (Yin, 1999, 2003).

So we decided in this study to undertake comparative case studies of a set of purposefully selected health care networks and to use these cases to build organisational theory explicitly as well as to consider implications for policy and practice.

But how does one design a 'good' organisational case study? FitzGerald and Dopson (2009) highlight the following facets as some of the important indicators of an organisational case study:

- The study of the organisation is embedded in complex contexts;
- A historical perspective on the 'case' can be relevant;
- The case can be holistic;
- Case studies provide depth rather than breadth;
- Cases lend themselves to multi stakeholder analysis;
- Within a case study, the elements of the design are flexible, however case studies must involve multiple methods;
- They can be longitudinal and therefore more appropriate to the study of processes over time;
- They are easier to accomplish than ethnography and use multi methods, this makes them more attractive to the sponsors and audiences of research.

So we deliberately adopted a narrative approach in the cases which sought to tell the story of the network as a whole over time, combined with a particular focus on a 'tracer issue' which explored organisational behaviours in greater depth. We used multiple data sources (documents, observation and interviews with a range of key stakeholders) as suggested by FitzGerald and Dopson (2009). We sought to emplace the case in its national policy context and local organisational context. We also used a themed and theoretically imposed approach to analysis and the reduction of the large amount of data generated in the field, rather than a purely grounded theoretical approach.

The stories of the 'tracer issues' reveal critical incidents and key decision points where they occurred within the case (e.g. the process whereby urology services were reconfigured in the cancer cases; the fate of particular work packages in the Genetics Knowledge Parks cases). The narrative approach is distinct from more micro level qualitative work which

would emphasise the coding of blocks of text, or even individual sentences, but which finds it difficult to make sense of a macro organisational history.

Multiple case designs can retain strong internal validity. They also provide the opportunity for structured comparison (Stake, 2000) between cases. Both Eisenhardt (1989) and Langley (1999) argue that with sets of 8-10 cases, it is possible to generate low level patterns and generalisations, without sacrificing internal validity. We deliberately decided to recruit a set of 8 cases on the basis of this advice.

The focus of analysis within the case studies (Yin, 2003) is the nature, behaviour and impact of the broader network as a whole and specifically its decision making in relation to particular 'tracer issues' over time. The focus on concrete tracers also enabled us to make an initial assessment of network impact, using intermediate process indicators. Tracers were chosen to represent important policy priorities in their local settings and might vary from one locality to another.

It is a challenge to reduce the vast amount of qualitative data reported in the field to a manageable length and to make it meaningful outside its local setting. In this data reduction process, three ground rules were used. Firstly, the basic stories of the 8 cases are reported in Chapter 5, containing some quotes and vignettes to add richness to the material so that the reader is exposed to the basic data and can follow how later conclusions track back to primary data. Secondly, some structured cross case tables (See Appendix 1) aid comparison in particular thematic areas such as the use of ICTs (although FitzGerald and Dopson 2009 caution against too much reliance on such tables, or other means of analysing qualitative data in a quantitative way). Thirdly, a process of theoretical induction (Chapters 11 and 12) represents the case data in more abstract way.

4.2 Case study selection

We recruited eight cases to the study, consisting of four pairs of different networks. The intention was to sample broadly across different types of health care network to generate comparative analysis (Goodwin et al, 2004). We wanted to ensure variety in the sample rather than similarity (i.e. we did not want to recruit 8 cases of one network type) so as to extend the empirical breadth of the study and expose and explain greater variation.

But which networks should we study and why? Our initial selection of network types was influenced by the following dimensions:

- *the differential content of the work of the network*: In order to achieve variety, we distinguished in our proposal between a network organised around: delivery of a clinical service within the NHS; a broader client group network involving a range of different agencies; a network involving basic science rather than care delivery; and a network relating to the functional activity of public health with a broader population view.

- *the form of the network*: professionalized dominated 'enclave'; more hierarchically managed; more emergent and individualised at the local level;
- *organisational growth*: organic (emergent) vs mandated (imposed) network forms;
- *membership of the network*: public vs private providers; professional/managerial balance; overall size of the network;

Drawing on these criteria, we studied a pair of cases from the four following network forms, having taken advice from our Steering Committee.

The clinical genetics network was a science based network which sought to undertake translational science. It included clinical scientists as a major stakeholder group. We hoped there would be novel non NHS actors such as venture capitalists, although this did not prove to be the case. The tracer issue was the fate of translational work packages devised by the networks.

NHS cancer networks: this form related to a NHS clinical service. While it retained a professional involvement, there was a move from traditionally informal and clinically dominated networks to more managed networks as suggested in the Calman Hine Report (DoH, 1995). These are mandated and managed networks with a designated network manager and a brief to deliver the NHS Cancer Plan (NHS, 2000). We had done prior work on cancer networks (Addicott et al, 2006, 2007) so this selection enabled us to build up a longitudinal element. We focussed on the tracer of the reconfiguration of urology services, following issuing of evidence based guidance in that field. We had been informed that cancer networks were often seen as a 'positive outlier' of the network form, so while they can be seen a major example, they needed to be complemented by other network types. Their staffing levels, for instance, are much greater than the other networks in the study.

The sexual health network was a population based network of interest to public health. Other public health based networks (such as Health Action Zones) were winding up by the start of the study so that it would have been difficult to have followed their activity. Nevertheless we wanted to study a population based network. Sexual health networks have implications for the health of the nation and health promotion. We were interested in the role of public health in the network and the way in which the network outreached to local community groups. The tracer issues chosen were the development of HIV/AIDS services for ethnic minority groups, together with the meeting of 48 hour access targets in one site and reducing teenage pregnancies in the other. We wanted to study network links to community groups to go beyond the NHS.

The services for older people network was a client group network. It involves a large number of agencies (social as well as health care agencies) and professions. It was seen as strongly multi disciplinary. It was likely to involve a large private sector presence in nursing and residential care. It was chosen in part because we expected it would be highly cross sectoral. Given the need for information to cross organisational boundaries, it was hoped that there would be evidence about the development of ICTs. The

tracer issue initially was the single assessment process on discharge from hospital as this was a major placement decision with important resource effects, although this proved difficult to operationalise in practice. We finally studied intermediate care and End of Life care tracers, although in one case we concentrated on End of Life issues.

Case study sites were selected in two regions, where the two arms of the study were located, with a rough geographical balance.

For each case study, we wanted to analyse the network as a whole but also undertake longitudinal analyses of particular 'tracer issues' to assess change outcomes in an area of activity identified as important to the network and also to explore patterns of decision making in action over time. We wanted the tracer issues to be big enough to reveal important decision making activity (and to relate to major health policy objectives) but contained enough to be researchable. The tracer issues were identified in early conversation with the sites and following discussion inside the research team. We here specify them in more detail as follows:

- *Genetics Knowledge Parks*: the translation of a test for Sudden Cardiac Death syndrome in GKP1; the development of public health genomics as an emergent field in GKP2; both of which has been signalled as important areas of local activity in initial bids for funding;
- *Managed Cancer Networks*: the implementation of the 2002 Urology Improved Outcomes Guidance note in both cases; this was an important piece of guidance in relation to a major clinical area that was current at the time of fieldwork;
- *Sexual Health Networks*: GUM access targets (a key national and local policy priority) and the response to HIV/AIDS in a diverse community with special reference to ethnic minority groups (which we had presumed to be a public health priority) in the Metropolitan case; tackling high teenage pregnancy rates (a key local and national policy priority) and the response to HIV/AIDS with special reference to ethnic minority groups in the Regional case.
- *Older People's Networks*; intermediate care and end of life care as two important policy areas in the Regional case (in practice, it was not always easy to gather information; we concentrated on end of life care in the Metropolitan case (which was designated as a pilot project));

Case selection

We aimed for a metropolitan/regional mix and a rough geographical balance across the cases. We also needed to be able to secure access and we did encounter some difficulties (although in the end we successfully completed fieldwork in a set of 8 cases, as planned in the protocol).

We initially hoped to select pairs of 'higher' and 'lower' performers, with performance rated by sets of experts in our initial policy interviews. In practice, it proved difficult either to secure a consensus based rating or (where we did) to secure access to our initially preferred sites. Later in the

study, we therefore relaxed the selection criteria and as a consequence moved from ex ante to ex post performance assessment (see Chapter 7). In practice, we recruited more 'mandated' networks than 'organic' networks, which may reflect the growth of the managed network form across the health care system.

We here outline the case selection process in temporal ordering.

Genetics Knowledge Parks: Fieldwork started in the GKPs, as we already had access to one site. There were only six GKPs funded in England so that the possible sample set was small. We selected 2 examples from research intensive Universities but with different 'missions'. We had access to a Department of Health retrospective evaluation of the 6 sites where one site (the one where work was already proceeding) was seen as a higher performer than the others. So the selection process was least problematic in the GKPs.

Managed Cancer Networks: fieldwork then moved onto the Managed Cancer Networks. We identified and successfully secured access to one network which was perceived as a high performer by respondents in the policy interviews. They also suggested a lower performing site to which we attempted to get access but unsuccessfully. We then had recourse to pragmatic sampling of another site which was prepared to give us access. Reflecting on early data, we concluded that this site was also to be seen as a higher performer so that the original design had to be modified in favour of ex post assessment.

Sexual health Networks: These were the third set of cases to be investigated. We secured access to a metropolitan sexual health network with an established reputation for effective meeting of targets and service redesign. We then selected a regional sexual health network (in a very different locale) for purposes of variation and geographical balance.

Older People's Networks: They were the final two sites in which fieldwork took place. We successfully secured access to a regional city which was still developing a complex cross agency Older People's Network. We then wanted to balance it with a metropolitan case study but found it difficult to identify a suitable candidate initially. Towards the end of the study, an interesting possibility emerged in a site where we already had contacts and we managed to secure access and complete the fieldwork there. Interestingly, it was the only non mandated network we managed to recruit.

So the selection design had to be adopted somewhat as we moved into the field as it was not always easy to secure access. We moved to a form of ex post performance analysis as a consequence. But we successfully completed a set of 8 comparative case studies, organised in pairs in 4 different health policy arenas, as the protocol proposed.

4.3 Case study methodology

We operated a strategy of 'triangulation' through multiple data sources (Stake, 2000) to ensure internal validity. We started each case study with a

collection of written policy documents and policy interviews with national level key informants and other appropriate stakeholders to build up background knowledge of the health policy issue. We carried out 20 policy interviews for the clinical genetics networks, 7 for the cancer networks, 11 for the sexual health networks and 23 for the older people's networks, making a total of 61 policy interviews in all (NB to preserve anonymity we have not identified the roles of these informants in the matrix of respondents - Appendix 6). We then wrote up a summary of policy developments. We identified possible sites through conversation with key informants in the policy interviews. We hoped initially to use expert opinion to identify higher and lower performers in each sector but this proved problematic and revised our approach to performance assessment (as detailed below). We then negotiated access, and on occasion encountered difficulties so had recourse in some instances to alternative sites or tracers on pragmatic grounds (detailed below).

Work in each site started with observation at key meetings and collection of key local documentation (such as minutes of key committees; local policy and strategy documents) to 'get a sense' of the site. This work helped suggest respondents for later interviews. This was followed by about 20 semi structured interviews of about one hour each per site, although there was some variation. Our sampling strategy was a combination of respondents suggested to us by initial contacts and documentation and a 'snowball' element of names that cropped up in earlier interviews. We also wanted to secure respondents from a variety of roles. We interviewed network managers and a selection of actors revealed as important in the decision making processes studied, typically a mix of doctors, nurses, managers, and user/voluntary sector representatives. We also observed a number of relevant meetings to get a better sense of group and leadership processes. We did not in general find problems in accessing representatives of particular groups of respondents, although there were gaps in two cases (general practitioners in the Metropolitan Sexual Health case; Social Services management in the Metropolitan Older People's Case).

In all, we carried out 31 interviews in the two clinical genetics cases, 49 in the managed cancer networks, 49 in the sexual health networks and 38 in the older people's networks (for a detailed breakdown of interviews per case see the matrix Appendix 6). Hence a total of 228 interviews were conducted for this study (167 case study site interviews and 61 policy interviews). In addition, a team member had already been observing the GKP1 in the 2002-2006 period and had already undertaken 54 earlier additional interviews and observed 25 GKP meetings (2002-2007). These earlier data have been included in the GKP1 case study as a 'free good.'

A semi structured interview format was chosen. This mixed a basic core of similar questions (see pro forma - Appendix 4) with some customisation to the geographical site, health policy arena and type of network. The core pro forma was built up after initial literature reviews and policy analyses, so it was informed by both theory and policy.

We wrote up the cases in four pairs. We decided the final report should be written up in a thematic mode, reviewing material across the eight cases to start moving from description to analysis. The chapters in this report address the six objectives in the original protocol (e.g. role of ICTs) but also new themes which emerged inductively from data and in-team discussion (e.g. learning in networks).

A 'whole systems' workshop was held at the end of the project (May 2009) with attendance from the networks, and also NHS London and the Department of Health. There were short presentations outlining the main findings and then group discussion. Notes summarising group discussions are reproduced at Appendix 3.

4.4 Operational methods

There were a number of relatively minor changes in research design in the course of the study, but they did not in our view affect the core of the work. Despite such difficulties, we successfully completed and analysed a set of 8 case studies. Where we encountered operational difficulties, we devised responses to ensure that the study could continue in the field successfully.

As suggested in 4.3, early policy interviews built up a knowledge base and aided site and issue selection. A substantial policy document was written and filed on each sector. Two initial literature reviews were undertaken on (i) political science/public management theories and (ii) organisational analytic theories which helped emplace the study in a theoretic context, and formed a first basis of our theoretical literature review chapter. These reviews revealed many different perspectives, triggering team discussions about which might be most useful.

Given this is an organisational study, our approach to getting a user perspective was through user representatives encountered on key committees. We were only able to secure a contained amount of material. Where we have data, we report it (e.g the enhanced role of user representatives in the Urban Cancer Case). But there is not enough material for a full chapter. In part this was because Professor Janet Askham from the Picker Institute who had been advising us on this aspect of the study sadly died in the course of the study.

We initially hoped to make estimates of staff costs associated with networking by asking respondents to keep time diaries. However, early conversations suggested strong respondent resistance to the time commitments implied by this request so that we dropped it as unfeasible, especially as it was not a core part of the study. We were thus not able to derive time and cost data. However, we do consider the staffing implications of our finding that networks need to be 'adequately' supported in administrative terms in the later policy chapter, so hope to contribute in a revised fashion.

Delphi studies were undertaken with experts in two network types (clinical genetics and managed cancer networks) to derive consensus based success indicators to be used in performance assessment. It proved difficult either

to derive performance indicators which were both agreed and insightful from the Delphis, or to collect the data needed to operationalise them. It was pointed out to us that perceived performance levels could shift over time. Thus it was not possible to use them to select pairs of higher and lower performers in practice. So the utility of the Delphi exercises was not found to be substantial.

We then moved towards more pragmatic selection of later cases, using ex post (rather than ex ante) performance assessment, informed by policy interviews (sexual health cases; older people's cases). We used the performance assessment framework developed by Turrini et al (2009) and developed it further. We think this is an interesting application which adds value to the study.

The tapes of the semi structured interviews were transcribed, read and analysed by the lead researchers on each case. We initially considered coding material into NVivo to create a cross case data base but in the end, and after discussion in a team meeting, did not pursue that option. The team felt there were very considerable time implications, a lack of developed technical capability within the team, and doubts about whether such a coding based approach would produce the strong overall macro understanding of the case that we required, given the deliberate use of the narrative method. There was thus considerable uncertainty about the utility of a NVivo based method in practice.

The use of early theoretical review, active team discussion and an agreed case study template was identified as an alternative method for case study 'sense making' which better fitted the narrative based nature of the study. In our view this alternative approach worked well in practice and was an appropriate design choice.

Approaches to cross case synthesis

To facilitate cross case comparison (while leaving some scope for expression of local difference), we used a structured process of analysis agreed within the team early on. The first step was the broad literature review (summarised earlier) which identified potentially valuable theories to explore in fieldwork and sensitised case writers to a set of potentially valuable theories. After several discussion sessions, we produced a case study 'template' with a common core of themes, headings and categories for case writers which enabled comparing and contrasting but also with some scope for customisation. We were keen to build in agreed comparative themes early on in the case writing process. Case writers were asked to tell 'the story' of the case and of the tracer issue in detail but relate the narrative to the case study template. They were asked to be aware of – and comment on the empirical strength of – the competing theoretical frameworks in discussion at the end of cases. Early case study documents (e.g. Genetics Knowledge Parks) were then reworked to fit with the finally agreed case study template.

Suggestions for development and revision to the first draft of the case study template were made in team discussion, and a final template agreed, which

added more thematic and theoretically developed areas as ICTs, leadership and governance (organising the empirical material which forms the basis of the chapters in this report) as well as earlier themes derived from the initial proposal. The final case study template is summarised in Appendix 5 for ease of reference. The case study documents themselves were seen as confidential internal 'source' documents which would start the process of higher order analysis.

The next step in the process of analysis was to produce a pair of parallel cases in the same sector. The first worked example of a 'paired report' was in the cancer cases and this operated as a template for the three other sectors. Cross case comparison within the pair of cancer cases began to identify higher order concepts and findings.

We then moved to a four case comparison (cancer cases with the Clinical Genetics cases) and then with the whole set of 8 cases. Such comparison work was discussed face to face in a series of long team meetings towards the end of the project. After early work with the 'paired' case source documents, we moved to comparisons across the 8 cases in relation to (i) themes specified in the protocol, (ii) identification of those theories identified in the early literature review which had resonance with the case study data as signalled in the individual source documents. This started a process of theoretical closure across the study.

This process of iterative and inductive analysis further generated a common understanding and interpretation across the team, which is important given that fieldwork had been undertaken by six different researchers. We consider that these discussions were helpful and valuable in moving to cross case analysis in a theoretically informed way and developing a shared understanding of the whole team across the cases. The development of the Turrini et al model and the 'extra' 54 interviews secured in the GKP1 case through the use of material gathered by a team member in an earlier study of this site are additional outputs/gains to SDO not signalled in the original proposal.

So the cross case analysis was informed both by an early literature review which identified candidate theories and a common case study template, developed in discussion in a number of team meetings. This process thus contained an inductive and iterative element as well as an early theoretical structure. Cross case analysis was built up from pairs to cross pair comparison and then across all 8 cases in sequence. The categories agreed at this stage for chapter headings strongly influenced the format of the final report.

Final report writing

Once the set of 8 cases had been finalised, the Principal Investigator acted as lead author and wrote the whole of the final report, drawing on the source documents for data and examples. This secured a unity of writing style across the whole of the final report. However, the text of the final report also went through various iterations and comment at face to face team meetings to ensure that case writers were happy that the use of their

case study material was appropriate and the theoretical interpretations were valid.

Workshop phase

Feedback opportunities were offered to all 8 sites after individual cases had been written: seven sites have so far taken them up; but in one site the report has been circulated but there appears little appetite for formal feedback. These local workshops also served as a final stage of data verification and collection. We presented thematic findings to an end of project workshop for a wider audience drawn from the sites and elsewhere at King's College London in May 2009. This workshop had an action orientation that sought to engage attendees with the findings and issues raised, prompting thought about collective action. Key notes from the workshop day at Kings College London are reproduced at Appendix 3.

4.5 Issues, problems and responses

Ethical approval and confidentiality

We did not encounter major problems with ethical approval. MREC approval was secured. Local R and D approval became an issue in one site (older people's services) where fieldwork was delayed. Individual respondents were given an information sheet about the project and explicitly asked at the beginning of the interview to consent to being interviewed and recorded. Anonymity was promised both to individuals and to participating sites. In order to ensure confidentiality, tape transcripts were assigned a numeric code (rather than being filed by respondent name) to which only the lead researcher and supervisor had access and stored securely. Where quotes have been used, very broad descriptors have deliberately been used ('clinician'; 'manager') to protect anonymity.

Access issues

We had relatively minor access problems. We were not able to secure access to a cancer network thought to be a 'low performer' and had to go elsewhere, with knock on effects on overall design. We were not able to secure access to the local social services department in one older people's case.

The user perspective

Professor Janet Askham (Picker Institute) was the consultant to the study on user perspectives. Janet very sadly died in the course of the study. The focus of the study was on decision making within organisations and following the protocol, we made the decision not to interview users (patients) directly. We did interview patient and voluntary organisation representatives where they emerged as significant stakeholders in the decision making process. User involvement was slowly developing from a

low base so we do not have much material. Where it was developing (e.g. Urban Cancer Network), we comment in the case analysis.

Staffing

In 2007, the part time Research Associate based in Leicester resigned from the project after having completed one case (the urban cancer network). We alerted the SDO to this resignation and secured a six month extension to the study within existing resources. The Co Investigator at the Leicester end recruited two experienced local researchers to undertake the two remaining cases (one case each). The monthly team meetings referred to earlier got these 2 researchers 'up to speed'.

Chapter 5 The story of the eight networks

We here summarise the overall story of the eight networks studies, organised in four pairs. We mix description with within case analysis. Later empirical chapters develop cross case analysis further but the purpose of this chapter is to introduce the basic case material.

5.1. Clinical Genetics Networks

We studied two Genetics Knowledge Parks (GKPs) as examples of scientific networks in health care. They were based in University settings but were charged with reaching out to other actors. We hoped to explore the dynamics of a new form of translational science. We completed an initial 5 policy interviews and Appendix 6 provides a detailed matrix of the 31 case study interviews undertaken. As noted earlier (Section 4.3) policy (15) and case interview data (54) from a previous study were included in the analysis.

Policy background

New academic science in biotechnology– and genetics in particular – may help develop radical new diagnostics and treatments in health care, in such areas as tissue engineering (cartilage growth); pharmacogenetics (drugs aimed at people with specific genetic profiles) and bio informatics (new technologies for the rapid labelling of RNA, DNA and proteins). They herald more personalised and preventive diagnosis and treatment. They featured in governmental policy around the ‘Knowledge Economy’, aiming to bridge the divide between academic science, industry and clinical practice. They are a potentially good example of dispersed or Mode 2 science (Gibbons et al, 1994) (as opposed to academically driven Mode 1), drawing together social actors in a novel mode of knowledge production.

In 2001, the UK Department of Health (DoH) and Department of Trade and Industry (DTI) together provided £15m funding for five years for a UK ‘Genetics Challenge Fund’ to establish six regionally based Genetics Knowledge Parks (GKPs). The aim was to bring together academic scientists (including social scientists with an interest in genetics), clinicians and health care providers, patient groups and ethical/legal experts to foster practical collaboration given breakthroughs in genetics and genomics research. The GKP Initiative was part of the government’s strategy for realising the potential of genetics science (see DoH’s White Paper *‘Our Inheritance Our Future: Realising the Potential of Genetics in Health’*, 2003).

The call for GKP bids highlighted the need for GKPs to demonstrate activity in (i) health care (ii) society (such as public education) (iii) translation into practice and (iv) commercialisation. Aside from the broad specification, the tender was open to considerable interpretation. The bidding process

intensified competition between specialists in different regions and bruised traditionally good inter site cooperation within the genetics community.

In the end, six sites were funded. They were (after a year's delay) to be accountable to the Advisory Group for Genetic Research (AGGR). This diverse group included not only academic scientists but representatives from pharmaceutical firms and patient groups. Quarterly reports were required so that by the end of Year 3, each Park had produced no fewer than 12 reports, seen as a 'box ticking exercise'. Despite (or perhaps because of) this high level of reporting, AGGR feedback on performance was limited, seen as vague and not that constructive. The DTI slowly withdrew, disappointed that progress on commercialisation had been slow.

In 2006, the Department of Health (following advice from AGGR) decided not to renew GKP funding nationally. While site performance was seen as variable by DOH, our case study site GKP1 was seen as having made more progress.

There are in summary four main features of the policy background which influence the story of the two networks studied:

- The expressed desire in the policy domain for a transition to a Mode 2 form of knowledge production in academic settings where Mode 1 still operated in practice.
- The impact of an initial loose specification of objectives for the networks by DoH and DTI.
- The competitive nature of the bidding process that appears to have disrupted informal networks within the genetics community.
- The *ad hoc* approach adopted to the governance of the networks and the introduction of a tight audit regime but only after a year of the network operating.

Genetics Knowledge Park 1

Site and context

This site (GKP1) was associated with a research intensive University long at the forefront of human molecular genetics research. The University contained several research programmes still in the discovery phase, notably in a genetics research centre. This research centre is physically located in the Genetics Knowledge Park next to NHS genetics labs (42 staff) which offer a full regional service and a NHS clinical genetics service with about five FTE consultants. In 2001, the NHS Genetics Department was regarded as a 'backwater', with poor leadership historically. This contrasted with the success of University genetics research. Work on cardiovascular genetics also takes place on a second teaching hospital site. There are good commercial links and infrastructure locally, set up by the University through its wholly owned technology transfer company. A strong theme was tension between the 'academics' and those on the NHS side, with different cultures, incentives and employment practices apparent.

Formation of the network locally

The opportunity to bid for national funding in 2001 pushed the academic and clinical and NHS labs groups somewhat closer together. Some clinical academics were well known, senior and had good links at the national policy level. They led in the bidding process, shaping the later personality of the GKP. They were keen to apply and led prestige to the bid, in part to secure funding to keep existing research going. The bid was rushed through to meet the deadline:

'25 people were named on this bid as part of the park network yet in practice it was only six people who would do the work.'

(park participant)

The bid was successful and the park set up in January 2002 for five years. The bid defined GKP 1's key tasks as follows:

1. to bring together and coordinate the research activities in human genetics, in order to harness their expertise for clinical practice.
2. to form a group which has the explicit aims of promoting, critically assessing and providing mechanisms for the expansion of genetic testing in clinical practice throughout the UK and overseas.
3. to perform specific model projects in important fields (cardiovascular disease and cancer) to demonstrate the viability of extended genetic testing in clinical practice.
4. to transfer knowledge and skills between research groups, the NHS and the private sector (the bid emphasised the site's excellent commercial links and proven track record in spin outs).

The site set up four specific Workpackages (WPs) to operationalise these aims, which became the tracers for our research:

Workpackage 1: (core tracer): cardiovascular genetics – development of a clinical service for the identification, genetic management of and counselling for inherited sudden cardiac death syndromes.

Workpackage 2: cardiovascular genetics – the viability of routine molecular testing for low penetrance genes influencing susceptibility to disease and/or response to treatment.

Workpackage 3: development of genetic microarray technology for clinical service and bringing the molecular testing of tumours into clinical practice.

Workpackage 4: ethical, social and legal factors in the successful translation of activities in WPs1, 2 and 3.

Stakeholder groups involved

The network contained many different groups, operating with different agendas, incentives, power bases and even fundamental epistemologies (what counts as 'good' research). It was initially dominated by an elite group of scientists with training in medicine ('clinical researchers'). We distinguish them from the other scientists trained in disciplines other than medicine. The clinical researchers worked together, knew each other well

and trusted each other. They shared a similar epistemology related to their basic academic training. They saw the network partly as a way of keeping existing Mode 1 research streams going. They successfully captured the initial 'jurisdiction' of the evolving GKP. Research scientists in a University Research Institute shared this epistemology but were less powerful.

NHS managers were only tangentially involved in the bidding but were worried about possible cost implications. They failed to get concerns on the agenda early on and can be seen as a marginal group in the early phases.

The NHS scientists working in the NHS Labs were important, displaying a more applied epistemology. They saw the GKP as a way of providing more funds and technology and raising the labs' profile.

The call for tenders emphasised social science involvement in the workpackages. *Social science* was a novel group in the network, although with variable impact.

User involvement took the form of a patient representative invited to attend executive meetings and as part of WP4. In practice, his attendance was rare.

In 2005, NHS commissioners became more involved in the network.

Management roles, relationships and management style

A Network Director (2002) was appointed with responsibility for operational management, financial control, developing commercial partnerships and delivery against aims. The Network Director came from a research science background and was responsible to two people: the GKP Board Chairman (a professor, clinical geneticist and scientist) with whom there was a good relationship ('a wise sounding board') and the senior manager of the NHS Lab (in practice, less involved in the network). The Network Director's ability to cross professional boundaries was important (explored in the later chapter on leadership). The relationship with the NHS lab scientists was problematic. The Network Director's dedicated full time role independent of the interest groups gave the network energy and direction.

Governance processes

The governance arrangements changed over time and are an important part of the story. The initial Executive Committee comprised the four Workpackage Principal Investigators, the Director of the NHS regional genetics labs, the Directorate Manager and the Network Director. It was chaired by a professorial clinical geneticist/scientist. Meetings were held quarterly. Department of Health (DoH) and Department of Trade and Industry (DTI) representation was expected but representatives appeared at the first meetings only. A patient representative was appointed (and received a stipend) but attended only for a few meetings. A senior Supervisory Board was appointed which met twice a year.

Some people (e.g. NHS lab manager) key to the translational strategy were not on the Executive Committee and not party to decisions they were

expected to implement. This was rectified later, but too late to repair relationships.

The history of the Network

So the GKP won funding, appointed a Network Director and set up Executive and Supervisory Boards. After start up, some senior clinicians involved in the bid withdrew to other research activities. A smaller core group emerged consisting of the Network Director; three consultant geneticists; two scientists and social scientists, together with a Professor of Medicine and senior epidemiologist. By 2003, the network revolved around a few actors. Representatives from primary care, patient groups, the NHS Trust and the Innovation Unit had little engagement. Other actors such as the DTI withdrew, disappointed by delays in commercialisation.

Given a need to understand more about GKP activity, the DoH brought together experts (Advisory Group on Genetics Research (AGGR)) as a governance mechanism nationally. The DoH also imposed quarterly reports on the GKPs. There were quarterly electronic templates to be filled in and reported upwards, seen as a 'cut and paste' job by people on the ground. By the end of 2004, the DoH and AGGR appeared to be better informed about GKP activity. There appeared to be little networking between the six GKPS and practical results were slow to come through. The DoH now put pressure on GKP1's Network Director, who in turn put pressure on the Principal Investigators of the four work packages, to meet espoused goals. The DoH/AGGR was trying to re-establish jurisdiction over the network, which it was funding, and to steer it back away from academic science towards translation into the NHS.

By 2005, Workpackage 1 scientists had developed a potentially viable test for Sudden Cardiac Death (SCD), and the health economist had effectively collaborated with them to provide evidence that it was cost effective. At this point, NHS commissioners responsible for funding the test re-emerged as key actors. They were concerned about costs, health benefits and fairness. Workpackage 1 researchers attempted to persuade the NHS commissioners to fund the test. However, cooperation was breaking down between these and the molecular genetics labs, relating to their different approaches to genetic testing (accuracy vs speed). Increasing competition for business between NHS Labs undermined the lab's willingness to disclose costs information to the health economist for fear it might leak to other labs. This led to distrust spreading to other parts of the network, although a consultant geneticist continued to broker between the University and the labs, as he had worked in both settings.

A second clash point was pressure from DoH to get the SCD test into practice. Workpackage 1 researchers looked to the Network Director to broker the conversation with the NHS commissioner about how to get NHS funding – they had really not considered this interface before:

'it was a bit like now we are going to talk to the commissioners and get the money. I do not feel that people driving the knowledge park realise the importance of commissioning...nothing is done unless the commissioner gives you the money.'

(NHS respondent)

The commissioner made an appreciated effort to understand the benefits of the test for the local population – although the test was 'too academic' - but NHS members of the GKP initially felt excluded from this conversation. The commissioning process was complex and even the sympathetic commissioner was not prepared to fund it unless the 'pathway was sorted'. All genetic tests needed to go through the UKGTN (UK Genetics Testing Network) before they were recommended to commissioners. The key to getting the SCD test mainstreamed was inclusion in the National Service Framework (NSF). A consultant geneticist in the park sought and achieved representation on the key national committee, indicating the social capital of the elite professionals.

A last tension was related to the sociologist in Workpackage 4 who was seen as one of 'these weird sort of sociology people' doing 'woolly' research (NHS Scientist). When it became clear that the post would not be refunded, the sociologist focussed on personal research to lead to a post elsewhere. There was general concern about the impact of some hires: 'other people associated with WP4 seemed to disappear without generating any outputs.' (scientist)

The Workpackage 2 lead began to withdraw from active involvement. Perhaps he was seeing the impending end of funding and looking for new funding elsewhere. The DoH eventually announced that funding would not be renewed when the initial five year funding stream came to an end.

Postscript and reincarnation

After the demise of GKP1, the same elite scientists involved in the GKP bid for a new Biomedical Research Centre (BRC) for which they then won funding. This provides resources for the GKP work on the genetics theme to continue. The BRC is a partnership between the Trust and the University, funded through a five year £57m National Institute for Health Research grant. There are 14 cross cutting research themes of which genetics is one. The mission is to develop well characterised, phenotype, genotype and annotated longitudinal cohorts of patients with major chronic diseases to help translational research and build links with industry. Some of the earlier work of the GKP was then reincarnated in the BRC.

However, in 2009, the University's bid to become an Academic Health Sciences Centre was not successful, despite its strong academic reputation.

The tracer issues

The careers of the tracer issues were assessed as follows:

Workpackage 1 successfully developed a clinically and economically viable test for Sudden Cardiac Death, funded in Scotland in 2007 and as a NHS service in 2008.

Workpackage 2 made some progress identifying some associations but without any major breakthroughs. It advanced the science but without any translation into practice.

Workpackage 3 failed to develop tests relating to micro arrays in cancer and learning disabilities, due to cheaper commercial tests. However *'what was very good was the evaluation of different platforms, we would not have been able to do that, we have some bits of equipment we could not have had, and we have been able to grow the lab'* (Lab Manager).

Workpackage 4 resulted in some better understanding between clinicians and social scientists about social science aspects of genetics. This was more so with the economics and ethics strands but not with sociology.

Reflections on Genetics Knowledge Park 1

We note that the power of elite scientists in the network is considerable and that they captured the initial jurisdiction. Management played a marginal role, except for the later involvement of NHS commissioners.

The stakeholder groups in the network display differences in incentives, structures, careers and working practices that can lead to tensions and even clashes.

We explore these themes further in a later chapter.

The positive impact of a dedicated full time network manager was considerable.

Genetics Knowledge Park 2

Site and context

Genetics Knowledge Park 2 is distinctive in its strong focus on public health genomics and the translation of genome based knowledge for population health. It was also associated with a research intensive University. The bid proposed the GKP would:

'take on a leadership role and establish shared values, building on the twin concepts of partnership and interdisciplinarity. By doing so, it will enable researchers across the wide range of scientific disciplines to be exposed to wider public health, legal and social perspectives.'

It placed a high emphasis on Ethics, Law and Social Science (ELSI) in genetics knowledge. One respondent commented that the network was *'an interdisciplinary think tank, to engage and educate the public and make recommendations.'*

GKP2 was subdivided into teams: genetic epidemiology; ELSI; knowledge and dissemination (including policy and information) and public health

(including education, public involvement and database/web development).
It had four key aims:

First, participating in the development of national policy on genetics and genetics services and enhancing the transition from genetics research into public health and policy interventions.

Secondly, to transfer information from scientific studies on genetics into wider knowledge through its validation by critical appraisal; by seeking the perspective of patients and the public; and by placing it in its ethical, legal and social context.

Thirdly, to stimulate the transition from research into clinical practice through programmes that promote the dissemination and sharing of genetics knowledge.

Fourthly, to create and support a network of individuals and organisations in and around the local area with active interests in human genetics.

Formation of the Network

The GKP2 was led by the Network Director (ND) who had a significant national profile as a public health physician and influence on the GKP initiative nationally. Many aims and objectives of GKP2 mirrored the aims of the small public health genetics unit set up locally by the ND in 1979. This local initiative later linked successfully to national funders including the Wellcome and DoH. It was seen as natural to bid for GKP money, given the pre history:

'so when the knowledge park money came along, we just set up the structure and we moved from having a 50 square metres of space to 250 square metres of space.'

(business manager)

The funds offered the opportunity to expand pre-existing work, as in GKP1. One respondent contrasted the academic orientation (seen as dysfunctional) and a change management orientation (seen as functional):

'the main fault line is not between the different disciplines...the fault line was between the academics and the rest of us'

And again:

'my model is not at all an academic model, it is about change management and we are about getting research into practice. We do not see ourselves as doing primary research, we do secondary research, we bring knowledge together, in fact that is the core of what we do.'

The underlying mission was to create a new discipline of public health genomics.

Stakeholder groups

The core unit team consisted of 24 people (not all full time), complemented by a team of part time lecturers and associates from various social science disciplines drawn from local universities. Full time staff were employed by and worked within the governance arrangements of the local teaching

hospital trust. They were totally reliant on GKP funding. The social science lecturers were employees of their respective universities but bought out part time. Despite this, neither the Trust nor the University features as an active players in the network. 'Obvious' stakeholders such as the NHS/academic genetics community and public health were not involved.

The management style was highly individualised and centred on the Network Director as a long standing founder (Ormrod et al, 2007). He was seen as lending positive qualities of vision, focus, energy, commitment and social capital to the network, particularly by more senior respondents:

'he is remarkable because he is very energetic, very knowledgeable, and has a very high international standing in the Public health area...he is regarded as you know the king pin in this area'

(Supervisory Board member)

Junior members were more critical, saying that the Network Director was difficult to work with if you had different ideas! 'Vision' and 'energy' were perceived as a 'benign dictatorship' by critics and as needing more operational management capability as ideas could lead nowhere. The Network Director was a policy entrepreneur, passionate about his vision and skilled at acquiring good political and financial contacts. He had an entrepreneurial view of life, impatient with performance management systems.

Processes, systems and governance

Executive and Supervisory Boards were set up. The Network Director chaired an executive (including himself, a chief knowledge officer, and a business manager) which met fortnightly. Members of the executive had line management responsibility for their teams and met with them at two monthly meetings where work progress was discussed. The Supervisory Board included representatives of the DoH, DTI, a research trust and the hospital trust. The board was chaired by a distinguished scientist and considered budgetary issues as well as monitoring the work.

The Advisory Group on Genetics Research (AGGR) later placed accountability requirements on this GKP site as the others, perceived locally as bypassing the Supervisory Board. There was also a distinguished member on the Board with a strong national profile – who acted as a sponsor for the Network Director – keen on the social science perspective on genetics and who lent much social capital. Decision making was seen to revolve around the Network Director personally, although over time the Executive started to challenge more.

The story of the case

The winning of funds by the Network Director did not go down well with the local health genetics community. Relationships were described as 'not good' with the regional genetics centre and the genetics department as the bid was seen as very public health led, as displaying a 'soft' emphasis on knowledge management, and as diverting money from basic science.

Despite the supposed focus of the initiative on translational science, science was not at all centre stage. Unlike GKP1, GKP2 was isolated from the local genetics network.

'The wider genetics community was not involved. In fact, I think it is fair to say that the GKP has never taken much interest in what is going on in our department'

(senior scientist)

The Network Director argued that he had approached the clinical genetics department but they were not interested as it 'wasn't proper genetics.' The network leadership later ring fenced some money for a lab in an attempt to repair relations with the genetics department. However, no real collaboration flowed from this gesture.

Nor was there evidence of the network extending to or influencing local health services delivery. There was no reported interaction with important external stakeholders such as NHS managers, commercial companies or NHS commissioners, leading to some concerns in AGGR that the network was the 'odd one out.' Towards the end of the five years, the Department of Health appeared to lose interest.

It proved difficult to define a concrete tracer as outputs were essentially publications and meetings relating to public health genomics, ethical debates and how to get research into practice (see the performance assessment chapter for more detail). The tracer issue is best defined as the attempt to develop public health genomics as a field. Whereas the Network Director saw the network as broadly successful, other interviewees felt that the network had not had much impact. It appeared isolated from key stakeholders that one would have expected it to 'network' with.

After the DoH funding was not renewed, the network sought funding from the Wellcome Trust. Despite a positive review, in the end the grant was not given. The positive review encouraged the Network Director to seek substantial funding from a philanthropic fund he was close to, which was obtained. The locality was later awarded one of the five national centres in cancer genetics, but the former GKP2 was not involved.

The network continues to study public health genomics:

'we have decided to revert back to our core business: public health genetics. Our profile has grown through the world...we are at the stage where we may possibly set up a charitable arm that would offer what we do to other parts of the world.'

(manager)

Reflections on the case

This is an unusual case which speaks to the impact that a determined, visionary and entrepreneurial leader can make. The DoH took a chance on a possible 'cuckoo in the nest' and appeared to spend the next four years worrying about the decision. Unlike the elite University scientists in GKP1, here they were 'caught napping' and failed to capture the jurisdiction. If we take the original DoH/DTI criteria, it is unclear precisely what the output of

the network was. There is however evidence of hard work and contribution to the grey literature.

Cross case analysis – policy and theoretical implications

The DoH had hoped initially that the GKPs would act as 'Mode 2' knowledge producers (Gibbons et al, 1994) but found significant challenges in steering the sites in that direction. In practice, both networks were profoundly shaped by their 'set up' stage and brought their pre-histories with them. Academic science remained dominant in GKP1. Some practices at the policy level (as seen in funding decisions and the activities of review panels) were still influenced by 'Mode 1' assumptions. So there was less of a move to Mode 2 science in practice than hoped for.

If networks are monitored by such bodies as AGGR then such review body should involved at the outset and members need to be clear about their roles. The monitoring body should be clear about objectives and reporting formats, perhaps with different time frames for different activities. There was some concern that AGGR had not been fully effective.

If the formation of a network involves increasing competition between sites for resources, then thought needs to be given to incentives to create more collaboration between the sites.

Such factors as career structures, incentives, social capital, working practices and (crucially) power differences are important in understanding how tensions arose in these two networks. Neither universities nor the NHS provided adequate support for ongoing conversations between the different stakeholder groups involved.

The Network Director role was a key part of both stories, although expressed in different ways. The GKP1 Network Director played a key role in the site achieving what it did. The GKP2 Network Director was charismatic, driven with the desire to establish public health genomics as a field: perhaps more surprising is the freedom he appeared to have in so doing. The ability of strategically placed individuals to shape networks is apparent. Also we saw several effective boundary spanners in GKP1. There are questions about facilitation skills where both networks would have benefited from more capacity, for example, to support the Network Director's activities in GKP1. The cases revealed less diverse networks than anticipated: Venture Capitalists were conspicuous by their absence and commercialisation activity was weak. Cooperation with the NHS labs was weakened by quasi market forces in GKP1.

Theoretically, we see professional dominance by elite scientists, the importance of their considerable social capital, and differences between various communities of practice. Top down performance management (and general management) was weak and there is little evidence of a soft bureaucratic/governmental control mode operating either.

We return to some of these themes in later chapters.

5.2 Managed Cancer Networks

Managed cancer networks (MCNs) were an early experiment in the managed network form, often seen as a role model. We included two MCNs in this study, following up our earlier work (Addicott et al, 2006, 2007). We completed 7 policy interviews for these cases and Appendix 6 provides a detailed matrix of the 49 case study interviews undertaken.

Policy background

Survival rates for UK cancer patients have historically been poorer than in the rest of the EU (DoH, 2000b). Traditional referral patterns worked well for individual patients, but not for providing equitable services across an entire population. Cancer is a clinical condition which requires patients to move across organisational and professional boundaries. How should cancer services be organised? The Calman Hine report (DoH 1995) broke with the quasi market in cancer services, proposing a shift to a network based form involving specialist cancer centres working together with local cancer units along with primary care. There was evidence that clinical outcomes for rarer cancers were better in units with large volume. This model should diffuse good and evidence based practice out from centres of excellence. The model was consistent with traditional professional working – and had strong clinical ownership – but moved these principles up to an organisational level. It built on pre existing patterns of clinical referral, downplaying the role of general managers or quasi markets in reconfiguration.

The 'NHS Cancer Plan' (DoH, 2000) did not specifically require a network form to deliver local services, but did encourage it. It focussed on improving prevention, acting on health inequalities, faster diagnosis and treatment, providing consistently high quality services and improving the quality of life through better care. It set demanding targets for waiting times and other areas. Local networks began to emerge and develop idiosyncratically.

The 'Manual of Cancer Services Standards' (NHS Executive, 2000, p9) outlined national standards such as reducing waiting times (based on Calman Hine) which the networks were to deliver. It mandated the formation of Managed Cancer Networks (MCNs) to deliver the Plan. MCNs were to comprise a core multi disciplinary management team independent from the individual member organisations but would work closely with them.

There are only 34 Managed Cancer Networks in England, so they cover large and complex patches. A typical MCN team includes a CEO, a Medical Director, a Nurse Director and now a Service Improvement Lead. They do not have financial control over the money to fund cancer services (which lies with Primary Care Trusts (PCTs)) nor do they enjoy hierarchical authority over the Trusts, so they have to influence behaviour, backed by a strong national policy framework and performance management regime. They usually set up multi disciplinary Tumour Groups, responsible for establishing joint protocols, guidelines and care pathways for their tumour

types. The MCN should develop and implement the strategy for the network in line with national policy.

At the national level, a National Cancer Director ('the Cancer Czar') was appointed who was a well respected clinical academic. Peer review visits secured external expert opinion in difficult or contested local decisions. The National Institute for Clinical Excellence (NICE) has produced increasing appraisal activity feeds into Improving Outcomes Guidelines (IOGs). IOGs are issued on a tumour site specific basis and have the potential to drive service reconfiguration: our tracer issue was the implementation of the Urology IOG. IOGs require the designation of cancer centres and units within a network for each tumour type, with the implication that hospitals not so designated lose the right to practice. Prostate cancer affects many middle aged and elderly men and is a clinical priority. The Urology IOG (NICE, 2002) states:

'patients with cancers that which are less common or which require complex treatment should be managed by specialist multi disciplinary urological cancer teams. These teams should be established in large hospitals or Cancer Centres and each team should carry cumulative total of at least 50 radical operations for prostate or bladder cancer per year.'

Cancer services have also seen service improvement activity supported by the National Patients' Access Team and then the NHS Modernisation Agency. This stream of activity includes the Cancer Services Collaboratives based on the continuous improvement model developed by the American Institute of Healthcare Improvement. The emphasis is on clinical leadership, multi disciplinary working and exploring the whole process of care across traditional boundaries. In 2003, it was re-branded as the Service Improvement Programme with the appointment of a Service Improvement Lead in Managed Cancer Networks to work across all types of cancer. The aim (Cancer Services Collaborative, 2003: 3) was to move from:

'a centrally driven programme to service improvement which is locally owned and driven but supported by the Modernisation Agency'

One emerging policy issue is how networks cope with the roll out of Foundation Trusts. The NHS has recently tried to reduce national targets. The 2004 update document ('The NHS Cancer Plan and the New NHS') stresses there is still a duty of partnership across the NHS which includes Foundation Hospitals and that there will be more locally developed targets (combined with performance management upwards through Strategic Health Authorities (SHAs)).

A final current policy issue is the role of the private sector in cancer services. The private sector has not been prominent in Managed Cancer Networks and cancer services do not demonstrate the same policy tilt to provider diversity evident in, say, elective surgery. This dissonance has been highlighted by pro market critics who see MCNs as promoting local cartels:

'while other areas of care are benefiting from greater pluralism, cancer services are still in the era of complete NHS monopoly within which cancer networks are promoting cartels to block out competition.'

(Sikora et al, 2005)

So Managed Cancer Networks are a major test of the network model. They were the first to be established and are often seen as a role model. They relate to a politically visible sector which affects many people both as patients and carers. They have been operating for a considerable time period and have enjoyed new investment in exchange for modernisation and reform.

County Cancer Network

Site and context

County Cancer Network (CCN) covers a relatively small population (just over 1 million). It operates in a somewhat less challenging context than the Urban Cancer Network (UCN). Its poor road links, however, make travel within the County difficult. The area is relatively affluent but has cancer outcomes below the national average, possibly due to the many elderly people who retire there. It has one major centre of population where the traditionally dominant Big Teaching Hospital (BTH) is located, together with hospitals in the East (Eastern Hospital) and West (Western Hospital) in the county, four Primary Care Trusts (PCTs) and seven voluntary sector hospices (with a somewhat marginal role within the CCN). There was no private sector involvement.

Patient choice and Payment by Results (PBR) policies were increasing the incentives for local hospitals to compete rather than collaborate, especially as BTH had financial problems and Western Hospital (WH) was under threat of closure due its small size. However, hospitals are individually funded for meeting cancer standards and targets (and penalised for not doing so) and this policy rebalanced financial incentives towards collaboration with the County Cancer Network (CCN). While the CCN had the remit of implementing the NHS Cancer Plan, it had no direct control over finance or line management authority in the Trusts. This limited its direct power:

'the network would be far better off if they had money. As long as people don't have money in the NHS then they are not really interesting.'

(urologist)

Yet they worked with Trusts to enable them to hit targets and hence secure resources. Although the CCN is formally accountable to its Strategic Health Authority in practice it is accountable to the Primary Care Trusts who retain the power of the purse.

Pre-history and structure

County Cancer Network (CCN) was established in 1996 in response to the Calman Hine Report (DoH, 1995) and also to focus groups carried out locally by the National Cancer Alliance to ascertain patient and carer views of local cancer services. Patient representatives were on the CCN Policy Board. The aim was to share best practice between different professional groups and organisations in the County. Key founders were the then Cancer

Services Development Manager; a Public Health consultant and also a Upper Gastro-Intestinal Tract surgeon at the local Big Teaching Hospital (BTH), so there was strong clinical support. When the Cancer Services Development Officer secured promotion, a new manager was appointed who is the current Network Director.

In 2001, managed cancer networks (MCNs) were made mandatory nationally. The Development Officer became the Network Director, and the current Medical Director (an oncologist from BTH) and Nurse Director joined in 2003. The challenge was to move from an informal network to a managed network to deliver the NHS Cancer Plan locally. The Policy Board streamlined into the Network Board. The CCN is a non statutory organisation with an important service modernisation function which has to win influence. As a Patient Representative put it:

'the biggest problem for the network...the executive board is not statutory and it has to rely on...cooperation...they (representatives of individual organisations in CCN) come out of the woodwork (only) if there is a financial issue that might affect them.'

The Executive Network Board (ENB) contains senior representatives of all the organisations in the network and meets bi monthly. It is accountable to the funder: Primary Care Trusts (PCTs) via the Network Chair (himself a PCT CEO). There was no private sector. We observed two ENB meetings: their role was strategic, to ratify recommendations from Tumour Groups and up coming issues.

Below the ENB are 11 clinically focussed tumour groups, including the Urology Tumour Group (UTG) charged with development of local guidelines for the treatment of prostate, bladder and renal tumours in the light of national guidance. It acts as a professional advisory group on 'horizon scanning' issues, such as new drugs and treatments. There is also a Clinical Advisory Group and various Generic Working Groups.

Management roles, relationships and style

The current Network Director, Medical Director and Nurse Director were in post and have remained as a stable Network Management Team since 2003, though the Network Chair, busy with his PCT responsibilities, was 'hands off.' They managed a large team of 17 staff, including part time Public Health staff and a Service Improvement Lead as well as information and change management staff. The Network Management Team was highly regarded by respondents as an effective small team and given credit for network's success. As a patient representative put it:

'The three of them (Medical Director Network Manager and Nurse Director) are on the whole very sympathetic and they have the interests of cancer patients at heart.'

They were seen as hard working, forming an effective team, with strong inter personal skills and able to combine soft and hard management styles as appropriate (see the later chapter on leadership).

Processes, systems and governance

The County Cancer Network appears in practice to be performance managed through the PCTs that fund it rather than the SHA.

The Network Executive Board acted as a 'funnel point' through which much documentation passed. As a result, the danger was that it 'rubber stamped' decisions because of overload, although one manager pointed out that lively debate could occur.

The Urology Tumour Group (UTG) is accountable to the Network Management Team (NMT). The UTG holds Multi Disciplinary Meetings which discuss the treatment of patients – we did not observe these meetings due to patient confidentiality.

The UTG has been chaired by 3 consultant urologists (note that urology remains a dominant professional grouping): they were strong personalities. The first chair was an experienced senior surgeon from Western Hospital (WH) who had a national advisory role.

He was 'ambivalent' about the reconfiguration of cancer services partly on clinical grounds (surgery would be less important in the long term, given advances in chemotherapy) and can be seen as a conservative force in this story. Of course, the smaller Western Hospital might lose out in any centralisation process. The second UTG chair was a younger surgeon and Clinical Director from Big Teaching Hospital. Although he was very committed to active management of health care, he commented that being respected clinically and people skills were important:

'you do need to enjoy the confidence of your colleagues, both from a personal and a clinical perspective...clinical skills, which are number one priority. Number two, yes, get on well with people and deal with conflict situations reasonably well...(by) dialogue, establishing facts, persuasion, firmness'.

He had just been succeeded by a young surgeon from Western Hospital: 'a very good surgeon' who was more of a traditional surgeon and less interested in management. In general, Tumour Group chairs wanted/needed to be seen as surgeons rather than as part of the County Cancer Network (CCN), so where there was a conflict they reverted to their primary role as surgeons.

Discussion in the UTGs observed were dominated by urologists with other professionals taking a back seat. Only Network Management Team members challenged the urologists in discussion.

The story of urology reconfiguration

The Urology Improving Outcomes Guidelines (IOGs) (NICE September 2002) contained evidence based recommendations about the structure, process and outcome of care. It had been developed in consultation with clinicians nationally. For the County Cancer Network (CCN), there were three recommendations, namely: (i) the centralisation of urology services. Currently, urologists were carrying out procedures in four sites (one in BTH, 2 sites at Eastern and one at Western Hospital) but the volume did not

comply with the IOG norm of at least 50 operations a year (ii) the further development of MDTs to discuss individual patient care (the issue in a rural County was getting people together at a single time and place every week), and (iii) the standardisation and development of joint local protocols to ensure uniform and high quality care. These protocols were to be based on IOGs or alternative European evidence based guidelines and reflect local needs.

These issues were discussed in UTG meetings with high involvement from the urologists. At the time of fieldwork, there was a range of treatments in urology cancer. Later NICE guidelines recommended fewer operations and a swing away from surgical interventions to reduce 'over treatment' of non aggressive prostate cancers.

Urology service reconfiguration started in 2003 and was achieved by 2008. Aided by national contacts, UTG members anticipated the IOG and began discussing drafts before formal publication.

The CCN wanted to learn from an earlier flawed process of reconfiguration in Upper Gastro-Intestinal services and ensure that this time all parties explicitly agreed the process through which decisions would be made. The tumour group was centrally involved in this. As one Network Management Team member said:

'you get the process agreed through the tumour group fundamentally to start with, they feel that they own that...if you don't they will spend months and years arguing about who said what and when. By having the processes there with the evidence if anybody challenges it.'

And again:

'Urology has gone quite well. The clinicians very much led the process...There was very good communication and engagement with all the clinical teams...extensive consultation with lots of people, patients and everybody concerned'

(Hospital Director)

The Urology Improving Outcomes Guidelines initially specified one centre for each cancer within a managed cancer network. Arguing that internal travel within the county was problematic, the CCN applied to the 'Cancer Czar' (note the recourse to a national authority figure) for permission to have two centres, one in the East and one in the West. This was granted. Three hospitals then bid to be a cancer centre. As a NMT member put it:

'once we got the green light to look at two bases, we had to design a process of how we would make that decision. And we did a paper...which the tumour group signed off...we gave them details of what we wanted in the bid.'

The decision that the Eastern centre should be in one site in the Eastern Hospital was relatively simple as it had the clinical expertise (five urologists) and facilities. Urologists there had been previously working on two sites (three in one and two on the second) and amicably agreed to centralise on the site with three urologists.

On the Western side, however, the decision was contested with both BTH and WH applying to be the urology centre. Big Teaching Hospital (BTH) was in financial difficulties and keen to provide urology services as they were

profitable under Payment by Results (PBR); whereas Western Hospital was under threat of closure so that the loss of urology could further threaten it. BTH had four urologists and other consultants with expertise in treating cancer but its site was problematic: the building was dilapidated; the site crowded and patient parking poor. It expected to win the contest as the historically dominant provider ('arrogance'). Western Hospital by contrast had only two urologists but the site was newer, had more space for development and parking was easier. An external review team was brought in who visited the sites (experiencing the difficulties in travel personally) but simply noted that there were strengths and weaknesses with both bids and referred the decision back to the County Cancer Network.

The CCN gathered local audit data on activity on the various sites to inform a decision in a commissioning meeting. In the end – and after much questioning – IOG guidance and purposefully compiled local activity data were seen as legitimate drivers by the urologists. So the Network Management Team built an legitimate and effective decision making process, but it took hard and skilled work. An urologist commented:

'Now that it has been going on for several years the testosterone has gone out of the argument. It is not as aggressive as it was before...I think nowadays we swallow a lot more of these things than we did before...in the beginning it took ages about every single decision...now we accept things...we accept that certain things have to be done and that as long as they are reasonably sensible we accept it and we do the work...'

A NMT member considered that the urology reconfiguration had been relatively successful and that initial conflict had been resolved:

'the urologists...two years ago they were an arrogant bunch and to move them forward to a point where they have agreed...we have a urology pathway specification...two years ago they would have just thrown a tantrum...would not have even looked at it, and now...they are really enthused by it.'

BTH had four urologists (whereas Western Hospital had only two, one of whom was moving out of the system on retirement). It also had linear accelerators, a renal centre and a radiotherapy centre. So the BTH bid was successful and reconfiguration took place in 2007/8. A NMT member commented:

'one of the reasons, the main reason we decided on (BTH)...(was) surgical activity data...showed a reduction in (Western Hospital) activity and increase in (BTH) activity...there were probably three times as many operations at (BTH) than at (Western Hospital)...you could either move one surgeon to (BTH) or you would have to move four surgeons with three times as many operations to (Western Hospital).'

The reconfiguration was heavily shaped by where the largest number of urologists – and hence service activity - were located (3 in one Eastern Hospital site, 2 in another; 4 in BTH as opposed to 1 in Western Hospital). The retirement of a senior surgeon at Western Hospital removed a major block on service change.

The County Cancer Network (CCN) also produced a urology pathway specification as required in the IOGs. It also progressed multi disciplinary team (MDT) meetings. Traditionally, the urological cancer teams in the different hospitals had met in different places and times. Moving to network

wide MDT meetings was problematic due to travel difficulties and also the slow development and accessing of teleconference technology. We consider this issue in more detail in the chapter on ICTs.

There was resistance to participation in full MDTs but where they worked, they could be a powerful force for change. As an NMT member put it:

'surgeons said they wanted to do...an ultra sound in all anal cancer patients...the radiologist said 'well, that is ridiculous. MRI is far more accurate, we need to do MRIs'. And the surgeons backed down...it does change practice.'

Themes emerging in the case

Power, professional dominance, jurisdictional disputes and epistemic communities of practice: We found strong professional dominance and competition for jurisdiction between different professional groups, (Abbott, 1988; Freidson, 1994; MacDonald, 1995). Here oncologists and radiologists (both medical professional groupings) formed an alliance with nurses and managers against urologists who were the primary professional grouping. There was evidence of the urologists excluding other professional groupings (including other medical professionals) from decision making by (for example) making 'real' decisions in the pub rather than in the MDTs and using highly masculine discourse.

A small group (11 urologists) dominated the reconfiguration process as change blockers or enablers. One clinical change blocker (who eventually retired) was a senior surgeon who had been involved in developing policy and standards nationally and so enjoyed considerable personal *social capital*. However the urologists' dominance was more bounded than that of the elite scientists in the clinical genetics cases. For example, their power was diluted by the evidence based IOGs which did not exist in the genetics cases.

New NICE Urology guidelines (issued after fieldwork) clarified an ambiguous evidence base about urological cancers. The evidence had previously been interpreted by professional groupings in different ways within a classic jurisdictional dispute (Abbott, 1988): surgeons claimed that surgery was the most effective approach; whereas oncologists and radiologists supported medicine, chemotherapy or radiotherapy. The new recommendations suggested less surgery, undermining the territory of urologists but expanding that of oncologists and radiologists.

Governmentality/Soft Bureaucracy: The case suggested some evidence which supported a theoretical perspective based on governmentality/soft bureaucracy. We develop this argument in a later chapter.

Leadership: The NMT as a small group exhibited 'contextual intelligence' (Nye, 2008) which enabled them locate the possibility of and receptivity to service change (Pettigrew et al, 1992). They cajoled professionals – particularly urologists – into changing their practice through soft persuasion but backed by harder rules (IOGs), specifying how cancer services should be delivered, along with rewards and penalties to secure compliance. Nye (2008) sees core soft leadership skills as including: vision; emotional

intelligence; communication skills; and organisational capacity and we saw evidence of such skills in this case. The appropriate combination of 'soft power' and 'hard power' brought about service reconfiguration.

Urban Cancer Network

Site and context

The Urban Cancer Network (UCN) relates to a large regional city and its suburban areas with a population of some 1.6m, including substantial ethnic minority and deprived populations. The UCN was established to implement the Cancer Plan locally and improve the patient journey. As the UCN's Annual Report for 2004/5 stated:

'our role as a cancer network is clear: it is to implement the National Cancer Plan. This means working across the organisational boundaries of our constituent organisations and requires the effective engagement of our constituent organisations of clinicians and managers. In fact, the work is aligned to the patient's pathway which is not defined by organisational boundaries. (It) also means moving forward with the whole health community, which includes patients, carers and the private and voluntary sectors.'

In particular, the main objectives are to:

- Develop all aspects of local cancer services: prevention, screening, diagnosis, treatment, supportive and specialist palliative care (taking account of Improving Outcomes Guidelines (IOGs)).
- Develop multi disciplinary teams and make arrangements to ensure that all patients are reviewed by them prior to treatment.
- Agree common protocols and service patterns to tackle variations and make best use of resources available.
- Develop workforce education, training and facility strategies.

The configuration of key services can be described as follows:

Big Teaching Hospital 1: Big Teaching Hospital 1 achieved foundation trust status in July 2004. With a budget of almost £400m, it employs almost 7000 staff. It provides a full range of hospital services, treating 500,000 patients each year. Big Teaching Hospital 1 is a leading regional teaching hospital and is research intensive. With a 3 star rating, it was the top performing trust in the region and one of the top 20 in the country. In 2006, it got the go ahead to build the city's first new acute hospital in 70 years, using PFI. It presently is on two main sites.

Big Teaching Hospital 2: is a big teaching hospital with 10,000 staff. It has undergone mergers in recent years. It has experienced rapid growth and has recently had three star ratings. The recent merger came as a way of solving a smaller trust's financial difficulties. Big Teaching Hospital 2 is a successful Trust that challenges some of Big Teaching Hospital 1's dominance. Big Teaching Hospital 2 now consists of three main units and two smaller ancillary units.

Big Teaching Hospital 3: was established in 2002 and has a budget of £325m. It employs 6,500 staff, has about 1200 beds and serves a population of over 500,000. Its hospitals provide specialist and emergency services including A and E on both sites. It hosts two supra regional specialist facilities. It is the largest provider of acute patient services in the region with a substantial research portfolio. Performance ratings dropped from 3 stars in 2003 to two stars in 2004/5. It consists of five units.

There are also 3 specialist trusts in the network

The network also relates to the Cancer Services Improvement Partnership which was part of the NHS Modernisation Agency.

The Strategic Health Authority: The Strategic Health Authority (SHA) was in close contact with the network and was active in performance managing the UCN. The SHA reports up to the DoH and in the first instance approves Network recommendations.

‘Yes, we do annual returns to feed into Department of Health publications. So you can compare yourself nationally against all your outcomes and your outcome data so that would all go back in centrally yes. They do regular audit returns on that, yes.’

(Executive Board member)

The SHA provides morbidity information which aids the network in strategic planning. The Network plans have to fit the SHA strategic context, including its PFI capital investment plans.

Primary Care Trusts: There are 6 PCTS, some of which are big and well resourced following recent mergers. They have the power of contracting to move services away from providers but seemed receptive to specialist advice from the UCN:

‘So commissioners are the ones that carry the clout, I don’t think the commissioners make the decisions, I think the network makes the decisions and the commissioners just agree with them...The commissioners have not got the initiative to make the decisions...When PCTs were set up, we all knew at the hospital for instance that there were too many of them. (Urban area), for instance, which is in our patch, had three PCTs. So that required three sets of managers, from chief executive to operations manager, to personnel manager and there were not enough to go round, basically...some of the bigger PCTs maybe do have the quality in management and also in knowledge and clout, but the average PCT hasn’t, the average PCT is struggling and grumbling along’

(clinician)

Historically, general urology cancer services were delivered in five different units in four trusts. Big Teaching Hospital 1 has traditionally been the main cancer centre, as well as the centre of academic power. Its academics helped block a proposal for a reconfiguration agreement with another network. Big Teaching Hospital 1 applied for a major rebuild and was hoped to become a centre of excellence at regional and national level. The network was originally seen as an opportunity to fast track these ambitions, although network decisions were more nuanced – favouring new players - than expected.

History and structure

Initially hosted by the local SHA, the Urban Cancer Network (UCN) started as a group of consultants and CEOs organised in a large Board. In late 2001, it appointed a Medical Director and Network Manager. They assembled a core management team, funded through ring fenced allocations from (for example) the Modernisation Agency. Early progress was slow, partly because of resistance from interest groups and also the complexity and scale of the site. The first Chairman came to the area from Scotland where he had seen well developed networks and provided the network with new impetus, as it then lacked clinical direction. The Network Management Team (NMT) began to work on clinical and senior management engagement, despite rolling out of Foundation Trust status which threatened cross hospital cooperation:

'Initially the challenge was to get clinical engagement because unless you have got clinical engagement nothing else could happen. Bear in mind as well that I was very clear that getting a general commitment from chief executives that we had to move to surgical specialisation was a critical success factor in my role. So because we were going through at that time Foundation Trust status they were all being really macho and competing with each other'

(former NMT member)

'but you have got to get the chief exec aligned about you, you are nothing if you have not got the chief exec aligned above you and a general agreement that there has to be change. I worked quite hard to get that sorted behind the scenes, so I think that strategic (intent) and for us it was unspoken, but a view that the way forward was that there would be specialisation of surgery was really important.'

(general manager)

The Network Board

The Network Board is made up of senior members of constituent organisations as well as the NMT. Its role is to provide strategic direction and oversee various sub groups, including the Network Site Specific Tumour Groups (NSSTGs). Its broad representation ensures its decisions were legitimate. It includes user representatives. On the whole, respondents describe the decision making process as legitimate and as one which tries to produce consensus. In its early stages, most founding members were clinicians and to a lesser extent CEOs. It was clear that the CEO of Big Teaching Hospital 1 was a major player.

The Board was too large and top heavy to be effective. More recently, specialised subcommittees have been set up and membership broadened to include more primary care and user members. Clinical representation has been pared back and now takes the form of NSSTG leads.

Attendance is good and the meetings are chaired in a dynamic and friendly way. All members are given a chance to participate but some are more vocal due to experience and personality (e.g. a senior radiologist). The exchanges are lively and opinions expressed openly, yet in a professional and convivial manner. There are two patient representatives (the second appointed recently) and the chairman makes a point of engaging their

participation, supported by other board members. One patient representative has been recently made Vice Chair. The Chairman's leadership was appreciated by almost every respondent. He tries to ensure that members move away from making narrow sectional points:

'one of the difficulties is that the composition of the clinical members of the board changed...and two or three of the other clinical people were trying to make points for their own institution and I was quite firm to start off with. People will settle down but it's just very important that folk know that they can't get away with murder.'

(clinician)

One criticism was that in the past the Board was full of Big Teaching Hospital 1 oncologists wearing different hats but skewing decisions in their favour:

'The (Medical Director) has a slightly difficult task. He tries very hard to make sure that everything does not end up at the Big Teaching Hospital 1 but it is very difficult'

(clinician)

Interviewees agreed that the board had sufficient representation to accord legitimacy in decision making, with providers as well as commissioners represented. The Board hosts a number of Network Site Specific Groups (NSSTGs) or tumour groups and cross cutting groups (e.g. Chemotherapy) as well as a Lead Cancer Nurses' Forum and a User Partnership Group.

The Network Management Team

The next level down is the Network Management Team (NMT) which is effectively led by the Medical Director, the Network Manager, the Nurse Director and Service Development Lead. There is a substantial group of other staff including information and service development staff.

The NMT sees itself as an expert body which interprets national guidelines and policies within a local and wider strategic perspective. It prepares 'gap analyses' or local implementation plans. It also oversees the work of the tumour groups so that although they are formally accountable to the Network Board, they are also supervised by the NMT. It consciously sees itself as an 'expert body' providing advice to the acute sector on service delivery and to the PCT on commissioning:

'we are an interface organisation...we work on the interface and it is either the interface is secondary to primary care, the interface between secondary to tertiary care or the interface between any provider and commissioner of care. So wherever there's an interface, you need a network because people don't naturally work together.'

(NMT member)

The role of the NMT is to ensure that guidelines and recommendations produced by local groups reflect national policy. The NMT provides technical information to the tumour groups (e.g. pharmaceutical), alongside data (therapeutic efficacy; epidemiology), and expertise in such areas as audit and workforce and cross boundary communication. It advises on developing shared protocols to facilitate services moving from secondary to primary care. They move between various parties in the network, trying to add value. Plans from the tumour groups come back to the NMT for

consideration of their technical and strategic implications and then go to the Board for ratification. The strategic input is provided by the Medical Director and the Chair and Network Manager. It has a clear model for itself as an interface organisation that adds value:

'so if I give you an example of the interface between primary and secondary, things like developing referral criteria from primary to secondary care to get the right patients into the right pathway...we developed shared care protocols, we have worked with primary care to actually develop the expertise and knowledge and put on training events, so that you can actually physically move a service out of secondary to primary care so there is an interface role for us there'

(general manager)

'the structure is that the network has a core executive team, the professionals who have the knowledge who then link, they are the glue who hold together commissioners on one side and deliverers of service on the other side...we are the link that tries to pull them together in a way that allows us to show each side each other's problems and to see if we can get a more intelligent dialogue.'

(clinician)

In summary, the NMT concentrated on IOG implementation in the acute sector in its early days. At this stage, the network was a newcomer in a difficult field with relatively low power as a non statutory body which did not hold a budget and worked in the context of newly emerging Foundation Trusts. Early Board membership was weighted to clinicians and CEOs from the acute sector.

The network later moved to a broader role and composition, including advising PCTs on service commissioning. It evolved into a centre of expertise in a number of important areas. There are more specialist sub committees and a staff support team. Both strategies – alliance with PCTs and the provision of expert capacity – underpin the network's current influence

The interview data suggest that the role of the network is widely understood in terms of linkage/facilitation between organisations and provision of expertise.

Network Site Specific Tumour Groups and the Urology Tumour Group

The Network Site Specific Tumour Groups (NSSTGs) act as the '*engine room*' in getting the work done that needs to be done.' They include members from all relevant professional groups, although GP involvement was low. They meet every 2 or 3 months to look at such areas as service improvement, audit, peer review, waiting times and patient information. Less frequently they consider plans for major service reconfiguration.

The Urology NSSTG processed the Urology Improving Outcomes Guidelines (IOGs) on behalf of the network. It had two different chairs during fieldwork. The meetings observed were less formal than those of the Network Board. During one observed meeting, the consultants sat in two discrete groups, apart from each other, and did not interact during breaks. The chair presided, surrounded by NMT representatives, the patient representative and the audit lead. His style was friendly and engaging. A

wide variety of topics was discussed including audit, patient information and a patient satisfaction survey. The clinicians present were vocal and defended their points firmly. Consultants dominated the discussion, with a tacit tension around the Big Teaching Hospital 1 axis. Nurses were the least vocal, while user representatives participated more, depending on personal characteristics and past experience. Despite some internal tensions, the meeting could be seen as dynamic and productive.

Management roles, relationships and leadership

The three core members of the NMT can be seen as the Chair, the (powerful and effective) Medical Director and the Network Manager. They are seen as a well functioning and effective group with strong credibility. They have had a critical influence on the representation of the network as an 'interface organisation.'

Supporting the strategic trio, the Network Board has wide membership, meets regularly with a well defined agenda and the encouragement of broad participation. There is good engagement and interaction.

Processes, systems and governance

Overall, the role of the network is defined as follows:

'we are an interface organisation'

Many network staff describe their work as moving between different stakeholders (either providing information or expertise) or transmitting information between parties. Key individuals seek to influence various organisations and individuals. To do this, these individuals have to have credibility.

There were difficult decisions which led to 'a lot of antagonism'. Staff at Big Teaching Hospital 2 seemed more satisfied with decision making than Big Teaching Hospital 1 for reasons which will become apparent. In the past, there had been difficulties which had now been learnt from:

'on the smaller things; highly (consensual). On some of the bigger stuff, where there is more at stake i.e complete loss of service, a shift of service to another provider trust, probably not consensual. And even we have had decisions made where the UCN...I say the network board, it wasn't the network board, it was the manager and the medical director would meet with their opposite halves in the (another cancer network) and between them decided that certain work would go to the other CN. That caused a huge furore, big, big, furore. That was a while ago. I do not think that the climate or the landscape now would allow that...'

(nursing respondent)

There were tensions between the different Trusts in the network as Big Teaching Hospital 1 saw their historic aspirations to develop as a cancer centre as being constrained by wider perspective of the network. The Chair hopes that Board members will adopt a strategic and corporate role and be less influenced by their home institutions. The user representatives are fairly active participants. Despite some criticisms, board decision making is regarded as transparent and legitimate.

Systems of accountability

There are clear decision making processes. The Board meets monthly and the NSSGs meet on a 8/12 week cycle. Board subgroups are expected to report to the board which provides active scrutiny.

A second element concerns the design of an explicit decision making process at lower levels:

'if we have to write a strategy, I will be here to kingdom come, because we are never going to get agreement to a strategy. So what we will try to do is agree a process and the process will be that we will take each IOG as it comes. And we will then say 'this is what the IOG says, we will look at the linkages required for that particular cancer and we will then invite business cases as to who does it best'. So it goes against textbook strategic management but I am convinced that it was the right thing to do because we as a network were not powerful enough to decide overall the configuration of hospitals in (region). So we accepted that was a limitation on our power'

(general manager)

Issues of due process were highlighted by the earlier flawed Gynaecology reconfiguration. To break the local deadlock, the NMT invited in an external panel to make recommendations including that the services should be moved out of the historically dominant teaching hospital (Big Teaching Hospital 1) to Big Teaching Hospital 3. This decision was a shock: IOGs were here to stay and the outcomes of any reconfiguration process were not guaranteed. There was a strong local desire to avoid an external panel in Urology.

The process of reconfiguration of urology services

The 2002 Urology IOG recommended changes to specialist services in urology (e.g. complete removal of prostates and bladders) in the same three main areas as found in the CCN: (i) the centralisation of services (the most contentious indicator) in centres doing at least 50 radical operations a year and with surgeons doing at least 5 such operations each and serving a population of about 1m (ii) the development of multi-disciplinary teams and (iii) the standardisation and development of joint protocols.

In 2002, these specialist procedures were being carried out in five sites, with three major Trusts. While all the consultants complied with the individual norm, no single unit complied with the norm of 50, so centralisation was needed. While the strategic aim was to devise a process which could generate local consensus and avoid an external panel, this was not easy to achieve.

Stage 1 of the reconfiguration process was dominated by lengthy discussions and limited progress in the Urology NSSTG. The discussions were dominated by the urologists, disputing the IOG in the hope that the proposals would be forgotten. As a NMT member put it:

'they prevaricated, well, the guidance might go away. BAUS (British Association of Urology Surgeons) might bounce it and everybody was in uproar and I found it fascinating actually because loads of very eminent urologists had been part of writing the guidance and it felt to me that some urologists, very eminent, were part of BAUS and they were winding BAUS up to say 'we don't like the guidance, we don't agree

with it. The population size is wrong or there is no evidence to say that you should have this number of cases.’ So they spend quite a lot of time, like most clinicians do with audit, first of all they rubbish the information, then they deny its existence, then they argue against it and I can see that cycle happening many times.’

Urologists were upset about changes to core working practices and historic inter site rivalry came into play:

‘And it took a long time to put the nuts and bolts in place. To say that it was easily agreed, mutually accepted, would be totally wrong. There was considerable acrimony particularly between Big Teaching Hospital 1 and Big Teaching Hospital 2 because the view from Big Teaching Hospital 1 was that they should be doing all of it, not only that but probably that their surgeons should be doing all of it. Big Teaching Hospital 2 stuck out.’

(clinician)

These discussions took about a year. On occasions, meetings were very fragmented with low attendance: *‘it was as if we’d gone for a cup of tea’*. Positions were being struck and there was very limited movement.

In *Stage 2*, *‘common sense prevails’* and movement to a 2 centre solution accelerated. Key NMT members were clear that they would be judged on their ability to reconfigure services and design new patient pathways, including across the secondary tertiary interface.

The network was not able simply to impose a decision. There were many arguments and interest groups for and against centralisation onto Big Teaching Hospital 1. Several new influences came into play at the same time. A new NSSTG chair – a consultant at one of the non competing smaller units - came in and pressed more forcefully for the parties to make a decision. Other parties were exerting influence. The SHA did not favour a single centre for the whole region. This was largely due to Private Finance Initiative issues but also related to the population served and likely beds needed in the future.

The network invited the trusts to present business cases, but put pressure on for a locally agreed decision and to avoid an external panel. As a managerial respondent recalled:

‘there was some real reluctance to go down the direction of a panel because they knew that there would be winners and losers and therefore there was a ‘don’t go there, lets try and sort this out ourselves.’ So the urology IOG very much about ‘let’s try to work this out ourselves, how are you going to do it?’ And they were very much allowed to get on and have a discussion over a much longer period of time to come up which an outcome and that is what they did to a greater or lesser degree.’

This combination of pressures led to more urgent consideration by the NSSTG. A first decision was to go for two centres instead on one, dividing the City on a North East/South West axis (as with the Upper Gastro-Intestinal Tract IOG). The new NSSTG chair had a role in one of the smaller and non competing units which made him an ‘honest broker.’ This decision was made in the light of improved local epidemiological data which indicated changing population need. It was referred up to the SHA and DoH (but not the Cancer Czar) for approval, which was secured.

In *Stage 3*, the two units were selected: based in the main teaching trusts in each sector. They would host the services and in each case the consultants from the smaller units would travel to these sites and work in a larger team. So no consultant would stop doing surgery but would have to travel (relatively small distances) to perform operations. The NSSTG would arrange the details of centralisation.

The process was easier in the North East sector where the consultants had cooperated earlier on, meeting informally at various times to build up a joint understanding. Integration went well (achieved in 2005) and surgeons showed flexibility in working practices. In the South West sector, however, where the service was centralised onto the historically dominant teaching hospital, service integration (2006) was weaker. Two consultants were not willing to travel to operate at the main site, as they did not feel welcome. There were continuing problems of communication and some even questioned whether patient care really benefited from centralisation. There were some big egos at Big Teaching Hospital 1. A number of respondents drew attention to issues in organising MDT meetings. It was stated that Big Teaching Hospital 1 did not try to accommodate the travelling clinicians' needs and just added the visiting cases to the end of their own MDT meeting:

'in other words, we have not set up a special MDT time, it's merely slotted into theirs, which is very nice for them because it is at a time that suits them and it is down there. At the moment, we do not have active video conferencing, which means that Mr XX and myself have to travel to (the hospital)'

(clinician)

Reflections on the case

The case demonstrates the prior impact of the flawed centralisation process in gynaecology which led to organisational learning for redesigning the decision process for the later urology IOG. The network's approach was to agree a process by which local decisions could be made, but then to maintain pressure to ensure that a local decision was made. The NMT played an important but subtle role in moving events forward. The main forum remained the NSSTG with the NMT constantly reinforcing the need for the IOG to be fulfilled:

'their role if anything was to speed the process up and make sure we had done things and things had been achieved in the timelines we had stated'

(NSSTG member)

The NMT was helpful, but operated within a set agenda. The case displays a range of stakeholders involved in exerting pressure at different times and using different forms of influence.

Finally, we note the crucial role of senior clinical staff in the implementation process and their influence on the final outcome.

Cross case discussion – policy implications

Both cases show a skilled, small team based form of leadership by the Network Management Teams, important in persuading the urologists to accept service reconfiguration as legitimate. We see these networks as broadly 'successful' (see the detailed discussion in a later chapter). The mandated network in County Cancer Network built on a pre-existing informal network. As well as using soft influencing skills, contextual intelligence and clinical credibility, the NMTs developed and used local data and also exploited a national policy framework and associated targets to put pressure on locally. The NMTs mixed 'hard' and 'soft' management, using top down pressure to increase local movement. They worked hard on the urologists to get them to change their early opinions. Learning from the flawed early IOG exercises, both networks developed an explicit process for urology configuration to produce a legitimated outcome (which it broadly did).

The question was raised about the future agenda and continuing role of the networks after they had reconfigured services in line with IOGs.

5.3 Sexual Health Networks

We originally selected sexual health networks because we thought that they would exhibit a community facing orientation and be influenced by the public health function. The cases did not always confirm these initial assumptions. We completed 11 policy interviews for these cases and Appendix 6 provides a detailed matrix of the 49 case study interviews undertaken.

Policy background

From the late 1990s onwards, in addition to the long established but more specific policy focus on HIV/AIDS, general sexual health has increasingly been recognised as a public health priority. 'Saving Lives: Our Healthier Nation' (Department of Health, 1999) referred to targets to improve sexual health as: '*an important public health issue*'. The National Strategy for Sexual Health and HIV (Department of Health, 2001) set a national target to reduce newly acquired HIV and gonorrhoea infections by 25 per cent by the end of 2007. It proposed the development of managed networks for HIV and sexual health services, outlining standards and guidance. Its main aims were defined as:

- To reduce the transmission of HIV and STDs;
- To reduce the prevalence of undiagnosed HIV and STDS;
- To reduce unintended pregnancy rates;
- To improve health and social care for people with HIV;
- To reduce the stigma associated with HIV and STDs.

There was considerable financial investment, over £200m since 2001. These broad aims were operationalised into specified targets. The 'Toolkit for

Effective Sexual Health Promotion' (Department of Health, 2003) made reference to the importance of networks and networking.

'Choosing Health' (Department of Health, 2004a) identified sexual health as a key policy priority. It highlighted the risks of unprotected sex, focussed on reducing the levels of teenage conception and a screening programme for Chlamydia. It committed new funding to modernise and redesign sexual health services, setting a target of seeing all patients within 48 hours of first contact with Genito Urinary Medicine (GUM) services by 2008. It specifically mentioned the need for: '*action to break down the boundaries between primary and specialist services*' (p145), for inter agency collaboration, and for multi disciplinary teams, all suggesting networks and networking to cross boundaries.

National Standards, Local Action: Health and Social Care Standards and Planning Framework, 2005-7' (Department of Health, 2004b) includes sexual health in NHS national targets and forthcoming Local Delivery Plans (p145). A key standard relates to managed sexual health networks which should reflect patterns of service use, develop care pathways and provide consistent standards of care. They should develop, agree and implement shared and cooperative governance, accountability and performance management systems. Managed networks should build on informal networks in place: they should retain an organic as well as a managed element.

The main professional bodies in the arena of HIV and sexual health are MedFASH (the Medical Foundation for AIDS and Sexual Health) and BHIVA (the British HIV Association) both of which published recommendations on policy and clinical guidelines for the delivery of care. MedFASH argues that the development of managed networks should facilitate prompt and equitable access, improve coordination, develop integrated care pathways, increase user choice and ensure consistent quality of care. Redesign which leads to more flexible opening hours could increase the prompt use of sexual health services.

MedFASH (2008) highlighted how PbR was driving organisational behaviour, along with a shift to a commissioning role on networks, greater use of multi-disciplinary teams, evidence based practice, standards and targets. MedFASH recommends the rolling out of sexual health networks to ensure holistic commissioning and integrated care pathways.

Metropolitan Sexual Health Network

Site and context

The network is set in a deprived metropolitan area with various ethnic minority populations and high prevalence of sexually transmitted infections (STIs), particularly in the inner city sector. The network covers five hospitals:

Teaching hospital: is a large and long established City centre teaching hospital with a medical school. It employs about 8000 staff and has a

budget of over £500m. It serves a mixed local population of 500,000 including areas of deprivation with high incidences of STIs and HIV. Their Department of Sexual Health employs eight consultants and operates a walk in service.

Foundation Trust: this urban hospital opened in the 1980s and recently gained Foundation Trust status. It is a small hospital with just over 2000 staff and a turnover of £160m. It was historically linked with Teaching Hospital and remains affiliated with its Medical School. It serves a deprived population with a high incidence of STDs and HIV positive patients, in particular African patients. Its Department of Sexual Health has five consultants and operates on a walk in appointment basis.

New Teaching District General Hospital: was also founded in the 1980s on a new site. It is a small hospital with just over 2000 staff and an annual budget of £160m. It has recently recovered from financial difficulties. It is also associated with Teaching Hospital's Medical School. It serves a deprived inner city population, also with a high proportion of HIV positive Africans. It operates a walk in service with 2 consultants.

Dual Site Outer Metropolitan City District General Hospital: is a medium sized Outer Metropolitan District General Hospital (DGH) operating on two sites, with a budget of £350m. It operates in a less deprived and ethnically diverse area, with lower incidence of STDs and HIV, so sexual health is a lower health policy priority than for other areas. Its Department of Sexual Health has two consultants operating walk in clinics for patients on two sites, having recently taken over responsibility for managing sexual health services at another under performing hospital.

Single Site Outer Metropolitan City District General Hospital: this Outer City DGH employs 3000 staff and has a budget of £185m. It operates on a single site and has recently recovered from financial difficulties. Its Department of Sexual Health has two consultants, operates a walk in clinic and until recently has had problems with waiting times, which the network helped to resolve.

The network relates to 7 Primary Care Trusts (PCTs) with major differences between the sexual health needs of the three inner city PCTs and the four outer city PCTs. It links to the Metropolitan Sexual Health Expert Advisory Group and the Metropolitan HIV Consortium so that a City wide dimension to sexual health policy is evident.

Structure

Initially, there were three main components to the network. There was a *stakeholder group* chaired by a PCT Chief Executive, consisting of representatives from organisations involved in sexual health/HIV services in the area. Then there was an *operational group* involved in directing and managing the network. The stakeholder and operational groups later merged to form a single *Executive Board*. Finally there are special subgroups.

The *Executive Board* was a large multi disciplinary group (including NHS providers, commissioners, voluntary sector and patient reps), designed to be a democratic forum meeting quarterly. The composition and culture of the Executive Board was described as highly multi disciplinary: '*the multi disciplinary approach is absolutely vital to sexual health*' (sexual health consultant) and '*very collaborative...you don't see the hierarchy at meetings that you see in other sectors*' (Executive Board member). The number of participants started to multiply until a dedicated Network Coordinator was appointed who then managed invitations to attend. Executive Board was more of an information sharing than decision making body. So while the Executive Board espoused '*a club approach...consensual decision making*' (clinical manager), in practice decisions were influenced by a smaller group of senior members.

Subgroups included issue focussed subgroups (such as GUM, HIV or an active research subgroup) and professionally focussed subgroups (such as Sexual Health nurses or commissioners/public health). In 2007, a new Patient Public Involvement subgroup was set up, operating through a patient forum based on 'Positive', a local HIV organisation. Decision making at the HIV subgroup was seen as democratic:

'the decision making at the HIV subgroup was by votes really. What do you think guys? There is a smallish group of us...that is really quite simple because there are a number of things pushed by BHIVA and BASHH and there are a number of things that are clinical and people can bring up anything that they have a concern about'

(consultant)

Foundation and early history

Consultants had been informally networking with each other about clinical issues since the 1990s, particularly those with links to the teaching hospital medical school and those providing cover during vacations. A formal network did not develop until after 2001 National HIV and sexual health strategy:

'historically, networks have always existed and I think that is a thing you need to realise...if anyone had a difficult patient in a difficult subject, whatever it may be...they'll pick up the phone...so that kind of networking always happened. But this is formalisation of that structure and also trying to ensure that there's standardisation of care across the sector'

(NHS consultant)

'it started as a group of clinicians sharing information and best practice'

(Network Management Member)

So the network evolved from a group of clinicians sharing information and best practice into a more managed network form. In 2002, informal discussions among Trust consultants and local commissioners began which felt that there was a '*lack of support*' for sexual health/HIV services in the patch and that a network could provide '*lobbying force*' (consultant).

The first chair was the Specialist HIV commissioner with a background in nursing (including HIV nursing) who undertook this role alongside his PCT

'day job.' He later became network Vice Chair and more recently moved on to a more senior role outside the network.

An away day in May 2003 arranged by a local Public Health manager established local support from various stakeholders for a sexual health network, covering the whole sexual health patient pathway. An inaugural meeting was held in August 2003 chaired by a local PCT CEO (*'it is more likely to happen if you have got a PCT Chair...it is their money at the end of the day'* Commissioner) which sought nominations for the operational group.

The main thrust for the formation of the network came from the HIV commissioners, public health and sexual health consultants, with primary care and patient representatives coming in later. However, public health influence waned after this founding stage as the network grew out of the acute hospitals and in particular the Teaching Hospital, with the support of the HIV commissioner. So it was more of a clinical network with an interest in providing medical care 'around HIV' rather than a wider social or public health network.

The Teaching Hospital 'group' included the first Clinical Director, the HIV Specialist Commissioner (previously a nurse there); the first Network Coordinator (a former HIV nurse there); the Research Lead (a consultant there); and a Vice Chair (who trained there). Their common background in the Teaching Hospital was seen as the 'glue' that kept the network together. The Network got some pump priming money from the local PCTs to pay for some Clinical Director time and the network coordinator post on the basis of improving outcomes for patients.

The first priority was to benchmark the implementation of various standards locally, notably the MedFASH HIV and Sexual Health standards and the BHIVA, BASHH, British Infectious Diseases Society and Royal College of Physicians 2007 HIV Clinical Care Standards, to ensure that local services conformed to national best practice. Meeting 48 hour access standards provided a particular focus. The network was supposed to act as a forum for learning and sharing best practice, although these more diffuse goals (along with engaging with local patient groups) were somewhat crowded out by high profile standards and targets.

Network as a pressure/support group

The network was also a pressure group which enabled members collectively to lobby the local NHS for resources and to get sexual health issues on the agenda. It was also a support group which enabled people to come together to share ideas in a 'safe' environment. It brought together acute sector and PCT representatives, breaking down traditional boundaries and stimulating informal flows of information. Some felt the network had both positive and powerful effects:

'there is absolutely no question the new clinic wouldn't have happened at (DGH) without the network sorting out the money'

(consultant)

'I must admit I had never experienced anything like it. And I've worked in Sexual Health for years and I was really amazed that it existed and that it was so cohesive. It's really impressive...it seems to have quite a lot of influence...they act in some ways as a mini pressure group'

(nurse)

'The strengths are definitely...strategically, politically, moving sexual health forward, keeping sexual health on everybody's agenda, absolutely important.'

(consultant)

The network facilitated 'people honestly sharing ideas...being vulnerable, talking about problems' (clinical manager) and providing peer based 'moral support' (consultant). Others commented that the network 'keeps relationships going' and 'brings people together', especially both purchasers and providers.

In summary, an informal network between clinicians existed before a formal network was established. The formal network was established by a diverse group of local stakeholders, including public health, commissioning and staff at the teaching hospital. It brought people together to share information, learn and also lobby for resources for sexual health. The main early leadership came from a consultant and a specialist HIV commissioner.

Stakeholder groups

The network was set up with a range of stakeholders, including a local HIV organisation. Although African community groups were involved in the formation of the network, their involvement later declined. Indeed, a representative of an African community group had never heard of the network:

'I'm not sure really what it's doing. I'm not sure because it has not come down to the local communities...we're not aware of their work.'

There was some resentment expressed that they were being 'used' as research subjects rather than having influence over the network. GPs were difficult to engage in the network – despite considerable efforts - as they were sometimes reluctant to take on sexual health issues.

As mentioned, the most dominant group were the consultants from the acute trusts and particularly those from the Teaching Hospital. Public health had less influence than expected. Although several PCT Public Health Directors sit on the Executive Board, the network was more focussed on delivering sexual health medicine than preventing poor sexual health as part of a wider public health strategy. This lack of profile was partly because sexual health was only part of Public Health Directors' much broader remit. Towards the end of the research, Public Health was taking on a higher profile and there was a discussion about whether the next push for the network could be towards a Public Health agenda.

Management roles, relationships and management style

Key roles

A Network Chair (PCT CEO) was appointed for a three year term and had just been replaced by a new appointment at the time of fieldwork. Both Network Chairs were seen as taking a 'hands off' approach to managing and leading the network, but had good relations with key network leaders.

In its early and middle stages, leadership was concentrated in the hands of the Clinical Director and Vice Chair, supported by a Network Coordinator. At the time of fieldwork, the first chair, Vice Chair and Network Coordinator had all been replaced, leaving the Clinical Director as the only member with experience of the role. Some interviewees argued that too much power was concentrated in the Clinical Director.

The Clinical Director was a consultant and Head of the Sexual Health Department at the Teaching Hospital and remained in post for two terms. The role was to provide clinical leadership for the network, although in practice it involved overall network leadership. She was seen as key to the success and direction of the network:

'The prime mover'

(consultant)

'She's stopped it from being a talking shop'

(Voluntary sector representative)

'A strong character and good leader'

(manager)

While some critics felt she might be too forceful:

'(Clinical Director is) very tough...we are all boys and she is a man, that is how forceful she can be'

(consultant)

Some raised the possibility of conflict between the Clinical Director's roles in the network and in the teaching hospital, especially as Payment by Results (PbR) came in which increased competition between hospitals. There were also succession issues, given her strong leadership.

The Vice Chair also provided network leadership, deputising for the chair when necessary. The role was first filled by a HIV specialist commissioner who had been a nurse in the Teaching Hospital. He was widely praised and provided a '*good counter balance*' to the Chair, while the two also worked well together. He was eventually promoted to a senior Metropolitan wide commissioning role. The second Vice Chair was a consultant at New DGH who had trained under the Clinical Director at the Teaching Hospital. She appeared less able to balance the power of the Clinical Director.

The network coordinator worked alongside the Clinical Director. The first coordinator brought HIV nursing and interpersonal skills which gave her clinical credibility. The second one came from a managerial background, and brought strategic and managerial qualities. She was viewed in positive

terms, although some felt she lacked the professional legitimacy and interpersonal skills of her predecessor or was too closely aligned with the Teaching Hospital.

The Research Director (Teaching Hospital Consultant) was important in leading the research subgroup and enthusiastically promoting research in the network and developing a HIV research centre at Foundation Trust.

In summary, the leadership of the network went through three phases. There was a multi disciplinary founding phase. The network appeared most effective in a second phase when there was a balanced trio in role (Clinical Director, Vice Chair and network coordinator) (all originally from TH). The Clinical Director was a powerful individual leader and with turnover in the Vice Chair and Network Coordinator roles she became more dominant in the third phase.

Team relationships were seen as critical to the functioning of a good network:

'if you have got good people in those key posts...you can...let them get on with it and a lot of network stuff is very reliant on relationships and those softer skills...negotiation and...relationships change and development skills are as, if not more, crucial than the hardcore technical and counting skills'

(Senior network member)

The introduction of Payment by Results increased competition between the hospitals and put strain on the internal cohesion of the network.

Processes, systems and governance

The network was formally inclusive and multidisciplinary in nature, formally enshrined in its terms of reference and Executive Board representation. Informally, there was some suspicion that decision making was skewed in favour of particular Trusts. In observing meetings, the atmosphere was informal (including dress) and friendly, very multi disciplinary with little sign of who belonged to which professional group (in contrast to cancer networks).

'5th Wednesday' research day

These research days brought together professionals and organisations to hear about the latest research in the network. As well as being educational, these days facilitated contact between members of the network who did not normally meet (e.g. acute trusts and PCTs) enabling them to share ideas. They were generally seen in positive terms, although a (non medical) critic commented they were too medically led.

We observed one research day which was very well attended (about 100 people), many of whom were finding out what other people were doing. There appeared to be no barriers between the professional groups, at least in the meeting. We see it as an example of good practice, given the high attendance and widespread praise from respondents.

Accountability

The network was officially performance managed by and accountable to its local SHA (until it was merged), although the exact nature of this relationship was unclear and the SHA appeared 'hands off'. In practice, it appeared accountable to the Network Chair (PCT CEO) and the Vice Chair. The network was seen as effective by the Chair and the 7 PCTs that funded it. PCTs and hospitals were also accountable for achieving Sexual Health targets (e.g. waiting times). This may have increased their willingness to accept network advice where it could lead to service improvement.

Sexual health in Metropolitan City

Metropolitan City has half the syphilis, quarter of the Chlamydia and a third of the gonorrhoea cases in the UK, along with half the HIV/AIDs caseload, with large numbers of gay men and Africans infected. The Carrier Report (1998) 'Developing Service Networks in London' proposed that HIV service networks should be established in the then 5 SHAs, one of which we studied here. There is also a regional dimension to sexual health policy making. The SHAs developed a 'Sexual Health Framework' to implement 'Choosing Health' in London. This elaborated specific targets (e.g. reduction in the growth of teenage conceptions by 2008; a maximum 48 hour waiting time and agreed minimum standards for NHS GUM services by 2008).

The Sexual Health Framework called for networks to bring together professionals in primary care, GUM and other Sexual Health services, including voluntary sector providers such as Terrence Higgins Trust and the African HIV policy network. Our two tracer issues were both local service delivery priorities: (i) the 48 hour waiting time for GUM appointments and (ii) improvements in HIV care, especially for people from ethnic minority communities.

Sharing best practice to meet 48 hour access targets for GUM appointments

The Network – and especially the Teaching Hospital – had achieved excellent 48 hour waiting target results. Some interviewees argued that this was because the Network had facilitated the sharing of best practice (through workshops and ongoing support) around service redesign, for example, how to redesign Sexual Health clinics to be based on walk in appointments:

'we were ahead of the country for quite a long time because clinicians really did sign up to it and we had workshops and we invited all the great and good to share best practice and we developed a timetable for rolling out whatever this best practice was'

(senior Network member)

Primary Care Trusts had an incentive to meet these targets too as they would be financially penalised for anyone not seen within 48 hours resident in their area, even if they used clinics elsewhere. So PCTs valued the ability of the network to influence a wide range of providers. The network moved between the different stakeholders to help them meet this target jointly:

'the network has been running meetings between the provider service and basically between the PCT and NHS Trust, to get them together and to put focus on the 48 hour waiting time and how it can be achieved...it has been a forum for sharing best practice between centres and trying to smooth the way...amongst discussions between PCTs and provider services...it is kind of an authoritative but safe discussion.'

(consultant)

Some senior members felt that the 48 hour target had been useful in galvanising the network on a key service improvement objective:

'the 48 hour thing perhaps did give the focus we need, it is like creating a burning platform'

Network members updated their protocols, visited units and suggested improvements to patient flows to meet this target. At the teaching hospital, they redesigned the clinic to make it more nurse led, looking also at triage and the patient care pathway.

Their good practice was diffused across the network through workshops enabling other sites to hit the 48 hour target. Other sites also adopted their protocols:

'We have updated our proformas and triage forms and we have shared our best practice with others...from that point of view it works brilliantly...I wanted to update the protocols and I thought it would be useful to have very similar protocols, so I based mine on (Teaching Hospital's protocol)'

(consultant)

There was initially strong resistance to targets but clinical opinion slowly shifted. The network used a questionnaire to gather data on practice which indicated that four out of the five units were doing well but one was doing less well. Peer pressure was used to try to reshape clinical opinion and reshape the early stages of the care pathway:

'I definitely think the network had an impact there...peer pressure, about modernising practice, allowing people to make and facilitating earlier change of clinical practice, earlier efficiencies in service, so you need follow up ratios, bringing in texting and all that kind of stuff'

(consultant)

The network used peer pressure to diffuse best practice to a failing GUM service led by an established consultant who had previously been resistant to change. There were two clinics at this hospital: one with a larger caseload (with good outcomes and standards). It reviewed all the units in the network, identified problems and made recommendations to the hospital (e.g. they needed a service manager; the two sites should merge). The old consultant later left and a new consultant was brought in to lead the service. Acting on the network's recommendations, the service moved from seeing 17 per cent to 97 per cent of patients within 48 hours.

Another hospital was also struggling to meet the 48 hour target and began to make changes internally, redesigning their clinic to become a walk in service, using support from the network.

The important issue about reporting systems in the 'Unify' database is explored in the later chapter on ICTs. 48 hour access targets were

measured through this national database into which different clinics input data on patient access. Clinicians argued that the data did not reflect the actual needs of patients, as the database only allowed clinics to enter data about the patients they see and not those that were turned away. So achieving the 48 hour target suddenly became easier but it was not clear how meaningful that was. Having said that, the network did engage in considerable 'real' service redesign, diffusion of best practice and turning round a failing clinic to improve care pathways.

Meeting the 48 hour target was a clear '*burning platform*' which mobilised the network in its early phases. Once it had been met, one perceived danger was that the network might lose focus. Some respondents felt that the units might have made these improvements anyway, even without the network.

Improving HIV services for people from ethnic minority populations

The network was seen to have helped improve HIV care, predominantly through the standardisation of care protocols in line with national guidance (similar to the pattern in cancer networks).

We were particularly interested in how the network improved care for ethnic minority communities, especially members of the African community in such organisations as African Forum. Community representatives interviewed reported low awareness and involvement:

'I heard of it, that it is an existing network, but I do not know whether...they are supporting community groups...I did not come across it in a leaflet, I do not know whether they have a web site, I do not know whether they have other materials, I do not know how often they meet,'

(African community representative)

Another respondent reported that African people sometimes felt 'used' as interesting research cases and that social care needs were as important as health care needs. The view was expressed that a local voluntary organisation ('Positive') was better at engaging with local community groups. As a 'Positive' representative put it:

'we need to develop more the engagement about people living with HIV and perhaps people using sexual health services and although (senior network leaders) are absolutely committed to that in a real sense of how we can make that work across the network'

The view was that the...network was historically dominated by acute sector and medical services and found it more difficult to engage with community groups, prevention and hard to reach groups. This focus on clinics may have been reinforced by the 48 waiting time target. This acute sector focus could have been counterbalanced with sustained involvement from public health, but their attention was spread over many public health issues.

It was also commented by the network that there were community representatives on the Executive but that they often failed to attend – so that the problem of lack of engagement was two way. This is an area which requires more sustained attention.

In summary, our view is that the network had been of mixed effectiveness in the HIV/AIDs tracer. They implemented national standards for all HIV patients (including African patients), but they had not really engaged African groups. Clinicians sometimes struggled to understand the behaviour patterns of African patients, which did not always fit with NHS ways of working.

Regional Sexual Health Network (Cathedral City)

Site and context

Cathedral City and its surrounding local area is an unitary authority. It has good transport links with the rest of the UK and a growing population with a relatively high proportion of immigrants from various ethnic groups. The city recently encouraged expansion with a big building programme. Texts such as the Local Area Agreement (2005-08) and the Annual Reports of the Director of Public Health state that its citizens do not enjoy the same affluence as many others in its SHA Region. Unemployment is relatively high; life expectancy lower and deaths from major causes of mortality high. The City has identified four areas for health improvement, including sexual health.

Cathedral City has an independent and progressive culture, dating back to a rapid expansion in the 1960s and 1970s: it has a Foundation Trust now undergoing a very major rebuild and a Primary Care Trust (PCT) (created from an original 2) which was one of only 8 PCTs to join the National Primary Care Contracting Collaborative in 2004 and has also successfully merged with Adult Social Care. A downside of frequent macro organisation is turbulence at the operational level.

Structure: The Hub Committee and key stakeholders

The 'Hub Committee' was formed in 2002 as the local PCT's response to the recommendation of the 2001 National Strategy for Sexual Health and HIV for managed networks in local sexual health services. This has been a key group for implementing the national guidelines in local sexual health services:

'essentially what we've had for the past few years...is the local strategy group set up to respond locally to the national sexual health and HIV strategy...that is a very specific multi agency group that we recognise as very necessary.'

(Hub Committee respondent)

The Hub Committee meets three monthly and has a membership of over 20 people, drawn from various statutory (PCT, Hospital Foundation Trust and also City Council) and non statutory agencies (HIV/AIDS services; Pregnancy Advisory Service; Drugs and Alcohol Services) working in sexual health services. It aims to ensure that agencies are aware of the strategic context and to provide information to underpin local strategy.

Organisations with representation on the Hub Committee

Cathedral City PCT was established in 2006. It fought off attempts to merge it with other local PCTs which were seen as less successful and more indebted. It has the same boundaries as the City Council and includes the old Adult Social Care Department. It has a staff of 1500 and a budget of £200m, of which approximately 12 per cent is contributed by the City Council for adult social care. In addition to the Chair, the PCT's Health Improvement Specialist is a regular attender and services the committee. Two other PCT employees who attend are the Head of Contraceptive and Sexual Health Services (formerly Family Planning) and the Head of School Nursing. *The NHS Acute Trust* (Foundation Trust, 2004) employs 3000 staff and runs two hospitals in the city, one in the centre and one a mile away from the centre. The latter hospital includes the Department of Sexual Health (relocated there from the city centre hospital in 2006). Representatives from this service attend the Hub Committee, but it was not clear how regularly.

The City Council is one of the largest local employers, with 6500 staff and a budget of over £200m. Three employees attend the Hub: two from Children's Services and the Teenage Pregnancy Coordinator (there are high local rates of teenage pregnancy).

The Cathedral City HIV Services voluntary organisation was registered as a charity in 1995 but was providing support and prevention services (including buddying) informally before that. The organisation currently has a caseload of 150 plus, of which only about 10 per cent are gay men and the rest HIV+ heterosexual people, often black Africans or Portuguese from Angola. The long established CEO is a regular attender at the Hub Committee. They do not have much contact with the Department of Sexual Health, except for the HIV/AIDS social worker outposted into their offices. The social worker is funded by Adult Social Services/PCT. This voluntary organisation will be incorporated into a larger, nationwide, HIV/AIDS charity in 2009.

The Cathedral City Pregnancy Advisory Service provides pregnancy advice, termination counselling and also Chlamydia screening. The manager (a qualified nurse) regularly attends the Hub Committee.

The Alcohol Advisory Service offers advice to adults and young people on alcohol related issues. The CE attends the Hub Committee on a more or less regular basis, although reporting a recent gap through pressure of work. There is also a *Drugs Advisory Service* but the CE rarely attends the Hub Committee.

Other linking organisations

Other bodies with formal links to the Hub Committee include the Strategic Health Authority's *Sexual Health Commissioners' Network* which brings the PCTs together on a quarterly basis. It is chaired by a SHA senior manager with responsibility for ensuring the national sexual health targets are met and allocating any monies. It is seen as effective. The *Cathedral City Strategic Partnership* was formed in response to the 2000 Local Government Act. Its Health Board involves joint work between the Local

Authority and PCT to achieve various health goals, one of which is reducing the under 18 pregnancy rate. Various people on the Hub Committee (including the Chair) are on the Health Board.

At the operational level, a multi agency *Prevention of Teenage Pregnancy Group* meets bi monthly and is chaired by the Teenage Pregnancy Coordinator (TPC). It reports upwards to both the Hub Committee and an executive committee of the Health Board. The TPC is seen as effective (we explore this more in the later chapter on leadership):

'The TPC's job is strategically to lead the teenage pregnancy strategy. So that is in charge of writing strategy and any documents and plans that relate to it. Coordinating things really, from an operational level and a strategic level. So perhaps being the interface between the strategic leaders and operational managers and staff and really being the key champion for teenage pregnancy in the city. The (TPC) is the only person whose sole job is to be about teenage pregnancy.'

(Hub Committee Member)

In addition there were various professionalised networks (clinical, nursing and social work) that had informal or indirect links to the Hub Committee including a *HIV Medical network* which met monthly, chaired by a sexual health consultant from elsewhere in the region and a long standing SHA wide *GUM medical network* which includes the Genito-Urinary Medicine doctors from Cathedral City. This group has survived various reorganisations with a marked degree of resilience.

Network management, processes, systems and governance

The PCT hosts and services the Hub Committee. This has a very small network management team consisting of the current Chair, who has a background in Health Promotion and is seen as effective in undertaking core strategic and linking roles, but has many other additional public health responsibilities, and a part time Health Improvement Specialist who works wholly on sexual health but mainly at the practitioner level. The leadership dynamics are considered in more depth in the later chapter on leadership.

Technically, the Hub Committee is a subcommittee of the PCT's Professional Executive Committee to which it copies minutes and progress reports (the SHA also sees its minutes). The PCT sets the agenda for the group

While the committee is tasked to operate at the strategic level, in practice the membership shifted between the strategic and operational levels and this was seen as problematic by some. Meetings consist of a business meeting followed by a presentation on a particular topic. Implementation capacity was limited until the present Chair – designated as sexual health lead – came into post in 2003 and became the chair of the Hub Committee in 2004.

Sexual Health Strategy: the story over time

The 2001 national strategy for sexual health and HIV indicated commissioners should develop effective partnerships with voluntary organisations, service users and their representatives. In 2003, a high

profile whole systems conference (the local MP spoke) started a collaborative process of developing the first strategy:

'The strategy was first developed in 2003 and was based on a conference...that conference brought together...the sexual health community of (Cathedral City). So that was people of all ages, ethnicities, service providers, service users, there were young people doing some drama,...all sorts of work going on and afterwards we consulted on that, and that is how we produced the original strategy.'

(Hub Committee respondent)

Although the conference covered the whole range of sexual health issues, the Health Partnership Board minutes referred to the 'teenage pregnancy conference' suggesting that was the key issue. After the conference, there was a twelve month process of consulting with local stakeholders and then circulating a draft. The strategy (Implementation Plan) was finally published in December 2004, outlining a 'Framework for Delivery' with 28 key tasks. A public health manager was appointed as Implementation Lead.

In June 2004, there was a successful local application to join the National Primary Care Contracting Collaborative to involve GPs in providing sexual health services. Four GPs came into the GUM department for continuing professional development (training to meet BASH competences). This helped build more capacity in primary care to enable the locality to meet 48 hour waiting time GUM targets. The initiative began to develop more cross boundary working between GPs, the Contraception and Sexual Health Service and the Department of Sexual Health.

In 2005, there was some loss of energy at the strategic level perhaps due to a further PCT reorganisation which interrupted systems for monitoring the Hub Committee. The public health improvement manager also left so that there was no dedicated secretariat. There was a substantial period of time (estimates varied as to its length) when the Hub Committee did not meet. It was not until 2007 that it began work on the second Sexual Health and Implementation Plan (2009-2011). The Hub Committee used the 2005 national MEDFASH standards as a template.

As before, there was an extensive consultation process on drafts. The final text assessed progress since 2004 in such areas as becoming part of the National Primary Care Contracting Collaborative, investment in GUM services, the development of GPs with a special interest in sexual health and implementing Chlamydia screening. There appeared to be high compliance with meeting the 48 hour access target, probably due to more rapid GP referrals. Gonorrhoea cases were down by 25 per cent since 2004 and the target of offering more HIV testing had been achieved. However, Chlamydia infections were continuing to rise locally and pushing up the screening rate significantly required making tests available through new venues and outlets. Nationally collected statistics suggested little progress in reducing teenage pregnancy rates (see below).

Sexual Health Services before 2002

Some respondents saw local sexual health services before the publication of the National Strategy for Sexual Health and HIV as fragmented:

'if we look back five years...you know, (there was not) any kind of dialogue or communication between providers of services.'

(Hub Committee respondent)

The first local Sexual Health and HIV Implementation Plan (2004) highlighted five long standing local issues:

1. Rapidly increasing incidence of STIs;
2. High rates of teenage pregnancy;
3. Inadequate provision of terminations services, with too many late terminations;
4. Changes in HIV epidemiology, with many new cases amongst the heterosexual population in the immigrant, asylum seeker and refugee populations;
5. The expected requirement to provide sexual health services to the population in a new prison;

In this study we focused on teenage pregnancy (a high local priority) and development for HIV/AIDS services for ethnic minorities (a lower local priority) as tracer issues.

Tracer issue – teenage pregnancy

The Social Exclusion Unit Report (Social Exclusion Unit, 1999) advocated 'joined up strategies' at local level involving many different agencies to tackle high rates of teenage pregnancy.

This policy stream had especial relevance locally given high and rising under 18 conception rates which were to become politically very visible. A multi agency group was established in 1999 and published (2001) its Teenage Pregnancy Strategy which recognised the need for a multi faceted approach, building on the National Strategy, and ensuring easy access to integrated services.:

However, implementation lagged in part because of a perceived lack of 'strong leadership':

'there was...historically a lack of very strategic and strong leadership for teenage pregnancy as an issue and as a result the...meetings were bumbling along and people were talking but nothing was really happening.'

(Hub Committee respondent)

A second explanation was that no ring fenced money was identified to fund the wide ranging training programme of teachers and school nurses needed to provide better sex education. Further reorganisation at the strategic may have distracted attention from operational issues. More fundamental still was poor communication between key stakeholders and lack of agreed strategic purpose:

'if we look back...we just did not have any kind of dialogue or communication between providers of services. For example, the old traditional family planning service did not talk to GUM.'

(Hub Committee respondent)

So little was happening at a strategic level in relation to teenage pregnancy. There was a prevention group chaired by the original Teenage Pregnancy Coordinator (TPC) with many statutory and voluntary sector representatives. It is now acknowledged that it was not effective and became a 'talking shop' with routine items such as updates taking up much time ('it was not really going anywhere') and variable and fluid attendance,:

Late 2004 saw the national rollout of the National Chlamydia Screening Programme Locally. The key service tasked both with meeting the teenage pregnancy and the Chlamydia targets was the Contraception and Sexual Health Service (previously Family Planning). Given its small scale and isolated location, these were big targets, particularly as the School Nursing Service did not offer contraceptives as part of to sex education in Schools.

The impetus provided by the new Hub Committee and its Chair was helpful in building links between traditionally isolated services:

'communication was pretty dire...so they were finding it quite difficult to find out what was going on...Whereas now, somebody attends every meeting or certainly most meetings, the same as everybody, there is always the odd one you can't do but most of the time they do that. And so...that is a major achievement.'

(Hub Committee respondent)

When the new Teenage Pregnancy Coordinator came into post (2006), the focus shifted radically from an all schools approach to targeting 'hot spots' for teenage pregnancy, following an analysis of data which showed a few schools at high risk. This decision, though it was recognised as a reasonable solution given limited resources, provoked some anxiety amongst those who had long been involved in developing sex education in schools, as this approach might simply mean that other schools became problem areas in due course.

There was still little good news as far as Teenage Pregnancy was concerned (despite a tough target of 50 per cent reduction 2004-2010). National statistics indicated that between 1998 and 2005, teenage conceptions had only fallen by 0.5 per cent locally. In 2008, the teenage pregnancy issue moved up the agenda rapidly when national statistics (based on 2006 figures) appeared to show Cathedral City to be one of the worst performing authorities in the country. It became a major health issue

'(Cathedral City) is on the naughty list for teenage pregnancy'

(Hub Committee respondent)

The Teenage Pregnancy Coordinator and PCT senior managers were called to Westminster for a ministerial conference and there was also a visit from the National Support Team for Sexual Health. These events increased the involvement of senior local managers in the issue:

'it is like they are signed up at the top now 'teenage pregnancy is now high priority, high visibility, monthly Assistant Director level meetings. Things are happening, decisions are being made...'

(Hub Committee respondent)

HIV/AIDS in ethnic minority populations

The epidemiology of the HIV epidemic locally suggests a relatively small number of HIV diagnoses in gay men until the late 1990s. After that, there was a rapid increase in the number of HIV cases diagnosed in people originating in Africa (including Angola), either relocated or dispersed as part of the national policy on dispersing asylum seekers. The local HIV/AIDS voluntary organisation had originally had a small clientele consisting of mainly gay men but now had a large cohort (150) of mainly heterosexual clients from ethnic minorities. The voluntary organisation concerned had a social worker based in their premises, making an important contribution to service provision in alliance with the statutory sector.

Increasing numbers of new HIV diagnoses increased the workload for what was still called the GUM Department. There were few links with other services with the exception of social work staff from voluntary HIV services who at that time had a room in the clinic. When GUM (now renamed the Department of Sexual Health) moved to other premises in 2006, it was not possible to accommodate social work staff in the clinic. Although another space was found, it was used less often. There were few direct links with the HIV organisation, unlike other localities in the SHA where representatives from local organisations regularly attended clinics. So the picture is of a isolated and 'non networked' GUM service.

The 2004 Implementation Plan showed the local rise in new HIV infections and drew attention to the many affected migrants and asylum seekers locally. These client groups had complex health and social needs and found it difficult to navigate the many agencies involved.

'if you are living in crisis you won't turn up for your appointments at the GUM, or school, or here. Then people will ring them and say 'well you didn't turn up, you made this appointment, you've not turned up'.

(PCT respondent)

With the growth of new HIV cases, local voluntary HIV/AIDS services expanded, largely on the basis of PCT contracts (and funding). It now needed more professional administration and management. There was an approach from another HIV/AIDS organisation in a neighbouring city for a merger, but talks proved inconclusive. However, in 2007 the discussions with a national HIV/AIDS organisation about a merger came to fruition.

Reflections on the case

Cathedral City is a unitary authority with a growing and ethnically diverse population. The health of the population is poorer than elsewhere in its region and sexual health is a key area for improvement. Particular issues of concern in sexual health include the high under 18 conception rate, and increasing numbers of cases of HIV/AIDS, mainly among the immigrant population.

The Cathedral City Sexual Health Network (Cathedral City Hub Committee) was formed by the Primary Care Trust (PCT) in 2002, in response to the National Strategy for Sexual health and HIV. Between 2002 and 2008,

despite operating with few resources and during massive organisational change, the network made considerable progress in meeting some objectives, including Chlamydia screening and 48 hour referral to GUM services. In addition the PCT became part of the National Primary care Contracting Collaborative, new investment extended the local terminations service, and a full time Public Health Programme Manager was appointed.

However, the limited management resource within the network meant there were periods when the Hub Committee met sporadically, and a lack of strategic focus had a negative impact.

In 2008, the Committee was reactivated and a revised strategy for 2008-2011 was published. Further impetus was provided by two incidents relating to sexual health in the Spring of 2008, when it appeared that the 48hr GUM referral target had not been reached and recently published statistics suggested that teenage pregnancies were increasing, rather than diminishing. Both these problems turned out to be artefacts of the ICT systems involved, but they had the effect of raising the profile of sexual health services locally and almost certainly increased top management interest in the issue.

Cross case discussion

The Networks - type, structure, and process: - Both networks are 'mandated', formed after the 2001 National Strategy for Sexual Health and HIVs recommendation for managed networks. Metropolitan City network had a complex governance structure, was well resourced and contained powerful leadership, including clinical leadership and related to a strong informal clinical network. It was focussed on acute sector services. The Cathedral City network took the form of a single committee of the PCT. It was less well resourced and exhibited a more individualised (non clinical) leadership constellation. It was more public health orientated, with stronger links between health and social care agencies. In both cases, networks sought to 'deliver' key NHS targets and standards. Both were in part 'organic' as the Metropolitan Network drew on pre existing clinical networks, while Cathedral City Network was composed of organisations that had been working together in the city (at least at operational level) for some time. However, at strategic level, 'resource dependence' on the PCT (see discussion on the exercise of power below) was probably a key factor in holding the network together.

Tracer Issues: - Achieving 48hr access to GUM services was more difficult for the Metropolitan Network as it had to reconcile systems across a number of different clinics. Cathedral City, with only one clinic, had only to simplify GP referral systems. Though both cases met their targets it remained possible for people to be turned away during busy periods without being recorded on the system. Reduction of teenage pregnancy did not feature as an issue in Metropolitan Network, probably because of its clinical focus. Cathedral City's apparent failure to meet its targets have been recently shown to be due to a 2 year lag in reported statistics. Current (2009) figures for both network areas (relating to 2007) show very similar rates of reduction. The rising

numbers of cases of HIV/AIDS in ethnic minorities was a concern in both cases, though Metropolitan Network, with far more cases, was more orientated towards clinical needs. In neither case did it appear that service provision satisfactorily met the cultural needs of their clients.

Knowledge Management: - Sharing of information was taken seriously in both cases. Metropolitan City Network had robust mechanisms for ensuring that knowledge (at least knowledge relating to clinical issues) was disseminated, though this may have relied on the existing informal professional network as much as the formal network structure. It is not clear if non medical knowledge (e.g. social work, or education) had as much opportunity for dissemination within the Network. In Cathedral City, dissemination of knowledge was originally achieved through discussion of all issues at every meeting. This ensured that members were kept up to date, but did not allow much discussion. More recently, the format changed to having brief updates and discussion of one particular topic in depth, though it may be hard to ensure that members whose interests are peripheral to the focal topic are motivated to attend. Gaining knowledge about a subject was useful, but did not necessarily lead to developing mechanisms for identifying good practice and implementing it across the network.

Leadership, and succession issues: - "Good leaders are people who have the attributes of the category of leader that fits situational requirements" (Hogg 2001). The two sexual health case studies exemplify the argument for situational leadership. The current Chair of the Cathedral City Hub Committee, recognised as the prime mover, strategist and key leadership figure, was a senior member of the PCT, but not a top executive. In Metropolitan City Network the role of Executive Board Chair, although taken by a PCT Chief Executive, was of less importance. Instead, three people with a clinical background successfully determined the strategic direction of the Network. When this tri-partite leadership group broke up, one person, the Clinical Director, held the reins of leadership.

Hogg (2001) suggests that effective leaders are prototypical of the groups they lead. The two individuals had different management styles, the one forceful, energetic and directive, as might suit a group composed mainly of high ranking doctors, while the Chair of the Hub Committee was inclusive and facilitative, as befits someone trying to encourage different organisations to work together. Within their own styles, both were charismatic, inspiring confidence in other network members. Another common characteristic was a clear strategic vision and the ability to both communicate it and gain assent to implementation.

Leadership succession issues were important in both cases. In Metropolitan City Network the Clinical Director appeared the main repository of a strategic vision and there was anxiety from other members that should that person leave there was no-one else able to fill that role. No such overt anxiety over succession was expressed by members of Cathedral City Network. However, the Chair was a key boundary spanner, and continuity of input was hard to maintain on a part-time basis with little administrative back-up. Would loss of either of these leaders threaten their continued

functioning? Pettigrew and Whipp (1991) use the term "*leading change*", rather than 'leadership', and emphasise the importance of the collective in achieving change. These two sexual health networks might be disrupted by the loss of their current leaders, but it seems likely that both would survive, though disruption might be greater in Metropolitan City Network, with its more individualised leadership pattern, than in Cathedral City, where the Hub Committee is made up of people who had been working together for many years and the organisation itself is embedded in local organisational structures.

Interorganisational trust: - Ferlie and Pettigrew (1996) suggest that a key task of the Chief Executive of a network organisation is encouraging its members to move from trust based on personal relationships to "a deeper level of interorganisational trust", perhaps through three practices 1) constructing win-win situations 2) broadening channels of communication and joint working and 3) building a culture receptive to alliances. Are these activities visible within these two sexual health networks?

1. 'Win-win' suggests that in coming together to work towards common goals everyone will benefit individually as well as jointly. For instance, a network might enable more effective lobbying for resources, or voluntary sector members might feel inclusion in the network gained them some 'social capital' (Burt 2005 p4; Leenders and Gabbay 1999 p2). However, expectations may differ from reality. Some voluntary organisations, initially pleased to be included, later complained that their ideas did not necessarily carry the same weight as those of their statutory colleagues, and in Metropolitan City the GUM consultant who resigned may well have felt that an unwanted service reconstruction was a large price to pay for increased resources.

2. Better communication and improved joint working was an aim in both cases and the network structure did promote this. The three measures of the strength of network ties suggested by Krackhardt (1992), frequency of interaction, affection which motivates exchange, and contact over time may be relevant.

3. Did either network succeed in creating a receptive culture for alliances? Cathedral City had a long history of collaborative working which the Hub committee utilised but did not add to in a distinctive way. In Metropolitan City Network the multi-disciplinary Network emerged from the medical professional network, seemingly indicating a readiness for cultural change. However, there are questions about whether the alliances went far enough outside the clinical spectrum. The low profile or absence of GPs, Public Health, health promotion and education, and also of voluntary sector organisations representing user groups was noticeable. Metropolitan City Network may need to become more radical in its cross boundary thinking before it can be said to be truly receptive to alliances. In summary, both sexual health network organisations developed some measure of interorganisational trust. However, that shown by Cathedral City was probably due more to the city's cultural history than to the influence of the network, while Metropolitan City Network had some way to go to become fully inclusive.

The exercise of power. - The managed network, lying somewhere between the free-for-all of a totally market-based system and traditional bureaucratic top-down management is potentially well suited to the exercise of the type of control modelled by Foucault (1979, 1991) not bureaucratic and hierarchical, but exercised through the development of internalised self discipline and obedience to organisational norms (Reed, 1999). The clinical governance model, while seeming self-regulatory, in fact also provides the state with a clear mandate to intervene if things go wrong. An example from the case study material is seen when, having (apparently) failed to meet its teenage pregnancy targets, members of Cathedral City Hub Committee, with the Chief Executive of the PCT, were summoned to Westminster and asked to explain themselves to government ministers.

The sexual health networks themselves exercised influence and power over their member organisations, but in different ways (French and Raven 1959, Raven et al 1998). The most obvious example in Metropolitan City was successfully putting pressure on a 'failing' GUM department to conform to the new 48hr targets, through the legitimate position, expertise and (probably) some personal pressure. Another example arises from the dynamics surrounding the Clinical Director's relationship with other members. Yukl and Falbe (1991) flag up the importance of 'charisma' and 'persuasiveness' as a source of influence. In Cathedral City Hub Committee, the most obvious mode is resource dependency. Although in theory all organisations represented were autonomous, in practice none could have functioned without the funding provided by the PCT.

5.4 Older People's Networks

Services for older people were chosen as exemplifying a client group network involving a large and diverse number of social and health care agencies and many different professions, so strongly multi disciplinary. It was likely to involve a large private sector presence in nursing and residential care. We completed ?? policy interviews for these cases and Appendix 6 provides a detailed matrix of the 38 case study interviews undertaken.

Policy background

Services for older people have traditionally been provided both by the NHS (health care) and Local Authority Social Services Departments (LA SSD). From the 1960s onwards, problems of coordination between different agencies were recognised. The escalating costs of social security funding for long term residential care emerged as a policy issue. In the 1970s, the idea of community based care diffused from mental health into other sectors including care for the elderly. The development of community care as a more humane and also cost effective alternative to long term residential care for the elderly became a policy priority, as changing demographics suggested a continuing increase in the number of very elderly people. The field is populated by different agencies (health and social care); electorates (national versus local); financial interest groups (taxpayers vs ratepayers),

professions (social work; the health care professions). These important interorganisational and interprofessional issues have been apparent for over thirty years and have stimulated various policy initiatives and reforms.

The 1988 Griffiths Review of community care proposed clearer lines of accountability down from ministerial to service delivery level. The role of government was to ensure that 'care was delivered' but not necessarily to deliver it. Local Authorities should be responsible for assessing needs and setting priorities and objectives. They would assess needs and arrange packages of care from multiple providers rather than always provide care in house. These ideas were enacted in the 1990 NHS and Community Care Act which included the following important measures in community care:

- A concentration of provision and resources on the greatest needs, leading to withdrawal of support from the lower levels.
- Development of domiciliary, day and respite services to promote independence and a stimulation of the role of the independent sector in provision.
- Rationalisation of financial and managerial responsibilities with new funding streams for local authorities (e.g Special Transitional Grant for community care).

The increasing transparency promoted further debate about underfunding. It handed the lead role for community care to Local Authorities (LAs), whilst stressing close cooperation with health. The picture was further complicated by the rapid growth of the independent sector in residential and nursing care, so local care networks became more complex. While all health care (including community nursing care) is free at the point of delivery, social care services are means tested so that individuals and families above the capital limit have to pay for themselves. The 2000 NHS Plan agreed that the State should fund nursing care and not social care.

There has been a strengthening of regulatory capacity to ensure quality in the independent sector with the creation of the General Social Care Council (2001) to regulate the social care workforce and the National Care Standards Commission (2004) to elaborate standards in residential care. There has been a stress on intermediate care to reduce 'bed blocking' in the acute sector.

The post 1997 period demonstrated policy streams to strengthen interorganisational cooperation and integration in services for older people. The 1999 Health Act allowed (permissively rather than as a mandate) under Section 37 the introduction of pooled budgets, lead commissioning roles and integrated provision.

The National Service Framework for Older People (2001) set out standards to improve health and social care for older people. There were four main themes: respect of the individual; development of intermediate care; provision of evidence based specialist care; and the promotion of healthy active lives. Eight standards were set in such areas as intermediate care and falls. It also introduced the Single Assessment Process (SAP) as an integrative measure to coordinate inter agency assessment, data collection

and availability within health and social care agencies. The aim is to achieve integration and avoid duplication. A National Clinical Director for Older People was appointed.

The 2006 White Paper ('Our Health; Our Care, Our Say') developed four main policy themes: better prevention with earlier intervention; more choice; improved access to community services and more support for people with long term needs. The choice and personalisation of care theme is a significant new development.

The whole field of community care was reviewed in the 2006 Wanless Report. Wanless concluded that previous attempts to improve integration (Section 37; SAP) were mainly incremental, yet far from routine in practice and may not be enough to achieve the radical shift from partnership to integration. More active encouragement is required for integration and the pooling of resources. More recently, NICE guidance on Supportive and Palliative Care identified the need to improve end of life care. The NHS End of Life Strategy (2008) recently considered the End of Life care pathway and elaborated standards.

So, in summary, currently about 1.2 m older people use social care provided by 150 Councils who now have a commissioning rather than a providing role. The provision of health and social care to older people involves a complex range of organisations and professions. Most residential care is now provided by the independent sector. There have been many policy initiatives to improve service integration, more recently by strengthening the national policy framework (including a 2001 NSF), improving regulation and standard setting. There has been a recent national policy push on improving End of Life care.

Regional City Older People's Network

Site and history

The Regional City Network (hereafter called 'Regional Network') is located in a major city with a relatively young population. The size of the various ethnic minority populations in the city – already extensive – has grown considerably.

There have been Local Authority reorganisations between the City and the neighbouring more rural County and also mergers between local Primary Care Trusts. The Regional City became a unitary council in 1997. In addition, there have been recent (2006) mergers between PCTs which has produced a single PCT serving the whole City. But the process of dividing up services between the City and County has been problematic, remaining a key factor in the slow development of the network. This reorganisation had disrupted pre existing relationships only now beginning to settle down. Many staff belong to more than one network, depending on their remit and geography.

Structure and stakeholders

The City Regional Older People's Network is made up of two groups: the Executive Group (EG) and Older People's Group (OPG) which together make up an overlapping network. Before the formation of the present network, there was no formal relationship between the various services for older people in the City, although there had been a City and County 'Older People's Board'. A 'Pathway Group' was developed to coincide with the reorganisation. Within the City, a large 'Direction Group' was set up at that point but that then split into a (strategic) Executive Group (which reports to the still emerging City Health Unity Group) and (more consultative) Older People's Group. Critics argued that stakeholders had been excluded for no clear strategic gain.

Local Authority – City Council: The City Council consists of four main departments, including Department One which supports adults and older people in need of personal care. Crucially, the City Council is formally responsible for leading on the development of services for older people, working collaboratively with health and other local services.

City Primary Care Trust: responsible for the commissioning of primary health care services (e.g. GPs) and health promotion. It works in partnership with non NHS organisations such as the City Council.

Hospital NHS Trusts: there is a City wide acute trust with three sites and also a Mental Health and Disability Trust (also operating in the County).

NHS City Community Health Services: health visitors, school nurses, intermediate care and walk in centres.

Independent Providers which include a large specialist charity (day centres for older people), a voluntary action group and specialist charities. The private sector is represented through a Trade Association of care home providers.

All these organisations are represented on the Regional network.

The network's purpose is 'enabling multi professional, multi agency discussion' so minutes are shared between the two committees. The network played a role in bringing together individuals from different backgrounds and perspectives and seeking to develop a common understanding.

The Executive Group

The EG is a senior level multi agency partnership designed to develop strategy in the city and oversee its implementation, including 'lead' personnel from social and health care. It reports to the Regional City Unity Group. The Chair is a manager in the Local Authority. Alongside other LA representatives, there are representatives from Public Health, the PCT and City Hospitals Trust: '*very much an officers' group*'. Selection to the committee was seen as opaque by some. Its formal terms of reference are as follows:

- To develop and review the overarching multi agency strategy for older people on the City and to progress implementation;
- To monitor performance against strategic targets;
- To agree investment plans through commissioning by the City Council and PCT to deliver strategic direction;
- To influence commissioning from other organisations;

The Executive Group will take direction from the Older People's Group;

The Executive Group meets for two hours every two months. A City Strategic Policy document was in draft form during fieldwork and has now been completed. The strategy is aimed at being '*overarching with linkages in to the Regional City Corporate Strategy.*' Further impetus came from the Local Area Agreement and the recommendations from a Commission for Social Care Inspection:

'There is the beginning of strategic work for older people...some really good things. We have ideas about what the strategy for older people should look like, we need to pay someone to write it up because I do not think anyone has got the time to do it...'

(LA manager)

So the lack of time (and resources) devoted to the network emerged as a major problem.

The Older People's Group

This is a broader, more representative and consultative group. The chair had experience of working with local charities and is an 'Older People's Champion.' The Executive Group Chair coordinates its work with the Older People's Group (OPG). An OPG meeting observed consisted of 9 representatives from various agencies, with 7 apologies. Stability of attendance was a problem. It meets for two hours every four months.

At a lower level, there are Project Planning Groups working on particular themes (e.g. intermediate care).

In summary, there is a two tier network in the City. While it is clear who is responsible for strategy formation, responsibility for implementation is less clear. The lines of accountability are formally up to the Regional City Unity Group but there is limited evidence that it is monitoring progress. The EG/OPG is linked in to many other local groups such as Champions or Project Planning Groups.

Management roles, relationships and management styles

The EG Chair was a prominent figure in the network, acting as a part time network coordinator, as well as a member of other groups and having other responsibilities. We note the absence of an appointed full time network manager and that this role is undertaken in addition to the Chair's '*day job.*' The Chair was seen as the key to the network. The role was inherited after the merger between the PCTs in the City and was designated as 'interim'. The lack of resource influenced the performance of the network:

'So...(the Chair will) squeeze in...(as much as possible), on top of the day job, in terms of getting stuff actually prepared for the network meetings but when...(you) see other networks, they appear to be better organised and they have this project officer whose job it is almost or part of their job is to pull that together and make sure the network operates effectively.'

(Regional Network respondent)

Another part of the role is to exercise leadership without having direct role power, so that diplomacy and the ability to persuade are key interpersonal skills:

'I suppose...(the role of the Chair is to coordinate) lots of people who...(are hopefully) working to the same objective, as opposed to having any responsibility over them or indeed within their organisation...'

(Regional Network respondent)

Another PCT interviewee identified the importance of good social skills:

'you need to have the interpersonal skills to bring people together and feel that their opinions and ideas are valid or at least discussed and if you don't take them forward, then you have a reason behind that. People need to be able to trust you and that is all about how you operate as a person. And don't sit back and let things bubble, you need to bite things as they happen and deal with them...'

Other important individuals include an Acute Trust clinical manager influential in many health and social care networks in the City and the County. Another EG member involved in intermediate care and health partnerships is currently working in joint commissioning.

The chair of the OPG is an Older Person's Champion and also a member of other fora. This provides for a broad level of contact with other groups and individuals.

However, the professional roles – and associated power bases – held by individuals in the EG created tensions and indeed resentment:

'there is definitely a professional, a huge professional discipline that is called management, managerialism, strategic management and a group of people of which I am a usurping member, a group of people believe that they have consensus and I think that they understand needs in a similar way...when trying to take those understandings and formulate actions and then implement them more broadly amongst the mainstream of proper work in the organisations, social work, nursing etc then you certainly do get really quite glaring differences in organisational culture and approach...'

(LA manager)

Clinical medicine, it was added, *'definitely considers itself to be of a higher status and is more powerful.'* There was a perceived hierarchy of professions according to this respondent from medicine at the top, through nurses and allied professions and social work at the bottom.

It was also pointed out that the Council had a key role as the gatekeeper to partnership working and indeed was the lead commissioner:

'well, the city council govern it. We have our terms of reference and work to that'

(senior OPG member)

The effective participation of non statutory organisations in the network is important. One voluntary organisation in particular is a major provider of services.

Network leadership and management style

Some respondents suggested that the EG (and by implication the OPG) was not being effective in providing a sense of direction:

'the honest truth is, I do not think it knows where it is...going. I do not think it has decided what its level is and I do not think there are any decisions made at that forum. I think it is a reporting board, not a decision board'

(manager, voluntary organisation)

Since its formation, the Regional network has been largely preoccupied with the development of a Strategy for Older People. This was still in process of being written during fieldwork. The network was trying to generate consensus between a number of diverse organisations, some of them highly powerful, but this consultation process was proving lengthy.

'the (problem of) not having the strategy and this hiatus...hasn't really enabled us to really pin our activity on something tangible. It has been a bit haphazard and a bit issues based...'

(manager, Local Authority)

Overall, the network was under resourced and without a full time manager. There was a sense of drift. There are key individuals but they do not form a complementary team, but are rather distributed across different organisations.

Processes, systems and practices

Without a strong national policy push in relation to specific areas (such as intermediate care), it was difficult to create focus.

'national legislation ultimately focuses people's minds, it gives managers a structure to work within, it gives the person campaigning for change a business case...I think it's vital to have the national legislation...It is probably the strongest driver...In many of the areas of elderly care, there has not been enough legislation and that has been the problem...there is a national strategy for stroke and it has caused a flurry of excitement and investment in no time at all'

(clinician)

There is a National Service Framework for Older people (2001), but it did not seem to have the same impact as other NSFs.

A draft Regional City Strategy for Older People was discussed at an Executive Group meeting in October 2008. An integrated paper on falls and how to respond to them has also been approved.

Unfortunately, in the EG meetings observed, the agenda item relating to intermediate care was not presented as a project planning board had been cancelled and no representative was available to report.

The EG reports upwards to the Health Unity Group yet this represents a relatively weak form of governance as it is still working on the Local Area Agreement.

Within the City, there are groups of Older People's Champions organised within a network as recommended by the National Director for Older People's Services who are expected to help change social attitudes.

The social clinical networks and multi disciplinary teams at the level of clinical practice remain highly influential.

Tracer issues

We selected '*intermediate care*' and '*end of life care*' as our tracer issues.
Intermediate care

'Intermediate care' refers to a six week package of care which follows personalised assessment, designed to prevent admission to hospital or aid rehabilitation and recovery. It is a time limited bridge. The City contained two sites which delivered intermediate care: the first is jointly run between the NHS and LA and the second is a privately financed, contracted out, service. The continuing negotiations about the division of services between the City and the Council were still complicating the situation.

There is some questioning about whether this level of provision is adequate for the city population, and some did argue that the county beds should be 'repatriated' to the city. Others felt that decision making ran more smoothly in the County than the City.

At the joint Health/Social Services Department home, staff reported that the two parts of the service still operated separately. Teams met separately once a week, as clinical or social care teams. Although they are working in the same building, there was little interchange between health and LA staff:

'we very much keep ourselves to ourselves because they class us as the hospital side and we do not do anything for their clients, we do not have any input. The only thing they actually do is if the fire alarm goes off...it would be nice to build up more of a link but then how much do you put in? Because when we first started they got reliant on us coming over to help with their poorly patients and then it was stopped by the PCT because of insurance risk.'

(nurse)

Paper or electronic records are used to record decisions and note progress. For some professions, patient record keeping is separate from the rest of the team (e.g. physiotherapy and occupational therapy). Information is exchanged by verbal handover, computer or written records, telephone, letter, e mail or fax. Information systems did not appear to be compatible across agency boundaries.

A project group looking at intermediate care has been in existence 'in some guise' since 2003. There is a multi disciplinary Intermediate Care Project Planning Group which meets monthly. However, at an EG meeting observed it was noted that a previous meeting had been cancelled and no project

representative was present. It proved impossible to secure access to project documentation. According to one respondent, the project group:

'(we have) probably had three meetings...so it is in fairly early stages'

This project planning group reports to the PCT, with members appointed 'on the basis of their knowledge' as service providers. Progress was still in its early stages: they had agreed terms of reference and were currently producing a project initiation document (similar to a brief). A pathway plan has now been formulated and agreed. Money has been committed by the City Council (including £3.5 for capital) and by health care providers. These organisations state that the development of intermediate care in the City is a priority, but delays are still being caused by organisational difficulties in getting the issue to rise up the agenda so that decision makers spend time on it:

'a shambles...there has been no leadership, no clinical leadership at all, and that has been the greatest failing of why there is not a strong intermediate care service'

(hospitals manager)

Private sector representatives felt that their involvement in the network was marginal:

'we often miss out...one (thing) that is often missed out would have been the first things you thought of, would be the commercial and business community that obviously have great interest in the regional network and the expanding group of over 65s in the city and their increasing spending power...'

(private sector respondent)

There was felt to be some caution about using the private sector by public sector commissioners.

In summary, pre existing intermediate care was felt to be of good quality and this was one reason why further development was not seen as a policy priority. The division of services with the County had left the City with fewer beds and while some have been privately contracted, there remains a shortage. There was not strong evidence presented to indicate whether there had been a local needs assessment. The relationship between the regional network and the intermediate care project planning group seemed tenuous. Certainly the project planning group had no clear reporting line to the EG or the network. Nor does it appear to have a clear timeline for implementation. The rate of progress in implementing service improvement in intermediate care is relatively slow. While the regional network has now completed its strategy, we have no data which indicate whether intermediate care services will now be a priority for development.

End of life care

A senior member of the Executive Group is involved with other groups addressing end of life care (EOLC) issues. These include a combined city and county group. Service developments were being anticipated:

'practice based commissioning will definitely want to stop people coming in simply to die, it will place an emphasis on identifying people who are in the last few days, weeks, months, however you like to define the last period of someone's life and create

a system which actually supports them at home and so on, We have already got a pilot project funded by the Department of Health.'

(clinician)

The role of the regional network was not emphasised in these developments, although it provided a platform for sharing information with colleagues from health and social care agencies.

EOLC groups were making more progress in the county than the city. A private care home manager reported very limited involvement. The network has primarily provided a platform for discussion and the exchange of information on EOLC rather than action.

Reflections on the case

Purpose and structure

We ask: is the purpose of the Regional City network to develop strategy and to improve communication or also to steer implementation? There is no firm evidence that the network sees itself as implementing service improvement. Respondents recognised the difficulties of bringing together diverse viewpoints:

'Yes, I do think we come from various different directions. You might have shared visions of where you want to be but very, very, definitely the notions of where we, how we get there might be different. Even within something like the NHS and LA, there is a distinct difference if we were sat talking to the contracts officers as against the service delivery practitioners. They have their own different view, and it tends to be how close you to the actual service user as to how you feel about that service.'

(Manager, Specialist Charity)

The two tiered network structure is distinctive and has positive elements: the EG has a remit to develop strategy and the OPG is broadly representative. But the relationship between the EG and OPG is vague with no clear responsibility for implementation. Project Planning Groups could fulfil this role in the future but there are tensions between the EG and the planning groups which do not report to the Regional network.

Resources

A positive factor is the enthusiasm of the EG chair. Conversely, the weight of additional work is very substantial, creating problems of excessive work load and time management. The lack of dedicated resources is one major reason for the slow rate of progress. Other resources are potentially available in other agencies but securing and coordinating them is complex.

Willingness to accept change

There was some resistance to continuing macro organisational change, related to nostalgia for the old days when the city and the county had integrated services before the city adopted a 'one city' strategy. This was seen in the specific arena of intermediate care.

Processes and systems of operation

An important area of under development in the network relates to the processes and systems to ensure implementation of strategy (even when

agreed). The Local Area Agreement was still not in place. However, the strategy formulation stage might usefully still have included some focussed service improvements, if interim priorities had been identified. The network faces issues of priority setting as well as implementation:

'the network allows review, allows raising of concerns, it allows, hopefully, allows change, but change can only happen, networks sometimes can be a lobbying force, they cannot always implement change. There are constricting factors and the constricting factors sometimes are how much, it all comes back to the hard finances basically. So the constricting factors are cash, availability of that and priorities within the LA and the PCT. I have not felt particularly that intermediate care has been as health priority for the PCT or for the LAs. So we make noises, we see changes sporadically but it is not a uniform growth'

(Clinician)

One function of the network can be to lobby for resources and attention, as in the Metropolitan Sexual Health case.

A further aspect of process concerns accountability arrangements up to the Regional Unity Group as there is currently very limited evidence of close monitoring or pressure to set or meet deadlines.

Budgets

Financial issues are important in affecting implementation at the operational as well as the strategic level: for example, the loss of a stroke coordinator post worsened working links with those services. The private sector saw itself as at an advantage due to lower management costs.

Issues of power and control

Who 'owns' the proposed new strategy for older people? This question was raised by a representative of a charity at a OPG meeting we observed. The reply given was the service users. Yet it was felt that the statutory sector commissioners had largely influenced the strategy. We detected some tension between third sector providers (who may be large scale) and the dominant statutory sector at this meeting.

Inter organisational and inter professional issues

Good working relations between individuals, professional groups and organisations was identified as critical to a well functioning network. While relationships were now moving in a positive direction, there was still scope for improvement.

Overall the network was still evolving. Important changes took place after the end of fieldwork: assistance for the EG chair; the production of a Local Area Agreement by the Regional City Unity Group; completion of a Regional City Strategy for Older People and also a Carers Strategy. The network is currently working on the NHS Darzi review, emphasising the relationship between health, social care and wider community services.

We studied this network earlier in its life cycle than other networks, so progress may be expected to be less. In other cases, we see two stages: first the development of informal relations (as in this case), followed by the implementation of changes driven by a government agenda. This second stage could occur here in the future.

Metropolitan Older People's Network

Policy background - end of life guidelines and strategy

NICE Guidance on Supportive and Palliative Care identifies the need to improve end of life care. About 500,000 people die each year, with most people dying in hospital rather than home despite evidence that more people would prefer to die at home. Many people do not have a personal experience of someone they know personally until midlife, so death can remain a taboo.

In 2006, new guidance on end of life for care homes was produced by the NHS End of Life Care Programme and the National Council for Palliative Care. The aim was to improve the quality of life at the end of life and to enable more people to live and die in the place of choice. The 2008 NHS End of Life Care Strategy supported the national strategy by sharing good practice in collaboration with national and local stakeholders. Both the Programme and the Strategy aim to provide people with a 'good death', treating the dying with dignity and respect, enabling them to die free of pain and other symptoms, in familiar surroundings and in the company of close friends and relatives if desired. The End of Life Care Strategy and Programme are based on a 'whole systems' approach to 'patient pathways,' involving the following steps:

- Identification of those people approaching the end of life and initiating: discussions about preferences for end of life care; care planning involving a multi disciplinary team and including the older person's wishes and preferences; coordination of care; delivery of high quality services in all locations; management of the last days of life; care after death; support for carers;
- The need to involve PCTs and LAs working in partnership to consider how best to engage with local communities to lift the profile of end of life care;
- Strategic commissioning led by PCTs and LAs to ensure an integrated approach to planning, contracting and monitoring of service delivery.
- Coordination of care: each person approaching the end of life should receive coordinated care according to the care plan, regularly reviewed by a multi disciplinary team including the patient and their carers when the patient's wishes and condition change. Locality wide registers are recommended to reference people approaching the end of life so that they can receive priority care.

The End of Life Care strategy flagged two sets of appropriate standards: the Gold Standards Framework (GSF) and the Liverpool Care Pathway (LCP).

Gold Standards Framework: GSF was developed over five years with a multi disciplinary reference group and pilot projects. It aims to improve palliative care provided by the whole primary care team. The key care processes are: to identify patients in need of supportive/palliative care; assess their needs and preferences; plan their care and communicate across all relevant agencies throughout.

It is linked to the GSF in Care Homes (GSFCH) standards which aim to improve the quality of care for people at the end of their life in residential care by improving collaboration between care homes, GPs/Primary Care Teams and Specialist Care Teams (Palliative Care) (that is, improved networking). This should reduce admissions to hospital from people in the last stages of life and enable more to die in Care Homes.

The Gold Standards Framework is supported by an evidence and policy base including the GSF for Primary Care, NICE guidance, and various National Service Frameworks. Care homes which comply with GSFCH standards will be accredited, given a plaque to display and listed in a GSFCH database available to the Commission for Social Care Inspection (CSCI), PCTs and the public. GSFCH accreditation is a quality kitemark which may help attract customers. One of the two care homes in this case study was involved in GSFCH implementation and the second home was planning so to do.

Liverpool Care Pathway: The LCP was developed for use in hospitals but can be used in other settings. Specialist palliative care teams lead the training for LCP which covers both cancer and other patients, and its roll out nationally is supported by the LCP Central team. The programme is based on a Ten Step Implementation Programme together with a full research and evaluation programme. This supports clinically based educational programmes, sustaining interest in the clinical workforce and attention to the cultural and organisational changes needed to achieve objectives.

So many issues in the End of Life Care strategy involve networking across professional groups and agencies (health, social care and independent sector homes).

GP Practices and the Quality Outcomes Framework: GP Practices are incentivised to implement the GSF because they receive Quality and Outcomes Framework (QOF) points and hence financial rewards for so doing. Indicators relating to palliative care in the General Medical Services (GMS) contract include:

- Records – Palliative Care (PC1): GP Practices should have a complete register available of all patients in need of palliative care and support (3 QOF points).
- Ongoing management – Palliative Care (PC2): GP practices should have regular (at least 3 monthly) multi disciplinary case review meetings, where all patients on the palliative care register are discussed (3 QOF points).

The tracer issue here was the implementation in the two care homes (Big Home and New Home) of the General Service Framework for Care Homes as part of the End of Life Care Strategy. The local SHA funded a two year EOLC project (paying for a Lead EOLC Coordinator) in the local PCT, which in turn funded Big Home to pilot GSFCH implementation. New Home was planning to implement the GSFCH but had not started doing so during fieldwork (late 2008-early 2009). Some New Home staff were due to attend a three day GSF training course in December 2008. So the two homes provide an interesting comparison.

Setting

The network was set in a metropolitan area, containing a diverse ethnic population and some deprivation. Most residents' care in both homes was funded by local authorities. In contrast to the other networks studied, this was an informal and clinically led network. Although no formal EOLC network existed, improving end of life care involved substantial networking, both inter professional (GPs, nurses, managers, social workers and care assistants) and inter organisational (the Primary Care Trust, a NHS hospice, a GP practice, 2 independent care homes and the Social Services Department).

The key organisations involved in the networking included:

The Primary Care Trust: It provides health care services for an urban population of 300,000. Using SHA funding, it funded the EOLC pilot.

The NHS Hospice: The PCT helps run a small NHS hospice which provides palliative care to about 20 local patients and palliative care support for residents in the two care homes. Palliative Care nurses from the hospice led the GSFCH project.

A GP Practice: This has 4 GP partners and is contracted to provide support to the two care homes. The GP Practice receives payment from the homes for the extra work and secures QOF points for palliative care work.

Interviewees were universally positive about this GP Practice: '*they are a very good practice; they put forward their opinions and are very open to palliative care.*' Care was easier to coordinate because one named practice was responsible for all support, and GPs developed relationships with individual patients.

Big Home: This is a nursing home run by a housing trust on a 'not for profit' basis since opening (2003). It has 125 beds, including nursing and dementia units. During fieldwork, it had over 100 patients, aged between 62 and 102, requiring nursing, dementia and palliative care. Two local authorities funded half of these patients. It was seen as a well run, clean and friendly home. Big Home also has a highly diverse staffing, many from Africa, Eastern Europe and India, and staff have different cultural attitudes to death and dying which affected the End of Life Care project. A EOLC Coordinator commented on their 'openness towards palliative care ... nurses at (Big Home) try very hard to give the patients the best care.'

New Home: is a residential, nursing and dementia care home which had recently opened in 2008. It was a Private Finance Initiative funded home which had replaced an old 'nightmare' LA run care home which many residents had transferred from. New Home is part of a larger organisation which runs several homes in the area. It has standard policies for all its homes, including policies for EOLC. Because it was newly established, many care processes were still developing.

Other organisations in contact with the network included: two Local Authorities (LAs) which funded most residents' care; Social Services and

their social workers; the local NHS hospital where patients were often sent if they were dying and 'out of hours' doctors.

Management roles, relationships and management style

The Lead EOLC Coordinator was a former palliative care nurse working for the PCT. She was supported by a former palliative care nurse who worked in the hospice and acted as EOLC Coordinator. They described themselves as:

'key players...we are becoming more visible and having clarity about what we do.'

Both appeared to be passionate about palliative care and saw the EOLC project as diffusing more widely within the health care system:

'it is about normalising the dying process...the buzz word is EOLC...to me it is just generic palliative care...empowering people'

(respondent involved in EOLC)

'I hugely believe in spreading the word of palliative care...the Liverpool care pathway and the Gold Standard Framework...when you look at it, you thought, oh for heaven's sake, we have been doing this for years, but to put it on paper and to make it useful...it is a wonder really because it is how we in (palliative care) practice...it is a template for outsiders to adopt really and it is tried and tested.'

(respondent involved in EOLC)

Another palliative care nurse in the hospice played a key role in the network. There was strong involvement from the Nurse Clinical Director in Big Home who was widely seen as effective, the Home Manager and Nurse Clinical Director in New Home. Various GPs in the GP practice were helpful.

Reflective practice was valued:

'I pinch ideas from everywhere...share information, that is a good thing, and then you can develop it yourself...it is all about building in reflective periods and actually trying to write down just very simply what went well, what did not go so well and what could have been better...'

(respondent involved in ELOC)

'we may not be writing it down but we are always reflecting on our actions all the time, it is just we don't write it down'

(GP)

So the network was run by primary care clinicians (Nurses and GPs), with less input from hospital doctors, social services, agency staff or 'out of hours' doctors.

Relationships and management style - face to face communication, 'good people' and leaders

There appeared to be warm and effective relations in a highly localised network. The Big Home has '*very good relations*' with the local GP practice and hospice. The EOLC Project was seen as working well as it was a '*team effort*.' After initial hiccups in the start up phase, strong face to face verbal communication was key to collective success in enacting the standards.

'...The tool is only as good as the person who uses it...to me, it is not about tick boxes, it is about...the things you need to think about as a standard but you can make individual decisions on each of those for each and every person but at least those are the core things...I am not quite into paper exercises...You can educate until you are blue in the face, it does not make any difference. It is translating it into practice...it is mentorship, it is learning from people, particularly with communication skills.'

(respondent involved in EOLC)

'the systems are completely different but they are not a barrier because it is verbal communication'

(GP)

The quality of the staff in nursing homes was seen as critical in EOLC implementation. The network benefited from a value driven, distributed, form of leadership which operated across occupational boundaries:

'good people...make a difference and it is not all about money...people working towards a common goal...whether you are a GP or a hospital doctor or a specialist palliative nurse...as a community...you can take it forward.'

(respondent involved in EOLC)

We note that key organisations were being incentivised to implement EOLC: GPs through QOF points and care homes could benefit from using EOLC as a quality kitemark which could provide them with competitive advantage.

Key processes, systems, governance and accountability

The End of Life Care pilot was funded by and accountable to the PCT and then the SHA Within the Care Homes, the Nurse Clinical Directors and Home Managers were accountable for EOLC implementation. In the case of New Home, the manager had a line manager in the wider organisation.

There is a similar configuration of actors and processes as in many cases in the study: passionate and respected hybrid clinicians (here the EOLC Coordinators) leading local implementation of codified national policy (itself legitimately developed by leading clinicians). They softly persuaded people to adopt best practice. However, the EOLC implementation process also benefited from an evidence base, a framework of supporting incentives and strong regulators.

The Care Homes were conscious of the looming shadow of their regulator (the Commission for Social Care Inspection or CSCI), given that EOLC standards were likely to become part of their quality assessment process. As one Home Manager put it:

'CSCI are saying that they would like it (EOLC) more and more. Yes, it is something that is coming into play and that factor is something that will affect our star rating.'

The network effectively helped the New Home manage key areas of risk. While the Big Home nurses were seen as 'confident and medically skilled', the New Home was still developing its systems and was more risk averse, although working with GPs to avoid over use of hospitalisation (e.g. calling an ambulance wherever there was an unwitnessed fall; over use of medication). Other homes had been heavily fined for mistakes in documented procedures so that the home was keen to minimise risk.

Its original policy of calling an ambulance for unwitnessed falls was funded from GP practice's budget. GPs in the network agreed with New Home that they should be called to assess patient state (this was also less traumatic for the patients). In addition, New Home had called GPs to prescribe medication for patients who complained of minor ailments such as headaches rather than risk allegations of neglect. The GP practice then worked with New Home to create a system of 'homely remedies', including a small stock of painkillers distributed within the home in the first instance

The tracer issue of the end of life care pilot project

The main objective of the EOLC project was to reduce inappropriate admission to hospital when patients were dying and to create more patient choice. This two year pilot (2007-2009) in two local care homes was actively led by palliative care nurses in the local hospice.:

'when I first started EOLC was just a nebulous thing...the (Lead Coordinator) role has been there to get interested parties together, get people talking about the end of life...Gold Standard is very much about empowering Care Homes from within, it is not from without.'

(respondent involved in ELOC)

An important objective was to get people talking about end of life, educating them, normalising the dying process and so improving the quality of care.

'we have educated and really taught the nurses with regards to end of life and the fact that it is not wrong to die in a nursing home because nurses to panic when a patient...deteriorating and clearly they are dying and they quite often call for an ambulance if it is out of hours, because if they feel that they don't do something, they have been a failure.'

(GP)

It was stated nurses in care homes originally wanted to do basic nursing and found palliative care stressful. All New Home staff were shown a video about EOLC and attended a talk given by the ELOC Lead Coordinator aimed at making staff more confident in dealing with death and dying. Some nurses went on a three day training course. In both homes, there was a pre existing 'death and dying' form supposed to be completed but in practice was sometimes not, given staff and resident resistance. Big Home made completion of the form mandatory: *'the death and dying form is very useful...it forces you to have that conversation.'* Similar views were expressed in New Home where a similar form was also being made compulsory, although due to a shift in company policy rather than as a purely local change.

Developing the End of Life Care/Palliative Care Register and multi disciplinary palliative care meetings

A major change was the creation of a register of palliative care patients between the care homes and GP practices which contained a list of patients that might be expected to die in the next six months. At the Big Home, the register was updated weekly with the nurses making a judgement about

how ill the residents were and coding them A-D accordingly (so called prognostic coding). The register was shared with the GP practice, enabling it to meet its QOF target. It was generally working well, although it did trigger coding negotiations between nurses and the GPs.

However, it was more difficult to arrange regular multi disciplinary meetings to discuss and review residents (the second QOF target).

Overall, the EOLC programme was seen as improving the way in which decisions about the end of life were taken so that the dying process was discussed with patients, relatives and staff in advance. This involved discussions about religious issues or last wishes:

'we had a smoking person and she was very, very poorly; she wanted a last cigarette so we called the fire brigade and covered the smoke detectors. She enjoyed it'

(respondent involved in ELOC)

GPs reported they had become more confident in dealing with dying and were less likely to refer to hospital.

Networks and relationships

Although relations between the care homes, GP practices and the hospice were good, networking with organisations less centrally involved was more problematic. For example, handovers to agency staff working on nights or at weekends in the care homes did not always work well as they appeared to be 'vulnerable' to pressure and easily bounced into calling ambulances to manage risk.

The agency staff working on nights related to the out of hours service more than the core GP practice so that the foundation of personal communication and trust was less well developed.

'How can you communicate well...(with) care home staff (who are saying) this patient is dying (to) the GP who has never met them before, there is a huge level of trust, it is a real problem...(calling an ambulance) is a safer way to go, but without understanding the possibility for harm, sending a frail old person to hospital.'

The transfer of dying patients between the main hospital and the homes was problematic. The notes from the hospital were short and often illegible, and the consultant there did not always inform the patient that they were likely to die, so that communication skills could be poor.

Relations between health care and social services were mixed, as medical and social care staff tended to see patients in different ways. Yet palliative care nurses worked on these tensions, developing more positive relations between health and social services. It was important to involve both the commissioning as well as the providing arm of the social care agency

Overall, the EOLC project was seen as successful in terms of improving the coordination of services, the reduction of excessive hospitalisation and achieving a 'better death.'

'all the staff and everyone I have talked to think that this is a good programme...this has given us a tool to achieve a good death for a patient.'

(clinical manager)

Postscript

We learnt in May 2009 (after the end of fieldwork) that New Home had cancelled its contract with the GP practice, communicating this decision highly formally and without prior warning and discussion. This decision points to the underlying fragility of the network.

Within case discussion

This is a relatively small scale, simple and informal network involving in implementing national EOLC standards. It involved palliative care nurses working out of a local hospice; GPs in a good local practice and two local care homes. There were (incremental and not resource expensive) improvements to care delivery. Nurses and GPs played a more important role in this case than hospital based consultants or social workers. We were surprised how small a role the LA appeared to play. However, we were unable to secure access to Social Services Department interviewees so it is possible there are gaps in data.

Clinical managerial hybrids (such as the EOLC Coordinators) used 'soft management' to persuade and teach staff, backed by macro level QOF and CSCI incentives and standards. Mandating the 'death and dying' form and educating staff about EOLC helped overcome resistance to speaking with patients and relatives about death.

Clinical leadership was strongly present, distributed between palliative care nurses, GPs and home nurses) and organisations (the NHS hospice, GP practice and two care homes). 'Managers' were only in the background. Clinical leaders were respected by their peers and used effective verbal and face to face communication skills to effect change. They were committed to changes on quality grounds. They were helped by a national standards which had been developed by leading clinicians and institutional incentives (QOF; CSCI ratings). Finally, the changes involved were not resource intensive.

An interesting feature was the many staff in the care homes from African (especially Nigerian) and also Eastern European backgrounds, while most residents were white British. There were problems reported of some residents racially abusing carers. Care staff from different parts of the world may have different cultural attitudes towards death and dying. Palliative care nurses trained overseas staff about appropriate ways of dealing with death and dying in the UK. Many staff spoke of being an evangelical Christian as part of their identity at work. Quotes included:

'I'm a God fearing lady, I am a born again Christian...staff, the majority are Christians'

'I'm...a nurse when it comes to my profession...a Christian when I go to Church.'

'my husband is a pastor'

'(I'm involved in) networks through the Church'

So the informal religious network may have been a 'glue' within the network. In summary, we see the network as effective in many ways but also note that it is small and relatively simple compared to other networks and that the changes involved were not disruptive. However, it did not prove sustainable in the long term.

Cross case discussion

We should point to the contextual differences between the two cases. The Regional Older People's Network was larger and more complex; it attempted to span health, social care and independent sector organisations, whereas the Metropolitan Older People's Network was more a clinical network, with some limited links to social care. The Metropolitan Older People's Network perhaps needed to engage more widely with local authorities, the local NHS hospital and out of hours agencies. So the Metropolitan Older People's Network was a more contained and receptive 'context for change' (Pettigrew et al 1992).

Network Forms

Here we have two different forms: there is a mandated network in the Regional case; whereas the Metropolitan case is much more an informal 'enthusiasts' network. Both forms have strengths and weaknesses. The Regional network is larger and more diverse, requiring greater resources and clearer and agreed processes to operate effectively. Metropolitan is smaller scale, has an active and distributed team of champions, but faces issues of sustainability as it has not enrolled the private sector or senior management. It lacks senior level external support and power.

Macro level transparent drivers

These two cases also show some evidence of a Foucauldian governance mode. The Metropolitan network was driven by a clear initiative (the End of Life Care programme) alongside incentives (QOF points for GPs, CSCI inspectors and accreditation) which motivated participants to make changes to EOLC. In the Regional Older People's Network people invested less time in attending Network meetings because there was no national level "burning platform". As in other cases, we see the importance of national macro-level leadership (targets and evidence-based protocols) working in parallel with local professional leaders, using soft communication skills but also drawing upon hard national guidelines to convince professionals that changes are necessary and/or can secure resources (QOF points for GP) or advantages over their competitors (EOLC accreditation for care homes). In the Regional case, while there is a mandate, standards and targets are less clear cut and there are no additional resources. So progress is slow.

Meso level influences

The Metropolitan Older People's Network appears more successful than the Regional Older People's Network, which was more of a 'talking shop' and

which struggled to make vertical links downwards to practice. Indeed it can be labelled as a 'strategic consultation network'. Its role may develop further as it becomes more mature.

The Metropolitan Older People's Network's relative success was in part due to its relative simplicity and focus on a single issue (EOLC/GSF implementation); it is a small 'clinical implementation network'. A crucial difference is the extent of collaboration across professional and organisational boundaries (Dopson and FitzGerald, 2005).

Micro level influences

A key difference lies in dedicated resources. Despite being smaller, the Metropolitan Older People's Network had a dedicated project manager, with resources, whereas the Chair of the Regional Older People's Network, although energetic and skilled, did the role part time, and failed to recruit others to help drive changes. The EOLC Project Lead in the Metropolitan Older People's Network was able to develop organic 'distributed leadership' and ownership across the Network; engaging GPs, care home staff, social workers as well as fellow Palliative care Nurses with the project, convincing them that EOLC was important, but that changing practice was possible without too much difficulty. The concept of 'distributed leadership' (Gronn, 2000, 2002) is useful in this context, given diverse professional and occupational groups and reinforces prior previous research in health care (Buchanan et al, 2007).

The Metropolitan case confirms that leadership requires skills in influencing, managing relationships and good face-to-face communication. Whereas the EG Chair in the Regional Network was skilled in these areas, its bureaucratic processes slowed progress.

Resourcing

Finally, the crucial importance of both human and financial resources is emphasised by the differences between these two cases. This reinforces the importance of the resource dependency perspective (Pfeffer and Salancik, 1979) in inter organisational exchange.

Chapter 6 Performance assessment and key success factors

6.1 Introduction

An original objective of the study was a performance assessment of the networks studied with identification of key success factors. Originally we hoped to select ex ante comparative pairs of higher and lower performing networks as rated by peers but this proved difficult to operationalise. We relaxed the criteria for case study selection to secure access and hence moved from ex ante to ex post performance assessment.

So how do we undertake an ex post performance assessment? Through our own academic networks, we came across the work of Turrini et al (2009) who conducted a structured review of international journal publications on the effectiveness of public services networks and proposed an assessment framework which we here applied and developed.

6.2 The application and development of the Turrini et al performance assessment framework

Turrini et al (2009) build on Provan and Millward (1995) and Provan and Sebastian (1998). Provan and Millward (1995) studied mental health care networks in American cities. They defined network effectiveness as a combination of the improvement of the client's health status and well being as perceived by two key stakeholders – the clients' families and therapists. The Turrini et al model proposed five key dimensions of network effectiveness.

1. Client level effectiveness
2. Overall community level effectiveness
3. Ability to reach stated goals
4. Capacity for innovation and change
5. Sustainability and viability

We interpreted these dimensions as follows:

1. *Client level effectiveness (including the quality of service delivery)*: This dimension focuses on the aggregate outcomes for network clients, but is not easy to put into practice. In our study, we found it impossible to gather reliable and valid clinical outcome data (e.g. shifts in five year survival rates in the case of the cancer networks; before and after self reports from patients and carers) within the period of the study, or to attribute safely any changes to the network as opposed to other factors (e.g. increased spending; new drugs and treatments). There was no area without network forms where they were mandated so an experimental/control

design was impossible. Nor was 'service quality' easy to define as we had little direct quality data.

We used proxy or intermediate measures, notably implementation of policies seen as 'evidence based' (i.e. the Urology IOG). Such proxies are relatively strong, where there is a strong evidence base. We also used intermediate proxies which capture service quality or the patient experience (i.e. 48 hour waiting time targets in the sexual health networks) seen in service improvement work.

2. *Overall community level effectiveness*: this broadens the initial focus on client level outcomes to include broader community level outcomes such as distributional effectiveness; more equitable provision; improved community access or enhanced participation and activation of the community in decision making processes. We developed similar community level concepts here.

As Turrini et al (2009, p11) suggest, as well as these dimensions of external impact, it is important to develop internal capacity in the sustainability, legitimacy and maintenance of the network: it has to become a viable organisational entity if it is to survive. They suggest three indicators of internal capacity building performance:

3. The network's ability to reach stated goals: the network is more likely to survive if it can achieve the key tasks it has been set and set itself.

4. The network's capacity for innovation and change: networks able to introduce service changes and innovations may be more valued and survive. We refined this indicator to reflect a particular interest in service improvement activity, given that we were studying NHS networks.

5. The network's sustainability and viability: this refers to the ability of the network to survive over a long time frame, and to move from one agenda to another.

We adopted this promising framework for our ex post performance assessment later on in the project when it became clear that the original ex ante design was difficult to operationalise in practice. We then needed a coherent framework to guide ex post analysis.

In team discussions of the Turrini model and its strengths and weaknesses towards the end of the project, we developed it by adding three further subcategories which appeared to us to strengthen it, having reflected both on the theoretical literature review and initial analysis of the cases. This process reflects the deliberate use of induction and iterative analysis, appropriate in qualitative work.

1. *Inclusiveness and engagement of stakeholders*: this additional dimension reflects the network governance (Newman, 2001) and 'wicked' problems (Clarke and Stewart, 1997) streams of theoretical literature. These reinforced the argument that effective public policy networks need to have broad ownership and engagement on a 'systems' basis, rather than rely on isolated agencies.

2. Shared learning: this additional dimension reflects the stream of literature which argues that network based organisational forms (Alvesson, 2004) are more effective at shared learning, adaptation and joint problem solving across organisational boundaries. We were particularly interested in examining any evidence of effective inter organisational learning within public policy networks.

3. Unintended outcomes (both perverse and serendipitous): we felt that the original model was too rationalist and functionalist, and did not adequately recognise that public policy networks (like any form of complex social action) can generate unintended as well as intended effects, which we needed to be alert to.

We also introduced a temporal ordering of the internal features to provide a clearer sequencing from early process indicators to intermediate outcomes.

The revised framework now appears as follows.

Revised Performance Assessment Framework for Networks (adapted from Turrini et al 2009)

External Impact of Network

1. Client level effectiveness
2. Overall community level effectiveness

Internal Capacity of Network

3. Inclusiveness and engagement of stakeholders
4. Shared learning
5. Capacity for innovation and change
6. Ability to reach stated goals
7. Sustainability and viability
8. Unintended outcomes (both perverse and serendipitous)

For details of how this assessment framework was used in practice see the following sections, also summarised in Table 1, Appendix 1.

6.3 The eight Networks and the Performance Assessment Framework

(a) Genetics Knowledge Parks

Client level or clinical effectiveness

In GKP1 we traced the outcome of four work packages designed to promote translational research in clinical genetics.

Workpackage 1 (WP1) successfully developed a clinically and economically viable test for SCD which became funded as a NHS Service in 2008, being first funded in Scotland in 2007.

Workpackage 2 (WP2) made some progress on a large data set relating to the genetics of heart disease, identifying some associations but without any major breakthroughs. It advanced science but without any translation into practice.

Workpackage 3 (WP3) failed to develop tests relating to microarrays in cancer and learning disabilities in part due to the internal clashes between NHS labs and researchers within the University and partly because cheaper commercial tests were developed outside the GKP. Workpackage 4 (WP4) resulted in some better understanding between clinicians and social scientists about the social science aspects of genetics. The economist and the ethicist involved (and to a lesser extent the lawyer) were able to engage clinicians, but this was not the case with the sociological work.

So the tangible clinically related progress was limited to the translation of the Sudden Cardiac Death (SCD) test in WP1. Our judgement is therefore one of limited clinical effectiveness. However, DoH saw this network as a higher performer than the other GKP sites nationally.

In GKP2, there was no evidence of direct clinical impact – indeed the focus was on population health. Most outputs took the form of reports and additions to the grey literature. Some of these reports were noted by or informed commissioning bodies in the genetics arena. The reports are cited in the wider literature and the website is much visited (93,000 visitors in 2008).

Community level effectiveness

GKP1 encouraged a traditionally disparate local genetics 'community' (in reality various different communities) to work together. There were benefits for local players in being involved in the network. For example, the NHS labs became a more respected and important player. NHS employees and university employees worked together more. The local management school secured a new place in the community. The GKP trialled some relationships that later led to the bio medical research centre. Genetics gained higher profile in the site. Despite these gains, different communities of practice continued and the network became dominated by researchers. User involvement remained marginal. So we assess the network as 'good' rather than 'outstanding' on this indicator.

There is some evidence that creating GKP2 compromised existing relationships with the local medical genetics community. GKP2 perpetuated the contribution of the public health genetics unit. Meetings, seminars and events were held on topics listed as objectives in the bid. GKP2's final reports argues: 'as might be expected from our focus on population health, much of our work is at a strategic/policy level or 'upstream' from clinical care.' There was no evidence that the work had a major impact on the policy community.

If the growth of the field of public health genomics is seen as a broader community level objective of GKP2, then there is some evidence of success. Fifty textbooks in the field are available via Amazon. A growing number of

papers with the term 'public health genomics' (as opposed to 'genetics') is evident.

Inclusiveness and engagement of stakeholders

GKP1 made some progress, but in an ad hoc way. Learning from hindsight, fundamental errors in relation to stakeholder involvement were made in the initial bid. Although an impressive and relevant initial group of stakeholders was assembled, once funding was secured 'active' stakeholders were limited. User representation disappeared, as did the DTI, and in practice the network remained dominated by the clinical research community. So the network translated a scientific innovation (the Sudden Cardiac Death test) and also contributed to publications in top science journals, but struggled to translate other activity into products which commissioners considered worth funding. Had they been open to commissioners' perspectives, the commissioning process may have gone more smoothly.

Effective engagement was limited in GKP1. We need to understand the incentives that different groups face to construct platforms for real joint work. Academic communities – both clinical researchers and research scientists – are typically incentivised to produce academic publications from their scientific work. These may be more important to them in terms of securing credibility and further resources (and indeed build academic careers) than creating a NHS service. Commissioners' credibility depends on them not overspending their local budgets. The NHS labs may be more concerned with protecting their practice from competition from competitors and not making any mistakes in testing, than in cooperating with academics. Social Scientists on fixed contracts needed to build credibility to get a new job. Finally, officials at the Department of Health need to show tangible translation as a return for investment. GKP2 performed poorly on this indicator in our view. The case highlights the surprising and continuing absence of the mainstream genetics and public health communities. Given that clinical scientists remain so powerful (as in GKP1), this damaged the impact of this network. The core was the group of researchers employed on GKP monies. There was some ethnographic evidence that they did not 'gel' as a core group: they did not spend time with each other except in formal meetings; few attempts were made to improve collaboration through team building. Health economics appeared better integrated: indeed the most senior health economist frequently published with 'genetics people.'

Shared learning

Our overall assessment is that the GKP1 network was not successful on this indicator. GKP2's performance was also assessed as limited. Further discussion is contained in the later chapter on Organisational Learning.

Innovation and change

There was evidence of some success in GKP1 in the translation of scientific innovation into the NHS. This was in addition the first initiative in biomedical research here where a social science perspective had been included.

There was no evidence of clinical change or innovation in GKP2. There was evidence of publications contributing to knowledge in public health genomics, a goal espoused by GKP2. *'I think the biggest thing is actually developing Public Health genetics as a field. As a discipline that has now been internationalised'* An international public health conference was held where learning took place and as discussed earlier, public health genomics is a term used more frequently in the grey literature.

Ability to meet stated goals

GKP1's performance was mixed with strong success in Workpackage 1 but a more disappointing performance in other work packages.

Numerous publications and guidelines emerged from GKP2. So if the objective of GKP2 was to create a new academic discipline, then there is evidence of success. However, in the mainstream worlds of public health and genetics, the presence remains marginal.

Sustainability and viability

GKP1 was moderately successful in surviving the withdrawal of initial funding and institutionalising itself in a new cycle of funding. Genetics became a cross cutting theme in the new Bio-medical Research Centre (BRC). New members of the network were added and new workpackages funded by the BRC monies. The Network Director became a project lead for the new genetics theme and rather than reporting to the Advisory Group for Genetics Research reports to a BRC board. The new funding is for five years. However, the University did not succeed in its bid for Academic Health Sciences Centre status in 2009.

GKP2 demonstrated strong evidence of success. The GKP was refunded with private philanthropic money (£5m) and is continuing on a smaller scale on the basis of this endowment. Further funding is being sought.

Unintended outcomes

One perverse outcome in GKP1 was that the perceived contribution that social science could make to medical and scientific research was if anything damaged. This was partly explained by particular appointments but also because appointees were on short term contracts and worried about long term career prospects. A disappointment was how little translation of science into the NHS took place and how difficult this process was.

A positive unintended outcome was that the relations formed in the GKP1 network helped inform and strengthen the later proposal for the Biomedical Research Centre. Secondly, medical researchers gained more than they had initially expected in terms of academic publications and grants.

In GKP2, and perversely, the GKP grant alienated the local genetics and public health communities.

Factors affecting performance

What were the main factors shaping these performance outcomes? In Genetics Knowledge Park 1, *positive factors* included:

- The value of a dedicated manager of the network whose role was critical in supporting what translation did occur.
- The quality of the science and the reputation of the medical stakeholders.
- The personal networks that fostered trust.

Negative factors included:

- The role played by DoH/DTI in failing to be clear about the objectives of the network,
- National governance systems of the network failed to develop any real impact locally.
- Lack of organisational development and facilitation skills within the network.

In Genetics Knowledge Park 2, *positive factors* included:

- The drive, energy and personal contacts (social capital) of the Network Director
- The entrepreneurial culture of the Unit.

Negative factors included:

- The failure to build effective relationships with the local genetics and public health communities.
- The failure of the DH to specify goals for the network and provide effective governance.
- Lack of evidence as to the impact of the network.

(b) Managed Cancer Networks

Client level effectiveness

We used a strong proxy indicator for clinical outcome – implementation of evidence based national policies, specifically the Urology IOG. The network delivered the reconfiguration of urology services, despite initial opposition and criticism from some clinicians.

Assuming that IOG is indeed evidence based (i.e. that higher volume leads to better clinical outcomes), then in the long term this implementation process should produce better clinical outcomes. Given the scale and complexity of the task, this could be seen as an important success.

We also used intermediate quality indicators such as the integration of the clinical teams on the two centralised. Here we suggest that one site was likely to have a higher quality profile than the other. A similar pattern of successful IOG based service reconfiguration was evident in County Cancer

Network which we rate highly for improving service level effectiveness and service delivery.

Community level effectiveness

This dimension was not easy to operationalise. Again there was little direct evidence and we had to think carefully about proxy indicators. We argue that the very process of considering the urology services provided across the Urban Cancer Network led to broader 'planning gains.' Without the IOG, this was unlikely to have occurred. It created partial but novel debate in local health policy circles about the current needs of the population, the best location of services and how these might best shift from their historic institutional location. These achievements were impressive given the scale and complexity of the setting.

The decision to locate services in two sectorally based sites does mean that patients have more of a balance between 'nearer to home' services and high quality, clinical services than if services had been provided from one location.

We again use indirect evidence, but would rank the County Cancer Network highly. There was widespread agreement from respondents that it was a well run and effective network which was supportive in terms of listening to feedback from users and trying to develop multi disciplinary working and improve services, such as hitting the 2 week wait guidelines.

Inclusiveness and engagement

The Urban Cancer Network adopted a strategy of inclusive engagement with a many stakeholders. There was widely expressed satisfaction with the network's willingness and ability to do this. It continued to include both commissioners and providers in the Board and the Network Site Specific Tumour Groups (NSSTGS). Crucially, these operated with inclusive processes. They made some progress in widening the decision making process somewhat from its historically narrow base of urology consultants and in building clinical engagement in the NSSTGs. The Chair took considerable efforts to invite active participation from user representatives on the Board.

County Cancer Network scores highly on this indicator too. A range of professions was represented in NSSTG meetings and the network worked to try to counter the strong professional dominance of urologists (although with only limited success). There was a serious attempt to expand user involvement and meetings appeared inclusive and democratic in their style of decision making. The trend to replace Chief Executives by lower level staff at Network Executive Board meetings was one warning sign for sustaining high engagement at senior level in the future.

Shared Learning

Urban Cancer Network could be seen as a high performer in terms of (i) redesigning a complex decision making process around service

reconfiguration and learning from prior events, (ii) sharing information across conventional organisational and professional boundaries and (iii) sharing and learning in smaller and multi disciplinary groups.

County Cancer Network scored highly for shared learning within the Network Executive Board, multi-disciplinary teams and the tumour groups, and learning from an earlier flawed process informed decision making in the redesign of urology.

More detailed analysis is presented in Chapter 12 on organisational learning and service change.

Service change and innovation

Urban Cancer Network changed service reconfigurations for cancer services, including but going beyond urology. These changes have been achieved in a complex setting with traditionally dominant professional interest groups.

Can these service changes be seen as 'innovative'? Some indicators support this:

- There is a significant shift from the historically dominant service provider which erodes institutional embeddedness often found in the NHS.
- A novel decision making process concerning the reconfiguration of services across a geographical area based on data on patient demand, need and their likely growth over a period of time.
- The trial of a mixed top down/bottom up approach to decision making rather than a totally top down approach.
- At least an attempt to include the users' views at Network Board level and in the NSSGs.

County Cancer Network also scores highly because it was subtly able to overcome change resistance from urologists, leading to a range of service improvements: introducing MDTs and local best practice guidelines; extending audit of activity and outcomes as well as concentrating urology surgery in two sites.

Ability to reach stated goals

Both sites achieved many of their stated goals, especially the politically visible and difficult centralisation of urology services, despite internal tensions and difficulties.

Sustainability and viability

It is difficult to answer this question. They appear to be largely successful so far but what will the future hold?

In Urban Cancer Network, the high learning capacity suggests the network may be an adaptable organisation. IOGs were not 'going to go away' as they had strong PCT as well as network support. Many general managers and NHS trusts and a fair number of the clinicians support the changes and consider them to be an improvement and the network to be 'successful.'

Some respondents in County Cancer Network questioned what role the network would play once service reconfiguration was completed and the cancer plan implemented.

Unintended consequences

In Urban Cancer Network, there is a rebalancing of the power of the historically dominant teaching hospital against other sites. There are unresolved issues about flawed relationships between groups of clinicians in one of the centralised sites.

County Cancer Network learned how to manage change and manage resistance from powerful Urologists as a by product of its service reconfiguration activity.

Factors affecting performance

In Urban Cancer Network, *positive factors* included:

- The policy development of cancer networks was driven by clinicians and included a consultative stage.
- The IOGs are based on clinical data and explicit quality standards and are not simply government targets. There was a gradual process of acceptance by clinicians. The role of the network as an interface organisation and in providing expertise is clear. The NMT team contains an effective and skilled trio working across disciplinary boundaries.
- Evidence based IOGs have been important drivers for change.
- The network contains very influential clinicians yet has diluted the power of a traditionally dominant hospital. It produces clear processes for resolving contentious issues.
- There is strong evidence of organisational learning.
- The structures are sound and developing, with good bottom up activity.

The *negative factors* included:

- Continuing tensions between the big hospitals over jurisdiction in cancer service provision.

In County Cancer Network, *positive factors* included:

- Good leadership: The NMT were highly regarded by most respondents. They appeared to have a good grasp of when to mix soft (persuasive) power and hard power (the requirement to comply with national standards and targets) (Nye, 2008). The CCN is a good example of a distributed leadership trio: a doctor, a nurse and a manager who worked together as a team but were also able to engage with different groups of stakeholders including doctors and nurses. NMT members had the 'absorptive capacity' to sense which external pressures would be acceptable within these groupings and the arguments needed to convince them.

- Simple context: as Pawson and Tilly (1997) argue, the career of interventions is shaped by their context. So the success of the CCN may have been aided by the relatively small size of the area (population of just over a million) and institutional simplicity (one teaching hospital) (Pettigrew et al, 1992), when compared to the Urban Cancer Network. It was still more complex than many other networks studied.

Negative factors included:

- The strong professional dominance by the urologists which produced less shared learning than in the Urban Cancer Network.

(c) Sexual Health Networks

Client level effectiveness

The Metropolitan Sexual Health Network can be rated highly in improving client level effectiveness, by introducing best practice standards and reduced waiting times (turning round a sexual health clinic in difficulties). The network perhaps rather neglected public health aspects of sexual health.

In the Regional Sexual Health Network, there was much service redesign activity and 'improvement' since 2004 (e.g. Reduced waiting times; more seamless patient pathways). It is difficult to know whether these service improvements would have happened without the network but respondents rated the network positively (e.g. funding for an HIV specialist nurse post was secured).

Community level effectiveness

The impact of Metropolitan Sexual Health Network is mixed. It brought together many stakeholders to lobby for more resources and also support and learn from each other, particularly in the early stages. However, the Network was rather medically focussed and dominated by teaching hospital consultants, concentrating on the 'burning platform' of the 48 hour GUM waiting time target. Public health and community groups played a more marginal role which was surprising, given the urban and multi ethnic location.

Regional Sexual Health Network: it is difficult to make an assessment. Efforts to reduce STIs and teenage pregnancies appeared on the face of it to have had little effect (although progress evident to local respondents was obscured at national level by a lag in nationally processed and published data). However, service access and availability appears to have improved. Some respondents identified the need for more resources for contraceptive services for young people.

Inclusiveness and engagement of stakeholders

Metropolitan Sexual Health Network initially scored highly, bringing together stakeholders from acute hospitals, clinicians and primary care, joined by

public health and commissioning. Over time, the Network become more dominated by clinicians associated with the teaching hospital and serving a more medical agenda. This may have been reinforced by pressure from Department of Health targets. We were surprised how little engagement there was from public health and African Community or other voluntary organisations.

The Hub Committee in Regional Sexual Health Network built better interorganisational cooperation and communication (e.g. between a historically 'stand alone' GUM and Contraceptive Service and also with GPs with a special interest). There were better relationships with the voluntary sector (although some felt the statutory sector was the dominant partner) and for the future the national charity merging with the local voluntary organisation was seen as 'a safe pair of hands' in which there was confidence. One negative point was the lack of representation from some of the major client groups on key committees, although they were consulted on draft strategies. Overall, the Hub Committee seemed to achieve its purpose in bringing people together.

Shared learning

The Metropolitan Sexual Health Network scores reasonably highly. The 5th Wednesday research meetings engaged large numbers of people. There is a more detailed discussion in the organisational learning chapter.

The Hub Committee in the Regional Sexual Health Network facilitated information sharing, diffusion of best practice and shared learning within the strategic level group, although the interface with the operational services was not always effective. The topic based system at meetings discussed issues at a deeper level.

Innovation and change

We would score the Metropolitan Sexual Health Network highly in terms of service improvement. The network engaged in effective service redesign, enabling them to meet the 48 hour waiting target. It helped turn round a failing clinic through using a network based audit. Service development processes with voluntary groups were weaker.

Regional Sexual Health Network: The agenda appeared dominated by central targets. This provided focus, direction, and a strategic direction, but may distort local operational priorities. The introduction of topic based meetings may promote more careful thought and eventually local innovation.

Ability to reach stated goals

The Metropolitan Sexual Health Network met the 'burning platform' and key target of a 48 hour wait and the implementation of the best practice standards for HIV care so it scored highly here. It also created a network to lobby for resources for sexual health services. However, the network was in

danger of losing momentum as it did not have the clear focus that the earlier NHS targets had provided: so its 'stated goals' became less evident.

Regional Sexual Health Network: There was good progress on proxy organisational indicators (e.g. service improvement) but as yet less on more clinical indicators (although data may be poor). The implementation of the national strategy brought with it new resources which could have been allocated through simpler routes such as commissioning. Networking had high time and transaction costs, according to one respondent:

'there must be a far more efficient way of working...the downside of networking is that we try so very very hard to consult everyone and engage everybody that we end up doing lots and lots of talking, not really making any decisions and certainly not driving anything forward...the sheer number of network forums means there is so many about for so many different things...it is the same people going to lots of the same meetings and you meet the same people at the same meetings and you think...how do you actually get anything done...when do you have time to implement the things that get talked about at these meetings if you are constantly going from meeting to meeting.'

Respondents acknowledged, however, that the Hub and its network were critical in supporting the forward movement achieved.

Sustainability and viability

Metropolitan Sexual Health Network could indeed be sustainable in the longer term. In its first phase, it rode on important national policy initiatives. During fieldwork, this period was coming to an end and the network was going through a transition with a change of key personnel. A collaborative 'Fifth Wednesday' event addressed these issues and suggested that the network might undergo a successful metamorphosis. The next phase of network development might focus more on previously neglected public health and community group issues.

Regional Sexual Health Network: this network was light on dedicated core staff and was vulnerable to burnout of key enthusiasts. It was affected by macro reorganisations. A number of Hub members reported that their attendance had fallen off, despite their support for its work, due to other pressures. The attempt to develop a whole systems perspective was interesting and important. The local Strategic Partnership was trying a new format for tackling so called '*wicked performance issues*' on a systemic and timely basis. Teenage pregnancy was one such issue where representatives of all the agencies involved were pulled together on whole systems basis:

'we've been through a process of learning, trying to map all the activity that goes on, who does what, where are the inter connections, where are the pathways and we have tried to learn a lot about what we do in the city and why that is not working...'

Unintended consequences

The main perverse effect of the 48 hour target in the Metropolitan Sexual Health Network case was an intensification of acute sector/teaching hospital dominance. This may have undermined wider collaboration and learning within the network, given rising competition, PbR and the dehosting of sexual health services. In the Regional Sexual Health Network case, the

only unintended outcome suggested was the targeting of sex education support on 'hot spot' schools. The concern was expressed that this could lead to a decline of support elsewhere which could create problem schools in the future.

Factors affecting the performance of the network

A *positive factor* in the Metropolitan Sexual Health Network case was the relation with a strong local SHA. With the later merger into a 'super SHA', local support from commissioners – which had been evident and valued – could erode. Accountability arrangements upwards to the SHA were not always clear.

Teaching hospital dominance was a possible *negative factor*, leading to a perceived marginalisation of public health and community group perspectives. On the other hand, much of the drive and leadership came from the teaching hospital. There was a danger of loss of focus once key early targets had been achieved.

For the future, dehosting, the possible development of polyclinics and introduction of independent sexual health clinics had the potential to fragment the network. PbR could intensify competition among Trusts to run services, exerting perverse effects on the network as a whole.

As far as the Regional Sexual Health Network was concerned, four factors affected performance:

Strong Vision and Purpose: The Hub Committee was a local response to the 2001 National Strategy for Sexual Health and HIV, reinforced by the local 2004 Action Plan. This gave the group a clear remit and purpose. The 2005 MEdfash guidelines were seen as a good fit with local needs. Strategy development was taken seriously with the use of a whole systems conference to generate a shared vision and producing collective energy and enthusiasm.

Human Resources and Finance: New resources were not made available for the Teenage Pregnancy Strategy and this could have been one factor in the slow progress there. They were for the National Strategy for Sexual Health but there were considerable transaction costs in bidding for and winning them. The management of a complex network fell on a very small management team, perhaps contributing to the loss of energy after the 2004 Implementation Plan.

Demographic, Contextual and Cultural Factors: The City had also developed an entrepreneurial approach to urban and social development which encouraged both innovation and a sense of community. It was helped by being a unitary authority and having a compact size. These characteristics were seen in the strong joint working between health and social care organisations which helped the development of new networked forms of organisation. Contextual factors helped explain the high rates of teenage pregnancy and of HIV infections among newly arrived refugee, migrant and asylum seeking populations.

Organisational Change Overload: Effective service development at an operational level was negatively affected by change overload at a strategic level with cycles of merging, demerging and reorganisation. This may have contributed to the loss of energy of the Hub Committee between 2005 and 2008.

(d) Older People's Networks

Client level effectiveness

In the Regional Older People's network, it was difficult to find clear evidence as there are few simple or clear standards for the care of older people.

In respect of Intermediate Care, the previously integrated service was seen as high quality. The regional network has struggled to reconfigure the city service or to upgrade quality. So its effectiveness here was very limited.

Relationship building and information sharing are positive developments associated with the network, for example, activity by the Older People's Champions. A voluntary sector respondent argued that the network was contributing to achieving higher standards. So while progress has been limited, the network has the potential to evolve.

We would judge the Metropolitan Older People's Network to score highly here. Respondents were universally positive about improvements in care associated with EOLC. There were some problems about handovers with agency staff, but the network was seeking to make further progress here.

Overall community level effectiveness

The slow development of an effective network strategy and process in the Regional case limited community level effectiveness. This was linked to the macro reorganisation with the city splitting from county services. The gradual 'picking apart' of services which had been integrated was still taking place in some areas. There was a perceived lack of political will and of leadership – in particular clinical leadership – which led to strategic drift. There was a continued absence of a Local Area Agreement. Clearly the Strategy for Older People has been a long time in development.

In the Metropolitan case, we see the wider community as benefiting from the EOLC pilot, especially families' experience of their relatives dying. Key networkers were trying to bridge across from health to social care and get the agencies to work more effectively together.

Inclusiveness and engagement of stakeholders

In the Regional case, the two tier structure was questioned by some respondents, who felt that there had been restrictions on participation without gains in strategy development. The absence of regular PCT attendance was seen as a 'key gap.'

One respondent argued that members are chosen for their ability to understand the strategic picture, rather than to advocate for 'unseen'

communities (e.g. the Somalian community). Links with the clinical level were relatively weak. It was felt that the network was now helping build communication links between the city council and the PCT, particularly amongst senior officers. Links appeared to be weaker at operational levels and with some community groups.

The Metropolitan network was inclusive in relation to GPs, care homes, palliative care and SSD (perhaps to a lesser extent). The acute hospitals and out of hours agencies were less involved.

Shared learning

There was only limited evidence of shared learning in the Regional network. There were some attempts to develop shared learning but against significant difficulties. This is considered in more detail in the chapter in organisational learning. What sharing has occurred has been largely effective.

There was strong evidence of shared learning in the Metropolitan case as professionals and organisations worked together to improve end of life care, with the GPs and palliative care nurses playing a key 'teaching' role.

Innovation and change

Interagency service innovation and change was very limited in the Regional case. Strategy development had been slow. Many services appeared unchanged, except for some commissioning of new services through private contract. The network was restricted by many organisational and professional boundaries. The network was weak in implementation capacity and in underlying processes and systems.

In the Metropolitan case, by contrast, there were various service improvements: the 'homely remedies' in the care homes; the reduction in the calling of ambulances; the development of new processes and systems and training for a diverse care staff workforce in British attitudes to death and dying.

The ability to reach stated goals

In the Regional case, the network's first task was to set out goals. Whilst in other arenas, the standards to be achieved have been laid down by government, this is less the case in older people's services. The network is still to move on to implementation. In the Intermediate Care strategy, the work of the Project Planning Group has been progressed through the PCT and has only a tenuous link to the network. Again, this network has not reached the implementation stage. Performance management has been weak.

The ability of the Metropolitan network to reach stated goals was very high with the implementation of many standards in the Big Home and then New Home beginning to plan their implementation, in anticipation that they would become core Commission for Social Care Inspection standards.

Sustainability and viability

It is too early to make a full assessment. The Regional Case network's long term sustainability and viability depends on its future effectiveness in delivering stated objectives. The network needs to evolve and find a role within newly constructed city based services which are themselves coming out of a macro reorganisation.

In the absence of line management responsibility, developing cooperative working relations between agencies will be critical to sustainability. There appears to have been some success so far, although it is still early days.

Several issues will affect the ability of the network to do this. The absence of a dedicated administrative resource is one negative factor, making the coordination and development of the network fragile. Attendance at regular meetings is sporadic and this causes discontinuity. Finally, the network has under developed operational and implementation systems.

In the Metropolitan case, there was a well developed sense of engagement and commitment from core stakeholders. However, there were two possible signs of concern. The network was dependent on the high energy levels of the Lead Coordinator. Secondly, there was talk about New Home not renewing its contract with the GP practice, which could erode the functioning of the network.

After fieldwork ended, we learnt that the New Home had in fact cancelled its contract with the GP practice, further evidence of the fragility of the network.

Unintended outcomes (perverse and serendipitous)

The relationship between the Executive Group and the Older Peoples Group had unanticipated tensions in the Regional case, with some OPG respondents reporting a sense of alienation.

In the Metropolitan case, the EOLC pilot may have led to a wider improvement in relations between organisations and professionals with broader spill over effects for other services.

Factors affecting the performance of the networks

For the Regional older people's network positive factors included:

- The hard work and enthusiasm of the key senior manager;
- The use of Older People's champions;
- negative factors included:
 - Lack of clarity about purpose and structure; unclear reporting lines and division of labour;
 - Overloaded and individualised leadership;
 - Enduring internal tensions;

For the Metropolitan older people's network positive factors affecting performance were:

- Strong and enthusiastic clinical leadership.
- Strong levels of ownership from clinical and other staff.
- Clear and limited focus with few resource implications.
- Negative factors included:
 - Poor long term sustainability of the network (New Home exited).
 - Weakly developed links with out of hours agency staff and the SSD.

6.4 Concluding comparison

Once we had reviewed the cases and undertaken the initial analysis (as summarised above) in a structured way across a set of proxy indicators, we discussed how to rank the broad overall performance of the cases (low, moderate and high). In team discussion, we came to a consensus view. This is summarised in Table 1 (see Appendix 1), along with brief notes detailing the key evidence derived from the case study data which underpinned reasons for our decisions. Tabulation is not used as an exact science but as a useful heuristic device to aid comparison. It also enables us to relate later thematic analysis to a broad assessment of performance levels.

Both the cancer networks were assessed as high performers. The Metropolitan Sexual Health Network was also seen as highly performing. Both Clinical Genetics cases were assessed as lower performers, although in one case there were mixed effects. The Regional Older People's case was seen as being a lower performer.

Chapter 7 Developing a typology of networks

In this chapter, we develop a typology of the eight networks studied, in line with our original protocol. We outline six dimensions, or rather continua, on which the networks varied. The first two are well known but the later four are more novel. For a tabular summary see Table 2, Appendix 1

7.1 More and less complex contexts

An obvious first dimension relates to the extent of complexity in the context to which the networks related (Pettigrew et al, 1992). Smaller scale and simpler settings (such as the Metropolitan Older People's case) were less challenging. The Regional Older People's case, by contrast, related to a larger scale and more diverse setting where there were many obstacles to progress. The dimension of 'complexity' might include such indicators as: scale; the size of the population affected; challenging geography; extent of social deprivation or multi culturalism; number of teaching hospitals; degree of behaviour change sought.

Yet this complexity dimension alone is not a full explanation: the urban cancer network related to a highly complex setting yet appeared to be effective in reconfiguring urology services.

7.2 Mandated, hybrid and organic networks

A second continuum is that of mandated, hybrid or organic networks. We fully expected both mandated and organic networks but we note the additional hybrid category where networks contain an element of both. Many networks contained a mandated element – reflecting national policy - and only the Metropolitan Older People's Case was mainly organic. Tacit professionalized networks remained influential in some cases (such as the urologists in the cancer cases).

Hybrid networks included the sexual health networks which grew out of pre existing organic networks but then became mandated.

7.3 Well resourced (vs) poorly resourced networks

A third continuum was the extent of resourcing (including dedicated staffing time) that each network enjoyed. This resource base affected potential for forward movement. The cancer networks were positive outliers with large staffs in such areas as information, audit and service improvement as well as a senior level management team. Many networks had one dedicated Network Manager (e.g. GKP1). Where staffing resources were slight or

overloaded (e.g. Regional Sexual Health case), then sustained activity and focus became difficult.

7.4 More formal (vs) less formal roles, structure and governance

Fourthly, networks varied in the extent to which roles, structures and governance were formalised. More informal patterns were found in smaller scale networks, notably the Metropolitan Older People's Case. Larger scale networks displayed more formalised patterns, notably the Managed Cancer Networks.

7.5 Number and diversity of stakeholders and internal power balance.

Fifthly, networks varied in the number and variety of stakeholder groups, the extent to which they came from different sectors; their different knowledge bases; the nature of the relations between them and different internal power balances. The simplest network was the Metropolitan Older People's Case which was small scale and relatively consensual. The Regional Older People's case, by contrast, displayed a wide range of different agencies sectors in a more complex setting. In Genetics Knowledge Park 1, the different stakeholder groups exhibited different epistemic communities of practice which made coming to any agreement difficult.

So networks with a larger number of stakeholders, with more variety amongst this set, and with more internal tensions between them might face more difficulties in taking effective decisions and moving services forward.

7.6 Development of underpinning shared processes and appropriate management skills

Finally, networks varied in the extent to which they had developed shared and accepted norms underpinning decision making processes and management skills which could enable collective decision making or shared learning to occur. The presence of a shared ideology or set of values was also important. Both cancer cases, for example, worked hard on such processes and this was an important background capability in enabling them to progress complex service reconfigurations. Such processes might be more effective when associated by a shift to a somewhat more equal distribution of power, as in the Urban cancer case. By contrast, few such background processes were evident in the two GKP cases or the Regional Older People's Case. Networks with strong internal conflicts or a skewed distribution of power could find effective organisational learning more difficult.

Some networks included network managers who exhibited appropriate and network related management skills (see later chapter), strongly so in the case of the two cancer cases.

7.7 Conclusion and implications for policy and practice

In this chapter we put forward six continua on which the networks varied. Two (see 7.1 and 7.2) are well known in the literature but the other four are relatively novel. It is possible that some networks exhibit a mixed pattern (being high on some criteria, but low on others) so that complex configurations could occur.

The typology could be developed into a diagnostic tool which may be use of network managers. It could help them diagnose what type of network they are; what responses might be thought to be appropriate and where they might need to take developmental action. The typology may be of particular interest for those setting up a new mandated network as it could help in making choices about levels of administrative resourcing and also on skills, style and capability issues which might otherwise be underestimated or overlooked.

The typology may also be a mechanism for distilling learning from a decade's experience with managed networks and informing the design of future network forms at a policy level (a broader point that we will return to in the concluding chapter).

Chapter 8 The role of ICTs

An influential literature stream reviewed in Chapter 3 highlighted the potential transformational role of ICTs in the move to network based organisations. It appears that this argument has been overstated, at least in relation to NHS sites studied. The data collected is summarised for comparison in Table 3, Appendix 1 and discussed in more detail below.

8.1 Evidence from the Cases

Genetics Knowledge Park Networks: In GKP1, new ICTs did not emerge as an important theme. The differences in the IT systems between the NHS Trust and the University compromised working together. In GKP2, there was no direct evidence reported but ICTs did not emerge as an important part of the story. Reporting upwards to the Advisory Group on Genetics Research was through electronic templates. While this was resented locally, it was a superficial 'cut and paste' task as the centre did not use the data reported.

Managed Cancer Networks: In the County Cancer Network case, long distance travel presented significant problems for professionals trying to attend a multi disciplinary team (MDT) meeting on a single site. The Cancer Network invested in teleconference facilities so that clinicians could take part in virtual meetings. These virtual MDT meetings were initially hampered by poor bandwidth and concerns about having secure rooms in which to store the equipment so that it was not stolen. Once secure rooms were found and the technological bandwidth problem resolved, this form of telemedicine worked well, enabling MDT meetings to proceed and reducing travelling costs considerably. The Network 's website contains up to date information about the network and about cancer and cancer care more generally, diffusing transparent information.

We did not receive any complaints that the quality of discussion was reduced in teleconference based meetings and they helped reduce the travelling and time costs associated with MDTs substantially.

The data from the Urban Cancer Network suggested that ICTs have played a minimal role. The basics of IT – such as good data storage and accessibility – do underpin the network's ability to share information. The expertise of the network's key staff also plays a key role. There was no strong evidence that interviewees habitually use a IT aided system such as a 'sharepoint' to access or share information with others in the network. Much of the information exchange is face to face and occurring in small groups, where individuals can debate data. Indeed, even 'low tech' support such as video conferencing could make a substantial difference to cross site working, but is not currently available. Much of the discussion in the case related to moving individual clinicians across sites rather than developing ICTs between sites.

Sexual Health Networks: Genito Urinary Medicine (GUM) services have a presumption to patient anonymity and confidentiality (backed by legislation), due to the stigmatised nature of the condition. When GUM computerised information systems were developed, they were separate from wider data bases and not shared with, say, the PCT. GUM services could retreat behind the duty of confidentiality until later anonymised data systems were developed. Despite this tradition, our data suggested that shared IT systems were slowly making an impact.

In the Metropolitan sexual health case The network decided to implement a joint IT system to record information about patients attending clinics in four NHS Trusts in a common form, to enable information to be shared within NHS providers. This also had to be negotiated by the network with individual providers. The idea was to provide 'joined up auditable data' with the potential to be an electronic record of the whole patient journey (at least within the network). After implementation, professional views about the effectiveness of the system were mixed, with supporters and critics. Problems included the lack of sufficient in network support and changes in the ownership of the company that sold the product. Despite these problems, it seemed that implementation of the system would eventually be successfully achieved. There was also a network website but it was not updated so information was often badly out of date.

Regional Sexual health Network: Three specific issues about information systems emerged from the case. The first concerned technical design issues in current systems so that either only poor information was recorded or that it could not be shared across organisations for technical reasons. Both statutory and voluntary agencies reported difficulties in accessing information from partner organisations.

There was secondly an issue about the accuracy of information. In 2008, the Department of Sexual Medicine (DSM) – as it had then been restyled - changed information systems at a critical moment and because of recording issues ended up apparently missing their 48 hour target leading to an intense burst of performance management.

Thirdly, there were issues about the significance and utilisation of (necessarily) dated information collated at national level to drive policy changes at local level.

There were examples of how ICTs/data bases could be helpful. Local data usefully underpinned the strategic planning process and triggered important 'drilling down' on the prevalence of teenage pregnancy which identified four schools were at high risk and led to a more targeted approach. There are now plans to develop a 'learning platform' to be available at schools, providing an integrated source of information about sexual health on line. The voluntary sector organisation already has an online web space available.

Older People's Networks: In Regional City Older People's Network there were issues (and problems) about the use of IT to support the Single

Assessment Process (SAP) which was seen as a well intentioned idea but difficult to implement in practice:

'yes, for the tape, I have a pained expression. There is a lot of good intention. Is SAP working anywhere? It is probably a marvellous idea but I do not think that it was necessarily, the full implications of the suggestion were thought through really. It is huge, huge, for not only culture changes to enable people to work together in different ways but also, quite fundamental developments in infrastructure and IT and equipment and all of those things'

(Local Authority manager)

It is worth providing some analysis of why this situation had arisen. Computers, telephones and faxes were all used to transfer information in City services, but the use of IT in a formal networking capacity was limited, in particular in SAP implementation of the SAP process:

'we have been talking about the SAP for more than five years and nothing has happened'

(Local Authority manager)

It had been decided *'a little while ago now'* to roll out a paper version of the SAP process and to buy into an electronic version. A programme of staff training had been carried out but there were still interorganisational obstacles in using the IT systems fully:

'all the community nursing staff are trained, they have the IT, they'll have the capability to use SAP. The Local Authority position is slightly different in that we have got an IT system that does all our reporting and we were not prepared to use SAP as a mainstream assessment tool until we had got a way of linking the two IT systems'

(Local Authority manager)

An integration tool to enable communication between the two systems was purchased but does not yet work. There have been subsequent attempts to get the interface to work and there is hope this will happen in 2009. At the time of fieldwork, information flowed across the interface between health and social care using a mix of the telephone, paperwork, fax (where the SSD could not access computer information) and computer based assessments.

The failure to introduce a shared computer information system led to a duplication of work as the same information was inputted onto several systems. For example, there was a multi disciplinary paper form for OT and physiotherapy. Written notes were taken which were then inputted onto an electronic system.

We studied an intermediate care facility for older people taking city patients, although some of the staff were employed by the county. Locked doors between the health and social care wings divide this facility. At the time of fieldwork, the two sides were not able to share SAP assessments electronically. These intermediate care services plan to bring in a new electronic record system in early 2009 and to eliminate paper records.

In Metropolitan Older People's Network there was little evidence of ICTs contributing to the network. Big Home had been faxing information to the

GP practice, more recently sending e mails as the faxes were getting lost. The IT systems were both primitive and not compatible. As a GP put it:

'we don't have an IT system in the home, which is a constant bug bear...we take copies of notes we take there and then type up notes back in the surgery...palliative care use a different system...they do not access the GP system.'

8.2 Discussion

Our cases provide little support for the argument (Castells, 1996) that new ICTs are a major driver towards network forms. There were still major obstacles in moving information electronically across agency or sectoral boundaries. The need for human support for ICT systems and the brakes placed on the interorganisational exchange of information by continuing organisational autonomy – and fragmented information systems – were apparent. There were no major developments towards telemedicine. Key decision making took place face to face rather than electronically. Working practices were not being 'transformed' by trends to ubiquitous computing or home working: the clinical consultation remained at the core of the work. The inability to develop a shared IT platform to implement the SAP in one of the older people's case illustrated the difficulties of relying on shared IT to drive major changes to interorganisational decision making processes.

There were examples of new ICTs being used in an attempt to intensify performance management and electronic surveillance from the centre (as in the GKP cases). This reporting had only superficial impact as the information reported appeared not to be used, but this 'tick box' culture (McGivern and Ferlie, 2007) demotivated local professionals and produced only superficial compliance. The new End of Life register in the Metropolitan Older People's Case increased surveillance of a marginal population, but was filled in manually. We still found little evidence (Snellen, 2005) of ICTs promoting novel public participation. Overall, ICTs did not constitute a major driver of organisational transformation across the cases.

Chapter 9 Leadership in health care networks

The literature predicts a shift from line managerial role power and a bureaucratic style of management to a broader emphasis on leadership and flexible cross boundary working as a correlate of the move to network forms. What evidence about leadership/management capability, skills and style emerged from our cases? The data collected is summarised for comparison in Table 4, Appendix 1 and discussed in more detail below.

9.1 Evidence from the Cases

Clinical Genetics Networks

Genetics Knowledge Park 1: – There was a generally but not totally individualised leadership constellation centred on the Network Director (ex research scientist). The Network Director was well regarded and built up influence and credibility by taking on much of the unpleasant work (e.g. Advisory Group for Genetics Research reporting). The Network Director developed expertise in the translation of meaning across epistemic and professional boundaries and had the credibility to negotiate cooperation between the different stakeholders. The Network Director's style was personable and focussed. She liaised with all the Workpackage leaders in a regular and positive way.

The Network Director was supported by individual 'boundary spanners' who emerged by chance rather than as a purposefully selected team. A consultant geneticist with previous experience of working in the labs linked the scientific and translational worlds. He could negotiate between the Labs and the University/NHS hospital, had excellent inter personal skills and a passion for genetics. A third boundary spanner was the health economist in the social science institute who was able to establish good relations with clinical researchers and scientists who saw value in her work. A fourth boundary spanner was a NHS Commissioner who had a varied background in nursing; managing specialist units and a MBA. He too had changed careers which perhaps helped him to move between different epistemic communities. As a commissioner, he also had some resource power. He saw credibility as an important influence base, defined as follows:

'you hear your name in a lot of places...it is a reputation...for not being stupid, being sensible basically...it is how to network through the system...how you apply power...if you have got credibility you can influence way beyond your status...your ability to do things, that you are an important player in the system and actually you are somebody they need to debate and talk to.'

Genetics Knowledge Park 2 presents a different leadership pattern from GKP1. It was an individualised fiefdom more than a network, with a strong and enduring founder. It speaks to the impact that a determined, visionary

and entrepreneurial elite actor with high levels of personal social capital, passion and vision can make in network development. Influential actors from outside the site had been enrolled in the network. The weakness of this leadership style was the limited impact in developing effective partnerships with the local genetics and public health communities: the network remained an enclave. It had a weakness at the level of operational management to balance the visioning. The leadership did not evolve but remained stable and highly individualised over a long period of time, difficult for juniors to challenge.

Managed Cancer Networks

County Cancer Network: The case demonstrates in our view an effective small team pattern of leadership with a core Network Management team of three people drawn from different professional backgrounds – and relating to a range of constituencies - but working together as a supportive and cohesive group.

The Network Director has a background in nursing, clinical audit and service development. She is seen as personally committed, dedicated to improving cancer services and very hard working: 'has her life and soul in it,' 'hands on' and personally persuasive:

'if there is a really big meeting and it needs clearing up and she is the last to leave...she will pick up the dirty cups'

(NMT member)

'(the Network Director) is a fantastic resource. She is assertive without being aggressive'

(oncologist)

Her long term memory and knowledge of the network were important assets. She could inspire other staff:

'she is a very good role model...she does inspire you to work at a high level ... she does her job so well...I would not want to work anywhere else'

(NMT member)

She had a clear quality and equity based view of what she wanted to achieve:

'my purpose of the network is to deliver high quality cancer services that are equally accessible wherever you live within the network boundaries and that deliver pathways irrespective of the organisation and professional group that is responsible for those pathways. In other words, it is breaking down all those boundaries.'

'my leadership style comes from the passion - I feel we can make a difference...the minute you have a relative go through that pathway you suddenly understand how complicated it is...I have had quite a lot of relatives and people with cancer.'

The current Medical Director was appointed in 2003 and acted as a strategic bridge into the clinical domain. He worked four sessions for the CCN and seven sessions as a consultant radiologist. He had responsibility for medical issues, including managing consultants. He had been involved with the CCN since 1997. He was seen to work hard and had an excellent reputation:

'(The Medical Director) puts in a huge amount of personal time and effort and I think his style and approach is very inclusive...it is a credit to what we have achieved'

(NHS manager)

He had a difficult job in managing the tension between medicine and management:

'(The Medical Director) is in a very difficult position...he is very good at his network role. But it is in huge conflict with his clinical role – clinicians like to know whether they are dealing with a clinician or are they dealing with a manager? And he is both...it makes sense to have a clinician there...and it would be a disaster not to have a clinician because...none of the clinicians would take any notice of the decisions that were made. But as a professional group we are very quick to criticise almost anyone. And we don't know where he sits really. Does he sit on our side or on their side?'

(oncologist)

The Medical Director commented that it was important to have a clear vision and that he now recognised: *'it is all about emotional intelligence'* and that *'you have got to understand yourself'* as well as being forceful. Other interviewees commented on the Medical Director's good interpersonal skills, yet ability to be forceful when necessary.

The third critical member – the Nurse Director – was also appointed in 2003. She was a Macmillan nurse by training and also had service improvement experience. She moved from a nursing to a management role because she wanted to change things. She had an excellent reputation for hard work and advocating for patients. She saw her leadership style as:

'enthusiasm, commitment...remaining quite grounded...being out and about.'

'focusing on the key things I need to achieve.'

'being assertive...not being rude back...having a conversation...'

The values and skills of the team were praised by many respondents:

'the three of them (Medical Director, Network Director and Nurse Director) are on the whole very sympathetic and they have the interests of cancer patients at heart'

(user representative)

As a small team, they exhibited soft management skills such as strong 'contextual intelligence', 'chatting behind the scenes', value commitment ('we share a belief that what we do makes a difference...we share pleasure in seeing change happen for the better'). They supported each other during difficult periods. They were deliberately based in an office in a small town between the three main hospitals to avoid appearing partial and to demonstrate 'fairness and even handedness'.

This soft approach was combined with a 'hard' approach of using national frameworks and the possible threat of an external peer review panel to amplify the case for change locally. There is a stress on producing local evidence and audit data to inform options for service reconfiguration. There is attention to the development of local and legitimated decision making processes below the level of the NMT (in the tumour groups) rather than making decisions directly.

Urban Cancer Network: This case exhibited a similar management style to the County Cancer case and was also seen as effective. Again there was a mixed and small team approach to network leadership. They again mixed 'soft/hard' management style.

The Medical Director has been with the network since its inception and is informally the Network Director, as this role does not exist locally. He plays a particularly important role in providing strategic. He is from a difficult medical specialism which gains him the professional respect of peers. He is focussed on the achievement of targets. As a member of a stakeholder hospital, he has a delicate balancing act to perform and some Big Teaching Hospital 1 staff have questioned whether he is entirely neutral. Some feel he is too powerful and entrenched. However, most respondents were positive:

'it is an enormously difficult position...I think the present incumbent has performed an enormously difficult role with immense skills and has shown, at times, the degree of steel that is needed to take on interest groups...and also, you have got to have a genuine commitment to trying to improve the care of patients with cancer'.

(clinician)

'he had a lot of clinical credibility as he was a real pioneer in the use of chemotherapy...he is as hard as nails, very objective, does not get diverted from the evidence'

(general manager)

The current Network Manager has a background in physiotherapy and then general management. The Network Manager seems to be very competent, with good communication and leadership skills, praised for being accessible at NSSTG meetings and for engaging with members of the network. The three core NMT members appeared to make up a good team with good interpersonal dynamics. There were some tensions with Big Teaching Hospital 1 clinicians who saw themselves as losing out, perhaps unfairly. The network team have a clear vision about how to 'add value' to constituent organisations across the patch through the provision of expert advice and information. They have a well staffed office. They scan outwards, identify local level leaders in particular sites and work well with them.

Sexual Health Networks

Metropolitan Sexual Health Network: The leadership went through phases: from a more effective small team approach to a less effective individualised leadership style and then possibly back towards a more collective approach at the end of the case study. The Clinical Director played a particularly influential role in the middle phase. Although there was a democratic rhetoric evident, in reality the leadership group was narrower. A common teaching hospital background provided the 'glue' in the network leadership group. Opinions varied about the effectiveness of highly individualised leadership: for some, it added focus and energy; against this, it was also seen as narrow.

Regional Sexual Health Network: The key leader was a senior PCT manager who had a participative and inclusive approach, aided by high social skills and an immense capacity for hard work. However the chair was located within the public health directorate and did not have a clinical background. There was a relatively restricted level of administrative support (this network was much more thinly resourced than the cancer networks).

The danger was overdependence on an overloaded individual. There was no rotation of the chair position. The role holder was in a senior position and juggled this role with serving on other major committees across the Health/LA interface. There was time pressure to cope with, along with a lack of group support and some isolation. These factors could help explain loss of momentum in some phases – there was a lot going on and too little capacity in the system.

Older People's Networks

Metropolitan Older People's Network: The network was led by a Palliative care Nurse and involved all GPs in a practice and Clinical Directors (ex nurse) in two homes. GPs and nurses were more important in this case than hospital consultants or general managers. They espoused ideas of reflective practice. These clinical leaders were respected by their peers and used effective communication skills to effect service changes. They were personally committed to the service changes they were sponsoring. The network represented a generally inclusive and distributed form of leadership, including various professions that cooperated well (albeit with some gaps). The end of life care Lead Coordinator played an important networking and teaching role. An emphasis on Education and Training was important in this case.

On the critical side, there were questions about whether the high energy levels observed could be sustained. The leadership constellation lacked a senior 'patron' which could intervene to protect them in difficulty (e.g. when New Home cancelled the contract with the GP practice).

Regional Older People's Network: This was the only network run by a senior manager in the Social Services Department (SSD) rather than a NHS representative (given the SSD is the lead agency in community care commissioning). This network exhibited an individualised but also overloaded pattern of leadership. The lead manager in the network was the chair of the Executive Group. She combined this role with membership of many other committees, and had been running the network on an 'interim' basis for two years without dedicated administrative support:

'so I feel I squeeze in what I can, on top of the day job, in terms of getting the stuff actually prepared for the network meetings but when I see other networks, they appear to be better organised and they have this project officer whose job it is, or part of their job, to pull that together and make sure the network operates effectively.'

Networks need to have some administrative resource and backup to operate effectively. The manager concerned was seen as hard working and dedicated (often staying late to make sure that network business was progressed) with excellent soft skills. Not having automatic credibility with

clinicians because of her non clinical professional background, it was important to build wider influence bases. One influence base was her lateral membership of other committees in the City: she was well connected. There was a question about the vertical links upwards to key power holders such as senior elected representatives or whether the committee was relatively isolated.

In terms of style, she worked hard to influence and persuade rather than use command:

'I suppose as Chair and coordinator, I am coordinating lots of people who I hope are working to the same objective, as opposed to having any responsibility over them or indeed within their organisation. So I have no leadership, no responsibility for making sure that things are done within the PCT other than trying to get them to work in partnership with me. I can't direct anyone somebody to do something, not likewise with all of the other organisations.'

A representative of the PCT defined good network based management in the following thoughtful terms:

'it goes back to being a good manager in a lot of respects. You need to have the interpersonal skills to bring people together and feel that their opinions and ideas are valid and at least discussed, and that if you do not take them forward, that you have got a reason behind that. I think people need to be able to trust you and again, that is how you operate as a person I think. And don't sit back and let things bubble. I think you need to bite things as they happen and deal with them. So good management skills, I think, are what you need.'

Note that 'good' management skills include the softer qualities of inclusion; participation; explanation; trustworthy behaviour, but also the capacity to take timely action and make decisions.

Recently, a respected clinician with a track record in medical management has been appointed as NHS Director for hospital based services for elderly people. This is potentially a major additional appointment which could extend the leadership base, reducing the pressure on one individual. This appointee was a member of many other committees in the City and the County. This illustrates the way in which networks can quickly proliferate and the central role that 'linkers' have.

There was a feeling that the network leadership had not so far been able to prevent 'drifting' at times. There was lack of clarity about the role of the Older Peoples Group:

'The honest truth is, I don't think it knows where...it is going. I don't think it has decided what level it is and I do not think there are any decisions made at that forum. I think it is a reporting board, not a decision board'

(voluntary sector manager)

The use of Older People's Champions across the City to identify individual leaders for service improvement was an interesting approach which drew on distinctive collective, social movement based, models of leadership.

9.2 Comparative discussion

We note first of all that the case studies strongly suggest effective local leadership is an important capability. If we look at the cancer networks, for example, they were (especially the urban case) assessed in Chapter 6 as high performers despite operating in highly complex contexts. One explanation is their strong staff resource base, but another lies in well developed small team leadership (a similar pattern in both cases).

Duos and trios in networks: A small group leadership pattern was common but not universal. We found once again mixed duos and trios in service change (FitzGerald et al, 2006), as in the two cancer cases (e.g.). An important advantage was that each member related to an important constituency directly (medicine, nursing, management). Individualised leadership patterns were also found (including an enduring 'founder' based style in GKP2) but seemed to produce more disadvantages. In the Metropolitan Sexual health case (also rated as a 'high performer' in Chapter 6) we also took the view that the leadership was more effective when in small team mode than in an individualised phase.

Strategic Grasp and Conceptualisation: Senior staff in some networks clearly conceptualised a local theory of why and how network based management should work. This strategic grasp shapes operational activity to ensure that it adds more value. The Urban Cancer Network developed a theory about developing an expert advisory role that could help constituent organisations meet their own objectives and create 'win win' situations. The Metropolitan Sexual Health Network saw networking as a way to link radically different activities (from bio molecular medicine in the teaching hospital to community groups representing socially marginalised social groupings), all needed in a holistic response.

Clinical managerial hybrid roles: Clinical managerial hybrids continue to exert a potentially critical bridging role in terms of winning legitimacy amongst clinicians who remain core stakeholders. As well at network wide level, such hybrids were found at a local level (e.g. tumour group chairs). We note the importance of clinical managerial hybrids and of clinical leaders (e.g. Metropolitan Older People's Case) across many of the case studies and the relatively marginal role of general managers and NHS Board members using role power.

Soft and hard management skills: Network managers combined soft and hard management skills. They used national frameworks and accreditation systems (as in cancer) to put pressure downwards. But much activity consisted of using 'people skills' such as communication, persuasion and motivation. They did not have direct role or resource power but won influence over time. The possession of 'contextual intelligence' or ability to read the context (Nye, 2008) was evident in some teams, as in the County Cancer Network.

Need for an 'office': There was a need for administrative resources if business were to be progressed effectively. Thinly resourced networks went through periods of inactivity as they were overwhelmed by competing

pressures. Many of the network managers were female. We speculate: Is network based management a gender related role or even competence?

We conclude that there was a significant shift from narrow, vertical, role based models of management to broader, influence based and lateral patterns of leadership, as the literature suggests.

Chapter 10 Organisational and interorganisational learning in networks

One advantage claimed in the literature (Alvesson, 2004) for flatter network based organisations is 'higher' organisational and interorganisational learning than in market or hierarchical forms. This argument has great relevance in health care, with its stress on science. Research and evidence based practice. Overall, however, we found a mixed and even disappointing pattern of organisational and interorganisational learning. The data collected is summarised for comparison in Table 5, Appendix 1 and discussed in more detail below.

10.1 Evidence from the Cases

Clinical Genetics Networks

Genetics Knowledge Park 1's track record was very limited, despite being set in a prestigious University setting. The quarterly meeting of the Network's Executive Committee and bi annual meeting of the Board could have been forums for shared learning. Yet in practice, this did not happen. They concentrated on ensuring the implementation of the grant plans but opportunities for reflection were not seized. Considering shared learning would have enabled the network to promote deeper understanding of different paradigms of research evident within the network.

It is also unclear whether learning occurred at a national policy to inform the later BRC commissioning process.

Genetics Knowledge Park 2's core purpose was to promote shared learning, yet evidence for impact in this respect was limited. There was some learning within the emergent academic domain of public health genomics. It was difficult to construct the multi disciplinary alliances and spaces needed for shared learning. Those with an academic background retreated into their base disciplines rather than moving into a new space. Also there were no joint intellectual forums, as opposed to managerial meetings. There were continuing epistemological barriers between the clinicians and the social scientists as in GKP1.

Managed Cancer Networks

County Cancer Network: This network was assessed as 'high' on shared learning. Network Executive Board meetings were effective fora in which people from different organisations learnt about what was happening elsewhere within the network (some respondents stated that real decisions were made outside these meetings). Similar shared learning occurred in the MDTs and UTGs where different professional groups were brought together to discuss patient care. Some interviewees commented on outdated

practices being challenged in these meetings. The network may also have facilitated learning by overcoming urologists' dominance (to some extent) and entrenched resistance to change. As Coopey and Burgoyne argue (2000), structures of power may impede organisational learning so that those who wish to design learning organisations have to engage with power issues.

We also saw evidence of the NMT learning about how to make change – for example, learning from the difficult Upper Gastro Intestinal Tract reconfiguration where there had been a clash of difficult personalities and turf wars to redesign the decision making process for Urology (echoing the experience in the Urban Cancer Network). The process was made more explicit with clear selection criteria and communication with the key clinicians:

'urology has gone quite well...The clinicians very much led the process...There was very good communication and engagement with all the clinical teams... very extensive consultation with lots of people, patients and everybody concerned'

(NHS Manager)

Urban Cancer Network – evidence of high learning

The *Urban Cancer Network*, (assessed as a high performer in Chapter 6) provides an interesting and positive example with strong evidence of organisational learning from the earlier (and flawed) process of reconfiguration which led local stakeholders to reconsider. The learning was that Improved Outcome Guidelines (IOGs) were here to stay and that the Network Management Team (NMT) would make sure they were implemented.

The gynaecology process removed decision making from local actors and once clinicians had reflected on this experience, the conclusion was to try to retain control over future processes by participating more effectively in service reconfiguration. A key aim – successfully achieved in the end - was to broker a local agreement to avoid an external panel.

Sharing of information and expertise across locations: the network acted as a facilitator rather than a line manager, specifically as a provider of information and expertise across the City. From an early stage of its development, expert staff were recruited and encouraged to develop roles as *'expert providers at the interface'* The network's strategy had two elements (i) the provision and offering of data and expert services and (ii) network staff crossing organisational boundaries as *'carriers'* of information. Many network staff interviewed reported they were conscious of this role.

Local sharing and learning in smaller groups: The network encouraged the development of multi-disciplinary teams (MDTs) and Network Site Specific Tumour Groups (NSSTGs) as power houses where the basic work was done. They tried to support these groups and not to usurp or undermine their power. For example, even when the urological reconfiguration process was floundering, the NMT did not take the reconfiguration decision out of the hands of the NSSTG. They did put top down pressure on the NSSTG by

using the Improving Outcomes Guidance and the possibility of convening an external panel.

Sexual Health Networks

Metropolitan Sexual Health Network: This network was assessed as 'reasonably high' in terms of shared learning. There were examples of sharing within and across disciplines and between organisations, including between acute and primary care organisations within smaller professional and issue focussed subgroups. Commissioners and clinicians appeared to have learned to understand each other better as barriers were bridged.

The network ran a '5th Wednesday' research day which attracted large numbers of participants (about 100 participants from different backgrounds in the one observed) There were no noticeable barriers between the professional groups at the event, although one interviewee commented that the day 'was too much about doctors educating other professionals', implying some medical dominance.

The network helped share best practice, for example, around service redesign in clinics, which enabled them to meet 48 hour waiting targets. The Network was effective in addressing issues in a failing Sexual Health clinics through a network wide audit The Network responded quickly to feedback e.g. our concerns about over concentrated leadership. At the next 'Fifth Wednesday' event where we publicly presented our findings, the Network tried to develop a more collaborative vision.

Regional Sexual Health Network: The Hub Committee facilitated information sharing, diffusion of best practice and shared learning within the strategic level group, although the interface with the operational services was not always effective. The PCT was seen as learning from the discussion in the Hub Committee. The topic based system at meetings enabled them to discuss issues at a deeper level. However there was not the systemic reflection and learning evident in the Urban Cancer Network.

Older Peoples' Networks

Regional Older Peoples' Network: There was only limited organisational learning. The tensions between the different agencies and professions made inter organisational learning difficult, as did separate budgets. The network made efforts to bring parties together and to accomplish a degree of understanding in the Executive and Older People's Groups. But beyond this arena shared learning was not seen as developing particularly well as there was little time or space for reflection:

'...it is hard enough in the circumstances to pull everyone together to discuss the core business and action learning experiences are not necessarily the priority.'

There was some collective learning through the Older People's champions. Another point was made concerning 'cliques' in the network which were daunting for new members and had a negative effect on shared learning. So there are no processes or systems to develop shared learning more broadly.

Metropolitan Older People's Network: We see this network as 'high' on group organisational learning. The network helped support New Home develop systems and manage risk and anxiety around the dying process. There was weaker communication between the two residential homes as they were in competition for both residents and staff. Instead the learning and diffusion of good practice was channelled through the nurses, hospice and GP practice to both homes. Care staff moving between homes brought ideas about good practice with them. There was a strong emphasis on education, training and reflective practice. The learning was vulnerable to the exit of New Home from the network.

10.2 Overall conclusion

Overall, the pattern of organisational and interorganisational learning was disappointing. We did not find a radical shift to high learning networks. There were some examples of effective interorganisational learning, as in the Urban Cancer case. But there were more negative examples. We often found tensions between different constituencies and poorly developed cross boundary processes. There was a bias towards action – or the impression of action – and overloaded agendas with little reflection (as in Addicott et al, 2006, 2007). Strong power inequalities and 'cliques' in some networks made joint learning problematic.

Chapter 11 Epistemic communities of practice and boundary objects in networks

11.1 Introduction and theoretical framework

Chapter 3 suggested that many professions, organisations and epistemic communities of practice (ECOPs) might populate the networks. Networks typically seek to link many different stakeholders within complex health policy arenas: that is a prime rationale for their existence. This 'system of professions' (Abbott, 1988) is an important meso level factor which potentially creates boundaries, including different epistemologies and hence more or less valued forms of knowledge within networks.

Another major stream of literature highlights the importance of 'knowledge objects' (Leigh-Star and Griesemer, 1989, Carlile, 2002, Swan et al, 2007, McGivern and Dopson, 2009) which operate at the interface between different ECOPs, either bringing them together or keeping them apart. These objects may be physical objects or abstract concepts inhabiting intersecting social worlds which all interested communities agree upon as objects (e.g. a joint protocol; a shared IT system; a joint commitment to 'joined up working'). They offer 'interpretive flexibility' so that different communities may all conceive of them as fitting with their own knowledge practices. While these objects can be useful in cross boundary problem solving, they can also reinforce boundaries and enact occupational jurisdiction if captured by a dominant group.

The concept of a knowledge object has been particularly influential within the field of Science and Technology Studies. 'Epistemic objects' (Knorr-Cetina, 1999: 246) are at the centre of 'different practices of creating and warranting knowledge in different domains', shaped by the incentive and power structures within wider epistemic communities. While *technical* objects tend to be fixed, concrete and transparent; *epistemic* objects are more fluid, abstract and indeterminate. But how do such objects transform themselves or move between such categories (Engeström and Blackler, 2005: p313)?

Swan et al (2007) use the concept of 'knowledge objects, as seen from a practice based and symbolic interactionist perspective, to explain patterns of biomedical innovation in another GKP which they studied. They highlight the highly interactive nature of biomedical innovation and the many professional and organisational boundaries involved which knowledge objects can potentially cross, hence becoming 'boundary objects'. They do this by using three vignettes around boundary objects to explain how GKP biomedical innovation was shaped by different communities' power. They highlight the symbolic importance of such objects and how they could be used to generate interest in projects and get clinicians to change their practice. They suggest that the formation of knowledge in the process of

innovation is affected by both the different perspectives AND the interests of the communities involved.

Knowledge objects may be 'inscribed' by the interests of those who create them. Scientists need to maintain a 'cycle of credibility' (Latour and Woolgar, 1986) within the broader scientific community. Other EPOCs may also generate their own needs for distinctive cycles of credibility, perhaps of a very different nature.

The power relations in macro professional contexts (and additionally in our case in different and distinctive governmental and organisational contexts) may well shape the creation of scientific knowledge at a more micro level through the assertion of dominance and the quest to capture jurisdictions. Such a theoretical perspective helps explain some processes observed in the cases. We start with an extended analysis of Genetics Knowledge Park 1 and review the other cases briefly, before making some more general observations.

11.2 Reviewing the case material

Clinical Genetics Networks

The Genetics Knowledge Park 1 case – extended analysis

The GKP1 case presents the most developed example of the operation of epistemic communities of practice and knowledge objects (McGivern and Dopson, 2009) in the study. This network was created to transform epistemic objects (academic genetics science) into technical objects (healthcare services). Can objects be both fluid and technical at the same time? The GKP case illuminates questions about evolution of knowledge objects within a range of different ECOPs.

The following ECOPs were involved in GKP1:

- The main epistemic community contained *medical scientists* from the University Department of Medicine (Medical Professors). Their collective and individual aim, inculcated through medical professional training, socialisation and career incentive structures, is the creation of academic knowledge objects (i.e. peer reviewed publications) that provide credibility within bio medical research. They see practical applications in the NHS (i.e. translational science) as a secondary by product of advancing academic science.
- A distinct but overlapping sub group within medical scientists contains *NHS medical scientists* (NHS doctors) associated primarily with the local NHS hospital rather than the university. They are interested in the practical translation of knowledge to patient care rather than simply advancing academic science, but still operate within a biomedical research epistemic paradigm.
- Thirdly, we distinguish medical scientists from *research scientists* (academic scientists) working in a University Research Institute trained in biological science. Research scientists'

epistemology is similar to medical scientists, focussed on developing academic science and creating knowledge objects (i.e. peer reviewed academic papers) providing credibility in the wider biological epistemic community. Research scientists in GKP1 were relatively junior to medical scientists (there were none at Professorial level).

- A fourth epistemic community contains *NHS scientists* working in the NHS Laboratories. Although trained in biological science, often at doctoral level, their epistemology was distinct from medical and research scientists. They focussed more on advancing knowledge than creating it. So they performed genetic tests in accordance with NHS standards rather than advancing academic science. NHS scientists are concerned to create practical and reliable epistemic objects.
- A fifth epistemic community contained *academic social scientists*, working in a university based social science institute on medical ethics. Social scientists, like medical and research scientists, are focussed on constructing academic objects (e.g. academic publications). However their social science epistemology, often based on qualitative methods, is a distinct and marginal research paradigm compared to that of bio medical scientists.
- The sixth epistemic community is the *policy community*, interested in the practical development of NHS services as epistemic objects, but also in translational science. This community had responsibility for directing financial resources and evaluating whether they have been well used and therefore needed objects which were calculable and governable. Thus the work of the policy community was informed by wider notions of governmentality which we explore later. They included the DH, DTI, civil servants and members of an Advisory Group (containing genetics experts from medicine, science, social science and the pharmaceutical industry).
- The final epistemic community contained NHS commissioners responsible for managing and funding NHS services within finite resources. While not involved in creating knowledge and therefore not strictly an epistemic community, they contested jurisdiction over objects because they define 'problems and measure their success' (Abbott, 1988: p139). Hence Commissioners also had an interest in creating governable (and affordable) objects and systems of governmentality. New modes of multi disciplinary knowledge production have at least the potential to disrupt pre existing knowledge bases, although epistemic or cultural barriers between professions may limit cross boundary sharing (Ferlie et al, 2005). Government policy has previously overlooked the consequences of these differences for NHS knowledge management (Currie and Suhomlinova, 2006).

We apply this framework to the GKP and its Workpackages - now seen as a number of knowledge objects which evolve over various phases, shaped by struggles for power and jurisdiction. The term 'Park' is somewhat misleading as it implies a permanent physical presence, whereas it was more of a transient organisational structure.

Object Process Stage 1: The Genetics Knowledge Park vision

The initial vision for GKPs was open, providing for considerable local 'interpretive flexibility' and an opportunity for those submitting bids to develop their own ideas. The national funding might initially have pushed clinical research and clinical practice closer together. However, the bid was dominated by 'the great and good' of the leading University medical scientists who captured jurisdiction over the proto GKP and structured it to create objects according to academic epistemology (i.e. to 'do their science' and produce articles in academic journals). Regardless of the GKP's espoused remit of multi disciplinary translational research, medical and research scientists saw the GKP as an opportunity to fund new and existing streams of research. NHS geneticists were concerned that the basic academic science would not translate into better patient care.

Object Process Stage 2: Genetic Knowledge Park formation (Workpackage 1)

It soon became clear that WP1 was the workpackage with greatest potential for translation. The key group included two NHS Medical Scientists and two NHS Scientists in the Labs although the Medical Scientist leading WP1 and the Network Director also played key roles.

Rather late in the day, this group began a conversation with a NHS Commissioner about how the test could be commissioned. Initially, they failed to reach agreement as the commissioner was focussed on costs. The Commissioner commented:

'The biggest problem...is the language and where we are each coming from. And it is the classic tension...between clinicians and commissioners, in that the clinician is there to do the best for the patient that is in front of them. The commissioner...the best they can do for the entire population. You are moving from single gene testing to population type testing...the test might be wonderful...But at £1200 a throw, I do not want 150 cardiologists all thinking it would be a good idea...because we cannot afford it.'

Research and medical scientists saw this in very different ways:

'the sudden cardiac death thing is up and running in the labs...I have got the impression that there is a problem funding it because it is cheaper to let someone die'

'if we did not do the test and the patients died, they are not going to cost the NHS money.'

By late 2007, the local commissioner had still not been convinced of the SCD's clinical and economic benefits which he regarded as 'academic.' In 2008, however, the SCD test was commissioned locally following a change of commissioner and the provision of the test elsewhere in the country.

Object Process Stage 3: Governance, dissolution and translation

The introduction of the Advisory Group on Genetic Research (AGGR) quarterly reviews can be seen as a form of governmentality. AGGR reporting was an attempt to reshape the GKP and its workpackages. It was a (belated) attempt by the DoH/AGGR policy community to challenge the domination of medical scientists in the construction of GKP objects.

The quarterly reports were new objects which communicated information across the boundary between the DoH and the GKPs. These reports represented the jurisdiction that the DoH had as funder. However, this did not lead to the policy community governing elite scientists who retained a capacity to argue, adapt or indeed exit from the system, delegating responsibility to juniors. The scientists argued that the AGGR reports were unclear and a superficial 'box ticking exercise'. Although these reports were one way of buffering the scientific and policy communities' conflicting interests, one perverse effect was the demotivation of scientists, their superficial compliance or leaving for jobs elsewhere.

Object Process Stage 4: Reincarnation

By mid 2006, the Department of Health had decided not to refund the wider GKP project because of concern that there had not been enough progress in translational science as opposed to academic science. An Advisory Group member commented:

'many of the academics don't seem to focus on the deliverables in the NHS and that has been my experience of the GKPs...a lot of the academic work going on would have gone on naturally and it was not going to benefit the NHS...they need to focus on the end game...the lack of translational awareness was disappointing.'

Yet as the GKP closed, the University's bid for a new Biomedical Research Centre (BRC) was successful where the epistemic objects were reincarnated. In 2008, after the closure of all GKPs, both the elite medical academics and policy makers gave up interest in jurisdiction over WP1. It was then translated into a technical object within the NHS. NHS doctors and scientists remained 'engaged' with developing a SCD test in the NHS despite there no longer being DH pressure to deliver on translation and eventually persuaded a new NHS commissioner to commission the service.

Discussion

Internal epistemic clashes within Genetic Knowledge Park 1

The case suggests a number of clashes between different players within the network, linked to different epistemologies. The pressure to make academic objects useful to the NHS strained the relationship between academic scientists and NHS Lab based scientists.

A Research Scientist felt that NHS Labs did not understand academic research:

'there was this perception that basically you just do three months work and they think it is easy to write a paper...we were not even considering that much research to be enough for publication...we do experiments which last months...they do the work of numbers and...you can do it all I suppose quite quickly...they feel that they are providing a service and being careful and we are feckless people who wander in at 11.00am and go home at 3pm and look for all the glory.'

A NHS Scientist was upset by a research scientist's attitude to the NHS Labs: *'when (research scientist) says "the routine lab", I could shoot her'*. The former felt that the Lab scientists were *'just as good'* as the academic scientists but had simply chosen a different career.

The two epistemic communities of practice had fundamental differences about how the test object should be constructed as expressed in turnaround times. Lab Scientists wanted to create reliable objects but this meant that test results were slower than the medical and research scientists wanted. Quick but possibly inaccurate test results undermined the credibility of the NHS Labs, more conscious of NHS governance, whereas waiting too long for results undermined the competitiveness and credibility of researchers, facing better funded international competition.

A second tension emerged between University researchers and the NHS Labs in relation to Workpackage 4 (social science). This was linked to a wider rationalisation of NHS Labs nationally, given expanding quasi market forces. National competition between Labs undermined the Old Labs' willingness to disclose costs information to the Health Economist. They feared such information might leak to other Labs and undermine their market position. As a Research Scientist put it:

'Health economics...were trying to do costing...(NHS Lab Director) basically did not want to give any prices...a complete barrier...embarrassing because you have got (NHS Labs in other Universities) collaborating.'

The Health Economist could engage medical and research scientists, as they shared a common quantitative epistemology and they understood the tangible benefit of the work. This contrasts with the work of the sociologist. One Research Scientist commented:

'I can understand the economics side of things and it is very interesting...you do see how it is applied...the sociology side of things would be the hardest to...understand because it just seems so vague...not exactly a science...you can take any opinion and just mould it into a report.'

The sociologist was perceived as doing 'weird and woolly research' of little practical use, based on a strange methodology. As a Research Scientist said:

'Our world is very black and white so when sociologists talk...(their) terminology, it does not mean anything to us, it was quite obvious we were providing material...to write some interesting papers (but)...it was not of mutual benefit...It was a one way flow...a clash between people coming from a scientific point of view, or what you feel is scientific, and things that are not.'

When it became clear that the position would not be refunded, the sociologist focussed on research to peer reviewed papers. These objects were valued by the social science community and could lead to a tenured academic position. The core EPOCs' expectations about knowledge objects were dominant over inter disciplinary translation.

Table 6 (McGivern and Dopson, 2009) (See Appendix 1) outlines the institutional and epistemic affiliations of the GKP1 communities, together with their mode of constructing objects and sources of credibility. The prospect of constructing knowledge objects in the GKP offered members of different epistemic communities of practice ways of developing credibility and resources. The elite grouping of medical scientists' capture of the GKP's formation in their specification of Workpackage objects reinforced as well as communicate across occupational boundaries. The introduction of quarterly

reporting upwards (a new boundary object) reinforced the division between various EPOCs, notably the elite medical scientists and the policy community. Object formation then became object dissolution as stakeholders (DTI; some senior scientists) withdrew from the GKP and the DOH withdrew funding because of concerns that the core goal of translational science had not been met.

While there are many ECOPs, the case suggests continuing dominance of the medical scientists' ECOP (Freidson, 1994). Their dominance was grounded in an academic epistemology that produced abstract knowledge about medical genetics that only medical scientists could understand. This was decoupled from the GKP's espoused aim of networking between disconnected communities and translating academic science into practice. This ECOP was later weakly challenged by AGGR which introduced quarterly reporting as a new boundary object which drew in the policy ECOP. Medical scientists contested the legitimacy of reporting and evaded it by withdrawing from the GKP collaboration in favour of activity more likely to produce academic credibility. There was little overlap between the ECOPs of medical scientists and either NHS scientists, NHS commissioners and social scientists.

A process analysis of object construction and evolution

Objects in the GKP were created at the interstices between very different communities with different interests, epistemologies and logics of action. Table 6 summaries the ways in which the different ECOPs shaped the construction and evolution of GKP objects (such as the Workpackages) due to their different sources of credibility and orientations to these objects. We note that these objects were also affected by policy and management communities concerned to ensure 'delivery' and hence to make the objects more governable (e.g. through introducing reporting regimes).

The objects were not fixed but evolved through distinct phases. The various communities had distinct power resources which they used to try to reshape objects to fit with their own sources of credibility. As in other GKPs (see Khlonovskaya, 2008, Swan et al, 2007) and biomedical translation projects (Robertson et al, 1996, Wainwright et al, 2006), there was little overlap between the objects academics (medical professors, academic scientists and social scientists) the and NHS/policy and management field (NHS scientists, commissioners and policy makers) wanted to construct, resulting in epistemic clashes over boundary objects.

University based academics needed to create epistemic objects that provided credibility within their own epistemic communities. NHS scientists were concerned about creating technical objects that would maintain their credibility (for reliable test results) and market share in the NHS. Commissioners wanted to create governable technical objects (NHS services) within budget, while the DH wanted to create governable technical objects, which demonstrated effective policy delivery (translation of science into NHS practice) within a determinate timeframe.

We see three stages of transformation in the GKP's lifecycle, first from *vision to formation*. The vision of co constructing knowledge objects in the

GKP offered members of different ECOPs the prospect of developing credibility and resources. However, medical professors captured the initial jurisdiction over the GKP as a consequence of the vague conditions set by the policy community in the GKP tender process and their superior knowledge of the nascent and indeterminate genetics discipline. They then proceeded to do 'their science' – constructing academic epistemic objects which produced credibility in their wider ECOP.

In the second stage, *the DH attempted to recapture the GKPs' jurisdiction*, first by improving their knowledge of genetics by drawing in the expertise of the Advisory Group and then trying to make GKP objects more governable by transforming the space of representation through quarterly reporting. This can be seen as a form of attempted governmentality (see Chapter 12). However, medical professors and academic scientists contested its legitimacy, drawing on their expertise to claim that genetics objects were more complex, indeterminate and evolved more slowly than reporting allowed for. They engaged in 'counter conduct' and began to exit the system. We suggest that their credibility in their wider ECOP (what Rose and Miller (1992) refer to as an 'enclosure of expertise') provided both the means and motivation to evade governmentality.

Finally, we see a stage of *reincarnation*. The DH decided not to refund the GKPs because they had not translated academic objects into NHS services quickly enough. However after the GKP closed and its work packages were discarded, the NHS doctors and scientists involved in WP1 were able to convince a NHS commissioner to fund a NHS SCD testing service (thus creating a technical object). Some of the GKP WPs were also reincarnated as epistemic objects within a new University Biomedical Research Centre.

So epistemic and technical objects remained mutually exclusive as the dominant community of medical professors maintained jurisdiction over the GKP, with their objects retaining their epistemic character. When they lost jurisdiction over the definition of objects to the government system, they simply exited the network. In the end, both academic and governmental communities abandoned the network because the network was not producing the objects they valued, but they were then reborn as technical objects (within the NHS as a 'translated' test) or as epistemic objects in the BRC.

Now let us review the other cases briefly.

General Knowledge Park 2: This demonstrates an attempt to create a new ECOP of 'public health genomics' isolated from both mainstream public health, the genetics community and the Medical School. The network was not so interested in the placing of papers in peer reviewed journals as contributing to the public understanding of genetics. Perhaps because of this underlying orientation, the network did not engage with important academic stakeholders.

Managed Cancer Networks

County Cancer Network: Despite various professional and especially clinical groups (urologists, radiologists, oncologists), there is one still dominant profession (urologists). While there are only 11 consultant urologists in the county, their wishes and acceptance of relocation were central to reconfiguration of services.

'(urologists) have been a sticking point...have taken a lot of persuading...they are probably the most senior participants...if they are not intending to be cooperative...you are banging your head against a brick wall'

(user representative)

Reconfiguration revolved around which sites had the largest number of urologists (four at BTH, three at Western Hospital and two on the Eastern Hospital site) and the eventual retirement of a key senior consultant which enabled service reconfiguration then to take place. This consultant had been active at the national level in terms of writing the Improved Outcome Guidance.

Despite being multi disciplinary, UTG meetings were in practice dominated by (male) urologists, with (female) nurses staying silent. The tone was combative:

'when they (UTG meetings) are bad, they are excruciating. Yes, really awful. Because you see through what is a lot of humiliation...(urologists) can be very, very, dismissive...sometimes they say it is complete nonsense your opinion'

'very alpha males'

(female consultant oncologist)

'a rather fierce group for the uninitiated...almost a gentleman's club type of thing'

'like a pack of wolves'

(NMT member)

The urologists were reported to held informal (uni disciplinary) group meetings in the pub afterwards. There were distinct models of medical practice, associated with different specialties (urology; oncology and radiotherapy). The urologists tended to stress surgical interventions; the other communities less so. The lack of a strong evidence base to support surgery enabled radiologists and oncologists to challenge urological dominance:

'they are very academically bright, many of the radiologists and the oncologists and they are able to present their cases very well and that balances out the power of the surgeons'

(oncologist)

The primary tension was not between clinicians and nurses but rather between the urological surgeons and other clinicians (oncologists, radiologists and radiotherapists).

While the clinical groups disagree about treatment modality for prostate cancer, they all broadly support a bio medical research paradigm (randomised controlled trials, meta analyses). Nurses and user

representatives play a secondary role in the decision process studied, although nurses were important in collecting and improving audit data which helped challenge traditional service provision. There were signs that urologists were losing turf and influence to radiologists and oncologists, after new NICE guidance came out suggesting that prostate cancer may have been 'overtreated' with surgery.

Urban Cancer Network: The network includes various professional groups, notably urologists, oncologists, radiologists, clinical nurse specialists and NHS managers. The same debates are apparent as in the County Cancer Network. While urologists are important, they are less dominant than in County Cancer Case. The network is trying to broaden actors in the decision making arena (e.g. more primary care and senior user representatives on the Board). The network was stimulating an active debate between urology and radiotherapy about treatment modalities.

The Urology Tumour Group was dominated by medically led conversations between vocal consultants which the quieter nurses saw as full of 'aggression.' The urologists remain very influential and their institutional affiliation important. The pattern is one of a powerful professional group which displays inter institutional tensions.

Sexual Health Networks

Metropolitan Sexual Health Network: There was a mixed and subtle pattern. There appeared to be an aligned inter professional system with more strongly developed multi disciplinary and relatively little overt tension between epistemic communities of practice. While the network was inclusive; it was not however equal. The well attended Research Days presented a variety of research styles, although doctors often took on a lead role. The medical community was still the most influential in knowledge production, with the bio medical research paradigm evident. Clinicians from the teaching hospital often took on key leadership roles as such affiliation provided high social capital, with some tensions with more distant hospitals. Public health was less visible, influential or well networked than expected.

Regional Sexual Health Network: there was a general alignment, with some slight tensions. The voluntary sector stated that it felt slightly subordinated to the statutory sector. The GUM service was historically isolated and did not reach out to other agencies. But these tensions cannot really be seen as clashes between different epistemic communities of practice as they were not associated with different knowledge paradigms. Important 'glue in the network' which counteracted these tensions was a shared local ideology of 'being a progressive City' and strong face to face contact between network participants in a smaller scale system.

Older People's Networks

Metropolitan Older People's Network: this was a smaller scale case. It contained several health care professions which worked together cooperatively with few jurisdictional issues. There was strong face to face

contact and educational work. Some workers reported a strongly Christian set of values which may have attracted them to work in this setting, and this could be seen as an informal network.

There were gaps in effective engagement with out of hours agency staff and the SSD. The New Home did not renew the contract with the GP practice so the network failed to establish a 'relational market' with the New Home which endured.

Regional Older People's Network: This interorganisational network included many agencies including the City Social Services Department (SSD), health care and other agencies. The SSD had control over funding and ran the network. The network tried to align the Local Authority, NHS Trusts, PCT and a large voluntary and independent sector where traditionally there had been major tensions. There were some issues about the division of historic services between the City and the County.

The private sector felt marginalised from dominant public sector agencies and not playing as full a role as it could. The voluntary sector – which contained a major service delivery arm - saw itself as less powerful and more responsive than the 'hierarchical' statutory sector, and displaying a different culture.

A second tension according to one respondent was the divide between field level professionals (Older People's Group) and an elite managerial stratum (Executive Group). There was also a sense reported that there was a hierarchy between the professions with clinical medicine at the apex.

We add that at the strategic level, the SSD was influential and indeed led the network so that power relationships did not simply reflect medical dominance.

11.3 Discussion

Networks seek to cross many organisational and professional boundaries. Will underlying tensions – or simply differences in culture, working practices and world view – between the various constituent agencies and professions impede effective network working? There may be profound epistemological differences between different groups (as in the GKPs) which make cooperation literally unthinkable. Indeed, the conflict between various ECOPs could well explain the limited impact of the GKPs.

This was the 'worst case' found. In other cases there were tensions, but they did not escalate into fundamental clashes and were containable. There were sources of normative 'glue' which counteracted inter professional tensions, such as institutional affiliation to a powerful teaching hospital (Metropolitan Sexual Health Network) or an underlying civic ideology (Regional Sexual Health Network). Some professional groups, notably medicine, were more powerful than others. This also applied to segments within medicine such as the historic (now declining) dominance of urologists within the cancer networks.

We conclude that the theoretical perspective based on the 'system of professions', epistemic communities of practice and knowledge object literatures is fruitful in explaining observed behaviours at the meso level in the cases. Our most intensive analysis was in relation to GKP1, building on related academic work on other GKPs and other translational science settings. We add to this established literature in two ways in our case study of GKP1.

First, we offer a process analysis of boundary objects and show that they evolve and change through time, shaped by the interest groups in the network which seek to shape such objects to fit with their distinctive (perhaps incompatible) claims to jurisdiction and credibility. Second, we show how these micro processes of social practice lie within wider structures of power and broader epistemic cultures.

Chapter 12 Governmentality: a new mode of organising in health care?

The earlier literature review highlighted the potential utility of a Foucauldian perspective, as already applied to NHS clinical governance systems by Flynn (2004), primary care settings by Sheaff et al (2004) and patient safety systems by Waring (2007). For ease of reference, we now reprise the definition of 'governmentality' offered in Chapter 3, referring to 'the conduct of conduct' or any more or less calculated means of the direction of how we behave and act. Dean (1999) offers the following definition (p11):

'any more or less calculated and rational activity, undertaken by a multiplicity of authorities and agencies, employing a variety of techniques and forms of knowledge that seek to shape conduct through working through our desires, aspirations, interests and beliefs for definite but shifting ends and with a diverse set of relatively unpredictable consequences, effects and outcomes.'

This definition shifts our perspective from the political institutions of the nation state to attention to the government of human conduct broadly, by various agencies and using knowledge and technique to influence 'practices of the self; and underlying identities. Applying these ideas to the study of the health care field, we first construct an argument about five broad themes which should be evident in a Foucauldian mode of governance in health care.

Theme 1 A power/knowledge nexus – the institutionalisation and generalisation of Evidence Based Medicine

Foucault (2007) sees the emergence of a power/knowledge nexus as part of the development of governmentality, referring to an ensemble of institutions, and associated knowledge bases, techniques and practices. There is a developing governmental apparatus, supported by expert knowledge bases and the learned professions. A major recent development has been the *institutionalisation and generalisation* of Evidence Based Medicine (EBM) or a 'scientific bureaucratic' (Harrison et al, 2002) form of medicine which replaces, or at least supplements, traditional tacit knowledge and clinical experience. It is curious that this strong case of a power knowledge nexus has not been explored more in recent Foucauldian studies. EBM knowledge is based on a clear hierarchy of evidence model where meta analyses of Randomised Control Trials (RCTs) lie at the apex. Knowledge is classified and ranked according to this model. High quality knowledge is produced by an elite group of accredited academic clinicians within peer reviewed journals.

The 'macro physics' of power include the creation and expansion of central UK agencies such as the National Institute of Health Research (NIHR) and the National Institute for Clinical Excellence (NICE) as national institutional

sites to carry this agenda forward, supported by an elaborate scientific advisory machinery. NIHR produces a growing volume of scientific evidence which feeds into NICE's work on evidence based health care which now covers much of the health care field. The 'micro physics' of power include various techniques such as cost effectiveness analysis, QALYs and meta analysis and published outputs such as evidence based guidelines and National Service Frameworks (here the 2001 NHS Cancer Plan). They produce a legitimate and generalised evidence based policy discourse difficult for clinicians to challenge.

Theme 2 Self regulation and surveillance within central frameworks – Clinical Governance

Governmentality seeks to create the capacity for self regulation and self surveillance at local level, but within central frameworks. The subjects of regulation are enrolled in control systems and may even embrace them: the delinquent may learn to love his jailor and adopt reformed conduct (Foucault, 1977). We are encouraged to learn how to govern ourselves responsibly as the state retreats, but still governs at a distance (Miller and Rose, 2008). Within health care, recent clinical governance based reforms have increased active clinical self regulation, but according to central frameworks and processes (e.g. consultant appraisals, McGivern and Ferlie, 2007). This leads to the enrolment of clinicians within regulatory processes and the colonisation of medicine by managerial techniques and thinking (although Waring, 2007, suggests clinicians may engage in adaptive 'counter conduct'). 'High performing' sites are accorded 'responsible autonomy'; but lower performers face central scrutiny and intervention (see below).

Theme 3 Transparent data - audit, normalisation, the threat of external examination and intervention

Governmentality seeks to make problematic social domains knowable and hence manageable through generalised collection of data across a collective field to manage risk and potential danger (Foucault, 2007). The greater suspicion of clinicians' traditional claim to tacit knowledge – and high profile scandals not picked up by self regulation - led to more external scrutiny and the collection of explicit data on clinical practice which has greatly extended the traditionally contained and inward facing role of clinical audit (Flynn, 2004) and exception management in primary care (Sheaff et al, 2004). Clinical practice is benchmarked against the explicit central norms provided through the EBM power/knowledge apparatus (normalisation). There is an electronic reporting of detailed performance data upwards to the remote yet active centre which surveys the field and monitors performance. For 'failing' sites, there is the credible threat of central disciplinary sanctions through public examination (external review panels), explicit judgement of competence and removal of services, as in cancer networks. These instruments of control are a powerful source of organisational discipline.

Theme 4 The self and reformed identities at work: strategic clinical managerial hybrids

How does one create self regulating subjects? A major theme within governmentality is the analysis of characteristic ways of forming selves, their identities and orientation to those who govern (Dean, 1999; Townley, 2008). Our focus here is the changing identities of those clinicians who are deeply drawn into management processes. How do we characterise the emergent stratum of clinical managerial hybrids (Sheaff et al, 2004) within networks? They are not solely the clinicians they were originally, nor are they simply general managers, so how can they be characterised? Are they now self regulating subjects? McGivern et al (2009) distinguish between two groups: incidental hybrids who undertake managerial roles only for a short period (and for whom there is no identity shift); and strategic hybrids on a longer term track (where there is an identity shift). They see themselves as 'good doctors' now permanently interested in organising clinical care on a collective basis and improving service quality (see below).

Theme 5 Bio politics and the government of populations

Foucault's notion of 'biopolitics' (Dean, 1999) concerns itself with the administration of the conditions of life of the population and its vital processes. Bio political interventions may be made in the health and illness (physical or mental) of the population through attempts to survey and control populations, especially the marginal or dangerous (e.g. migrants, criminals). The prevention and risk management of unhealthy behaviours becomes important as well as their treatment. We here shift from the traditional clinical focus on individual patients to a broader governance of health care populations. As Castel (1991, p281) argues in respect of the rise of risk management in mental health services: *'the new strategies dissolve the notion of a subject or a concrete individual, and puts in place a combination of factors, the factors of risk'*. There is a shift from face to face consultation to the use of new technologies of assessment ('an epidemiological clinic') with the profiling of populations and rational planning of forward trajectories, using new formulae for administering populations.

We suggest these five broad themes can – taken as a whole - be seen as an overall framework for assessing whether a new mode of governmentality can be seen as steering a health care field. We now review our case study material to see how useful such a perspective is, concentrating our analysis on the cancer cases but also reviewing the other cases more briefly.

12.1 Review of the cases

Managed Cancer Networks: significant moves towards governmentality

The mode of organisation of the two managed cancer networks can partly be analysed within a governmentality perspective, although best seen as hybrid regimes rather than a pure form (Ferlie et al, 2009c). Nevertheless,

Foucauldian elements are an increasingly important part of the governance mix in these two cases. We here comment on some of the analytic themes which emerge from the story of the two cancer networks and the review of national cancer policy already told in Chapter 5.

Which organisational dogs did not bark?

The cancer cases demonstrate a very weak use of market or quasi market forces, indeed the private sector was absent and the non for profit sector represented by relatively small scale hospices. Conventional line management (general management) was also largely invisible, although some hierarchical elements remained in the SHA (Urban MCN) and the National Service Director (County MCN) who was an authoritative source of decision making in the event of local disputes. The National Cancer Action team was also a back up central resource that could intervene in failing localities.

Informal professional control (notably from the group of urologists) remained important but it was being reshaped into somewhat broader decision making patterns through the operation of the MNCs (e.g, broader planning process in Urban MNC).

The cancer cases and the five Foucauldian themes

Foucauldian Theme 1: A power knowledge nexus – the institutionalisation and generalisation of Evidence Based Medicine (Urology IOG)

There is a strong, standards based, policy framework in cancer services developing from the 1995 Calman Hine Report (Department of Health, 1995), through the 2000 NHS Cancer Plan (Department of Health, 2000), 2001 NHS Manual of Cancer standards (NHS Executive, 2001) and then the 2007 Cancer Reform Strategy (Department of Health, 2007). This leads on to explicit guidelines, norms and targets for each tumour type (IOGs) prepared by NICE which draw on the best evidence available (still with areas of contest and uncertainty, as in the 2002 Urology IOG). There is a growth of cancer patients enrolled in trials, further developing explicit, trial based, evidence. The new National Cancer Intelligence Network will act as a 'one stop' repository for all cancer data. Two Prostate Cancer Research Collaboratives have been funded by the National Cancer Research Institute. There is now a major £30m trial (Protect) on the outcomes of surgery (vs) radiotherapy (vs) watchful waiting approaches for PSA detected localised prostate cancer (NHS, 2007). The bio medical research domain is therefore of very substantial scope and scale. There is more broadly a growth of new proto scientific techniques to support policy including systematic reviews and meta analyses; clinical and cost effectiveness appraisals; list searching (NICE, 2002). Evidence is explicitly graded into 3 levels: A (RCTs and systematic reviews of RCTs); B (non randomised control trials and observational studies) and C (professional consensus), although this hierarchy is difficult to apply to research on organisation of services (NICE, 2002).

Elite scientific/clinical advisory bodies are evident from the Calman Hine Report (Department of Health, 1995) onwards, such as the National Cancer Guidance Group (NICE, 2002). They consist of a core of clinical academics, clinicians and Health Services Researchers, with some representation from other constituencies. The National Service Director is an eminent clinical academic. The underlying policies of a strong evidence base, coordination, equity, high quality and the diffusion of best practice are attractive and legitimate to clinicians. The Urology IOG indicates their standards were developed in extensive consultation with influential clinicians, reflecting informed clinical opinion as well as formal evidence. They are eventually seen as legitimate by local clinicians in both MCNs, after initial resistance.

We conclude Theme 1 is strongly present both nationally and locally.

Foucauldian Theme 2: Self regulation and surveillance within central frameworks – local Network Management Teams and tumour groups

Within the framework of the Urology IOG, local clinical groups have delegated responsibility for how this is to be achieved locally. There is a mixed pattern of central targets/guidelines and delegated autonomy, backed up by the reserve power of the centre to intervene in failing sites through external panels and the National Cancer Action Team. There is both engagement of and pressure on key professionals. In both cases, the NMTs had discretion about how central norms in Urology were to be applied and how local services were to be reconfigured. In both cases, the NMTs did not impose decisions on the tumour groups but rather collaborated with them to produce a redesigned process which would be likely to produce decisions within national guidelines and which made sense locally.

These 'soft' processes worked effectively in both sites, but were backed by the 'hard' sanction of an external panel should self regulation fail. The urologists in the tumour groups were progressively drawn into the policy/management domain in addition to their primary clinical domain. While they started by contesting the legitimacy of guidelines and audit, immersion in the UTG process resulted in a later shifting of position. Prolonged exposure of clinicians to a carefully designed 'hybrid' process may then be seen as the essence of governmentality within the clinical domain. In CCN, clinicians had discretion as to which evidence base to adopt (the Urology IOG OR European research) and were asked to ensure it related to local needs. We conclude that Theme 2 is strongly present in the two networks.

Foucauldian Theme 3: Transparent data – audit, normalisation, threat of examination and intervention

The Urology IOG (NICE, 2002) sets out a range of detailed information requirements in relation to structure (e.g. information on systems for network wide clinical audit), process (e.g. evidence of weekly MDT meetings; records of attendance) and outcome (e.g. data on one, two, and five year survival rates for each type of cancer, adjusted by case mix) needed for accreditation as a Urology centre. These indicators assess through explicit audit trails whether desired practices and standards are in place. Within the two MNCs, local audits of clinical practice (e.g. the volume

of operations in each site) informed decisions about the siting of cancer centres. Urologists' practices became more transparent, subject to surveillance and scrutiny by the network through audit. Clinical audit has greatly expanded in scale, scope and external visibility since its early days (Flynn, 2004). Possible sites are compared against Urology IOG norms and classified as viable or non viable. There is the threat of discipline through a public examination by an external panel to make recommendations about reconfiguration – and possible loss of services - if self regulation fails. We conclude that Theme 3 is systemically present.

Foucauldian Theme 4: The changed self and identities at work – NMT management style

The NMTs contained an important group of 'clinical managerial hybrids', linking the clinical and the policy/management domains. These hybrids were originally from clinical backgrounds but had progressively been drawn into management roles. They tended to remain in managerial role for long periods of time. Their hybrid identity can thus be seen as 'strategic' rather than 'incidental' (McGivern et al, 2009). Thus the CCN Network Director had a background in nursing but then moved into audit and service improvement posts before taking up the ND post. The Medical Director in CCN had been involved in the network since 1997. The UCN Medical Director was involved with the network since its inception, was influential, and acted informally as Network Director (as that post did not exist locally). The Network Manager there had a background in physiotherapy and then general management. Such hybrids were on long term tracks involving new tasks, skills and even identities (McGivern et al, 2009).

What was their management style? They were no longer 'just' clinicians; nor were they 'just' general managers. Rather they displayed a characteristic interest in a 'hybrid' management agenda based on service and quality improvement goals, rather than a focus on productivity or cost effectiveness. Secondly, they displayed an entrepreneurial, high energy, change orientated and value led orientation (e.g. CCN Network Director), rather than the neutral affect, routine bound and maintenance management orientation typical of public service bureaucracies. So there was evidence of some 'corporate reenchantment' (Reed, 1999) with internal commitment to the service improvement agenda: they can be seen as internal change agents. Thirdly, they offered a predominantly soft and small team based approach to 'leadership', rather than a reliance on crude managerial direction or charismatic individuals. Finally, they showed a strong focus on the governance of populations (see below). So there was evidence to substantiate Theme 4.

Foucauldian Theme 5: Bio power and the governance of populations – population based planning, system redesign, and the reform of problematic conduct

The cancer services field can certainly be seen through a bio power lens which draws attention to the collection and use of vital statistics, linked to interventions designed to reform problematic conduct. The UK cancer registries have long collected population level data on the incidence and outcomes of each cancer (registration and mortality data). The IOGs have expanded such data and extended it into fields of process and structure.

The Department of Health (2007) signals that the collection of defined data sets will be made mandatory and that PCTs should ensure that such data are collected by MDTs and sent to local registries.

Such data bases are becoming more powerful as they move into an electronic format. The Department of Health (2007) states all such data should be in electronic format by 2009. They will inform the development of an electronic commissioning toolkit which the PCTs/networks will use, supported by the NCAT. National clinical audits already provide comparative analyses of clinical outcomes in a particular tumour types, pinpointing areas which are doing poorly. The new National Cancer Intelligence Network will act as a repository of all cancer data. Screening programmes (e.g. cervical; bowel) are being extended. The Department of Health (2007) outlines health promotion interventions to reform 'problematic conduct' (e.g. anti smoking and anti obesity interventions which should reduce the incidence of urological cancers, specifically bladder and kidney cancers; mass vaccinations to protect against cervical cancer) and to reduce health inequalities within cancer services.

The two MNCs demonstrate a strong population wide perspective across a defined territory containing a large population of 1m and 1.6m people respectively. The UNC case suggests a novel and broader process of service reconfiguration based on local audit data which reflects changing population need, rebalancing services (somewhat) away from a traditionally dominant provider. There is a strong systems perspective, seen in the focus on the whole patient pathway and agreed joint protocols. However, stronger MDTs improve review of individual patients and broaden work roles. While the 'bio power' theme is pervasive, it is rebalanced with a focus on individual patients through enhanced MDTs.

Overall, we see the five Foucauldian themes as strongly present in UK cancer services. However, there are still important hierarchical elements, for example, the interventions of the SHA in UCN and the NSD in CCN (although he is a strategic hybrid and not a general manager).

Development of Foucauldian theory within health care organisations

Can our extended analysis of the cancer cases help develop Foucauldian theory as applied to the analysis of current health care organisations? Here we review our findings benchmarked against the earlier review of Foucauldian studies of health care organisations.

Firstly and unlike Doolin (2004) or Waring (2007), we did not find clinical resistance and 'counter conduct' within shadow systems outside managerial scrutiny but rather their successful enrolment over time in official systems of 'watched self regulation.' We see the scientific knowledge base, analytic techniques and institutional sites of Evidence Based Medicine as a generalised source of legitimated power rather than as just EBM or clinical governance 'discourse' (Sheaff et al, 2004; Flynn, 2004).

Secondly, we develop Sheaff et al (2004)'s argument that a new stratum of clinical managerial hybrids govern managed networks through a mentoring rather than monitoring based style, but under the hierarchical shadow of

the Chief Executive or Chair which can be invoked. In our cases, NMT style also contains a major developmental element, but invokes the credible threat of external discipline and examination (through accreditation processes), should self regulation fail. Explicit accreditation based on transparent norms and data is a more Foucauldian and less hierarchical control mode.

Finally, our strong emphasis on bio power in the governance of populations (statistical surveillance techniques, comparative data bases; attempted behavioural interventions) in addition to the EBM/Clinical Governance policy systems so far analysed (Flynn, 2004) is additive and could be developed in the analysis of other health care settings, notably the growth of risk management in mental health (Castel, 1991).

We now review the other cases more briefly.

Clinical Genetics Networks

These are both negative cases when examined from this theoretical perspective. There was not much evidence of governmentality based modes of control. There were few evidence based norms, a weakly developed knowledge base when compared to the basic science, and largely unreformed scientific identities. There was an attempt at electronic surveillance through the Advisory Group for Genetics Research reporting templates but this not seen as more than of superficial impact. Indeed, the behaviour of the medical professors can be seen as a form of resistance and of 'counter conduct', in escaping from the 'gaze' of the system of electronic reporting upwards which the policy domain had introduced in an attempt to make boundary objects more governable.

Sexual Health Networks

The sexual health cases are more like cancer networks than clinical genetics in that the governmentality perspective fits as an explanatory model to a limited respect.

There is a similar elaboration of field wide explicit standards and evidence based guidelines in the NSF and Medfash Guidelines, drawn up after consultation with leading clinicians which are then seen as legitimate. Networks are given 'responsible autonomy' in meeting these targets, but are performance managed should they fail to do so.

There is a group of clinical managerial hybrids who undertake significant managerial roles and are committed to the role of the network in improving services, quality and access.

Audit and other data are collected on performance locally (e.g. waiting times). Poor performance triggers intervention locally or indeed nationally, as in the Regional Sexual Health case where a ministerial reprimand followed perceived lack of progress in reducing teenage pregnancy.

Older People's Networks

While we see a NSF and a National Clinical Director for Older People in other people services as elsewhere, these pressures seem significantly weaker than in the cancer or the sexual health cases. Standards appear broad (perhaps due to a weaker conventional evidence base) and diffuse.

There is little evidence of any effective control regime in the Regional Older People's Network, Weberian or Foucauldian. There was low transparency (diffuse and weakly specified standards); relatively low professional engagement and low surveillance through the collecting and reporting up of data.

In the Metropolitan Older People's Case, there was a similar pattern to the cancer cases in respect of:

- the linking role of engaged, passionate and legitimate clinical/managerial hybrids in leading change; marginal role of general managers;
- a difficult and traditionally tacit health policy area ('a good death') becomes explicit. Key standards are elaborated, clearly specified and monitored.
- an explicit and evidence based national policy framework drawn up with the advice of respected clinicians;
- explicit and field wide standards and norms; forms are mandated; collection of local data and construction of local registers of clients at risk of dying which are regularly updated;
- soft management style but backed by looming shadow of regulators;
- delegated operational responsibility but accountability upwards to the PCT/SHA.

12.2 Concluding discussion

Aspects of the governmentality perspective are helpful in understanding modes of organising in some (we would argue five of the eight) of the cases. They seem particularly applicable in the two cancer cases. Hybrid regimes (Reed, 1999) which mix 'gaze' with 'cage' are evident. There is a continuing Weberian element: these health care arenas remain tightly performance managed with reporting upwards. The National Service Directors retain an element of hierarchical authority and provide an authoritative source for local dispute resolution. Economics based incentive systems play an important role in encouraging providers to accept the advice of networks to help them meet delivery targets (and avoid financial penalties) and are a non Foucauldian influence mode.

Some elements of a Foucauldian control regime are either absent or weakly developed. For example, there is no spatial segregation in jail like institutions (although new ICT systems may be enabling perpetual e surveillance by the centre). Our extended analysis of the two cancer cases develops the application of Foucauldian ideas within health care

organisations in three ways. First, we emphasise the emergence of a discourse, but also a specific set of practices and techniques proceeding from the institutionalisation of the Evidence Based Medicine movement which operates as a legitimate and generalised power source. There is a strong power/knowledge nexus across the health care fields studied.

Secondly, we characterise the management style of clinical managerial linkers as a form of post bureaucratic management which mixes soft and some hard elements within a engaged and 'high energy' affect. They display changed (reformed) roles and identities at work and believe in the service improvement agenda. However, they also invoke the credible threat of external discipline and examination (through accreditation processes) should self regulation fail. Explicit accreditation based on transparent norms and data is a more Foucauldian and less hierarchical control mode.

Finally, our strong emphasis on bio power in the governance of populations (statistical surveillance techniques; comparative data bases; attempted behavioural interventions) in addition to the EBM/Clinical Governance systems usually analysed (Flynn, 2004) is additive.

While we see only partial impact of these concepts across the set of case studies and the emergence of hybrid rather than pure forms in those cases which do demonstrate Foucauldian governance modes, this distinctive theoretical perspective helps us theorise a mode of organising very different from the micro world of EBM enactment of the late 1990s (Dopson and FitzGerald, 2005) which emphasised the strong micro processes of the clinical group and saw the macro context as relatively weak, the conventional strong line management hierarchies of Weberian bureaucracies or the competitive forces apparent in markets/quasi markets.

Chapter 13 Implications of the study for NHS policy and practice

13.1 Choice of governance mode: empirical advantages and disadvantages of network forms

The literature review argued that network based organising could be seen as a distinct governance mode, different from markets or hierarchies. Policy makers can choose between such modes, or at least shift the mix. While the literature review advanced some theoretical arguments for network forms, they were not always substantiated in empirical work.

The empirical work suggests some specific advantages and disadvantages of network based organising which may help inform policy making.

Advantages included:

- they addressed the many 'wicked problems' in health policy where different agencies and professions are necessarily involved within 'cross cutting' streams of work (please see cancer services; sexual health; older people's services cases);
- they had potential as 'implementation networks' to implement national health policy targets within localities; there were instances of major service reconfiguration successfully achieved (e.g. in the cancer cases);
- they secured high levels of clinical engagement and legitimacy, especially when backed by an evidence based policy framework (e.g. Metropolitan Sexual Health case; cancer cases);

At their best, they developed lower level processes which enabled sharing and learning to take place across organisational boundaries (e.g. cancer cases); The disadvantages of the network forms included:

- they could degenerate into 'talking shops' with many meetings but little output; networks could multiply so a dense system emerged, comprehensible to and populated by a small policy elite (e.g. Regional Older People's case);
- weak focus, so that some targets could be helpful in providing milestones (e.g. Regional Older People's case);
- they required administrative resourcing ('an office') to retain energy and focus, and without this the network leadership could become overloaded and the network drift (e.g. Regional Sexual Health case);
- they may be difficult to performance manage and contain a major emergent as well as a planned element (e.g. Clinical Genetics case);
- there may be less emphasis on creative local innovation rather than implementation of national policy targets (only the

Metropolitan Older People's case could be seen as a local innovation);

- there are high transaction costs so that policy outcomes can take a long time to implement with few short term 'hits' (e.g. Cancer cases);
- a number of networks remained dominated by elite professional groups and the statutory sector. They only weakly emphasised user choice. (e.g. Regional Older People's case)
- they needed skilled and well resourced management to be effective.

In terms of policy implications, one important question is: does the study support the continuation of network forms, or a shift back to market or hierarchy as a basic governance mode in the health care system? We consider this question in greater detail below.

13.2 Contribution of the study to management practice

We developed a typology of different network forms which may provide a useful diagnostic tool for local managers (in NHS networks, also in PCTS and SHAs) which enables them to assess what kind of network they are operating in and what kind of actions and management style may be appropriate. Their style may well appropriately vary by network type. The typology will be particularly useful for managers setting up new mandated networks as it is a tool which helps summarise learning from the experience with existing networks and make it available for new sites.

We developed a qualitative performance assessment model which may be of use to the field. It can be used by network managers, and also PCT and SHA managers to trigger a structured conversation about the performance of particular networks and how local performance might be improved. It also helps suggest which networks are 'high performing' and which therefore can act as important 'success stories' from which other sites can extract learning.

We stress the significant shift from role based and vertical management and towards broader conceptions of leadership in the networks. We highlight the role of clinical managerial linkers and 'boundary spanners' and of small team based modes of working. We highlight the use of a 'soft hard' management style. The cancer cases are good examples of these findings. We see this management style as broadly functional in these settings. These findings need to be captured and should influence the design of NHS management and leadership development programmes to support networks in the future.

We highlight the need for networks to have 'adequate' administrative resources if they are to be effective. Poorly resourced networks are unlikely to make progress in their service improvement objectives. The resource requirements will vary according to the size, scope and complexity of the networks concerned. For smaller scale networks, a dedicated medium grade

administrator and a fractional buy out of a senior level coordinator would seem reasonable. For a larger network, there might be a full time and senior level Network Manager with administrative support, a Senior Nurse and a Medical Director (both perhaps part time). Some networks (e.g. Cancer Networks) represent substantial overhead costs, given large staffing and such costs need to be justified in terms of value added.

13.3 Wider implications for policy

The 'Wicked Problems' problem – pervasive and persuasive

First, we return to the 'wicked problems' problem (Clarke and Stewart, 1997; Sullivan and Skelcher, 2002, Ferlie et al, 2009) reviewed earlier, which has been taken to support the case for network based forms of organising. Is the concept no more than a chimera or is it empirically evident?

'Wicked problems' were found in many of the cases, so that the concept appears well grounded, at least in the settings studied. Returning to the original definition of a 'wicked problem' specified in the literature review, many of the sites did indeed work on cross cutting objectives across hospital/PCT, agency and sectoral boundaries but which were only realistically achievable in the longrun (e.g. both cancer networks successfully reconfigured urology services but over a five year period).

The range of actors represented within the networks included not only the NHS (both commissioning and providing functions, relating to many individual NHS providers and professions), but also local government (e.g. Regional Sexual Health case), Universities (e.g. the GKPs) and voluntary and private sector providers (e.g. Regional Older People's case). These are indeed fragmented and multi sectoral local delivery systems.

We found major, challenging, behaviour change objectives in the cases, such as in the Sexual Health networks (reducing new HIV infections and teenage pregnancy rates). Such behaviour change objectives could be defined not only in relation to service users but also to service providers (e.g. treating older people with respect in the Regional Older People's case), families (e.g. caring for a loved one who was dying in the Metropolitan Older People's case) and society as a whole (e.g. attitudinal shifts towards older people).

There was some – although much more mixed – evidence of increased co production and influence from users and citizens (e.g. Older People's Champions in the Regional Older People's case), although less change here than on other indicators.

We conclude that the 'wicked problem' problem was – at least in the settings studied – not a chimera but of pervasive importance across many different health policy arenas and therefore should be persuasive in the design of governance modes. Health policy is often misleading, designing a more bounded elective surgery model (which fits the market mode of

governance better), when many health policy arenas are much more complex and systemic in nature.

Enhancing the role of ICTs and data bases

We highlighted the modest contribution of new ICTs in network based forms of organising at present (e.g. Regional Older People's case) – despite what the theoretical literature suggests – so this area may well be a priority for further policy development. We do not refer to macro level reorganisations of the whole NHS IT infrastructure (which have often failed to deliver what was originally promised) but identification of more modest local level reforms to the most pressing obstacles.

What information needs to flow across the network to make it function more effectively? Are there political or organisational obstacles to the transfer of such information or are the barriers mainly technical in nature? There may be a need for work in all three of these domains.

How valid and valuable are any shared data bases? Do they provide genuinely meaningful data which can help inform strategy? Or are they populated by out of date data (as in the Regional Sexual Health case) which are misleading? Are data being collected but not used (as in GKPs)?

National Frameworks and local customisation

We conclude that the development of National Service Frameworks and Improved Outcomes Guidelines have been broadly positive in providing a national evidence based framework of policy agencies and systems which support local networks. These frameworks are seen as legitimate and influential (as in the cancer cases and the Metropolitan Sexual Health case). Where national frameworks were weak (e.g. the Genetics Knowledge Parks), networks struggled to make progress. It is more helpful if they are frameworks rather than targets so that there is local discretion (as in the cancer networks). Clinician involvement at a national level in the production of frameworks is also helpful locally.

Effective network leadership: a small team approach

Network based forms need skilled and resourced management to be effective. It is a governance mode which is demanding to operationalise in practice. We reinforce earlier findings (FitzGerald et al, 2006) about the helpful presence of a distributed or small team approach to leadership ('duos and trios in service change') rather than a highly individualistic approach to network leadership (as in the cancer cases). A trio of a CEO, Medical Director and a Nursing Director is one possible model. This enables the network to relate directly to three core constituencies. It provides more capacity to divide up the work which could well overwhelm one individual and a source of mutual support and learning in demanding and stressful settings.

Skills and style: soft plus hard

Network managers typically mixed 'soft' and 'hard' approaches to management. They used national frameworks, standards and targets to put pressure downwards. But they complemented top down pressure with a typically 'soft' approach to management locally (as in Genetics Knowledge Park 1 and the Cancer cases). Indeed local customisation built credibility and legitimacy.

What are the core 'soft' skills needed? Our cases suggest a number of implications. Network managers need to reach out and enrol other parties. So they need to be skilled in organisational systems and stakeholder analysis and to be able to identify key players in the local network. They need to understand and work with the local context. They need active lines of communication 'up the line' (e.g. to the Strategic Health Authority) as the orchestration of national guidance and pressure is important. They need to move between different agencies and professions, hopefully adding value.

Network managers often have low role or direct resource power, so they need to build indirect sources of influence or credibility. This could come from a prior professional background, (e.g. Clinical or Nurse Directors), which creates credibility with core professional groups. It could come from taking on time consuming and unpleasant tasks (such as upwards reporting in Genetics Knowledge Park 1 which took pressure off the scientists). It could come from providing specialist advice and expertise to enable NHS Trusts to redesign services and meet targets, so avoiding fines. Such influence can only emerge and be won over time, through repeated behaviours and developing skill levels.

Once again, we highlight the role of clinical/managerial linkers such as Clinical Directors who bridge the policy, managerial and clinical worlds and who have high legitimacy with clinicians. This critical linking group needs to be supported effectively. How are they selected into these roles and on what basis? What counts as good prior experience and work related competence in such selection decisions? What induction, mentoring, training and development support do they need and do they get in coming into role? Such considerations not only apply to Clinical Directors but also to nurses and user representatives taking on roles on network management boards.

Process development and learning locally

Network managers need to think about how to develop effective network processes. Networks which just display periodic and business dominated meetings are unlikely to be effective. Examples of good practice would be developing tumour groups in both cancer sites – and encouraging them to make decisions about reconfiguration – rather than relying on centralised decision making. Supporting 'off line' and developmental arenas in which different professions and organisations can come together to talk about their different perspectives may help bridge the gaps between different epistemic communities of practice (ECOPs). Bridgers whose careers enable them to link different groups and have an awareness of different ECOPs are

important. Such measures could help increase the relatively modest amount of interorganisational learning seen in many of the cases.

Chapter 14 Conclusions and future research agenda

14.1 Summary of conclusions and contribution

The key findings and contribution of the study can be summarised as follows:

First, we developed a typology which distinguished between six continua: complexity of context; mandated, hybrid and organic networks; degree of resourcing; formalisation of roles, structures and governance; number and diversity of stakeholders and internal power balance; and development of underpinning shared processes and appropriate management skills.

Secondly, we adapted the Turrini et al (2009) model of performance assessment to add or refine the following dimensions: inclusiveness and engagement of stakeholders; shared learning; innovation and change (service improvement); unintended outcomes (both perverse and serendipitous). We used this extended model to assess the comparative performance of the networks. The high performance of both Managed Cancer Networks was an interesting finding.

Thirdly, we found only a modest driver from ICTs in the move to network based forms so this stream of literature (Castells, 1996) was not supported empirically.

Fourthly, we found decidedly mixed evidence in relation to the extent of organisational and interorganisational learning in the networks – despite what the literature argues - as high learning appeared confined to a subset of cases.

Fifthly, we concluded that, at the micro level, effective leadership and management capacity contributed to high network performance and we elaborated characteristics of effective management found. These included small team leadership, a soft/hard management style and clinical managerial linkers.

Sixthly, we concluded that the meso level at which these fields operate is populated by many agencies and professions with different agendas, interests and knowledge bases. The epistemic communities of practice perspective was helpful theoretically. On the basis of an intensive analysis of a GKP case, we develop this theoretical literature by suggesting that 'boundary objects' can evolve and change their nature over time and that micro processes of practice need to be seen in a macro context of power relations.

Seventhly, there were signs of a macro level shift in some networks from a Weberian to a governmentality based (Foucauldian) control mode. On the basis of an intensive analysis of the cancer cases, we develop this

Foucauldian theoretical perspective further within health care organisations by arguing that: (i) the institutionalisation of Evidence Based Medicine with a specific set of techniques and practices provides a legitimated and generalised power source; (ii) that clinical managerial linkers demonstrate reformed work identities as they are engaged with and personally committed to the service improvement policy agenda evident at the time of the study but are backed by accreditation mechanisms and the threat of external examination and judgement against transparent data and norms and (iii) MCNs have moved along the spectrum from displaying a traditional clinical interest in individual patients to the more field wide governance of large populations, using techniques of 'bio power'.

Finally, we note that networks were set up to tackle 'wicked problems' or cross cutting themes (Sullivan and Skelcher, 2002). There were indeed 'wicked problems' found in many policy arenas studied (e.g. sexual health; older people's cases). Many networks worked on cross cutting objectives which could only be realistically achieved over the long term and included major elements of behaviour change (e.g. teenage pregnancy rates). Both cancer networks successfully reconfigured urology services over large and complex patches, rebalancing historically founded institutional power, but this took five years.

The range of actors found included not only the NHS (both commissioning and providing) but also local government, Universities, and the voluntary and private sectors. These are indeed fragmented delivery systems, made more so by decentralising reforms (e.g. NHS Foundation Trusts) which increase operational autonomy of units. There was some – although mixed – evidence of co production and user influence in some cases (e.g. Older People's Champions), but less in others. Despite the limited progress made so far, many arguments can be found in the cases for the utility of network forms in tackling 'wicked problems' and that furthermore the 'wicked problems problem' remains of pervasive importance.

14.2 Limitations and strengths of the study

What were the limitations and also the strengths of the study? We found it difficult to collect the costs information originally hoped for (although this was a secondary objective of the study, which had an interpretive core). The Delphi studies also proved problematic and were abandoned. We found it difficult to select or get access to pairs of higher and lower performing organisations as originally hoped and moved to an ex post framework for performance assessment. We did not collect quantitative data on performance levels, as this was designed as a qualitative study using interpretive methods, but future studies might well seek to address this gap. It is possible that our results are somewhat skewed towards a positive view of networks: cancer networks are often seen as positive outliers of the managed network form and both of our cancer networks were assessed as high performers within that subtype.

The study also has some important strengths. We successfully secured access to and completed the 8 case studies, securing over 200 interviews in

a large scale empirical study with high internal validity. The cases tackled major issues of public policy importance and we achieved a substantial variety of different network types in the sample, including but going beyond the cancer cases to novel settings. The Metropolitan Sexual Health network was assessed as a high performer as were the two cancer cases, indicating that the managed cancer network form can be successful in a broader range of settings than only cancer networks. We successfully wrote up the cases to a common format and linked our empirical analysis of the cases to underlying themes and to social science theory. We hope to have developed such theory (even if only incrementally) through intensive analysis of our case studies as well as applying it. The attention paid to team process worked well in terms of generating a common understanding.

14.3 Suggestions for future research

Suggestions for future research need to be informed by the direction of health policy. If policy is swinging away from networks to a model based on markets, contestability and choice, then the case for more research on networks is weak. We note however that network based forms still exert appeal, with managed cancer networks often held up as a role model. They retain high legitimacy with many clinicians. The 'wicked problems' they tackle are both pervasive and enduring. Assuming that networks remain of policy interest, where might research go next?

A first suggestion for comparative work is a six month thematic review across the four final reports commissioned by NIHR SDO in its Networks Programme. (see Sheaff et al, SDO 08/1518/105; Davies et al, SDO 08/1518/103 and Currie et al SDO 08/1714/149). Are these other studies coming up with similar or different findings to ours? Are there other health policy arenas (apart from cancer care and sexual health) where there is evidence of 'high performing' networks? This overview work would ensure the impact of the programme already commissioned would be more than the sum of four projects. This also depends on whether the four studies are comparable.

There may be additional service areas adopting network based forms of organisation (e.g. coming out of the Darzi Review of Health Services in London) so new empirical sites may be forthcoming. Continuing to track Managed Cancer Networks as an emblematic example may be useful: what do they do once they have reconfigured and centralised cancer services?

A cohort study of a group of NHS network managers would be useful in tracking the backgrounds of this group of NHS managers, their skill set and their careers. This research could feed into the appropriate design of NHS HR and management development programmes.

We derived a relatively small amount of material on the influence of user representatives within the networks, which appeared to be generally slight. There were however some serious attempts to broaden the traditional role of users in some networks (e.g. Urban Cancer Networks) and there is scope for more research work into this theme.

The study raised the following novel perspectives where more work may be helpful.

Governmentality in networks: this was a relatively novel theoretical approach. We noted the role of transparent field wide and evidence based norms (as in the cancer cases) which eventually influenced professional behaviour. This theoretical perspective should be explored more broadly.

Performance assessment and explanation: we undertook a qualitative approach to performance assessment. Can this early effort be developed? Is it possible to complement qualitative data with more quantitative or even clinical outcome data (which would strengthen the framework) or is this methodologically too challenging? We noted methodological difficulties in assessing network performance here. The topic of performance assessment in networks and how better methods can be developed is however important. There may be greater stress on performance, value for money and productivity in the future, given strong pressure on public finances and reduced taxation base.

A future study could review recent performance assessment literature more fully. Boyne et al (2006) contains some chapters evaluating network performance, using different methods (both quantitative and qualitative). A special recent issue of Public Management Review (10, 6, November 2008) edited by Mandell and Keast develops this theme of performance assessment of public service networks. Perhaps a small scale scoping study would be indicated to see if appropriate methods can be developed.

Rising policy relevant themes which could be informed by future research include:

Relational markets in health care?: One policy scenario is for a move towards markets and a mixed economy of health care with more private and not for profit providers. What sort of market may emerge? There was little evidence of a major increase in private sector actors in our cases as yet, although this could change. It may be that in such as 'mixed economy of health care', there would be relatively few 'spot contracts' and instead a reliance on long term relationships such as preferred providers or new public/private hybrid organisations. Theoretical perspectives from economic sociology could be helpful.

Re-emergence of Civil Society?: A rhetoric of 'new localism' in the political domain suggests a further move away from top down direction and central target setting is possible. Highly managed networks may give way to more self steering and locally based network forms. They may move from being 'implementation' networks to 'invention' networks. Non State actors (Civil Society, advocacy groups or Social Movement Organisations) may have a broader role than of a service provider to the NHS under contract. Theoretical perspectives from political science, organisational studies and social geography could be helpful here.

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Appendix 1 Tables

Table 1 Performance assessment of the networks studied

Network	Scoring	Comments
Genetics Knowledge Park1	Low/moderate	2002-07: mixed results, SCD test successfully translates but other WPs show less movement; difficult to move from academic to translational science; some internal tensions and clashes; generous financial resource base;
Genetics Knowledge Park 2	Low	2002-07: Enclave: tries to form a new discipline but sees itself and is seen as 'maverick' and isolated from some major stakeholder groups; generous financial resource base;
County Cancer Network	High	Long history; met key policy targets; organisational learning; simpler setting; less inclusive process, skilled management, high resource base for Network Management Team;
Urban Cancer Network	Very high	Long history; met key policy targets; organisational learning; more complex setting; more inclusive process; skilled management, high resource base for Network Management Team;
Metropolitan Sexual Health Network	Moderate/high	Complex setting; strong on target meeting; redesign and learning; weaker on public health and voluntary organisation involvement;
Cathedral City Sexual Health Network	Moderate	Smaller scale setting; but coping well given a low resource base and continuing macro reorganisations which could distract from service development;
Metropolitan Older Peoples Network	Moderate	Small scale setting; 'win win situation'; PCT funding; clear focus; generally harmonious relations between the health care professions; not sustained in long term; weaker relations with other groups;
Regional Older Peoples Network	Low	Relatively recent creation; large scale and complex setting; diffuse focus; very thinly resourced and overloaded; limited progress but still in start up phase?

Table 2 Typology of Networks

Continuum	Sub-indicators	Examples
Complexity of Context	Scale; population size; geography; social deprivation; multi culturalism; teaching hospitals; degree of behaviour change sought.	High – Urban Cancer Network; Low – Metropolitan Older Peoples Case.
Network form	Mandated; hybrid; organic; tacit professionalized forms.	Mandated - Cancer Networks; Hybrid – Metropolitan Sexual Health Case; Organic – Metropolitan Older People’s Case; Tacit – urologists in County Cancer case.
Resource base	Staffing; control over budgets.	High – cancer networks; Low – Regional Sexual Health case.
Formalisation	Roles; structures; governance.	High – cancer networks; Low – Metropolitan older peoples case.
Range of Stakeholders	Number of stakeholder groups; range across sectors; internal relations and power balance.	Simple – Metropolitan older people’s case; Complex – Regional Older People’s case; Genetics Knowledge Park 1.
Processes and Skills	Shared management processes; shared learning; shared ideology; developed leadership and management skills.	Well developed – Cancer Networks; Less well developed – GKP2; Regional Older People’s Case.

Table 3 The role of ICTs and databases

Network	Role of ICTs	Database Issues	Commentary
Genetics Knowledge Park 1	Limited – NHS and University systems remain incompatible;	None	New forms of virtual and template based reporting upwards; yet not used centrally to inform policy.
Genetics Knowledge Park 2	ICTs not a major theme	None	
County Cancer Network	Slow development of teleconference based multi-disciplinary team meetings; Good website.	Pro active work on local audit.	Management Team used local data to achieve local service changes in line with Cancer Plan/IOGs.
Urban Cancer Network	Minimal role of novel ICTs;	Proactive local audit; good data storage and accessibility.	Information seen as a source of expert advice which adds value.
Metropolitan Sexual Health Network	Cross hospital IT systems slowly emerge; 'joined up auditable data'; Dated website	Inaccurate and misleading GUM data bases; issues of confidentiality.	
Regional Sexual Health Network	Future plans to develop a learning platform at school level;	Inaccurate and misleading GUM and National databases; issues of confidentiality; useful local data on teenage pregnancy rates.	
Regional Older People's Network	Major IT problems with Single Assessment Process; inter organisational barriers; duplication of notes;	None	Failure of inter agency ICTs a major block.
Metropolitan Older People's Network	Primitive and incompatible IT systems; duplication of notes	New register on End of Life Care filled in manually.	Failure of cross organisational IT systems.

Table 4 Leadership

Network	Leadership Configuration	Boundary spanners	Skills base	Style
Genetics Knowledge Park 1	Generally individualised, centred on Network Director; no deliberately constructed management team - team representative of research themes.	Network Director, supported by others.	Building credibility; Network Director had background in scientific research.	ND - Personable, focussed, inter personal contact; did unpleasant work (upwards reporting).
Genetics Knowledge Park 2	Individualised; long standing network founder	Largely absent	High social capital; visioning; weaker at operational level.	Maverick; few local linkages; stable.
County Cancer Network	Mixed team: trio	Network and Medical Directors	Well functioning team;	Hard working; engaged; committed; quality led; soft/hard balance.
Urban Cancer Network	Mixed team – trio	High impact Medical Director; Network Manager	Well functioning team; strong vision and conceptualisation.	Enthusiasm; quality orientated; soft/hard balance.
Metropolitan Sexual Health Network	Phases – from small team; through individualised; back to small team.	High impact Clinical Director; small leadership grouping; mixed boundary spanning capability.	Strong on service improvement; target meeting; research.	Oscillates – strong emphasis on hitting key targets.
Regional Sexual Health Network	Overloaded individual PCT manager.	Individual leader.	Consultative	Participative, inclusive, well embedded, lacks connections to clinicians;
Regional Older People's Network	Overloaded individual SSD manager at top; also collective social movement from below.	Not yet well developed.	Consultative	Trying to build consensus and develop an agreed strategy
Metropolitan Older People's Network	Various clinical champions, notably nurses.	Small group of nurses and GPs; link to care homes.	Clinical credibility; strong education and training base.	Inclusive, strong quality values; service improvement.

Table 5 Organisational and Interorganisational Learning

Network	Learning Pattern	Commentary
Genetics Knowledge Park 1	Very limited; no joint intellectual fora; continuing epistemological differences.	Narrow focus on implementation; weak processes to discuss and resolve differences between groups; yet a university setting!; both epistemic and organisational boundaries.
Genetics Knowledge Park 2	Some internal learning but weak inter organisational learning; no joint intellectual fora; continuing epistemological differences.	A public health 'enclave'; yet a university setting!; retreat into base academic disciplines; both epistemic and organisational boundaries.
County Cancer Network	Strong on organisational learning; Network Executive Board diffuses information; learning in subgroups.	
Urban Cancer Network	Strong organisational learning (i) redesigning organisational processes (ii) sharing information and expertise across boundaries (iii) promoting learning in smaller groups.	Note ability to reflect on past events and to change the process; also develops a theory of how network adds value.
Metropolitan Sexual Health Network	Reasonably high; examples of cross boundary sharing; large scale Research Day.	Note mixed large scale research arena as a learning space.
Regional Sexual Health Network	Mixed: some examples in the strategic group but weak connection to the field or systemic learning.	
Regional Older People's Network	limited learning in core management groups; some wider learning through older people's champions; overloaded agenda and learning crowded out.	Enduring tensions between different professions and agencies (health/social care); 'cliques'; few systems for shared learning.
Metropolitan Older People's Network	Strong on collective organisational learning; strong education and training emphasis.	Vulnerable to exit of independent sector provider – loss of learning.

Table 6 Epistemic Communities of Practice and Object Orientations

Community	Epistemic Affiliation	Organisational Affiliation	Source of credibility	Object Orientation
Medical Professors	Medicine	University	Biomedical publications and research grants	Epistemic (academic)
NHS Doctors	Medicine	NHS hospital	Delivering and developing NHS services and patient care	Technical (practical)
Academic Scientists	Biology	University	Biomedical publications and research grants	Epistemic (academic)
NHS Scientists	Biology	NHS Labs	Maintaining credibility for reliable testing and NHS 'market share'	Technical (practical)
Social Scientists	Social Science	University	Social science publications and research grants	Epistemic (practical)
Policy	Policy (various)	DH (and various)	Delivering demonstrable policy outcomes	Governable (technical)
NHS Commissioner	Management (finance)	NHS PCT	Delivering NHS services within budgets	Governable (technical)

Appendix 2 Intermediate outputs from the study

Conference and Working Papers

Ferlie, E., FitzGerald, L. and Turrini, A. (2009) 'Turning Compassion into Results in Public Management Networks: The Complexities of Performance Assessment', accepted and under preparation, EGOS Conference, Barcelona, July 2009.

FitzGerald, L., McGivern, G., Ferlie, E. and S. Dopson (2009), 'Organisational Networks in the NHS – can they deliver improvements in health care?', Paper for EGOS Conference, Barcelona, July, accepted and under preparation.

McGivern, G. and Dopson, S. (2008) 'Inter Epistemic Power and Object Processes in a Biomedical Network', paper currently under review with Organisational Studies.

Presentations

Banaszak-Hall, J. (University of Michigan) and FitzGerald, L. (organisers) 'Symposium on Organisational behaviour in Health Care –Diverse Perspectives and International Dimensions', Academy of Management Conference, Chicago, Ill, Aug 2009. This will include the presentation:

FitzGerald, L., Ferlie, E., McGivern, G. and Dopson, S. 'Organisational Networks in Health Care – What Can They Deliver?'

Dopson, S. and McGivern, G. (2007) 'Lost in Translation? Innovation in the Oxbridge Genetics Knowledge Parks', Academy of Management Annual Meeting, Healthcare and Technology Management Symposium on the Translation of New Genetic Health Technologies, August, Philadelphia, USA.

Dopson, S. (2008) 'Why is change so difficult in the NHS?', Seminar given to the Seminar Series 'Medical Innovation – Enabling Change in the NHS and Beyond', University of Oxford.

Dopson, S, and McGivern, G. (2008) 'Lost in Translation – Innovation in the Old University Genetics Network', the Oxford Workshop on Professions and Programmes, Saïd Business School, Oxford.

FitzGerald, L. (2009) 'Can change be delivered through HRM? Case Examples from a Struggling NHS', L. FitzGerald, E. Ferlie and P. Hyde, Invited seminar at Radboud University, Netherlands, 4 Feb 2009.

FitzGerald, L., Ferlie, E., Dopson, S., McGivern, G., Bennett, C. and Griffin, R. (2009) 'Hard Work under New Labour? The Curious Case of Cancer

Networks' HRM Department/Health Policy Research Unit seminar series,
Leicester: De Montfort University, 13 March

FitzGerald, L., Ferlie, E., Dopson, S., McGivern, G., Bennett, C. and Griffin,
R. (2009) 'Cancer Networks – Reconfiguring Cancer Services', Health Policy
Research Unit seminar series, Leicester: De Montfort University, April 22

McGivern, G. and Dopson, S. (2007) 'Lost in Translation? Innovation in the
Oxbridge Genetics Knowledge Park', 23rd EGOS Conference, July, Vienna,
Austria,

McGivern, G. et al (2008) 'Networks, Professionals and Governmentality in
the NHS', Presentation at Conference on 'Public Sector Reform – New Forms
of Governance', LSHTM.

McGivern, G. and Ferlie, E. (2008) 'Control Systems in Healthcare Networks
– Cage Plus Gaze and Professional Enrolment?', 24th EGOS Conference,
July, Amsterdam, Netherlands.

McGivern, G. and Ferlie, E., 'Managed Clinical Networks Study', To Darzi
Review Clinical Working Group on Networks, London: Royal Marsden
Hospital, Nov 2008.

Appendix 3 Feedback from the Final Dissemination Conference

We made summary notes on flipcharts during plenary discussions with delegates at the final dissemination workshop held on 14 May 2009 at the Department of Management, King's College London. These are reproduced here in slightly edited format:

Key Advantages of Network based working?

- May increase access across a health economy;
- Opportunity to look at the whole patient pathway;
- Greater consistency, clarity of decision making and transparency;
- Opportunities around commissioning;
- Can create buy in to vision – people won't walk away.

Key Disadvantages of Network based working?

- can be very closed;
- term now has particular connotations. Rebranding?
- Cost a lot of money/value for money/what is the value added?
- Not always a clear purpose;
- Single disease focus – what about co morbidities?

What might be our advice to policy makers?

- Dangers of over formality;
- May stifle innovation – need some local freedoms;
- Leadership and teams – need time and support to develop;
- Allow different network forms;
- Think about terminology carefully.

The three level model

Macro:

- EBM/NSFs are important but not equally so in all areas;
- More powerful when they are translated into precise performance metrics (e.g. cancer);
- How do the localities interpret local guidance?

Meso:

- Where does the glue in networks really come from?
- Need impetus – a bit of disruption can help (grit makes pearls);
- Network needs to be neutral between stakeholders and be seen to be.

Micro:

- Overall analysis of leadership seems accurate;
- User involvement is another lever which can be used to influence consultant behaviour.

Appendix 4 'Core' interview pro forma

This basic schedule was used (with slight customisation for specific sites) for all case study interviews.

Common Networks Interview Protocol (Final draft)

Personal Role

1. What are your job title and key tasks?
 - Which organisation(s) are you employed by?
 - Which network(s) are you involved with?
 - What role do you play within the network(s)?
 - (How) has the network changed the way you work?

Network purpose and structure?

2. What do you understand to be the purpose and structure of the network?
 - Is this clear/ explicit?
3. Who are the key stakeholders (orgs, groups) within the network?
 - Do you think any stakeholders are excluded?
 - What relationship did these stakeholders have *before* the network existed?
4. Who are the key individuals within the network
 - Most influential?
 - With whom you relate to most frequently?
 - With responsibility for managing the network (e.g. individuals, NMT, board)?
5. (How) has the network changed since you first became involved with it?
6. (How) does the network structure fit with the organisations it links?
7. Are there formal (contractual) agreements between members of the network (or is membership informal)?
8. How do contracts, NSFs, targets, payment regimes affect the network?
 - Does the network operate outside/beyond these formal aims?

Decision-making, implementing change and leadership

9. How are priorities/goals decided within the network?
 - Which are the most influential individuals, groups, organisations within the network? (*prompt* if medical professionals and/or patients not mentioned)
 - Who is responsible for these priorities?
 - Are these decisions linked with commissioners?
 - Is decision-making consensual? Or imposed?
10. (How) do decision-making processes within the network relate to those within the organisations that networks link?
 - What linkages are there between the network and bodies like the SHA, NICHE, DoH or PCTs?
11. How does the network develop the capacity and motivation to implement decisions?
12. To what extent are decision-making and the implementation of change affected by:
 - (i) control over resources (e.g. budgets/time)
 - (ii) subjectivity - the way people think about practice (its norms, meanings, discourse, institutions)

- (iii) Legislation/ hierarchical/ managerial authority
13. Does the network have effective leadership?
- What are the characteristics of good (and bad) network leadership?

Collaboration/Innovation/Learning/Knowledge-sharing/Trust

14. (How) is knowledge and best-practice shared within the network?
15. (How) does the network facilitate collaboration/ sharing/learning across (e.g. organisational/professional) boundaries?
- What are the factors which facilitate and retard this?
16. What is the role of trust within the network?
- How do you build/break trust?
17. How do you decide whether to trust members of the network?

(prompt if necessary: sharing common goals, interests, morality, identity, communities of practice, epistemology friendship, reputation, association [with individuals, orgs, groups])

Overall impact of network

18. Do you think the network is achieving its purpose?
- In what way(s)?
 - What factors have contributed to this?
19. In your opinion, what are the network's major achievements?
- What were the reasons for these happening?
20. In your opinion, what were the main problems with the network?
- Why did these occur?
21. Has the network led to improved patient care?
- Clinical outcomes?
 - Equity?
 - Continuity of patient care?
 - Knowledge sharing and innovation?
 - Access?
 - Speed of care?
 - Is there any data to support this?
22. Have you been involved with any other networks? And if so, how does this network compare with them?
23. So in summary, what are the main strengths and weakness of networks?
24. Are there any other comments you would like to make?

Appendix 5 The case study template

This case study template was agreed in team discussion and used as a common structure within which case writers were asked to write up each pair of case studies in an initial source document (four in all).

1. Policy background
2. Methods used in the case study – data sources
3. The key characteristics of the network
4. Management roles, relationships and management style
5. Processes, systems, practices and governance
6. The story over time, including the tracer issues
7. Assessment of network performance
8. Factors affecting the performance of the network
9. Role of ICTs
10. Summary of the case – key points for analysis
11. Reflections across the pair of cases and links to theory – which theories reviewed earlier were strongly evident in the pair of cases? Did any new theories emerge inductively from the data?
12. Implications for policy and practice

Appendix 6 Matrix of Respondents

Roles/Professions of Respondents	Genetics Knowledge Park 1	Genetics Knowledge Park 2	County Cancer Network	Urban Cancer Network	Metropolitan Sexual Health Network	Regional Sexual Health Network	Regional Older Peoples Network	Metropolitan Older Peoples Network	Total
Senior NHS Managers (Inc. Medical Directors)	2	3	5	5	3	3	0	0	21
NHS Managers	0	1	3	5	6	5	3	1	24
Doctors (Acute)	4	2	7	7	6	2	2	0	30
Doctors (Primary Care)	0	2	1	1	0	0	1	4	9
Nurses	0	0	3	6	5	1	2	11	28
Scientific staff (inc. Social Scientists)	6	1	0	0	0	0	0	0	7
University Staff	4	4	0	0	0	0	0	0	8
Senior LA Managers	0	0	0	0	0	0	3	0	3
LA Managers	0	0	0	0	0	2	5	0	7
Social Workers	0	0	0	0	0	1	1	1	3
Voluntary Sector Managers	0	0	0	0	0	5	1	0	6
Voluntary Sector Staff	0	0	0	0	0	3	0	0	3
NGO/Private Sector Managers	0	0	0	0	0	1	1	0	2
Others (Technical Support, Admin., etc)	0	0	1	1	0	2	1	1	6
Patient Representatives	2	0	2	2	4	0	0	0	10
Total	18	13	22	27	24	25	20	18	167

NB: *We have not included a similar matrix for the 61 Policy interviewees (46 for this study and 15 in the early Genetics Knowledge Park1 study - see Chap. 4.3) in order to protect their anonymity. Also the 54 interviews undertaken earlier (see Chap. 4.3) in GKP 1 are not included in this matrix, thus the total number of case interviews on which this report is based is 167. When the 61 policy interviews are also included this makes a total of **228** interviews.*

Disclaimer:

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Addendum:

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The management of the SDO programme has now transferred to the National Institute for Health Research Evaluations, Trials and Studies Coordinating Centre (NETSCC) based at the University of Southampton. Although NETSCC, SDO has conducted the editorial review of this document, we had no involvement in the commissioning, and therefore may not be able to comment on the background of this document. Should you have any queries please contact sdo@southampton.ac.uk.