Comparative evaluation of children’s services networks: Analysing professional, organisational and sector boundaries in Paediatric Nephrology, Children’s Safeguarding and Cleft Lip and Palate Networks

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Contents

Chapter 1 Introduction ...............................................8
1.1 Cumulative Research: Building upon SDO Research ..........8
1.2 Report Structure ......................................................8

Chapter 2 A Summary of Literature and Research Questions ........................................10
2.1. The Structural Solution of Networks .......................10
   2.1.1 The Policy Context ............................................10
   2.1.2 What are networks the solution to? ......................10
   2.1.3 Types of network .............................................11
   2.1.4 The Institutional Challenge .................................12
   2.1.5 Performance Metrics .........................................12
   2.1.6 Key Research Questions ...................................13
2.2 Prescriptions for Networks: Complementing Structure with Process Change ..........13
   2.2.1 Leadership Processes and Networks ....................13
   2.2.2 Knowledge Management Processes and Networks ..17
2.3 Summary: Process and Structural Change ......................23

Chapter 3 Research Design ......................................24
3.1 The Comparative Case Method ..................................24
3.2 Data Gathering Techniques .......................................25
   3.2.1 Social Network Analysis ....................................26
   3.2.2 Qualitative Methods ..........................................29
   Table 3.2.2 (i) (a) Network Staff and Interviews Cleft Lip and Palate Network ............29
   Table 3.2.2 (i) (b) Observations Cleft Lip and Palate Network ................................30
   Table 3.2.2 (ii) (a) Network Staff and Interviews Paediatric Nephrology Network ......31
   Table 3.2.2 (ii) (b) Observations Paediatric Nephrology Network ..........................32
   Table 3.2.2 (iii) (a) Network Staff and Interviews Local Safeguarding Children’s Board .......................................................33
   Table 3.2.2 (iii) (b) Observations Local Safeguarding Children’s Network ...............34
   3.2.3 Historical Case Analysis .....................................34
   3.2.4 Health Economics Analysis ..................................35
   3.2.5 Data Analysis ....................................................36
   3.2.6 Research Design Limitations .................................36
Chapter 4 Case Study 1 - Cleft Lip and Palate Network ................................................. 40
  4.1 Introduction to Cleft Lip and Palate Network ................................................. 40
    4.1.1 Why Mandate Cleft Lip and Palate Networks? .................. 40
  4.2 The Structural Arrangements of Queenton Cleft Lip and Palate Network ................................. 42
  4.3 Early Days: Re-organisation within the Hub .................................. 45
  4.4 Leadership of the Cleft Lip and Palate Network .......................... 46
    4.4.1 Social Network Analysis: Leadership Patterns .................. 46
      Figure 4.4.1 (i) Social Network Analysis for Leadership Influence ........................................ 47
      Table 4.4.1 (i) Centrality Measures ........................................ 47
      Table 4.4.1 (ii): Normalised Centrality Measures .................. 48
      Table 4.4.1 (iii): Descriptive Statistics for Each Measure ...... 48
    4.4.2 Leadership Aligned with Professional but not Organisational Hierarchy .................. 49
    4.4.3 Leadership Aligned with Organisational but not Professional Hierarchy .................. 51
    4.4.4 Leadership Alignment with Professional and Organisational Hierarchy .................. 53
  4.5 Knowledge Management ............................................................................ 56
    4.5.1 Social Network Analysis of Knowledge Exchange .................. 56
      Figure 4.5.1 (i) Diagrammatic Representation of Knowledge Exchange Patterns .................. 57
      Table 4.5.1 (i): Relative Brokerage (raw scores divided by expected values given group sizes) .... 58
    4.5.2 Organisational and Geographical Boundaries .......................... 58
    4.5.3 Professional Boundaries .................................................... 62
    4.5.4 Situated Knowledge Exchange .............................................. 64
  4.6 Analysis of the Regional Cleft, Lip and Palate Network .................. 66
    4.6.1 Analysis of Network Structure ............................................ 66
    4.6.2 Analysis of Network Leadership Process .......................... 68
    4.6.3 Analysis of Network Knowledge Exchange Process ............ 70

Chapter 5 Case 2 - Paediatric Nephrology Network ........................................... 73
  5.1 Introduction to the Paediatric Nephrology Network .......................... 73
    5.1.1 Professional Association Recommendations .................. 74
    5.1.2 Network Growth and Development .................................. 75
    5.1.3 Network Staffing ....................................................... 75
    5.1.4 Network Functioning .................................................... 75
    5.1.5 Transitioning from Queenton C to Queenton Q .................. 76
  5.2. Leadership in the Paediatric Nephrology Network .......................... 77
    5.2.1 Social Network Analysis .............................................. 77
      Table 5.2.1 (i) Centrality measures ........................................ 77
      Figure 5.2.1 (i) Diagrammatic Representation of leadership/influence patterns .................. 78
      Table 5.2.1 (i) QAP Correlations ............................................ 79
Figure 5.2.1 (ii) Diagrammatic Representation of formal influence patterns ..................................................... 79
Table 5.2.1 (iii) In-degree influence/Leadership .................. 80
Figure 5.2.1 (iii) Diagrammatic Representation of informal influence patterns ..................................................... 81
Table 5.2.1 (iv) Centrality measures of informal and formal influence networks ..................................................... 82
5.2.2 Concentrating and Distributing Leadership ............... 82
5.2.3 Overcoming Intra-Professional Hierarchies ................. 87
5.3 Knowledge Exchange Processes ................................... 88
5.3.1 SNA Knowledge Exchange ........................................... 88
Figure 5.3.1 (i) Diagrammatic Representation of Frequency of Contacts .................................................................. 89
Table 5.3.1 (i) QAP correlation coefficients between Frequency of contact and relational quality with information sharing, knowledge about sharing resource and referrals ........................................ 90
Table 5.3.1 (ii) Relative Brokerage Role for Information sharing ............................................................... 90
Table 5.3.1 (iii) Relative Brokerage Role for Resource sharing ............................................................................... 91
Figure 5.3.1 (ii) Information sharing network for Nephrology ........................................................................ 91
Table 5.3.1 (iv) Relative Brokerage Role for Referrals ............. 92
Figure 5.3.1 (iii) Knowledge of sharing resources network for Nephrology .............................................................. 92
Figure 5.3.1 (iv) Knowledge about referrals for Nephrology ..... 93
5.3.2 Co-location, Socialisation and Knowledge Exchange ........ 93
5.3.3 Knowledge Brokering Across the Network ..................... 96
5.3.4 Professional Hierarchy and Knowledge Brokering ............ 99
5.4 Economic Analysis of Paediatric Nephrology Network ........ 100
5.5 Analysis of Paediatric Nephrology Network ...................... 103
5.5.1 Analysis of Network Structure .................................... 103
5.5.2 Analysis of Network Leadership Process ...................... 104
5.5.3 Analysis of Knowledge Exchange Processes ................. 106

Chapter 6 Case 3 - Local Safeguarding Children’s Board ................................................................. 108
6.1 Historical Comparison: Area Review Committees .......... 108
6.1.1 Ensuring Change across All Agencies ......................... 108
6.1.2 Distributing Leadership for Healthcare and Social Care Influence ................................................................. 110
6.1.3 Balance Between Central Mandating and Local Level Agency ........................................................................ 112
6.1.4 Professional Representation at Strategic Level ............... 113
6.1.5 Summary of Historical Case ...................................... 114
6.2 The Mandating of Local Safeguarding Children’s Boards ... 115
6.3 Introduction to the Queenton Safeguarding Board .......... 117
6.4 Leadership Process in the Network ................................. 117
6.4.1 SNA Leadership Patterns ........................................... 117
Chapter 6 Analysis of Knowledge Exchange Processes

6.4 Influence Network Analysis

6.4.1 Centrality Measures

- Table 6.4.1 (i) Centrality Measures

6.4.2 Explanations for Patterns of Leadership

6.5 Analysis of Knowledge Exchange Processes

6.5.2 The Role of the Independent Chair in Knowledge Brokering

6.5.3 Boundary Spanners and Co-ordinators

6.5.4 Organisation and Professional Hierarchy

6.6 Health Economics: Local Safeguarding Children’s Board

6.6.1 Cost and Benefit of Local Safeguarding Children’s Board

6.7 Analysis of Local Safeguarding Children’s Board

Chapter 7 Cross-Case Analysis: Network Structure and Processes

7.1 Network Structures

7.1.1 Type of Networks

7.1.2 Aims of Networks

7.1.3 What are Institutional Facilitators and Barriers to Structural Reform?

7.2 Leadership Processes

7.2.1 Patterns of Leadership

7.2.2 Organisational Accountability and Leadership

7.2.3 Professional Hierarchy and Leadership

7.2.4 Role-based Leadership and Person-based Leadership

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7.2.5 Combining Concentration and Distribution of Leadership

7.3 Knowledge Exchange Processes

7.3.1 Patterns of Knowledge Exchange

7.3.2 Developing Architectural Knowledge

7.3.3 Situated Learning

7.3.4 Knowledge Brokering

7.4 Comparative Cost-benefit Analysis of Networks

Chapter 8 Conclusions and Lessons

8.1 Lessons for Policy Makers

8.1.1 Mandating Networks

8.1.2 Process and Structure

8.1.3 Leadership and Accountability in Networks

8.1.4 Contingency Model for Network Structure and Process

8.2 Lessons for Organisational Managers

8.2.1 Concentrating and Distributing Leadership

8.2.2 Human Resource Policies and Practices

8.2.3 Creating Opportunities for Knowledge Brokering

8.2.4 Culture: Cultivating Communities of Practice

8.3 Lessons for Academics

8.3.1 Interdisciplinary Research

8.3.2 Further Research

References

Appendix 1 Glossary of Terms
The Report

Chapter 1 Introduction

1.1 Cumulative Research: Building upon SDO Research

Our study builds upon previous research funded by the NIHR SDO programme of research (Ferlie and McGivern, 2003; Goodwin et al., 2004). It also links to the ongoing research commissioned by NIHR SDO since these earlier reports (Davies et al., 2009; Ferlie et al., 2009; Sheaff et al., 2009). NIHR SDO funded research on networks has highlighted the impact of institutional influences upon networks. In particular, networks seem vulnerable in their implementation to powerful institutional influences, such as power differentials between professional groups, and fragmentation engendered by participants’ orientation towards their employing organisation, rather than the network. In order to more fully understand the impact of institutional influences, our research attends to network processes, specifically leadership and knowledge exchange. Our study encompasses: three purposively sampled primary case studies (cleft lip and palate network, paediatric nephrology network, local safeguarding children’s board), that vary in terms of the number of organisations, professions and the extent to which they are NHS bounded; a historical case study. Our study combines qualitative methods (145 semi-structured interviews and 120 hours observation) over 3 years, with a relatively novel data gathering technique of Social Network Analysis (SNA), to provide a more nuanced understanding of how professional and policy institutions frame patterns of leadership and knowledge exchange in networks that might counter or support structural reform. Linked to this, our study focuses upon the potential for leadership agency and knowledge management to transcend institutional hurdles and so ensure networks are networked. In essence, the theme that drives our research study is that networks need to be networked if they are to realise the potential to address complex health and social care problems. This does not mean we ignore the structural reform itself. Indeed, we comment upon the relative efficacy of mandating networks in meeting the aims of policy, and provide a limited, descriptive health economic analysis of their costs and benefits.

1.2 Report Structure

Following the introduction, we outline our review of literature that frames our study (Chapter 2). At the end of Chapter 2, we present the set of research questions that we used to interrogate our empirical cases. Our research design, we place in chapter 3. Chapter 4 commences presentation of data. Within Chapter 4, we present the Cleft Lip and Palate Network along three inter-related lines; network structure, network process of leadership, and network process of knowledge exchange. A summary of the case follows at the end of the chapter. Chapter 5 follows a similar framework and examines the Paediatric Nephrology Network, and
Chapter 6 examines the Local Safeguarding Children’s Board, and also encompasses our historical case of Area Review Boards, as well as limited, historical health economics analysis. In Chapter 7 (discussion), framed by the literature and research questions at the end of Chapter 2, we move from ‘within’ case analysis to ‘cross-case’ analysis to produce theoretical generalisation from our comparative cases that provides the basis for transferable lessons. In our final Chapter 8, we outline lessons for policy-makers and organisational managers, followed by lessons for academics pursuing a similar multi-disciplinary research agenda as our research team.
Chapter 2 A Summary of Literature and Research Questions

This chapter reviews literature that frames our study of children’s services networks, with a view to establishing relevant research questions through which to interrogate our empirical cases. For those readers that do not wish to read the details of literature, they may wish to go straight to the end of the chapter (section 2.3), where we summarise the research questions relevant to the structure and process of children’s service networks that the literature review generates.

2.1. The Structural Solution of Networks

2.1.1 The Policy Context

Over the past 25 years, governments across the world have sought to transform public services via policy labelled New Public Management (NPM) (Hood, 1991), or Re-inventing Government (Osborne and Gaebler, 1992). Within the public services context of the United Kingdom, network forms of organising public services delivery have enjoyed particular prominence since the election of successive Labour Governments in 1997. We note the tendency to promote networks, rather than markets and hierarchies, represents continuity to some extent between Labour Governments elected since 1997, and the Conservative Governments, which preceded this (at least the Conservative Governments from mid-1990s onwards). We also note both political parties have tended to support the generic transfer of private sector models of management to the public services context, such as networks, leadership and knowledge management interventions. As the largest and archetypal public service, the NHS has been a consistent focus of governance reforms towards network forms of organising, and leadership and knowledge exchange initiatives (Klein, 2006).

However, government policy has remained insensitive to differences in the institutional context, specifically organisational and professional boundaries that may counter policy aspirations towards more joined up delivery of public services. The case of the delivery of health and social care in England exemplifies both the network solution and the challenges of implementing networks for public services more generally.

2.1.2 What are networks the solution to?

A starting point for our analysis is the question – what are networks the solution to? Extant literature highlights four aims of network forms of organising health and social care delivery:

(a) An economic aim: network forms of organising are expected to result in cost efficiencies as constituent stakeholders pool resources (Entwhistle and Martin, 2005);

(b) A social aim: decision-making is co-ordinated and integrated services are created to tackle complex or “wicked issues; i.e. assists in addressing problems that defy the efforts of a single agency (Rhodes, 1997);
(c) A democratic aim: the democratic deficit in society is mediated through a particular emphasis upon the inclusion of users, carers and public voice in networks (McQuaid, 2000);

(d) An organisational learning aim: service development is promoted as knowledge is more effectively exchanged in a context of reciprocal and co-operative relationships within networks (Lorenz, 1989; Thompson et al., 1991).

### 2.1.3 Types of network

From the perspective of public policy, networks are often viewed as part of the larger third way discourse linked to the election of the Labour Government in 1997, and was associated with a number of contemporary ideas, such as ‘modernisation’, ‘governance’ and ‘joined-up working’ (Ferlie and McGivern, 2003; Lowndes and Sullivan, 2004). In the so-called ‘N form’, accountability still rests on compliance with central targets and audit mechanisms but this is increasingly achieved through devolved, shared and enacted networks of responsibility, indicative of more self-control or governmentality (Flynn, 2004; Sheaff et al., 2004). This has involved fostering co-operation amongst policy stakeholders, bringing together different organisations from all public services, all sectors and all areas of government. Upon such logic lies the view that ‘Public management should be seen as network management’ (Kickert et al., 1997: 3).

For individual medical specialties, there has been a growth in managed networks (James and Miles, 2002). Importantly these have a formal management structure with defined governance arrangements, specific objectives linked to strategy and lines of accountability, although not necessarily command of resources (Ferlie et al., 2002). A common example is that of cancer networks, supported by the NHS cancer plan (DoH, 2000). Similarly, managed local networks involve formal administration and aim to co-ordinate the activities of all contributors within a geographical area to work together in delivering integrated pathways of care for the user.

However, as the network form has gained ascendancy, a continuum of network forms has emerged beyond managed networks. This in turn has driven a research agenda concerned to develop typologies of networks in public services predicated upon the question – what is a network? (Ferlie and McGivern, 2003). Broadly, within a more pluralist conception of networks, they can be characterised, on one hand, as relatively top-down and policy driven, and hence managed. On the other hand, networks may derive from bottom-up forces that are more professionally driven. Policy driven network types are:

(a) Managed form of network focused upon knowledge sharing and service development (Bate and Robert, 2002); e.g. Breakthrough Collaboratives.

(b) Managed form of network focused upon service delivery and subject to centralised performance management (Addicott et al., 2006, 2007; Rimmer, 2002); e.g. cancer networks and other regional speciality networks.

(c) Inter-organisational partnerships that encompass private, public and third sector organisations, with a focus upon mutual gains and resource synergies (Lowndes and Skelcher, 1998); e.g. Health Innovation and Education Clusters (HIEC).

Meanwhile, professionally driven networks are:

(d) Communities of practice that are self-organised and based upon common interests with a strong emphasis upon knowledge sharing
(Tagliaventi and Mattarelli, 2006); e.g. Gastro-Enterology Group, described by Currie and Suhomlinova (2006), which represented a local level, bottom up, forum that brought together disparate professionals, organisations and service users.

(e) Professional networks that protect the self-interest and autonomy of members (Currie et al., 2008a; Sheaff et al., 2004; Waring and Currie, 2009); e.g. a clinical ‘firm’.

2.1.4 The Institutional Challenge

Networks are deeply affected by the embedded history of the institutions within which their members carry out their routine work (hence our inclusion of a secondary, historical case, from which we derive parallels with our contemporary, primary cases). Institutions may represent immediate constraints on the possibilities for collaborative actions; e.g. knowledge exchange (Child and Heavens, 2001). The institutional challenge to develop and implement network forms of organising children’s service delivery encompasses a policy challenge (2.2.1(ii) (a)) (Hudson, 2004; Kirkpatrick, 1999; Newman, 2001); and professional challenge (2.2.1 (ii) b) (Ferlie et al., 2005) as follows:

Organisational fragmentation may also characterise networks because the affiliation of network participants is orientated towards their accountability within their employing organisation rather than the network. Networks by definition consist of many organisations, some of which may compete for resource to deliver health and social care services, and others positioned in commissioner-provider relationships.

Professional jurisdiction and socialisation means professionals orientate towards their own silos, rather than collaborate. Divisions between primary care and hospital doctors and, more broadly, between health and social care professionals, stymies integration in particular.

Finally, linking policy and professional challenges, there is the risk that, in mandating networks, policy undermines the very essence that makes the network work. Networks rely for their effectiveness upon their voluntaristic, informal and organic nature: i.e. the latter may exist as ‘practice’ networks, and may be destroyed by new ‘managed’ networks, and/or may hinder the development of ‘managed’ networks (Addicott et al., 2006, 2007; Bate, 2000).

In short, networks are framed by patterns of accountability for participants that are driven by other policy structures, and patterns of professional power that are longstanding., so that networks co-exist with more hierarchical and marketised forms of organisation (Newman, 2001), which influence the extent to which networks are networked. Within the empirical presentation of our network cases (Chapters 4-6), we reflect upon whether and how network forms of organising effectively address the institutional challenges.

2.1.5 Performance Metrics

Networks in health and social care may be costly; e.g. in co-ordination, space and time resources. As their number rises, it is important within a resource limited health and social care system, to evaluate whether or not networks offer value for money and are a cost-effective means of improving health. As an example of costs involved, since 2001, the network management teams in the NHS Cancer Networks have received £40,000 per year for support costs (National Audit Office, 2005: 25). Whilst this is not
much per network, across all networks this will amount to many millions of pounds that could have been spent in other ways to improve the nation’s health. Measuring the costs and benefits of networks is, however, inherently difficult and often focused upon process rather than outcomes (Layard and Glaister, 1994). As a result it is, perhaps, not surprising that there is little published economic evidence. Our study makes a further attempt to evaluate networks from a health economics perspective, but may be limited by those factors, such as accessibility to accurate cost information, imputing benefits, and what one might compare the network with.

2.1.6 Key Research Questions

(i) What are the aims in the implementation of network forms of organisation for the delivery of health and social care?
(ii) Are these aims met?
(iii) What types of network develop?
(iv) What are the institutional facilitators and barriers to structural reform?
(v) What are the costs and benefits of networks?

2.2 Prescriptions for Networks: Complementing Structure with Process Change

As highlighted above in section 2.1.4, the critique of network forms of organisation has focused upon the insufficiency of the structural solution in the face of significant institutional challenges. On the one hand, accountability of network participants may remain orientated towards their employing organisation, rather than the network. On the other hand, even should policy exhibit consistency, informal structures of professionals’ collective schemas of understanding and action are the main determinant of organisational behaviour. In essence, the argument is that networks need to become more network-like in their operation. Thus, structural change needs to be accompanied by process change. Such process change might focus upon leadership and knowledge exchange processes. We review literature related to leadership and knowledge exchange processes in turn within the next sections of our report.

2.2.1 Leadership Processes and Networks

Alongside structural change, government policy globally has converged upon effective leadership as a panacea to improve the performance of organisations delivering public services (Hennessey, 1998; Kakabadse et al., 2003; Martin et al., 2009b). Two models of leadership are favoured by policy-makers. The first model privileges transformational leadership, with an individualistic orientation (Behn, 1998; Bellone and Goerl, 1993; Eggers and O’Leary, 1995; Hennessey, 1998). A second model views public services organisations as complex, where leadership is distributed beyond the formal leader to a wide range of stakeholders (Denis et al., 1996; 2000; 2001). Critique of government policy argues that policy-makers ignore the wider organisational, social and cultural context in which leadership is enacted within public services organisations (Bryman, 1999; Currie and Lockett, 2007; Currie et al., 2009a, 2009b, 2009c, 2010; Pawar and Eastman, 1997; Porter and McLaughlin, 2006).
2.2.1 (i) Contemporary Policy Models of Public Services Leadership

Reflecting the emphasis of government policy internationally upon leadership of public services organisations (Hennessy, 1998; Kakabadse et al., 2003), in England, since the election of a Labour Government in 1997, policy-makers have held modernising intentions for the delivery of public services. Modernising policy is predicated upon an assumption that the environment for the delivery of public services is turbulent and leadership an urgent requirement to drive necessary change.

In particular, policy-makers believe effective leadership paves the way for the acceptance of a new system of beliefs necessary to turnaround or transform poorly performing public services organisations (Gunter, 2001; Newman, 2001, 2002; Storey, 2004). Leaders of public services organisations, like CEO ‘superstars’ in the private sector, are cast in a heroic, transformational mould and encouraged to exhibit characteristics, such as: charisma; inspiration; individualised consideration and intellectual stimulation; with the leader maintaining a continuous challenge to followers by espousing new ideas and approaches (Bass, 1985; Bryman, 1992; Storey, 2004).

Over time, to extend the reach of transformational leadership influence, policy-makers have sought to promote distribution of transformational leadership beyond a single, ‘heroic’ individual (Currie et al., 2009a; 2009b; 2009c; 2010). In its academic conception, relative to individual leadership, with its long history in theory and practice, distributed leadership is a much more recent idea. It was first suggested by Gibb (1954), but lay dormant until its rediscovery by Brown and Hosking (1986). Since then, the descriptive and prescriptive literature on distributed leadership has blossomed. The boundaries of the concept, however, have been somewhat blurred by the range of different terms employed to describe leadership that extends beyond the individual located within the upper echelons of an organisation (e.g., “collective” (Denis et al., 2001), “shared” (Pearce & Conger, 2003), “democratic” (Bennett et al., 2003: 4), “devolved”, “participative”, and “collaborative” (Harris, 2007: 315). We employ a definition of distributed leadership directly derived from the most cited paper in the area, as a concertive (i.e. representing more than an aggregation of individual acts, with steps initiated by one individual, developed by others through the ‘circulation of initiative’) and conjoint (i.e. synchronising individual acts by having regard to individuals’ own plans, those of their peers, and their sense of group membership) action of a group or network of individuals (Gronn, 2002).

Supporting the implementation of distributed leadership within public services organisations, the Labour Government (1997-current) in England has established a centralised and formalised leadership development system across all domains of public services; e.g. health and social care for children’s services are covered by the National Health Service Leadership Centre, co-located with NHS 3Is at Warwick University, and the National College (for School Leadership and Children’s Services), located at the University of Nottingham. Within these Leadership Centres, there are research, consultancy and education activities aimed at inculcating both transformational and distributed leadership, which include leadership programmes directed towards distributing leadership to professionals and managers at all levels, so that the public services delivery is transformed (see: www.institute.nhs.uk; www.ncsl.gov.uk).

On the basis that ‘complex’ organisations, located in pluralistic settings are characterised by diffuse power and divergent objectives (Denis et al., 1996,
2000, 2001), and given most, if not all health and social care organisations conform to the complex organisation archetype, we agree with the policy emphasis that, for transformational leadership to be effective in health and social care services organisations necessarily requires that it is distributed (Currie et al., 2009a; 2009b; 2009c; 2010; Denis et al., 1996, 2000, 2001). However, as evident in the next sections, the development and implementation of distributed leadership for transformational effect is likely to prove challenging. Policy aspirations for distributing a transformational variant of leadership may prove normative, rather than empirically evidenced.

2.2.1 (ii) Critique of Contemporary Models of Public Services Leadership

As with our institutional critique of network forms of organisation more generally, the implementation of distributed leadership faces institutional challenges related to professions and policy-driven patterns of accountability, as follows:

(a) The Professional Institution

That many health and social care organisations, conform to the professional bureaucracy archetype (Mintzberg, 1979, 1995), has implications for leadership along two inter-related lines:

Firstly, the dominant technical core of professional bureaucracies renders such organisations non-receptive to transformation by others (Pawar and Eastman, 1997). A powerful professional core of staff (e.g. doctors in a health care organisation or social workers in children’s services located in a local government organisation) may exercise significant autonomy over the means and ends of service delivery and self-regulate their activities, with limited scope for leadership intervention outside the ranks of this professional cadre (Friedson, 1994; Hebdon & Kirkpatrick, 2005; Wilding, 1982). This powerful professional core of the organisation are represented by a “leader” drawn from their ranks, but the leader is “first amongst equals”, with a notion of collegiality underpinning decision-making by any leader (Kirkpatrick, 1999; Sheaff et al., 2004); i.e. professional bureaucracies engender professional leadership from its professional core, although this may not be strategically orientated towards the type of organisational change necessary to engender transformational change demanded by policy makers.

Secondly, based upon horizontal and vertical distribution of knowledge and jurisdiction (Abbott, 1988), a professional logic of hierarchy is dominant, which remains essentially paternalistic and authoritarian (Bate, 2000). On one hand, this may facilitate the distribution of leadership amongst the powerful professional core of staff. On the other hand, it militates against leadership being distributed beyond the powerful professional group, due to significant power disparities regarding who can lay claim to knowledge and jurisdiction over expert matters (Fitzgerald and Ferlie, 2006). Specifically, within health and social care, power is likely to be concentrated in doctors, and nurses may struggle to assert their influence upon service delivery. Despite this, it would be an oversimplification to label nurses as subordinates and doctors as leaders in every situation, with some potential for nurses to exert informal leadership influence given their sustained interaction with the patient (Allen, 1997: Hughes, 1988; Svensson, 1996; Wicks, 1998). At the same time, managers may struggle to assert themselves in influencing doctors (Ackroyd, 1996; Currie et al., 2008; Ferlie and Pettigrew, 1996; Ferlie et al., 1996; Harrison et al., 1992). Where health and social care organisations come together to deliver public services, the distribution of power is less clear, particularly between doctors and social workers. Meanwhile, professionals from agencies outside health
and social care, such as police or youth workers, find they are marginalised in leadership influence (Huxham and Vangen, 2000).

(b) The Policy Institution

Leadership in the delivery of health and social care is rendered further challenging because of potential organisational fragmentation that may flow from competition between network participants, or patterns of accountability, whereby participants orientate towards the demands and interests of their employing organisation. In England, fuelled by market-based reforms, there exists tension regarding the presence and form of the state and its intervention at a local level. A tight financial relationship has been created between central government and public services organisations. Those charged with leading public services organisations, including health and social care, are forced to meet short-term targets and make efficiency savings demanded by central government (Newman, 2001). This is also evident in other countries, such as the US, where target-based leadership prevails as a consequence of marketisation and strong performance management regimes associated with public services delivery (Fairholm, 1991; Terry, 1995). For example, the Bush Administration (2001-2009), like current policy in England, orientated managers towards centrally set performance targets, and fostered a competitive climate around this, through publicly comparing performance of units, at the organisational or district levels (Martin et al., 2009a, 2009b). This has implications for leadership of public service organisations because vertical “control and command” structures may prove difficult to supplant with transformational or distributed leadership (Ferlie et al., 2003). There are likely to be consequences for those leading networks, who may orientate towards performance targets if the network is subject to these, or orientate towards the demands of their employing organisation in which the network is located, where this is relevant. Meanwhile, similarly, followers may feel more accountable to their employing organisation, rather than the network, and may be reluctant to take on distributed leadership where this is offered.

In sum, the thrust of government policy is towards the distribution of leadership to drive transformational change in health and social care organisations. Such a model is deemed an effective one on the basis that health and social care organisations are “complex” organisations (Currie et al., 2009a; 2009b; 2009c; Denis et al., 1996, 2000, 2001). On the ground, professional hierarchy and traditional power relationships, combined with policy-driven patterns of accountability and self-interest at the local organisational level (rather than the network), may adversely impact upon these policy aspirations for transformational change that transcends professional and organisational boundaries through the enactment of distributed leadership.

As a consequence of professional and policy institutions, we suggest distribution of transformational leadership is likely to be relatively parsimonious within health and social care organisations along the following dimensions. Firstly, leadership will be relatively concentrated within powerful professional blocs who enact operational, rather than strategic, leadership. Secondly, leadership will be relatively fragmented because accountability regimes mean that representatives of constituent organisations within the network pursue organisational self-interest, at the expense of wider network objectives.

2.2.1 (iii) Key Research Questions

(a) What are patterns of leadership within health and social care networks; i.e. are they fragmented, concentrated, individualistic, or distributed?
(b) How might we explain these leadership patterns in relation to institutional context?
(c) Under what contingencies are concentrated, individualistic or distributed leadership patterns appropriate?
(d) How might policy-makers and organisational managers mediate institutional challenges to ensure that leadership patterns fit with the necessities of the context in which health and social care is delivered?

2.2.2 Knowledge Management Processes and Networks

Within the private sector, the exchange of knowledge across organisational and occupational boundaries has become widely accepted as amenable to formal intervention, under the rubric, ‘knowledge management’, in pursuit of improved organisational performance (Swan and Scarbrough, 2001). As with network forms of organisation and leadership prescriptions, generic transfer of models for knowledge management is evident in health and social care (Bate, 2000). The particular objective of formal intervention for knowledge management, consistent with the aims of network forms of organisation for public services delivery, is to address ‘wicked issues’ (complex social problems, which are ill-defined and where any solution lies beyond the remit of any organisation of professional group) (Rittel and Webber, 1973).

2.2.2 (i) Contemporary Models of Knowledge Management

Drawing upon generic models of knowledge management and critique of these (see Currie and Kerrin, 2003 for overview of the critique of generic models for knowledge management), policy and practice interventions to support knowledge exchange can be delineated as follows:

(a) A technical approach to manage knowledge exchange: This is most commonly reflected in ICT based solutions (Davenport and Prusak, 1998; McDermott, 1999; Ruggles, 1998). This approach is characterised by language such as ‘knowledge repositories’ (for example, an intranet). Crucially, its proponents see tacit knowledge, as well as explicit knowledge, as amenable to articulation and codification within a knowledge repository. Belief in the role of ICT for the management of knowledge means that, commonly little attention is paid to broader social and organisational factors (Blackler, 1995; Currie and Kerrin, 2003, 2004). Critics of the technical approach to knowledge management, emphasise the tacit dimension of knowledge as embedded in work practice, which is difficult to capture through a knowledge repository, or even through sophisticated electronic tools, such as web-based chat room. At best, such a ‘knowledge’ repository captures one employee’s attempt to give sense to their experiences and observations to another. However, even this may be doomed to failure because, in the absence of tacit knowledge, the ‘information’ is insufficiently contextualised (Hayes and Walsham, 2000). Employees may be unable to share knowledge because they fail to appreciate the tacit assumptions and values upon which others’ knowledge is based and to develop an understanding of ideas and frameworks different from their own (Boland and Tenkasi, 1995; Mohrman and Cohen, 1995). Allied to this, more critical accounts of knowledge management interventions question the existence of the necessary trust between employees as a key ingredient for effective sharing of knowledge through virtual means (McInerney and Lefevre, 2000). In professionalised organisations, such as health and social care networks, social and human issues appear exacerbated, more so where a
network is geographically dispersed, because a dispersed network may have to rely upon ICT based ways of exchanging knowledge.

(b) Approaches to supporting knowledge exchange that recognise its human and social dimensions: The human and social approach emphasises that knowledge cannot be divorced from its context, with the implication that knowledge exchange is best embedded in work practices; i.e. ‘situated’. In this more situated process, knowledge held by one person informs problem solving by another, typically through ‘communities of practice’, which represent informal social groups formed at work, with a common focus upon a work based problem, in which employees voluntarily participate (Brown and Duguid, 1991; Lave and Wenger, 1991). Employees may be more willing to exchange knowledge here than in organisationally sanctioned interventions in which they are obliged to participate (Storck and Hill, 2000).

Crucially, participation in communities of practice facilitate the development of social capital (understanding, trust and reciprocity) which underpins effective knowledge exchange (Nahapiet and Ghoshal, 1998) – see below for further details of social capital. We highlight that human and social approaches to knowledge management are best suited to networks where participants enjoy a good deal of co-location and where practice brings together disparate disciplines in a co-temporal way; i.e. for dispersed networks, the human and social challenge for knowledge exchange is more significant.

2.2.2 (ii) Critique of Application of Contemporary Models of Knowledge Management to Public Services

There has been significant critique of knowledge management interventions in the private sector. Extant literature highlights inter-related political and cultural barriers, as well as challenges regarding the nature of knowledge, to knowledge exchange. This critique of knowledge management interventions in the private sector is one that appears more pertinent in the domain of health and social care. In the same way that formal intervention regarding structural change towards network and processual change towards distributed leadership, present an institutional challenge, any attempt to formally intervene to manage the knowledge exchange process, whether technical or social, should take account of the institutional context, as detailed below.

Central to our focus upon institutional barriers in health and social care is the existence of occupational, specifically professional boundaries, which stymie knowledge exchange (Currie & Suhomlinova, 2006). The dominance of doctors (Abbott, 1988; Freidson, 1994; Larson, 1979, 1990), the ongoing power differentials between doctors and nurses (Freidson, 1994; Larkin, 1988; Walby et al., 1994), the challenge that managers face in managing doctors (Currie and Procter, 1995), the endurance of intra-professional hierarchies and power relationships, for example between doctors in hospitals and those in primary care, or even narrower stratification within a discipline such as surgery between generalists and specialists (Freidson, 1994), is likely to complicate any effort to exchange knowledge across boundaries. On the basis that new ways of collaborative working within networks impinge on long established jurisdictions, power and resource that frame the practice for a single profession, healthcare practitioners may be unwilling to exchange knowledge. Healthcare practitioners may be also unable to exchange knowledge across boundaries (Currie and Suhomlinova, 2006). Regulatory and normative processes shape the perspectives of healthcare practitioners in such a way that a combination of organisational and professional affiliation adversely affects the likelihood of finding the
“common ground” for collaboration even where different professionals are willing to share knowledge. Divergent education, training, socialisation and career structures for occupational groups adversely influence knowledge exchange because the various professionals delivering a public service have no shared perspective, or language, through which to do this i.e. a cultural dimension of knowledge exchange. Linked to this, the challenge of exchanging tacit knowledge is exemplified within healthcare, rendering ICT based solutions to knowledge exchange even more challenging. Arguably, despite the rise of Evidence-Based Medicine, most health and social care knowledge is tacit and less amenable to articulation and codification that commonly assumed (Dopson and Fitzgerald, 2005). Healthcare professionals expected by policy-makers to exchange knowledge in the delivery of public services through ICT or written forms of communication, such as protocols, may be unable to do so. For example, Gabbay and Le May (2003) describe how GPs make more ‘intuitive’ decisions based upon their experience and a wider appreciation of the particular patient in front of them; i.e. GPs follow ‘mindlines’ not ‘guidelines’ in delivering healthcare. The resort to mindlines may also characterise health and social care decisions in other clinical and psychosocial domains.

In summary, not only do powerful professional groups resist knowledge exchange, where it threatens their interest, but the cultural dimensions of knowledge exchange may mean they are less able to exchange some types of more specialist knowledge outside professional silos. In contrast, generalist or generic knowledge is more amenable to exchange across boundaries (Currie et al., 2008; 2009d; Martin et al., 2009b Waring and Currie, 2009). Professional networks are a fundamental site for knowledge exchange, but knowledge is likely to be shared relatively narrowly within professional groups or epistemic communities, rather than between professional groups (Bate, 2000; Currie and Suhomlinova, 2006; Currie et al., 2009d; Ferlie et al., 2005; Martin et al., 2009b; Waring and Currie, 2009). A key question for practitioners is how the tendency towards silos of knowledge exchange can be mediated.

A particular challenge, given that health and social care is dominated by powerful professions, is to support service user and carer involvement in knowledge exchange for service development. Despite the strong policy orientation towards service user involvement, and arguments that the patient experience should provide part of the evidence base for service development, evidence is weak, both for the widespread creation of meaningful forms of user involvement with real influence, and for the impact of user involvement on professional and managerial practices (Crawford et al., 2002). Service user forums frequently take the form of relatively tokenistic ‘talking shops’, discussing relatively peripheral issues and with little influence beyond unaccountable ‘consultation’ (Allsop and Taket, 2003). The inclination of health and social care participants in networks is to resist the risks and opportunities presented by the extension of functional networks practice to wider constituencies and stakeholder groups (Montpetit, 2003).

Besides the above, public services organisations, including health and social care, face an additional ‘Political’ (with a large ‘P’) challenge to effective knowledge exchange. The economic facet of government policy is particularly evident in England, which may inadvertently compromise the networking of health and social care delivery that policy-makers desire (Currie and Suhomlinova, 2006; Newman, 2001). Structural change towards network forms of organisation in the delivery of health and social care co-exists with markets and hierarchies, as previously discussed, which
may engender competition between network participants, or in the case of commissioner-provider split, an arm’s length relationship between network participants, and this may be combined with a degree of fragmentation within a network as a consequence of pursuit of self-interest by network participants aligned with patterns of local level organisational accountability. In short, constituent individuals and organisations that participate in a network may compete, or at least may diverge in their aims and behaviours, as well as collaborate. On this basis, knowledge exchange might be compromised.

2.2.2 (iii) Component and Architectural Knowledge

Knowledge can be classified as component or architectural (Balogun and Jenkins, 2003; Henderson and Clark, 1990). There have been several attempts under Labour’s modernisation programme (1997-2010) to develop architectural knowledge; e.g. cancer services collaborative, but little evaluation of this. The distinction between component and architectural knowledge is particularly helpful where complex activities draw on multiple specialist domains. It allows analysts to consider how knowledge flows can be optimised, by focusing on linkages between domains rather than on specialist knowledge in isolation. Component knowledge (i.e. distinctive professionally-defined knowledge) is well developed in health and social care, which is a mosaic of component knowledge domains that may be reflected in networks. In contrast architectural knowledge, such as organisation-wide routines and schemas for co-ordinating knowledge domains, is poorly developed. Consequently, separate knowledge domains may co-exist uneasily within a network, since there is little architectural knowledge to unify them. Knowledge brokering and the development of communities of practice represent potential ways in which architectural knowledge can be enhanced. We discuss the knowledge brokering ‘solution’ further below.

2.2.2 (iv) Knowledge Brokering as Effective Network Process

Within this broader agenda, to effectively intervene in the management of knowledge exchange, there has been a more recent focus upon the concept and practice of knowledge brokering across organisational and professional boundaries. Consideration of knowledge brokering has enjoyed particular prominence in health and social care (Canadian Health Research Foundation, 2003; Clark and Kelly, 2005; Dobbins et al., 2009; Lomas, 2007; Van Kammen et al., 2006; Verona et al., 2006; Ward et al., 2009). Extant literature in health and social care focuses mainly upon the brokering of external evidence into practice and remains relatively normative with little empirical evaluation of the implementation of knowledge brokering to deliver up healthcare more effectively (Dobbins et al., 2009). Aligned with the research agenda of our study, we note there is little consideration within knowledge brokering literature about the interaction of social structures with knowledge exchange, and how institutional barriers to knowledge exchange might be mediated (Greenhalgh et al., 2004; Hargadon, 2002). Yet, as detailed below, knowledge brokering seems to offer a potential solution to ensure that processual change supports structural change so that institutional challenges are mediated and that network forms of organisations are indeed networked.

(a) Different Levels of Knowledge Brokering

Knowledge brokering activity is located at different levels. At an individual level of brokering, a key employee may engage in the necessary boundary-spanning work across organisational and occupational boundaries to ensure
effective knowledge exchange. For example, a senior nurse might broker knowledge between different professionals engaged in the delivery of care.

At the group level of brokering, ‘social capital’ (Nahapiet and Ghoshal, 1998) represents a means through which knowledge exchange is brokered. For example, through situated interactions, participants in a network build up trust and understanding that encourages them to exchange knowledge.

At the organisational level of brokering, boundary spanning organizations may develop. For example, networks in general, exemplified by one of our empirical cases, Local Safeguarding Children’s Board, represents a boundary organisation that brokers knowledge

(b) What Do Knowledge Brokers Do?

Much of the literature on knowledge brokers in health and social care focuses upon the individual level; i.e. who within the network acts as a knowledge broker. Much of analysis at the individual level applies to the cases of group and organisational level knowledge brokering.

“Knowledge brokers” facilitate knowledge exchange through using their in-between vantage position to connect, recombine, and transfer to new contexts otherwise disconnected pools of ideas: i.e. they get the right knowledge into the right hands, at the right time (Hargadon and Sutton, 2000; Verona et al., 2006). A brokerage role allows those in linking positions to mediate the flow of resources or information between two other unconnected actors (Burt, 1992). The brokerage role can be delineated into a number of roles (Fernandez and Gould, 1994):

‘Liaison’: where they broker knowledge across different groups, neither of which they are members of;

‘Representative’, where a senior member of a group delegates the brokering role of external knowledge to someone else in the group;

‘Gatekeeper’, where the broker screens external knowledge to distribute within their own group (a slight variation of representation, but which Fernandez and Gould suggest is more prone to filtering of knowledge by the broker aligned with self-interest) ;

‘Co-ordinator’, where all the actors, including the broker and the source of knowledge, are in the same group;

‘Itinerant broker’, where the broker mediates between actors in the same group, but where the broker is not part of this group.

Effective knowledge brokering may be due to a structure or role, which is substitutable, should a knowledge broker leave. Alternatively, knowledge brokering may be less role-based and more person-based, in which case knowledge brokering is less substitutable. In the latter situation, social capital is likely to underpin the effectiveness of knowledge brokering activity (Lin, 1999, 2001).

(c) Knowledge Brokering at the Group Level

The development of social capital within a network or community requires that actors are connected to each other (structural dimension), understand each others’ perspectives (cognitive dimension) and trust each other (relational dimension) (Nahapiet and Ghoshal, 1998). Social capital both affects, and is an effect of situated interaction between actors; i.e. social capital may be developed through exchanging knowledge in real time as actors engage in their occupational practice, and such interaction may depend on social capital in the first place (Lave and Wenger, 1995). Situated interaction allows tacit knowledge to be more easily exchanged,
since unlike explicit knowledge, the former is embedded in practice itself and is not amenable to articulation or codification (Polanyi, 1966). Knowledge brokering is crucial for the more contextualised nature of tacit knowledge, compared to the more generic nature of explicit knowledge. Social capital, in which a group of knowledge brokers may be embedded, provides an antecedent or ‘glue’ for brokerage to overcome any ‘stickiness’ of tacit knowledge across occupational and organisational boundaries (Burt, 2001; Hargadon, 2002).

(d) Knowledge Brokering at the Organisational Level

Extant literature has also examined the role of the boundary-spanning organisation in the brokering of knowledge (Hargadon and Sutton, 2000). However, this has mainly taken place in competitive situations and focused on innovation gains from sharing research and development across private sector organisations, although in some cases inclusive of university research and innovation activity. In this light, boundary spanning organisations are portrayed as ‘trusted intermediaries’, whose role is act as a non-partisan mediator that facilitates co-operation between parties and maintains a co-ordination role over time. Knowledge brokers at the organisational level have a social-integrative function and mediate divergent interests by focusing on organisational mechanisms and processes that enable collaboration, and in so doing, they selectively broker knowledge to induce collective action and enhance co-operation amongst network constituents (Fligstein, 2001; O’Mahony and Bechky, 2008; Obstfeld, 2005; Perkmann, 2009; Pielke, 2007; Rai et al., 2008). As earlier outlined, our empirical case of the Local Safeguarding Children’s Board particularly represents a potential organisational level knowledge broker.

(e) Contingencies for Knowledge Brokering

A key article framing our analysis of knowledge brokering is that of Shi et al. (2009) on the basis it takes a contingent view of knowledge brokering and is concerned with the translation of the concept of knowledge brokering into practice. Shi et al (ibid.) highlight that some knowledge brokering roles will more or less effectively broker knowledge to enhance organisational performance. Particularly relevant is that the knowledge broker may need to be affiliated with the group that they are seeking to broker knowledge into, for this enhanced performance effect. Linked to this, the political dimension of knowledge brokering has been under-researched; i.e. the question of who has the legitimacy for others to accept their knowledge brokering role. Implicit within this analysis is that social capital is crucial to effectively discharge a knowledge brokering role.

Reflecting generic assertions about the importance of social capital or relationship quality for knowledge brokering, effective knowledge brokering in healthcare is facilitated, first, by the existence of organisational structures and human resource policies and practices that link knowledge domains and actors laterally (Currie and Procter, 2005); i.e. structural dimension to social capital. This aligns with more generic prescriptions for supporting knowledge exchange across professional and organisational boundaries through human policies and practices that highlight the need for long-term development of skills, culture and capabilities (Currie and Kerrin, 2003; Scarbrough and Carter, 2000). Second, co-location and frequent interaction that build high trust relationships represent a prerequisite for effective knowledge brokering at the healthcare system level (Bowen et al., 2005; Dobbins et al., 2009; Landry et al, 2000). More generally the effect of the cultural context or climate within healthcare organisations impacts
upon knowledge brokering (Pettigrew et al., 1992; Waring and Currie, 2009); i.e. relational dimension to social capital. Third, effective knowledge brokers in healthcare possess expertise related to the knowledge domains between which they are brokering and are, consequently, more likely to understand others’ perspectives (Dobbins et al., 2009); i.e. cognitive dimension to social capital.

2.2.3 Key Research Questions
(i) What are patterns of knowledge exchange within health and social care networks?
(ii) What are the facilitating and limiting contextual features for knowledge exchange?
(iii) What technical and social approaches to the management of knowledge exchange are evident and how effective are they?
(iv) Who are knowledge brokers and what do they do?
(v) To what extent and how is knowledge brokered at group level and organisational level?
(vi) What are the facilitating and limiting contextual features for knowledge brokering at individual, group and organisational levels?
(vii) How might policy-makers and organisational managers mediate institutional challenges to ensure that brokerage meets the necessities of the context in which health and social care is delivered?

2.3 Summary: Process and Structural Change

Extant literature emphasises that an institutional challenge exists regarding the development and implementation of health and social care networks that cross organisational and professional boundaries. In the face of such institutional challenges, structural change is highlighted as insufficient. Network structures can be implemented but, in the face of network processes, specifically leadership and knowledge exchange, that reflect professional and policy driven patterns of accountability and self-interest, collaboration is stymied. In short, networks may not be networked. Consequently, in the face of these environmental influences upon networks, as well as attending to structural change, policy-makers and organisational managers need to consider how to intervene effectively regarding network processes in the realm of leadership and knowledge exchange. Respectively distributed leadership and knowledge brokering represent processes consistent with network forms of organising. Consideration of these issues and prescriptions frame our empirical analysis of our 3 primary case studies and 1 historical case.
Chapter 3 Research Design

Our research design is aligned with our theoretical and empirical focus upon institutional, as well as organisational context, and individual agency (i.e. different levels of analysis). We adopt mixed method approaches (combining SNA and traditional teamwork methods of interview, observation and documentary analysis) to comparatively analyse three primary empirical case studies and one secondary, and historical, empirical case study. To examine performance, we complement the above, with a health economics analysis of costs and benefits of our primary empirical cases.

3.1 The Comparative Case Method

The aim of our study was to generalise theoretically with data gathered through comparative case studies. The need for case studies to deepen understanding of organisational phenomena is widely acknowledged. In particular case studies are appropriate where there is an emphasis upon understanding processes alongside their organisational context. We selected cases so that individual cases could be used for corroboration of specific propositions, patterns could be perceived more easily and chance associations eliminated. By piecing together the individual patterns, the researcher can thus build a more complete theoretical picture (Eisenhardt, 1989, 1991; Yin, 1994). Specifically, three comparative primary empirical cases were sampled aligned with our research questions that focused on the policy and professional institutions, as follows:

Case 1: The Cleft Lip and Palate Network is a mandated network driven by top-down policy requirements, which was surgically dominated network but nursing led
Case 2: The Paediatric Nephrology Network is a non-mandated network led by a specialist physician in a tertiary specialist centre
Case 3: Local Safeguarding Children’s Board is a mandated cross-agency network (health, social services, police, education) led by community based practitioners

The three primary empirical cases were complemented by a fourth secondary empirical case, with a concern to identify the historical continuity of the professional institution. Case 4 represents organisational arrangements for safeguarding of children that preceded the implementation of Local Safeguarding Children’s Boards, called Area Review Committees (ARCs). This fourth case has a range of embedded cases within a publicly available dataset produced through a research programme led by one of the Co-Investigators (Dingwall, 1983), which is archived at the Wellcome Trust. This research investigated the interaction between health, welfare and legal agencies with particular reference to cases considered for care proceedings under section 1 (a-c) of the 1969 Children and Young Persons Act. The first phase of the project studied twenty such child cases in depth. The collected data included observation of case conferences and court hearings; interviews with key participants; and summaries of case records plus observations of meetings of the local ARC. The study presents...
a detailed empirical investigation into relationships within and between health, welfare and legal agencies involved in the care and custody of children thought to have been abused or neglected.

Each primary empirical case and the secondary, historical case was carefully chosen to serve a specific purpose within the overall scope of inquiry, so that a theoretical sampling logic was followed. In short, cases were selected to show sufficient variation in the contingencies of network structures and processes. To ensure appropriate case selection, before data gathering commenced, the Principal Investigator (Currie) carried out exploratory interviews with network leads in each case, which also encompassed the dual aim of securing access to empirical cases, when funding was awarded to support the research programme. However, readers should note our data gathering efforts were compromised in the case of Cleft, Lip and Palate because of changes in leadership and ongoing ‘political’ problems in the network that we regard as indicative of relative failure of the network form of organisation in this case (see Chapter 4 of the report). Specifically, whilst able to carry out a significant proportion of interviews as planned, the problems of the Cleft, Lip and Palate network meant that SNA is constrained, and that health economics analysis was withdrawn in the face of constituents’ concerns these would show the Cleft Lip and Palate Network in a poor light. Thus, readers should interpret our analysis in this case with some caution.

Finally, we highlight that the research protocol was progressed through the local ethics committee, which judged the proposed project as ‘research’ (rather than service evaluation) and relevant organisational research governance. Full ethics and organisational research governance permissions were obtained, following the promise of anonymity and confidentiality to participating individuals and organisations that consented to research (the latter means that we need to exhibit care in the presentation of data to maintain anonymity and confidentiality).

### 3.2 Data Gathering Techniques

Our research design is sequenced as follows. Our study firstly utilised quantitative techniques (social network analysis: SNA), focused more at the level of the organisation (in our empirical cases, a network form of organisation) (undertaken early 2008). Simultaneous to this, we undertook exploratory interviews with key stakeholders (some of whom were interviewed more than once over the course of the research). This generated patterns of leadership and knowledge exchange, with tentative explanations for these patterns, which the research team analysed, cognisant of the literature reviewed in chapter 2. Following this, SNA and exploratory interviews informed fieldwork within our in-depth case studies (mid-2008 to late 2009), within which we carried out interviews and observations, focused more on key groups and individuals that enact leadership agency and exchange knowledge; i.e. individual level of analysis. Note with the Cleft Lip and Palate Network, due to access problems, the interviews took place largely in mid-late 2009 on the appointment of a third Clinical Director over the period of the research. Through the interviews in particular, we seek to understand constraining or enabling structures to agency within the network; i.e. an institutional level of analysis; and how institutions might be mediated; i.e. an individual level of analysis. Meanwhile observations allow us to both validate and elaborate upon claims made in interviews, where leadership agency in particular may be subject to self-attribution claims. We also highlight, that knowledge exchange and
leadership are phenomena situated in practice. Consequently, whilst observation is time consuming, it nevertheless is necessary to engender a nuanced understanding of network processes. In the empirical case of the Local Safeguarding Children’s Board, we preceded our in-depth qualitative fieldwork with analysis of a historical case of safeguarding, set in the late 1970s-early 1980s, to empirically surface the institutional challenges identified in our literature review that we sought to follow through. At the mid-point of the research programme (early 2009), we undertook health economics analysis of two of our primary cases, the Paediatric Nephrology Network and the Local Safeguarding Children’s Board (see section 3.6.2 (i) for explanation of why this was not possible in our third case of the Cleft Lip and Palate Network). This represented a small scale, addition to our research programme, which was linked to one of the aims of network forms of organisation identified in the literature review, that of cost efficiency (Entwhistle and Martin, 2005).

3.2.1 Social Network Analysis

Social network analysis (SNA) is particularly suited to the study of patterns of interaction in health and social care organisations because it is inherently relational and provides methods for analysing both vertical and lateral relations within a network (Balkundi and Kilduff, 2006; Scott, 2000; Uhl-Bien, 2006), and so complements our system level analysis of leadership (Burt, 1992). Our application of SNA extends its current use that focuses upon inter-organisational relations (Provan and Kenis, 2008), through an analysis at different levels that encompasses inter-professional and intra-professional relations (Lazega, 2001; Sparrowe and Liden, 1997).

For the study, we collected social network data on network members. We are interested in the effects of the interactions of the members of this network, thus the boundary for the network is set around these actors. We are interested in the activities occurring at specific times and places such as meetings and otherwise. The initial observations of a couple of their meetings helped us to appreciate the interest purpose and motives of the group and the form or mode of the interactions that took place in the network and so justified our choice of boundary and helped our design of the methods for data collection. However, readers might note the limits of our analysis in this respect; i.e. our focus is relatively tightly bounded.

Since ‘whole network’ information was needed for the SNA, we used the roster method within the survey. That is, the respondents were provided with a list of names of all the members of the safeguarding network, which we generated through exploratory interviews with two key members of the safeguarding board. Respondents could add to this list should they identify a network member omitted. Following which, they ticked the names of members according to network questions that corresponded with our area of interest. This approach is consistent with socio-metric work on network interactions (Balkundi and Kilduff, 2006) and provides reliable data which avoids mono-source bias (Friedkin, 1981). Furthermore, the data can generate measures at the individual level of analysis (e.g., the centrality of each individual) or at the network level of analysis (e.g., the extent to which the network is centralised around a few actors). See Appendix One for a glossary of terms used in SNA.

For the roster method, each member of the group was asked to identify links to every other person for influence, information sharing, and advice on resources sharing. Also, each person was asked to indicate the frequency of contact with every other member of the group and to rate the overall
quality of the relationship. While some have challenged the practice of asking a single socio-metric question to measure a relationship, a review by Marsden (2004) suggests that these measures are reliable when appropriate procedures are followed to help individuals report their network links. The items used in this instance involved pretesting and constructing questions that were highly specific, and which elicited typical patterns of interactions rather than one-time events. Questionnaires were sent out to all network participants in both cases of the Local Safeguarding Children’s Network and Paediatric Nephrology Network and all were returned in both cases (see Table One for details of respondents).

The data collected are cross-sectional and the unit of observation is the relationship between pairs of respondents. For questions that require a rating, the respondents were not required to rate their relationships with people they did not interact with. Thus, not every person has a rating for every other person in the network. These were coded as missing values. We also collected data on each member’s position in their organisation and tenure on the board.

Using the data collected from the socio-metric survey, matrices were constructed to reflect the extent to which each actor was connected to every other actor in the network. The results were arranged in binary matrices, where each cell $X_{ij}$ corresponded to i’s relation to j as reported by i. If i reported a response about j, then the cell $X_{ij}$ was coded as 1; otherwise, the cell $X_{ij}$ was coded 0. The data for frequency of contact and quality of relationship was coded according the values reported.

To understand network processes from a network perspective is to investigate the structural positions occupied by particular individuals in the organisational networks; to look for the patterns of ‘connectivity and cleavage’ in social systems (Wellman, 1988: 26). The study explores network processes and identifies the structural roles that individuals within the network must enact to ensure success. Often success is seen through the individuals’ positions in networks, which is assumed to enhance the networks’ overall performance through the creation of social capital or the ability to take advantage of network connections (Burt, 2005; Bono and Anderson, 2005).

For our study we analyse the three most common features for studies on network interactions, namely centrality, density and core-periphery structure. These are used to explore direct ties adjoining network participants, the pattern of direct and indirect ties within which participants are embedded in the network, and the inter-organisational linkages formed by participants as representatives of organisations, which all contribute to network effectiveness (Balkundi and Kilduff, 2006; Scott, 2000; Wasserman and Faust, 1994).

We used UCINET (Borgatti, et al, 2002) to compute these measures (see Appendix 1 for a glossary of terms). Centrality measures show the least and most central actors. If an actor receives many ties, they are often said to be prominent, or to have high prestige (see Wasserman and Faust, 1994). That is, many other actors perceive them to be influential, and this may indicate their importance. Actors that have unusually high nomination from other actors, are ones who are able to exchange with many others, or make many others aware of their views. The sender-receiver characteristic emphasises differences in control of resources and information as well as perceptions of authority or deference. Wasserman and Faust (1994) proposed that an actor’s prestige or influence can be calculated as the in-degree and out-degree centrality measures to reflect the number of ties
incident upon an actor as a node in the network. Finally, there is the betweenness centrality score (Freeman 1977). This measure views an actor as being in a favoured position to the extent that the actor falls on the geodesic paths between other pairs of actors in the network (Freeman, Roeder, and Mulholland, 1980). The “betweenness” leader is a broker who helps bridge across the network, and, thereby, helps coordinate activities and information flow in the network (Balkundi and Kilduff, 2006).

Centralisation measures, at the network level of analysis, show the extent to which the network is centralised around a few actors and in combination with network density (Turk, 1977), this provides information about the overall network structure and cohesion. It is used to explore levels of cooperation and coordination. It is expected that elite members of the network should be able to influence the density of the group network (Zohar and Tenne-Gazit, 2008), in particular the promotion of information sharing.

Network centralisation quantifies how dispersed the centralities of the actors are, or the extent to which an entire network is focused around a few central actors. It is also a measure of variability, ranging from an even distribution of ties between actors to a skewed one where the ties are focused on a few members. That is, when the measure is large, it means that few actors are central and the remaining actors occupy less central positions. If the measure is low, it means that the network is populated by actors who occupy similar central positions. Thus, the measure is an indication of the levels of centralisation or decentralisation in networks (Scott, 2000).

An extension of the concept of centralisation is the notion of core/periphery structure (Borgatti and Everett, 1999). The idea is that certain networks revolve around a set of central actors (not just one) who are well-connected with each other, and also with the periphery. Peripheral actors in contrast are connected to the core, but not to each other. Network analysts have developed a number of techniques for identifying core/periphery structures or cohesive sub-groups in networks. Here, it is assumed that a network has a core/periphery structure if the network can be partitioned into two sets: a core whose members are densely tied to each other, and a periphery whose members have more ties to core members than to each other. This concept is seen as increasingly important in studies of network processes (Gulati and Gargiulo, 1999; Hutt et al, 2000). Where a network has a dominant core, we expect network processes are dominated by few, rather than many, although amongst the few dominant members of a network, control over network processes may be distributed.

Readers should note that data gathering with the Cleft Lip and Palate Network was somewhat compromised (see section 3.6.2 (i) for more detail). Firstly, those staff from Lowham did not engage with the qualitative or SNA fieldwork. Secondly, it proved difficult to obtain SNA responses through the sociometric questionnaire. We resorted to developing SNA through questions inserted within the exploratory interviews that replicated those used in the sociometric questionnaire. We asked interviewees to identify those they worked closely with, from whom they sought professional advice, with whom they discussed important matters, who they would consider as influential for important decisions made for the network. They were asked to think back over the last six months, and to consider all the people in the network and to name up to six people. In the cleft network, we used the interview data to construct SNA. However, the data wasn't complete (see section 3.6.2 (i)).
3.2.2 Qualitative Methods

These combined interviews and observations as set out below in each of our primary case studies. A total of 145 interviews have been carried out over the 3 years of the study, accompanied by 120 hours of observation of leadership and knowledge exchange, mainly within meetings, but also in the case of the Paediatric Nephrology Network, following ward rounds. In our observations, attention was given to exchanges that took place between members and also comments expressed individually to observers during breaks or outside meetings that reflected aspects of leadership influence or knowledge exchange within the network. Copious handwritten field notes were taken in each setting.

(i) Cleft Lip and Palate Network Qualitative Fieldwork

Table 3.2.2 (i) (a) Network Staff and Interviews Cleft Lip and Palate Network

<table>
<thead>
<tr>
<th>Name</th>
<th>Position/Profession</th>
<th>Location</th>
<th>Interviews per person</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ava</td>
<td>Speech Therapist</td>
<td>Queenton</td>
<td>2</td>
</tr>
<tr>
<td>Chris</td>
<td>Clinical Director Family Health</td>
<td>Queenton</td>
<td>1</td>
</tr>
<tr>
<td>Alex</td>
<td>Cleft Orthodontist</td>
<td>Queenton</td>
<td>3</td>
</tr>
<tr>
<td>Sofia</td>
<td>Sr. Specialist Nurse/Former Assoc CD</td>
<td>Queenton</td>
<td>1</td>
</tr>
<tr>
<td>Simon</td>
<td>Consultant/Plastic Surgeon</td>
<td>Queenton</td>
<td>2</td>
</tr>
<tr>
<td>Ella</td>
<td>Consultant's Secretary</td>
<td>Queenton</td>
<td>1</td>
</tr>
<tr>
<td>Lily</td>
<td>Cleft Nurse</td>
<td>Queenton</td>
<td>1</td>
</tr>
<tr>
<td>Abby</td>
<td>Clinical Lead/Mgr - Family Health</td>
<td>Queenton</td>
<td>1</td>
</tr>
<tr>
<td>Justin</td>
<td>Consultant</td>
<td>Valley</td>
<td>2</td>
</tr>
<tr>
<td>Alice</td>
<td>Hospital Trust Mgr - Medical</td>
<td>Valley</td>
<td>1</td>
</tr>
<tr>
<td>Bea</td>
<td>Cleft Orthodontist</td>
<td>Valley</td>
<td>1</td>
</tr>
<tr>
<td>Marge</td>
<td>Cleft Co-ordinator</td>
<td>Valley</td>
<td>1</td>
</tr>
<tr>
<td>Henry</td>
<td>Consultant/Maxillofacial Surgeon-current CD</td>
<td>Valley</td>
<td>1</td>
</tr>
<tr>
<td>Mia</td>
<td>Hospital Trust Mgr - Surgical</td>
<td>Valley</td>
<td>1</td>
</tr>
</tbody>
</table>

19
<table>
<thead>
<tr>
<th>Meetings Observed (Cleft Lip &amp; Palate)</th>
<th>Dates</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monthly Team meeting</td>
<td>10/09/2007</td>
<td>4</td>
</tr>
<tr>
<td>informal 'time out' workshop</td>
<td>01/10/2007</td>
<td>6</td>
</tr>
<tr>
<td>Monthly Team meeting</td>
<td>05/11/2007</td>
<td>4</td>
</tr>
<tr>
<td>Monthly Team meeting</td>
<td>13/12/2007</td>
<td>4</td>
</tr>
<tr>
<td>Monthly Team meeting</td>
<td>04/02/2008</td>
<td>4</td>
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</table>

5 | 22
(ii) Paediatric Nephrology Network Qualitative Fieldwork:

Table 3.2.2 (ii) (a) Network Staff and Interviews Paediatric Nephrology Network

<table>
<thead>
<tr>
<th>Name</th>
<th>Position/Profession</th>
<th>Location</th>
<th>Interviews per person</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alice</td>
<td>Hospital Trust Manager</td>
<td>Valley</td>
<td>1</td>
</tr>
<tr>
<td>Babs</td>
<td>Secretary</td>
<td>Queenton</td>
<td>0</td>
</tr>
<tr>
<td>Betty</td>
<td>Consultant nephrologist</td>
<td>Queenton</td>
<td>2</td>
</tr>
<tr>
<td>Bob</td>
<td>Specialist Registrar</td>
<td>Queenton</td>
<td>2</td>
</tr>
<tr>
<td>Cat</td>
<td>Visiting Paediatrician</td>
<td>Queenton</td>
<td>1</td>
</tr>
<tr>
<td>Chris</td>
<td>Consultant/Family Heath Director</td>
<td>Queenton</td>
<td>1</td>
</tr>
<tr>
<td>Christine</td>
<td>Psychologist</td>
<td>Queenton</td>
<td>2</td>
</tr>
<tr>
<td>Debbie</td>
<td>School teacher</td>
<td>Queenton</td>
<td>1</td>
</tr>
<tr>
<td>Diane</td>
<td>Dietician</td>
<td>Queenton</td>
<td>1</td>
</tr>
<tr>
<td>Donald</td>
<td>Consultant</td>
<td>Lowham</td>
<td>1</td>
</tr>
<tr>
<td>Emma</td>
<td>Social Worker</td>
<td>Valley</td>
<td>1</td>
</tr>
<tr>
<td>Gina</td>
<td>Youth Worker</td>
<td>Queenton</td>
<td>1</td>
</tr>
<tr>
<td>Jan</td>
<td>Transplant Nurse</td>
<td>Queenton</td>
<td>2</td>
</tr>
<tr>
<td>Jane</td>
<td>Social Worker</td>
<td>Queenton</td>
<td>3</td>
</tr>
<tr>
<td>Jean</td>
<td>Children's Ward Manager</td>
<td>Queenton</td>
<td>1</td>
</tr>
<tr>
<td>Kerry</td>
<td>Dietician</td>
<td>Valley</td>
<td>1</td>
</tr>
<tr>
<td>Lydia</td>
<td>Social Worker</td>
<td>Queenton</td>
<td>1</td>
</tr>
<tr>
<td>Len</td>
<td>Consultant Paediatric Nephrologist</td>
<td>Queenton</td>
<td>3</td>
</tr>
<tr>
<td>Linda</td>
<td>Senior Youth Worker</td>
<td>Queenton</td>
<td>3</td>
</tr>
<tr>
<td>Liz</td>
<td>Jr. Doctor</td>
<td>Queenton</td>
<td>1</td>
</tr>
<tr>
<td>Lola</td>
<td>Dietician</td>
<td>Queenton</td>
<td>1</td>
</tr>
<tr>
<td>Maggie</td>
<td>Senior Paediatric Nurse</td>
<td>Queenton</td>
<td>3</td>
</tr>
<tr>
<td>Martha</td>
<td>Secretary</td>
<td>Queenton</td>
<td>3</td>
</tr>
<tr>
<td>Mary</td>
<td>Consultant</td>
<td>Valley</td>
<td>1</td>
</tr>
<tr>
<td>Molly</td>
<td>Consultant Paediatric Nephrologist</td>
<td>Queenton</td>
<td>3</td>
</tr>
<tr>
<td>Nadine</td>
<td>Nephrology Liaison Nurse</td>
<td>Queenton</td>
<td>2</td>
</tr>
<tr>
<td>Olive</td>
<td>School Teacher</td>
<td>Queenton</td>
<td>2</td>
</tr>
<tr>
<td>Pat</td>
<td>Unit Director/Chief Consultant</td>
<td>Queenton</td>
<td>4</td>
</tr>
<tr>
<td>Pete</td>
<td>Dialysis Nurse</td>
<td>Queenton</td>
<td>2</td>
</tr>
<tr>
<td>Sara</td>
<td>Sr. Ward Nurse</td>
<td>Queenton</td>
<td>1</td>
</tr>
<tr>
<td>Scott</td>
<td>Radiographer</td>
<td>Lowham</td>
<td>1</td>
</tr>
<tr>
<td>Scovia</td>
<td>Receptionist</td>
<td>Queenton</td>
<td>1</td>
</tr>
<tr>
<td>Sheila</td>
<td>Assistant Psychologist</td>
<td>Queenton</td>
<td>1</td>
</tr>
<tr>
<td>Tamara</td>
<td>Play Therapist</td>
<td>Queenton</td>
<td>3</td>
</tr>
<tr>
<td>Tedd</td>
<td>Secretary</td>
<td>Queenton</td>
<td>3</td>
</tr>
<tr>
<td>Tom</td>
<td>Junior Charge Nurse</td>
<td>Queenton</td>
<td>1</td>
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<td>36</td>
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### Table 3.2.2 (ii) (b) Observations Paediatric Nephrology Network

<table>
<thead>
<tr>
<th>Meetings Observed (Renal/Nephrology Unit)</th>
<th>Dates</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>Paediatric Nephrology Regional Consultants AGM</td>
<td>20/04/2007</td>
<td>3</td>
</tr>
<tr>
<td>Outpatient clinic</td>
<td>26/04/2007</td>
<td>3.5</td>
</tr>
<tr>
<td>Team meeting</td>
<td>26/04/2007</td>
<td>2.5</td>
</tr>
<tr>
<td>Team meeting</td>
<td>29/09/2007</td>
<td>2.5</td>
</tr>
<tr>
<td>Team meeting</td>
<td>27/10/2007</td>
<td>2.5</td>
</tr>
<tr>
<td>Team meeting</td>
<td>28/02/2008</td>
<td>2.5</td>
</tr>
<tr>
<td>Paediatric Nephrology Regional Consultants AGM</td>
<td>22/04/2008</td>
<td>3</td>
</tr>
<tr>
<td>informal 'time out' workshop meeting</td>
<td>06/05/2008</td>
<td>8</td>
</tr>
<tr>
<td>Team meeting</td>
<td>30/10/2008</td>
<td>2.5</td>
</tr>
<tr>
<td>Team meeting</td>
<td>29/01/2009</td>
<td>2.5</td>
</tr>
<tr>
<td>Team meeting</td>
<td>26/03/2009</td>
<td>2.5</td>
</tr>
<tr>
<td>Team meeting</td>
<td>23/04/2009</td>
<td>2.5</td>
</tr>
<tr>
<td>Paediatric Nephrology Ward Rounds</td>
<td>27/04/2009</td>
<td>4</td>
</tr>
<tr>
<td>Team meeting</td>
<td>29/06/2009</td>
<td>2.5</td>
</tr>
<tr>
<td>Team meeting</td>
<td>24/09/2009</td>
<td>2</td>
</tr>
</tbody>
</table>

46
### Table 3.2.2 (iii) (a) Network Staff and Interviews Local Safeguarding Children’s Board

<table>
<thead>
<tr>
<th>Name</th>
<th>Profession</th>
<th>Employer/Agency</th>
<th>Board Role</th>
<th>Board tenure</th>
<th>Interviews per person</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiona</td>
<td>Police Officer</td>
<td>Police</td>
<td>Police Rep-member</td>
<td>4 years</td>
<td>1</td>
</tr>
<tr>
<td>Sally</td>
<td>Health-Manager</td>
<td>Health</td>
<td>advisor</td>
<td>2 years</td>
<td>2</td>
</tr>
<tr>
<td>Carol</td>
<td>Social Worker</td>
<td>Mental Health</td>
<td>Mental Health Rep-member</td>
<td>1 year</td>
<td>1</td>
</tr>
<tr>
<td>Gina</td>
<td>Safeguarding Nurse</td>
<td>Health</td>
<td>Health Rep-member</td>
<td>2 years</td>
<td>2</td>
</tr>
<tr>
<td>Louise</td>
<td>Director</td>
<td>Adult services</td>
<td>Adult Services Rep-member</td>
<td>1 year</td>
<td>1</td>
</tr>
<tr>
<td>Sally</td>
<td>Social worker</td>
<td>Childrens Services</td>
<td>Std board manager-staff</td>
<td>4 years</td>
<td>2</td>
</tr>
<tr>
<td>Lillian</td>
<td>Social worker</td>
<td>Childrens Services</td>
<td>SG Chair-QA-staff</td>
<td>9 years</td>
<td>4</td>
</tr>
<tr>
<td>Terry</td>
<td>Nurse consultant</td>
<td>Health</td>
<td>advisor</td>
<td>12 years</td>
<td>3</td>
</tr>
<tr>
<td>Medina</td>
<td>Safeguarding Doctor</td>
<td>Health advisor</td>
<td>advisor</td>
<td>10 years</td>
<td>3</td>
</tr>
<tr>
<td>Jess</td>
<td>Social worker</td>
<td>Children’s services</td>
<td>NHS/UK Administrator-staff</td>
<td>11 years</td>
<td>4</td>
</tr>
<tr>
<td>Sarah</td>
<td>Training coordinator</td>
<td>Children Services</td>
<td>board staff</td>
<td>3 years</td>
<td>2</td>
</tr>
<tr>
<td>Nick</td>
<td>Medical Director/Doctor</td>
<td>Health</td>
<td>Health Rep-member</td>
<td>2 years</td>
<td>1</td>
</tr>
<tr>
<td>Bill</td>
<td>social worker</td>
<td>children’s services</td>
<td>Children’s Services Rep-member</td>
<td>1 year</td>
<td>1</td>
</tr>
<tr>
<td>Helen</td>
<td>Social worker/service director</td>
<td>Childrens Services</td>
<td>Children’s services Rep-member (interim)</td>
<td>1 year</td>
<td>1</td>
</tr>
<tr>
<td>Tony</td>
<td>probation officer</td>
<td>Probation</td>
<td>Probation Rep-member</td>
<td>2 years</td>
<td>1</td>
</tr>
<tr>
<td>Jerry</td>
<td>Operations Director</td>
<td>Schools/careers</td>
<td>Schools/careers Rep-member</td>
<td>5 years</td>
<td>2</td>
</tr>
<tr>
<td>Eve</td>
<td>social worker</td>
<td>Childrens Services</td>
<td>Children’s Services Rep/former chair-member</td>
<td>11 years</td>
<td>1</td>
</tr>
<tr>
<td>Paul</td>
<td>social worker</td>
<td>Court Services</td>
<td>Court services lead-member</td>
<td>5 years</td>
<td>3</td>
</tr>
<tr>
<td>Doris</td>
<td>Doctor - GP</td>
<td>Health</td>
<td>Community Health Rep-member</td>
<td>1 year</td>
<td>3</td>
</tr>
<tr>
<td>Frank</td>
<td>Probation officer</td>
<td>Probation</td>
<td>Probation Rep-member</td>
<td>1.5 years</td>
<td>1</td>
</tr>
<tr>
<td>Kim</td>
<td>Police Officer</td>
<td>Police</td>
<td>Police Rep-member</td>
<td>2 years</td>
<td>1</td>
</tr>
<tr>
<td>Polly</td>
<td>Lawyer</td>
<td>Local Council</td>
<td>Legal Adviser</td>
<td>5 years</td>
<td>2</td>
</tr>
<tr>
<td>Nina</td>
<td>Domestic Violence Officer</td>
<td>Local Council</td>
<td>advisor</td>
<td>3 years</td>
<td>1</td>
</tr>
<tr>
<td>Milly</td>
<td>CEO- voluntary agency</td>
<td>Voluntary /Local Charities</td>
<td>Local level volunteer Rep-member</td>
<td>3 years</td>
<td>2</td>
</tr>
<tr>
<td>Nelly</td>
<td>Social worker</td>
<td>Independent Consultant</td>
<td>Independent chair-staff</td>
<td>2 years</td>
<td>3</td>
</tr>
<tr>
<td>Sam</td>
<td>Medical Director/Psychiatrist</td>
<td>Mental Health</td>
<td>Mental Health Rep-member</td>
<td>3 years</td>
<td>3</td>
</tr>
<tr>
<td>Kirk</td>
<td>Police officer</td>
<td>Police</td>
<td>Police Rep-member</td>
<td>1.5 years</td>
<td>2</td>
</tr>
<tr>
<td>Mona</td>
<td>Safeguarding Nurse</td>
<td>Health</td>
<td>advisor</td>
<td>3 years</td>
<td>1</td>
</tr>
<tr>
<td>Karen</td>
<td>social worker</td>
<td>Childrens Services</td>
<td>Acting board manager-staff</td>
<td>1 year</td>
<td>2</td>
</tr>
<tr>
<td>Jo</td>
<td>CEO- voluntary agency</td>
<td>Voluntary /National Charity</td>
<td>member</td>
<td>1 year</td>
<td>1</td>
</tr>
<tr>
<td>Miriam</td>
<td>services mgr/social worker</td>
<td>Voluntary /National Charity</td>
<td>Statutory Rep-member</td>
<td>2 years</td>
<td>1</td>
</tr>
<tr>
<td>Monica</td>
<td>Manager/Nurse</td>
<td>Health</td>
<td>Health Rep-member</td>
<td>9 years</td>
<td>3</td>
</tr>
<tr>
<td>George</td>
<td>Project Manager</td>
<td>Local Council</td>
<td>Housing rep-member</td>
<td>2 years</td>
<td>2</td>
</tr>
<tr>
<td>Jim</td>
<td>Commander/Fire Fighter</td>
<td>Fire &amp; Rescue</td>
<td>Fire Service Rep-member</td>
<td>1 year</td>
<td>1</td>
</tr>
<tr>
<td>Ronald</td>
<td>Social Worker/service director</td>
<td>Children’s Services</td>
<td>Children’s Services Rep-member (interim)</td>
<td>1 year</td>
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</tr>
</tbody>
</table>
Table 3.2.2 (iii) (b) Observations Local Safeguarding Children’s Network

<table>
<thead>
<tr>
<th>Safeguarding Meetings Observed</th>
<th>Date</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>Quarterly Meeting</td>
<td>14/06/2007</td>
<td>4</td>
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<tr>
<td>Quarterly Meeting</td>
<td>13/09/2007</td>
<td>4</td>
</tr>
<tr>
<td>Quarterly Meeting</td>
<td>13/12/2007</td>
<td>4</td>
</tr>
<tr>
<td>Development Day Workshop</td>
<td>17/01/2008</td>
<td>8</td>
</tr>
<tr>
<td>Quarterly Meeting</td>
<td>20/03/2008</td>
<td>4</td>
</tr>
<tr>
<td>Executive Board Meeting</td>
<td>22/05/2008</td>
<td>4</td>
</tr>
<tr>
<td>Quarterly Meeting</td>
<td>19/06/2008</td>
<td>4</td>
</tr>
<tr>
<td>Quarterly Meeting</td>
<td>18/09/2008</td>
<td>4</td>
</tr>
<tr>
<td>Quarterly Meeting</td>
<td>04/12/2008</td>
<td>4</td>
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<tr>
<td>Development Day Workshop</td>
<td>19/01/2009</td>
<td>4</td>
</tr>
<tr>
<td>Quarterly Meeting</td>
<td>17/09/2009</td>
<td>4</td>
</tr>
<tr>
<td>Quarterly Meeting</td>
<td>17/12/2009</td>
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<td></td>
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</table>

3.2.3 Historical Case Analysis

Within the area of safeguarding, the project had unique access to a body of observational and interview data on child protection work collected by Robert Dingwall and his colleagues in three parts of England during the late 1970s and early 1980s. This material, which is now lodged under restricted access at the Wellcome Library, represents a unique source of material on inter-agency working in health, social care and legal services at the time, amounting to some 40,000 sheets of A4 transcription from hand notes and recorded interviews. The study was fully reported in Dingwall et al. (1983). Within the study, the team had observed the early phases of constructing inter-agency networks, at a point where these were beginning a 20-year evolution from essentially voluntary to essentially mandated forms of organization. In Shire, a relatively affluent county in the South Midlands, the team observed the initial meetings of the Area Review Committee (ARC), the first body to have any kind of central mandate for inter-agency co-ordination in child protection. In County, a relatively remote rural area, and Borough, a traditional industrial community in the North, individual ARC meetings were observed and members interviewed.

The present study, then, offered an exceptional opportunity to explore the extent of continuity and change over a period of nearly 30 years, an unusual but important resource for policy development. This allowed us to reflect on the extent to which problems in the system might result from fundamental issues that were not susceptible to organisational change or, alternatively, the degree to which organisational innovation, particularly in the reinforcement of mandating and the attention to leadership, had effected genuine improvements.
3.2.4 Health Economics Analysis

This component of the study attempted to quantify the financial costs and benefits associated with networking in health and social care. Readers should note, as outlined previously, the Cleft Lip and Palate Network did not allow the research team to carry out a health economics analysis due to concerns it would show them in a poor light (see section 3.6.2 (i)). However, the other two of the networks selected for inclusion in the study allow some comparison between mandated and non-mandated networks. This stage of the research attempted to capture the resources and costs associated with running the networks as well as any benefits that might be associated with the network. Attempts were made to quantify the costs and benefits although in some cases this was not possible. A summary of the methods used is provided below.

3.2.4 (i) Methods

Following discussion with the two networks involved, it became apparent that two distinct approaches would be required to capture information on the costs and benefits of the networks, reflecting the differing nature of the networks involved.

With the Local Safeguarding Children’s Network, the costs and benefits associated with the safeguarding network were elicited through the use of a questionnaire, distributed to representatives of each of the organisations involved in the network. The questionnaire asked participants to provide information on the costs involved in running the network, including: direct financial contributions made by their organisation that are allocated to the work of the network (where applicable), and other resources allocated to network activities, such as staff time. In addition to this, participants were asked to list the key benefits associated with the network, ranking these in order of importance. Finally, respondents were asked to consider what costs their organisation would incur if the network did not exist. This was intended to provide a counter-factual viewpoint, against which the actual costs of running the network could be compared. However, it is acknowledged that it may be conceptually challenging for participants to provide estimates of the hypothetical cost of the counter-factual case. Responses were collated from each of the organisations involved in the network and collated for analysis.

With the Paediatric Nephrology Network, we adopted a more qualitative approach on the basis that discussions with key individuals in the network indicated that participants would not be able to respond to a similar, quantitative questionnaire to the one used for evaluating the safeguarding network. Unlike the Local Safeguarding Children’s Board, the Paediatric Nephrology Network has no allocated funding or resource to support it and participants view their network activities as part of their day job. As such, any attempt to ask participants to value their contribution or even quantify the amount of their time allocated to network activities was deemed to be too challenging.

Instead, a qualitative approach was adopted, which included attendance at two network meetings and a short focus group with network participants. Participants were asked to provide opinions on the resources allocated to network activities and the degree to which these could be delineated from their day-to-day activities. Participants were also asked to provide their thoughts on the main benefits associated with the network.

It is recognised that by adopting two different approaches to evaluating the costs and benefits associated with the networks means that the findings are
not directly comparable. However, a decision was made to adopt a pragmatic approach that allowed for evaluation of two networks, one mandated and one voluntary. Whilst the findings are not directly comparable, they do provide some insights into the challenges associated with quantifying the work of mandated and non-mandated networks.

3.2.5 Data Analysis

Data gleaned from SNA and exploratory interviews (and in the case of the Local Safeguarding Children’s Board, the historical case) informed in-depth qualitative fieldwork that encompassed interviews and observations. More emergent, issues raised in the interviews or evident in observation, in turn, led to further examination and the development of SNA; i.e. there was a degree of reciprocal interaction between the different research techniques.

An iterative process of analysis of qualitative data encompassed re-reading and coding transcripts, field notes and documents, identifying salient themes, and then cross-checking these through discussions between three of the authors (GC, TS & LW), to ensure inter-researcher reliability. Related themes of the embedded analysis were grouped together. To validate our emergent analysis during the course of the research, findings were presented to an Advisory Board, which consisted of four stakeholders from each of the primary empirical networks under examination, and that encompassed health and social care senior professionals, plus an additional two advisors experienced in the delivery of children’s services, but that were located outside the empirical cases, and a further two service users. The Advisory Board met at six monthly intervals over the course of the three year research programme. In the first advisory board, the research aims and design were presented by the research team, to which responses from advisory board were elicited, that helped detail the proposed research plan. At subsequent advisory board events, emergent analysis was presented, with advisors commenting upon this, following which, the research team finessed analysis. The final report was further finessed following a dissemination event designed to authenticate analysis and prescriptions.

3.2.6 Research Design Limitations

3.2.6 (i) Access to Cleft Lip and Palate Network

As is evident in the forthcoming empirical chapters, the Cleft Lip and Palate Network was characterised by intra-professional conflict across sites, which rendered leadership more challenging than might be anticipated by policymakers, and there were consequent leadership changes, with more general anxiety about granting access to researchers. Whereas, in the Paediatric Nephrology and Local Safeguarding Children’s Board such conflict, change, and general anxiety were absent. The resultant limited access to the Cleft Lip and Palate Network meant there was only one phase of interviewing, and that, unlike the other networks where all network members participated in interviews, only around half the Cleft Lip and Palate Network members agreed to be interviewed. The Cleft Lip and Palate case may be regarded as more partial than the others. Nevertheless problems of sustained access might be viewed as an empirical reflection upon network processes; i.e. the network was not networked. Further, we highlight that the key actors in the case, including those most resistant to the hub and spoke network structure, were keen that their voices were represented in the research study and so participated in interviews.
3.2.6 (ii) The Boundaries of a Network

We set boundaries around a purposive group with relational analysis in mind; i.e. leadership and knowledge exchange interactions. In the case of the Local Safeguarding Children’s Board, it was bounded by those members of the strategic board, although we note that membership changed as members left, and others were co-opted in, so that, at any point in time there were between 20 and 25 members. We highlight that this meant interviews and SNA did not extend to wider networks that each board member was embedded in. The Paediatric Nephrology Network, whilst providing geographical spread within the local region and beyond, was located in one organisation, with all those employed by the organisation to deliver paediatric nephrology services considered as the network, although here, there are some more peripheral participants, such as general paediatric nurses that were pulled into service to augment more specialist nurses, whom we excluded from the network analysis since they changed frequently (e.g. they included agency nurses). With the Cleft Lip and Palate Network, as described above, identifying network members was rather more problematic given lack of participation in the research study from what we judge to be half the network members.

3.2.6 (iii) Health Economics Analysis

There are significant challenges inherent in a health economics analysis of networks. The very nature of networks means that many professionals contribute time, expertise and resources to their functioning yet few of these individuals are paid directly by a network. Furthermore, many individuals who participated in the research suggested that whilst their contributions to the operation of the networks often went above and beyond their job description, they perceived these contributions to be a part of their role and often took great pride in their contribution. The result of this is that it is difficult to quantify the true costs of operating in a network. Many individuals found it difficult, if not impossible, to identify what proportion of their time (for example, presented as a percentage of their full time equivalent or in the number of hours/days per month) they allocate to the operation of the network. Furthermore, where networks are functioning well, then disentangling network activities from other functional activities becomes even more difficult. As a result of this, many participants, particularly those in non-mandated networks found it very difficult to provide estimates of the resources which are allocated to network activities. Where this was the case then it was not possible to generate any estimate of the cost of running a network.

The one exception in our study was the mandated network for safeguarding of children. The mandated nature of this network meant that participating organisations were often called upon to make a financial contribution to cover its operations. Furthermore, the more structured nature of this network meant that individual participants were often called upon to attend regular meetings and as such were able to provide estimates of the amount of time allocated to these activities. In this instance it was possible to estimate the resources involved in the operation of the network and the costs associated with them.

Similar difficulties were experienced in generating estimates of the benefits associated with networks. Participants in the research were called upon to consider a hypothetical ‘what-if’ scenario, asking them to consider what might happen in the absence of a network. In many cases, participants found this to be conceptually challenging and were unable to provide
detailed responses that would allow for any quantification of the monetary benefits of the networks.

Whilst attempts have been made to provide some form of comparative analysis, the use of different methods with different networks means that we are essentially comparing quantitative estimates of the monetary costs and benefits of one network with qualitative thoughts on the costs and benefits of a second network. Clearly, the two cannot be considered to be directly comparable and this is acknowledged.

The difficulties of measuring and quantifying costs and benefits in economic evaluations are well documented (see Layard and Glaister, 1994). In many cases, economists are attempting to place a value (or shadow price) on resources for which there is no market value. In other cases, it might be that attempts are being made to value time savings which might lead to releasing resources for other activities, but do not necessarily lead to monetary savings. All of these issues apply in this study and are compounded by the fact that the networks are multi-disciplinary, comprising staff from health, education and social care sectors, each of which might have very different conceptions of what constitutes a cost and a benefit.

Note, in spite of these difficulties, every attempt was made to ensure that the methods adopted were fit for purpose and acceptable to the networks involved.

3.2.6 (iv) Analysing Historical Data

There were relatively few problems with the analysis of the historical data for comparative purposes, and these were mostly technical rather than scientific in nature. Clearly it was an advantage that one of the original fieldworker/authors was available to resolve any uncertainties in the data and one or two small points about the role of particular individuals had to be referred to other original fieldworkers. However, the field notes had always been compiled for other people to use, because this was originally a team project, and, as a matter of scientific principle, case notes had been kept in a strictly behaviourist manner. In practice, what this meant was an effort to record talk and actions as literally as possible without concern for analysis at the point of recording. Although there was some selective omission in other contexts, except to the degree to which notes were necessary to understand the place of child protection within the overall workload of services and professional groups that also had other client responsibilities, the particular committees being compared were recorded in similar ways because the same principled approach was adopted in the safeguarding study. This meant, then, that it was relatively straightforward to compare attempts at verbatim transcription from different periods within different theoretical frames and research questions, because neither dataset was, as it were, pre-analysed at the point of recording.

The two main problems were essentially technical. One could be described as regulatory in terms of getting the data out of the archive where it had been deposited. The rules of the archive required transfer of copyright, which is a sensible measure for the management of data usage and the protection of intellectual property rights over a lengthy period. However, it did mean that the original compilers had no privileged rights of access. Since the original data were collected, regulatory changes around ethical approval presented an initial barrier. In the late 1970s, research of this kind did not go through formal governance processes – indeed, it is almost impossible to envisage a comparable study being conducted today – and access rested mainly on verbal agreements and mutual trust between the research team and key gatekeepers. As a result, the custodians of the
archive were looking for approval documentation that never existed. None of this is to suggest that practice was in any respect unethical – the files had been deposited with a 30-year closure of access in order to cover the professional careers of those studied, in parallel with the general rules on access to public records, although the archive questioned whether this was really long enough. Resources had not been available to redact the records and, in any case, the original team had taken a principled decision that the historical value of the data would be much diminished if it were not, in principle, possible for future users to trace key individuals and their careers through other records, should they wish to.

Having resolved these problems with the archive, they then offered to scan the relevant sections of data as pdf files. We decided that it would be more efficient to vire funds for this purpose rather than for visits to the archive by Dr Starr. However, this did present problems of data management and retrieval. The original computer index might have been usable but we did not think it was a good use of researcher’s time to reconstitute those sections relevant to this particular committee. The pdf format also meant that word searching could not easily be used to navigate the files and they could not be imported into commonly used CAQDAS software. In practice, this was not a major problem because there was a relatively limited quantity of data and it could be managed quite practically by hand coding on printed copies but it might have been difficult, were we to have been comparing the much larger volume of data from field notes on actually agency practice, notes of court hearings, etc.

Methodologically, the experience of this project reinforces what many leading figures have long regarded as best practice in participant observation, namely that immediate field notes should record as exactly as possible what people actually said and did, rather than the observer’s impressions of the meaning of their behaviour. The latter is a second stage of analysis, always to be tested and justified by reference to the evidence of the contemporaneous note, which can then be cited as a means for readers to evaluate the weight of interpretation placed upon it. If notes are kept in this form, which does make them difficult to redact and share freely, then there are few practical barriers to their re-use.
Chapter 4 Case Study 1 - Cleft Lip and Palate Network

4.1 Introduction to Cleft Lip and Palate Network

Within this chapter, we provide a discussion of the antecedents to the mandating of the Cleft, Lip and Palate Network, and its early beginnings. We then discuss network processes, specifically leadership and knowledge exchange within the network. The meta-narrative within Cleft Lip and Palate Network is that of the influence of professional hierarchy upon network processes.

4.1.1 Why Mandate Cleft Lip and Palate Networks?

In the 1990’s, standards of treatment of cleft lip and palate patients both within the NHS/UK and across Europe emerged as a concern following a European commissioned study into cleft care. The results of the study reported the UK as having one of the worst cleft services in Europe. This prompted a further, in-depth study into cleft care in the UK by the Clinical Standards Advisory Group (CSAG: Sandy et al., 1998). CSAG used excellence care standards they identified in two European cleft centres (i.e. Oslo and Nantes) to formulate recommendations for improving cleft care in the UK. Although several findings emerged from the CSAG study, one of the most salient was that despite a large number of cleft units across the UK (i.e. 57), cleft service was found to be lacking in expertise and a drain on resources in its current form. CSAG recommended reducing the number of cleft units from 57 to a maximum of 8-15 centres across the UK, dependent on population needs. The aim was to concentrate and centralise cleft expertise and resources to improve patient outcomes. Specifically the relationship between low patient volume and outcomes was a key driver for change, and the reduction in the number of cleft centres was seen as a viable means for ensuring minimum caseloads for cleft surgeons deemed necessary for maintaining and improving surgical competence and proficiency. The effect of which w/should then lend itself to further improvements in cleft outcomes through follow-up care provided through secondary surgeries, orthodontists and speech/language therapists.

The reorganisation of cleft care within special services commissioning was set out as a national priority for 1999/2000 within the NHS (HSC 1998/198). This entailed the NHS Executive forming a Cleft Implementation Group (CIG) to ensure cleft services were aligned with CSAG recommendations, with implementation to be completed no later than April 2005 (CSAG Report: Sandy, et al, 1998). Health Services Circulars (HSC 1998/198 & 238), and input from the Cleft Lip and Palate Association (CLAPA), which is a national voluntary organisation, provided the framework for changing the process and structure of cleft care into a networked service.

To overcome problems associated with limited patient access as a result of centralising cleft services, recommendations included the implementation of
'hub and spoke' networks. A decision was made to implement 9 'hub and spoke' structured units across England, on the basis this required minimal reorganisation, and reflected the 'best practice' cleft care system in use in Norway. The bulk of cleft services would be located at the 'hub', which would include a full-time core lead team. Specialist equipment would be located at the hub, which would also act as the coordinating centre for records and audit. Whilst primary cleft surgeries would be carried out at the hub, continuing care and secondary surgeries would be provided for in the spokes by both generalist staff (i.e. orthodontists and speech therapy) and specialist cleft staff (i.e. notably primary surgeons) from the hub in line with the requirement for patient accessibility. The new structures would necessitate additional training for spoke staff, as well guidance from, and regular visits to, the hub. Hence, hospital trusts designated as hubs would have to implement a ‘network’ of care involving spoke units as part of their remit for change. Surgeons and speech therapists from the hub were required to cross geographical and organisational boundaries to attend local clinics, and work alongside suitably trained professionals from various spokes from the outlying network, whilst maintaining clear links with the central hub (HSC 1998/238).

Further recommendations for organising hubs included the implementation of multi-disciplinary teams comprising a number of distinctively different medical, other clinical and non-clinical professions, who should have a specific dedication to, or specialism in, cleft care. These included: a cleft coordinator; an array of surgeon specialists (i.e. primary and secondary surgeons); orthodontists; speech and language therapists; lead paediatrician; ENT surgeon; audiological physician; a specialist nurse or health visitor; and a psychologist; as well as administrative, secretarial and audit support. However CSAG recommendations went on to specifically point out that the ‘best’ multidisciplinary teams were those with ‘key individuals’, i.e. notably primary cleft surgeons, followed by orthodontists and speech therapists. Hence the nature of cleft care and the delivery of services within a mandated hub and spoke structure would likely result in a surgically-dominated and a relatively narrow clinical orientated network form.

In addition, services provided by each regional centre (i.e. hub and spokes network) was to be in accordance with strict protocols set out by the Department of Heath Circular (HSC 1998/238) designed for monitoring and evaluation purposes, which ensured national standardisation and adherence to this in cleft care. Centres were tasked to show that they were delivering efficient service and providing value for money as part of the performance management strategy. In addition, the protocol called for: the introduction of benchmarking for comparing performance and sharing best practice; sufficient resources to achieve good standards of care; and the need for effective, efficient and open management; in line with a more managerialised form of a networked organisation.

Insofar as network leadership was concerned, this came under the guidelines for education and training, where it was ‘recommended’ (i.e. not a formal requirement) that cleft services should be consultant led and staffed. Hubs were expected to provide specialist training for the mix of professions, and lead consultants from each profession were expected to demonstrate a commitment to continuing education and training for the multi-disciplinary team across the network, as well as within their professional area of cleft care (HSC 1998/238).

Despite the overarching changes brought about through recommendations by the CSAG report and related Health Service Circulars (HSC 1998/198 &
238), to date there has been relatively few follow-up studies on the implementation of mandated cleft care networks. Indeed, the only study we found was a CLAPA survey carried out in 2006 and published in 2007 (CLAPA 2007). In this survey by CLAPA, the experiences of service users (parents of patients) was collated to identify where the majority of improvements had taken place (or not) in re-organisation of cleft care services, following CSAG and HSC recommendations. Despite privileging the users’ perspective in this national survey, as we later note, service user involvement in the development and delivery of cleft care at the local level of cleft service appears relatively absent. Thus, despite our intention at the inception of the study to examine user involvement in knowledge exchange within the network, their non-involvement in processes of service development means we have little to say on this matter.

The results of the CLAPA national survey, gleaned from 227 responses (40 per cent return rate) from parents of children under the age of 3, found cleft services and patient outcomes had markedly improved. Specific improvements that were identified in the study included, more specialist cleft nurses during early care and a higher standard of surgery that stemmed from “tried and tested surgery protocols”. The survey suggested that the latter improvement was due to surgeons now having more well-documented expertise and experience, because there were fewer cleft centres. The implementation of multidisciplinary teams was also found to have had a positive impact on cleft care. For families attending joint or post-operative clinics, multidisciplinary cleft teams provided an “opportunity to talk to the whole team” (CLAPA, 2007:16). However, although families reported good access to ‘core’ network members (i.e. a surgeon, cleft nurse and a speech therapist), all located in one setting, there were still problems with accessing other professions including orthodontists, paediatricians and psychologists. This was due to there being fewer of these professions employed within cleft centres. Despite this shortcoming, CLAPA’s summary of the overall results from their survey was highly supportive of multidisciplinary teams as part of the CSAG recommendations, with particular praise given to improvements in patient access to all key ‘core’ team members. Evaluation of any improvements at the local level of individual networks appears less advanced. In following up our analysis, readers might note that local level evaluation by CSAG of the re-organisation of cleft services is set to commence in July 2010 through December 2012 on a nationwide basis.

4.2 The Structural Arrangements of Queenton Cleft Lip and Palate Network

The focus of our analysis of cleft centres is Queenton Cleft Lip and Plate Network, which is a designated regional hub for cleft care. The Queenton hub is responsible for providing cleft care covering 6 areas, providing 8 combined/joint clinics across the region, which link to 25 hospitals (i.e. spokes). The Queenton hub is based at the Queenton University Hospitals NHS Trust, which comprises 2 hospitals, Queenton C and Queenton Q. Whilst secondary cleft surgeries are carried out within the ‘spokes’, primary cleft surgeries (mandated to be carried out at hubs) were transferred just before the start of this project from Queenton C to Queenton Q. This followed relocation of the Paediatric Intensive Care Unit (PICU) from Queenton C to Queenton Q.

The division of labour and contractual arrangements underpinning the hub and spoke network are an important feature of context, since, as later
discussed in this section, they engender fragmentation of the network. At
the hub, there are 2 primary cleft surgeons. Justin, is a senior plastic
surgeon part-employed by the Queenon Trust hub to deliver surgery, but
who travels in from his main employer, Valley, that employ him to cover
outlying/spoke cleft clinics in the Northern half of the region, as well as
other NHS-related consultancy work. Along with Justin, the hub’s second
primary surgeon is Simon, a slightly less senior plastic surgeon, who is
employed solely by the Queenon Trust. Simon is allocated the most hours
of all primary and secondary surgeons. In addition to performing primary
cleft surgeries, Simon covers outlying/spoke cleft clinics in the southern half
of the region including Hillside and Lowham, and shares clinical coverage of
Queenon with Justin. Additionally, Simon also has a private practice for
plastic surgery.

The hub has 2 maxillofacial surgeons responsible for secondary cleft
surgeries and outlying clinics to some extent. Henry, employed by the
Queenon Trust, and Ron, who travels in from his base in Lowham, is
employed by both the Queenon Trust and Lowham Trust along similar
contractual lines to Justin; i.e. contracted to deliver surgical interventions.
In contrast to the primary surgeries, secondary surgeries can and do take
place at both the hub and/or spokes of the network. This depends on
whichever locale is closest to the patient’s home. In their capacity as
maxillofacial surgeons, Henry covers the Northern half of the region whilst
Ron covers the Southern half, and they jointly share coverage of Queenon.

In addition to surgeons, the hub in Queenon also comprises a specialist
cleft nurse [Lily], speech and language therapist [Ava], cleft coordinator
[Marge], orthodontist [Alex] and other administrative and secretarial
support staff. Having a separate location for primary cleft surgeries at the
Queenon Q hospital site since 2006 necessitates, not only Justin to travel in
from Valley, but specialist nurses to travel across the ‘hub’ from Queenon C
to Queenon Q. Subsequent to patients having primary surgery in Queenon
Q, they receive follow up surgeries and other related services within their
respective localities. Consequently the core leads (primary and secondary
surgeons and the speech therapist) from the hub are also forced to travel to
deliver care in the spoke areas to support the multidisciplinary team, ensure
patient accessibility and that the provision of cleft service remains of high
standard across the region. Again, we note that geographical dispersion and
the need for clinicians, specifically surgeons, to travel, influences division of
labour, with clinicians contracted specifically to deliver or support delivery of
care at the spokes in way that may lead to fragmentation of the network in
the absence of specific intervention to ensure this isn’t so; i.e. contract
arrangements reflect the common division of labour, where surgeons deliver
their clinical intervention, but such arrangements don’t emphasise broader
engagement with the network.

In terms of formalised network meetings, a weekly meeting is held in
Queenon Q to discuss patients, psycho-social concerns and more general
‘hub-related’ business. With respect to the latter, one meeting of each
month is a dedicated Directorate meeting where both clinical and non-
clinical issues that concern the network as a whole are discussed (e.g. trust
issues, patients, staff and resources, and regional and national issues). In
addition, the network also holds 2-3 informal time-out meetings a year in
various locales, and encourages both hub and spoke staff to jointly attend.
Plans are in place for a dedicated regional-wide website, which will have an
intranet and internet, as well as a regional patient forum, up and running by
January 2010. Having this specific means of communication is something
the network has wanted for some time, to complement the more
generalised information about cleft care disseminated through the CLAPA website. However, at the time of completing research (January 2010), there had been no website development; i.e. ten years after the inception of the network.

Arrangements for the delivery of cleft care prior to inception of the network are relevant, since this influences whether or not re-organisation is accepted. Both Queenenton and Valley employed primary care surgeons prior to, and following the re-organisation (i.e. Justin and Simon). However, in Lowham, most of the primary surgeons had either retired or left the trusts around the time of the mandate, so that primary surgery was already taking place at Queenenton for patients referred to Lowham. Ron [Lowham-based secondary surgeon] was already in place as a secondary surgeon at both Lowham and Hillside, and he also worked alongside Henry [secondary surgeon] and Simon [primary surgeon] at Queenenton C. Hence, between Queenenton and Lowham, there were good working relationships between surgeons likely to support re-organisation. Between these sites, professional working arrangements that reflected hub and spoke arrangements, were in place prior to mandating the network. This meant there was little resistance from staff at Lowham towards the mandated network (although as noted in section 3.6.2 (i), they did not participate in research interviews). This contrasted with historical arrangements and relationships between Queenenton and Valley.

With reference to scaling down the number of cleft centres, Queenenton and Valley had amongst other things what CSAG regarded in their recommendations as essential criteria to support a multi-disciplinary team, and were high-volume sites adequate for training new surgeons and other specialities (e.g. orthodontists and speech therapists) and a PICU. In the run-up to re-organising Cleft care, Queenenton and Valley were in competition with each other for ‘hub’ status.

Valley’s attempts to become the ‘hub’ was premised on the fact that it was already a Centre of Excellence with several different specialities necessary for providing cleft care, and also hosted most of the hubs for other specialties across the region. Valley was confident that cleft care would remain their responsibility as they had the expertise and facilities to provide a quality service to patients and were also co-located with PICU necessary for cleft surgeries. Although Queenenton also had a good record of cleft care, those at Valley argued Queenenton had fewer resources, facilities and less expertise than Valley. They further argued that the relatively poor position of Queenenton was compounded by internal re-organisation as cleft care was moved from Queenenton C to Queenenton Q. Nevertheless the commissioners’ decided to appoint Queenenton as the regional cleft lip and palate hub, largely based on geographical accessibility for patients, consistent with providing an even spread of regional centres across the country, with Queenenton Trust senior management promising ‘state of the art’ facilities to support the development of the hub. However, this did not dissuade Valley staff from attempting to have both Queenenton and Valley designated as ‘twin surgical sites’ (with the regional hub staying in Queenenton). The idea was considered by commissioners. However regional population or patient access needed to be shown problematic in order to justify two surgical sites in one region. Given Queenenton was already deemed regionally the most accessible site, the idea was rejected.

The result was that Justin [Valley primary surgeon] was now required to travel in to carry out primary cleft surgeries. This was perhaps the most significant change to staffing, because although Ron [secondary surgeon] was also technically transferred from Lowham to Queenenton, the fact that he
was already performing secondary surgeries there meant the change was more of an administrative one. Given existing divisions between Queenenton and Valley borne out of the ‘hub’ location decision, changing to a networked form of organisation would require forging new inter- and intra- professional working relationships.

4.3 Early Days: Re-organisation within the Hub

Whilst moving the cleft surgeries from Queeneton C to Queeneton Q was an expected change, it nonetheless contributed to an array of problems; e.g. theatre availability and scheduling, conflicting or double-booked surgeries with other departments or specialities, inadequately equipped theatres for performing primary cleft operations on small babies and children. These issues in turn, also impacted waiting lists and waiting times for patients, which formed the main performance indicators for surgeons, and thus which they privileged in organising clinics and surgeries. There were no designated core cleft leads on-site (nor space for any), or any cleft administrators on hand on a day-to-day basis to effectively organise and manage planning and procurement of cleft surgical space at Queeneton Q. Moreover, competition and hierarchy emerged when other surgeons/specialties, well-entrenched at Queeneton Q, leveraged theatre space, times and dates, and resources away, from cleft surgeons through their longstanding relationships with Queeneton Q staff responsible for overseeing the allocation of surgical space.

A further problem that also surfaced was, in theory, a mandated hub was meant to ensure cleft patient information was centralised and coordinated. However, in practice, the hub and spokes divide, specifically between Queeneton and Valley, and dispersal of staff and information across Queeneton C and Queeneton Q sites, coupled with the lack of any centralised ICT records system, led to cancellation of primary cleft surgeries due to absence of supporting patient information; e.g. discussion of this was observed at the directorate meeting 13/12/2007, and cancellation for this reason was confirmed in interviews with primary surgeons [Justin and Simon], the specialist cleft nurse [Lily], Simon’s secretary [Ella] and the cleft coordinator [Marge]. Essential patient notes and medical histories from outlying spokes were either misplaced or lost entirely, and this only revealed itself hours before surgery was due to commence at Queeneton. In one situation, patient notes had apparently been sent to the children’s ward at Queeneton Q, rather than the cleft unit. However, no one at the children’s ward knew for whom they were meant, or indeed where the notes were ultimately destined to go in the first place. The incident happened despite the notes having been requested by the cleft hub several weeks in advance of the surgery. In short, cleft care did not enjoy much visibility in the hub site, Queeneton Q, where its primary surgery was carried out.

Alongside the above problems, linked to the move from Queeneton C to Queeneton Q, a number of cleft staff resigned their posts but, consistent with the need to make efficiency gains following re-structuring at Queeneton, were not replaced. Meanwhile, in the face of a more productive climate (one where cost efficiency gains are demanded), any promise of funding for new positions outside the core cleft team, was not met. Consequently, the hub continued to function with only ‘part-time’ lead roles related to some professions deemed necessary to deliver high quality care, including an orthodontist and speech therapist, and with other professions, such a senior psychologist, not employed to deliver service. Yet we highlight that all of
these positions were mandated as necessary by CSAG and HSC in their prescriptions for the re-organisation of cleft services nationally.

4.4 Leadership of the Cleft Lip and Palate Network

Following on from the above discussion, which sets out the historical antecedents to the re-organisation of cleft care, in this section we further explore the need to align leadership with professional and organisational hierarchies.

4.4.1 Social Network Analysis: Leadership Patterns

As a consequence of ongoing problems in the network, readers should note the difficulties in researching the Cleft Lip and Palate Network, which meant the network was not fully surveyed (note that Lowham base staff in particular did not engage with the research study). Thus readers should interpret SNA findings with some caution (see section 3.6.2 (i) for more details). Figure 4.4.1 (i), shows the influence or leadership relationships among the network. This graph was developed for the leadership/influence relationships. The graph provides descriptive evidence relating to the overall network structure and the prominence of central actors. It is apparent that this network is centralised around certain identified leaders in this network, notably a limited number of specialist cleft surgeons, but across both Valley and Queenton sites. Notwithstanding this, we suggest our SNA shows that the Cleft Lip and Palate Network is a relatively narrow one in terms of interaction between its staff, particularly when compared to the Local Safeguarding Children’s Board (Chapter 6) and the Paediatric Nephrology Network (Chapter 5), with both of these latter networks exhibiting significantly denser interaction.
Table 4.4.1 (i) is a summary of the centrality measures. Referring to this table the in-degree (a measure of prominence) measure is of most interest. This indicates who are regarded as high status. Within the Cleft Lip and Palate Network, five participants can be identified as located at key nodes of influence. These members received most of the nominations from SNA respondents. This is a recognition that the positions of actors Ava (speech therapist), Justin (primary/specialist surgeon, Valley/Queenton), Simon (primary surgeon, Queenton), Henry (secondary surgeon, Valley) and Sofia (Associate CD, senior cleft nurse, Queenton) might be worth trying to influence. The statistics in Table 4.4.1 (ii) and (iii) highlight that Justin and Simon occupy particular key leadership influences in the network. Beyond these two, Ava has significant leadership influence, with Sofia also exercising leadership influence in a less significant way. The significance of these leadership nodes of influence becomes clear when we map this onto professional hierarchy.

<table>
<thead>
<tr>
<th>Network</th>
<th>In degree</th>
<th>Betweenness</th>
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<tbody>
<tr>
<td></td>
<td>Most central</td>
<td>Least central</td>
</tr>
<tr>
<td>Influence</td>
<td>Justin, Simon, Henry, Ava, Sofia</td>
<td>Alex, Ella, Lily</td>
</tr>
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The SNA in Table 4.4.1 (ii) and (iii) and Figure 4.4.1(i) highlight that, whatever formal leadership arrangements are in place within the Cleft Lip...
and Palate Network, informal leadership patterns are one heavily influenced by professional hierarchy. To re-iterate Simon and Justin are the key primary surgeons that are positioned at the apex of professional hierarchy in the network, and represent key leadership influences. Sofia, is the (Associate) Clinical Director, positioned as such for the accountability requirements of the policy institution, but these formal leadership arrangements are not aligned with professional practice, with the latter engendering more significant leadership influence from primary/specialist surgeons. In sum, professional hierarchy shapes leadership so that doctors are ‘in charge’, with some leadership influence for the senior nurse who formally leads the network and is accountable for meeting targets. Beyond this, the influence of Ava (speech therapist) represents an interesting exception, which we investigate further in our in-depth qualitative fieldwork.

Table 4.4.1 (ii): Normalised Centrality Measures

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<tbody>
<tr>
<td></td>
<td>In-Degree</td>
<td>Closeness</td>
<td>Betweenness</td>
<td>Eigenvector</td>
</tr>
<tr>
<td>Ava</td>
<td>27.273</td>
<td>68.750</td>
<td>27.515</td>
<td>62.101</td>
</tr>
<tr>
<td>Alex</td>
<td>0.000</td>
<td>57.895</td>
<td>18.788</td>
<td>36.722</td>
</tr>
<tr>
<td>Justin</td>
<td>45.455</td>
<td>64.706</td>
<td>12.970</td>
<td>53.630</td>
</tr>
<tr>
<td>Simon</td>
<td>45.455</td>
<td>78.571</td>
<td>37.030</td>
<td>71.823</td>
</tr>
<tr>
<td>Ella</td>
<td>0.000</td>
<td>50.000</td>
<td>0.000</td>
<td>29.988</td>
</tr>
<tr>
<td>Lily</td>
<td>0.000</td>
<td>55.000</td>
<td>0.000</td>
<td>41.997</td>
</tr>
<tr>
<td>Sofia</td>
<td>18.182</td>
<td>55.000</td>
<td>3.879</td>
<td>36.003</td>
</tr>
<tr>
<td>Bea</td>
<td>0.000</td>
<td>47.826</td>
<td>2.121</td>
<td>26.860</td>
</tr>
<tr>
<td>Henry</td>
<td>27.273</td>
<td>55.000</td>
<td>3.152</td>
<td>30.320</td>
</tr>
<tr>
<td>Duncan</td>
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<td>50.000</td>
<td>0.000</td>
<td>29.988</td>
</tr>
<tr>
<td>Doreen</td>
<td>9.091</td>
<td>37.931</td>
<td>0.000</td>
<td>8.223</td>
</tr>
<tr>
<td>Marge</td>
<td>9.091</td>
<td>42.308</td>
<td>0.000</td>
<td>13.906</td>
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</tbody>
</table>

Table 4.4.1 (iii): Descriptive Statistics for Each Measure

<table>
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<tbody>
<tr>
<td></td>
<td>In-Degree</td>
<td>Closeness</td>
<td>Betweenness</td>
<td>Eigenvector</td>
</tr>
<tr>
<td>Mean</td>
<td>31.818</td>
<td>55.249</td>
<td>8.788</td>
<td>36.797</td>
</tr>
<tr>
<td>Std Dev</td>
<td>19.105</td>
<td>10.803</td>
<td>12.084</td>
<td>17.682</td>
</tr>
<tr>
<td>Sum</td>
<td>381.818</td>
<td>662.987</td>
<td>105.455</td>
<td>441.561</td>
</tr>
<tr>
<td>Variance</td>
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<td>116.702</td>
<td>146.023</td>
<td>312.668</td>
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<tr>
<td>SSQ</td>
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<td>51.759</td>
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<tr>
<td>Minimum</td>
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<td>0.000</td>
<td>8.223</td>
</tr>
<tr>
<td>Maximum</td>
<td>72.727</td>
<td>78.571</td>
<td>37.030</td>
<td>71.823</td>
</tr>
</tbody>
</table>

Table 4.4.1 (i) also shows the most central actors for the betweenness measure; i.e. the extent to which an actor mediates the other actors (potential brokers). Ava, Justin, Simon, and Alex (cleft orthodontist, Queenton) appear to be relatively a good bit more powerful than others by these measures. Clearly, there is a structural basis for these actors to perceive that they are "different" from others in the network. Having noted this, Lily (cleft nurse, Queenton), appears to exert some leadership influence on the closeness measure (how quickly an actor can interact with others). As discussed in our qualitative data section, this is due to her taking up a co-ordinating role for surgeon-led clinics, so she enjoys some ‘voice’ in the delivery and development of service; i.e. in part, this might be viewed as consistent with professional hierarchy that positions nurses in a
relatively less powerful position to doctors. Of all those outside surgeons, only Ava, the speech therapist, appears to have most leadership influence. There are a number of reasons for this. Consistent with our proposition that the professional institution drives patterns of leadership, we suggest that speech therapy is a distinctive knowledge domain, which surgeons accept as higher status than nursing. Moreover, we highlight that the speech therapist is positioned to evaluate the effectiveness of the surgical intervention, since a child’s speech should be more amenable to therapy with a high quality surgical intervention. A further reason, discussed below in our qualitative data section is division of labour between surgeons and other healthcare professionals. Surgeons deliver their intervention, and subject to pre-operative and post-operative assessment, interact relatively little with nurses. In contrast, nurses tend to have a sustained interaction with patients and carers, and the speech therapy intervention is embedded in the clinics delivered by surgeons, thus there is situated interaction across professions that allow the speech therapist to influence delivery and development of service.

4.4.2 Leadership Aligned with Professional but not Organisational Hierarchy

As evident in previous sections of this report, historical inter- and intra-professional hierarchy, combined with a need for staff to work across geographical and organisational boundaries, proved major challenges for the network. From its inception, Queenton’s selection as the hub over Valley, and the rivalry that emerged from that, seemed likely to overshadow the networks’ ability to collaborate effectively.

The decision by senior management at the hub of Queenton Trust to appoint Justin [Valley-based primary surgeon] as the first formal Clinical Director [CD] from the pool of four surgeons attached to the network, showed their awareness of pre-existing professional and organisational hierarchy, which preceded re-organisation cleft care. From our interviews with various staff across professions and organisations, this was a decision they wholly supported as necessary to mediate professional and organisational divisions and build up a collective ethos across the network. Appointment of Justin as formal leader was seen by staff as a move to ‘welcome’ Justin into the Queenton hub. His legitimacy as leader was enhanced because he was the most senior surgeon and had demonstrated the necessary leadership skills through his previous role of heading up cleft care as the lead primary surgeon in Valley. Most importantly, as the most senior surgeon in the network, his professional status afforded him legitimacy and power amongst his peers, thus enabling him to lead and influence the other cleft surgeons in a more effective manner:

‘When the cleft hub decision was being made, there was a rivalry between the different surgeons as to where the cleft centre would be located and who would lead it. This was a historical thing. So when Justin [Valley-based primary surgeon] was appointed CD that appeared a positive move towards building bridges between competing sites’ (Ava, Speech Therapist).

As the first appointed CD, Justin’s leadership approach was one of administrative leadership, as he developed management structures and processes, and organised and chaired formal meetings, to bring network staff together. His leadership style was participatory and consistent with
traditional collegiate ways of working. He viewed his role as making
decisions on behalf of network staff, and his participatory approach
engendered favourable comments from staff about a ‘united’ ethos of the
network under his formal direction:

‘When Justin [Valley-based primary surgeon] was CD, he always, always,
came up to Queenton to do the job. He chaired meetings and took a very,
organised approach to leadership. He was influential with others. He dealt
with the wider relevant network business like the budget and clinical
governance, and generated action plans for improvement that he would
follow up. He was a systematic leader, and we developed a lot of protocols
and procedures from his work as the first CD. It was the beginning of our
regional service, everyone participated, and there was a sense of
excitement and unity’ (Ava, Speech Therapist).

Whilst Justin’s appointment as the CD of the network was embraced as a
way to overcome historical and professional divisions and influence
collaboration, he nevertheless continued to ‘beat the drum’ for a
reconsideration of designating both Queenton and Valley as twin surgical
sites:

‘Justin [Valley-base primary surgeon] went to national cleft meetings and
said ‘we should be reviewing whether the work should only be done in
Queenton and whether much of it might be better back in Valley’. The trust
heard about this and called him in to see senior management. He [Justin]
thought they were going to discuss the waiting list issue. Instead senior
management said, ‘we understand that you have been saying this at the
national cleft meeting ... as Clinical Director, one of the terms and
conditions of your employment is that you represent Trust policy and that’s
not Trust policy, so with immediate effect you are relieved of those duties’.
His removal from post was a shock to everyone!’ (Ava, Speech Therapist).

The above quote illustrates the way the trust viewed Justin’s action akin to
overstepping the boundaries of his role as the network CD leader in his
attempt to interject his own personal agenda for policy change at the
national level.

Following Justin’s removal from the post of CD, we might expect Queenton
Trust senior management to simply appoint one of the remaining surgeons
from the network (all affiliated originally with Queenton) as CD. However,
this was not to be the case for reasons associated with intra-professional
hierarchy, underpinned with a sense of professional collegiality:

‘Justin was sacked and he was taken aback at that. However, I couldn’t
then go in and become CD, because it would look like a Queenton stitch-up.
Look I’m 10 years younger than Justin, and probably 6 years junior to him
on a professional level. It would be relationship and professional suicide,
and cause me great difficulties, very tangible difficulties with my peers’
(Simon, Queenton Primary Surgeon).
Apparent in the above is how intra-professional hierarchy underpinned a less senior surgeon’s reluctance to fill the vacant lead role. Meanwhile, the other two surgeons in the network [Henry and Ron, secondary surgeons] espoused not wanting the CD position because they were merely secondary surgeons, not cleft specialists, and anyway had too many clinical commitments to manage to take on an additional administrative role.

In light of the network requiring a CD lead in place to fully function, Sofia (Queenton senior specialist cleft nurse) applied for the post and was subsequently appointed, but only as an ‘associate’ CD. This compared to the ‘full’ CD status that Justin had held, primarily because Sofia’s status as nurse meant she was unable to performance manage doctors. However her nursing role, although a senior position within the network, proved to be limiting insofar as her ability to lead or influence the surgeons was compromised because of inter-professional hierarchy, with surgeons pursuing professional self-interest, rather than wider network interest.

4.4.3 Leadership Aligned with Organisational but not Professional Hierarchy

In her role as associate CD, Sofia faced the challenge of traditional professional hierarchies in carrying out her leadership role. A range of network staff highlighted that Sofia’s ability to effectively lead the network relied heavily upon surgeons accepting her legitimacy to do so, and their willingness to cede a degree of authority to her:

‘Sofia tried to help the best she could. But she didn’t have those negotiating skills that leaders need, because they’re not something that nurses have. I don’t mean this detrimentally, but nursing training and management doesn’t develop leadership. If you’ve have never been in that kind of situation, you don’t learn those kinds of skills, especially when it comes to negotiating with doctors’ (Lily, Specialist Cleft Nurse).

‘It is just so hierarchical here. There are many difficulties in terms of the CD being able to influence what the surgeons do. The reason why Sofia had such a hard time was because she was a nurse, and nurses are not on the same level as surgeons, and they wouldn’t listen to her’ (Alex, Queenton Orthodontist).

‘There were some difficult issues she [Sofia] needed to address involving some of the surgeons. You’ve got to be a certain kind of leader to be able to tackle clinical issues with powerful doctors’ (Ava, Speech Therapist).

In the quotes above, the hierarchical nature of network as surgically-dominated is pervasive and clear inter-professional hierarchies impeded Sofia’s attempts to effect leadership over clinical matters due to the powerful position of the surgeons.

Surgeons were candid about the way Sofia, although the lead CD for the network, was viewed first and foremost as a nurse, which greatly undermined her capacity to lead on network matters with any autonomy or perceived authority:

‘I think the difficulty that Sofia had was that a lot of people she would talk to would say ‘oh, well you are a nurse’, whereas if you are a surgeon, then
people are a lot more willing to listen to you. Sofia was unable to address the issues, whereas a surgeon would have had more clout. So, her leadership influence was focused on her nursing peers’ (Simon, Queenton Surgeon).

This last comment reflects the way that those less powerful professionals to whom leadership opportunities are distributed may struggle to assert their influence beyond their own professional group. In negotiating access to the research site, we naturally dealt with the formal leader of the network, who was Sophia at the time, and assumed her acquiescence meant all network staff bought into the research. However, over time it became clear that Sofia had merely gained the consent of nurses. Justin (Valley primary surgeon) complained that, ‘whilst I support the research, it rather irks me that surgeons were not consulted about your research study’. The disengagement of many Cleft Lip and Palate staff halfway through the research programme, which compromised our fieldwork, reflected Sofia’s narrow leadership jurisdiction. Access only improved again towards the very end of the study when another surgeon was permanently appointed CD.

In addition to being strained by traditional surgeon-nurse hierarchy, professional challenges to Sofia’s leadership were further compounded by the fragmentation of the network. In effect, leadership within the network had become silo-ed, with each profession independently pursuing their, own interests, particularly manifest within surgery:

‘Under Sofia’s leadership, there were different wills or people not all pulling in the same direction mainly because of professional self-interest, particularly surgeons. So, instead of Sofia providing leadership, a lead surgeon would influence staff in another direction that suited surgeons rather than the rest of the network’ (Alex, Queenton Orthodontist).

Sofia’s case for representing an effective leader was further compromised because of a number of staff was resigning their posts, but not being replaced due to budget cutbacks. Moreover the network continued to function with only part-time lead roles in areas such as the orthodontist and speech therapist, and without other professions, including a psychologist on board. Yet all these positions were mandated by CSAG and HSC. The overall feeling within the network, particularly within the ‘hub’, was that Sofia had put in considerable effort to effect positive change across the network, including lobbying for staff. However, she was unable to exert the necessary influence over Queenent Trust senior management, because her professional standing as a nurse meant she was insufficien tly powerful to compete for resources with the doctors that headed up other areas. As a result of her limited power, the Cleft Lip and Palate Network was disadvantaged.

Suffice to say that following Sofia’s retirement from the CD post and her specialist senior nursing position in the network, it was perhaps unsurprising that the view held by the majority of the network was that the next CD should come from within the ranks of the surgeons. Although there were indications from some members that other professions within the network might have good leadership skills and the necessary capabilities to fulfil the role adequately, in the end the professional status of surgeons that
engendered the necessary leadership legitimacy, mattered most in the appointment of the next CD.

We also note that any leadership agency was framed by a need to attend to targets, specifically waiting list reductions, which were centrally monitored. We emphasise that this particularly applied to the Cleft Lip and Palate Network (the non-mandated nature of the Paediatric Nephrology Network, combined with its small size and that kidney transplants were a relatively rare intervention, meant it was not subject to policy set targets, although was influenced by those longer-term outcomes set by a professional body). This engendered target-based leadership, with resources diverted by the formal leader of the Cleft Lip and Palate Network to bring down waiting lists in line with the demands of policy. As the commissioner for childrens services regionally admitted:

*The cleft network interests me, more than the nephrology network, because national agendas and national policy pay attention to cleft. My priorities are driven nationally by what’s come down from the top, particularly where costs and outcomes are concerned. I even sit on their steering group to ensure they are doing what they should be doing and hit targets. Their funding is dependent upon this.*

So, in the case of the Cleft Lip and Palate Network, we see how leadership agency of its formal leader is likely to be framed by the demands of the commissioner, which in turn reflects nationally set targets.

### 4.4.4 Leadership Alignment with Professional and Organisational Hierarchy

As evident in our earlier discussion about the appropriateness of Justin’s appointment to CD, that others accepted the legitimacy of any leader was crucial for the network to maintain a common purpose and overcome historical divisions, so that the network was ‘networked’. Following Sofia’s retirement, surgeons were positioned by remaining network staff as the most likely to achieve such aims:

‘*It’s unlikely to be Justin [Valley-based primary surgeon] because I don’t think he would try again and who can blame him although I think he could probably do a very good job. Maybe Simon [Queenton primary surgeon] although I know Simon doesn’t want to do it, so it will need to be one of the other two surgeons, either Henry or Ron [both secondary surgeons]*’ (Ava, Speech Therapist).

Confirming this, within such a surgically-dominated network, nurses agreed that the CD role was a position of authority that required the legitimacy of a surgeon. They accepted there were limits to their leadership capabilities within the professional hierarchy:

‘*We (nurses) are only such a tiny part of the whole cleft network, with little professional standing amongst the surgeons, so I would say one of the*
three surgeons, definitely one of them should be the network leader’ (Lily, Cleft Specialist Nurse).

For other staff, the possibility of having a profession other than a surgeon take on the CD role was a notion that was mildly entertained, albeit only briefly:

‘We have put forward suggestions for the CD. Initially we [orthodontist and nurses] wanted the speech and language therapist [Ava] to be the CD. She has good social skills, is a hard working person and dedicated, but she declined because she feels there is not enough unity within the network for her to take on the role. I think what we need right now is to make the network more united and I would say one of three surgeons could do that’ (Alex, Orthodontist).

There is a suggestion in the above quote that, in the different circumstances of a more harmonious network, other professionals might effectively enact a leadership role. However, in its current state of fragmentation and contestation, only surgeons are deemed to occupy a position of substantial influence:

‘As a leader, next it should be a surgeon because there are thorny issues to be addressed with some of the surgeons so we’ll need to let a surgeon do that. Surgeons are able to do that level of influencing, challenging people on the way they’re working, given most of the problems lie with the surgeons … now that’s real NHS hierarchy stuff!’ (Ava, Speech Therapist).

The above quote draws attention to the potential limitations or challenges to leadership that other professions might encounter due to professional boundaries, particularly when dealing with surgeons, so certain tasks would require the legitimacy of a surgeon in order to succeed:

‘It’s a difficult decision as to who should be the next CD. You may have gathered that there are some very thorny issues and, despite having been a network for a long time, we are not really getting any closer to resolving those in our current state. Those issues need to be resolved, but it will be very hard to take on that leadership role, so I think it should be a surgeon in the end’ (Simon, Primary Surgeon).

This view that only a surgeon would have the ability to lead and influence other surgeons and also shape the future direction of the network was a perspective that was shared by all staff members. Indeed, evident from the preceding vignettes in this section is how the network as a whole seemed decidedly intent on having a surgeon take up the lead CD role. Of interest is that apart from reasoning that Justin [Queenton primary surgeon] would be an unlikely candidate because of his earlier removal from the CD position by the trust, out of the remaining three surgeons, it seemed that whichever one was appointed to lead was of little consequence or concern.
From all accounts, the overarching criteria for effective leadership associated with role of CD was bound up with the ability to influence across boundaries and based on professional status. Despite this, the surgeons remained reluctant to take on the role at least on a fulltime basis. Initially the network filled the gap in leadership by distributing the work around the various professions, until such time that Henry [secondary surgeon] made the decision to take on the CD role on an interim basis, a move that proved positive amongst network members as one of the nurses explained:

‘Well everybody was so under pressure with their own case loads that nobody felt they could take on the role of CD by themselves. At that point leadership got divvied out a little bit. Then Henry [secondary surgeon] decided to take on the interim role himself and was then appointed as permanent CD. It’s easier for one person, especially a surgeon to be able to influence decision-making, and also represent the network much better when dealing with management’ (Lily, Cleft Specialist Nurse).

Whilst requiring a concentration of formal leadership due to professional hierarchy, collective input and engagement of all network members regardless of profession is vital to facilitate collaborative working. From his position of professional strength, Henry reverted to the more participative style of leadership previously enacted by Justin:

‘Things are much different to what they used to be and much more improved. There is a sense of cohesion because Henry was appointed CD. And there’s more clarity to what roles people have as far as clinical aspects and non clinical aspects are concerned, and now everyone contributes to the team, including administrative duties. We collectively collaborate so much better under a surgeon’s leadership’ (Marge, Cleft Co-ordinator).

As an early outcome of leadership from a surgeon, other surgeons showed a willingness to make meetings more of a priority, following an early intervention by Henry as CD:

‘I made it clear from the start that everyone, especially consultants should be at that meeting at least once a month. I made it clear that it was important for Justin as one of the main consultants and main surgeons to rearrange his schedule to at least make this once a month meeting and now he does’ (Henry, CD and Surgeon).

Although Henry [secondary surgeon] became the driving force of leadership as evidenced through his formal appointment as CD and in line with his professional standing as a surgeon, in practice leadership was effectively shared to a certain extent across a range of professions:

‘I would say leadership now is shared really, although Henry [secondary surgeon] is the CD lead, I think it’s shared between Henry [secondary surgeon], Marge [Cleft coordinator] and Ava [speech therapist] and I also
think the nurses are in there too though probably en masse, if that makes sense’ (Lily, Cleft Specialist Nurse).

Apparent here is that the leadership approach demonstrated by Henry is also conducive to tempering inter and intra-professional power struggles that abounded in previous times. More importantly, the surgeon-nurse hierarchy is less overt, in that the contribution of other professions is valued by the formal leader, which in turn encourages them to take on some degree of responsibility. Indeed, the ability to take on board the views of others was a key factor in the way leadership had now become more distributed across this network. We note however that there is still a need for concentrated leadership aligned with professional hierarchy, which is apparent in our final quote:

‘We needed somebody, a surgeon, who could take leadership responsibility and make decisions. Otherwise, like with Sofia, you come to meetings, you chunter away, you have the discussions, but when you go away, nothing ever gets done. Everyone is still saying “right, and how are we going to move this forward? What are we going to do? What is our decision?”’ (Ava, Speech Therapist).

4.5 Knowledge Management

Within this section, we outline patterns of knowledge exchange through SNA. We discuss organisational and professional boundaries and their impact upon knowledge exchange. We describe and analyse attempts to mediate organisational and professional barriers to knowledge exchange these through formal interaction within meetings, ICT and situated interaction in the course of clinical practice.

4.5.1 Social Network Analysis of Knowledge Exchange

Indication of brokerage was measured based on the five brokerage roles distinguished by Gould and Fernandez (1989). Information regarding these roles is derived from the network structure of the influence/leadership relationships. Following Friedman and Podolny (1992) and Gould and Fernandez (1989), we have calculated the relative brokerage scores. This way it is possible to determine for every individual the level to which their communication profile corresponds with one of the five roles as determined by Gould and Fernandez (1989). Drawing upon the Gould and Fernandez’ typology of knowledge brokering roles, Figure 4.5.1 (i) and Table 4.5.1 (i) highlight that Simon (Queenton primary surgeon) plays a strong gatekeeper role and Ava (Queenton speech therapist) and Sofia (Associate CD) a liaison role; i.e. they link to the other professions. The knowledge brokering role of Ava is particularly intriguing, an issue we explore further in the next sections of this chapter, where we highlight this is consistent with expectations related to professional hierarchy. Despite being the formal leader of the network at the time of the SNA, Sofia has a rather narrow knowledge brokering role, liaising with her nursing peers. We also discuss further below.
Figure 4.5.1 (i) Diagrammatic Representation of Knowledge Exchange Patterns
Table 4.5.1 (i): Relative Brokerage (raw scores divided by expected values given group sizes)

Legend: (given flow 1-->2-->3, where 2 is the broker)
- Coordinator:  A-->A-->A  (all nodes belong to same group)
- Gatekeeper:  B-->A-->A  (source belongs to different group)
- Representative:  A-->A-->B  (recipient belongs to different group)
- Consultant:  B-->A-->B  (broker belongs to different group)
- Liaison:  B-->A-->C  (all nodes belong to different groups)

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<th></th>
<th>Coord</th>
<th>Gatekee</th>
<th>Represe</th>
<th>Consult</th>
<th>Liaison</th>
<th>Total</th>
</tr>
</thead>
<tbody>
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<td>0</td>
<td>0</td>
<td>2.316</td>
<td>1.222</td>
<td>1.000</td>
</tr>
<tr>
<td>Alex</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Bea</td>
<td>0</td>
<td>0</td>
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In sum, knowledge brokerage patterns appear relatively concentrated and knowledge brokering roles lie with the same network participants evident in leadership influence. Meanwhile, the bulk of network participants remain peripheral to leadership and knowledge exchange. Our initial impression is that the network is not networked. We investigate this further within our in-depth qualitative fieldwork.

4.5.2 Organisational and Geographical Boundaries

Within this section, we examine how the recent shift to a mandated hub and spoke structured network has created various inter- and intra- geographical and organisational barriers to exchanging knowledge. For example, notwithstanding different organisational affiliation, staff is not co-located under one roof, or geographically in one location, due to the ‘hub and spoke’ physical structure of the network. Also cleft patients do not stay in dedicated wards on an inpatient basis for long periods of time nor are they seen in outpatient settings on a daily or even weekly long-term basis unlike nephrology patients.

The latter contextual dimension of care means that on-going surgery is required at various stages of care delivery. To begin with, primary cleft surgery is performed by plastic surgeons [i.e. Justin-Valley-based but also attached to the Queenton hub, and Simon - Queenton] and take place at Queenton Q. This means both surgeons and specialist cleft nurses travel in from either the hub (at Queenton C) or from the Valley spoke, to Queenton Q. However, subsequent and follow-up cleft treatment might include patients either attending non-surgical multi-professional clinics and/or alternatively having secondary surgeries over time (usually carried out by maxillofacial surgeons Henry, Valley and Ron, Queenton). In contrast to primary surgery, secondary surgeries (and clinics) are carried out at the
hub or at a spoke, dependent on which locale is closest to where the patient actually resides. Hence, opportunities within and across the network to work side-by-side in either setting is sporadic and irregular at best. Finally, physical divisions created by regional management (SHA’s) having mandated and designated Queenton C as the regional network hub over the Valley site has effectively contributed towards fragmented working relationships between staff in both places, an issue that seemingly remains a divisive topic:

'We [Valley] have always had an established network to liaise with. Our immediate contact is our primary surgeon [Justin]. We have regular clinics every 3 months. We have a Valley-based speech and language therapist and we have two clinics a year with a geneticist and a consultant paediatric dentist, who are also Valley based. Further we have a designated nurse and we keep continuity over the clinics, so parents recognise familiar faces. Where Queenton went wrong was that they didn’t employ all the key members of staff in one location, or indeed employ those members of staff in the first place, yet they were still trying to run and operate a very specialist and integrated service. Their care delivery is therefore all over the place’ (Bea, Valley Orthodontist).

The Valley organisation is historically presented as a better resourced, more integrated and well-functioning multi-professional team compared to Queenton C. Such a view provides a nuanced understanding as to why knowledge exchange and collaboration between the two sites, even after considerable time has passed, continues to remain distant and strained. The historical implications of the network mandate appear reflective of an ‘us versus them’ on-going rivalry, and an issue that several members openly acknowledged as having been detrimental to policy aspirations of joined-up networking and knowledge sharing:

'There is a great divide between North and South parts of this region, so there’s not much cohesion, discussion and working togetherness. We sometimes don’t share knowledge very well because of the divide. A major undercurrent has certainly been there, but this has gone on since the unit was established’ (Simon, Queenton Surgeon).

In addition to historical organisational divisions between network sites and the associated difficulties of fostering good working relationships essential for facilitating knowledge exchange, members also identified the lack of a centralised ICT system for storing all cleft patient information and vital for carrying out cleft surgeries:

'I now operate in Queenton, rather than in Valley. We have centralised the actual surgery in Queenton over the last three or four years. The idea of that was if you brought the people together in one unit, then this would lead to better outcomes. But often, when I operate in Queenton, we don’t have all the notes that we need from Valley or elsewhere because the child doesn’t live in the Queenton area. Part of the grand plan was that there was going to be a computer system that we can all link into and all the records would be available electronically and we’d be able to exchange information
at the touch of a button and that all sounds great...but we still don’t have that’ (Justin, Primary Surgeon, Valley).

The preceding view underscores the need for follow-up improvement to communication processes in delivering quality patient care through a network. In the Cleft Lip and Palate Network, development of the necessary means for communicating between and across organisational boundaries has not been forthcoming.

Another means through which an attempt was made to mediate organisational boundaries was through formalised weekly meetings, which were held at the Queenton hub to discuss patients and general ‘hub-related’ business. However, some of the surgeons had to choose between travelling to/from their outlying spoke to the hub for meetings in Queenton or managing clinical obligations within their respective spoke:

‘They have directorate meetings once a month in Queenton, but it tends to just be the people in Queenton that go to it. For people like me and other colleagues, for example the speech therapists I work with here, attending a directorate meeting in person would take out half a day. I’ve got a clinic to do or a theatre list and it would mean I’d have to cancel that. So I’ve got to decide what’s the most effective use of my time?’ (Justin, Primary Surgeon, Valley).

From the perspective of the sole primary surgeon attached to a spoke, it seems understandable that patient care should supercede the more administrative aspects of attending a network-related monthly meeting in a distant and different locale. However, it is a choice borne directly from Queenton Trust’s decision not to adhere to CSAG and HSC recommendations for all consultants, including surgeons, to be centrally located in network hubs. Whilst the hub and spoke network was deemed a structural solution to improving cleft service, spoke staff is hindered from attending regularly scheduled meetings in Queenton, which in turn impedes the process of knowledge exchange. Competing demands for time effectively undermines the exchange of knowledge between organisations across the wider regional network.

Another factor that impinged on the ability of spoke staff to attend network meetings was paradoxical commissioning arrangements in place between employing trusts within the network. For example, spoke trusts would freely fund time spent at the hub only when it pertained to surgical procedures or surgeon-led multi-professional clinics, but not time spent attending directorate meetings, and conversely the hub trust would not agree to fund other spoke staff to attend the meetings either:

‘Part of the problem at meetings is there are difficulties in terms of getting the funding [for spoke staff] to attend, so there isn’t personal apathy, it’s just very difficult with the current arrangements and it shouldn’t be that way, obviously major changes in funding are needed’ (Simon, Queenton Surgeon).
That resources were allocated to the constituent clinical centres rather than
the network was a more general problem. Justin (Valley surgeon) described
how a ‘hidden waiting list’ was uncovered at Valley, the reduction of which,
local management at Queenton monitored the network. Yet, funding from
Valley was not easily forthcoming to support the reduction in a Valley
generated waiting list:

‘I don’t think that problem of funding from Valley following the patient has
been resolved. It reflects Valley’s view that Queenton is not where clinical
care should be focused. Worse it generates ill-feeling across the clinical
centres, so that people don’t collaborate’

Additionally, and more specifically related to knowledge exchange, Cleft
specialist nurses were needed on-site for the families and to help with
surgical procedures. This creates logistical problems in terms of trying to
cover two hospital sites when surgeries are scheduled to take place, and
because the network has few specialist nurses available. A further knock-on
effect is that their presence at one site inevitably means gaps in other areas
of cleft services they are required to deliver at the hub site:

‘I am now stretched even more as I work between the two Queenton
hospital sites, so I end up wasting an awful lot of time going to and from
each location. That tends to cut down on the clinical and training side of
cleft’ (Lily, Cleft Specialist Nurse).

In stark contrast to the Paediatric Nephrology Network, which is largely co-
located under one roof, a key issue here is that nurses must manage their
workload across the network hub at Queenton C hospital, whilst
simultaneously managing cleft surgeries scheduled at Queenton Q hospital
site. This reflects the way nurses play a centralised role in surgical settings
across the various locations. However for specialist nursing staff, the
necessity of having to commute regularly between the two sites puts a
considerable drain on both nursing time and resources, which limits their
interactions with other cleft staff. Instead of exchanging knowledge with
other cleft staff in pursuit of service development, nurses take on a pivotal
role as coordinator and administrative boundary spanner between
Queenton-based patients and the surgeon who travels into Queenton from
Valley for cleft surgeries and clinics:

‘His (Justin) secretaries up in Valley don’t have anything to do with his cleft
patients down here. So we (nurses) have to liaise for the clinics and that
kind of thing because there is no one else here to do it’ (Lily, Cleft specialist
nurse).

The above comment highlights the additional task of having to draw on
nursing time to organise surgeons’ schedules so that clinics and surgeries
can be carried out efficiently. Organisational boundaries mean the surgeon’s
secretaries are located (and employed) where surgeons are formally
located, in this case the spoke and not the hub. This also sheds light on the
unwillingness of two trusts (as part of a hub/spoke network) to support or
fund positions/time, apart from the surgeon’s, to carry out work outside their respective organisational boundaries even with a mandated hub/spoke structure in place.

Also apparent is that work practices such as these are bound up with inter-professional hierarchy with an emphasis on surgical expertise and related matters. The result is the nurse acting as a crucial administrative lynchpin and conduit for coordinating patients, clinics and surgeon schedules in addition to carrying out their specialist nursing role. Whilst they may seek to exert more influence upon doctors, in this fragmented network, nurses are positioned as responsible for coordinating the latter’s professional activities. We discuss this further in the next section.

4.5.3 Professional Boundaries

There existed considerable difficulty in creating a network ethos between various professions and individuals, where working relationships had not previously existed. Network staff felt there had been inadequate attention to the need to develop relationships with other professions whom they barely knew:

’Soo much communication is when you can meet somebody and you talk to them. It’s hard to communicate only through emails on a few occasions. If you communicate on a daily basis or something like that then it’s easier to share things. But we’re all so spread out and we hardly get together that it’s hard to feel that we’re one big network. People just have different interests, different priorities, and that’s an issue’ (Alex, Queenton orthodontist).

This impacted upon any drive towards multi-disciplinary teamworking:

‘I don’t think that the team across the region, the multi-disciplinary team, is currently effective. I don’t feel we work very well as a team outside clinics. We really don’t function properly as a team and I think the sense of that is probably very evident in our directorate meetings’ (Ava, Speech Therapist).

Notably, cleft surgeons commented openly that their professional status meant they had jurisdiction over patients and related decision-making:

‘Surgeons are the most important in cleft, not because I’m a surgeon, but obviously babies that are born with cleft lips need surgery. That’s the main form of treatment because it’s not tablets and medicines we give them, it’s surgery. So obviously surgery is very important, after which the other specialties follow’ (Justin, Primary Surgeon, Valley).

To emphasise our point, primary surgeons are professionally located at the apex of the Cleft Lip and Palate Network. They privilege their own professional status and specialised expertise to broker knowledge for their own benefit, with other professions positioned on the periphery of care delivery and development because they were not dedicated cleft specialists:
'There's a clinic at the dental hospital just a few miles from here (Valley) and there's many other clinics spread across a number of areas which myself, and Simon (another primary surgeon), each cover. In each of these places there are speech therapists and orthodontists that we link with, but they only have a marginal interest in cleft lip and palate. This is not their specialism. It's only a relatively small part of their work, but for us it's a large proportion of our work, so we need to drive things' (Justin, Primary Surgeon, Valley).

Evident above is that specialist knowledge was exchanged and brokered by primary surgeons who travel from the hub to link up with outlying spokes and collaborate with more generalist clinicians and non-clinicians. This is necessary because cleft patients receive the majority of their treatment, apart from primary surgeries that is, within the various spokes, and from other professions, who have a more generalist knowledge about the ongoing treatment of cleft, which needs supported by ‘experts, the primary care surgeons. Brought about as a result of the mandated hub and spoke network structure, this effectively means primary surgeons (attached to the hub) bear the responsibility for taking a proactive role in distributing, concentrating and brokering patient knowledge across a range of professions within the spokes. This suggests a division of labour within the network, with generalist professions holding very limited jurisdiction over certain aspects of cleft care. Specialist knowledge held by dedicated cleft surgeons remains at the forefront of cleft care. We highlight such arrangements are entirely congruent with the policy mandate of CSAG and HSC recommendations, which puts the onus on surgeons to cross organisation and professional boundaries.

The impact of professional hierarchy, in framing knowledge exchange, remained a pervasive feature our research team observed during a number of monthly directorate meetings we attended. For example in one meeting (e.g. 10/09/07 directorate meeting) we observed how a discussion led by the two primary surgeons [Simon and Justin] ensued about directorate meetings needing to be less about multi-professional team issues and more focused on medical issues, specifically “medically and surgery-driven issues”. Despite protests by the then Associate Clinical Director [Sofia, cleft nurse] against this idea, the same surgeons went on to argue that it was necessary for everyone present (and this was mainly surgeons and nurses with few exceptions) to agree medical and surgical issues would take priority in meetings over other ‘team-related’ or administrative concerns. Simon [primary surgeon, Queenton] went on to add how ‘medical people’ such as himself were more informed, and claimed surgeons were better placed to make decisions on most matters, even those that might concern other network members and professions.

In a similar vein, within another directorate meeting (04/02/08), we observed yet another example of how a primary surgeon, in pursuit of professional self-interest, privileged his own expertise and unilateral decision-making over other professions. This was also further indicative of how professional hierarchy may effectively ‘trump’ non-clinical staff, and also draws attention to the lack of knowledge sharing and mutual regard shown by surgeons towards other staff members. At the beginning of the meeting, Simon [Queenton surgeon] announced that he had taken a unilateral ‘self-decision’ to change his outlying clinics for 6 months, and in fact had already cancelled them as a temporary measure. Simon went to
explain that the reasons underlying his decision was the need to spend more time catching up on surgical time and clinics in Queenton Q, in the wake of increased waiting lists and waiting times for patients. He premised his decision on the basis that this would benefit the network and make better use of his time in the long run, as he would now be spending more time in Queenton getting patient cases ‘up to speed’, carrying out follow-ups, and so forth. Ava [Queenton speech therapist], who worked with Simon in the outlying clinics, was clearly taken aback. She expressed surprise that he had made a decision to cancel clinics without consulting her (or anyone else for that matter so it seemed) prior to today’s meeting. A lengthy discussion then followed where Ava voiced concern over the cancelled clinics and asked Simon for more information about “exactly what the changes meant … how things were going to change … how was this going to impact looking after those patients who were affected by the cancelled clinics”. She expressed additional worries, such as how the patient group would react to the change, and the extra duties this might cause for the nursing staff and also the rest of the team in general. The discussion then became very vocal and much more argumentative as time went on, especially when other professions, including Marg [cleft coordinator, Queenton], chimed in with concerns about how the change would impact their work. This elicited similar questions and concerns from nursing staff in attendance. Ava was clearly upset to the extent that she looked round the room and then rhetorically questioned, ‘so where does everyone else fit into Simon’s changes?’ Simon’s initial response to the question remained fixed on having too much work and not enough time, adding that it was more important that he was able to get ‘my house in order first’. His subsequent reply then took on a more hierarchical and professional stance when he stated, ‘the nature of surgery requires structure’, and made no attempt to address the knock-on effect of cancelled clinics on other professions within the network. Of interest was that at this point in time, Henry [Valleyon secondary surgeon and also interim CD at the time, working for Queenton] stepped in and took control of the direction of the discussion. In support of Simon’s decision in his role as a surgeon, Henry stated how clinics and medical matters were not a relevant point of discussion for members at this directorate meeting, but instead w/should be taken up at clinics and by the surgeons themselves. He then made it quite clear that the changes Simon enacted were ‘surgeon’s business’, and therefore not an appropriate item for the rest of the meeting.

4.5.4 Situated Knowledge Exchange

Similar to the Paediatric Nephrology Network, situated interaction within clinical settings appeared to mediate professional boundaries more effectively. There is a particular need for dedicated surgeons from within the network to share and exchange knowledge about mutual patients with other non-network professionals, who are also responsible for various aspects of cleft-related treatment and care. Whether on-site in spokes or hubs, or by telephone, surgeons view interactions situated in the clinical context as worthwhile compared to the lack of interest they show in attending regularly scheduled directorate meetings, or in discussing medical matters within this meeting context. Pre-arranged clinics that preceded and followed surgical procedures, in both the outlying spoke areas and the hub, seemed to function well when it came to knowledge exchange focused on the patient. Similar to the Paediatric Nephrology Network, non-doctors act as a knowledge broker [notably, rather than specialist nurses, Ava, the speech therapist]:
'The best way to actually share information about a patient is when you can all sit down together and do it. One of the benefits of having combined cleft clinics, multi-disciplinary clinics, is the fact that we are afforded the opportunity to sit down and share patient information and if those occasions were not organised and booked, that would be hard to engineer. So, for example, if I want to speak to the plastic surgeon and the orthodontist, dead easy because I can just book that into an existing clinic. What I enjoy most is working with other medical professionals and trying to do the best thing for a child. I’m an equal member of a multi-disciplinary team and my opinion is valued, the orthodontist’s opinion is valued, and when you put all that together, that’s in the best interest of the child’ (Ava, Speech Therapist, Queenton).

The interdependent working relationships that emerge between the various professions within the network, through pre- and post-operative meetings, depict surgeons’ willingness to exchange knowledge across professional and organisational boundaries in a more positive light:

‘When we do a combined clinic where we’ve got the various professionals there. So there’s the speech therapist, the orthodontist, the ear nose and throat consultant. They’re not funded through cleft, but employed by their own hospitals or their primary care trust. However, we sit and we talk about problems. Alternatively, I’ll be on the phone to the lead speech therapist [Ava] in Queenton to discuss a patient’ (Justin, Primary Surgeon).

However, we suggest situated interactions are driven by surgical need, rather than concern to develop service more widely. Indicative of knowledge exchange that is rather narrowly orientated towards the primary surgeon’s needs, only a limited number of non-doctors, specifically the speech therapist and orthodontist, enjoy influence with the surgeons:

‘I rely on other people’s judgement, specifically the speech and language therapist and orthodontist, where they will say ‘oh this patient has this problem, what are we going to do?’ and I will then act on the basis of what they suggest as they are often the experts in that area. In particular, the speech therapist is positioned through her work to evaluate whether my surgical intervention is any good’ (Simon, Queenton Surgeon).

Meanwhile, other network staff may remain on the periphery of such situated interactions. Within the Cleft Lip and Palate Network, as previously discussed, the nurse is positioned by the primary surgeons merely as a co-ordinator of the pre-operative and post-operative clinics that bring together healthcare professionals, with less opportunity to broker in knowledge than apparent in the case of the Paediatric Nephrology Network. Also notable by their absence in knowledge exchange processes within the Cleft Lip and Palate Network is that the multi-disciplinary teams encompass clinicians only, with an absence of input from those with psychosocial expertise, and further, there is no evidence of user involvement or patient input at the local level of cleft care.
It may be that, within such a surgically dominated network, for those other than powerful doctors to meaningfully contribute to knowledge exchange requires more structuring. The following quote is illustrative of how one professionally-affiliated conference of regional cleft orthodontists was transformed into a situated knowledge sharing event with cleft surgeons:

'We [cleft orthodontists] have two meetings a year to discuss cleft care in the region. I also invited the surgeons Simon [Queenton primary surgeon] and Henry [Valley secondary surgeon] to come, which they did, so we had a joint discussion with them about surgeries and orthodontics. This allowed us to have some input and influence into their interventions to serve our needs’ (Alex, Queenton Orthodontist).

In the above, Alex, the dedicated Queenton orthodontist, acted as a knowledge broker so that different clinical worlds were integrated. Alex’s professional affiliation with other orthodontists, combined with his pre-existing relationship with two Queenton surgeons, gave him legitimacy to broker knowledge into, and across two different professional boundaries engaged in cleft care. Evident here is how brokering activities such as this brings professions together for a common purpose, and seems to lessen the effects of professional hierarchy, as well as engender a better understanding of how each professions’ contribution to cleft care remains nevertheless interrelated.

4.6 Analysis of the Regional Cleft, Lip and Palate Network

4.6.1 Analysis of Network Structure

4.6.1 (i) Rationale for Mandating Network

The Cleft, Lip and Palate Network exemplify government policy. Whilst our commissioned study was one mainly focused upon network processes, our analysis in this chapter informs evaluation of whether policy aims were met. We highlight that the CLAPA survey showed better clinical outcomes from cleft care (CLAPA, 2007), and suggests concentration of expertise led to higher quality care (Sandy et al., 1998). Linked to this, there appeared effective knowledge exchange between surgeons, across the hub and spokes, although policy aspirations for wider knowledge exchange and organisational learning at the organisational and inter-professional levels are not met (Lorenz, 1989; Thompson et al., 1991). Any economic gain through more efficient use of resources appears particularly compromised by competition within the hub and between the hub and spoke site, Valley (Entwhistle and Martin, 2005), although readers should note that access problems meant we could not undertake an economic evaluation in the Cleft Lip and Palate Network (see section 3.2.6 (i)). In a more operational vein, leadership to ensure co-ordination of care across the hub site of Queenton and spoke site of Valley, appeared relatively absent. Finally, we highlight any democratic aim in this case is not met, with service user and carer involvement notable through its absence (McQuaid, 2000).
4.6.1 (ii) Hub and Spoke Network

The Cleft Lip and Palate Network is a ‘hub and spoke’ structure. Organisationally, this can be characterised as a hierarchical network, with the hub privileged in resource terms. Implementing a ‘hub and spoke’ structure is likely to be contested where the legitimacy of the hub, particularly in terms of the relative clinical expertise evident in the hub compared to spokes, is not accepted by network stakeholders. Note that geographical accessibility was privileged as criteria for selection of the hub, which might meet policy aims of mandating the network to some extent, but appeared to counter the aim of concentrating expertise to improve quality of care. That a relatively hierarchical hub and spoke structure was imposed upon cleft care in the region has consequences for leadership and knowledge sharing, as discussed further below.

4.6.1 (iii) Performance Management

The Cleft Lip and Palate Network can be characterised as a managerialised network, subject to more scrutiny regarding its performance than the clinical network around paediatric nephrology (Addicott et al., 2006, 2007; Rimmer, 2002). In particular, reduction in waiting times and waiting lists represent key performance criteria, as evidenced in the emphasis to tackle the previously ‘hidden’ waiting list problem revealed at Valley. This may focus leadership and knowledge exchange activity towards relatively narrow targets, which impact upon surgeons more than other health and social care professionals, and potentially drives out more knowledge exchange that meets service development needs, and which is more inclusive of health and social care professionals other than doctors. However, such managerialisation of the network had one significant advantage of embedding the network in the wider healthcare system, so that it was recognised by commissioners for funding purposes (although the lack of medical leadership meant resources were less forthcoming than might be expected).

4.6.1 (iv) What is (not) Mandated?

Whilst national policy mandated a reduction in the number of Cleft Lip and Palate Centres (Sandy et al., 1998), and regional strategy determined that Queenston was the hub of the network due to geographical accessibility, beyond this, network processes were subject to guidelines or recommendations, rather than these being formally mandated. The allocation of leadership responsibility proved a thorny issue, particularly in the context of conflict about the location of the hub. The context is one that we might characterise as ‘non-receptive’ (Pettigrew et al., 1992) to any distribution of leadership beyond a powerful professional core of surgeons. In short, medical leadership appears necessary where networks are characterised by fragmentation and contestation (Martin et al., 2009a).

We also note employment contract arrangements for surgeons that only fund specific clinical intervention. Admittedly, this may reflect division of labour arrangements for surgeons (who do not retain the same sustained contact with patients as do physicians for example). However, the difficulty of engaging surgeons in the network suggests employment contract arrangements may require a more explicit affiliation with the network, as well as individual constituent organisations of the network.

4.6.1 (v) Geographical Fragmentation

There are two dimensions to geographical fragmentation that impact upon network processes:
(a) Prior to the mandating of the network, cleft care was delivered across a number of centres, notably Queenton, Valley, and Lowham. Following inception of the network, care continued to be fragmented across these centres, even when Queenton was designated as the hub. Healthcare professionals from Valley and Lowham travelled to Queenton when required, and where funded to deliver interventions, although much of their care continued to be delivered in the spokes. More crucially, for the working of the hub and spoke network, they did not engage in knowledge exchange activity more widely to develop service on a network basis; i.e. they remained affiliated to their centres and merely delivered care at the hub.

(b) We also highlight that, even within the hub of the network at Queenton, the delivery of care was fragmented across two hospitals (Queenton C and Q). Whilst there are plans to relocate all services at Queenton Q, these have not been progressed. The promise made by commissioners of cleft, lip and palate services was that ‘state of the art’ facilities would be developed within Queenton. In the face of transition between Queenton C and Q, this promise has not yet been honoured, which further fuels Valley staff’s claim that they represent the premier centre in which any regional hub should be located. For those at the hub formerly located at Queenton C, but now required to deliver care in Queenton Q, managing the operational requirements of delivering care proved challenging in the face of different systems and cultures across the hospitals, and without the leadership influence to pull down operational resources from within Queenton Q.

4.6.2 Analysis of Network Leadership Process

4.6.2 (i) Formal Leadership

Formal leadership of the network passed through three staff. The lead medical consultant from one of the spoke centres (Valley) initially took up the ‘baton’ of leadership with consent from all others in the network. He was removed by Queenton Trust Management in the face of his attempts to get the decision regarding the hub location changed from Queenton to Valley. He was replaced by the lead specialist cleft nurse at Queenton C, with other medical consultants from either the hub or spokes reluctant to take up the formal leadership position because one of their peers had been removed. We note that the lead nurse was allocated ‘Associate’ Clinical Director status, compared to the ‘full’ Clinical Director status that her predecessor and successor enjoyed. Upon the recent retirement of the lead nurse, the formal leadership position for the network was taken up on a temporary basis by one of the medical consultants from Valley, but whom was then employed by Queenton, and after an interim six month period, he was given the post permanently. It is illuminating to compare the leadership influence of the lead nurse Queenton C with the medical consultants, since the importance of professional status and associated legitimacy is very evident (Friedson, 1994; Hebdon and Kirkpatrick, 2005; Wilding, 1982).

4.6.2 (ii) Legitimacy for Leadership

There are two dimensions to legitimacy, which influence the likelihood that a formal leader drawn from the ranks of a medical consultant is more effective than one drawn from outside the medical group:

(a) Within the Cleft, Lip and Palate Network, leadership influence is more evident where it is aligned with professional power. This is consistent with the tradition of a professional bureaucracy, where the leader is likely drawn from the most powerful professional group in the bureaucracy (Mintzberg, 1979, 1985). We also note, consistent with the role of the leader in a professional bureaucracy, that any leader is regarded as ‘first amongst
equals’ and therefore requires the support from his or her peers (Kirkpatrick, 1999; Sheaff et al., 2004). Reflecting collegiality, when the original leader (a medical consultant) was removed, his peers were reluctant to take up the leadership position, with a senior nurse positioned as ‘Associate’ Clinical Director, but who was unable to exercise the requisite leadership influence upon network processes. On her retirement, she was replaced by a medical consultant. Immediately, he was able to exercise greater leadership influence;

(b) Our analysis highlights that leadership influence is greatest where it is aligned with not only with professional hierarchy, but with organisational hierarchy demanded by the policy mandate. In this light, the policy recommendation that ‘encouraged’ medical consultants located at the network hub to enact leadership, appears appropriate, given the requirement to support the delivery of care through leveraging resources at the hub site.

4.6.2 (iii) Uni-disciplinary Leadership

Linked to the above, much is made of a need for multi-disciplinary team-working with a concomitant requirement for leadership influence that encompasses the wider range of professional disciplines in such structural arrangements. However, apparent within the Cleft, Lip and Palate Network was a predisposition of healthcare professionals towards leadership of peers, but less so exerting leadership influence over other healthcare professionals. Most visibly, surgeons focused upon leadership influence over their medical peers. Beyond this, we also highlight that, when the formal leadership was allocated to the lead nurse at Queenton C, she focused any leadership activity, beyond administration, upon her nursing peers (Currie et al., 2009a).

4.6.2 (iv) Administrative Leadership

Administrative leadership appears important. Indeed our third case of the Local Safeguarding Children’s Board, presented in a later chapter (6), exemplifies the importance of administrative leadership in the initial stages of network development. This is also evident in the Cleft Lip and Palate Network. Whilst removed relatively from the formal leadership position very quickly following his attempts to promote Valley as an alternative hub, the lead consultant from Valley exhibited leadership focused upon the development of administrative structures and processes during the initial development of the network. This may not represent leadership in its heroic guise within more populist literature (Currie et al., 2009a). Nevertheless it represents a leadership approach that is consistent with collegiate traditions of healthcare, where any professional leader is first amongst their professional equals and so administers leadership decisions on their behalf (Kirkpatrick, 1999; Mintzberg, 1979, 1985; Sheaff et al., 2004).

4.6.2 (v) Acquisition of Resource

There are two dimensions to the challenge of acquiring resources:

(a) Between hub and spokes: Management at the spoke centres within the network refused to relinquish resource to support the development of services at the Queenton hub. This related both to payment for staff delivering services at the hub, but employed by the spoke centres, and to support the employment of further staff, such as an orthodontist and educational psychologist at the hub. Yet, local clinical management at the hub site monitor the performance of the network, particularly around waiting lists and waiting times, which in our specific empirical case may be
generated by spoke clinical centres, but for which the hub lead is accountable;

(b) Within the hub: Within the Queenton hub, the Cleft, Lip and Palate Network had to compete for resource with other clinical areas. Whether represented by a medical consultant at Valley or the lead nurse from Queenton, acquisition of resources within Queenton proved challenging as local medical consultant leads of other clinical areas used their status and power to leverage resource more effectively within the hub. We note recommendations from CSAG (Sandy et al., 1998) and HSC (HSC, 1998), but not the mandated requirement, that formal leadership might best be allocated to a medical consultant from the network hub. To emphasise our point, for influence over resource allocation, key medical consultants are better positioned to take up formal leadership positions.

4.6.2 (vi) Distributing Leadership

A distinction can be drawn between distributing leadership and dispersed leadership (Currie et al., 2009b, 2009c, 2010 forthcoming). The position of power that surgeons enjoyed in the Cleft Lip and Palate Network, when appointed to formal leadership roles, allowed them to enact a more participatory style of leadership, whilst, simultaneously ensuring their interests were served. In contrast, when the nurse took up the formal leadership position, leadership was dispersed professionally and geographically, with influence concentrated within the surgical group.

4.6.3 Analysis of Network Knowledge Exchange Process

4.6.3 (i) The Role of Meetings

Formal, regular meetings were put in place to facilitate knowledge exchange across the hub and spokes. However, attendance at these from healthcare staff located at the spokes was very limited during the leadership tenure of lead nurse Queenton C. They did not see the value in attending such 'managerial' meetings. Instead they prioritised the delivery of care within the spoke centres. Only when 'one of their own' was appointed recently, the signs are that attendance at such meetings from doctors in the spoke centres has improved. Moreover, knowledge exchange around the general business of the network was held in low regard by surgeons compared to clinical knowledge exchange. However, surgeons felt clinical knowledge exchange was something to be concentrated within the medical group, or within situated clinical interactions with a narrow range of other healthcare professionals.

In sum, that knowledge exchange and power are inextricably intertwined with professional jurisdiction was evident within the formal meetings of the Cleft Lip and Palate Network (Currie and Suhomlinova, 2006).

4.6.3 (ii) The Role of ICT

The development of robust ICT was recognised as necessary in the face of geographical spread of the network. ICT potentially supports information sharing and more effective knowledge exchange for learning and service development. There are two challenges:

(a) Even with respect to the more modest aim of information sharing, current ICT infrastructure proved inadequate. Those healthcare staff employed by one of the spoke centres, but delivering care in one of the hub sites, frequently could not access necessary patient information in a timely manner;
(b) Meanwhile, any aspiration that a virtual ‘community of practice’ could be developed, which would promote learning and innovation, seemed unlikely in the absence of sophisticated ICT. On completion of the research programme, the network still lacked a dedicated website, including an intranet, which encompassed a wide range of stakeholders (including patients and carers), through which knowledge exchange for learning and innovation might be supported.

In sum, ICT infrastructure did not develop to support situated knowledge exchange across the network (Hayes and Walsham, 2000). As evident across the network, the lack of development of ICT infrastructure reflected a more widespread failure to develop architectural knowledge so that flows between component domains of professional knowledge were optimised (Balogun and Jenkins, 2003; Henderson and Clark, 1990).

4.6.3 (iii) Integration of Clinical and Psychosocial Knowledge

Clinical and psychosocial knowledge required to deliver better patient outcomes appears insufficiently integrated. This appears due to:

(a) Lack of the relevant non-clinical staff due to the inability of the formal leader of the Cleft Lip and Palate Network to leverage resource from the Queenton hub for staff appointments;

(b) Geographical fragmentation of service and the staff delivering respective clinical and psychosocial care (compared to the co-location of staff evident in the Paediatric Nephrology Network);

(c) The nature of patients. They are not long-stay patients, or commonly experience regular out-patient interventions, so any situated brokering of clinical and psychosocial knowledge in patient interactions is relatively absent;

Brokering of knowledge across clinical and psychosocial domains was relatively limited because, at the individual level of knowledge brokering (Hargadon and Sutton, 2000; Verona et al., 2006), network participants tended to orientate towards their own professional silos, and this limited any development of group level knowledge brokering, through, for example, the development of a community of practice focused upon co-ordination of patient care (Tagliaventi and Mattarelli, 2006). There was little evidence that any staff acted as knowledge brokers, who worked across organisational and professional boundaries, in the same way as nurses within the Paediatric Nephrology Network. In particular, any brokering of knowledge was dominated by surgeons located at the hub and they privileged their medical knowledge as the basis of decision-making around the patient, compared to broader clinical knowledge that might be held by nurses or paediatricians for example, or psychosocial knowledge that might be held by social workers or educationalists. Only those other healthcare professionals, whom surgeons regarded as holding some expertise, such as speech therapists and orthodontists, were able to move beyond these narrow knowledge brokering arrangements focused upon surgeons. We highlight speech therapists, however, are able to evaluate the quality of the surgical intervention, and thus hold some power over surgeons, and this explains, to some extent, their inclusion in knowledge exchange with surgeons. In sum, any expectation of wider knowledge brokering is mediated by institutional structures (Greenhalgh et al., 2004; Hargadon, 2002).

4.6.3 (iv) The Role of Nurses

The role of nurses is particularly interesting. Their prolonged contact with patients and carers potentially positions them in an ideal knowledge
brokering role. However, whilst there are glimpses that they have a ‘voice’ in some instances, which is listened to by surgeons, more commonly, in the face of operational difficulties in delivering service, they seem to take on a co-ordination role for primary surgeons (Currie et al., 2008b). This represents a role that compromises a broader and, potentially more valuable, knowledge brokering role. The division of labour renders nursing care relatively decoupled from such interaction and influence opportunities.

4.6.3 (v) Professional Network

In terms of network types, whilst formally a policy mandated network that is managerialised (Addicott et al., 2006, 2007; Rimmer, 2002), the Cleft, Lip and Palate Network tends towards a ‘professional network’ on the basis that leadership and knowledge exchange processes are driven by powerful medical consultants within the network to serve their own interests (Currie et al., 2008a; Sheaff et al., 2004; Waring and Currie, 2009).

4.6.3 (vi) Situated Learning at Local Level

At the local level, ‘situated learning’ (Lave and Wenger, 1995) was evident within the formal interactions linked to clinical interventions, although we note much less evident than within the Paediatric Nephrology Network. However, the limitations of fieldwork within the Regional Cleft, Lip and Palate Network, specifically lack of observation opportunities, render such analysis tentative (see section 3.2.6 (i)).
Chapter 5 Case 2 - Paediatric Nephrology Network

5.1 Introduction to the Paediatric Nephrology Network

The Paediatric Nephrology Network is now located at the Queenon Q hospital, after having moved in June 2008 from Queenon C Hospital, following amalgamation of the two hospitals to form Queenon University Hospitals NHS Trust. Whilst co-located on one site, nephrology staff supports joint clinics in outlying areas, within the Valley and Lowham locales, and also in locales beyond that covered by the host SHA for Queenon. Care can be provided from birth through to adulthood, inclusive of dialysis and kidney transplant services, the latter delivered solely at the Queenon Q site. The service is low volume, but high intensity, with few cases when compared to the adult cases. The treatment offered in most cases is expensive and is usually life long as patient survival rates are approximately ninety per cent.

This network is an informal, ‘voluntary’, NHS-led, multidisciplinary network. The network was initiated by the current unofficial (meaning unpaid) Director, who is also the lead consultant nephrologist. Driven by recommendations from the professional association (British Association of Paediatric Nephrology [BAPN], in 1985, the unit’s lead consultant nephrologist [Pat] and, a since retired nephrology nurse, began organising a nephrology-dedicated specialist unit for children in Queenon. Initially a paediatric psychologist, who remains an active network member [Christine], agreed to provide psychosocial care to nephrology patients. Following this, over time, a number of nephrology consultants, nurse specialists, administrative staff, and other professions joined the network including; paediatric dieticians, social workers, school teachers, youth development workers and more recently, play therapists. Since inception, the network has evolved considerably, with each profession developing as a nephrology specialist within their own dedicated field of professional expertise. Of interest is that some psychosocial positions attached to the network are technically employed by another public agency (e.g. social workers remain employed by Children’s Services of a local authority). However their positions are actually full or part-funded directly through the network or through a charitable organisation (e.g. the part-time psychologist and part-time youth development worker).

The delivery of multi-professional nephrology care is linked to the network Director’s [Pat] vision of healthcare as, “not just about medical care, it’s about holistic care, which has a psychological and social dimension”. This vision of more integrated care appears one that the entire network buys into. It is reflected in the way that integrated care is showcased throughout annual reports produced by the network: e.g. within the 2008 report (18th Annual Children’s Renal and Urology Unit Report), “our holistic model of care” is emphasised; there is “Multidisciplinary Teamworking” headed sub-section, which highlights patient-oriented/user involvement services, including parent’s evenings and support groups delivered by medical, clinical and non-clinical staff members; the network’s ability to offer other
non-medical supportive measures is highlighted, such as “play preparation packages” that are developed by play leaders for use “during potentially distressing procedures”, and “joint visits made to the home, nursery or school and general practitioner by a named nurse, social worker, dietician and sometimes a school teacher”, are featured services on page 21.

5.1.1 Professional Association Recommendations

The queenon Paediatric Nephrology Network is one 13 regional centres, which was created following a recommendation by the British Association of Paediatric Nephrology (BAPN) for concentration of services. BAPN assumes ‘an advisory role in service delivery matters’ (BAPN 2003, p15). Its main aim is to improve the standard of medical care for children with nephrology disease through ensuring that “paediatric nephrology units, suitable training and research and knowledge are used optimally within the limited resources of the British Health Service” (BAPN 2003, p iii). In essence, such pressure is necessary because paediatric nephrology is a low volume service, which swallows up a relatively minor part of national nephrology spending, which mainly funds adult services; i.e. paediatric nephrology services represents a ‘cinderella’ service. BAPN is affiliated with the Royal College of Paediatrics and Child Health, and the Nephrology Association, and so has some policy influence upon the Department of Health.

The development and improvement of paediatric nephrology has been the result of a number of recommendations formulated by the BAPN over several years. BAPN highlights deficiencies in existing services, as well as setting out definitive national recommendations for paediatric nephrology services and staffing requirements. Its recommendations have included the development of dialysis and transplantation facilities in 12 university based centres for children with End Stage Nephrology Failure. Queenon developed a thirteenth additional centre beyond these.

Whilst, the Paediatric Nephrology Network does not exhibit the contestation evident in the case of the Cleft Lip and Palate Network, the development of a thirteenth hub beyond the original 12 recommended by BAPN, has remained an issue between the Valley spoke (which now lies in a different SHA area) and the Queenon hub. Within the former, paediatric nephrology is subsumed within adult nephrology, its much larger (in resource and patient throughput terms) ‘parent’. There is little dedicated expertise, specifically medical expertise, in the narrower area of paediatric nephrology, but considerable expertise (and power) in adult nephrology. Paediatric nephrology is cast a ‘cinderella’ service by the powerful consultants within adult nephrology at the Valley spoke, and they practice a more clinically orientated model of care with little psychosocial input. Despite the absence of psychosocial expertise within adult nephrology, these powerful consultants argue that they can offer a high quality service to children and young people, and moreover, it is one accessible to the local population.

This argument has proved attractive to local patients and their carers. They have set up a carers’ pressure group to fight for the relocation of paediatric nephrology services back to Valley; i.e. what the lead consultant described as an, “unholy alliance of doctors and parents are fighting the wrong battle”. As he goes on to explain, “we need to continually convince them that our psychosocial expertise means their children get care tailored for them, rather than generic adult care, which is ill-suited for their needs because it’s narrowly clinically orientated”. However, we emphasise that such contestation was not as significant as that in the Cleft Lip and Palate Network, with it widely accepted across the region and beyond in the other clinical centres where service was delivered, that the Queenon Paediatric
Nephrology hub was where expertise was concentrated and service best centred:

‘We just couldn’t offer the expertise and support that is offered by the centre [the Paediatric Nephrology Network hub at Queenston] to our patients and their families. It is a first class international quality outfit that us doctors are really grateful for’ (Donald, Consultant, Lowham).

5.1.2 Network Growth and Development

Over the years, a number of different hospitals and primary care trusts have aligned with the Paediatric Nephrology Network at Queenston, as a result of relationships that the lead consultant nephrologist [Pat] and the other consultant nephrologists at Queenston developed in the early years with other interested medical consultants located in outlying areas of the region (Lowham and Valley) and, indeed beyond the region. Many medical consultants from outside Queenston personally knew Pat, having worked or trained under him, or listened to his vision for integrated clinical and psychosocial care at conferences and workshops. Pat and the network as a whole enjoy national and international renown for integrated care in paediatric nephrology. Former students (e.g. junior doctors), who had trained in the Queenston Paediatric Nephrology Network, became 'links' to the network from the different units in which they were now working, and so would invite a consultant nephrologist from Queenston to carry out combined clinics in their areas.

5.1.3 Network Staffing

A number of staff who formed part of the founding membership of the network was recruited informally by Pat. He simply asked staff to join or asked their line managers to allow them to move over to the network on the basis the former bought into the vision of the Paediatric Nephrology Network. Two of the consultant nephrologists [Betty and Molly] had trained at Queenston, and having worked in other units, were then recruited by Pat for their current positions. As the network grew, over time, recruitment and selection practices became more formal, but there remained a tendency to recruit staff already conversant with the way the network delivered integrated clinical and psychosocial care. To develop the multi-disciplinary nature of the network required additional funding, which was obtained from kidney charities, or Pat lobbying hospital management for further funding. That one of the consultant paediatric nephrologists [Chris] is also the Clinical Director of the Family Health Directorate for the Queenston University Hospitals Trust is helpful in the latter matter.

5.1.4 Network Functioning

Unlike the Cleft Lip and Palate Network or Local Safeguarding Children’s Network, the Paediatric Nephrology Network does not have a board, a manager or co-ordinator for its services. The network has monthly team meetings, where network members or a representative from each of the different professions attend and provide regular feedback about patients. The weekly psychosocial meeting provides a forum where clinical and psychosocial patient information is discussed. Other opportunities for interaction include two weekly ward rounds, after which a meeting is held to disseminate patient information and discuss the ward round activities.
Besides its core staff outlined in the introduction, the network also has substantive links with a number of paediatricians and urologists with an interest in nephrology from the outlying areas, and they meet with core network staff regularly to discuss nephrology issues and develop practice that integrates clinical and psychosocial care. Regarding these links to outlying areas, we highlight funding arrangements are focused upon SHA regions so that a paediatric nephrology patient within a region is expected to be referred to a centre within that region on the basis that a local PCT has a contract with that centre. The more organic development of the Paediatric Nephrology Network, however, meant its services extended beyond the geographical boundary of its host SHA. Whilst extra-contractual referral payments are a mechanism by which such extended services can be funded, perhaps because the Paediatric Nephrology Network was not mandated, such funding was not forthcoming from outlying areas.

The network also hosts its own website at the local level, which disseminates online educational material and a newsletter. There are dedicated meetings between core network staff and patients and their carers, to elicit the latter’s experience of care and to feed this through to development of service. That nephrology is a long-term condition, with sustained intervention, means long-term relationships are developed across the professional-service-user divide that engenders effective interaction. Finally, the network produces an annual report and runs an annual conference aimed at a wide range of internal and external stakeholders.

5.1.5 Transitioning from Queenton C to Queenton Q

The entire Paediatric Nephrology Network moved its facilities and staff in June 2008 to Queenton Q, following the relocation of the Paediatric Intensive Care Unit (PICU) from Queen ton C. For staff, the Paediatric Nephrology Network was no longer, ‘a big fish in a small pond’ as they had been at Queen ton C. Further, culturally and structurally, the Paediatric Nephrology Network was very distinctive from other units within Queen ton C in terms of structure, leadership style, professional interaction and their multidisciplinary approach to holistic patient care. Previous informal ways of working, developed at Queenton C, were no longer tolerated. A more hierarchical structure, accompanied by strict Queenton Q protocols, framed work practices within the Paediatric Nephrology Network, particularly for nurses. For example, each profession had to answer to line managers within their respective professions (e.g. nursing chain of command) in contrast to the autonomy and cross-professional work that staff had previously enjoyed whilst at Queen ton C. In addition, there was a re-banding and re-organisation of administrative staff that was undertaken by the trust, the result of which caused unwelcome and unexpected change to the way the administrative side of network functioned (i.e. new administrative line managers and a redistribution of administrative/secretarial work loads across the trust). As a consequence of these changes that immediately followed the move, some of the network administrators, as well as nursing staff, resigned their posts.

There were also other problems (some of which are still on-going), particularly regarding space allocation. In contrast to the close proximity of clinical, psychosocial and administrative staff at Queen ton C, on moving to Queen ton Q, staff are now spread out across an entire hospital floor with many sharing small office space (i.e. 3 consultants in one small room) and Pat, the network lead consultant is now located in a separate wing of the hospital from the rest of his team. In terms of the physical layout of the other facilities, there are two main units: the dialysis bay and the ward. A
positive feature of the new location is the close proximity the network has with PICU, which makes it easier for ‘shared care’ patients to be seen by all the relevant specialisms in one place. The network also shares ward facilities with paediatric urology, a specialism that has close links to nephrology and so helps with the joint management of patients. Whilst the current setup has presented the network with some adjustment problems mainly to do with the reduction of space on the wards, and there are still some ‘teething’ problems to do with having adequate space and facilities for optimum outpatient clinics, the network seems to be getting to grips with the changes. Although the move meant the network left behind adult nephrology and transplant colleagues at Queenon C, they have nevertheless endeavored to maintain those links by organising joint meetings to liaise on a regular basis, essential for ensuring the smooth transition of young people over to adult nephrology.

5.2. Leadership in the Paediatric Nephrology Network

5.2.1 Social Network Analysis

Figure 5.2.1 (i) shows the influence or leadership relationships for the overall network and the prominence of central actors. In combination with Table 5.2.1 (ii) we can see that the influence network is centralised around the three key actors. It is not surprising that they were identified as the most influential members of the network, given that they are senior representatives of network. These actors Pat (lead consultant/director), Maggie (senior paediatric nurse) and Pete (dialysis nurse) are viewed by the members of the network as providing an influential leadership role. From Table 5.2.1 (i) and 5.2.1 (ii), with respect to the influence/leadership network, we can see that the in-degree (prominent) measure highlights who is regarded as high status. Table 5.2.1 (i) and 5.2.1 (ii) also shows the most central actors for the betweenness measure; i.e. the extent to which an actor mediates the other actors. Maggie (senior paediatric nurse) appears to be relatively a good bit more powerful than others by this measure. The consistently exceptional people from the centrality measures (Table 5.2.1 (i)) are Len (consultant paediatric nephrology), Pete (dialysis nurse), Molly (consultant paediatric nephrology), Maggie (senior paediatric nurse) and Pat (lead consultant/director).

Table 5.2.1 (i) Centrality measures

<table>
<thead>
<tr>
<th>Network</th>
<th>In degree</th>
<th>Betweenness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influence</td>
<td>Pat, Maggie, Pete, Len</td>
<td>Maggie, Nadine, Pete, Jan</td>
</tr>
<tr>
<td>Close to</td>
<td>Pat, Len, Pete, Maggie, Molly</td>
<td>Jane, Len, Pete, Molly, Christine</td>
</tr>
<tr>
<td>Go to</td>
<td>Pat, Maggie, Pete, Molly</td>
<td>Jane, Pete, Maggie Molly</td>
</tr>
</tbody>
</table>
In order to explore whether leadership was influenced by hierarchy or clustering we explored the relationship between the formal and informal relationships. The formal network is measured by asking respondents to indicate the persons with whom they work closely (variable is called “close to”) to successfully carry out their daily activities. We asked each respondent to think back over the last six months, consider all the people with whom they have worked closely. This approach is derived from the work of Mehra et al. (2001) who use a similar question to gain insight in the manner in which the professional hierarchy has been practically implemented. The informal network was measured by asking with whom do you go (variable is called “go to”) to discuss matters important to you. This way insight is gained in the personal preferences and insights of colleagues regarding informal communication. SNA can be used to explore the patterns of informal networks which may complement patterns of formal arrangements of leadership in the network. If we look at the QAP correlations coefficients between the influence network relationships, close to and advice seeking between the actors we find that influence is strongly correlated with who people feel they are close to and who people go to (see Table 5.2.1 (ii)).

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1 The correlation between the formal and informal networks is measured using the quadratic assignment procedure (QAP) (Hubert and Schulz, 1976, Krackhardt, 1987)
Table 5.2.1 (i) QAP Correlations

<table>
<thead>
<tr>
<th>QAP Correlations</th>
<th>close to</th>
<th>go to influence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.400*</td>
<td>0.541*</td>
</tr>
<tr>
<td>close to</td>
<td>0.444*</td>
<td></td>
</tr>
<tr>
<td>* p &lt; 0.001</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As is to be expected the formal and informal networks overlap to a certain extent (QAP correlations 0.444, p<0.001). The QAP correlation between the formal network and the influence network is 0.0.400 (p<0.001). The QAP correlation between the informal and the influence network is 0.541 (p<0.001). This shows that both the formal and the informal are correlated with the influence network, thus lending support for view that there is indeed some clustering in the network.

Figure 5.2.1 (ii) Diagrammatic Representation of formal influence patterns
Table 5.2.1 (iii) In-degree influence/Leadership

<table>
<thead>
<tr>
<th>Name</th>
<th>InDegree</th>
<th>NrmInDeg</th>
<th>Betweenness</th>
<th>nBetweenness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lydia</td>
<td>0</td>
<td>0.00</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>Rachael</td>
<td>2</td>
<td>9.09</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>Debbie</td>
<td>0</td>
<td>0.00</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>Mark</td>
<td>0</td>
<td>0.00</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>Len</td>
<td>3</td>
<td>13.64</td>
<td>4</td>
<td>0.87</td>
</tr>
<tr>
<td>Pete</td>
<td>8</td>
<td>36.36</td>
<td>1.75</td>
<td>0.38</td>
</tr>
<tr>
<td>Tom</td>
<td>0</td>
<td>0.00</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>Nadine</td>
<td>1</td>
<td>4.55</td>
<td>3.25</td>
<td>0.70</td>
</tr>
<tr>
<td>Olive</td>
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<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>Chris</td>
<td>2</td>
<td>9.09</td>
<td>1</td>
<td>0.22</td>
</tr>
<tr>
<td>Tamara</td>
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<td>0.00</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>Teddy</td>
<td>1</td>
<td>4.55</td>
<td>4</td>
<td>0.87</td>
</tr>
<tr>
<td>Jan</td>
<td>2</td>
<td>9.09</td>
<td>2.25</td>
<td>0.49</td>
</tr>
<tr>
<td>Linda</td>
<td>0</td>
<td>0.00</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>Molly</td>
<td>1</td>
<td>4.55</td>
<td>0.5</td>
<td>0.11</td>
</tr>
<tr>
<td>Maggie</td>
<td>12</td>
<td>54.55</td>
<td>30.25</td>
<td>6.55</td>
</tr>
<tr>
<td>Martha</td>
<td>0</td>
<td>0.00</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>Christine</td>
<td>2</td>
<td>9.09</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>Betty</td>
<td>0</td>
<td>0.00</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>Anna</td>
<td>0</td>
<td>0.00</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>Jane</td>
<td>0</td>
<td>0.00</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>Diane</td>
<td>0</td>
<td>0.00</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>Pat</td>
<td>16</td>
<td>72.73</td>
<td>0</td>
<td>0.00</td>
</tr>
</tbody>
</table>

The network diagrams of the formal and informal networks show some clustering around professions (see Figure 5.2.1 (ii) and 5.2.1 (iii)) and an indication of hierarchy. From Table 5.2.1 (i) and 5.2.1 (iii), with respect to both the formal and informal networks, we can see that the in-degree (prominent) measure highlighted Pete (dialysis nurse), Pat (lead consultant/director) Maggie (senior paediatric nurse) and Molly (consultant paediatric nephrology) as high status (Len (consultant paediatric nephrology) is prominent for the formal network, but not in the informal). Table 5.2.1(i) and 5.2.1 (iv) also shows the most central actors for the betweenness measure; i.e. the extent to which an actor mediates the other actors for each of the networks. Pete (dialysis nurse) appears to be relatively a good bit more prominent by this measure. But interestingly so is Jane (social worker). Christine (psychologist) also appears to be prominent as a go-between.
Figure 5.2.1 (iii) Diagrammatic Representation of informal influence patterns
Table 5.2.1 (iv) Centrality measures of informal and formal influence networks

<table>
<thead>
<tr>
<th>Close to</th>
<th>Goto</th>
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<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>InDegree</strong></td>
<td><strong>NrmInDeg</strong></td>
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In sum, leadership influence in the Paediatric Nephrology Network crosses or is distributed beyond professional hierarchy, a theme we explore in the next empirical section.

### 5.2.2 Concentrating and Distributing Leadership

Pat (lead consultant/director) was regarded by all network staff as the person in whom leadership was vested, because, firstly he had the necessary professional legitimacy as the senior lead consultant. Secondly, he was responsible for starting up the network and promoting its vision of multi-disciplinary, integrated care upon which its development was based. Externally, Pat also had the most power to enact influence on behalf of the network. Illustrative of this last point, the move from Queenton C to Queenton Q site flagged up the need for Pat to exert a more concentrated and overt leadership influence externally to secure resource for the network. An early illustration of this came as a result of a shortage of administrative staff:

"The shortage of staff is an ongoing situation. That’s not been resolved, so we’re trying to get the ammunition together and see what Pat can do for us."
with the management over here at Queenton Q. He knows how we feel and he’s fighting for us’ (Martha, Secretary, Queenton).

More generally:

‘Because of the move, Pat’s definitely become more influential and more of a leader because he’s had to do things, to find things out, deal with things when they’re not right for our patients. I don’t think anybody else in this network can do it. Pat is seen as our senior lead by us and others in Queenton Q’ (Molly, Consultant, Queenton).

Despite these examples, we highlight that external leadership proved more challenging to enact because the network was not formally recognised in the healthcare system as a mandated network. This applied within the Queenton organisation that hosted the Paediatric Nephrology Network, within the wider region that the network served, and the neighbouring regions beyond the Strategic Health Authority that hosted Queenton. Consequently, the Paediatric Nephrology Network provided clinical and social care in some instances for which funding did not follow. In particular, commissioners in neighbouring Strategic Health Authorities were reluctant to provide funding to organisations beyond their own geographical area, more so when that service was delivered by a network not mandated as a centre of clinical excellence. This was a problem that the formal leadership of the network lacked capacity or time to address. In short, despite our perception that leadership was effective, system structures might stymie its enactment.

Internally, the enactment of formal leadership from Pat’s perspective required an ability to keep staff aligned with a network ethos of working together towards a common goal, and this required leadership input from everyone:

‘When you have a team obviously you’ve got to push along the agenda, which is what I do. However, I try to get everybody involved and contributing, everyone leading change in some way. You know, the old adage about T.E.A.M. …Together Everybody Achieves More’ (Pat, Lead Consultant, Queenton).

His distributed approach was confirmed by network staff, who commented how Pat’s leadership was, “akin to being the foundation of a building a brick wall from the ground-up” (Jan, Transplant Nurse). To distribute leadership at the same time as driving the network forward is challenging. Pat’s standing as the lead consultant/network director is clearly tied to power and perceived legitimacy, which enables him to engage different professions and to elicit their respective input to the benefit of patients. However, as was the case with the Cleft Lip and Palate Network, this may prove insufficient. In identifying other features of context supportive of such efforts, compared to the Cleft Lip and Palate Network, most visibly alignment around a common vision for integration of care, and the existence of longstanding, good relationships between network staff that crossed professions served as a foundation for collaboration.
Beyond this, we highlight what Pat himself described as his, “old school style of operating”. He explained how he led by example, practising clinically, teaching, researching and managing, a combination of activity he suggested unlikely to be taken up by more recent consultants. He also described himself as:

‘Available 24/7 for other doctors to phone me about problems ... I take the newcomers in hand and really push the way we integrate care here, never mind the books, what’s the patient in front of you telling you? They just want to consult their computer these days rather than deal with the patient. I develop them otherwise’ (Pat, Lead Consultant, Queenton).

Leadership influence was vested in other consultants beyond Pat by virtue of their perceived professional status and legitimacy. This is unsurprising. More surprising however, in contrast to traditional professional hierarchies, the leadership influence of nurses was also marked:

‘I think everybody has their role. The consultants have a key role in leadership, but I would also say Pete [dialysis nurse] and Maggie [sr paediatric nurse] both stand out because they’ve been here for a while, and are influential in their own right’ (Diane, Dietician, Valley).

Medical consultants confirmed that nurses had leadership influence that crossed traditional professional hierarchy:

‘I wouldn’t put one person or profession way above everybody else as a leader because we do work a team. There are different leaders for each profession - the nurses have a nurse leader, and so forth. Across the team, clearly my consultant colleagues are influential, but of course, there’s Maggie [sr paediatric nurse], who intimately knows the patients and has been around for a long time. She’s really in charge of everybody who works here!’ (Molly, Consultant, Queenton).

Noteworthy, nurses’ knowledge of patients, combined along with their long-term membership in the network, underpinned this particular consultant’s apparent willingness to cede authority.

Other more ‘person-based’ reasons as to why certain nurses (specifically Pete and Maggie) also held a leadership role in the network alongside Pat [lead consultant/network director] were explained in more detail by Pete [dialysis nurse]:

‘People perceive Pat [lead consultant] and Maggie [sr paediatric nurse] as undoubtedly the main leaders because everyone knows they’re the strongest characters and they get things done. But I’d say I’m a leader too for the same reasons, and we’ve all worked together for a long time’ (Pete, Dialysis Nurse, Queenton).
The consultants’ acquiescence to such distribution of leadership appeared quite startling when compared to the Cleft Lip and Palate Network. Whilst acknowledging formal leadership within the network remains with Pat [lead consultant/director] to represent the collective interests of the network, the consultants openly conveyed an acceptance that each profession should be unfettered by professional hierarchies:

'We have all signed up to the concept that we are a multidisciplinary team, so we want our nurses, dieticians, play therapists, everyone to be allowed to lead and do things, not to be personally controlled on everything they do. Yes Pat is the unequivocal leader, but really it’s all of us’ (Chris, Consultant/Family Health Director, Queenton).

In the following quote, Maggie [sr paediatric nurse] considers all of the consultants as having a more formalised leadership role. However professional status does not preclude other professions in the network including herself, a less senior consultant and social worker from taking the lead in challenging Pat’s formal authority and medical decision-making:

'We all look to the consultants to lead and chair meetings, but one example was yesterday when we got a new patient who needed dialysis. Pat and Chris are the most senior consultants so they made the decision about allowing home dialysis. But Betty [consultant], who’s the most junior consultant, Jane [social worker] and me decided it was the wrong decision after we all talked to the family members in more depth. So we went to Pat and told him, and it was all fine. He took on our views and agreed’ (Maggie, Senior Paediatric Nurse, Queenton).

The above vignette highlights openness on the part of the Pat [lead consultant] as the formal network leader and senior consultant to be influenced by the combined efforts of a less senior consultant, a social worker and a nurse. Their ability to leverage influence at this highest level is indicative of the absence of professional hierarchies and jurisdictional boundaries and where psychosocial expertise about a patient’s circumstances is revered as much as medical expertise. Pat’s ability as the senior consultant and formal lead to take on board the views of other professions highlights a leadership style in line with a more consultative democratic approach and a full acceptance of others’ legitimacy to influence. Such an approach not only enables understanding as to why this network has few inter-professional conflicts, but also how distributed leadership is crucial for supporting the network ethos of integrated patient care.

We highlight that an internal dimension of leadership should be accompanied by a focus upon influencing the external environment, specifically to influence resource acquisition. Here, leadership appeared rather more concentrated in the hands of Chris (consultant paediatric nephrology/Clinical Director Family Health) to influence resource allocation within Queenton, with Pat also focused upon influencing external stakeholders, such as relevant charities, which provided some part funding for staff. Pat also promoted the Paediatric Nephrology Network nationally and internationally at peer reviewed conferences to promote the way they worked and the better resultant patient outcomes from the integration of
clinical and psychosocial care, “in the hope that it filters down to those giving us funding, that we are a world class outfit they should fund” (Pat, Lead Consultant, Queenton).

In line with our contingency perspective upon leadership in healthcare, we suggest that distribution of leadership within the Paediatric Nephrology Network was facilitated because it was non-mandated, small scale, and produced longer-term outcomes with less measurable intervention. With respect to the latter:

‘Our performance management is very crude. It’s basically just demonstrating we are doing activity, such as seeing a certain number of patients. We present this in our annual report and pass that onto trust management. We then have a number of indicators that are standards derived from professional bodies, such as transplant survival rates against the national average. With this, it’s a bit crude because we probably need 20 years of data to produce meaningful data. Of course the important things, like do the children grow up and achieve their physical, emotional and social potential is such a nebulous set of dimensions that we end up using surrogate measures to ‘feed the beast’, although to be honest, we don’t get a lot of hassle compared to surgically dominated areas, where targets really frame what they do (Pat, Lead Consultant, Queenton).

The quote above shows, compared to cleft lip and palate and safeguarding, leadership of paediatric nephrology was a matter relatively free of government pressure. Without resorting to semantics around discourse analysis, Pat’s use of ‘we’ is evident throughout transcripts to highlight that choice of measures against which to produce data fed upwards to the trust and beyond was a group decision, with a relatively free choice, free from external imposition upon the network. This view was shared by the commissioner of children’s services regionally:

The renal network is not really on my radar. In contrast to the attention I pay to cleft, renal performs well, but also it’s not subject to the type of targets, such as waiting lists, that cleft is subjected to. Whilst it is nationally recognised within its own domain as excellent, from my perspective, it’s wrapped up with children’s services more generally, and is less visible because it’s not mandated in the same way as cleft. I just leave them alone.

It might seem that the Paediatric Nephrology Network enjoys a degree of freedom with respect to leadership not available to other networks. Yet, we highlight this has a ‘downside’:

‘In renal care, it is difficult to measure performance as with surgically dominated networks. We can’t play the numbers game to measure performance and pull down more funding. We find it difficult to lobby for funds. However much I send our annual report to commissioners, we can only shroud wave, rather than present the so called business case (Pat, Lead Consultant, Queenton).
Thus, we argue, based on comparison of the target based effect upon the Cleft Lip and Palate, and Paediatric Nephrology Networks, performance management frames, indeed constrains leadership agency (cleft lip and palate network), but also that leadership agency may be required to influence those external stakeholders, such as commissioners, in the absence of performance targets, to leverage funding for networks (paediatric nephrology). Regarding the latter, where a network is not embedded in the system, there may also exist funding problems at the local organisational level:

'It’s [paediatric nephrology] is a well recognised unit nationally, but it isn’t really represented in the managerial structure within the hospital. Renal services fall under the family health directorate, specialty medicine and even specialty surgery. It isn’t represented as a distinctive body and paediatric nephrology in particular has no champion round the management table when resources are being allocated (Chris, Consultant/Family Health Director, Queenton).

Chris went onto describe the Paediatric Nephrology Network as ‘invisible’ to the trust on the basis that it was not part of the formal organisational structure, and so ‘off the radar’. This also applied to Pat, the lead consultant, whom he described as, ‘not in a formal position to negotiate for resource’, unlike the lead for cleft lip and palate, who enjoyed representation within the formal organisational structures.

5.2.3 Overcoming Intra-Professional Hierarchies

Of further interest within this network is that there was very little evidence of intra-professional power struggles or hierarchy within the ranks of consultants. The body of consultants willingly conceded leadership to Pat (lead consultant/network director] because of his formal role and professional standing as lead professional. Any internecine conflict was viewed as detrimental to the network:

‘If we consultants weren’t willing to work in the team fashion that we do, well you can destroy networks that way. I know many other networks that have very dysfunctional consultants because they all want be leaders, but all of us are experts and have signed up to working together even if we are all different and don’t necessarily all agree with everything we do’ (Chris, Consultant Paediatric Nephrology/ Family Health Director, Queenton).

This is markedly different compared to other medical specialties, where leadership and professional authority is ceded to one consultant ostensibly over other consultants:

‘There are certain consultants in other networks, who very much want to be the dominant leader. That kind of person would not be able to fit in here because you have to have a team mentality. You must be able to take a step back and not put always yourself at the forefront of things’ (Molly, Consultant, Queenton).
However, such a more distributed approach proved difficult to sustain outside the immediate confines of the Paediatric Nephrology Network, particularly for non-medical staff, such as nurses. Consultants in other specialties appeared unaccustomed or unwilling to accept that nurses can take up a leadership role in medical settings:

'I was in a meeting the other day with some general paediatricians and a specialist consultant. We were discussing discharge of patients. One of the consultants said that the discharge decision was a consultant decision, and not a nursing one, since they are the lead clinician. I said, 'in nephrology, it’s my decision!’ However, he didn’t accept this at all’ (Pete, Dialysis Nurse, Queenston).

More generally, when relocated to Queenston Q, nephrology nurses found their influence limited by line management external to their speciality, but to whom they answered within their professional hierarchy:

‘There’s a real lack of understanding about multi professional working and leadership at Queenston Q. I was talking to my nursing manager about something and she said, “nursing decisions are my business”, and I said, “but in nephrology, they’re my problem”. She replied by saying, “my biggest problem was Pat, who also thinks he’s a nurse manager”’ (Maggie, Sr Paediatric Nurse, Queenston).

The above draws attention to an apparent unwillingness by nursing managers outside nephrology to cede authority to less senior nursing staff in making decisions and otherwise exerting some degree of autonomy within their specialist area of nursing. The Paediatric Nephrology Network does not exist in a vacuum, and whilst distributed process appears a feature within the network, those beyond the network remain aligned with traditional professional hierarchy.

5.3 Knowledge Exchange Processes

5.3.1 SNA Knowledge Exchange

SNA can be used to explain how knowledge is accumulated and applied. It can also be used to explain the viability of access to information across different professional groupings. Complex knowledge emerges from the social interaction of individuals within and across professional groupings. Thus, for the study we looked at frequency of contact and relational quality between actors in the network as the means to understand the context for knowledge exchange. The details of the network graphs for frequency of contact and relative quality are provided in Figures 5.3.1 (i). The thickness of the lines corresponds to the levels of frequency of contacts (thick being high) and relationship quality strength (thick being strong).

We also looked at what was being exchanged. Figure 5.3.1 (ii) shows the way the team is organised in relation to general information sharing. Here we find that is network is fairly distributed in nature. It is also a dense
network and where almost everyone in the team is interacting with each other. Through the way in which the team is organised it appears that members of the team are actively engaged in general information sharing with sufficient understanding and clarity. However, when it comes to knowledge around sharing resources or referrals we find different patterns in the relationships between the actors (see Figures 5.3.1 (iii) and 5.3.1 (iv)). The patterns seem to show that information regarding sharing resources and referrals are more professionally oriented.

**Table 5.3.1 (i)** shows the QAP correlations between frequency of contact and relational quality with information sharing, knowledge about sharing resource and referrals. The table shows that information sharing is embedded in networks relating to frequency of contacts and trust between the actors. However, something else is important in terms of resources and referrals. It appears that information regarding sharing resources and referrals are more professionally oriented.

*Figure 5.3.1(i) Diagrammatic Representation of Frequency of Contacts*
Table 5.3.1 (i) QAP correlation coefficients between Frequency of contact and relational quality with information sharing, knowledge about sharing resource and referrals

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<th>referrals</th>
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* significant at P< 0.001

The five network roles that Gould and Fernandez (1989) distinguish are coordinator, gatekeeper, representative, itinerant broker, and liaison. These roles can be split into two internally and three externally oriented ones. The coordinator and gatekeeper both represent an internal orientation, as they transfer the knowledge they have to individuals within their own unit. Representatives, itinerant brokers and liaisons are externally orientated as they open up their own knowledge base to individuals from other groups. An individual may fulfil several brokerage roles at the same time. It is therefore also possible that an actor fulfils an internal orientated brokerage role in one network while he may have an externally oriented role in another. A comparison between the different orientations a person may have in the different networks may give insight into the overall knowledge brokerage behaviour in the network. In short, internally and externally orientated network roles have different functions and both are needed. However, to stimulate knowledge-transfer between groups of, say professionals in a network, externally oriented roles are likely to be more important.

Table 5.3.1 (ii) Relative Brokerage Role for Information sharing

<table>
<thead>
<tr>
<th></th>
<th>Coordina</th>
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<td>0</td>
<td>0</td>
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<tr>
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<td>0</td>
<td>0</td>
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</tr>
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Tables 5.3.1 (ii), 5.3.1 (iii) and 5.3.1 (iv) provide the relative brokerage roles for the general information sharing, resource sharing and referral respectively. From Table 5.3.1 (ii), not surprisingly, in terms of information sharing, everyone seems to have a liaison role (where the relationship is where none of the triad of actors belongs to the same
division), apart from Babs (also not surprising since she is the secretary) who has more of a gatekeeper role with regards to information sharing.

### Table 5.3.1 (iii) Relative Brokerage Role for Resource sharing

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### Figure 5.3.1 (ii) Information sharing network for Nephrology
When it comes to resources (Table 5.3.1 (iii)) Babs (secretary), Martha (secretary) and Teddy (secretary) play strong liaison roles, but they are also brokers between different groups (consultant role). Tamara (play therapist) coordinates knowledge about resources within her group (coordinator role) and Linda (senior youth worker) represents the interest of her group to others (representation role).

Table 5.3.1 (iv) Relative Brokerage Role for Referrals

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Figure 5.3.1 (iii) Knowledge of sharing resources network for Nephrology
When it comes to referrals (Table 5.3.1 (v)), Pat (lead consultant/director) and Len (consultant paediatric nephrology) play gatekeeper roles. So does Tamara (play therapist) and Linda (senior youth worker), whereas Jane (social worker) and Maggie (senior paediatric nurse) are liaisons to all the other groups.

**Figure 5.3.1 (iv) Knowledge about referrals for Nephrology**

To some extent, within the Paediatric Nephrology Network, knowledge brokering roles are with professional hierarchy. We also see that these are moderated in our SNA. Patterns of knowledge exchange were more distributed in the network with respect to general information sharing and psycho-social knowledge (compared to medical knowledge). Most notably, the lower status play therapist brokered knowledge into and across members of a higher status group (doctors). We investigate this further within our in-depth qualitative fieldwork.

### 5.3.2 Co-location, Socialisation and Knowledge Exchange

Knowledge exchange seems largely mediated because of co-location:

‘*When I’m down here from Valley, we’re all in a fairly close geographical area within the hospital and walk in to each other’s offices fairly easily and often. It takes a while just to get to used to doing things this way*’
know people but then you learn how to freely share information with everyone else’ (Mary, Consultant, Valley).

However, geographically, whilst all members are located on one hospital site, there is some dispersion within this hospital site; i.e. for doctors, co-location aided knowledge exchange. Clinical (i.e. all consultants, other doctors, and nurses) and some non-clinical staff (i.e. secretaries, play therapists and youth workers) are situated in relatively close proximity, whereas other staff, including dieticians and other non-clinical staff (i.e. teachers, social workers and psychologists) are located in other areas of the hospital. Conceivably this might pose a barrier to exchanging information, particularly for those who do not work side-by-side on a regular basis. Whilst knowledge exchange opportunities were less prevalent in this context, information sharing on a one-to-one basis was nevertheless marked, with network staff seeking out each other informally on a voluntary ‘as and when’ basis for advice or information:

‘Everybody’s involved on an informal level with each other and everybody knows everybody very well and everybody seems to get on quite well, so I might catch someone in a hallway or coming out the office or whatever. There’s no sort of like “I need to have a meeting about such and such”’ (Pete, Dialysis Nurse, Queenton).

Differences between specialists within the network are acknowledged and respected. An informal, rather than management driven policy, of knowledge exchange, engendered a better working atmosphere. Collaborative relationships, focused upon the patient, seemed to cut across professional boundaries and counter traditional hierarchies which, in other clinically-bound settings, orient towards knowledge silos:

‘It’s such a relaxed environment for me to get the job done, it is just so open. That brings out the best in everybody and that can only benefit the patients. People have the patients’ best interests at heart and aren’t at all protective here about sharing their knowledge’ (Diane, Dietician, Queenton).

The preceding views are perhaps unsurprising given they stem from professionals (i.e. Pete, Dialysis Nurse, and Diane, Dietician), located amongst the lower echelons of the professional hierarchy. We note, however, that this collective rather than individualistic acceptance for an ‘ad hoc’ participative culture of learning and open door policy seemed equally supported by consultants within the network:

‘I prefer to see other staff face to face to exchange information. It’s an informal thing and I think that it is kind of more human in a way, because people talk to each other across all professions and levels within our network’ (Molly, Consultant, Queenton).
The advantages of informality described above were observed by the research team firsthand on several occasions, whilst conducting interviews with individual members in their respective offices. We observed how, regardless of anyone’s specific profession or location, staff would simply turn up at each other’s offices unannounced, or in response to a previous fleeting conversation in a corridor, brief telephone chat or email request. Exchanges varied from imparting information about a particular patient or recent event on the ward, to conveying professional advice or an opinion about a specific situation. Some examples we observed included: a play therapist showing up in the specialist nursing office to advise a senior paediatric nurse of her availability for ‘distraction therapy’ to help with a specific patient scheduled for treatment later that same day; an impromptu visit by a dietician to a consultant as she was passing his office, in response to an email she had received earlier about dietary concerns he had about a particular outpatient. Aligned with our SNA findings, spontaneous and voluntary encounters like these were further illustrative of why the network is both decentralised and well-connected for knowledge exchange. As discussed further in this section, knowledge exchange is culturally embedded within the network through informal socialisation and learning, which drives a willingness to cross professional boundaries through knowledge exchange to the benefit of patients.

Informal knowledge exchanges were not constrained to staff with direct patient contact on the wards or in clinics, but equally taken up by administrative staff:

‘If you need something or want to know something about a patient you just go and ask them [staff delivering care]. Everyone [staff delivering care] will also come and ask me, “what’s happening with this patient”’ (Teddy, Secretary, Queenton).

Here, administrative staff are often the first or primary contact for outpatients receiving care at home or attending on-site clinics at the hospital, and also responsible for organising various staff events and coordinating clinics. Their knowledge of a particular patient is vital to network functioning.

This was also the case for other non-clinicians including teachers, who elaborated how informal knowledge sharing in this network bore scant resemblance to their previous experience of teaching in clinical settings where jurisdictional boundaries and divisional hierarchies were the accepted norm:

‘It can be quite difficult because you have each got your role and it is where you role stops that becomes the shady area. We work closely with the nurses in the dialysis bay and we are always asking them ‘is he up to doing this in your opinion as a nurse?’ or reporting back to them how ‘this child isn’t feeling too good, is there a reason for this?’ That has been very difficult for me in jobs before here, because you might be seen as interfering, but here things are different’ (Olive, Teacher, Queenton).

Consistent with our SNA findings of a decentralised network, knowledge exchange is underpinned by recognition across the network of the
legitimacy of a range of non-clinical professions in the delivery of patient care. Specifically, consultants accepted the legitimacy of others’ expertise, something that was engendered in their early training:

‘Collaboration depends on what your exposure is during your training. I worked in different specialties as a trainee. This is the only unit I can say truly and effectively works together. Most units have consultants at the top and the rest just kind of branch down, and it just doesn’t work. Everyone talks about multi-disciplinary care, only here do we really provide multi-disciplinary care’ (Molly, Consultant, Queenet). 

Further effort to encourage mutual regard for different professional specialists across the network was also exerted during informal indoctrination practices. For example, whilst most interviewees (i.e. nurses, play specialists, dieticians and psychologist) had been involved in the network for a considerable length of time and so taken on-board the need to exchange knowledge on a cross-professional basis, incoming junior doctors were ‘shown the ropes’ by consultants as a routine part of their induction process:

‘At the orientation done by the consultants, it’s stressed quite clearly at the beginning that we are a multi-disciplinary team, so please involve or ask dieticians or specialist nurses or whomever, their advice, and always think ‘who else should be involved?’, ‘what can they add to what we already know’?’ (Liz, Jr Doctor, Queenet).

In sum, reflecting our SNA, the findings presented in this section are consistent with a well-connected network for knowledge exchange. This seems largely due to the way members perceive, or alternatively learn to perceive, themselves and others within the network as having an equal status or value attached to their respective profession. We suggest, however, that the shift from informal, one-to-one knowledge exchange to more formalised knowledge exchange across professions, and the emergence of brokerage roles within the Paediatric Nephrology Network, is most pronounced within a collective group setting, such as weekly and monthly meetings. This is a phenomenon we explore further in the next section.

5.3.3 Knowledge Brokering Across the Network

Formalised meetings were calendared on a regular basis. These round table settings served as a forum for proactive knowledge exchange and appeared a valuable learning experience across the various professions. The meetings comprised a weekly psychosocial meeting, and also an amalgamation, during the last meeting of each month, of both psychosocial and clinical updates across the wider network membership. Additionally twice-weekly ward rounds were conducted and then immediately followed up by a collective renal team discussion aimed at disseminating the results of the rounds. The commonly shared view regarding the importance of psychosocial input to care, empowered non-clinicians to participate credibly within such meetings, and encouraged them to broker knowledge. In line with our SNA findings, our observations of meetings in tandem with
interviews provide a nuanced understanding of how and why non-clinicians seemed to play more salient roles in brokering knowledge within the network and from an array of professions; i.e. the play therapist, the youth development worker, and the psychologist. A contributing factor is that non-clinicians appear to have frequent interactions with patients on a daily basis much more so than clinical staff, particularly doctors, so that the knowledge brokerage enacted by non-clinicians within the context of meetings constitutes giving patients a voice:

‘A massive part of my role has been educating the team about youth work. Just simple things like setting up a ‘youth room’ on the ward. Clinical staff wanted to call it an ‘adolescent room’. Well the young people [patients] thought it sounded like a punishment room because it’s a very ‘medical’ term. So I was able to feed their views back to the renal team in meetings who then understood and supported the idea’ (Linda, Snr Youth Worker, Queenton).

Evident above is how the context of meetings offer direct access to knowledge exchange and situated learning. What is also clear is that the effective brokering of psychosocial patient knowledge requires an open and receptive culture where doctors in particular, demonstrate their willingness to look beyond professional boundaries and the medical side of patient care. Similar examples of how this youth worker actively emerged as a knowledge broker were observed by the research team over the course of several meetings. One example occurred during a time-out day (May 08) when network members were thrashing out the details of moving the Paediatric Nephrology Network to another hospital site. In the midst of a major discussion about facilities and space dominated by the clinicians, Linda (Snr Youth Worker) simply just stood up and announced “this is what I think is most important”. Arising out of her close work with young people, she argued for a purposely built non-medicalised area, a ‘haven’ for teens to get away from family to just do ‘everyday’ things that they like to do; i.e. ‘chill out’. Insider knowledge conveyed from the patients’ viewpoint immediately captured everyone’s attention when she espoused “this is just my thoughts of what I found out from talking to the teens”. The value of knowledge gained through her professional role was positively received by the network in that after she finished speaking, she received a full round of applause accompanied by chants of, “go Linda go, go Linda”.

However, others noted meetings could become medically dominated so that, “there ends up an awful lot of medical stuff in those meetings” (Christine, Psychologist). To broker others’ knowledge into such meeting was challenging. We observed a marked example of how Christine (Psychologist) used her knowledge brokering skills in one meeting (25-10-07), where the consultants were discussing two different patients and the medical implications of both having had poor histories of taking vital medication or refusing injections. The discussion then turned to the related psychological implications of both situations and therefore shifted to Christine for her professional input. Firstly Christine provided an update on both children; i.e. one child who difficulty swallowing tablets was now able to swallow 3 out of 5 pills, and the second child who was needle phobic had now agreed to an injection. However, she stressed that the progress made was the result of collective efforts and went on to broker further discussion around the table with other professions/individuals that included a social worker, the play therapist and the youth worker. Each elaborated on the
professional contribution they had made alongside the psychological treatment rendered by Christine. For example, the play therapist (Tamara) highlighted using distraction therapy to help deal with the needle phobic issue; the social worker (Jane) detailed how she spent time educating the respective parents of each patient to foster their understanding and support; and the senior youth worker (Linda) provided respite for the patients’ siblings to help take the additional strain off them and their families. In this instance, effective brokering by Christine culminated in providing a bridge between psychosocial knowledge and medical knowledge, enabling knowledge to be transferred easily from one professional domain across several domains. This perfectly illustrates how the pursuit of integrated care for patients, which encompasses its clinical and psychosocial dimensions, can become the common ground for learning and professional collaboration.

There were very diverse professions and individuals who attended meetings, some of whom were more vocal or charismatic than others as evidenced in the preceding analysis. Of note however, is that although meetings were usually overseen by Pat (Lead Consultant/Unit Director), professional domination was not a problem that we observed over the course of study. In fact the structure of all the meetings seemed to mediate this. Pat would literally go around the room, one-by-one, asking the lead from each profession for their views; e.g. 'Right so Tamara, play therapist, what’s happening with your services? Linda, youth worker, what’s happening with youth work? Christine, psychology, what do you know about this child?’ and so forth. This appeared conducive for facilitating knowledge exchange especially when it came to individuals or professions that were relatively new:

'When I first started, I was absolutely petrified of Pat [lead consultant] and the other consultants. I didn’t used to like saying anything at the psychosocial meetings. I would sit, listen and make notes, and then go and see the relevant people afterwards. I didn’t feel confident at first in telling other professions, whereas now I will contribute to the meeting no problem’ (Tamara, Play Therapy, Queenton).

In the above, we see how the play therapist (Tamara), who despite commanding a salient knowledge broker role as evidenced by our SNA findings, nevertheless had initial reservations about her professional standing within the network. She admitted that she had to overcome her traditional assumptions of professional hierarchy based upon previously working in other health care settings, and that she took time to adapt to the distinctive open knowledge exchange within the Paediatric Nephrology Network. In the process, she came to, “recognise the importance of what I do, whereas before, in other jobs, the doctors downgraded it as unimportant”.

In this section, we note how sustained inter-professional knowledge exchange was facilitated through knowledge brokering. Brokering roles were largely enacted by non-clinical professions, and overcame traditional hierarchies generally associated with multi-professional working within such settings. However, we assert that clinical context is what should drive knowledge exchange and brokering across professions, particularly when there is a need for clinical decision making to prevail. We discuss our assertion in detail in the following section as it relates to patient ward rounds.
5.3.4 Professional Hierarchy and Knowledge Brokering

Although a multi-professional, non-hierarchical network structure may support knowledge exchange informally as evident in our first data section, and more formal knowledge exchange and brokering across professionals in principle in the second data section, network members recognised that clinical hierarchy and professional jurisdiction was nevertheless important:

‘All the consultants have a key role in decision making. There is a hierarchy with the consultant making decisions on day to day treatment, day to day changes. They are the main people who should be doing that, but they [patients] also need different professionals to help them through each bit of the process’ (Bob, Specialist Registrar, Queenton).

Consistent with our SNA findings, non-clinical staff explained in more detail how professional hierarchy was necessarily concentrated in clinical settings, but subsequently transformed into multi-professional collaboration in non-clinical settings:

‘At both clinics and ward rounds, the patients get their medical bit sorted out and they get their medical condition monitored and checked. We [non-clinicians] come into the picture either during the rounds, if we’re on the ward, brought in by one of the consultants or a nurse, or else directly after we’ll hear about it at meetings and get involved’ (Jane, Social Worker, Queenton).

The above is further illustrated within our observations of ward rounds (27-04-09) and outpatient clinics (26-04-07), which provided valuable insight into the distinctive way that knowledge was concentrated or brokered in various contexts. For example, professional hierarchy and more clinically-bound knowledge brokerage activities were particularly visible on ward rounds with the following network members: lead consultant, registrar, two junior SHO’s, a staff nurse, and two dieticians. Although the group collectively went to visit each patient, the lead consultant carried out consultations with patients’ and their families, whilst the other team members stayed in the background. The one exception to this was the registrar, who took notes and worked alongside the lead consultant, exchanging medical knowledge about the patients they were consulting. Dependent on the circumstances and on a patient-by-patient basis, the lead consultant would then disseminate information amongst the ward round team or alternatively make enquiries of other team members when specific knowledge from another profession was needed to support the medical side of care. We observed these exchanges usually just before or immediately following a consultation.

A salient illustration of this involved dietary concerns and weight loss/gain, a pervasive issue for patients with chronic kidney disease. This surfaced through our observations of the lead consultant reiterating several times over the course of the rounds we observed; “when you come on this ward round or do ward rounds with me, you focus on weight”. Correspondingly, we noted how the lead consultant would talk to the parents of a patient about the medical implications of on-going feeding problems and voiced concern about weight issues. However upon exiting the room, he would
then engage with the dietician for advice on how best to deal with the problems in wider dietician terms. They discussed several options with the dietician conveying what the patient had been consuming to date. She gave her professional opinion about how to improve nutrition using certain foods she felt would best counter this particular patient's feeding problems. In turn, the lead consultant acknowledged how this course of dietician-led action should support the desired medical outcome. Although ward rounds are primarily focused on medical treatment and thus largely consultant-led, gleaning additional knowledge from other professions was nonetheless brokered through a reciprocal exchange. Evident was the apparent willingness on the part of the consultant to openly broker knowledge across different professional boundaries to deliver integrated care via multi-professional collaboration.

Also of interest during our observations was that when ward rounds were taking place, the staff nurse would continually liaise with the registrar and then relay medical information onto a receptionist on the ward who would then electronically update patient files. In addition, the staff nurse would also exchange knowledge with the dietician and consultant, and make the necessary notifications to the unit’s catering staff to modify a patient’s dietary requirements accordingly. In this context, the staff nurse assumed a key knowledge brokering role between specialist professions to achieve a common goal. This particular brokering activity required one’s capability or as evidenced here, one’s role as a staff nurse, to translate or reframe clinical knowledge from one profession or domain to non-clinicians to engender mutual understanding.

At other times on the rounds, we observed how knowledge was concentrated solely on medical issues and so patient-orientated knowledge was confined to discussions between consultants and other doctors. The need for such knowledge to remain concentrated was particularly manifest in cases where patients were under shared care (i.e. combined care under both the renal unit and other specialists’ units due to multiple health issues). When these situations arose, only the lead consultant and registrar would enter a patient’s room with the remaining nephrology team standing just outside the door. This seemed to occur largely because the consultants from another specialist unit, as well as their staff were already occupying the room and conducting their own ward rounds. However when the lead consultant and registrar announced their arrival, staff from the other specialist’ unit immediately stepped back and ‘opened ranks’ to allow the former to stand shoulder-to-shoulder next to their medical peers at the patient’s bedside. In shared case situations, overseeing patient treatment and decision-making remains foremost with the specialist area deemed to have medical jurisdiction based on the patient’s specific medical conditions and care requirements. What transpired was a professional exchange of knowledge between consultants from each specialism that collectively focused on the overall status and future care of the patient. In sum, this contrasted considerably to our previous observations, Within shared care arrangements, there was much more silo-ed knowledge exchange within the medical group.

5.4 Economic Analysis of Paediatric Nephrology Network

Information on the costs and benefits of the Paediatric Nephrology Network was derived from a focus group with members of the network. The voluntary nature of this network means that there is no direct financial
support for their activities. As such, a questionnaire of the type used to evaluate the safeguarding network was deemed to be an inappropriate approach to valuing costs and benefits. A qualitative approach was thus adopted.

5.4.1 (i) Costs of Paediatric Nephrology Network

Participants were asked to consider the resources and costs involved in participating in the network. Typically, these might include time either within or outwith working hours or travel time to network meetings.

The first point to note is that participants were not entirely comfortable with the term network. Many felt that they were members of a paediatric nephrology services team rather than a network. A network was considered to represent a loose affiliation of parties, whereas participants considered there to be a high degree of communication, interplay between individuals and common objectives within the Paediatric Nephrology Network. As such the term, ‘team’, better represented this relationship.

Secondly, the voluntary and organic nature of the network was emphasised. There is no resource to employ a network co-ordinator, unlike in other clinical disciplines meaning that co-ordination of the network is managed by participants.

Participants emphasised that the network is patient centred, with individual cases being reviewed by the multi-disciplinary team present at the network meetings. Whilst issues relating to resources available for paediatric nephrology services and challenges associated with funding appropriate care were frequently discussed, the network is not considered to be business focused, unlike other clinical disciplines.

Participants struggled to quantify the amount of time that they allocated to network activities, regarding these activities as part of their day-job and part of good quality patient care. This reflects the patient focused nature of the network activities and the high degree of integration between the disciplines represented.

The nature of paediatric nephrology services means that many individuals work flexibly, working well beyond their normal working hours or prescribed working time, to accommodate services such as home visits or patient liaison activities. However, there was no suggestion from participants that these extended responsibilities were considered to be beyond their job description.

The issue of resource availability, or more precisely the lack of it, was raised. Participants did not feel that the network activities were constrained by a lack of resource, although there was a recognition that paediatric nephrology services, like many other specialties, could benefit from additional funding. The co-ordination of network activities inevitably takes up time from senior staff and there is a danger that any change in the senior staff in the paediatric nephrology team may lead to discontinuity of network activities.

There was a suggestion that the business/directorate manager with financial responsibility for renal services should attend network meetings. Participants struggled to quantify the benefits of the network (see below) due to the chronic/progressive nature of renal disease, the wide-ranging impact on patient quality of life and the diverse range of services required. It was felt by participants that the benefits of the network were not fully recognised by financial managers in the trust and that their attendance in network activities may be beneficial. However, it was also recognised that
increased involvement of financial managers may impact on the patient focused nature of the network, resulting in a greater focus on business issues.

5.4.1 (ii) Benefits of Paediatric Nephrology Network

Participants were able to provide thoughts on the benefits of network working more readily than the costs. The key benefit of the network was perceived to be the integrated, multi-disciplinary approach to patient care, which places the patient’s needs at the centre of decision making.

This approach was seen to generate a number of benefits, including:
(a) More integrated care pathways for individuals, covering secondary, primary and community care settings;
(b) The chance for non-medical staff to have their thoughts and opinions listened to in a non-hierarchical setting;
(c) Peer-support, particularly in the management of challenging patients with progressive illness;
(d) A process for error-trapping, by making joint decisions with peers and considering the multi-faceted needs of patients with renal disease.

Whilst network members felt unable to provide quantifiable estimates of the impact of the network, many of the benefits reported clearly have financial implications for the NHS. Participants suggested that the network approach to managing patients with complex needs results in reduced re-admissions, improved discharge management and improved health and social care outcomes. Whilst all participants felt confident that the network results in improvements, it was acknowledged that it is more difficult to provide quantifiable estimates of output in renal care compared with other disciplines. For example, surgical specialties have easily quantified outputs such as survival/mortality, infection and re-admission rates. In contrast, paediatric nephrology services involve the management of a long-term chronic condition which has wide-reaching health and social care implications for the patient and their family. In such cases, it is inappropriate to use crude performance benchmarks, such as hospitalisation rates or length of stay, as the primary outcome is improving or maintaining an individual’s health status.

As a result of the inability to accurately capture quantifiable outcomes associated with the network, there was a perception that business and finance managers in the trust do not fully appreciate the value of the integrated approach to paediatric nephrology services. In particular, there was a suggestion that managers do not understand the breadth of the work, either in geographical terms (covering patients from as far away as 70 miles from Queenton) or in terms of the range of services provided.

The network has sought to address this by producing an annual report for 18 years. This is intended to provide insights into the work of the Paediatric Nephrology Network and enable internal communication within the trust and the broader health economy. In addition to this, the work of the trust has been recognised internationally, with visits from overseas renal specialists keen to understand the operation of the network, as well as nationally, with nominations for rewards that recognise excellence in care standards. In addition to this, the network holds an open meeting for parents twice per year at which any concerns about the quality of care can be aired. Recent meetings have been characterised by relatively low numbers of attendees, which may indicate few concerns about the quality of care being provided.
Other benefits identified by participants included: the development of a living/collective memory which can inform treatment decisions; improved creativity in the development of treatment pathways; a greater recognition amongst consultants of the value of other disciplines in treatment decisions; an openness that welcomes naïve ideas and suggestions for how treatment pathways could be improved.

5.4.1 (iii) Summary of Costs and Benefits of Paediatric Nephrology Network

Participants in the Paediatric Nephrology Network were clearly enthused about their approach to co-ordinated care and firmly believed that this improved the outcomes of children treated. Whilst the evidence to support this is largely anecdotal and lacks quantification, the collective experience and level of consensus amongst participants about the value of the network approach would seem to provide a convincing case of its benefits. Furthermore, from a healthcare perspective, the activities of the network are essentially ‘cost-free’; the network received no ring-fenced funding and most participants contribute time well beyond their normal working day to ensure that the best quality care is provided to patients. On this basis, the trust should consider these activities to represent excellent value for money.

5.5 Analysis of Paediatric Nephrology Network

5.5.1 Analysis of Network Structure

5.5.1 (i) Rationale for Mandating Network

The development of the Paediatric Nephrology Network aligns with recommendations of the professional association, BAPN, for the area (BAPN, 2003). Whilst not mandated by policy, it meets all the aims set out by policy-makers of mandated networks. Expertise was concentrated so that quality of care was improved. Resources were used efficiently because they were concentrated at the network hub (see section 5.4 for economic evaluation of the network) (Entwhistle and Martin, 2005). Care was co-ordinated, in particular clinical and psychosocial interventions were integrated through effective knowledge exchange (Lorenz, 1989; Thompson et al., 1991), and this enhanced the patient experience of a complex care package (Rhodes, 1997). It was the only network of our three primary cases that involved users in any significant sense in the development of services (McQuaid, 2000). Compared to the other networks in our study, the Paediatric Nephrology Network supported user involvement in service development to mediate professional dominance (Allsop and Taket, 2003; Crawford et al., 2002; Montpiet, 2003). As apparent in our analysis of the network, the Paediatric Nephrology Network might be viewed as distinctive in a way that makes replicating its success difficult; e.g. notably, it’s a low volume service, with sustained patient and carer interaction, catering for long-term conditions, and it was led by a particularly committed specialist doctor, who enacted both role-based and person-based influence.

5.5.1 (ii) Hub and Spoke Network

The Paediatric Nephrology Network is a hub and spoke network ‘lite’, but not one that is policy-mandated, rather a professional network, that was less driven by narrow professional self-interest, but more exhibiting ideal community tendencies (Tagliaventi and Mattarelli, 2006). Aside from their spat with adult nephrology services at the Valley hub, that the Queenton
hub was where expertise was concentrated, appeared widely accepted by other spoke hospitals that referred into the hub. Consequently, the Paediatric Nephrology Network was not characterised by the type of internecine strife between consultants about geographical location of the hub. Having stated this, we note the problem that the Paediatric Nephrology Network faced in drawing down funding against services provided beyond the host SHA. In a more productive climate faced by the NHS, such issues are likely to come to the fore.

5.5.1 (iii) Performance Management

As a non-mandated network, the Paediatric Nephrology Network does not experience the type of performance management pressures applied to the case of more mandated networks, such as the Cleft Lip and Palate Network; i.e. it is not a managerialised network (Addicott et al., 2006, 2007; Rimmer, 2002). Notwithstanding this, any performance pressures might be less acute for an area that is low volume and caters for a long-term condition; i.e. reducing waiting times and waiting lists is less challenging, and outcomes may be more difficult to measure. In the absence of externally imposed targets, network processes can be aligned with those working arrangements determined by professionals delivering the service. The Paediatric Nephrology Network is consequently free of managerialising influences that may stymie the development of effective network processes. However, this does mean that the importance of local level agency is heightened in the development of the network, specifically leadership, since to leverage resources may require that evidence of clinical outcomes is presented alongside a more general business case for any investment. That the Paediatric Nephrology Network was not formally recognised in the health and social care system as mandated exacerbated the external leadership challenge, and this leadership challenge extended to resource allocation decisions within the Queenton Trust itself.

5.5.2 Analysis of Network Leadership Process

5.5.2 (i) Alignment of Formal Leadership and Professional Hierarchy

That the Paediatric Nephrology Network was an emergent phenomenon, both necessitated and engendered formal leadership that aligned with professional hierarchy (Friedson, 1994; Hebdon and Kirkpatrick, 2005; Wilding, 1982), at least in the initial stage of its development. Although not formally appointed as ‘clinical director’ for the network (instead one of the other paediatric nephrology consultants was appointed Clinical Director, Directorate for Family Health, which encompassed the network), the lead consultant drove the development of the network and this was accepted by medical and other staff within the network; i.e. the lead consultant enjoyed internal legitimacy to exercise leadership influence. As argued above (section 5.5.1 (ii)), given the network was not formally embedded in the commissioning system, since it was not mandated, arguably external legitimacy with stakeholders beyond paediatric nephrology was even more important, specifically to leverage resource to support the development of the network. As we saw with the Cleft Lip and Palate Network, this proved challenging, even when a network was mandated. In this regard, the lead consultant enjoyed an international reputation with his paediatric nephrology peers outside the Queenton Trust; i.e. this was consistent with the collegiate arrangements of a professional bureaucracy (Kirkpatrick, 1999; Mintzberg, 1979, 1985; Sheaff et al., 2004). We noted how he spent a great deal of his time presenting, indeed promoting the new way of working within the Paediatric Nephrology Network to his national and...
international peers. Meanwhile, beyond paediatric nephrology within Queenston Trust, the lead consultant was viewed as high status by other senior consultants and managers.

Undoubtedly, the constant presence of the lead consultant over the 25 years of network development proved helpful in the enactment of external leadership influence. We note, however, of his plans for retirement in Summer 2010 and raise the thorny issue of succession at this point. In short, reliance upon a particular individual for leadership, particularly its external facet, creates a problem upon that leader stepping down, when much of his leadership influence relies not just on role and professional power, but also upon the person and their social capital (Nahapiet and Ghoshal, 1998) developed over the course of a longstanding leadership role. We discuss person-based characteristics of leadership further below in section 5.5.2 (ii).

5.5.2 (ii) Person-based Leadership

A notable feature of leadership within the Paediatric Nephrology Network was that, as well as having a role-based element predicated on professional power, the incumbent of the formal leadership role also exhibited the type of charismatic leadership presented in popular models of transformational approaches (Behn, 1998; Bellone and Goerl, 1993; Eggers and O'Leary, 1995; Hennessey, 1998). This may exacerbate the succession problem upon the lead consultant’s retirement, since such person-based characteristics may prove difficult to replicate by the next formal leader of the network. Of interest will be the extent to which the next leader, assuming they are a medical consultant (and note, we advise this) may only be able to rely upon role-based leadership influence in the potential absence of the type of charisma exhibited by the current leader.

5.5.2 (iii) Administrative Leadership

The type of administrative leadership observed in our other primary empirical cases was relatively absent in the case of the Paediatric Nephrology Network. Here, the necessary processes to support the network form of organisation had been developed through the more normative means of socialisation of newcomers into the new ways of working. However, we highlight the ritualistic aspect of all meetings we observed, where the lead consultant would go round each of the professional groups in turn and ask them to provide a commentary about ongoing issues that related to the meeting topic. A mixture of his charisma, and the structure provided by such rituals, encouraged those, such as the play therapist, to make contributions that they initially felt they were not placed or confident enough to make. It’s difficult for the research team to articulate or evidence, but the lead consultant exhibited an ‘old school’ style of collegiality (Kirkpatrick, 1999; Hebdon and Kirkpatrick, 2005; Wilding, 1982), and mentorship for others that may be declining in the face of managerialist pressures, yet it is one entirely fitting with the emergence of a non-mandated network that exhibits community of practice tendencies (Lave and Wenger, 1995).

5.5.2 (iv) Distributing Leadership

Whilst noting professional concentration of leadership above, compared to the Cleft Lip and Palate Network, consistent with the case of ‘complex’ organisation, leadership influence was relatively distributed (Denis et al., 1996; 2000; 2001). The lead consultant’s powerful professional position, and that the Paediatric Nephrology Network represented a receptive context for change (Pettigrew et al., 1992), allowed him to distribute leadership
from a position of strength. In distributing leadership to consultant peers, this proved necessary in the case of Chris, a paediatric nephrology consultant, who also acted as the Clinical Director for Family Health. As discussed previously, the Paediatric Nephrology Network was decoupled from many of the formal systems of resource allocation through its non-mandated status. Chris, in concert with Pat, was able to favourably influence resource allocation within Queenon Q Trust.

Meanwhile, others outside the medical group, notably the play therapist, social worker, psychologist and specialist nurses, exerted leadership influence, which went beyond the confines of their peer group to encompass the wider network. Compared to the Cleft Lip and Palate Network, where any distribution of leadership was relatively parsimonious (Currie et al., 2009a, 2009b, 2009c, 2010 forthcoming), distribution of leadership influence within the Paediatric Nephrology Network was generous and inclusive of professionals, such as nurses and psychosocial professionals, whose knowledge domain is not traditionally viewed as high status by doctors (Abbott, 1988; Freidson, 1994; Larson, 1979, 1990; Walby et al., 1994).

Having highlighted distribution of leadership, when those within the network, accustomed to exerting influence upon others beyond their peer group, interacted with the formal managerial hierarchy at Queenon Q, they found their leadership efforts ‘bounced out’. Thus, manager hierarchy seems to impact more upon doctors than has been noted in the past (Currie and Procter, 2005), at least in this non-mandated case. Specifically within nursing, those enjoying influence within The Paediatric Nephrology Network found they were ‘reined back’ within the broader nursing management hierarchy. In short, it may be challenging for an individual network to decouple its processes from those prevalent in the wider system, with the latter likely to exhibit the type of institutionalised arrangements that work against the networked form and associated distributed leadership process (Martin et al., 2009a).

5.5.3 Analysis of Knowledge Exchange Processes

5.5.3 (i) Patterns of Knowledge Exchange and Professional Hierarchy

As evident in the discussion in the next section, patterns of knowledge exchange were largely distributed. However, in line with a need for medical expertise to inform the patient intervention and traditional professional arrangements (Abbott, 1988; Freidson, 1994; Larson, 1979, 1990; Walby et al., 1994), knowledge exchange was more concentrated within the more situated context of ward rounds (Lave and Wenger, 1995). Here, the paediatric medical team would exchange knowledge focused upon the patient with other medical specialists, with other professions positioned backstage. Within such arrangements, a more junior doctor would act as the ‘runner’ between the lead consultant and other paediatric nephrology staff and broker medical and other clinical, psychosocial or patient management knowledge.

5.5.3 (ii) Knowledge Brokering Clinical and Psychosocial Knowledge

Clinical and psychosocial knowledge were integrated in a situated manner (Lave and Wenger, 1995), through formal, regular meetings, and through ward rounds and the more patient-focused meetings that followed. Compared to the Cleft Lip and Palate Network, knowledge exchange patterns revealed significant brokering by those other than doctors, across professional boundaries. In particular, specialist nurses, through their
sustained contact with patients, acted as the individual level knowledge brokers (Hargadon and Sutton, 2000; Verona et al., 2006) between clinical and psychosocial worlds, but also between doctors and administrative information. We also see brokering patterns extend to non-clinicians, inclusive of administrators, with the latter’s role a result of them being a contact point for patients and carers. In short, patterns of knowledge exchange were distributed, rather than concentrated, so that clinical and psychosocial knowledge was integrated.

5.5.3 (iv) Situated Learning in a Community of Practice

Situated learning (Lave and Wenger, 1995) is underpinned by co-location of staff. However, we highlight that, even when staff were more dispersed following the move, there remained a culture of seeking each other out to exchange knowledge face-to-face as problems arose and solutions were discussed. This reflected a more general open, egalitarian, collaborative culture into which newcomers were socialised, and which engendered community tendencies. Group identity appeared strong for those delivering paediatric nephrology services at Queenton, and this transcended, or at least equalled professional affiliation. Staff tended to talk about the paediatric nephrology ‘team’, rather than refer to ‘network’. They gave their time voluntarily to the ‘team’ beyond what might be expected in the everyday routine of their roles. In such a way, the effect of an identity that was structured in a relational way, by professional hierarchy, was mediated (Currie et al., 2010). A focus upon the patient, from which arose a distinctive way of working, and charismatic leadership provided the bedrock for staff identification with a community of practice; i.e. the network took on a form that tended towards an ideal type of network (Lave and Wenger, 1995). Beyond such arrangements, knowledge was brokered in a more structured fashion within regular meetings that encompassed all network staff, and which were orientated towards the psychosocial dimension of care, and more general network business. What stood out as a feature of the Paediatric Nephrology Network compared to our other primary cases was the acceptance by all network staff, including powerful doctors, that all professions and administrators held knowledge that potentially improved quality of care. This allowed for the development of understanding across clinical and psychosocial worlds of each others’ perspective. When held together with the glue of a focus upon patients, this provided a powerful driver for collaboration, so that the network was networked. These community tendencies engendered by strong socialisation, facilitated the development of architectural knowledge that integrated disparate professional knowledge domains (Balogun and Jenkins, 2003; Henderson and Clark, 1990). Consistent with the knowledge management literature about such matter, a social ‘fix’ rather than technical ‘fix’ supports knowledge flows across component knowledge domains (Currie and Kerrin, 2003; 2004).
Chapter 6 Case 3 - Local Safeguarding Children’s Board

Within this chapter, we introduce the third of our primary empirical cases, the Local Safeguarding Children’s Board. Prior to presenting our primary case, we provide an outline of a historical case of children’s safeguarding arrangements – Area Review Committees (ARCs) -- carried out by Robert Dingwall in England during the late 1970s and early 1980s, to highlight challenges for networked forms of health and social care delivery (Dingwall, 1983). We bridge this with our primary case, through providing an early glimpse of parallels between the historical and primary cases, and a description of recent safeguarding failures, which highlight leadership and knowledge exchange problems. Following this, we provide rich description and analysis of leadership and knowledge exchange processes within our primary case. Our comparative case analysis, focused on children’s safeguarding arrangements, reveals ongoing, all pervasive professional and organisational challenges that may be relatively intractable without skilled intervention at the local level.

6.1 Historical Comparison: Area Review Committees

Historically, Children’s Safeguarding Boards have existed for quite some time across England and Wales in various forms, prior to the recent mandating. Such arrangements were driven by rising incidents of non-accidental child abuse. In the 1950’s, co-ordinating committees were created to discuss what were deemed significant cases of child neglect and all cases of ill-treatment. These committees were comprised of local agencies and voluntary organisations involved in children’s welfare. These were later transformed into ARC’s (Area Review Committees) in the 1970’s. In their earliest form, ARC’s were set up as ‘policy-making’ bodies to emphasis teamwork and information-sharing between agencies engaged in children’s safeguarding protection i.e. social services, health and police (Dingwall, 1983). Our historical case study details challenges for ARCs below.

6.1.1 Ensuring Change across All Agencies

ARCs took their foundation from a 1974 DHSS memorandum which ‘strongly recommended’ that local authority social services and health authorities should establish these bodies to develop joint policies and co-ordinate strategies in child protection. Various other agencies involved in this field were expected to join. This guidance was reinforced by subsequent circulars in 1976 and 1980. The three areas in our study had all established ARCs by 1980 but their status and activities were very different. County had had a co-ordinating committee on child care since the early 1950s, which had been used by a particularly committed and charismatic community physician as a vehicle for developing an integrated approach to case management between health and social services over many years, under his leadership. Although an ARC had been created, its role was largely ceremonial and the body with real authority was the voluntary network focused around this individual, which had a large role in the oversight of particular cases. Borough had recently experienced a high-
profile external inquiry into a child death and had responded by creating a very tight system, with jurisdiction over individual cases going well beyond that envisaged by the DHSS memoranda. The mandating was extended considerably on a largely voluntary basis. Lower-level staff in both areas perceived these bodies as a source of joint control, where their own agency chiefs would always implement a collective decision, even if they, or their staff, might have professional reservations. This shared authority was not necessarily stable, particularly in County, where the social services chafed against the de facto leadership that had been achieved by the community physician and were looking to reclaim ground on his anticipated retirement shortly after the conclusion of the fieldwork.

In Shire, however, the tensions were more evident. This county had been much affected by the 1974 reorganisation of local government and had no experience of a major child death incident. Its attempts to get a unified approach to children’s safeguarding through the ARC could then neither build on an established history of relations between individuals not benefit from a sense of collective threat from the consequences of failure to agree. Its attempts to secure agreement between agencies, despite the element of mandating, were, then, somewhat desultory. They had, for example, been trying to replace an initial inter-agency procedure booklet, hastily assembled in 1974/5 as a simple compendium of each agency’s procedures. This came as a paper to the ARC at a winter 1978 meeting and had still not been completed by 1980, with a vague hope that it might get done some time during 1981.

At the heart of this was the issue of accomplishing change in most, if not all of the constituent organisations in the network. This is illustrated by the following extract from notes of an ARC meeting (19/07/1978, p.49, box 3):

Henry (Deputy Director, Social Services & ARC Chair) stated; ‘anything this committee produces can only be recommendations unless we agree as an Area Review Committee and reach some consensus that the procedures which we come up with be adhered to, but people will decide for themselves how much notice they’re going to take of them. It’s a problem for both the ARC and the agencies involved.’

Barbara (Area Director, Social Services) responds; ‘well if there are too many recommendations (by the ARC), which are not being implemented, then we might just as well not bother.’

This was a recurring topic in meetings over the years. This extract is from another meeting two years later, involving Henry, Ronald (a community physician) and Oscar (a lawyer in the local authority) (17/04/80- ARC meeting, Box 3, p.135):

Ronald states; ‘We’re all responsible. I hope we’re all here as representatives with a mandate on behalf of our agency. Each agency has a representative on the committee, but if they don’t agree with decisions, they can just ‘opt out’. What’s the point in sitting here, if we’re all going to go away and opt out?’

Henry responds: ‘This is the reality, this is real life....we cannot enforce our decisions, we have to accept that problem.’
Oscar adds: ‘All we can do is offer guidelines and advice. We can meet together and discuss our problems, we cannot enforce anything.’

The evidence from the present study suggests that this situation remains unchanged despite the mandated policy changes that have created formalised Local Safeguarding Children’s Board structures. The Board still struggles to hold agencies to account and drive change in any organisation other than the one immediately accountable for safeguarding outcomes; i.e. the local authority. As the national policy guidance suggests, directing other agencies is challenging. The following are direct quotes from policy documents produced by the Department of Education and Skills pertaining to the operations of the Local Safeguarding Children’s Board:

**DES, 2006, chapter 3, p.82, 3.45:** ‘the Local Safeguarding Children’s Board is, in general, an operational body….its role is co-ordinating and ensuring the effectiveness of what it’s member organisations do, and contributing to broader planning, commissioning and delivery.’

**DES, 2006, chapter 3, p.77, 3.16:** ‘Therefore, the broader remit of Local Safeguarding Children’s Board lies in co-ordinating and ensuring the effectiveness of local individuals’ and organisations’ work to safeguard and promote the welfare of children, it is not accountable for their operational work.’

**DES, 2006, chapter 3, p.77, sect 3.16:** ‘However, in effect the Local Safeguarding Children’s Board does not have a power to direct other organisations.’

These may be compared with para 4.3 of LASSL (80)4/HN(80)20

‘Decisions relating to the exercise of statutory duties remain, of course, the responsibility of the agency concerned.’

As our contemporary case analysis showed, Local Safeguarding Children’s Board members confirmed that although the Board was now a mandated network, it still struggled to bring about individual agency engagement or accountability (see section 6.4.2 (i)). In this respect, then, our conclusion would be that the problem of pooling agency sovereignty that was identified thirty years ago has still not found a satisfactory resolution. Agencies may be mandated to participate in the safeguarding system but this still competes for priority with their independent legal obligations and lines of social and political accountability which, under most circumstances, are likely to take priority in the event of conflicting imperatives. The extent to which this is a practical problem may, however, have a considerable element of path dependency, reflecting local histories, experiences and contingencies that are outside the immediate control of the legislator or central policymaker.

### 6.1.2 Distributing Leadership for Healthcare and Social Care Influence

The attempt to solve this problem, described by Dingwall et al. (1983) as one of ‘agency sovereignty’ through shared leadership of the organisations
as the centre of child protection networks was evident in data from both periods. The issue of the chair’s background and role appeared at every one of the ten quarterly ARC meetings observed in Shire. It was frequently the first substantive agenda item, occupied large swathes of the minutes, and was highlighted in annual reports (e.g. Notes of Annual Report to H & SS Area Review Committee for April 1977 to January 1978 - document dated 19/04/78). Minutes from the 28/04/77 H&SS Area Review Committee meeting indicates Henry was once again elected chair with Ronald as vice-chair for another 3 years. In 1980, notes from 17/04/80 H & SS Area Review Committee meeting indicates Henry again was appointed for another one year term as chair of the committee. The following year, observations of the 02/04/81 meeting showed Henry once again being re-elected as chair for the ensuing year. However, this meeting included a long discussion, led by Henry, about the rotation of the chairing role, given that he had occupied this position since the establishment of the Area Review Committee structures in 1973-74. Henry made a point of suggesting that he felt it would be more beneficial for the chairman to be selected from another profession than social care when his present term ended.

The present system favours the introduction of an independent chair to mediate between different interests on the Safeguarding Board. Shire’s debate about the appointment of a vice-chair from the health side offers an alternative option as a means of achieving health service ‘buy-in’ to joint policy and ensuring that responsibility for delivering change could be delivered by both of the key players (17/04/80, p 122, box 3):

Henry begins the meeting by asking for nominations for Vice-Chair.

Oscar (lawyer) steps in suggesting that; ‘it ought to come from them, someone from the medical side.’

Fawn (Area Director, Social Services – Training) asks: ‘What about Michael (consultant paediatrician)? Perhaps we could nominate him in his absence’

Henry responds; ‘What do the committee think? Do you agree?’

Fawn follows up; ‘The problem is getting him to come at all.’

Barry (GP and other health representative on the committee) comments; ‘The trouble is that there not really been a real replacement for Ronald [who has retired from the board]’. He goes on to agrees with Fawn’s nomination: ‘I agree with the suggestion of Michael as vice-chair’.

At this point in time Henry then steps in; ‘Shall we defer this until Michael can be consulted?’

Oscar responds on behalf of everyone in attendance; ‘I think it’s the general consensus from the Committee that it should be somebody from the Medical Authority and I think, given that, and given Michael’s experience on this committee, it ought to be Michael.’

Henry again asks the members; ‘Do the committee agree?’

The observation notes confirm unanimous agreement by the committee to appoint Michael in absentia and they move onto the next agenda item.

In the 1970s, the NHS was less fragmented organisationally than it is today, but even then, the challenge of getting health care commitment without a large representation of representatives, covering hospital, community,
primary care – and representing both medical and nursing interests, was considerable. The complaints now heard about Safeguarding Boards, that NHS members frequently outnumbered those from local authority children’s services, with the principal legal responsibilities, were well-established at that time. However, there were comparable difficulties in finding anyone who could speak for this diverse range of interests and professions, because of the great differences between the monolithic bureaucracies of local government and the collegial bureaucracies of the NHS. Installing a key network member from the health side seemed a possible solution to this, in that Michael tended to be the passage point between health and social services in child protection work. As such, he could exercise a degree of influence over the cases that went through his hands in one direction and the policies that went in the other. However, this was more akin to the role of leadership in the Paediatric Nephrology Network than in that of the Cleft Lip and Palate Network: his authority came from his acknowledged expertise and willingness to engage in the difficult legal work associated with child protection rather than from a formal position. Ronald’s position had been more formal – part of his established role as a community physician – but he had struggled to enlist clinical colleagues into the network because of the historic stratification of the medical profession and the tensions between hospital, community and primary care, which have still not been fully resolved.

There is not sufficient evidence to show whether this attempt to create what amounted to a distributed form of leadership was a more, or less, effective solution than the appointment of an independent chair to the issues of engaging health services and professionals in the children’s safeguarding network. Certainly the contemporary data do not suggest that this problem could be said to have been solved by the new structures.

6.1.3 Balance Between Central Mandating and Local Level Agency

The question about what should, or should not be mandated, was discussed in our contemporary case, with some commentary about central dictates that constrained local level agency. Such concerns in safeguarding have been longstanding, as evident in observations of an Area Review Committee meeting (26.04.79 p 1010, box 3, ARC meeting- observation):

There was discussion in the meeting about a DHSS circular on the ‘children at risk index’ policy guidelines that had just come out. This would affect all ARCs and the representative agencies sitting on them. However, ARCs were not consulted or involved in the development of the guidelines or aware this was coming out.

The effect of this was summarised by Henry: ‘It is interesting that, since ARCs are the fulcrum of representation for the relevant agencies, it seems odd that they are the one group that is not always consulted.’

A similar observation was made within our contemporary case (20/03/2008):

Medina was reporting back to the board that after having spent considerable time and effort (with Babs) putting together a now-completed
policy regarding the child death manager function in time for the 1st April 2008 deadline, and part of the mandate for LSCB’s set out in the DES document ‘Working Together for Children’. However she and Babs informed the meeting that they were contacted that very morning by the DCFS (Department for Children, Schools and Families), without any prior notification or consultation, that they (i.e. DCFS) were now handing down a specific policy on this for all boards to implement by the 1st April deadline. Reflecting disappointment with the last minute and change undertaken by the DCFS, which they could not predict, Medina commented; ‘We have beavered away independently, burning the midnight oil to develop our own policy and now here it is imposed upon us from the centre.’

The relative roles of central government and local agents seem to have continued to remain ill-defined. Indeed, if anything, central government appeared to have become less sensitive to local contingencies or to leave room for discretion and interpretation within the system, as indicated by the increased force of mandating – from circular to statute. At the same time, local practice continued to escape central controls simply because the planners could not be aware of all the relevant local contingencies and path dependencies. On the other hand, ineffective central control does buffer government from the consequences of the inevitable system failures, which can always be attributed to flawed implementation of mandates rather than the social institutions of privacy that constrain the possible actions of safeguarders.

6.1.4 Professional Representation at Strategic Level

Area Review Committees experienced the same problems as Safeguarding Boards in ensuring the right level of representation from constituent organisations to drive strategic development. This is evident in observations:

Lack of agency reps to make the meetings, apathy, lots of apologies, same people at every meeting. Viewpoint expressed that, irrespective of people continually not attending ARC meetings, they are deemed responsible by their position/agency and so still responsible or the ‘right’ person who ‘should’ be there in the eyes of the committee (26/04/79, pg 96, box 3 Meeting notes):

Ronald states: ‘I don’t think Dr……name should be on here (referring to the ARC members list)

Henry responds; ‘Well it’s like the case of Fred (a senior administrator). He hasn’t been to a meeting, but his name is on the list because it is a question of his responsibility. So it’s right that this is wrong – if you see what I mean.’

Henry then goes on to list 3 other members in the same way.

Then a rep from probation at this meeting speaks up and interjects; ‘I’m attending in place of…..who is away at the moment.’

The ARC was the same kind of ‘administrative elite’ that we saw in our contemporary case. Yet, strategic development of safeguarding requires contributions beyond that tight knit group, specifically from senior
professional experts and senior organisational managers. This challenge has not changed over the last thirty years, as evident in a meeting observation (Box 3, p 122, 17.04.80):

*Henry asks the committee members; 'Is the current list of members is accurate or does it require amendment, nominations or alterations.'*

*The observer notes a complete silence falls over the room. Henry asks a second time; 'Are there no comments? Has anyone got ideas of anyone else who would be nominated for the committee, who is not represented?'*

*Again complete silence...opts to move onto next item – but before that admonishes the group saying; 'I think we are danger of becoming a tight little outfit and we forget that other people may have things to contribute.'*

For Henry, the ARC runs the danger of ‘groupthink’, or in social capital terms, a rather greater sharing of perspective than is desirable, as further captured in meeting notes (17/04/80, box 3, p94, 17/04/80):

*Henry states; 'It would be great to have a committee that reached consensus all the time but I think we are now being abrasive because we are getting to the real issues. It is important not to formalise items by saying ‘very well’ all round the table and not meaning it. We need a clear decision made and recorded...we have as members, got to be clearer that we cannot have it both ways. Our responsibility is to consider issues and make up our minds.'*

One significant change following the mandating of Local Safeguarding Children’s Boards is that the mandate gives the Board the authority to co-opt people and ensure their attendance, based on organisational affiliation. However, this does not ensure the actual attendance of appropriately senior and accountable representatives from the constituent organisations. The independent chair has tried to enforce attendance of higher status actors at the Queen's Safeguarding Board and discourage the tendency for senior professionals to appoint junior subordinates, or just not attend meetings. However, it is too soon to be clear how much success this campaign will have.

### 6.1.5 Summary of Historical Case

This unique opportunity to consider inter-agency arrangements in a thirty year perspective tends to suggest that certain problems are remarkably intractable and probably derive from more fundamental structural and cultural factors than can be addressed in any one sector in isolation, and which, may, in fact, be highly functional for achieving other desirable goals in other networks or institutions. The historical review underlines the importance of an understanding of local contingencies and the ways in which they can create path dependency, and questions the tendency to seek ‘one-size fits all’ central solutions that are insensitive to these circumstances and the positive opportunities that they can represent. Arguably there is an over-emphasis on the potential downsides of local variation, although the gap between central policies, regulations and law,
and local actions also constitutes an important buffer for central actors when adverse events occur.

For technical reasons, the historical data proved more difficult to handle than had been expected in the original proposal and would have needed more resources than were available to produce a comprehensive re-analysis (see section 3.2.6 (iv) for more details). However, this relatively brief overview suggests that, where data of this kind are available, they can add an important dimension of depth and reflection to contemporary analyses and draw the attention of system actors and would-be reformers to features that may be more deeply embedded than a present-oriented approach can capture. We now move on to our primary case to assess whether challenges of organisational and professional collaboration are addressed through Local Safeguarding Children’s Boards. Prior to this, we provide a summary of more recent academic literature about the organisation and management of safeguarding, and highlight two investigations (Laming, 2003; 2009) into child abuse pertinent to our primary case.

### 6.2 The Mandating of Local Safeguarding Children’s Boards

Our analysis of the historical case is confirmed in more recent academic commentary relating to challenges of inter-agency working in safeguarding. In relation to government driven re-structuring of safeguarding arrangements towards Area Child Protection Committees (ACPCs), the latter were also deemed “insufficiently equipped for their roles and responsibilities” and failed to “ensure effective interdisciplinary coordination of services to vulnerable children” (Morrison and Lewis, 2005: 299). Extant literature identified variation in levels of representation, structure, practice and effectiveness of ACPCs, including poor leadership (Chief Inspector of Social Services, 2002; Narducci, 2003; Ward et al., 2004; Morrison and Lewis, 2005) More generally, safeguarding challenges identified include: fragmentation of service responsibility; differences in values; variable understanding of other professionals’ roles; and tension concerning status; autonomy and professional expertise (Easen et al., 2000; Frost and Lloyd, 2006; Hardy et al., 1992; Hudson et al., 1999; Jones et al., 2002; Lupton and Khan, 1998; Ward et al., 2004). Ward et al. (2004) specifically highlighted ineffective communication and information sharing between individuals and agencies expected to safeguard children. Meanwhile, the challenge of joint working, specifically commissioning, between the NHS and local authorities has been emphasised by Glasby et al (2010), with obvious resonance for the provision of children’s services.

Such problems above have, in large part, led to two high profile and internationally publicised safeguarding serious incidents in recent years, with the Lord Laming Report (2003) into the death of Victoria Climbié prompting more radical change, which involved statutory mandating of inter-agency working that would “speak with an independent voice” (DES, 2006: 83) in the form of Local Safeguarding Children’s Boards across all local areas beginning 1st April 2006 and compulsory by 1st April 2008.

The Laming Report (2003) was a full scale independent investigation into the death of Victoria Climbié, an 8-year old girl who died in 2000 as a result of extensive and long-term child abuse, which occurred in spite of overwhelming evidence of such abuse documented on numerous occasions by multiple public agencies, including health, police and social services, that might have been used to drive action to prevent her death. A salient issue
that surfaced in the report was the lack of leadership for influencing collaboration and information-sharing between and across agencies and professions. This was flagged up as "seriously defective" (2003:72), particularly at higher levels in all key agencies and the report went on to espouse the need for, "robust leadership" (2003:10), to effect significant changes and prevent similar events in future.

Included within Laming’s recommendations was that Directors of Children’s Services (DCS) at the local level should take the lead in establishing and maintaining inter-agency governance arrangements. However, regarding formal leadership of Local Safeguarding Children’s Boards, in contrast to past practice, where Social Services previously had held the lead role on ACPC’s, the appointment of independent chairs was proposed (although we emphasise, not mandated). The appointment of an independent chair was felt to avoid conflicts of interest (i.e. between the interests of the network as a whole and the employing organisation for any formal lead) and was deemed to allow for clear lines of accountability for safeguarding outcomes. At the time of this study, some Local Safeguarding Children’s Boards had independent chairs, whilst others were formally led by the Director of Children’s Services. During our study, further changes that were mandated included a requirement for Local Safeguarding Children’s Boards to extend their membership beyond ‘key’ statutory organisations; i.e. children’s services, health, police and the NSPCC, to involve and engage more ‘grass-roots’ agency members from the third and private sectors. Although control would remain with the local authority, their responsibilities were extended to developing inter-agency cooperation and devolving safeguarding accountability across all agencies. The intent was to devolve accountability and raise the profile of boards by engaging more senior representatives not just from traditional statutory agencies, but from a multitude of organisations and agencies (France et al., 2009).

Despite reforms and the network mandating of Local Safeguarding Children’s Boards, problems of leadership and knowledge exchange remain. During our study, Lord Laming’s report into the death of Baby P in 2009 (Laming, 2009), a 17-month child, reiterated similar problems associated with a lack of leadership, multi-agency collaboration and information-sharing. In a statement released by Ed Balls, UK Secretary of State for children (The Guardian, December 12th 2008), “clear failings of practice and management”, and the inadequacy of “the arrangements for the leadership and management of safeguarding by the local authority and partner agencies” were highlighted. Whilst not part of the Local Safeguarding Children’s Boards mandate, the remedial action taken by Balls included immediately replacing the Director of Children’s Services at the Local Safeguarding Children’s Board with a newly appointed independent chair. Evident from the Laming reports was that leadership and knowledge exchange have continued to be central issues within Local Safeguarding Children’s Boards. Historically, as evident in the Laming reports, there has been a perception that safeguarding children is the responsibility of children’s social care, rather than everyone’s responsibility. The challenge lies in breaking down organisational barriers to ensure effective cooperation to improve safeguarding outcomes. We explore these in the next sections.
6.3 Introduction to the Queenston Safeguarding Board

The Queenston Local Safeguarding Children’s Board in our study is like other strategic safeguarding boards in England, which were established under the Children Act 2004, in that it comprises a number of different organisations deemed responsible for overseeing the front-line handling of child abuse and related safeguarding issues. The current working arrangements of the board align with the recent statutory policy mandating of ‘Local Safeguarding Children’s Boards’ (LSCB’s) in England (DES 2006; DES, 2007). Prior to its re-organisation through mandating into a Local Safeguarding Children’s Board network form, it was previously an Area Review Committee (ARC) then an Area Child Protection Committee (ACPC). It has been in place as a Local Safeguarding Children’s Board since 2006.

There are approximately 20-25 members (membership is fluid as staff are co-opted, whilst others drop out on retirement or moving jobs) on the Local Safeguarding Children’s Board, representing various statutory agencies; i.e. health, police and local authority-children’s services, NSPCC, Connexions, CAFCASS, Probation, Prison, and Youth Offending Teams. Other non statutory members/agencies often invited to board meetings include domestic violence agencies and housing. There are also professional advisors to the board, including a designated doctor and designated nurse, and legal advisor. At the start of our study, the board was chaired by the Assistant Director of Children’s Services within the host local authority. However, as of June 2007, the board has been subsequently headed up by an independent chair.

Some major changes have been brought about by the independent chair [Nelly]. For example, prior to her appointment, the executive committee, which comprised the board administration (head of service, committee manager and committee administrator) and the chair, directed the board; e.g. would get together to determine the agenda for meetings. Following her appointment, a sub-committee structure has been implemented, with each of these answerable to the board, and a more strategic body of decision makers within the network (i.e. those who are senior agency representatives and have the authority to commit resources to the network), inclusive of the chairs of the various subcommittees, directs the board. Emergency situations are also handled by this group of people. Those who serve on the executive committee rotate the executive lead. Overall, since the independent chair’s appointment, whilst the full Local Safeguarding Children’s Board continues to meet quarterly, there has been an increase in other meetings that feed into this.

6.4 Leadership Process in the Network

6.4.1 SNA Leadership Patterns

Network plots or graphs were developed for each of the network relationships. The graphs provide descriptive evidence relating to the overall network structure and the prominence of central actors. The shape of the nodes represents the type of organisation (down triangle-social services, up triangle-health, square-police, diamond-voluntary sector and circle-independent chair). Figure 6.4.1 (I), shows the influence or leadership relationships among the organisations that constitute the board. It is
apparent that this network is centralised around certain identified leaders in this network.

**Figure 6.4.1 (i) Influence/leadership network**

![Influence/leadership network diagram]

The network is centralised around the network administrators, all drawn from social services (Jess, Lillian, and Babs, social workers), senior healthcare organisation representative (Medina, community paediatrician) and another senior local authority manager (Eve, social worker, former chair LSCB). They are viewed by the members of the network as providing an influential leadership role. The figure is important for an understanding of our conception of leadership, in that the network is based around a long-serving administrative elite, which is dominated by stakeholders from health and social care. We discuss the basis of this within our in-depth qualitative fieldwork.

**Table 6.4.1 (i)** is a summary of the centrality measures. Referring to **Table 6.4.1 (i)**, with respect to the influence/leadership network, the in-degree (prominent) measure is more important. This indicates who are regarded as high status. This is a recognition that the positions of actors Lillian (social worker), Medina (community paediatrician), Babs (social worker), Jess (social worker), Eve (social worker), and Fiona (senior police representative) might be worth trying to influence. These five members received over sixty per cent of the nominations from SNA respondents. Of these Medina (community paediatrician) and Eve (social worker) were the most central. It is not surprising that they were identified as the most influential members of the network, given that they have been involved in the previous children’s network and are senior representatives of the health authority and local authority respectively. The next most influential were Babs (social worker) and Lillian (social worker), the main coordinators of the
boards. However, it is Fiona, the representative from police that seems the most interesting inclusion, given long established arrangements that privilege health and social care professionals in children’s safeguarding. We discuss this in the empirical section that presents the qualitative data.

Table 6.4.1 (i) Centrality Measures

<table>
<thead>
<tr>
<th>Network</th>
<th>In degree</th>
<th>Out degree</th>
<th>Betweennesses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Most central</td>
<td>Least central</td>
<td>Most central</td>
</tr>
<tr>
<td><strong>Influence</strong></td>
<td>Lillian, Medina, Babs, Jess, Eve, Fiona</td>
<td>Polly, Dina, Theo, George, Jerry</td>
<td>Babs, Medina, Jess, Fiona, Eve</td>
</tr>
<tr>
<td></td>
<td>Polly, Monica, Theo, George, Miriam</td>
<td>Babs, Medina, Jess, Nelly, Eve</td>
<td>George, Theo, Miriam, Sarah, Nick</td>
</tr>
<tr>
<td></td>
<td>Monica, Terry, Medina, Jess, Eve, Gina</td>
<td>Polly, Theo, George Miriam, Jerry, Carol</td>
<td>Lillian, Babs, Medina, Jess, Nelly, Eve</td>
</tr>
<tr>
<td><strong>Information sharing</strong></td>
<td>Monica, Terry, Medina, Jess, Eve, Gina</td>
<td>Terry, Medina, Eve, Jess, Gina</td>
<td>Paul, Theo, George, Monica, Tony</td>
</tr>
<tr>
<td><strong>Sharing resources</strong></td>
<td>Monica, Terry, Medina, Jess, Eve, Gina</td>
<td>Polly, Theo, George Miriam, Jerry, Carol</td>
<td>Lillian, Babs, Terry, Medina, Jess, Eve, Gina</td>
</tr>
</tbody>
</table>

With the information sharing network, actors Babs (social worker), Medina (community paediatrician), Jess (social worker), Nelly (independent chair), and Eve (social worker) have the greatest out-degrees, and might be regarded as the most influential (though it might matter to whom they are sending information). These (except Nelly) are joined by Gina (safeguarding nurse) when we examine in-degree. The in degree scores ranged from 0 to 20 with a mean of 11.6, standard deviation of 4.7, while with the out degree the range is from 2 to 22, with a mean of 11.6, standard deviation of 6.2. It appears that the out-degree measure seems more homogenous than the in-degree scores. It also appears that the ties between most of the central actors were reciprocated, indicating that the network with regards to information sharing has a strong core group. The reciprocity rate was sixty eight per cent; i.e. of all the pairs of actors in the network, sixty eight per cent of the pairs have a reciprocated connection. This seems to suggest a considerable degree of institutionalised horizontal connections within this organisational network.

With the sharing resources network the picture is different. Here Eve (social worker) was most central in out-degree terms, whereas Medina (community paediatrician) and Monica (senior paediatric nurse) were highly central for in-degree. The in degree scores (ranged from 1 to 10 with a mean of 6 standard deviation of 2.8. While the out degree the range is from 0 to 22, with a mean of 6, standard deviation of 5.6 and median 5. The ties between the central actors were weakly reciprocated. The reciprocity rate was 33 per cent, indicating a less cohesive network than the information sharing one.
In summary, Lillian, Medina, Eve, and Babs (all social workers) represent the elites in the network. They have been around before the board was established (they have enjoyed a relationship with each other of around 10 years, which, in part forms the basis for their influence). They tend to have agenda setting powers and capacity to mobilise resources. Within the information sharing and resource sharing graphs, it can be observed that not all ties can be assumed positive or reciprocated with the same intensity. Indeed, networks are often the locus of conflict for competing resources. These networks are therefore more likely to be clustered and factionalised than any ‘dense’ or ‘diffuse’ assumption would imply. That is why often the actors of interest are those who play brokerage roles or those who are most central within a particular cluster. This is where formal network analysis can offer valuable insights by establishing brokers, and information flows within a network (Pappi and Henning 1999).

Thus, Table 6.4.1 (i) also shows the most central actors for the betweenness measure; i.e. the extent to which an actor mediates the other actors. Actors Jess (social worker), Eve (social worker), Babs (social worker), Medina (community paediatrician) and Fiona (senior police representative) appear to be relatively a good bit more powerful than others by these measures. Clearly, there is a structural basis for these actors to perceive that they are "different" from others in the network. In particular, Fiona (senior police representative) is less influential, she is not one of the elite and she does not have an administrative role, yet she may establish the situation or conditions in which an exchange can take place. The results could be important for understanding the extent of leadership in the network, which will be looked at shortly.

Having explored the measures of centrality in relation to the elite or influential leaders in the network; we will now look at measures as indicative of coordination patterns -- network density. Table 6.4.1 (ii) shows the density measures for each of the networks.

### Table 6.4.1 (ii) Density and centralisation measures for the networks

<table>
<thead>
<tr>
<th>Network</th>
<th>Density %</th>
<th>Network Centralisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influence /leadership</td>
<td>19.98%</td>
<td>Indegree = 43.289%</td>
</tr>
<tr>
<td>Information sharing</td>
<td>52.37%</td>
<td>Outdegree = 49.79%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Indegree = 30.78%</td>
</tr>
<tr>
<td>Sharing resources</td>
<td>27.27%</td>
<td>Outdegree = 73.724%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Indegree = 19.282%</td>
</tr>
</tbody>
</table>

The specific level of connection varied among different types of networks, with information sharing being the densest. This network is well connected, with most people either directly or indirectly linked. Claiming that a network is dense, when everybody is directly connected to everybody else, is not very informative. We know that maintaining ties to others entails a cost. Therefore actors tend to be selective when making connections with others. Indeed it could be argued that this is the core concern of the Local
Safeguarding Children’s Board. The actors are unlikely to have the same status or resources within a network, and so not all ties have the same strength or value. We see that while information sharing can be perceived as diffuse, influence is reserved for those with the authority to make decisions and is therefore concentrated.

Apart from the sharing resources networks, Table 6.4.1 (ii) shows the centralisation measures for the other networks were relatively low, indicating that information sharing and leadership influence are somewhat decentralised, whereas the sharing resources network is highly centralised round a few actors.

One general view is that the network is integrated but in different ways. The conviction that there might be fragmentation is not entirely supported. Overall we can see that leadership is concentrated with an ‘elite’, and that most activities orientate around them. This seems a positive characteristic of the Local Safeguarding Children's Board, as further discussed in the qualitative data analysis that follows, since a limited number of professionals are in charge and accountable. The centralisation and density scores show that while the network is coordinated around a few leaders they exhibit decentralised cooperation, which is also positive because it means there is a commitment to action from other constituent organisations in the network.

But centrality and network centralisation alone does not provide a fair representation of the relational advantages and constraints for actors. The first and most obvious observation when examining the network graphs is that there is a strong core/periphery structure, which again we perceive as positive since it allows for accountability. Typically in this type of structure there exists a dense cohesive core with a sparse, unconnected periphery. Although there may be multiple cores, it is often the case that a smaller subset of the network participates more actively than the rest. A core/periphery structure may be related to better performance because such structures hold the potential to improve the means by which information diffuses within a group. It also holds that core/periphery structures could impede group effectiveness in non-routine or complex tasks. Rowing back on our earlier proposition that, at least from a policy makers’ perspective, effective leadership is one that is distributed, we suggest that there simultaneously exists a need for concentration of leadership aligned with accountability. Our qualitative data, presented in the next empirical sections, underscores this point further, and discuss this further in our conclusion.

Figure 6.4.1 (ii) shows the Multi Dimensional Scaling of geodesic distances. This represents two individuals with a greater number of interactions would have nodes closer together than those with fewer interactions. This suggests a core/periphery structure (Borgatti and Everett, 1999). Borgatti and Everett (1999) suggest ways to identify a core/periphery structure. The first is by examining the group's adjacency matrix, researchers may simultaneously identify the core and periphery. The core is a dense, well-connected sub-graph. Conversely, the peripheral nodes are loosely connected to each other, but connected to some members of the core. Below we show the analysis (Table 6.4.1 (iii)) for the information sharing network.
Figure 6.4.1 (ii) Core/Periphery Class Memberships: Information sharing

From the density matrix in Table 6.4.1 (iii) it can be seen that the members of the core group have a high probability of being tied to one another (.902) or to the periphery (0.576), but the periphery is somewhat weakly tied to each other (0.106) or to the core (0.438). From the regression model fitted to the data it can be seen that this model does a good job of describing the pattern of core-periphery. The R-square is reasonably high (.313), and significant.

In assuming that a core/periphery structure exists, it appears that the network mainly has an administrative function with a hierarchy embedded in the network. Indeed all the core members are very senior figures in their organisations. This indicates a level of accountability through an elite group. What is interesting is the organisations that are peripheral are weakly connected. This would indicate that the network is structured for tackling issues around performance and is distributed around issues which are generally routine. However, this structure may not be effective for a rapid response to unusual events or appropriate for strategic developments, as discussed further in later sections. As with the other themes generated in our SNA, we pursue this further through qualitative data.
Table 6.4.1 (iii) Core/periphery analysis

<table>
<thead>
<tr>
<th></th>
<th>Core</th>
<th>Periphery</th>
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<tbody>
<tr>
<td>Core</td>
<td>0.902</td>
<td>0.576</td>
</tr>
<tr>
<td>Periphery</td>
<td>0.438</td>
<td>0.106</td>
</tr>
</tbody>
</table>

Model fit

<table>
<thead>
<tr>
<th>R-square</th>
<th>Adj R-Sqr</th>
<th>Probability</th>
<th># of Obs</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.313</td>
<td>0.310</td>
<td>0.0000</td>
<td>552</td>
</tr>
</tbody>
</table>

REGRESSION COEFFICIENTS

<table>
<thead>
<tr>
<th>Independent</th>
<th>Coefficient</th>
<th>Coefficient</th>
<th>Significance</th>
<th>As Large</th>
<th>As Small</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.106061</td>
<td>0.000000</td>
<td>0.0000</td>
<td>0.9998</td>
<td>0.0000</td>
</tr>
<tr>
<td>1-1</td>
<td>0.795455</td>
<td>0.678646</td>
<td>0.9998</td>
<td>0.0000</td>
<td>0.9998</td>
</tr>
<tr>
<td>1-2</td>
<td>0.470328</td>
<td>0.413075</td>
<td>0.9998</td>
<td>0.0000</td>
<td>0.9998</td>
</tr>
<tr>
<td>2-1</td>
<td>0.331439</td>
<td>0.291093</td>
<td>0.9998</td>
<td>0.0000</td>
<td>0.9998</td>
</tr>
</tbody>
</table>

6.4.2 Explanations for Patterns of Leadership

In tandem with the SNA findings presented in the previous section, four themes emerged from interviews, observations and documentary analysis, that exemplify why, who, and how leadership within this safeguarding network is both concentrated and distributed amongst various members and at varying levels: concentration of leadership across individuals, agencies and professions based on accountability; distributed, quiet leadership approaches; the impact of professional hierarchy; role of the independent chair.

6.4.2 (i) Accountability and Leadership

Historically, leadership has mainly been concentrated within the higher echelons of statutory agencies and their representatives (i.e. Children’s Services and Health) as they were primarily accountable for safeguarding outcomes. Concentrated leadership in key influential organisations appears integral to the operation and functioning of this board. Indeed, the absence or presence of key influential members (both administrative and board level) from Children’s Services had a significant impact on one meeting we observed (13/12/07-p4) when future board meeting dates had to be changed to ensure ‘Eve’ and ‘Babs’ [Children’s Services] could attend. Particularly, in times of difficulty (e.g. adverse publicity surrounding the deaths of teenage girls from anorexia within the board’s area in 2008) leadership influence remained concentrated on those Local Safeguarding Children’s Board members who are professionally accountable for outcomes; i.e. in health and social care:
‘There are certain people that other people look to for the answer when things go wrong. I would look to either Babs [Children’s Services] Eve [Children’s Services] Lillian [Children’s Services] or Medina [Health Authority] to direct problem solving’ (Jess, Board Administrator).

Jurisdictional knowledge over strategic matters perpetuates a concentration of leadership on statutory core members and away from other members who see their own organisations and roles as less influential. This is consistent with our SNA findings, and provides insight as to why certain members command an elite leadership status within the network. Confirming our analysis, we also note some board members, perceiving themselves to be less accountable for performance, may seek to avoid leadership responsibility. Instead they ascribe leadership to others in line with accountability and reporting requirements:

‘I think there’s almost a monopoly with social care and health because they are accountable agencies. So I just sit back and let the agenda ride with those who know the most about it and are performance managed against it’ (Miriam, Voluntary Sector, National Organisation).

Despite Miriam being the designated statutory representative for voluntary organisations, she willingly relinquishes leadership influence to elite Local Safeguarding Children’s Board members based on accountability requirements of constituent agencies for safeguarding outcomes.

Overall, the change from ACPC to Local Safeguarding Children’s Board, was described as giving the safeguarding network, ‘more teeth, more responsibility, more accountability’ (Mona, safeguarding nurse advisor), with the independent chair, Nelly, stating her responsibility as being, ‘to ensure the children of this city are safe’. Whilst her accountability for this was to all constituent organisations of the Local Safeguarding Children’s Board, this was a reciprocal accountability of organisational constituents to the independent chair. However, such reciprocity seems to remain an aspiration with any leader of the Local Safeguarding Children’s Board finding it difficult to orientate the constituent organisations towards network outcomes:

‘The board can only co-ordinate organisations. It does try to hold members accountable for their organisational activity, that they discharge their responsibilities in appropriate ways against guidelines. However, we receive incomplete information about this and can easily have the wool pulled over our eyes. So, the chair is accountable for systems outcomes that she may have little control over. Sadly, unless the individual agencies know they are measured by central government for something, and for things that contribute towards good safeguarding outcomes they may not be, they will focus on other priorities. She’s [the chair] accountable, but they are much less accountable. It’s a real leadership dilemma. (Nick, medical director).

To re-iterate this point, Nelly’s direct reporting line was to Director of Children’s Services in the local authority, and she also noted her performance was also subject to surveillance from government inspections bodies, notably performance indicators of Ofsted. We highlight that the local
authority, not health, is held accountable for serious incidents, which in turn, is imposed upon the chair of the safeguarding board, independent or not. Yet, the chair in turn, may not enjoy influence upon the activities of constituent organisations of the Local Safeguarding Children’s Board, upon which she relies to ensure the children of the city are safe:

‘The sad fact is that, with individual agencies. Unless they know they are going to be measured by central government, they don’t engage because there’s such pressure across the agencies to meet their own organisational performance measures’ (Babs, board manager)

The quote above is confirmed by analysis of organisation and management across a larger number of Local Safeguarding Children’s Boards by France et al (2009), who note that board members may be inclined to champion the interests of their agency, rather than being an independent board member.

Having presented the leadership dilemma for the chair, we note an upside to such publicly visible accountability for safeguarding outcomes. In contrast to the Paediatric Nephrology Network, responsibility and accountability structures and processes can support Local Safeguarding Children’s Board leadership in leveraging resources:

‘It’s useful to be mandated and performance managed, because when you are competing against an organisation, such as police, you can argue for more resources on the basis the stakes are higher nationally, and that additional resource will help you perform better against national benchmark’ (Nelly, independent chair)

In summary, as a board, there is no explicit accountability for operational issues. Such accountability lies with constituent members of the Local Safeguarding Children’s Board. However, accountability, as a less specific phenomenon, is felt by certain members of the Local Safeguarding Children’s Board, notably the chair, the effect of which may be to concentrate leadership amongst elite members. Whilst the policy document, ‘Working together to safeguard children’ (DES, 2006: section 3.5.5) states that, ‘LSCB members should be of sufficient authority; commit their organisation on policy and practice matters; and hold their organisation to account’, such matters may prove challenging to operationalise.

6.4.2 (ii) Distributed, Quiet Leadership

Board members also suggested the existence of a “quiet” style of leadership. This label of “quiet leadership” was used by a number of interviewees, and deemed consistent with the traditional ways in which professionals worked together:

‘I think Lillian [Children’s Services] does some of the steering bits, but she doesn’t come across as being a leader. I think that’s some of her personality perhaps that she sits back a bit, but it is there and she will steer you through. So I think she gets you to where she wants you to be, but in the background, which is a form of leadership isn’t it’ (Milly, City based Voluntary Sector).
This approach to leadership was enacted by other elite Local Safeguarding Children’s Board members over time. For example, a senior representative of Children’s Services, identified through SNA as holding one of the most elite positions of influence within the network, appeared particularly reflexive about what she described as her ‘quiet, collegiate approach to leadership’:

‘I think probably people would see me as a leader and a shaper in there. I try very hard to sit back a bit in doing this, because otherwise there is a tendency for people to think ‘well ‘it is Social Services leading so we don’t need to do anything’ (Eve, Children’s Services).

In a similar vein, Lillian [Children’s Services] reflected upon her enactment of quiet leadership. Indeed she was one of the few to describe in more detail what quiet leadership constitutes:

‘I go and talk to people individually offline to influence their views. When we were proposing new governance structures, we knew the people who would challenge us, so we went to speak to them before the meetings, to bring them in line with us, to even manipulate them in the background.’

A quiet approach to leadership also extended beyond elite core agencies (i.e. Children’s Services and Health). For instance, whilst not an actual agency member, but a well-seasoned administrator, ‘Jess’ is described as having immense influence over board matters. History and board service time explain her positioning as boundary-spanner and information broker. ‘Jess’s’ centrality as a board administrator and key information holder enables her to inform and influence board members based on a wealth of safeguarding experience and expertise:

‘I would say ‘Jess’ [Board Administrator] is a leader, although she doesn’t see it in herself or would she acknowledge her influence, but I think there is certainly something about the fact that she has also been there a long time, so she knows the individuals, structures, and she knows the history’ (Eve, Children’s Services).

Our observations of ‘Jess’ at numerous meetings confirmed her “quiet” leadership style, exemplified through: her role in conveying extensive knowledge of past practice relating to organising, training and more specific safeguarding issues; initiating written rather than just verbal accounts of sub-group meetings (13/12/07 – pp. 1-2); and putting forth ways to improve information flow and raise the profile of safeguarding in the wider community (17/01/08 – p 6).

Similarly, we note some extension of leadership influence to the police:

‘The leaders I am aware of I suppose would be Eve [Children’s Services], Lillian [Children’s Services], and Medina [Health Authority] and it would also
be the Police, you see there is a certain bowing behind the scenes to Fiona’s expertise really’ (Tony, Probation).

The inclusion of the ‘Police’ is interesting in that others perceive them as safeguarding experts in their own right on the basis they encounter safeguarding challenges everyday, and thus afforded leadership influence. However their influence seems more “backstage” in the operations of children’s safeguarding services, and less “frontstage” in Local Safeguarding Children’s Board meetings, with Fiona’s leadership style described by many as relationship-orientated, where she engaged other Local Safeguarding Children’s Board members one-to-one outside meetings to exert her influence.

In sum, our interviewees deemed distributed leadership to fit with the more politicised and collegiate context of the Local Safeguarding Children’s Board. Nevertheless, most interviewees found it difficult to articulate what quiet leadership constituted and how it might be further developed in safeguarding boards.

6.4.2 (iii) Professional Hierarchy

We have highlighted how certain professions exerted influence more than others and how these others may cede any influence to health and social care. This is confirmed within a wider study of Local Safeguarding Children’s Board, which notes that social care, education, police and health are major players, with other agencies more peripheral in safeguarding structures (France et al., 2009). Within our primary case, this was not just a matter of leadership aligning with accountability patterns, but also long-established professional hierarchy. The following vignette captures the complexities of professional hierarchy.

We observed the way ‘Nick’ [Health] would look to ‘team up’ with ‘Medina’ [Health] to argue for the interests of the acute hospital (20/03/08-pg 7), when, for example, there was a threat that resources might be re-allocated to children services located in the local authority. There were three interesting dimensions of this exchange. Firstly, leadership appeared divergent between health and social care as the elite agencies battled for jurisdictional control and resource. Secondly, linked to this, other Local Safeguarding Children’s Board members outside health and social care rarely engaged in such discussion. Instead they behaved as spectators to the emerging conflict between health and social care professionals. Thirdly, more subtly within such discussions, we saw how Nick, the more senior health professional, but who was removed from the operational delivery of safeguarding utilised Medina, less senior but closer to safeguarding operations, and leveraged her legitimacy and strong relationships with other Local Safeguarding Children’s Board members to exert influence. On a number of occasions during the discussion, having been set up to argue for the acute hospital interests, Medina would check that Nick reinforced the point she was making; i.e. intra-professional, as well as inter-professional hierarchy characterised leadership patterns in the network.

More generally, in light of recent board re-structuring brought about through mandating and improving organisational accountability, the need for safeguarding leadership to be professionally concentrated within senior health and social care staff was supported by the elite Local Safeguarding Children’s Board members. ‘Helen’ [Children’s Services] expressed a view that there were too many representatives from health currently on the board and that most did not hold a high level of professional status,
expertise and influence within their own organisation for safeguarding. Accordingly she argued that they should not be entitled to enact leadership influence in the Local Safeguarding Children’s Board. Expanding on this view, ‘Medina’ and ‘Gina’ [Health] were cited as examples of seasoned members who although experienced and knowledgeable about issues at the practitioner level, were not sufficiently expert in professional terms to wield significant authority. For ‘Nelly’ [Chair] (17-01-08, p5), there was a necessary order of ‘who’ should be included on the board to enact influence on board matters in accordance with statutory regulation based upon their professional standing. Firstly were members whom she referred to as ‘higher level’ organisational representatives who would be professionally accountable for safeguarding by their organisations. Second on the list were ‘other’ board advisors e.g. ‘Polly’ [legal representative local authority] and ‘Sarah’ [board training coordinator], and lastly on the list were the board administrative staff. The primary issue, as she put it, was that there were “too many variations between agencies and individuals, which complicated board activities and were not aligned with professional expertise and responsibility”.

Consequently, apart from the specific illustration of Fiona [Police], discussed earlier, who was afforded recognition by elite Local Safeguarding Children’s Board members as holding some expertise, other Local Safeguarding Children’s Board members who were not health or social care senior professionals were increasingly pushed to the margins of leadership influence within the network. France et al. (2009) note, in particular, how the voice of the third sector may not be heard in Local Safeguarding Children’s Board, and that this represents a potential source of tension. For many of those on the periphery, this was not a source of conflict since they willingly ceded leadership influence to the elite professionals. However, for Local Safeguarding Children’s Board administrators, who traditionally enjoyed leadership influence, such marginalisation may represent an unwelcome change.

In summary, it seems in the context of this Local Safeguarding Children’s Board, leadership flows are driven by a top-down approach, which requires enhanced influence from certain high status and accountable professions, located in higher echelons of relevant health and social care organisations. In essence, professional expertise is concentrated between and within professions and aligned with accountability for safeguarding, and this is reflected in the relatively parsimonious way in which leadership is professionally, as well as organisationally, distributed.

6.4.2 (iv) Role of the Independent Chair

Within this network, good working relationships amongst members have been well-developed over a period of time. For the most part, these were still in place when the change from an ACPC to a statutory Local Safeguarding Children’s Board ensued in 2006. Having a chair that is able to give leadership and direction is deemed crucial for the effective operation of strategic boards, such as Local Safeguarding Children’s Boards (Horwarth and Morrison, 2007). Whilst not mandated to do so, the board opted to appoint an independent chair to head up this Local Safeguarding Children’s Board in accordance with policy recommendations largely to do with accountability (in their national study, France et al. (2009) noted that 40 per cent of Local Safeguarding Children’s Board appointed independent chairs, whilst 41 per cent appointed a Director of Children’s Services as chair of their Local Safeguarding Children’s Board). Indeed, this was a proactive move so as to circumvent or essentially prevent many of the problematic issues to do with leadership, accountability and information-
sharing that has plagued other safeguarding boards in recent times. France et al. (2009) concur with the decision to appoint an independent chair on the basis it is perceived independent from the interests of any organisational or professional stakeholder.

For some members, there was a sense of the new chair becoming more aware of the need to distribute leadership when specific strategic issues arose to more tenured network members with the organisational experience and knowhow to take the reins on such matters.

This was apparent in a comment from a long-serving board member identified through SNA as a central and most influential ‘elite’ board member:

‘Nelly has come in and has sort of reinforced some of the statutory timescales ...she has got more power and she is an external force. But I think she would probably say that she is struggling as well in terms of knowing when to dip in and out, and when to take the lead in terms of saying certain things need to happen and when to leave it to me as the operational kind of manager’ (Lillian, Children’s Services).

The role of the chair is understood as primarily aimed at ensuring and overseeing that the board keep to the statutory requirements and associated tasks that were imposed upon them. Administrative leadership aligns with organising skills and gives rise to the independence of the chair as occupying a distinctly different but nonetheless lead role to that of other board members.

Along with the newness of the chair’s role comes uncertainty about how, when and to whom the boundaries of leadership should be extended to other network board members. Effective leadership seems to be characterised by an issue-bound approach and the ability to distribute or alternatively, concentrate leadership on central actors when board matters and jurisdictional issues such as operations management fall outside the chair’s independent administrative remit.

The appointment of the independent chair also flagged up other changes with regards to leadership structure and network influence that contrasted considerably to past board practices:

‘I think having Nelly as an independent chair has helped tremendously. I think it takes away from somebody like me or Eve [long-serving children’s services member] or whoever would have been chairing in the past because no matter what, you are still part of ‘that other organisation’ or that agency, so there’s still in your head something about ‘what does that mean for us?’ An independent chair has meant that there isn’t any of that conflict’ (Monica, Health Authority).

The transformation of the chair to one of independence has shifted dual accountability and actual time spent on board maintenance away from key agencies i.e. Children’s Services or Health, who have traditionally assumed the lead role of chairing in the past. In light of ever-increasing safeguarding scrutiny, independence in this context is a positive leadership feature in that it allows time for the chair to now focus primarily on influencing administrative and statutory tasks. In contrast to the past, this enables leadership to be shifted to organisational-bound members that retain a vested interest and specific accountability for respective health and/or
children’s services issues. However, leadership authority that goes with independence is not a straightforward matter, and accountability of the independent chair to the Director of Children’s Services can create a perception amongst Local Safeguarding Children’s Board members that the role-holder may privilege certain organisational interests, notably the local authority (France et al., 2009). Consequently, holding the formal leadership role is not sufficient, and any role-holder requires considerable personal leadership qualities to ensure the effective operation of safeguarding arrangements (Ward et al., 2004).

The need for an independent chair to oversee the board’s activities is perhaps best summed up by ‘Nelly’ (the chair) when she commented in a meeting to our field researcher “what started off as a small role that I was supposed to play has now become a major time-consuming role” (19/06/08-pg2). What seems evident is that leadership can be enacted in a formal but yet emergent manner, and so the chair is both a catalyst for independent action and also equally influential for distributing leadership accordingly on more strategic matters.

A similar view was echoed by another long-standing ‘elite’ member from children’s services:

‘Having an independent chair allows us to develop much more governance arrangements that are less scrutiny really, I think that’s very difficult when you are a senior operational manager because you are trying to straddle both bits really’ (Eve, Children’s Services).

The appointment of an independent chair serves to reinforce a formal leadership role for overseeing the board’s collective development of governance arrangements. This allows more time and energy to be spent coordinating and synchronising network activities from an independent position of influence and thus avoiding potential conflicts of interest. Safeguarding boards have been increasingly accountable to government inspection bodies and also to the public for their decisions and actions. From the perspective of Eve [as a representative of Children’s Services] appointing an independent chair was a necessary and welcome transformation to re-shaping board leadership that also mitigates challenges from stakeholders, both internally and externally. As France et al. (2009) note, the chair of Local Safeguarding Children’s Board, ‘independent’ or otherwise, needs to bring people to the table and make them accountable for their actions. One of the first steps taken by the independent chair to ensure this, was modification of safeguarding structures at the strategic level. Local Safeguarding Children’s Board members commented favourably upon the development of sub-committee structures, to which Local Safeguarding Children’s Board members were affiliated based on their professional or organisational role. Each of these sub-committees was headed up by a key senior professional that had expertise and held responsibility for safeguarding within their own organisation, and who reported in to the main board. In this way, Nelly (Independent Chair), described how she was able to ensure, ‘those who manage and deliver safeguarding as part of their professional duties at the very top levels of their organisations have to take responsibility and, if necessary, remedial leadership action, to assure good safeguarding processes across the patch”.

Both this and the preceding quote are perhaps examples of what the DES (2007) review of Local Safeguarding Children’s Boards, including this board,
espoused generally as “advantages in appointing independent chairs to avoid conflicts of interest and provide independent scrutiny”. Leadership activity on the part of the chair is framed by delineation that suggests a much more formal style of leadership compared to that of past chairs. Observations we made at the first and subsequent meetings chaired by ‘Nelly’ (13/12/2007-pg 3 TH; 20/03/08-pg5) support our assertion that she exhibited an impartial and professional style of leadership, rather than one that was more personalised:

‘When it wasn’t an independent chair you kind of knew more about their background and you understood why they were there. I don’t see a problem with the independent chair except that does it become more businesslike at the loss of actual relationships’ (Fiona, Police).

At the same time, we perceived that the independent chair’s close social ties with many of the current Local Safeguarding Children’s Board members, developed over decades with some as a consequence of working in children’s services in a neighbouring geographical patch, allowed her latitude in enacting leadership influence over others, and buttressed her legitimacy as an effective leader. We also highlight, whilst a less personalised and more administrative style of leadership was practised by the independent chair, her personal qualities were characterised by a degree of charisma that other Local Safeguarding Children’s Board members readily embraced. On the basis of our research, it was evident that specialist knowledge and expertise in the area of safeguarding children were necessary for leadership influence by the independent chair to engage all Local Safeguarding Children’s Board members, and that the independent chair needs to develop a shared language and understanding amongst all stakeholders in pursuit of cultural change towards more networked and less ‘silo-ed’ safeguarding processes (France et al., 2009):

‘She really captured us with her vision for the board. She is so enthusiastic and energetic about safeguarding and how we need to work together and move away from our silos. You can’t help but listen and follow’ (Eve, Children’s Services)

However, our overall impression remains that the chair has in effect been transformed to a full-time administrative leadership function, from which distribution or concentration of leadership can be enacted from a more impartial position.

6.5 Analysis of Knowledge Exchange Processes

6.5.1 SNA Analysis

For the knowledge exchange within the Local Safeguarding Children’s Board we looked at frequency of contact and relational quality between actors in the network as the means to understand the context for knowledge exchange. We also compared these networks to the general information sharing, resource sharing and referral networks to explore whether knowledge was distributed and exchanged through the same or different professions. From Figure 6.5.1 (i), referring to frequency of contact
between the members of the board, we have a highly connected network, indicating the ease of which actors can reach each other. This is not surprising given that the board meets on a quarterly basis. The thicker lines refer to more frequent contacts. We show the network of the more frequent contact between the members in **Figure 6.5.1 (ii)**. We see that there is a core of people in contact with each other regularly outside the board meetings, with Jess (social worker), Medina (community paediatrician), Babs (social worker) and Lillian (social worker) being most central.

**Figure 6.5.1 (i) Frequency of contacts**

![Network Diagram](image)

**Table 6.5.1 (i) QAP Correlations**

<table>
<thead>
<tr>
<th>QAP Correlations</th>
<th>Information sharing</th>
<th>Sharing resources</th>
<th>Referrals</th>
</tr>
</thead>
<tbody>
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<td>0.763*</td>
<td>0.560*</td>
<td>0.311*</td>
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<tr>
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<td>0.814*</td>
<td>0.536*</td>
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</tr>
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</table>

* significant p<0.001

**Figure 6.5.1 (iii)** shows a pattern of connections in terms of relational quality. Here, we have a highly dense and well connected network. If we look at only the strong relationship quality (**Figure 6.5.1 (iv)**), this is again orientated towards core key people, with Nelly on the periphery. We also see a strongly organisational orientation in this network.
We also looked at what was being exchanged. We have already seen that in relation to information sharing that the network is fairly distributed, but when it comes to sharing knowledge around resources or referrals we find different patterns. We used QAP correlations to see if there are any correspondence between frequency of contacts and relational quality with the information sharing, resource sharing and referrals networks. The results are provided in Table 6.5.1 (i).

The coefficients were all significant (p <0.001) showing that most knowledge sharing activities are embedded in networks relating to frequency of contacts and trust between the actors.

**Figure 6.5.1 (ii) Frequency of contacts (beyond board meetings) network**

In terms of brokerage roles, in relation to general information sharing (Table 6.5.1 (ii)), there is a high level of coordination within the separate affiliations. Within health Nick (medical director, healthcare provider) and Sally (senior manager, healthcare provider) appear to be strong brokers in terms of the coordinators role (i.e. bringing two or more people from their own group in contact with each other), and George (local authority housing project manager) and Jerry (operations director, local authority schools/careers) play the same role within social services. Nelly’s (independent chair) role, as expected, is as a liaison broker across the different groups. Other strong liaison brokers are Fiona (senior police representative) and Paul (social worker, court services). Miriam (social worker, third sector) plays a consultant brokerage role (transfers information between individuals who both belong to the same group).
<table>
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Figure 6.5.1 (iii) Relational Quality network
Figure 6.5.1 (iv) Relational Quality (strong relationships only) network

Table 6.5.1 (iii) Relative Brokerage Roles Sharing Resources

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</table>
With respect to resource sharing (Table 6.5.1 (iii)), again there is mainly a coordination based brokerage. The key brokers here are Nelly (independent chair), and Fiona (senior police representative) playing a strong liaison role, with Gina (safeguarding nurse), Medina (community paediatrician) and Dina (local authority domestic violence) officer playing a representation brokerage role.

In terms of the referral network (see Table 6.5.1 (iv)), Medina (community paediatrician) is key as a coordinator for the health members of the board, while Babs (social worker) acts in the same manner for members from social services, although their status in relation to their group is very different. Terry (nurse consultant, healthcare provider) and Babs (social worker) appear to be gatekeepers and Lillian (social worker) seems key as a liaison broker in this network. Carol (social worker, mental health) seems interesting in this network in that she appears to have a representative brokerage role, i.e., transferring knowledge on referrals received from an actor from her own group to an actor in another setting, or representing her own group to outside the group.

<table>
<thead>
<tr>
<th>Table 6.5.1 (iv) Relative Brokerage Roles Referrals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coordinate Gatekeeper Represent Consultant Liaison Total</td>
</tr>
<tr>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>Nelly 0 0 0 0 0 0</td>
</tr>
<tr>
<td>Fiona 0 0 0 0 0 0</td>
</tr>
<tr>
<td>Shaun 0 0 0 0 0 0</td>
</tr>
<tr>
<td>Gina 1.711 1.303 1.489 1.675 0 1.000</td>
</tr>
<tr>
<td>Medina 4.277 1.861 0.745 0.745 0 1.000</td>
</tr>
<tr>
<td>Sarah 0 0 0 0 0 0</td>
</tr>
<tr>
<td>Sally 0 0 0 0 0 0</td>
</tr>
<tr>
<td>Nick 0 0 0 0 0 0</td>
</tr>
<tr>
<td>Terry 0 2.606 0 2.606 0 1.000</td>
</tr>
<tr>
<td>Sam 0 0 0 0 0 0</td>
</tr>
<tr>
<td>Carol 0 0 5.212 0 0 1.000</td>
</tr>
<tr>
<td>Monica 0 0 0 0 0 0</td>
</tr>
<tr>
<td>Paul 0 0 0 0 0 0</td>
</tr>
<tr>
<td>Miriam 0 0 0 0 0 0</td>
</tr>
<tr>
<td>Willy 0 0 0 0 0 0</td>
</tr>
<tr>
<td>Babs 3.992 3.475 0 0 0 1.000</td>
</tr>
<tr>
<td>Eve 1.497 0.652 2.606 1.303 0 1.000</td>
</tr>
<tr>
<td>Lillian 0 0 0 0 2.933 1.000</td>
</tr>
<tr>
<td>Jerry 0 0 0 0 0 0</td>
</tr>
<tr>
<td>George 0 0 0 0 0 0</td>
</tr>
<tr>
<td>Polly 0 0 0 0 0 0</td>
</tr>
<tr>
<td>Dina 0 0 0 0 0 0</td>
</tr>
<tr>
<td>Jess 0 0 0 0 0 0</td>
</tr>
<tr>
<td>Tony 0 0 0 0 0 0</td>
</tr>
</tbody>
</table>

6.5.2 The Role of the Independent Chair in Knowledge Brokering

The ability to effectively exchange knowledge is central to the work of the Local Safeguarding Children’s Board to promote the type of inter-agency collaboration deemed necessary to improve service delivery to children and young people. What was evident in the Local Safeguarding Children’s Board, as with our other primary cases, was that knowledge exchange was best facilitated in a situated way through human rather than technological intervention. Whilst the Local Safeguarding Children’s Board had a web site and an intranet, upon which they posted learning from adverse events, such
as serious case reviews, as well as more mundane information about their people, structure and processes, when asked to comment upon knowledge exchange within the network, ICT was notable by its absence in such commentary. Even within a dispersed network, such as that of a Local Safeguarding Children's Board, ICT doesn't appear to be the panacea for effective management of knowledge. Instead, knowledge brokering by key individuals appeared the best way to mediate professional and organisational barriers to knowledge exchange.

Knowledge exchange in safeguarding, similar to other arenas, has a political dimension. Network members may be unwilling to exchange knowledge where it does not serve their professional or organisational interests. A key mediating intervention for overcoming political obstacles to knowledge exchange was the appointment of the independent chair, 'Nelly'. Not constrained by professional affiliation or organisational hierarchy, she enacted a knowledge brokering role within and across the wider network membership:

‘Nelly [independent chair] has been very good at not allowing certain agencies take over the meetings and dominate exchanges. For example, with health, there are probably six or seven people potentially at the Board now and she’s monitoring their inputs, and intervening at the table to ensure other agencies contribute their knowledge where appropriate’ (Lillian, Board Staff).

Evident here is concern that because some agencies, notably health and social care, dominated board membership, the knowledge contribution of other agencies was driven out in decision-making, more so because health and social care professionals were traditionally held up as the professional groups in whom safeguarding expertise resided; i.e. longstanding professional arrangements privileged their knowledge contributions. Yet the policy mandate required wider contributions from a range of other public and third sector agencies, traditionally marginal to knowledge exchange. As an independent chair without specific links to any one organisation, Nelly was ideally placed to broker knowledge exchange more widely across the network in line with the policy mandate.

This is not to say, the health and social care agencies took a back seat. Indeed, a major requirement of her role as an independent chair was the ability to act as intermediary between two most powerful agencies to ensure collaboration:

‘I think Nelly does a great job of chairing, because it can’t be easy to rein in all those big, sometimes strong agencies, health and social care, which engage in raging arguments’ (Doris, General Practitioner).

Consistent with our SNA findings of a highly-connected network, Nelly’s independent status coupled with her ability to broker knowledge across organisations was conducive to multi-agency working and enhancing knowledge-sharing. Brokering activity is necessary if this network is to move away from long-established domination by health and social care agencies, and overcome related jurisdictional disputes. In the process of knowledge brokering, opportunities may be opened up for other, previously
marginal, organisations to credibly participate in knowledge exchange. Beyond the policy mandate, we note that the wider network membership, including long-standing ‘elite’ members from children’s services, felt the opening up of knowledge exchange improved safeguarding outcomes:

‘Nelly [independent chair] is very clear in terms of her role to ensure we all work together, and that everyone, no matter how small the agency or number of representatives, feel they can contribute equally to improving safeguarding’ (Babs, Board Manager).

‘Nelly [independent chair] has grown into the role of chairing and making sure everyone gets their say, including smaller agencies like the voluntary sector, that need to be brought into the discussions if we are to improve safeguarding’ (Jess, Board Administrator).

Most important for smaller agencies was Nelly’s ability to broker knowledge effectively within the context of board meetings:

‘Nelly [independent chair] seems to have a good understanding of why the voluntary sector is there. She understands our contribution and wants everyone else to understand too. She listens to what I’m saying, and if I want to say something in the meeting, she ensures that I get my voice heard and make that contribution to strategic decision-making’ (Milly, Local Voluntary Sector).

Nelly’s independent status and lead role as chair, discussed previously in this chapter, gave her the legitimacy to control discussion, so that on occasions, it was concentrated, with knowledge contributions from a limited number of board members (e.g. when an adverse event was healthcare focused), or alternatively, it was distributed widely, with a wide range of contributions across the various organisations (e.g. when an adverse event represented a system level failure). Even the larger, more powerful agencies of health and social care appreciated Nelly’s liaison role and her ability to broker knowledge across organisational and professional boundaries:

‘I prefer having an independent chair compared to previous arrangements. I think that it does give the whole thing more balance, so that safeguarding structures and processes don’t just suit one agency. It means in health we may need to reach a compromise with other agencies, rather than just pursue what we want. Taking others’ views of the system into account produces better outcomes. Nelly really is very good at organising, bringing people together, you know calling in organisations and people to make their contributions’ (Terry, Nurse Consultant PCT).

Apparent above, is that in contrast to past practice where the network chair was previously occupied by children’s services, competitive influences generated by inter-organisational politics and jurisdictional boundaries can be effectively mitigated through brokering by Nelly [independent chair]. Moreover, bringing organisations together for a common purpose also creates new opportunities for inter-organisational learning. This goes hand
in hand with facilitating the board’s requirements to collectively develop governance arrangements as another health representative explained:

‘She’s [Nelly] able to get everybody involved, all the different agencies. In terms of knowledge sharing and producing safeguarding protocols, she’s facilitated those very well. It’s been helpful that she is well known to all the key players across the system. Nelly has been in this region for probably longer than anyone else around the table. Whist she’s worked in a neighbouring area, she has been around across the patch’ (Sam, Medical Director, Mental Health).

Whilst not part of the mandated changes to safeguarding, what is clear is that knowledge sharing and organisational boundary crossing in this network appears highly dependent on the knowledge brokering skills enacted by the independent chair. The last part of the quote is consistent with our ongoing emphasis upon social capital as an antecedent for both leadership influence and the enactment of knowledge brokering roles. Nelly ‘hit the ground running’ on appointment as independent chair and in large part this was due the relationships she already had with some of the key players in network.

### 6.5.3 Boundary Spanners and Co-ordinators

There were other members of the network identified as central relation to brokering roles as information co-ordinators and ‘boundary-spanners’. Firstly, the formal network board administrators (senior representatives with the local authority/children’s services) accountable for network operations and administrative functions; i.e. Jess [Board Administrator] and Lilian [Board staff], were identified as boundary spanners. Secondly, a senior member with the health authority i.e. Medina [Safeguarding Doctor] was also viewed central to the co-ordination of knowledge flows between health and other agencies in the network.

A common thread between these three members was that they had a professional background (social care or health care), and, although middle ranking staff within their employing organisations, they had served together on the board in various capacities for a considerable length of time, and so had considerable historical knowledge of safeguarding issues and board matters:

‘Members always seem to come to me in the first instance because they know I have a lot of information and if I don’t know, at least I know who to contact. Further, I’m usually always available at the end of the phone, which can’t be said for all board members’ (Jess, Board Administrator).

The role of Jess as the first point of contact for board members is not surprising, since alongside her long services, she remains the primary administrator responsible for meeting minutes, in addition to compiling and disseminating all of the protocols and procedures of the board. Stability of core staff and the longstanding relationships developed by core staff provide the glue that facilitates the co-ordination of agencies and professions across the network:
'My role is such that if anyone has any issues in relation to social care, they usually come through me to try and resolve those issues because I’ve been on the board for so long, people trust and respect what I know. For the same reasons on an inter-agency basis, I speak to Medina [safeguarding doctor] quite a lot for professional advice and she also contacts me quite a lot too’ (Lillian, Board Staff).

In the quote above, the importance of social capital is again emphasised, with knowledge shared in a reciprocal manner and underpinned by trust, shared understanding and mutual regard between long-serving social care and health members. Their history of board membership, combined with some professional legitimacy (although we note they were not the highest status representatives of their respective professions) for safeguarding matters, facilitated brokering roles for Medina [Safeguarding Doctor] and Lillian [Board Staff, Social Worker]:

‘For information or professional advice I go to Medina [Safeguarding Doctor], then Lillian [Board staff] as they’re the people that run the meetings, they know the most and so have the most knowledge’ (Sam, Medical Director, Mental Health).

From the perspective of this medical director, the willingness to cede authority is based on history and long-term board experience, seemingly important factors for overcoming traditional hierarchies generally associated with multi-agency working. This view was also shared by another board member, representing a smaller less powerful organisation:

‘I go to Medina [Safeguarding Doctor] as she is respected on both an operational and a strategic level. She shows respect for other agencies and seeks to understand us. She is also very open and clear in explaining to others the healthcare perspective upon safeguarding’ (Milly, Local Voluntary Sector).

In the quote above, Medina’s [Safeguarding Doctor] ability to span organisational and professional boundaries was tied to others’ respect for her professional knowledge. Complementing this, that she exhibited respect and understanding of others’ professional or organisational viewpoint was a major factor in her ability to effectively link across the myriad of organisations and professions in the network.

6.5.4 Organisation and Professional Hierarchy

Thus far, we have presented knowledge exchange within the Local Safeguarding Children’s Board in relatively glowing terms. However, we do not underplay the professional and organisational tensions that characterise safeguarding settings, and these were evident in the Queenton Local Safeguarding Children’s Board:
'I think representatives like Nick [Medical Director, Hospital] come in from a much more self-interested background. I get the impression that he comes into meetings with the attitude, ‘if you [other agencies] want money off me, I am going to make sure that you don’t get it’ rather than thinking ‘this is the place to interact with other agencies, and we work to mutual benefit. I really don’t think he actually sees the board as a place to inter-connect with others about safeguarding matters the way he should’ (Lillian, Board Staff).

Although the intent of the recent re-organisation of safeguarding was to distribute accountability by engaging more senior representatives, for representatives such as Nick, located at the very top of the medical hierarchy, organisational interest to protect resources takes precedence over multi-agency collaboration. Such attitudes were not conducive to knowledge exchange, but over time, these may change:

‘There is a need for us [healthcare agency] to be better at information sharing. We have been too protective in the past, but it’s difficult to change. We are starting to be more open though. For example, we’ve never presented a healthcare annual report board until now. It’s always been an internal annual report for the PCT [Primary Care Trust], which we’ve guarded jealously’ (Monica, Executive Nurse/Chief Operating Officer).

In contrast, other changes, resulting from the recent organisational re-structuring within health, were not so beneficial for the network:

‘You can’t assume all the healthcare agencies are collaborating. The PCT representative on the board is also there to ensure safeguarding arrangements are sound throughout all the healthcare organisations. So when there’s a medical director representing a provider organisation, such as a hospital, foremost the PCT representative is very interested in their business, what they’re doing and what they’re saying, what audits they’re running, basically you know, how they’re performing’ (Terry, Nurse Consultant).

The quote above highlights the way children’s safeguarding outcomes are embedded across all areas of health in performance indicators that frames their activities. Such performance is constantly under surveillance, and the Local Safeguarding Children’s Board represents an arena in which the PCT can garner information about a provider’s safeguarding performance. Unsurprisingly, those representing the healthcare providers on the board may be reticent to share knowledge about adverse incidents in their organisations more widely in the network, as illustrated later in this section. This too narrowed the scope of knowledge exchange within the network:

‘You have to understand that our practices are under scrutiny at the board across the table by organisations, PCTs, that commission our services, and others with whom we sometimes have an uneasy relationship, the local authority, because we deliver interdependent services. I am sometimes uneasy about revealing too much about any problems we have because it might be used against me. So, the type of knowledge sharing that you...
[interviewer] hint at is not as free as you might expect (Sam, mental health psychiatrist).

For other organisations, such as the police, competing priorities and performance targets also have a major impact on the extent to which they willingly share knowledge or, limit their interactions with other organisations and professions:

'I’m not actually interested in other agencies or their views. I focus upon our need to meet our own performance targets. But then there’s an interface between the changes we make and other organisations make, we clearly have to consult others and the board is a mechanism for doing this so the police can move forward. But I do think multi-agency working like the safeguarding board raises an expectation that everyone has to be consulted on everything that you’re doing and that’s just not the case with my organisation’ (Fiona, Police).

Clear here is that the emphasis upon performance targets that individual organisations are subject to, limits collaboration and the willingness of one agency to share knowledge with others in the Local Safeguarding Children’s Board.

In the following and final quote in this section, we question to what extent traditional dominance of health and social care has been challenged through mandated safeguarding arrangements. Despite the recent changes to safeguarding, suffice to say that overcoming some of the more traditional challenges associated with knowledge sharing and multi-agency working remains high on the agenda:

‘In terms of sharing knowledge and interaction, at the end of the day, the police are actually on the periphery, with health only coming in second, and of course, number one is still children’s services and social care. You know, some things haven’t changed much, even though structures have’ (Jess, Board Administrator).

On the basis of the above, we suggest our empirical chapter has moved a full circle. We started the chapter with analysis of a historical case set in the late 1970s- early 1980s, within which certain institutional challenges were highlighted. Bringing it up to the date through our primary case of a Local Safeguarding Children’s Board highlights the intactability of institutional challenges through structural reforms alone.

### 6.6 Health Economics: Local Safeguarding Children’s Board

Information on the costs and benefits associated with the safeguarding network was derived from a questionnaire, distributed to all participating organisations. Responses were received from the eight organisations that make up the network. Each organisation provided a summary of their
financial contribution and perceptions of the benefits of the network. These are summarised below.

6.6.1 Cost and Benefit of Local Safeguarding Children’s Board

6.6.1 (i) Costs of Local Safeguarding Children’s Board

Six of the eight organisations that responded made financial contributions to the establishment and maintenance of the network, with contributions ranging from the nominal (£500 per year to access records from a minor partner) to the significant (£200,000 per year from the Local Authority Children’s Services Directorate). In addition to this, respondents provided estimates of indirect contributions, in the form of staff time spent attending and preparing for meetings. A summary of the costs associated with the network is presented below (Table 6.6.1 (i)).

Table 6.6.1 (i) Summary of the costs associated with the safeguarding network

| Responders (N) | 8 |
| Direct financial contributors (N) | 6 |
| Direct financial contributions (£) | £ 306,491.00 |
| Indirect costs (£) | £ 106,968.00 |
| **Total running cost of network (£)** | **£ 413,459.00** |

The majority of the cost is associated with direct financial contributions to support staffing (appointment of a policy officer) and board activities. In addition to this, the participating organisations reported that they allocated over £100,000 in indirect costs, mainly in the form of staff time required to prepare for, travel to and attend the network meetings. For the main part, the responses provided accurate bottom-up estimates of costs, for example, based on the number of hours for each grade of staff that contributed to the network activities. This bottom-up approach to costing suggests that the estimates provided can be considered to be reasonably accurate and a fair reflection of the resources allocated to the network activities.

Participants were asked to consider what resources would need to be allocated to do the same activities, in the absence of a formal network. Asking participants to consider the counter-factual to the existence of the network seemed to present some challenges and whilst six of the organisations responded to this question, the responses lacked detail in some cases. As such, the responses should be regarded with some caution.

The findings suggest that in the absence of the network, the cost of conducting the same activities would be £160,000 per year. This is substantially lower than the costs of maintaining the network which are reported above. However, it should be noted that this appears to be an anomaly resulting from incomplete responses to this question. Of the six organisations that responded, four stated that the costs of conducting the same activities in the absence of the network would be greater than their current financial contribution to the network. On this basis, the network can be considered to represent good value for money for these organisations. For the remaining two responders, there are clearly some
concerns about whether the network results in more efficient ways of working or whether it leads to greater contributions than are considered necessary.

In considering the costs avoided, comments highlighted that these would typically comprise training and education for staff, the need to build relationships between agencies and the need for multiple meetings on case reviews. This suggests that the integrated, multi-disciplinary nature of the network meetings should lead to some efficiency gains, by avoiding the need for multiple interactions between single agencies.

Based on these findings, a balance sheet of the finances of the network is presented below (Table 6.6.1 (ii)). This suggests that there is a significant cost associated with running the network, although this also avoided with some efficiencies which at least partly offset the costs. However, these figures should be interpreted with some caution due to incomplete responses from some agencies, particularly in relation to the costs avoided.

<table>
<thead>
<tr>
<th>Table 6.6.1 (ii) Summary of costs reported for the safeguarding network</th>
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<tbody>
<tr>
<td>Total running cost of network (£)</td>
</tr>
<tr>
<td>Costs avoided (£)</td>
</tr>
<tr>
<td>Net cost (£)</td>
</tr>
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</table>

In order to establish whether the network represents good value for money, the costs of running the network need to be considered in relation to the benefits accrued. These are discussed below.

6.6.1 (ii) Benefits of Local Safeguarding Children’s Board

Respondents were asked to provide comments on the benefits of the network. An open ended question was included which allowed respondents to identify the key benefits from their perspective and a further question asked for the benefits to be weighted, in order to allow ranking of their importance. Key themes to emerge are summarised below.

(a) Improved co-ordination of multi-agency working

Of the eight responses, all suggested that the network had created improved multi-agency working and co-ordination amongst the participants. This was ranked as the most important benefit by four of the responding organisations.

(b) Accountability

Two of the responding organisations suggested that the network had improved accountability for safeguarding and rated this as the most important benefit of the network. Related themes were also raised, including the potential for organisations to challenge decisions, the quality assurance role of the network and the introduction of a grievance procedure.

(c) Sharing of knowledge and expertise

Several respondents identified that the network has created opportunities to share knowledge and expertise across agencies. Related to this, responses
highlighted the potential for training of multiple agencies during network activities and improved access to information.

(d) Process improvements

Respondents also praised the network for leading to improved clarity around processes and policies relating to safeguarding and the development of agreed common goals across agencies.

6.6.1 (iii) Summary of Costs and Benefits of Local Safeguarding Children’s Board

The evaluation of the safeguarding network provides some interesting findings. Many of the participating organisations felt that their financial contributions were outweighed by the costs that would be incurred in the absence of the network. However, some of the respondents, including some of the larger financial contributors, felt unable to estimate what costs would be incurred in the absence of the network. The result is that the summary findings suggest that there is a positive cost associated with running the network that is only partially offset by costs avoided.

Participating organisations felt able to readily identify a number of benefits associated with the network. The main benefits being improved co-ordination of activities, improved multi-agency working and improved accountability.

Without valuing the benefits, it is difficult to determine whether the network represents good value for money for the participating organisations. However, what is clear is that the financial contribution to the network is relatively modest when contrasted with the potential human and financial costs associated with a serious safeguarding incident which results in harm or even death to a child. Previous research has indicated that there have been no attempts to allocate costs to serious case reviews although the legal costs alone are expected to be the very high (Rose and Barnes, 2008).

In addition to this, we should not lose sight of the human costs that may be involved, particularly in the case of the death of a child. If the network can result in the avoidance of one serious incident of this sort, then the financial contributions presented above, would appear modest in comparison.

Furthermore, as evident in the recent Laming Report (Laming, 2009), it should be noted that there remain serious concerns about the quality of safeguarding. The safeguarding networks have been established in response to these concerns and whilst some organisations may feel that their contributions do not represent good value for money, there is a place for legislation to enforce co-ordinated working across public sector agencies. In the case of safeguarding, the level of contribution is not believed to be excessive when considered in relation to the potential harm avoided.

6.7 Analysis of Local Safeguarding Children’s Board

Mandating the change in structure towards Local Safeguarding Children’s Boards, as with our primary case of the Cleft Lip and Palate Network proves insufficient. This is starkly illustrated in the similar child death cases, which took place in the same London borough despite Local Safeguarding Children’s Board arrangements being in place (Laming, 2003, 2009). Professional hierarchy and organisational fragmentation may remain all-pervasive in the absence of changes in process, as well as structure, as illustrated in our historical case analysis (Easen et al., 2000; Frost and Lloyd, 2006; Hardy et al., 1992; Hudson et al., 1999; Jones et al., 2002; Lupton and Khan, 1998; Ward et al., 2004).
6.7.1 Analysis of Network Structure

Local level interventions are necessary to buttress policy intention that a wider range of ‘grass roots’ agencies are included in safeguarding arrangements at the strategic level, and that leadership and exchange of knowledge are effective at the system level (France et al., 2009). Furthermore, it seems insufficient to bring the appropriate senior level organisational representatives to the table via the board if they merely pursue organisational self-interest, and if it is more junior staff that drives network processes (DES, 2006). The one thing we highlight as effective at the local level is the appointment of an independent chair, who has legitimacy in the eyes of the key powerful network members within health and social care agencies on the basis she is perceived as neutral and exhibits professional administrative leadership (France et al., 2009), combined with charismatic leadership (Behn, 1998; Bellone and Goerl, 1993; Eggers and O’Leary, 1995; Hennessey, 1998) and supported by longstanding relationships with key stakeholders that engenders the development of social capital across organisational and professional boundaries (Nahapiet and Ghoshal, 1998).

6.7.2 Analysis of Leadership Processes

6.7.2 (i) Accountability and Organisational Self-Interest

The accountability of the Chair of the Local Safeguarding Children’s Board is one for safeguarding children in the local area. For this, where independent, he or she is accountable to the Director of Children’s Services within the host local authority (where the Chair is the Director of Children’s Services, then, as noted in the Laming Reports (Laming, 2007, 2009) accountability becomes more confused). This might individualise accountability and leadership except any safeguarding outcome relies upon other key members, beyond the Chair, discharging their professional roles and being held accountable for this; i.e. such dual accountability regimes requires that leadership is both concentrated and distributed (Currie et al., 2009b, 2009c). However, the latter proves challenging as our interviewees suggest that key stakeholders, holding professional expertise and responsibility for safeguarding, may orientate towards organisational self-interest, and sidestep the broader accountability for safeguarding demanded by the board. Indeed, interviewees report concern that those providing leadership for safeguarding, where it is distributed, are an administrative elite, rather than a professional elite. This may not represent a significant problem if organisational level accountability aligns with the broader accountabilities of the Local Safeguarding Children’s Board. However, the suggestion from interviewees is that this may not hold. To mediate this, in our empirical case, the Chair develops a sub-committee structure with key stakeholders reporting into the main board: i.e. some internal re-structuring supports aspirations for more distributed accountability and leadership. We highlight that Laming too felt leadership responsibility and accountability are located with the professional, rather than administrative, elite: “The time is long past when the most junior employee should carry the heaviest burden of accountability” (Laming, 2009: 18, subsection 2.10),

6.7.2 (ii) Distribution of Leadership

Countering concentration of leadership, our second theme is one of distribution of leadership that may be less visible or ‘quiet’ (Badaracco, 2002; Rock, 2006), and therefore less likely to be reported. So some network participants remain in the background, but nevertheless engage in
influencing activity to move the network forward. As with our previous theme, such leadership influence appears predicated on their historical knowledge of local safeguarding structures and processes. The essence of analysis is that leadership is not always the very visible phenomenon that others come to expect.

6.7.2 (iii) Professional, Role-based Influence

Our study shows how hierarchy and competition between, but also within, professions, impacts upon leadership patterns. The development of leadership in the network links directly to professional role and organisational affiliation. It proves difficult for those beyond the narrow leadership elite to enact leadership influence because their professional role and organisational affiliation does not align with institutionalised patterns of power and status in the provision of health and social care; i.e. inter-professional and intra-professional hierarchy (Abbott, 1988; Bate, 2000; Fitzgerald and Ferlie, 2006). Linked to this, in the literature review we noted collegiality characterises a professional bureaucracy (Kirkpatrick, 1999; Mintzberg, 1979, 1985; Sheaff et al., 2004). However, our study shows collegial organisations are not some sort of utopian context in which all organisational members enjoy equal influence. Rather, collegiality is embedded in a system of power differentials that allows some within the network to exert leadership influence more than others (Currie et al., 2009a). As discussed further below, contestation between health and social care professionals is particularly evident.

6.7.3 Analysis of Knowledge Exchange Processes

6.7.3 (i) Knowledge Brokering

The independent chair was a key knowledge broker at the individual level (Hargadon and Sutton, 2000; Verona et al., 2006). This is not merely a matter of exhibiting the required competence to elicit the necessary range of contributions from all members, whether more or less powerful. More, it appears due to others’ acceptance of her knowledge brokering role (Shi et al., 2009), particularly those that enjoy powerful positions from their professional status or organisational affiliation. In part, her position as a key knowledge broker, as with her influential leadership role, lay with her perceived impartiality in the eyes of others, particularly powerful players from health and social care organisations (France et al., 2009). Role-based characteristics may, however, prove insufficient to enact an influential role; i.e. it is not merely the appointment of an independent chair that ensures effective knowledge exchange. In the case of Queenton Safeguarding Children’s Board, the independent chair appointed, not only exhibited the necessary chairing competences, but had generated a good deal of social capital (Nahapiet and Ghoshal, 1998) with network members in her work around the region prior to her appointment. In short, she knew the key players and they respected her. She was thus able to enact a knowledge brokering role quickly following her appointment, whereas someone less well known on appointment may have taken some time to develop the necessary trust and understanding with others.

The importance of social capital was underscored for others that were positioned in knowledge brokering roles. Whilst, enjoying less professional standing than some of the other members of the Local Safeguarding Children’s Board, we see an administrative elite emerge as key nodes of the network through which knowledge flows are channelled. In part, this is due to the administrative structures for the board, which channel knowledge flows through these staff. In part, it is their longstanding membership of the
board and past knowledge of board matters and people that represents the antecedent for them to enact a key knowledge brokering role.

Knowledge brokering enacted by the independent chair, small scale changes in structure of the Local Safeguarding Children’s Board, the existence of social capital across the network, all combine to engender architectural knowledge that potentially brings together disparate component knowledge domains in a way that mediates some of the institutional barriers to effective collaborative working highlighted in literature (Easen et al., 2000; France et al., 2009; Frost and Lloyd, 2006; Hardy et al., 1992; Hudson et al., 1999; Jones et al., 2002; Lupton and Khan, 1998; Ward et al., 2004). We summarise these challenges in the next sections of the report (6.6.3 (ii) and (iii)).

6.7.3 (ii) Professional Barriers to Knowledge Exchange

We do not want the reader to run away with the idea that knowledge exchange was without problems in the Local Safeguarding Children’s Board. Whilst cast in a positive light, there is more than a hint of professional barriers to effective knowledge exchange (Currie and Suhomlinova, 2006), most obviously between health and social care professionals engaging in jurisdictional battles over safeguarding. Meanwhile, other professional perspectives and contributions to knowledge were driven out by the dominance of health and social care agencies, despite the mandate for wider agency inclusion (France et al., 2009).

6.7.3 (iii) Knowledge Exchange and Accountability

As reported in a previous section (6.6.2 (i)), individual members of the Local Safeguarding Children’s Board may orientate towards the demands of their employing organisation: i.e. they perceive accountability towards their employing organisation, not the Local Safeguarding Children’s Board. This may reduce collaboration between members, since they fail to see the interdependencies for safeguarding that exist across organisations; i.e. an inability to see the need to exchange knowledge (easen et al., 2000; Frost and Lloyd, 2006; Hardy et al., 1992; Hudson et al., 1999; Jones et al., 2002; Lupton and Khan, 1998; Ward et al., 2004). Individual members may also be less willing to exchange knowledge because they perceive that resource allocation may be adversely affected through an open exchange of knowledge: i.e. politics with a ‘small p’ characterises knowledge exchange within the Local Safeguarding Children’s Board (Currie and Suhomlinova, 2006).

To emphasise, even where performance management regimes do not directly impact upon networks and their members, the effect of accountability and surveillance can be seen to narrow the scope of knowledge exchange, as well as leadership, in the Local Safeguarding Children’s Board.
Chapter 7 Cross-Case Analysis: Network Structure and Processes

In this penultimate chapter, we integrate our analysis of each of the empirical cases with themes generated from the literature that were outlined in Chapter 2, to develop cross-case analysis that directly addresses the research questions set out in section 2.3. In order, we deal with the question of network structure; leadership processes within networks, particularly whether leadership is best distributed or concentrated, to support network forms of organisation; and knowledge exchange processes within networks, particularly whether and how knowledge exchange across organisational and professional boundaries is best supported. The non-participation of the Cleft Lip and Palate Network, and the necessarily different methods used in the other primary empirical cases, means that any comparative analysis of costs and benefits is limited within our final section of the chapter.

7.1. Network Structures

The first two questions set out in our literature review within Chapter 2 are inter-linked; i.e. the aim of the network very much generated a certain network form.

7.1.1 Type of Networks

The Cleft, Lip and Palate Network was top-down, policy driven in its conception. However, whilst this conceptual case represented a policy-driven network (Addicott et al., 2006, 2007; Rimmer, 2002), on the ground we might characterise the realisation of the network in the Cleft, Lip and Palate case as one driven by powerful professionals, surgeons, who dominated the network in pursuit of self-interest (Currie et al., 2008a; Sheaff et al., 2004; Waring and Currie, 2009); i.e. the outcome was somewhat the opposite of policy intention. In its intent, the Cleft, Lip and Palate Network might reflect a more managed form of network, but a more professional network was realised, which we emphasise was one structured to meet narrow self-interest of the primary surgeons.

In comparison, the Paediatric Nephrology Network was positioned at the other end of network type continuum, a professional network, but one that developed as a community of practice (Tagliaventi and Mattarelli, 2006), which encompassed the influence of a wide range of professions, rather than narrowly orientated towards medical consultant self-interest. This allowed the network to meet a number of aims of network forms of health and social care organisation. However, whilst this bottom-up, more emergent, professional network appears effective, readers should not assume that the key question for policy-makers regarding whether networks should be mandated has a clear answer. Indeed the limited scope of our research, and the distinctive contextual features of each of our primary case studies, render any conclusion regarding this, tentative at best. We also highlight that this network may need to move towards managerialisation for it to effectively pull down resource internally within the hospital, and more widely from the commissioning system.
The empirical case of Local Safeguarding Children’s Board plays out somewhere between the cases of Cleft, Lip and Palate, and Paediatric Nephrology in that it is a mix of, a top-down policy-driven network and bottom-up professional network. On the one hand, it represents a policy-driven network (Addicott et al., 2006, 2007). On the other, historically, there has been some degree of networking across boundaries prior to the mandating of the network, which has been professionally driven to bring health (NHS) and social care (local authorities) organisations together. A good deal of social capital exists between some of the key professional participants prior to mandating of the network, and despite some concentration of knowledge exchange and contestation across health and social care boundaries, which reflects somewhat intractable institutional challenges, the network exhibits some of the ideal type community tendencies noted by Tagliaventi and Mattrelli (2006). This, we suggest may be a local phenomenon, which we can’t assume is evident in other Local Safeguarding Children’s Boards nationally (France et al., 2009). Yet, our primary case offers a glimpse of how hitherto intractable institutional challenges noted by extant academic literature (Easen et al., 2000; Frost and Lloyd, 2006; Hardy et al., 1992; Hudson et al., 1999; Jones et al., 2002; Lupton and Khan, 1998; Ward et al., 2004), might be mediated at the local level.

Overall, the dynamic nature of the network form reflects that the question – what is a network – is not a straightforward one, and that any network may be mixed in its character, including the extent to which it is driven bottom up by professionals compared to top-down policy driven (Ferlie and McGivern, 2003).

7.1.2 Aims of Networks

Network forms of organisation for the delivery of health and social care potentially give rise to cost efficiency gains (Entwhistle and Martin, 2005). The disengagement of the Cleft, Lip and Palate Network did not allow us to quantify cost reductions in the specific empirical case. However, our health economics analysis suggested such efficiency gain was likely, where network forms of organisation supplant markets and hierarchies in the empirical cases of the Local Safeguarding Children’s Board and Paediatric Nephrology networks -- see Section 6.4 for more detail regarding this.

The criteria that drove the location of the Cleft, Lip and Palate Network was one that privileged geographical accessibility for users and carers, compared to perceptions of where clinical expertise was located (the primary surgical expertise was perceived to lie at the Valley spoke in particular). This adversely impacted upon the aims of the network as follows. Whilst, some of the expert surgeons and nurses worked into the hub from spoke site of Valley, such staff merely delivered their intervention at the hub without fully engaging in leadership or knowledge exchange to the benefit of the network. Meanwhile, those expert surgeons and nurses that worked into the hub from the Lowham spoke were much more accepting of the hub and spoke hierarchy compared to those in the Valley spoke. This related to longstanding health and social care delivery arrangements, where those at Lowham privileged Queenton as the centre for cleft, lip and palate expertise, and travelled to Queenton to deliver care under contracting arrangements between the two hospital trusts. However, this merely represented a division of labour arrangement. Clinicians at Lowham did not fully engage with network processes but remained aligned to contracted ways of working prior to the introduction of the mandated network. In short, the ‘networkings’ of the network were a function of historical work.
arrangements that preceded the imposition of the mandated network, an antecedent that is also visible in other empirical cases.

Regarding the aim of co-ordination of service (Rhodes, 1997) within the Cleft Lip and Palate Network, this too was rather more fragmented than might be expected, particularly as regards the integration of clinical and psychosocial domains of care, because the network was not networked.

In the face of fragmentation of service delivery, any democratic aim to increase user voice with respect to service development proved difficult to implement (Allsop and Taket, 2003; Crawford et al., 2002; McQuaid, 2000; Montpetit, 2003). We note there appeared little emphasis upon user involvement, or structures to support this in the Cleft, Lip and Palate Network, which is consistent with our view that Cleft, Lip and Palate was a professionally defined network.

In summary, particularly from the perspective of surgeons at spoke site Valley, they perceived that an economic rationale drove the development of the network. They judged expertise was not located at the hub site, and so they viewed the decision regarding the location of the network as lacking legitimacy, with the consequence that the organisational learning aim was not met (Lorenz, 1989; Thompson et al., 1991), as surgeons at spoke site Valley distanced themselves from strategically developing the network. Rather, they continued to promote services at Lowham to retain traditional patterns of resource allocation as far as possible.

Again we cast the Paediatric Nephrology Network in a more favourable light compared to the Cleft, Lip and Palate Network with respect to realising economic or social aims. As outlined in section 6.4 in more detail, cost-benefit analysis suggests an efficiency gain through network form of health and social care delivery (Entwhistle and Martin, 2005).

That the network encompasses a wide range of healthcare and psychosocial expertise, and the different domains of knowledge are integrated, has a consequent positive effect upon co-ordination of care (Rhodes, 1997). Finally, within the Paediatric Nephrology Network, largely due to the emphasis upon psychosocial, as well as clinical, concerns, structures and processes gave patients and carers ‘voice’ in the development and delivery of care, thus addressing a perceived democratic deficit as regards such matters (Allsop and Taket, 2003; Crawford et al., 2002; McQuaid, 2000; Montpetit, 2003).

The Local Safeguarding Children’s Board exhibits a more mixed picture regarding realisation of its aims. Its position at a more strategic level might explain that service users have little influence upon decision-making beyond indirect representation from health and social care professionals that act as their advocates (Allsop and Taket, 2003; Crawford et al., 2002; McQuaid, 2000; Montpetit, 2003). Our health economics analysis suggests some economic gain from its presence (Entwhistle and Martin, 2005), although this is less clear than the case of the Paediatric Nephrology Network, where clearer operational outcomes can be identified. The sharing of resources to produce economic efficiency gain between the constituent organisations of the network cannot be assumed. Perhaps where the Local Safeguarding Children’s Board fared best was where organisational learning ensued from open knowledge exchange around serious untoward incidents (Lorenz, 1989; Thompson et al., 1991). This supported the development of more co-ordinated care across agencies (Rhodes, 1997).
7.1.3 What are Institutional Facilitators and Barriers to Structural Reform?

Our study confirms that professional and policy institutions impact upon whether a network is ‘networked’ (Currie et al., 2008b). The Cleft Lip and Palate Network provides an exemplary case for the effect of professional hierarchy, which impacts upon network processes of leadership and knowledge exchange. Professional hierarchy is not just a matter of inter-professional competition, with doctors relatively more powerful than nurses, but also intra-professional competition (Abbott, 1988; Freidson, 1994; Larson, 1979, 1990). Specialist staff is more powerful than those less specialist (Currie et al., 2009d), as illustrated by the privileged position primary surgeons enjoy compared to secondary surgeons in the Cleft Lip and Palate Network. Others’ specialised knowledge may also be valued by the aforementioned doctors, as illustrated in the influence the speech therapist and orthodontist enjoyed in the delivery and development of cleft care. The professional institution is likely to drive working arrangements prior to the introduction of networks by policy-makers; i.e. the processes that ensue following the implementation of the network reflect, and even reinforce, professional hierarchy. The mediation of the professional institution is challenging, but previous long-standing relationships between network participants may help in this matter through developing social capital across organisational and professional boundaries (Nahpiet and Ghoshal, 1998). Whether, it is long standing professional institutional arrangements or long-standing local level relationships that impact networks, we highlight that ‘history matters’ in the development of ‘networked’ networks.

That ‘history matters’ is particularly apparent when we compare our secondary case, of the ARC, with the primary case, of the Local Safeguarding Children’s Board. The former predates the latter by around 30 years, yet patterns of professional hierarchy remain across the cases. To highlight these, the historical case shows four themes: the challenge of ensuring change across all agencies; distributing leadership for healthcare and social care influence; the balance between central mandating and local level agency; securing professional representation from agencies at a strategic level. Such features of the ARC map well onto contemporary challenges faced by the Local Safeguarding Children’s Board (France et al., 2009).

7.2 Leadership Processes

7.2.1 Patterns of Leadership

Patterns of leadership varied across the networks. The Cleft, Lip and Palate Network showed leadership as dispersed into uni-disciplinary silos, rather than the type of distributed leadership argued as suitable for complex organisations (Denis et al., 1996, 2000, 2001). Further, significant leadership influence across the network was concentrated with particular silos, notably specialist surgeons. Concentration of leadership influence is also evident in the cases of the Local Safeguarding Children’s Board and the Paediatric Nephrology Network. In the first, formal leadership of the network switched from a senior social care professional affiliated to the local authority, to an independent chair. Under the former, leadership patterns were one where influence was held by an ‘administrative elite’ (who were not health or social care professionals) employed by the local authority, an
influence that was particularly contested by the healthcare professionals in
the network. On the appointment of an independent chair, leadership
influence was more distributed, particularly with respect to the way it was
shared across social care and health care professionals. Meanwhile, in the
Paediatric Nephrology Network, leadership was both concentrated in the
hands of the charismatic, lead specialist doctor, and distributed over time
across the network to encompass health and social care professionals at all
levels. In summary, in the cases of Paediatric Nephrology and Local
Safeguarding Children’s Board, leadership approaches encompass a mix of
more concentrated and distributed dimensions. Like the network form itself,
what represents distributed leadership is a continuum of approaches, and
likely one that is more parsimonious (Currie et al., 2009b, 2009c), than
presented in its purist conception as conjoint and concertive action (Gronn,
2002).

7.2.2 Organisational Accountability and Leadership
Concentration of leadership aligns with the need for accountability
requirements. This requirement is particularly significant in the case of the
Local Safeguarding Children’s Boards, in the wake of recent reports
regarding poor leadership and lack of accountability (Easen et al., 2000;
Frost and Lloyd, 2006; Hardy et al., 1992; Hudson et al., 1999; Jones et
al., 2002; Lupton and Khan, 1998; Ward et al., 2004). Given the
accountability lies with the Director of Children’s Services within the local
authority, the appointment of a formal leader that reports into the Director
of Children’s Services, and the emergence of an administrative elite,
affiliated to the local authority and social care, appears appropriate.
However, given other agencies, specifically healthcare organisations, are
crucial to delivering safeguarding outcomes, any decision about the
appointment of a formal lead should be cognisant of potential tensions
across the social care-healthcare divide (Huxham and Vangen, 2000). Yet,
for reasons of a wider accountability to society, in the case of public
services organisations, someone still needs to be visibly in charge (Currie
and Lockett, 2007). In this light, the appointment of an independent chair,
perceived as neutral by all stakeholders (despite accountability to Director
of Children’s Services), met both the requirement for concentrated
accountability and the requirement for co-ordination of service across
agencies, specifically social care and healthcare organisations. Having taken
up their position, the appointed formal leader of the Local Safeguarding
Children’s Board then faces a dilemma. More than other formal leaders
within our study, the chair of a Local Safeguarding Children’s Board, ‘walks
on the razor’s edge’ of accountability for outcomes, yet with a need to
distribute leadership to ensure outcomes are achieved (Heifetz, 1994).

For the formal leader of the Cleft Lip and Palate Network, accountability
requirements are focused upon performance as it relates to waiting times
and waiting lists. In large part, this appears a surgical matter, and in this
case, the requirement of organisational accountability aligns with the
hierarchy of professional practice: i.e. surgeons are both accountable for
the outcomes and most significantly influence these outcomes. So, a target-
based approach (Currie and Lockett, 2007; Currie et al., 2009b, 2009c)
might underpin leadership in these more managerialised networks.

Finally, the Paediatric Nephrology Network is not formally embedded in the
healthcare system since it is not mandated. Organisational accountability
upwards is less clear here. Only a case of ‘failure’ (e.g. to provide a timely
intervention for a child) is likely to focus the ‘spotlight’ of accountability
upon the lead of Paediatric Nephrology. In this case, leadership patterns
may change towards greater concentration with the specialist doctors. However, currently the Paediatric Nephrology Network delivers services with little delay following referral of a child. The absence of performance management and managerialisation of the network might be seen in a positive light, since it allows the network to operate in a way that meets the broad set of policy aims, rather than focus on narrow performance targets. Rather than driven by accountability requirements, leadership is aligned, to some extent with professional hierarchy so that the specialist doctor is in charge (Abbott, 1988; Freidson, 1994; Larson, 1979, 1990), and over time, as the network matures, leadership is distributed to others (Currie et al., 2010 forthcoming). In sum, the context of accountability is one that allows, over time, for the distribution of leadership in a conjoint and concertive manner (Gronn, 2002).

### 7.2.3 Professional Hierarchy and Leadership

In all our empirical cases, effective leadership aligns to a large extent with professional hierarchy (Abbott, 1988; Freidson, 1994; Larson, 1979, 1990). When leadership is not aligned with professional hierarchy, as in the case of the Cleft, Lip and Palate Network, where a senior nurse took up the position of Associate CD, then, within a non-receptive context (Pettigrew et al., 1992), the network tends towards dispersal or fragmentation. As Currie et al. (2010 forthcoming), highlight, whatever the intent, to label such arrangements as distributed is a misnomer in the absence of conjoint and concertive leadership action across the network (Gronn, 2002). To influence the network as a whole, rather than merely a narrow group of professional peers, requires that any leader has professional status amongst the wider network; i.e. they can step outside their uni-disciplinary silo. There is also the question of influence beyond the network, notably to leverage resource, which requires that any leader has standing with those other specialist doctors and senior trust managers that make resource allocation decisions. To emphasise our point, the concept of legitimacy is central to understanding which person is most likely to effectively lead the broader network (Currie et al., 2009a). Thus, notwithstanding the regional rivalry between the hub and one of the spokes, the Cleft, Lip and Palate Network only functions effectively when a specialist doctor is formally in charge. Policy recommendations that leadership of the Cleft Lip and Palate Network is allocated to a specialist doctor at the hub appear prescient. Within the Cleft Lip and Palate Network, reinforcing our argument that leadership influence is linked to professional hierarchy, nurses appear to have little real leadership influence beyond their peers, and are positioned in a coordination role by others (Currie et al., 2009a), whereas those healthcare professionals granted legitimacy by doctors because they hold specialist knowledge (Martin et al., 2009b), such as the speech therapist and orthodontist, appear more influential.

The Paediatric Nephrology Network appears a relatively straightforward case, with formal leadership clearly aligned with professional hierarchy (Abbott, 1988; Freidson, 1994; Larson, 1979, 1990). Given the specialist doctor in charge does not have an organisational mandate, professional legitimacy is more important in leveraging resources to support the network. The most significant analytical point beyond this is that the strong professional position enjoyed by the formal leader of the Paediatric Nephrology Network allows him to distribute leadership in a way that cuts across professional hierarchy to those less professionally powerful over time (Currie et al., 2010 forthcoming). Having suggested this, when it comes to exceptional matters, leadership is rather more concentrated again in line...
with professional hierarchy (Currie and Lockett, 2007; Currie et al., 2009b, 2009c).

When professional hierarchy is less clear, alignment of leadership with status becomes a more challenging matter. Within the Local Safeguarding Children’s Board, whether social care or health care professionals are most expert in safeguarding matters is contested. In this case, the appointment of a social care professional as formal leader of the network engenders dispersed leadership across social care and health care silos. This is a problem only overcome on the appointment of an independent chair, who is both skilled and experienced in the leadership of safeguarding networks, and, further, is perceived as impartial and enjoys respect from the various stakeholders following long-standing relationships with many of them (France et al., 2009).

### 7.2.4 Role-based Leadership and Person-based Leadership

Linked to the discussion above regarding the need to align leadership with professional hierarchy, our analysis suggests leadership influence is less about charismatic individuals, which the application of models of transformational leadership tends towards (Bass, 1995), and more about the status of any formal leader in the eyes of other health and social care professionals. In other words, leadership influence relates to professional role, rather than particular individual competencies. This was most apparent in the case of the Cleft, Lip and Palate Network. However, having argued this point, whilst charisma alone may be insufficient (e.g. a charismatic nurse may not enjoy the same leadership influence, as a charismatic specialist doctor), person-based influence may buttress professional role influence to enhance the transformational effect of any leader. This was apparent in the case of the Paediatric Nephrology Network, the formal leader of which was the lead specialist doctor, who enacted the charismatic type of leadership borne of popular myth (Currie et al., 2009a). We also note similar, more person-based competences, exhibited by the independent chair of the Local Safeguarding Children’s Board (France et al., 2009).

### 7.2.5 Combining Concentration and Distribution of Leadership

In considering how concentrated and more distributed transformational leadership approaches interact, a picture emerges of the necessity for one to precede the other (Currie et al., 2010 forthcoming). Whether mandated or more emergent, we can’t expect the implementation of network forms of organisation to be immediately complemented by distribution of leadership across the professional and organisational boundaries within the network. Such patterns of influence are likely, within the early stages of the network, to reflect historical arrangements, particularly professional hierarchy (Abbott, 1988; Freidson, 1994; Larson, 1979, 1990). Moreover, some concentration of leadership is desirable to identify the person ‘in charge’ for those external stakeholders seeking accountability (Currie and Lockett, 2007; Currie et al., 2009a, 2009b, 2009c).

The Local Safeguarding Children’s Board exemplifies a network situation that extends beyond the NHS boundary, a situation in which professional and organisational hierarchy may be less clear (Huxham and Vangen, 2000). It can be viewed as exemplifying the case of a complex organisation, but not one necessarily in which distributed leadership easily flourishes (Denis et al., 1996, 2000, 2001). Traditionally, and currently in just under
half the boards, the formal leadership position is allocated to someone from
the social care organisation, often the Director of Children’s Services
(France et al., 2009). However, their leadership and knowledge brokering
influence may not extend to specialist healthcare professionals. Instead
there is likely to be professional contestation within such arrangements
regarding who is most expert and professionally accountable for
safeguarding outcomes. The role of the independent chair appears crucial
here, particularly at early stages of network development (Currie et al.,
2010 forthcoming). Whilst there are prescriptions evident in the way that
the independent chair operated in our empirical case, such as developing
the necessary management structures and processes to distribute
leadership influence and knowledge exchange, we also suggest there are
person-based characteristics necessary to enact such a ‘political’ role (Denis
et al., 1996, 2000, 2001). Such person-based characteristics in the case of
the independent chair in our empirical case, were buttressed by long-
standing relationships with key network staff across the health and social
care divide that engendered social capital (Nahapiet and Ghoshal, 1998).

In summary, our analysis of the dynamic interaction between networks and
leadership is a contingent one (Currie et al., 2010 forthcoming). We suggest
there is a temporal dimension to the development of distributed leadership
as a network matures. Antecedents may drive the development of networks
and leadership towards fragmentation in the early phase and concentration
of leadership in a middle phase, but antecedents may be mediated (e.g. by
appropriate chairing or through the development of social capital) so that as
the network matures, leadership is more distributed.

7.3 Knowledge Exchange Processes

7.3.1 Patterns of Knowledge Exchange

Patterns of knowledge exchange reflect professional hierarchy to a large
extent (Currie and Suhomlinova, 2006; Currie et al., 2008a; Martin et al.,
2009b; Waring and Currie, 2009). Firstly, professional hierarchy means that
certain knowledge is privileged; i.e. clinical, and even more narrowly,
medical knowledge. Secondly, linked to this, this concentrates knowledge
exchange with doctors, or those whose knowledge jurisdictions are regarded
as legitimate by doctors. The Cleft Lip and Palate Network provide a striking
illustration of the concentrated knowledge exchange phenomena. Within a
wider health and social care network, such as the Local Safeguarding
Children’s Board, the picture appears a more complex one, but again
professional hierarchy dictate some knowledge domains are privileged, and
linked to this knowledge exchange is concentrated in certain high status
medical and social care professionals, with other professionals affiliated to
organisations other than those in health and social care, pushed to the
periphery of such interactions (France et al., 2009).

Within the Local Safeguarding Children’s Board, orientation of members
towards the interests and accountabilities of their employing organisation
rather than the network, produces the sort of fragmentation across
agencies noted by academic commentators (Easen et al., 2000; Frost and
Lloyd, 2006; Hardy et al., 1992; Hudson et al., 1999; Jones et al., 2002;
Lupton and Khan, 1998; Ward et al., 2004) that limits knowledge exchange
particularly between those organisations that view such knowledge
exchange as revealing of potential poor performance, and with potential
resource implications.
These conclusions diverge little from our predictions in the original bid for funding, where we suggested the professional and policy institutions were likely to stymie network processes. What is more novel are the illustrations that emerge of the way in which, at the local level, interventions mediate concentrated or fragmented knowledge exchange. The empirical case of the Paediatric Nephrology Network exemplifies some of the potential solutions that others might follow, such as: developing architectural knowledge (Balogun and Jenkins, 2003; Henderson and Clark, 1990); situated learning (Lave and Wenger, 1995); and knowledge brokering at the individual (Hargadon and Sutton, 2000; Verona et al., 2006) and group levels, encompassing the development of social capital (Nahapiet and Ghoshal, 1998) and cultivation of communities of practice (Lave and Wenger, 1995). Noteworthy is the absence of ICT based solutions to the knowledge exchange challenge (Currie and Kerrin, 2003; Currie et al., et al., 2008a; Waring and Currie, 2009). We emphasise that human, rather than technical solutions, prevailed across our cases. ICT was relatively poorly developed, but even when implemented, appeared inadequate for the purposes of sharing the more contextualised, situated type of knowledge prevalent in health and social care delivery Dopson and Fitzgerald, 2005; (Gabbay and Le May, 2003).

7.3.2 Developing Architectural Knowledge

Prior to the implementation of network forms of organisation, working arrangements are already in place for the delivery of service. Whilst these may not be ideal for co-ordination and integration purposes, nevertheless they provide a starting point to understand the organisational routines and schema that might help bring disparate component knowledge together (Balogun and Jenkins, 2003; Henderson and Clark, 1990).

As discussed elsewhere, the development of management structures and processes appears a necessary dimension of early, more administrative, leadership by those appointed to formal leadership roles (Currie et al., 2010 forthcoming). In the absence of pre-existing organisational schemas and routines for exchanging knowledge, these appear particularly necessary. We note in the two empirical cases of the Local Safeguarding Children’s Board and the Cleft Lip and Palate Network, administrative structures and processes were welcomed across the network as a way of bringing together disparate component knowledge. However, we note failure of formal meetings to do this in the latter case.

The Paediatric Nephrology Network provides a distinctive, and perhaps more effective way of developing the over-arching architectural knowledge necessary to bring together component knowledge (Balogun and Jenkins, 2003; Henderson and Clark, 1990). In essence, effective intervention to promote knowledge exchange might be more normative than structural (Alvesson and Karreman, 2000). Within the medical group in particular both selection and socialisation into the Paediatric Nephrology Network ensure coherent and consistent ways of working are established and sustained that engender knowledge exchange. This includes an emphasis upon the valuable contribution those other health and social care professionals bring to care, specifically the importance of psychosocial expertise. This, more than any administrative structure, provides the necessary architectural knowledge, as embedded in organisational routines and schemas, to bring together disparate component knowledge (Balogun and Jenkis, 2003; Henderson and Clark, 1990). Broadly, the socialisation of staff in the Paediatric Nephrology Network, might be viewed as part of a raft of relatively ‘soft’ or informal human resource practices, which engender
effective knowledge exchange (Currie and Kerrin, 2003; Currie and Procter, 2005; Scarbrough and Carter, 2000).

7.3.3 Situated Learning

The most productive fora for organisational learning appear those through which situated knowledge exchange can ensue (Lave and Wenger, 1995). Most obviously the clinical interaction provides opportunities for situated knowledge exchange across professional and organisational boundaries (Currie et al., 2008a; Waring and Currie, 2009). So, even in the Cleft Lip and Palate Network, which we have characterised as the least effective of our primary empirical networks, situated knowledge exchange is evident between surgeons, across hub and spoke sites, but also encompassing other healthcare professions, such as the speech therapist and orthodontist. However, the knowledge exchange is relatively narrowly focused upon the patient at hand. In a geographically dispersed network, broader knowledge exchange regarding service development and network business, is more challenging. Formal meetings, the intention of which is to broker knowledge exchange more broadly, are stymied by ongoing hub and spoke rivalry and a surgical dominance over network matters, to function effectively as a forum for knowledge exchange. However, the structure afforded by the orthodontists’ awayday provided a useful forum for knowledge exchange, albeit relatively narrowly focused on the interaction of two powerful professional groups’ clinical service; i.e. organisation development events, which take place outside ‘normal business’, may constitute a way of engendering situated learning (Currie and Kerrin, 2003).

Within the Local Safeguarding Children’s Board, we presented at and observed such learning events. These were one of the structures instigated immediately upon the independent chair’s appointment, due to her concern that the Local Safeguarding Children’s Board tended to focus upon operational matters, rather than strategic development, during its formal meetings. Otherwise, outside the series of ‘awaydays’, there was little opportunity for network participants to engage in situated knowledge exchange, since they were organisationally and geographically dispersed. In an attempt to further enhance situated learning, the independent chair internally restructured the board, so that sub-committees of those with shared interest in strategic matters met and reported upwards. In comparison to the Paediatric Nephrology Network, intervention to promote knowledge exchange appears more structural than normative (Alvesson and Karreman, 2000).

In a co-located network, such as the Paediatric Nephrology Network, opportunities for situated knowledge exchange were abundant. Expert staff in clinical and psychosocial aspects of care delivered service alongside each other and were those able to exchange knowledge in real time, as problems arose, and solutions were discussed (Lave and Wenger, 1995). Compared to the Cleft Lip and Palate Network, and Local Safeguarding Children’s Board, situated knowledge exchange processes reinforced the ‘networking’ of the network.

7.3.4 Knowledge Brokering

Above we describe how patterns of knowledge exchange reflect the professional hierarchy. To a lesser extent, patterns of knowledge exchange reflect the policy institution, specifically performance regimes for organisational accountability, and competition between organisations. Such
patterns of knowledge exchange, notably in the Cleft Lip and Palate Network and the Local Safeguarding Children’s Board, adversely impact upon networking of networks. Knowledge brokering at individual, group or organisational level helps ensure a network is networked. However, knowledge brokering is also influenced by social structures.

7.3.4 (i) Individual Level Knowledge Brokering

At the individual level, knowledge brokering takes place most visibly in situated interactions, as described above, with knowledge brokers located at the interstices of professions or organisations (Burt, 1992; Fernandez and Gould, 1994; Hargadon and Sutton, 2000; Verona et al., 2006). The interesting question is who brokers knowledge within these situated interactions, and what role they play. A key criterion for a knowledge brokering role is legitimacy in the eyes of others, particularly the powerful professions (Shi et al., 2009). This may vary across networks. In short, a contingent view of knowledge brokering is necessary. For example, nurses in the Paediatric Nephrology Network enact a knowledge brokering role, which is facilitated by their position as the professional group that enjoy sustained patient and carer contact. However, the legitimacy ascribed to nurses by surgeons within the Cleft Lip and Palate Network is not sufficient to allow the former to enact a knowledge brokering role. In this case, surgeons perform the knowledge brokering role, with some support from other professions to whom surgeons do ascribe legitimacy; e.g. speech therapist and orthodontist. Within the Local Safeguarding Children’s Board, knowledge brokering appears influenced by organisational affiliation, as much as professional hierarchy. The local authority was the lead organisation in safeguarding and this concentrated knowledge brokering within their staff. Particularly notable in this case, the legitimacy for the independent chair to enact a knowledge brokering role was informed by others’ perception of her impartiality, and the longstanding relationships she held with the most powerful stakeholders in the Local Safeguarding Children’s Board prior to her appointment; i.e. her network of social capital (Nahapiet and Ghoshal, 1998) encompassed formal members of the board. This may be an important consideration where the network solution aims to mediate organisational and professional conflict.

7.3.4 (ii) Group Level Knowledge Brokering

Regarding group level brokering, communities of practice, within which there exists a high degree of social capital, exemplify the solution. The development of a community of practice that mirrored the wider professional membership of the network was most obviously evident in the Paediatric Nephrology Network. Indeed, this network might be viewed as exemplifying the community of practice form desired by organisational managers, since knowledge exchange is relatively open across professional boundaries, staff exhibit a shared perspective and focus upon the provision of clinical and psychosocial care for patient benefit, with the high degree of voluntarism associated with archetype communities of practice (Lave and Wenger, 1995). Within the Paediatric Nephrology Network we discern the necessary social capital (Nahapiet and Ghoshal, 1998) in existence to support knowledge exchange across boundaries. Co-location and frequent interaction ensures network participants can identify the relevant ‘expert’ when required (Bowen et al., 2005; Dobbins et al., 2009; Landry et al., 2009). Network participants, as outlined above, exhibit a shared perspective upon the provision of care. Ongoing interaction in meetings and clinical settings, both formal and informal, ensures the necessary trust and reciprocity is generated that supports knowledge exchange across professional boundaries. That all staff work for one hospital trust means the
mistrust and lack of reciprocity that may come from organisational competition and conflict is absent. In essence, group level knowledge brokering is underpinned by knowing each other, an understanding of others’ perspectives and trust and reciprocity (Dobbins et al., 2005; Nahapiet and Ghoshal, 1998).

However, we should note that communities of practice are not necessarily characterised by such harmony (Contu and Willmott, 2003). The spectre of power rears itself when considering legitimate peripheral participation in communities of practice and thus undermines the development of social capital necessary for wider knowledge exchange. Within the Cleft Lip and Palate Network, some, by virtue of professional status, move more easily into the centre of the community; i.e. surgeons, but also speech therapists and orthodontists. Others, meanwhile, remain positioned at the periphery of the community on the basis that powerful professionals in the centre of the community regard their contribution as lacking the necessary legitimacy to fully participate; i.e. nurses are marginalised. The label, “legitimate peripheral participation”, coined by Lave and Wenger (1995) to characterise the politics of communities of practice, appears particularly apt to represent group level knowledge brokering in health and social care.

Within the Local Safeguarding Children’s Board, despite attempts by the independent chair to develop community tendencies, this may prove difficult in the face of geographical and organisational dispersion, and the many different perspectives held by network members upon the safeguarding problem. Consequently, key individuals assumed the knowledge brokering role, and there was less evidence of the community tendencies evident in the Paediatric Nephrology Network.

7.3.4 (iii) Organisational Level of Knowledge Brokering

In the context of the strategic level of delivering services, particularly when a number of public service domains come together, which encompass different public sector and third sector agencies, an individual or group level of knowledge brokering may prove inadequate. There may be a gap for an organisational level knowledge broker that spans knowledge domains and mediates any stickiness of knowledge exchange across boundaries (Fligstein, 2001; O’Mahony and Bechky, 2008; Obstfeld, 2005; Perkmann, 2009; Pielke, 2007; Rai et al., 2008). Such a situation exists in the safeguarding of children and the implementation of Local Safeguarding Children’s Boards represents an organisational knowledge broker to strategically co-ordinate the development and delivery of children’s safeguarding. However, when led by someone or a group considered partial regarding their profession (social care) and organisation (local authority), the role of the Local Safeguarding Children’s Board as a trusted intermediary is called into question by other network participants, notably health professionals that work for a hospital, and this stymies organisational level knowledge brokering. In essence, with respect to knowledge brokering, it appears that the formal leadership of the Local Safeguarding Children’s Board is a more crucial matter than the existence of the Board itself. For a network to enact a knowledge brokering role, it must be viewed as impartial.

7.4 Comparative Cost-benefit Analysis of Networks

The results indicate the costs and benefits of two children’s networks, one of which is voluntary and one of which is mandated. The differing approaches adopted to evaluate the networks mean that the costs and benefits of each are not directly comparable.
The evaluation of the safeguarding network adopted a quantitative approach, recognising that individuals in the network were able to identify their financial and resource contribution to the network. Valuing benefits proved to be more challenging. The financial costs associated with running the safeguarding network are not insubstantial and some participants clearly had concerns about their contribution. However, the financial impact of the network needs to be considered in respect to its objectives. If the network is able to avoid one catastrophic safeguarding event, involving harm or even death to a child, then the benefits in terms of life years saved and legal costs avoided would more than offset the costs of the network.

In contrast, the Paediatric Nephrology Network has grown organically over time, under the leadership of senior clinical staff in the renal unit. The network is now truly multi-disciplinary, incorporating professionals from health care, social care and education. There was a strong, collective belief that their work was resulting in improved outcomes for children with renal disease as well as improved efficiency in the management of these patients. However, due to the complex needs of the patient group there are few opportunities to identify hard outcome measures or conduct benchmarking with other centres. Participants viewed this network as being cost-free. Clearly this is not the case. Participants allocate time and resources to maintaining the network. However, given that most participants essentially saw network activities as part of their job, there is no financial cost to the trust.

It is difficult to say whether the results tell us anything about the relative merits of mandated and voluntary networks. There appeared to be a very strong collective belief in the values and objectives of the Paediatric Nephrology Network, whilst some responses from the Local Safeguarding Children’s Board indicated some concerns about the level of financial support needed and whether this was warranted. A further complicating factor is that the safeguarding network has been mandated to avoid the occurrence of very high-cost (both financial and human cost) events which, thankfully, occur relatively infrequently. In this respect, the network can almost be considered to have similar characteristics to an insurance policy, in that much of the work conducted is to put in place processes and procedures to avoid serious events which have a low risk of occurring. This approach inevitably means that there may be some concerns about allocated resources to it when the benefits are difficult to quantify.

One of the key issues to emerge from the evaluations is the degree to which the benefits of networks can be quantified. In both evaluations, individuals found it difficult to quantify the benefits of networks, either in terms of costs avoided or events. This was felt to be case in the renal services network, where the absence of applicable, well defined outcomes measure, such as mortality rates, admission rates and length of stay, mean that the network struggles to make a strong business case for their existence and justify any demands for more financial support. In other indications, such as surgery, there are metrics which are both easier to identify and to measure, meaning that other networks may be in a stronger position to argue for additional funding compared with the renal services network. This position is not atypical and it is widely recognised that many of the routine measures of health service performance actually capture activity rather than quality and that more needs to be done to address this (Jacobs et al., 2007).

Similarly, the multi-disciplinary nature of the services considered also makes it challenging to easily define and capture measures of benefit. Whilst a great deal of attention has been put into defining measures of health service performance, the services considered above cut across
health, social care and education and might also impact significantly on individuals and their families. As such, crude measures of performance and impact that focus on one domain are likely to underestimate the true impact of the network activities.

Not withstanding these limitations, the qualitative findings reported above suggest that participants value working in networks and that there are substantial benefits to be accrued. Whilst the current study is unable to provide a robust argument to support the claim that working in networks is cost effective, further research is warranted on how best to capture the costs and benefits associated with networks and research designs capable of evaluating these.
Chapter 8 Conclusions and Lessons

Our research confirms previous NIHR SDO research (Ferlie and McGivern, 2003), that networks seem vulnerable to institutional influences. Firstly, they seem vulnerable to patterns of interaction between stakeholders that link to professional hierarchy. This engenders a degree of tribalism, characterised by conflict within and between professions framed by power differentials that relates to jurisdiction. Secondly, particularly where they are managerialised, collaboration between stakeholders may be stymied through emphasis upon meeting centrally set targets, and networks may fragment as stakeholders orientate towards the interests of their employing organisation. So, policy aspirations that networks behave in a networked way may not be met. Reflecting this, previous NIHR SDO funded research (Ferlie and McGivern, 2003) highlights that any structural reform towards networked forms of organisation must be accompanied by attention to network processes. Our study builds upon these assertions through drawing upon a range of literatures from organisational studies, sociology of professions and public administration to provide a more nuanced understanding of how institutional context frames patterns of interaction in networks and how these might be mediated, which gives rise to the following prescriptions for policy-makers, organisational managers, and academics, set out below:

8.1 Lessons for Policy Makers

8.1.1 Mandating Networks

There is not a simple answer to the question of mandating networks. On the one hand, mandating a network may not be aligned to either existing professional practice, or the voluntarism and emergence that produces the community tendencies that characterise effective networks. On the other hand, if not mandated, any more emergent network is unlikely to be effectively embedded in the health and social care to the detriment of resource acquisition and service development.

Further, both our limited sample, and limitations of the research design noted in section 3.2.6 of this report, do not allow us to provide a definitive answer to the question, should policy-makers mandate networks? However, we highlight that government policy in this matter is supported by professional associations. For both the Cleft Lip and Palate Network, and the Paediatric Nephrology Network, the lead professional association (CLAPA and BAPN respectively) was supportive of the general principle that concentrating expertise in a limited number of network hubs proved helpful in supporting network development. Perhaps the challenge is to ensure alignment of the mandated structure with pre-existing professional arrangements, so that there is the appropriate combination of top-down and bottom-up influences. Of our three networks, the mandated Cleft Lip and Palate Network appeared the least ‘networked’, yet, arguably this was a consequence of non-alignment of pre-existing professional arrangements with the mandate, rather a consequence of mandated-ness itself.
8.1.2 Process and Structure

‘History matters’, with the consequence that shifting the balance of power within health and social care is a significant challenge. One of the key messages to policy-makers is that structural change is insufficient to drive the networking that they desire to join up agencies, ensure democratic decision-making, make efficiency gains, and promote organisational learning. If professional practice arrangements are decoupled from such structural change, then any network is unlikely to be networked. Attention should be paid to process arrangements in networks.

Our analysis suggests the management of knowledge exchange is a local level matter, which any policy mandate is unlikely to impact upon; i.e. it is a matter for organisational managers or lead professionals, rather than policy-makers. However, policy recommendations regarding medical leadership of more clinically bounded networks seem appropriate, particularly in the early development of the network and/or any conflict within a network, which requires any leader to hold legitimacy with powerful stakeholders in the inter-professional and intra-professional hierarchy. Our limited sample precludes any definitive conclusions about the person-based characteristics of leadership, but early stage of network development appears to benefit from a more charismatic approach, as in the case of the Paediatric Nephrology Network.

Within those networks that encompass health and social care organisations, consideration should be given to the appointment of an independent chair. Specifically, we concur with recent recommendations for the appointment of an independent chair of Local Safeguarding Children’s Boards, in whom leadership is concentrated with a remit to engage network members more widely over time in line with organisational and professional accountability requirements. However, we stress again, that person-based characteristics remain important in the selection of any independent chair so they competently address the political management of Local Safeguarding Children’s Boards in a ‘quieter’, administrative approach to leadership.

8.1.3 Leadership and Accountability in Networks

Concentration of leadership, is necessary in the face of accountability regimes in public services organisations, none more so than in the case of children’s safeguarding, as evident in the case of ‘Baby P’ in England (Laming, 2009). At the same time, leadership needs to be distributed for high quality outcomes to be attained, since the latter requires commitment and decision-making contribution from those nearer the frontline of service delivery, which is necessarily dispersed across a wide range of organisations. Yet, with respect to distributed leadership, this may tend towards fragmentation, particularly where a network crosses a number of public services domains. Network members may orientate towards their local organisational self-interest and accountabilities associated with these, rather than the network, since resources are still allocated along relatively competitive lines. Policy-makers might be more reflexive about how different local organisational self-interest and accountabilities, including separation of provision and commissioning, play out in networks when conjoint and concertive action is called for, yet there remains a competitive element to the allocation of resources for constituent organisations in the network. In sum, for networks to be networked, may require that the various local organisational self-interest and accountabilities are aligned with wider aims of the network that brings the local organisations together.
8.1.4 Contingency Model for Network Structure and Process

Our contextualised analysis shows considerable variation across our empirical cases, and that ‘one size does not fit all’; i.e. there are a range of contingencies that explain variation in network structure and processes. Consequently, there is no template for the introduction of network structures and processes that is likely to fit all health and social care contexts; i.e. we prescribe a contingency model for network structures and processes.

Important contingent aspects of the implementation of networks, whether mandated or more emergent are: the concentration of professional power; the impact of local organisational self-interest and accountability; temporal dimension of development of networks; nature of the patient; whether network staff are co-located or not; professional arrangements prior to implementation; local level relationships between network staff; the nature of the most powerful professionals (e.g. whether surgeons or physicians); informal human resource practices in place.

8.2 Lessons for Organisational Managers

8.2.1 Concentrating and Distributing Leadership

Concentrating and distributing leadership are not mutually exclusive. Concentration of formal leadership appears necessary, if only in the early stages of the network, to develop distribution of leadership. The formal leader should seek to put management structures and processes in place that engender distribution of leadership, and complement this with a more person-centred approach to encourage others to make a leadership contribution. Organisational managers should move away from the myth of more ‘heroic’ models of leadership and recognise and support the distribution of ‘quiet’ or administrative leadership behind the scenes, which is entirely consistent with the more politicised setting of health and social care networks.

8.2.2 Human Resource Policies and Practices

Human resource policies and practices, except in the case where all staff are employed by one organisation, are likely to be fragmented. The behaviour of staff within a network will be framed by the different human resource policies and practices practiced by their employing organisation. Most obviously this applies to the performance criteria that they are subjected to, but also apparent in our study were employment contracts for clinical interventions that further fragmented networking. Whilst this may be a function of policy drivers as they apply to constituent organisations of a network, there may be scope to develop some convergence in individual level performance criteria across the network. This requires that a network, rather than individual organisational, approach is taken to the management of human resources. Given the difficulties faced by the Human Resource function in enacting a strategic role at the individual organisational level, we suggest responsibility for networked human resource policies and practices is best allocated to operational management of the network. We also highlight that effective human resource practices may be more informal or soft, to engender the normative glue (as reflected in architectural knowledge) to socialise network members towards more community-based behaviours.
8.2.3 Creating Opportunities for Knowledge Brokering

Management of knowledge exchange is best subject to local intervention, rather than subject to a policy mandate. Knowledge management can be characterised as an ‘oxymoron’ because any attempt to formally manage knowledge may destroy the voluntary basis of effective knowledge exchange. Consequently, organisational management should tread carefully is seeking to promote the brokering of knowledge across boundaries. Knowledge exchange is a situated phenomenon and is closely linked to professional work arrangements. Organisational managers might seek to create knowledge brokering opportunities through influencing professional work arrangements, so that those delivering care interact in a sustained fashion that engenders ongoing knowledge exchange across organisational and professional boundaries. Most obviously co-location of staff is helpful, if only when they actually deliver care, but more broadly consideration might be given to structural intervention such as the way services can be re-engineered, and co-ordinating roles developed, to create situated knowledge exchange.

8.2.4 Culture: Cultivating Communities of Practice

It is desirable that any network encompasses tendencies towards a community of practice for the broader aims of networks to be met. However, communities of practice are emergent in their nature. Consequently, it is difficult to formally manage communities of practice; i.e. the community tendency of the Paediatric Nephrology Network in our study is difficult to replicate. Instead the metaphor for ‘managing’ communities of practice is one of cultivation of social capital or architectural knowledge that underpins their effectiveness. So, to re-emphasise an earlier point, organisational managers need to consider how they socialise staff within networks so that trust, understanding and reciprocity are developed between these staff. Drawing upon the socialisation practices evident in the Paediatric Nephrology Network, prescriptions might encompass: induction; organisation development; management of lateral career paths; secondment or shadowing opportunities; designing the workplace to ensure situated interaction; or more generally managing the climate of the workplace in which care is delivered; i.e. attention to ‘softer’ aspects of the management of the human resource. In such a way, social capital is developed across professions and organisations, so each knows, understands and trusts, the others. Professional working arrangements will then develop that support the network structure.

8.3. Lessons for Academics

8.3.1 Interdisciplinary Research

We highlight our application of generic organisation studies literature (i.e. developed in private sector settings) to the case of health and social care, taking account of its distinctive professional and policy institutions revealed in the sociology of professions and public administration literatures. Working across traditional academic disciplines, and considering private sector models of organisation and management, offers considerable explanatory and prescriptive potential for organisational managers and public policy makers concerned with health and social care delivery.
8.3.2 Further Research

One of the novel features of our research design was the combination of SNA with more traditional qualitative methods of interview, and ethnographic observation. This has value in that the first informs the ‘what’ question; i.e. patterns of leadership or knowledge exchange; whilst the second provides richer description and explanation of these patterns. Further, the application of organisation studies literature to the patterns generated by SNA, allows the latter to move beyond its traditional more atheoretical, empirical analysis, to contribute towards theory development. At the same time, SNA may be revealing of patterns of interaction not reported in more traditional fieldwork methods, such as less visible, distributed, leadership influence. For these reasons, we encourage other academics to build mixed methods into their studies of networks.
References


Larson, M.S. (1990). In the matter of experts and professionals, or how impossible it is to leave nothing unsaid, in R. Torstendahl, & M. Burrage (Eds.), The formation of professions: Knowledge, state and strategy. London: Sage.


Appendix 1 Glossary of Terms

*Betweenness* centrality is the number of times an actor connects pairs of other actors, who otherwise would not be able to reach one another.

*Centrality* measures identify the most prominent actors, that is those who are extensively involved in relationships with other network members.

*Centralisation* is the difference between the number of links for each node divided by maximum possible sum of differences. A centralised network will have many of its links dispersed around one or a few nodes, while a decentralised network is one in which there is little variation between the number of links.

*Degree centrality* is the sum of all other actors who are directly connected to ego. It signifies activity or popularity.

*Density* of a network is the total number of relational ties divided by the total possible number of relational ties.

*Graphs* are visual representations of networks, displaying actors as *nodes* and the relational ties connecting actors as *lines*.

*Nodes* are the individual actors within the networks.

*Ties* are the relationships between the actors.

*Quadratic assignment procedure (QAP)*, is commonly used in social network analysis for calculating the standard errors and is used for correlation and regression of network data.
Disclaimer:

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