Health care managers' access and use of management research

Sue Dopson (PI)¹, Chris Bennett¹, Louise Fitzgerald¹, Ewan Ferlie², Michael Fischer¹, Jean Ledger², Janette McCulloch¹, and Gerry McGivern³

¹ Said Business School, University of Oxford

² King's College, University of London

³ Warwick Business School



This report contains transcripts of interviews conducted in the course of the research and contains language which may offend some readers.

Published May 2013

This project is funded by the Service Delivery and Organisation Programme

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

Address for correspondence:

Professor Sue Dopson Saïd Business School Park End Street Oxford OX1 1HP UK

Email: sue.dopson@sbs.ox.ac.uk

This report should be referenced as follows:

Health care managers access and use of management research. Final report. NIHR Service Delivery and Organisation programme; 2012.

Relationship statement:

This document is an output from a research project that was funded by the NIHR Service Delivery and Organisation (SDO) programme based at the National Institute for Health Research Evaluations, Trials and Studies Coordinating Centre (NETSCC) at the University of Southampton. The management of the project and subsequent editorial review of the final report was undertaken by the NIHR Service Delivery and Organisation (SDO) programme. From January 2012, the NIHR SDO programme merged with the NIHR Health Services Research (NIHR HSR) programme to establish the new NIHR Health Services and Delivery Research (NIHR HS&DR) programme. Should you have any queries please contact sdoedit@southampton.ac.uk.

Copyright information:

This report may be freely reproduced for the purposes of private research and study and extracts (or indeed, the full report) may be included in professional journals provided that suitable acknowledgement is made and the reproduction is not associated with any form of advertising. Applications for commercial reproduction should be addressed to: NETSCC, HS&DR.

National Institute for Health Research Evaluation, Trials and Studies Coordinating Centre University of Southampton Alpha House, Enterprise Road Southampton SO16 7NS

Disclaimer:

This report presents independent research funded by the National Institute for Health Research (NIHR). The views expressed are those of the authors and not necessarily those of the NHS, the NIHR or the Department of Health. If there are verbatim quotations included in this publication the views and opinions expressed by the interviewees are those of the interviewees and not necessarily those of the NHS, the NIHR or the Department of Health.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

Criteria for inclusion

Reports are published if (1) they have resulted from work for the SDO programme including those submitted post the merge to the HS&DR programme, and (2) they are of a sufficiently high scientific quality as assessed by the reviewers and editors. The research in this report was commissioned by the SDO programme as project number 09/1005/01. The contractual start date was in July 2009. The final report began editorial review in March 2012 and was accepted for publication in May 2013. The authors have been wholly responsible for all data collection, analysis and interpretation, and for writing up their work. The SDO editorial team have tried to ensure the accuracy of the authors' report and would like to thank the reviewers for their constructive comments on the final report documentation. However, they do not accept liability for damages or losses arising from material published in this report.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

Contents

Conter	nts	Error! Bookmark not defined.
List of	fig	ures
Glossa	ry	of terms/abbreviations10
Acknow	wle	dgements
Execut	ive	9 Summary
1 Int	tro	duction
2 Lit	era	ature domains
2.1	0	verview
2.2	Т	he utilisation of management research: EBMgt and its critics
2.2	2.1	EBMgt and healthcare26
2.2	2.2	Knowledge fragmentation and systematic reviews
2.2	2.3	Tacit and explicit knowledge 29
2.2	2.4	Criticisms of EBMgt 31
2.3	Ir	ndividual and cognitive approaches to learning
2.3	3.1	Practice-based theories of knowing and learning in organisations 34
2.3	3.2	Epistemic cultures and knowledge boundaries
2.4	P	ossibilities for 'practice-based evidence' in healthcare
2.4	4.1	Criticisms of practice-based approaches
2.5	Ir	nstitutions, power and hierarchies of knowledge
2.5	5.1	Clinical hybrids in healthcare management
2.6	R	eflections on this chapter
3 St	udy	/ design and methods 45
3.1	Q	pualitative methods – comparative case studies
3.2	С	ase study and respondent selection
3.3	D	Pata collection
3.3	3.1	Phase 1 47
3.3	3.2	Phase 2 47

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

	3.4	App	proach to analysis for Phases 1 and 2	48
	3.5	Cro	oss case analysis for Phases 1 and 2	49
	3.6	Act	ion learning sets (ALSs) Phase 3	49
	3.6	.1	Purpose	49
	3.6	.2	Methods and process	49
	3.6	.3	Participants	50
	3.6	.4	Analysis	50
	3.6	.5	Supervision space	50
	3.7	Fee	edback opportunities	51
	3.8	Lim	nitations of the research	51
	3.8	.1	Was the research question answered?	51
	3.8	.2	Can the findings be generalised?	52
	3.8	.3	Issues, problems and responses	52
4	Sur	nma	ary of the six cases	54
	4.1	Bee	echwell – what kind of knowledge organisation was this?	54
	4.1	.1	Knowledge management system	54
	4.1	.2	Knowledge actors	55
	4.1	.3	Highlights of findings from the case	55
	4.2	Elm	nhouse – what kind of knowledge organisation was this?	56
	4.2	.1	Knowledge management system	57
	4.2	.2	Knowledge actors	58
	4.2	.3	Highlights of findings from the case	58
	4.3	Firg	grove - what kind of knowledge organisation was this?	60
	4.3	.1	Knowledge management system	60
	4.3	.2	Knowledge actors	61
	4.3	.3	Highlights of findings from the case	62
	4.4	Ma	pleshire - what kind of knowledge organisation was this?	63
	4.4	.1	Knowledge management system	64
	4.4	.2	Knowledge actors	65
	4.4	.3	Highlights of findings from the case	65
	4.5	Oal	kmore – what kind of knowledge organisation was this?	66

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

4.5	5.1	Knowledge management system	67
4.5	5.2	Knowledge actors	68
4.5	5.3	Highlights of findings from the case	68
4.6	Will	lowton-what kind of knowledge organisation is this?	69
4.6	5.1	Knowledge management system	70
4.6	.2	Knowledge actors	71
4.6	5.3	Highlights of findings from the case	72
4.7	Sur	nmary	73
5 Ho	w do	managers access and use management knowledge?	74
5.1	Intr	roduction	74
5.2	Infl	uences on management practice	76
5.3	Тур	e of orientation towards knowledge limits/ boundaries	78
5.3	.1	Handling an issue or puzzle to be solved	79
5.3	.2	Organisational knowledge as competitive productivity	80
5.3	.3	Curiosity and innovation	82
5.3	.4	The art of knowledge use	83
5.4	Rol	e of career formation, identities, and biographies	85
5.4	.1	Knowledge and personal identity	85
5.4	.2	Career formation	86
5.5	Kno	owledge leadership	89
5.5	5.1	Knowledge transposition	89
5.5	5.2	Plausible knowledge leadership	90
5.6	Cor	nclusions	91
		ies of management knowledge and the relationship between	
	5	s: lessons from the Phase 2 data	
6.1		roduction	
6.2		se 2 tracer vignettes	96
6.2	.1	Beechwell vignette	96
6.2	.2	Elmhouse vignette	97
6.2	.3	Firgrove vignette	99
6.2	.4	Mapleshire vignette1	102
6.2	.5	Oakmore vignette1	104

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

6.2.6	Willowton vignette107
6.3 1	Themes from the cross-case comparison analysis of Phase 2 data110
6.3.1 these	The tracer texts, management knowledges and the relations between knowledges
6.3.2	2 Local epistemic cultures and the role of epistemic fit
6.3.3 knov	3 The role of knowledge leaders in transposing management /ledges
6.3.4	Formative spaces118
6.3.5	5 Facilitative organisational systems119
6.4 (Conclusions
	n learning as an aid to facilitate knowledge sharing and knowledge n121
7.1 I	ntroduction121
7.2 (Drientations to new management knowledge in the ALS context122
7.3	Aanifested attitudes to sharing and learning in a set
7.4	Aanagement knowledge: interchange, absorption and transposition127
7.4.1	Interchange absorption and transposition127
7.4.2	2 Local knowledge communities and community exchange128
7.4.3	3 Transposing knowledge129
7.5 A	Academic / practitioner interfaces130
7.5.1	Within set interfaces130
7.5.2	2 The 'supervision' space131
7.6 (Conclusions
8 What	t factors increase management knowledge use?
8.1 I	ntroduction135
	Strong credible knowledge leaders exist in the site and are skilled at osing management knowledge enabling it to be more accessible136
	The existence of 'formative spaces' and opportunities for informal tion and discussion
	Management knowledge has a positive epistemic fit with prevailing ne(s) in the local context140
8.5 F	acilitative systems and mechanisms are in place141
8.5.1	Structural alignment141

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

8.5.2 Strategically-connected and incentivised management syst			Strategically-connected and incentivised management systems142
	8.5 org	-	Career systems aligned to human resource development and ational development
	8.5 anc		Access to practice- and case-based knowledge portals that capture lify practice143
	8.5	.5	On line learning and knowledge sharing143
8	.6	Sur	mmary of findings and implications for practice143
	8.6	.1	Strong, credible knowledge leaders144
	8.6	.2	Opportunities for informal interaction and discussion144
	8.6	.3	Positive epistemic fit145
	8.6	.4	Facilitative systems145
9	Cor	nclus	sions146
9	.1	Ret	urning to the original research questions146
	9.1 ma		Under what circumstances and how did managers access and use ement research based knowledge in their decision making?146
			What were the barriers and facilitators of management knowledge the contexts studied?
	9.1 of r		What was the role of the Action Learning Sets in facilitating the use agement knowledge?151
9	.2	Imp	plications for theory151
	9.2	.1	From micro to micro/macro152
	9.2	.2	Epistemic fit and clash153
	9.2	.3	Nonlinearity – transposition rather than high fidelity implementation 153
	9.2	.4	A more modest project for EBMgt?153
9	.3	Poli	icy implications154
9	.4	Im	plications for higher education institutions and business schools155
9.5 Implications for health professionals' education - Masters and PhD level training			
	.6 nterr		plications for commissioning bodies, CLAHRCs, AHSCs and other iary institutions156
9	.7	Pro	mising future research157
Ref	erer	ices	

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

• •	Appendix 1Interview schedule and Tick List for Phase 1 and an example ofPhase 2 questions175				
Appendix 2	Examples of Information Sheet and Consent Form used183				
Appendix 3	Interviewees profiles				
Appendix 4	Case analysis process199				
Appendix 5	NVIVO analysis200				
Appendix 6	Methods and processes in the action learning sets201				
Appendix 7	Organizational metaphors and associations from Phase 1 analysis: 209				
Appendix 8 management	Data analysis leading to the development of the influences on practice categories				
Appendix 9	The management fellow report213				

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

List of figures

Figure 1	Influences on management practice7	6
Figure 2	Influences on management practice by organisation*7	7
Figure 3	Phase 2 tracer texts and organisational issues/puzzles to be addressed9	4
Figure 4	Cross case analysis of the Phase 2 data11	1

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

Glossary of terms/abbreviations

Abbreviation	Term in full	Explanation of term
	NHS Modernisation Agency	An executive agency of the Department of Health in the United Kingdom established in April 2001 to support the NHS in England, and its partner organisations, in the task of modernising services and improving experiences and outcomes for patients. It's functions were incorporated into the NHS Institute for Innovation and Improvement in 2007
ABS	Association of Business Schools	The representative body and authoritative voice for all the business schools of UK universities, higher education institutions and independent management colleges
AHSC	Academic Health Sciences Centre	A partnership between one or more universities and healthcare providers focusing on research, clinical services, education and training.
AIM Research	Advanced Institute of Management Research	A UK leader in the field of management research, bringing academics together with business, public sector and policy thinkers to develop and deliver research of a world class standard which has an immediate and significant impact on management practice.
ALS	Action Learning Set	A group educational learning process where participants obtain knowledge through actions and practice rather than via traditional instruction/teaching.
ARU	Applied Research Unit	An applied research unit in the Willowton site.
ВАММ	British Association of Medical Managers	The association of managers working in the medical sector in the United Kingdom.
CAGs	Clinical Academic	New structures which bring clinical services and academic activities together within a

© Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

	Groups	series of single managerial units.
СС	Cochrane Collaboration	An international network of more than 28,000 dedicated people from over 100 countries. It works to help healthcare providers, policy- makers, patients, their advocates and carers, make well-informed decisions about healthcare, based on the best available research evidence, by preparing, updating and promoting the accessibility of Cochrane Reviews.
CLAHRCs	Collaboration for Leadership in Applied Health Research and Care	A collaboration between Universities and their NHS partner organisations.
СОР	Communities of Practice	Theory developed by E. Wenger according to which each individual participates and is a member of several communities of practice (professional, work-based or familial). These communities situate experience and learning in specific contexts (which need not be geographically defined), leading to identity formation and development.
CQC	Care Quality Commission	The independent regulator of all health and social care services in England.
DH	Department of Health	The department of the United Kingdom government with responsibility for government policy for England on health, social care and the National Health Service.
EBM	Evidence based medicine	A scientific approach which aims at applying the best available evidence gained from scientific methods to clinical decision making.
EBMgt	Evidence based management	A term adopted from medical science (particularly, evidence based medicine) to describe the practice of management based on empirical evidence.
HR	Human Resources department	An organisation's department in charge of the management of its workforce.
HSR	Health Services Research	A new intellectual discipline which brings together researchers from many backgrounds, including some clinicians, in investigating questions of healthcare service delivery.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

		n – – – – – – – – – – – – – – – – – – –
IFCaSS	Involvement, Fusion, Communication, and Sharing and Spread of information	The IFCaSS programme (a pseudonym) was selected as the tracer issue in the Mapleshire case and was devised to deal with some key aspects of the CLAHRC's purpose, drawing on organisational learning, communities of practice, knowledge brokering and social network theory.
IHI	Institute for Healthcare Improvement	Offers a wide range of resources and teaching tools to help health care professionals lead effective improvement efforts and enhance clinical outcomes
IIC	Initiative for Integrated Care	The management knowledge tracer in the Willowton case. It was an initiative premised upon a 'whole systems' and 'action research' approach.
IRAS	Integrated Research Application System	System used for making application to do research involving NHS patients or staff.
KPIs	Knowledge Performance Indicators	Part of the Balanced Score Card, a performance management system developed by Kaplan and Norton.
NHS	National Health Service	The publicly-funded healthcare system in England.
NIHR	National Institute for Health Research	An organisation with the aim of creating a health research system in which the NHS supports outstanding individuals, working in world class facilities, conducting leading edge research focused on the needs of patients and the public.
NIII	NHS Institute for Innovation and Improvement	An organisation with the aim of supporting the transformation of the NHS, through innovation, improvement and the adoption of best practice
NPM	New public management reforms	Refers to the government policies in the United Kingdom, since the 1980s, which aimed at modernising and making more effective the public sector.
ODIC	Organisational Development Internal Consultancy Unit	A unit that supported leadership team development across one of the sites (Firgrove).

© Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

РСТ	Primary Care Trust	A commissioning organisation responsible for managing a healthcare budget, which is financially audited by the Audit Commission and accountable to its local Strategic Health authority.
PDSA	Plan-Do-Study- Act methodology	A tool used by health professionals to deliver and test changes to clinical care.
QIPP	Quality, Improvement, Productivity and	A Department of Health-led programme to transform NHS services to make £20Bn efficiency savings.
	Prevention	http://www.dh.gov.uk/en/Healthcare/Qualitya ndproductivity/QIPP/index.htm
RCT	Randomised Controlled Trial	A type of scientific experiment in which study subjects are randomly allocated to receive one or other of the alternative treatments under study.
SDO	National Institute for Health Research (NIHR) Service Delivery and Organisation (SDO) programme	A programme by NIHR which involves commissioning research evidence that improves practice in relation to the organisation and delivery of healthcare and building research capability and capacity amongst those who manage, organise and deliver services. www.sdo.nihr.ac.uk.
SHA	Strategic Health Authority	Part of the structure of the National Health Service in England. Each SHA is responsible for enacting the directives and implementing fiscal policy as dictated by the Department of Health at a regional level.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

Acknowledgements

We acknowledge the valuable advice received from members of the advisory group, namely Professor Jo Rycroft-Malone, Professor Stephen Davies, Jan Fowler and Dr Keith Ruddle.

We are also grateful for the support of the anonymous provider organisation.

We benefitted greatly from discussions with colleagues working on other SDO management practice projects, notably at the SDO events that brought teams together and the meetings organised for the management fellows.

We thank academic and administrative staff at SDO for their encouragement of the management practice programme, especially Stephen Lemon and Ruth Saw.

We would also like to thank the clinicians and managers who generously gave their time to be interviewed. We are particularly grateful to the six organisations who hosted the case studies.

Contributions of authors

Sue Dopson, PI, responsible for oversight of the fieldwork, cross-case analysis and Action Learning Set analysis, writing of the report dissemination and the management fellow report.

Michael Fischer, fieldwork lead in two sites, contribution to cross case analysis, writing of empirical chapters and commenting on the final report.

Louise Fitzgerald, responsible for Action Learning fieldwork and lead on analysis of Phase 3, writing of empirical chapters as well as commenting on drafts of the final report.

Jean Ledger, fieldwork lead in one site, conducting of the literature review, contribution to cross case analysis, empirical chapters and commenting on drafts of the final report.

Chris Bennett, fieldwork lead in two sites, contribution to cross case analysis, writing of empirical chapters and commenting on the drafts of the final report.

Gerry McGivern, CI, fieldwork lead in one site, work on Action learning sets, contribution to cross case analysis, writing of empirical chapters and commenting on drafts of the final report.

Ewan Ferlie, CI, contribution to two fieldwork sites, cross case analysis and commenting on drafts of the final report.

Janette McCulloch, our management fellow, contribution to cross case analysis , action learning set work, comments on final report and the management fellow report.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

Executive Summary

Background

Despite much work on how clinicians use and enact clinical research, which is now well-known, there is less on healthcare managers' use of management research and how this might be evolving. Earlier work by members of the research team concluded that healthcare management was largely invisible in the Evidence Based Medicine (EBM) arena. So the baseline is one of very limited engagement of healthcare managers with research. The poor uptake of management research by practitioners has been attributed to numerous factors: the fact that academics and managers possess different perceptions and assumptions about knowledge utilization and research; a lack of proven knowledge transfer and dissemination models within academia; divergent institutional incentives and rewards in educational institutions and organisational contexts.

Recently it has been argued that healthcare managers' motivation and ability to access and use management research may (under some circumstances) be increasing from historically low levels, due to the professionalisation of management and a developing high-quality knowledge-base.

Some studies have shed light on the effects of theories and research deriving from the disciplines of economics and finance on managers' decision-making. However there is a need for empirical research on how healthcare managers, whether general managers or those doctors, nurses and other professionals with clinical as well as managerial responsibilities (called here clinical managers or sometimes 'clinical hybrids'), use the research base of management and organisational knowledge in the decision process. The available literature does not indicate empirical studies of healthcare managers' or clinical hybrids' use of management research, nor how they derive principles from research evidence and translate them into concrete actions to resolve organizational challenges. This project seeks to address this major lacuna.

Aims

The study had three main aims.

 To explore healthcare managers' own responses to the research question: "under what circumstances and how do managers access and use management research-based knowledge in their decision making?". In order to situate the enquiry in terms of managers' day to day

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

practice, this question was operationalised by seeking to understand how managers, engage with management-related knowledge – including, although not exclusively, research-based knowledge.

- 2. To explore the utilisation of management knowledge in context. This question was addressed by purposively studying the use of management knowledge found being cited and used in some way in the organisations studied. These case settings provide another lens for studying how the two knowledge domains of formal/ codified and experiential/ relational knowledges interact in these settings. What do these sites reveal about how and why research- based management knowledge of different forms may be transposed and used or rejected?
- 3. What is the value of the action learning set (ALS) as a method of sharing research-based learning and of encouraging and facilitating the uptake and utilization of research-based evidence?

Additionally it should be noted that the project also benefited from the attachment of a Management Fellow to the research team. This was an NIHR initiative intended to encourage close working between academics and practical managers. This proved to be a highly successful enterprise and a report detailing the contribution to this project made by the Management Fellow can be found at Appendix 9.

Methods

The research design used mixed methods, having a three-phase design, which deliberately explored the boundary between management research and practice. Core to the design was exploring the acquisition and utilisation of knowledge from the field of management /organisation studies in a wide diversity of health-related settings. These were purposively selected for their significance to facets of processes of knowledge production and utilisation in a 21st century health knowledge economy which has become more diverse and multi-layered and to explore the links between individual motivation, learning and action. The case sites, which were given pseudonyms, were:

- Beechwell, a Policy Unit.
- *Elmhouse,* a Health Care Consultancy.
- *Firgrove,* an Academic Health Sciences Centre (AHSC).
- *Mapleshire,* a Collaboration for Leadership in Applied Health Research and Care (CLAHRC).
- Oakmore, an Independent Charitable Trust offering specialist services.
- *Willowton,* a Primary Care Trust (PCT).

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

The research design consisted of three phases:

In Phase 1, the unit of analysis was the individual manager. Phase 1 involved 45 interviews with general managers and clinical managers in the sites, who were identified as interested in using management research and knowledge. This phase focused on exploring the individuals' perspectives on what motivated them to seek management knowledge, what search processes and sources were used, how management knowledge was utilised within their work and finally, what were the main influences of their 'knowledge career' on their management practices.

The primary focus of Phase 2 was the utilisation of management knowledge in context. It comprised six in-depth comparative case studies of management knowledge utilisation; 92 interviews were carried out in this phase, making a total of 137 interviews overall

Phase 3 was always classed as 'experimental'. The research protocol states that the ALSs were 'to test and evaluate this form of intervention as a method of sharing research-based learning and of encouraging and facilitating the uptake and utilisation of research based evidence'.

Results

- In all the cases, managers were most highly oriented towards knowledge drawn from their own experiences and from others within their own communities of practice.
- Managers' careers play an important (and previously neglected) role in shaping their orientation to knowledge including their motivation and willingness to engage with and adapt management texts.
- Research-based knowledge and particularly management journals appear as the lowest source of interest and influence for most managers. This suggests an interesting and marked tension between two contrasting forms and sources of knowledge domains: a) relationship- and experientially-based knowledge; b) evidence-based management texts and codified knowledge.
- Some knowledge leaders appear to be accomplished at transposing abstract knowledge into a form useable in a specific organisational context. This was demonstrated in Phase 2, where the importance of the activities and presence of certain knowledge leaders in transposing the management knowledge was observed. Converting theories and formal evidence into the local management practices involved them in inventiveness and improvisation, not captured by conceptual models of knowledge translation.
- A wide range of diverse management knowledges in use was found in the sites. Formal management knowledges tended to cluster in two

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

main areas: performance management and productivity/quality improvement represented one group, and approaches to desired organisational change another. Formal management knowledges were often accompanied by more experiential forms; for example, case studies, training and development activities, workshops, mentors, and coaches.

- The theme of management knowledge transposition appeared important, implying a more far-reaching, non-linear process of transforming knowledge from the field of expertise to the field of practice. Managers often tested out 'evidence based knowledge' in context, re-evaluating the issue and indeed the management knowledge (formal and experiential) that they referenced.
- The analysis suggests that knowledge leaders are greatly assisted in transposing management knowledge if there are formative spaces where people can step away from their immediate context and engage with a variety of formal management knowledges and the experiences of others.
- The study of Action Learning Sets confirms and extends understanding of the motivation of individuals to seek new knowledge. It was found in the sets that individuals are driven to look for knowledge when they have a personal commitment and involvement with a work issue.
- The medium of ALS offers several unique characteristics seemingly not always available to individuals within their own organisations. These include: independent perspectives; credible other professionals whom individuals can consult; and the opportunity to debate topics which cannot be openly discussed inside the organisation.

Conclusions

At the heart of the conclusions is a desire to signal the complexity of the social processes involved in accessing, contextualising and using management knowledge. As noted by others commenting on the field, the results suggest management knowledge is not one unified thing; it rather involves multiple formal and informal aspects.

These findings question the assumption that knowledge translation is a linear and rational process. The plurality of knowledge forms (tacit, explicit, embodied, codified) and the proliferation of products and organisations available in the 'knowledge economy' suggests more complex models of knowledge flow and exchange may be timely. The empirical cases demonstrated a plurality and blending/transposing of knowledge sources that gave rise to a non-linear and dynamic picture of management knowledge utilisation; one less congruent with rational accounts of

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

evidence-based knowledge transfer. This concept of knowledge transposition seems to better capture the complexity of the processes observed informing management knowledge use.

Finally, it was concluded that Action Learning Sets may be valuable for intermixing codified, experiential and interpersonal knowledges and enabling the crossing of disciplinary and institutional boundaries.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

1 Introduction

This chapter introduces the rationale for the research project and outlines the design and methods used and the structure of this report.

Previous research has suggested that healthcare managers often lack the skills to access and process research findings and play a marginal role in the Research and Development arena (1). However, it may be argued that healthcare managers' motivation and ability to access and use management research may (under some circumstances) be increasing from historically low levels, due to the professionalisation of management and a developing high-quality knowledge-base. This research project sought to investigate the possibility that previous findings are now dated and that a better developed research base and culture is now emerging within healthcare management.

This broad idea was operationalised into the following research question:

"Under what circumstances and how do managers (both general managers and hybrid clinical managers) access and use management research-based knowledge in their decision-making?"

The three phase research design (discussed in depth in Chapter 3) used mixed methods and deliberately investigated the boundary between management research and practice. Core to the design was exploring the acquisition and utilisation of knowledge from the field of management/organisation studies in a wide diversity of health related settings. These were purposively selected for their significance to facets of processes of knowledge production and utilisation in a 21st century health knowledge economy which has become more diverse and multi-layered and to explore the links between individual motivation, learning and action.

Despite much work on how clinicians use and enact clinical research which is now well known, there is less on healthcare managers' use of management research and how this might be evolving. Earlier work by some of the authors of this report concluded that healthcare management was largely invisible in the Evidence Based Medicine (EBM) arena (1, 2). Healthcare managers may have become more interested in evidence-based guidelines (e.g. National Service Frameworks), but a recent study (3) found managers were motivated to meet targets rather than to read or 'own' research. So the baseline is one of very limited engagement of healthcare managers with research. The poor uptake of management research by practitioners can be attributed to numerous factors: differences between

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

academics and managers in their perceptions and assumptions about knowledge utilisation and research (4; 5); a lack of proven knowledge transfer and dissemination models within academia (6-8); and divergent institutional incentives and rewards in educational institutions and organisational contexts (7).

Immersed in the complex realities of organisational life, managers may prioritise internal information and evidence and refer to their professional experience and peer groups as a primary source of valued knowledge, rather than external research evidence (9-11). At the same time, managers and organisations may be susceptible to 'best practice' innovations and consultancy firm solutions which are not grounded in validated empirical evidence (12) or 'hard facts' (13). According to some academic writers, the tendency is for managers (and to some extent, researchers) to follow management 'fads' and 'fashions' (14, 15) with organisations adopting or imitating management techniques that are not necessarily effective.

Why might this depressing picture change? The broader context is one of a very significant expansion of management education generally over the last twenty years which has been characterised by a growing number - and variety – of management programs and higher enrolments (16). Business Schools now account for about one seventh of all students in UK Higher Education (in 2009/10, see 17). The rise of the Business School is a noteworthy feature of UK Higher Education. The ABS web site (17) lists over 100 member Schools, even though the first two Schools (London and Manchester) were founded as recently as 1965. As part of a professionalisation process (18, 19) managerial qualifications are moving toward graduate or even post graduate education (20). The 'remarkable rise' in business and management education, especially the expansive MBA market of the 1980s and 1990s, has been attributed to the belief that a business degree will support 'a graduate's earning power and career prospects' (21, AIM Research Report). Far less is known about the motivations of adult learners who complete business degrees whilst employed in management and the impact this has on their practice.

The emphasis on empirical research in many UK Business Schools has been accentuated by the effects of the research assessment exercises. There has been an expansion of peer reviewed academic journals, with a hierarchy of esteem emerging (as in the ABS list of peer ranked journals). The top management journals are now extremely competitive to publish in, with some complaints that Business Schools are divorcing themselves from their roots in practice and becoming captured by professional researchers (22). These developments have intensified an ongoing debate about the relevance, role and applicability of management and organisational research to practitioners. Scholars highlight the stark division that separates academic and practitioner worlds (23-25) and have made numerous suggestions to ameliorate this gap. For example, mirroring the experience of other fields, such as medicine (26, 27), education (28), policing (29) and psychology (30), leading management academics have started to delve into

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

the implications of adopting a pro-research 'evidence-based management' (EBMgt) approach in organisations. This could impact the content and structure of management curricula, type of faculty, and research (on the academic side) and decisions and managerial practices (on the practitioner side) (31-33).

It is also plausible that the institutionalisation of EBM since the 1990s, and an increasing emphasis on the evidence based clinical decision making as good practice, might render healthcare settings particularly receptive to EBMgt as an idea (34, 35). At an institutional level, Government policy has long stated the objective of UK health policy having a '*scientific basis*' (36) and creating '*a research-led and evidence-based NHS*' (37).

The emergence of clinical managerial hybrid roles (such as Clinical Directors) has also been significant. These role holders were originally educated as doctors in Medical Schools where there is a well developed biomedical research base, but then acquired a second identity as a manager. Clinical managers began to develop their own institutions and journals. Investigating the 'research mindedness' of these clinical managerial hybrids as well as NHS general managers was a key part of this project and led to the development of the concept of the 'knowledge leader', someone unusually interested in – and often quite skilled at – transposing research-based texts into usable knowledge and whose status within the organisation was sufficient to enable that to be accessed and used by others.

In addition, a new intellectual discipline of Health Services Research (HSR) has emerged which brings together researchers from many backgrounds in investigating questions of healthcare service delivery, including some clinicians. A wider range of non-traditional methods, including action research and qualitative work, has been evident (38) in HSR. The SDO R and D programme has been active in generating a knowledge base in this field both in terms of primary empirical research and broader overviews, and some of its publications (39) have been very widely disseminated to NHS managers and might be thought to be 'high impact'.

Some organisational research has proved to be particularly influential in the NHS field, notably the work of Don Berwick and his IHI group at Boston (40), which helped diffuse the notions of service redesign and patient pathways into NHS management. It was picked up by the NHS Modernisation Agency (later, the NIII) as a key technique for the modernisation of healthcare, for example, through the Cancer Collaboratives (41). However, the Cooksey Report (42) noted a pervasive lack of progress regarding research utilisation in the NHS citing a range of barriers to the timely and effective translation of research findings into clinical practice: poor incentives for medics to undertake applied research and pursue hybrid careers; a poor research culture in the NHS with research undervalued as a 'secondary activity'; the need for better training for both managers and clinicians to understand the benefits of research as a mechanism for performance improvement and cost effectiveness; a lack of financial incentives for health services research (compared to lucrative

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

clinical research and drug trials funding) and institutional barriers between the numerous UK funding and research bodies (such as the Medical Research Council and Department of Health R & D).

While some studies from economics (43) and finance (44, 45) have shed light on the effects of some theories and research on managers' decisionmaking, there is a need for empirical research on how managers use the research base of management organisational knowledge in their decision making. The available literature does not indicate empirical studies of healthcare managers' (or clinical hybrids') use of management research, nor how they derive principles from research evidence and translate them into concrete actions to resolve organisational problems (31). This project seeks to fill this major lacuna.

The report is organised as follows:

Chapter 2 outlines a summary of the literature domains found useful. Chapter 3 presents the research design. Chapter 4 provides a description of the case study sites and highlights of the cases. Chapters 5 to 7 centre on the research questions, namely:

- Under what circumstances, and how, do managers access and use management knowledge? (Chapter 5)
- What is the use of management knowledge in context? What management knowledges have the case sites debated, used or rejected and what can be learnt from exploring the relationships between such knowledges? (Chapter 6)
- What is the value of the action learning set (ALS) as a method of sharing research based learning and of encouraging and facilitating the uptake and utilisation of research based evidence? (Chapter 7)

Chapter 8 reflects on what appears to assist the use of management knowledge across the cases. Chapter 9 presents some conclusions.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

2 Literature domains

2.1 Overview

An extensive literature review was produced as part of the project. In this chapter this review is summarised across five broad domains. Each domain has been deemed helpful for understanding, theoretically and conceptually: healthcare professionals' motivations to access and use management research; the types of knowledge that may compete at an organisational and institutional level; and individual and group orientations to knowledge about management. These domains are:

- 1. The utilisation of management research: EBMgt and its critics
- 2. Individual and cognitive approaches to learning
- 3. Practice-based theories of knowing in organisations
- 4. Institutions, power and hierarchies of knowledge
- 5. Clinical-hybrid roles in healthcare management

Taking as a starting point Crilly et al's (46) scoping review of the literature on research utilisation and knowledge mobilisation, this review proceeded in an iterative, explorative manner during the period of data collection as comparative themes emerged from the field. A more structured approach was adopted during the latter phase of analysis when candidate theories had been selected.

2.2 The utilisation of management research: EBMgt and its critics

EBM is perceived by some leading academics as an exemplar for the development of EBMgt, either specifically in healthcare settings (34, 11, 47, 48) or more generally in management practice (31, 32, 49, 50, 33). It is reasoned that managerial decision making will advance, and with it organisational performance, if decision makers utilise the best available 'scientific' research evidence in a meaningful way (12). This can be viewed as a 'science push' (51) or 'problem-solving' model of research utilisation (52) that focuses on the academic supply of knowledge to practitioners.

The significant feature of EBM is that it describes an ideal type of decisionmaking process, where the appraisal and systematic use of clinical research evidence is combined with professional judgment and experiential knowledge. The strength and reliability of research evidence is ranked according to a hierarchy of evidence and made accessible through electronic resources, such as the Cochrane Collaboration, which has remained pivotal

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

to the success and institutionalisation of EBM globally. By comparison, it is observed that management is *not* a profession with a systematically accumulated knowledge base and '*managers need not be exposed to scientific knowledge*' in order to practice in organisations (53).

EBMgt is therefore a relatively new term in the management field having been coined by prominent U.S. management scholars (31, 32, 54, 13; 55; 56) as a means of addressing the problematic research-practice divide in academia and improving 'sub-optimal' decision-making in organisations. Advocates of EBMgt have suggested that managerial decisions are often driven by dogma, individual preferences, personal experience, gut feelings, intuition, tradition, mimicry, hype and assumptions (13, 11, 57, 31), rather than by consideration of scientific evidence. This results in research evidence '*being left at the table*' (57) and financial investment in academic knowledge being wasted.

The idea of EBMgt has evolved over the past five to six years in response to academic debate and criticisms, with Briner et al (58) and Briner and Rousseau (59) in particular softening their position and recommending that different types of knowledge should feed into evidence-based practice. Briner et al's (58) recent definition of EBMgt continues to follow an evidence-based medicine perspective but it is more cognisant of the fact that scientific research is but one form of evidence:

Evidence-based management is about making decisions through the conscientious, explicit, and judicious use of four sources of information: practitioner expertise and judgment, evidence from the local context, a critical evaluation of the best available research evidence, and the perspectives of those people who might be affected by the decision. (p.19)

EBMgt supporters therefore implicitly assume that a positive correlation exists between the utilisation of scientific research evidence and more rational decision-making, the implication being that, if successful, an EBMgt movement might stimulate consumer demand for scientific management research. As noted by Rousseau (31):

An evidence orientation shows that decision quality is a direct function of available facts, creating a demand for reliable and valid information when making managerial and organisational decisions.(p.260)

2.2.1 EBMgt and healthcare

Prior to the academic EBMgt dialogue that circulated in the Academy of Management Journal 2005-6, analysts had begun to consider the application of an evidence-based approach to the management of healthcare organisations (34, 35). Walshe and Rundall's (11) influential paper is of particular note. In it the authors reflect that:

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

In almost every area of managerial practice, we find massive variations between individual health care managers and health care organisations that cannot easily be explained. (p.437)

Referencing a report by the Institute of Medicine in 1999, Walshe and Rundall (11) cite the '*overuse*', '*underuse*' and '*misuse*' of healthcare interventions as examples of poor management practice (for example, the overuse of hospital mergers). The authors observe that the cultures and professional worlds of clinicians and managers are vastly different, with healthcare managers likely to have divergent career backgrounds and qualifications. This they perceive as a problem for EBMgt decision-making because healthcare managers are not predisposed to using research evidence in the same manner as clinicians. In addition, '*there is no specified formal body of knowledge*' (p. 439) about effective management that healthcare managers can access to improve their practice, even if they want to (11). Similarly, Kovner et al (35) noted the tendency for large healthcare organisations to rely on external consultants for '*riskier strategic interventions*', but a concomitant failure by managers to '*rigorously challenge the information upon which such recommendations are based*'.

Indeed, healthcare is perceived as the ideal environment for EBMgt because of the field's inherent complexity and corresponding need for best practice solutions in organising (60). Kovner and Rundall (47) refer to '*evidence based health services management*' (EBHSM) in a strategic sense, defined as:

The systematic application of the best available evidence to the evaluation of managerial strategies for improving the performance of health services organisations...the research evidence one uses in EBHSM does not replace but rather complements other types of knowledge and information.

However, in a literature review of '*fads, fashions, and bandwagons*' in healthcare strategy, Kaissi and Begun (61) found '*no evidence that imitation strategies are more common in health care than in other industries*' and '*little evidence on the appropriateness of imitation in terms of its performance effects.*' Nevertheless, the integration of EBMgt with EBM is viewed as a promising means to improve the performance of healthcare organisations (62).

2.2.2 Knowledge fragmentation and systematic reviews

The fragmentation and plurality of knowledge that is found in management and organisation studies is perceived as a fundamental difficulty to realising EBMgt (63, 49). This also applies to sub-disciplines, such as industrialorganisational psychology and human resource management (HR), where 'the best available external evidence' on research topics is unlikely to be accessible to practitioners or obvious to researchers (59, 10). EBMgt supporters contend that systematic reviews of research evidence are a

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

fundamental necessity to avoid knowledge loss and identify where stable effects and replicable findings exist in the research knowledge base (50). Knowledge accumulation and synthesis at the level of the academy is thus a prerequisite for the practice of EBMgt, as Rousseau et al (50) clearly state:

Syntheses are needed to provide access to the evidence that would inform MOS's [Management and Organisation Science's] scholarly development as well as the teaching and practice of evidence-based management.'

Systematic reviews '*expose studies to rigorous methodological scrutiny*' and promote the development of a reliable knowledge base (64). However, there are doubts about the possibility of an equivalent methodology being applied to management research given that few RCT-type studies exist. As Tranfield et al (64) write:

It is unlikely that aggregative approaches to research synthesis, such as meta-analysis will be appropriate in management research as the heterogeneity of studies prevents the pooling of results and the measurement of the net effectiveness of interventions.

Management and organisational knowledge is often equivocal (57: p.16) with research drawing upon different paradigms that are not necessarily commensurable (65, 66). Whilst EBMgt advocates remain optimistic that a systematic approach to knowledge synthesis modelled on medicine is feasible in management studies, other writers (63, 67, 68) remain more cautious, suggesting a failure by these academics to acknowledge that techniques such as replication and meta-analyses are only achievable in certain areas of study (67: p.624). There is, however, greater consensus over the possibility of researchers producing 'realist' research syntheses using structured, replicable methodologies that answer carefully developed review questions (69, 50). These have already been applied in health services research because of difficulties in evaluating the effectiveness of complex interventions, especially where multitudinous evidence exists (70, 71). Indeed, Rousseau et al (50) have positioned themselves according to the critical realist perspective (following Bhaskar (72) in responding to the 'inherent pluralism' in management and organisation science):

We suggest that syntheses in MOS research are best accomplished using a critical realist epistemology. Critical realism acknowledges that all methods have limits... Rather than advocate one method over another ... critical realism makes such a choice unnecessary. Instead, it emphasizes triangulation across methods and forms of data.

It nevertheless remains the case that in advocating an EBMgt approach, even from a realist epistemology, writers such as Briner and Rousseau (59) would appear to have in mind the prioritisation of scientific research studies that examine causal relationships between objectively observable and measurable phenomena (e.g. the impact of pay incentives or goal setting on employee performance). Research studies that attempt to understand

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

causality may be more common in industrial-organisational psychology and HR fields (which often use quantitative methods, such as surveys and intelligence tests) but less apparent in other sub-disciplines, such as workplace studies, which draw upon qualitative research methods (i.e. ethnomethodology and ethnography). If, as Pawson (71) suggests, in realist syntheses there is no precise criterion for making meta-evaluative judgements of evidence, it becomes apparent that systematic reviews in management and organisation studies require further development. Rousseau et al (50) do attempt to devise evidentiary criteria for producing systematic reviews, but the issue of what types of evidence have greater weight or '*evidentiary value*' is not apparent. Instead, evidentiary value is determined in relation to the requirements of the specific research question at hand. This leaves potentially intractable matters of evidence incommensurability unresolved.

2.2.3 Tacit and explicit knowledge

We draw attention to the fact that 'knowledge' is a problematic concept in the organisation and management literature given its reach theoretically and empirically. 'Knowledge' is commonly used in the literature to refer to a range of processes and types - from information and informational flows to individually embodied practical know-how. 'Tacit knowledge' and 'explicit knowledge' are concepts commonly mentioned. The former, 'tacit knowledge', draws upon the philosophical insights of Polanyi (73). For Polanyi, tacit knowledge refers to the personal, sensory and holistic knowledge embodied in the individual. Polanyi discusses tacit knowing as 'indwelling' to express the idea that knowledge is incorporated into the self. Hence, for Polanyi, we often 'know more than we can tell' (73). There is a collective aspect to tacit knowing since it can be learned through interpersonal interaction and socialisation. According to Nonaka and Takeuchi (74), tacit knowledge is linked to innovation and knowledge creation in organisations although it is more problematic than explicit knowledge for organisations to capture. This is because tacit knowledge is located within individuals and specific contexts of 'shared experience'.

Nonaka and Takeuchi (74) devised a four dimensional model of knowledge creation in organisations that integrates both explicit and tacit forms of knowledge. This is the 'spiral' or 'SECI' model of knowledge creation which envisages four patterns of knowledge conversion: socialisation, externalisation, combination and internalisation (75). In this model, a team may share perspectives and experiences (socialisation) and begin to articulate (externalise) their tacit knowledge. This tacit knowledge is then combined - through team efforts and communication - with existing, explicit organisational knowledge (combination). Finally, concrete concepts are tried and tested through experimentation giving rise to new knowledge that is internalised (internalisation). This model envisages how tacit knowledge

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

may be harnessed at the individual level and made explicit at the collective or organisational level to yield competitive advantage.

The extent to which tacit knowledge and social learning processes can be managed by organisations thus remains an unresolved and controversial issue in theory. Blackler (76) attempted to move away from conventional notions of knowledge using activity theory. Refusing to conceptualise knowledge as a formal entity or 'thing', he emphasised *knowing* as an 'active process' and suggested five different forms of knowledge operative in organisations: 'embodied', 'embedded', 'embrained', 'encultured', and 'encoded', all of which co-exist and are not readily separated from one another. Blacker attempts to replace a static view of knowledge as a category with '*knowing*' as an *activity* which is '*mediated*', '*situated*', '*provisional*', '*pragmatic*' and 'contested'.

This resonates with ideas espoused by 'situated learning theory' where learning is understood to be socially and culturally 'embedded' in organisations and power relations (77). Interestingly, Lam (78) has devised a typology of knowledge linked to organisational forms and macro environmental/societal forces. She describes four types of organisation: 'Operating Adhocracy'; 'J-form Organisation'; 'Professional Bureaucracy'; 'Machine Bureaucracy'. An 'Operating Adhocracy', for example, is an organisation which engages in providing 'non-standard, creative and problem-solving services' to clients. Here, individual experts work in project teams and the knowledge structure is 'individualistic, but collaborative' (78) - such as that found in management consulting firms. Tacit knowledge and experimentation will be particularly relevant for 'Operating Adhocracy' organisational forms. On the other hand, a 'Professional Bureaucracy' is heavily influenced by standardisation and the external institutions that define 'the standards and boundaries of the knowledge in use.' These organisations are likely to be heavily dependent on information and performance management systems and 'encoded' and aggregated types of knowledge. In such contexts, tacit knowledge may well be lost.

These theories put forward the view that 'explicit' and 'encoded' knowledge forms tend to be formalised and hence more readily accessible in the public domain. Conversely, it is harder for individuals to reflect upon and express their tacit knowledge or 'knowing'. This is due to the fact that tacit knowledge relates to *doing and action*; to the practical skills embedded in activities and performance. As such, fully competent practice - such as that exhibited by the experienced professional - can never be made entirely explicit or codified in guidelines. Something will always be lost. This remains important for considering the varied and experiential forms of knowing that managers and clinicians may refer to as influencing their management practice and decision making.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

2.2.4 Criticisms of EBMgt

Critics of the EBMgt narrative observe its preoccupation with 'the higher prestige of 'medical science'' (67, 79) and draw attention to the contestable nature of evidence. It is argued that with EBMgt, a 'positivist' notion of evidence is emphasised over 'the role of situated judgment and ethics' in managerial decision making (67). Arndt and Bigelow (80) argue that decision-making is rarely straightforward and outcomes will vary across organisations even where the same technique or evidence is applied, due to differences in initial conditions. For them, EBMgt proponents treat scientific evidence as objective and context-free when it is in fact socially constructed:

Best evidence, in turn, is an artefact of the social processes that lead to its creation, reflecting researchers' or organizations' interests in the selection of topics, what questions to ask, and what sources of information to legitimate.

Learmonth criticizes EBMgt writers for developing an attack against ideological and methodological pluralism in management and organisation studies (79). Partly in response to these criticisms, EBMgt lead authors (50, 58) broadened the meaning of EBMgt decision to factor in *four* types of evidence: local business evidence ('*little e*'), scientific evidence ('*big E*'), practitioner judgment/expertise and stakeholder perspectives. It is not clear though how these different forms of evidence might interplay, given the power dynamics in organisations, which may mean that certain types of evidence may take precedence over others. Through emphasizing systematic reviews, 'Big E' scientific research would appear to be interpreted as more reliable and valuable by prominent EBMgt supporters.

Reay et al (81) attempted to apply a hierarchy of evidence model adapted from the biomedical domain to the literature on EBMgt. They found no studies at Level 1 (RCT based high quality evidence) and many studies at Level 6 (low level 'think pieces'). This suggests a significant lack of empirical evidence in support of EBMgt as a strategy to improve organisational performance.

2.3 Individual and cognitive approaches to learning

Theories and research useful for understanding learning and decision making in organisational contexts are considered next. In the management and organisation fields both decision making and organisational learning theories represent vast literatures, the following represents a selection of concepts dealing with cognitive or social approaches to adult learning and decision making to be drawn on in Chapters 5 and 7.

According to Illeris, learning is a complicated process involving psychological, biological and social/environmental interactions (82, 83). It may be broadly defined as:

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

Any process that in living organisms leads to permanent capacity change and which is not solely due to biological maturation or ageing. (ibid)

Contemporary adult learning theorists note that individual 'frames of reference' (habituated ways of thinking and feeling) can remain unchanged over time, which may serve as a barrier to a person acquiring new knowledge. However, learning may arise if a person is faced with a significant situation or experience that prompts reflection and/or action. For example, Mezirow (84, 85) recognizes that in adult education 'transformative learning' has the potential to challenge an individual's 'frames of reference':

We have a strong tendency to reject ideas that fail to fit our preconceptions, labelling those ideas as unworthy of consideration.... When circumstances permit, transformative learners move toward a frame of reference that is more inclusive, discriminating, self-reflective, and integrative of experience.

Of particular relevance to this study, some theorists have devised models of learning which recognize the influence and importance of experience in advancing an individual's knowledge base. Kolb, for example, (86-88) provides an 'experiential learning model' which comprises four discrete stages: concrete experience; reflective observation; abstract conceptualization; active experimentation. The learner requires experience across all four abilities for cognitive growth, in the manner of a continuous learning cycle. Kolb et al (88) stresses that experiential learning theory responds to weakness in some cognitive and behavioural theories '*that deny any role for subjective experience in the learning process.*' He stresses, for example, that professional career choice and professional training will shape a person's learning style and subjective beliefs. In relation to management education, an experiential approach implies that:

Managerial education will not be improved by eliminating theoretical analysis or relevant case problems. Improvement will come through integration of the scholarly and practical learning styles. (86)

Learning can therefore be understood as a continuous process; the outcome of people's active engagement with the world. However, learning may also be thwarted by deeply ingrained reasoning processes that individuals have internalized over time. Drawing on a cognitive perspective, Argyris (89-91) suggests a person acquires 'theories of action' over time - types of interpretive frameworks that are reinforced through socialization. Theories of action operate like a 'master program' implicitly guiding behaviour and assessments of other people's actions. These theories are not so much borne out of prejudice and ignorance but a pragmatic human need to reason efficiently about the world in order to perform skilfully within it; because it is '*impossible to reason anew in every situation*' (91).

Argyris expounds on the implications of individual cognition and behaviour for organisations. Automatic, tacit reasoning processes are conceptualised

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

as 'single-loop learning'; the type of learning most commonly found in organisations. 'Double-loop learning' only results where individuals examine the 'governing variables' underlying their behaviour and 'go through experiences' where they start to identify the unspoken theories behind responses (91). 'Double-loop learning' is viewed as necessary for dealing with complex, long-term organisational issues. The implication is that action-based interventions (usually in the form of an external observer or facilitator running a group event) are necessary to instigate the process of 'double-loop learning'.

It is suggested that individuals are prone to draw upon partial and inaccurate representations of the world because of the human mind's finite capacity to process new information (91), a view explored by 'limited capacity models' (92) and the concept of 'bounded rationality' (93) in the psychological and organisational literatures. Theories stressing the mind's limited capacity are contrasted with 'rational choice' models of decision making that suggest that individuals can make decisions with reference to total information and 'a comprehensively inclusive context, which incorporates all the relevant details of the present situation' (94). By contrast, limited capacity models theorists observe that:

People work within a very limited conceptualization of problems, considering only a few of all possible alternatives.... Limited capacity models emphasize the role of cognitive heuristics and simplifying knowledge structures in reducing information-processing demands. (92)

Kahneman (94-96) distinguishes between reasoning and intuition. Intuition may be constructive, even '*powerful and accurate*', such as when skills are acquired through prolonged practice and result in effortless performance. Intuition can therefore assist with efficient decision making in practice, although it does risk errors. The view that systematic errors may result from judgmental heuristics is not without criticism, however. Gigerenzer (97), for example, has disputed this claim drawing upon probability theory and reinforcing the point that decisions and judgment are affected by social context and environment:

Human judgment seems to be domain-specific rather than guided by some general mental logic.

Elsewhere, Dane and Pratt (98) have argued that cognitive heuristic schemas may be applied as 'rules of thumb' without sensitivity to the particular problem at hand; this, they suggest, is the case with the type of probability judgmental heuristics described by Tversky and Kahneman (99, 100). In their view intuitive decision making is effective when it is both 'complex and domain-relevant', as is the case with the highly skilled professional expert (such as the doctor or nurse). They argue that there is a shortfall in research exploring the complex relationships between intuitive knowing and the body, or intuitive knowing and cultural factors.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

Research into cognitive processes has therefore questioned the assumption that the provision of sufficient information (a rational choice model) or even adequate training will necessarily result in less biased decision making. Instead, contemporary cognitive theories suggest that improved reasoning techniques are required to counterbalance automatic, intuitive responses and expose underlying 'mental models' or 'heuristic schemas' that are based upon invalid premises (100, 91, 101, 98). Interestingly, academic theories of limited capacity and cognitive bias are being applied in behavioural economics and used in the financial sector. A recent Barclays research report on risk and controls in financial decision making, for example, highlighted that biases may lead to poor investment strategies and choices:

The central argument of behavioural finance is that we are not perfectly rational, and we do not have perfect control even over our own behaviour. Instead, our decisions are shaped by our context, emotions and a number of psychological biases that we are unavoidably prone to. (102)

2.3.1 Practice-based theories of knowing and learning in organisations

There is a growing emphasis in the organisational literature on 'practice based' perspectives to organisational learning and knowledge (103). Such perspectives offer an interesting contrast to evidence-orientated understandings of knowledge utilisation (the so-called 'science push' angle – see 52) and cognitive theories of learning that focus on individual mental processes (104). In brief, practice-based orientations attempt to understand human actions as socially situated phenomena that generate meaningful behaviours in a cultural-historical context.

Practice-based writers draw upon sociological and anthropological theories and methods to explore the activities that individuals participate in by being members of organisations or looser 'communities of practice' (105). Practice-based theorists observe that a shared 'logic of practice' (106, 107) underpins and directs human activity, not in terms of rule-following behaviour as expounded by functionalist and rationalist accounts of social order, but according to a collective 'knowledgeability' that characterizes particular fields of action (108, 109), such as in the domains of science or medicine. As Wenger has summarised:

The concept of practice connotes doing, but not just doing in and of itself. It is doing in a historical and social context that gives structure and meaning to what we do. In this sense, practice is always social practice. (105)

Engagement in any form of interaction – for example, managing a team in an organisation – requires the skilful accomplishment of a range of activities and socially-recognised competences, such as interpreting local meanings, monitoring one's behaviour (and that of others), leading, producing textual

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

accounts of organisational performance and understanding client orientations. These activities – denoted by verbs - can be framed using a 'practice lens' (110) which views such micro level activity as producing the reality of the organisation - as it is experienced by members (i.e. shared understandings, definitions of conflicts, textual artefacts and discourses about activity). It is through engagement with particular social practices – the 'nexus' or 'field' of practices – that humans enact knowledge, or, to be more precise, their 'knowing' (76) (the verb form is often favoured in the practice-based literature). At a micro level, practices tend to have a takenfor-granted guality unless normative proceedings and expectations are somehow disrupted (111, 112); in this way, practices constantly reproduce social life (107). This idea focuses the organisational researcher's attention to what people do in organisations, even if individuals are not always able to articulate the rationale (logic) informing their actions. The empirical unit of analysis becomes practices and the relations between 'humans and objects', not individuals per se or the organisation as a discrete entity (112).

Practice-based perspectives may provide an interesting (and potentially more radical) discourse for explaining organisational knowledge flows and translational activity. Nicolini et al (113), for example, criticize the prominent frameworks used in 'knowledge management' and 'organisational learning' subfields for offering acontextual and atemporal representations of knowledge. These treat knowledge as a manageable entity or as 'intellectual capital' that adds value to the firm (Ibid), whilst cognitive-based theories of organisational learning '*conceive knowing as something that resides in the heads of individuals*'. They conclude that:

The conceptualization of knowledge as an object instead of a process – that is as a mental substance mainly located in individuals minds and manifested in written texts, representations and routinized behaviors – is needlessly and, in our view, erroneously restrictive....

Corradi et al (110) observe that practice-based theorizing '*is a powerful device with which to re-discuss the positivist and rationalist paradigms, which are still active in various fields of organization studies.*' Sandberg and Tsoukas (112) contend that the dominant 'scientific rationality' has disconnected academic knowledge and research from practitioners' social contexts, rendering it less relevant. The scholarly ambition to create valid, truthful representations of the world using the methods of science does in fact abstract 'from the temporal flow of practice, such as the practical necessities, uncertainties, and urgencies in which practitioners are typically entangled.' This point is supported by Brown and Duguid (114), who comment that:

In a society that attaches particular value to "abstract knowledge," the details of practice have come to be seen as nonessential, unimportant, and easily developed once the relevant abstractions have been grasped. Thus education, training, and technology design generally focus on

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

abstract representations to the detriment, if not exclusion of actual practice.

In contrast to cognitive theories that emphasis individual reasoning and information processing, practice-based theories concentrate on the social attributes of knowledge acquisition and knowledgeability. Social learning theory (104, 115) (which builds upon a practice-based epistemology) analyses work-based activity and is concerned with social context and culture. Learning is analysed relationally since individuals cannot be viewed as detached from their 'social world of activity' or 'community of practice' (116, 117). Analysis of relationships in social networks may also be important in order to understand how 'information seeking and searching' behaviours affect learning (118).

Gherardi (119) thus speaks of organisational learning as a 'situated practice' within a particular community of practice rather than as a process that can be quantifiably measured or generally applied. Learning is not to be associated purely with the mind since to perform (practice) involves the accomplishment of skills that are *socially* recognized by others and expressed through the actions of the body (110, 120). Indeed, within a practice-based framework, *knowing* and *learning* are not seen as separate activities as each process implies the other. To successfully participate in any practice (be it professional or otherwise), it is not sufficient for individuals to internalize 'facts about the world' They must be socially recognized as competent actors in the world (114).

Bourdieu uses the concept of 'habitus' to refer to the process by which external social structures are interiorized through learning and later externalized through practices (121). This he expresses as: 'the body is in the social world but the social world is in the body' (122). To view the body as inscribed by socialization and years of social practice is to recognize that non-codified forms of knowing (the experiential, sensory, corporal, and intuitive) will have profound relevance for understanding how learning occurs in institutions dynamically. This concords with the idea of 'embodied work' (123) and 'tacit knowing' (73) said to be integral to the performance of scientific inquiry. According to Geiger (124):

Knowledge as knowing is not the outcome of rational decisions resulting from scientific methods but instead describes a process of continuous enactment, refinement, reproduction and change based on tacitly shared understandings within a practicing community. (p.134)

Individuals are not viewed in cognitive isolation from one another because any practice is by its definition social in nature. This perspective is clearly articulated in Wenger's (105) concept of 'communities of practice' (COPs) which begins from the premise that we are essentially 'social beings'. COPs are not distinct entities but better thought of as informal, fluid units (Ibid). At any one time, Wenger suggests, we each participate and are members of several communities of practice –perhaps professional, work-based or

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

familial. COPs situate our experience and learning in specific contexts (which need not be geographically defined), leading to identity formation and development.

Wenger emphasizes that practice is about learning and the 'negotiation of meaning' within the communities to which we belong. COPs demonstrate coherence because they are mutually engaged in 'a joint enterprise' and have a 'shared repertoire' (105, 125). However, they should not be thought of as neutral or harmonious groupings since social groupings may also be the sites of power disputes and hold individuals 'hostage' to their understandings. Social communities also define competency and 'legitimate' participation (126). As a result, boundaries may be evident around a particular community of practice according to the membership it allows and those persons it excludes. Contu and Willmott (77) stress that Lave and Wenger's (126) 'situated learning theory' - and with it the concept of communities of practice - explicitly addresses 'power relations', such as conflict around the entry of newcomers and novices. However, issues of power tend to be side-lined or diluted by many writers in this area, who emphasise the communal, sharing and participatory aspects of communities of practice.

2.3.2 Epistemic cultures and knowledge boundaries

Multiple epistemic cultures or communities are said to be a feature of modern knowledge societies (123), what Luhmann (127) interprets as an outcome of the hyper differentiation of social systems (127). Knorr-Cetina (123) has put forward the concept of 'epistemic cultures' to elucidate how different sub-fields of science utilise diverse epistemic practices and approaches. Her empirical research into two sub-systems of science (high energy physics and molecular biology) challenges the conception of science as a homogenous field founded upon epistemological agreement or a unified common culture. On the contrary, Knorr-Cetina (123) emphasises the 'diversity' and disunity found in the natural sciences as different subfields exploit varied mechanisms to deliver knowledge outputs:

[*I*]*t* is not one enterprise but many, a whole landscape – or market – of independent epistemic monopolies producing vastly different products.' (Ibid)

According to this view, different epistemic cultures adopt distinctive knowledge practices and standards – will function according to different norms and rules. For Knorr-Cetina (123), it is the variation in the *processes* and *mechanisms* of 'knowledge contexts' that demands further attention, over and above differences in the *content* of the knowledge that is produced.

The idea of epistemic cultures existing in science resonates with studies of related industries. Gittelman and Kogut (128), for example, examined the 'conflicting logics' apparent in different areas of the biotechnology industry.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

They noted the difficulty for scientists to bridge two types of knowledge communities: academic-scientific research and technological, market innovation. They emphasise the important role of the firm and skilled individuals to span dissimilar epistemic worlds and 'translate knowledge produced within the epistemic community of science into knowledge that a market will value.'

Material objects play a significant role in many practice-orientated theories, not as containers of knowledge but as tangible products that enable coordination and engagement in a practice (105). The concept of 'boundary objects' is one example (129). Boundary objects may be documents, concepts or artefacts (129-132) that are accepted as legitimate by affected parties and which structure joint action. However, they can also take on non-material forms (such as stories, concepts) and refer to organisational processes or procedures (133, 134, 125). Because boundary objects are malleable they can respond to different environments and intersect at the boundaries between different social worlds (129). Socio-material objects may be of particular relevance in settings where specialist or occupational knowledge is widely dispersed and poorly integrated across communities. Here knowledge may be said to 'stick' rather than flow (114, 135).

However, the role or presence of boundary objects is contested in theory. Orlikowski (108), for example, adopts a challenging position to theories of intermediary objects (including 'knowledge brokers'), suggesting that the 'problem of knowledge transfer' is a matter of '*sharing* "*knowing how*" and enabling individuals to learn a practice that is useful for 'their own particular local situations'. This perspective contrasts with the idea that successful 'best practices' and innovations can be readily transferred and replicated across different organisational contexts:

Leaving aside the problematic notion of who decides what "best" means, practices are, by definition, situationally constituted. They are not discrete objects to be exchanged or stable processes to be packaged and transported to other domains. Practices are generated through people's everyday action.

2.4 Possibilities for 'practice-based evidence' in healthcare

Practice based theories may offer useful theoretical frameworks for explaining the relationship between situated medical practice and knowledge products or artefacts - such as evidence-based guidelines and performance protocols – and the mediating role of context on knowledge utilisation in healthcare. Dopson and Fitzgerald's (1) collection of empirical studies, for example, demonstrates that for evidence-based healthcare to be effectively implemented there needs to be 'an appreciation of the social context of which practitioners are a part.' The scientific, biomedical paradigm of evidence-based medicine cannot easily explain the

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

unpredictable, cultural and complex social factors that affect the use of codified forms of knowledge, nor does this model accommodate the 'tacit or experiential' knowledge clinicians may utilize as a legitimate source of knowledge.

Greenhalgh and Wieringa (136), drawing upon social practice literature, critique the concepts of 'knowledge translation' and 'translational medicine' for their failure to deal with tacit and experiential knowledge in clinical decision making. They remark on the complexity involved in making situated professional judgments in consultation with a patient, reiterating the point by Orr (137) and discussed earlier concerning 'situational dependence':

The skilled practice of medicine is not merely about knowing a set of abstracted rules and recommendations but about deciding which of many competing rules is most relevant. (136)

Greenhalgh (138) had previously described the intuitive process involved when a clinician selectively judges which rules (here we could also add knowledge tools) to apply to a patient in specific circumstances (138). She suggests that it is in more 'unfamiliar situations' that clinicians are likely to use a 'more formal and rational approach' based upon explicit knowledge.

Gabbay and Le May (139) discuss the prospects for generating 'practicebased evidence.' Their research revealed that even highly performing primary care clinicians do not directly access research evidence ('formal knowledge') and implement guidelines in the manner assumed by the evidence-based medicine movement. This echoes the observation made earlier by Schon (140) that professional work also depends upon 'tacit recognitions, judgments, and skilful performances', even when 'researchbased theories and techniques' are explicitly used. Gabbay and Le May (139) describe how clinicians' internalised *tacit* guidelines (what they term 'mindlines') were more influential in day-to-day practice than the explicit use of evidence-based guidelines.

Gabbay and May conclude that due to 'acquired expertise' and professional habitus, clinicians have ready access to tacit understanding and practical knowledge. As a result, they recommend that evidence should be '*refined appropriately into knowledge-in-practice-context*' (139).

2.4.1 Criticisms of practice-based approaches

Elkjaer (115) points out that social learning approaches, such as those expounded by Lave and Wenger (126), pose difficulties for understanding the influence that 'concepts and theories' have on individual learning and which may affect the acquisition of new knowledge and experiences. Moreover, social practice theorists - in their attention to group processes and collective activity - may overlook agency and the role played by prominent individuals locally (104):

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

One critique of social learning theory is that it focuses too much on the organizational context, and thus cannot, for example, encompass the mobile, knowledgeable and potentially influential individual.

2.5 Institutions, power and hierarchies of knowledge

This section reviews literature discussing the relationship between power and knowledge, with attention given to the macro/institutional level of analysis.

From a Foucauldian perspective (141, 142), knowledge implies power relations and a field of knowledge. Knowledge is not taken to be objective, detached or value-free because knowledge and power are inextricably intertwined. As Foucault writes:

Power and knowledge directly imply one another; that there is no power relation without the correlative constitution of a field of knowledge, nor any knowledge that does not presuppose and constitute at the same time power relations. (141: p.175)

A knowledge/power duality is articulated in the Foucauldian concept of 'governmentality' (143) which describes how modern institutions function as knowledge-gathering and knowledge-creating entities. It is suggested that modern democratic government has relied upon information about populations to enact power, as evidenced by the rise of population statistics during the 19th Century (144). Consequently, governments engage in accumulating facts through 'centres of calculation' (145). As Rose and Miller (146) point out, knowledge in this context does not equate to abstract ideas but instead refers to the 'vast assemblage of persons, theories, projects, experiments and techniques that has become such a central component of governments.'

Foucauldian theory stresses that 'governmentality' - the rationality that something can be managed, monitored and controlled - is dependent upon institutional knowledge accumulation and classification. Rose (144) suggests that government has continually strived to 'give itself a form of truth – establish a kind of ethical basis for its actions.'

A Foucauldian standpoint has been used to challenge positivist presentations of scientific truth. Roy Jacques (147), for example, examines the 'metanarrative' of management science as a knowledge field from a cultural-historical perspective, suggesting that management knowledge has fallen into the 'truth-trap' of science. He observes that academic research has resulted in a reliance on data to produce 'truth', despite the lack of unity in the field of organisational inquiry and 'competing paradigms' of knowledge co-existing. Within the field of medical sociology, Epstein (148) has applied Foucault's notion of a 'microphysics of power' to investigate the inter-relational and cultural aspects of different fields of expertise which aim to define the 'true' characteristics of the AIDS epidemic.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

More generally, critical management and organisational theorists have observed that management per se is engaged in matters of discipline, control and dominancy in its attempt to coordinate worker behaviour (e.g. 149-151), what Karreman (152) describes as the 'power as restraining force' perspective. Clegg (150), for example, provides a structural account of how 'structures of dominancy' in organisations can produce a 'system of social order', which will determine actors' behaviour and what is perceived as legitimate action (149). On the other hand, power may be a 'productive force', this according with a Foucauldian perspective, whereby power results in a multitude of activities and practices (152). From the latter perspective, at the micro level, power manifests through 'techniques' that encourage self-governing and self-disciplining behaviour and conformity with dominant rationalities, discourses and ideological constructs (153-155). Both theoretical perspectives on power are useful for understanding what is seen as constituting legitimate knowledge in an organisation, context or field, and how different knowledges (or rationalities) may compete (156).

Theories of the professions state that 'formal knowledge' is fundamental to the legitimacy of professional work, as in medicine (157, 158). Formal knowledge also gives professionals the capacity to 'exercise power' over their clients (Ibid). For Freidson (157), the 'ultimate legitimacy' of professional work is grounded in the formal knowledge that a profession has access to - academic textbooks, teaching and research; in other words, an abstract knowledge base. However, in practice, this knowledge is applied loosely since professionals make 'arbitrary and selective decisions.' On the other hand, administrators (managers) will attempt to transform and standardize knowledge (e.g. into protocols, guidelines) as they seek to influence the performance and evaluation of professional work. For Freidson (157), then, different perspectives and positions lead to different uses of formal knowledge.

How knowledge is transformed and selected by professional groups is an outcome of power and interests, as well as institutional constraints. This raises important questions about the forms of new knowledge that professional institutions support or resist; the boundaries around occupational knowledge domains; the types of knowledges that are selected in professional organisations. For example, whilst professionals may seek occupational and jurisdictional control over their work, managers may adopt new techniques and knowledges (such as those developed by external management consultants or experts) to effect cultural change or challenge professional practices, potentially leading to conflict (159-162).

Finally, this review highlights the literature on 'knowledge intensive-firms' and management consultancy as 'knowledge work' (163, 152, 164). Adopting a critical perspective to the concept of knowledge – which is seen as inherently ambiguous - Alvesson (165) comments that traditional professions theory is being undermined as more occupations are 'founded in higher education' and able to make knowledge claims, even if they lack

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

formal professional status. Knowledge-intensive companies - such as management consultancies and technical agencies - develop products and engage in highly uncertain and ambiguous labour when they interact with client organisations. As a consequence, it is argued that these organisations employ rhetorical and symbolic devices to distinguish their services, knowledge and expertise, what Alvesson refers to as 'systems of persuasion' and 'impression management' (165). Alvesson and Johansson (166) remark that:

Professionalism is best seen as a resource on which management consultants can draw selectively in their claims for authority, status and credibility.

It should be noted that academics writing in this area observe the general lack of empirical research on management consultancy and knowledgeintensive firms (e.g. 167, 164). However, alongside the theoretical viewpoints surmised above, these analyses reinforce the point that though knowledge may be treated (in both academic and practitioner communities) as a neutral, rational output that speaks for itself, it is also contestable, amorphous, and subject to power dynamics at multiple levels of analysis.

2.5.1 Clinical hybrids in healthcare management

With the introduction of New Public Management (NPM) reforms in the 1980's, clinicians increasingly became absorbed into managerial functions throughout the NHS, although few were likely to have had prior management training or experience (168). During the 1990s, clinical director roles developed bridging management and clinical boundaries and redefined medical roles (169, 170).

Writers on healthcare management have drawn attention to the knowledge inequality that exists between managers and clinicians: managers can never have a monopoly over clinical knowledge, although clinicians can access management concepts and skills through supplementary training (170, 11, 171). Clinicians can also demonstrate a lack of respect for managers' education and training, and question managers' ability to make appropriate healthcare decisions (169, 171).

Thorne (170) sees the clinical director role as a particularly powerful one in organisations because clinicians act as 'professional insiders' with 'access to medical and managerial expertise and a professional legitimacy.' She observes that once clinicians master 'managerial language', this enables them to 'reinterpret and reframe problems' in ways that traditional manager/clinical roles are not set up to do.

Clinical or medical directors can, therefore, possess considerable influence in healthcare settings, over both clinical and managerial occupational groups (172, 169-171, 168). Llewellyn (171) argues that the clinical

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

director role has brought about a new 'discourse' in the medical profession leading to new understandings of healthcare organisation. Factoring in the broader implications of NPM reforms and the establishment of an internal market in healthcare, she suggests that some clinicians may even be 'aligning themselves with the world of business and profit by seeing themselves as entrepreneurs of healthcare – the income generators.'

Waring and Currie (160) argue that 'hybridisation' occurs when clinicians appropriate managerial expertise and incorporate it into their own practice. This is a strategy to extend jurisdictional control over professional work and resist external control by management. However, hybridisation has broader consequences:

As professionals internalize management techniques in an endeavour to stave off management encroachment, they become increasingly managerial in terms of their practice and identity.

Evidence from outside the UK has revealed that clinicians have been successful at incorporating financial knowledge in a context of NPM reforms; to the extent that hospital doctors report learning accounting skills and incorporating them into their existing knowledge base (173). However, in Kurunmaki's (173) study, full 'hybridisation' did not occur because clinicians emphasised the importance of mastering useful 'techniques' rather than a new body of knowledge *per se*. This observation is supported by Ferlie et al (168) who state that:

Management training does not transform professionals into surrogate general managers. Instead, professionals retain their past professional and caring values, which they now apply in the management fora also. In reality, this can lead to the exercise of professional, accountable management.

Why might clinicians be drawn to hybrid roles? Fitzgerald's (169) study of a cohort of 31 doctors that took on management responsibilities highlighted certain influencing factors. For example, the fact that changes in the health sector enabled clinicians to undertake clinical director roles on a part-time basis (most wanted to maintain their clinical practice), or the potential challenge and stimulation offered by this work. As in other studies, clinicians demonstrated a capacity to absorb new managerial knowledges – such as strategic management and marketing – through exposure to managerial techniques and training. However, initially, most had a limited understanding of the breadth of the management field and held a perception that 'management is easy to learn.'

At a middle management level, Currie (174) and Currie and Proctor (175) describe how nurses and other allied health professionals have entered managerial roles in the NHS and taken advantage of training, such as MBA programmes. However, educational assistance for middle managers diminished with budgetary cuts, leaving middle managers without any formal management education feeling under-supported.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

2.6 Reflections on this chapter

Reflecting on this summary of promising literature domains identifies a gap in the literature in adequately dealing with how pluralist evidence and knowledges might be reconciled (or be irreconcilable) in practice. It is clear that organisational contexts and professional identities exert a profound mediating influence on the utilisation of scientific evidence and management innovations in healthcare (1, 2). This necessitates greater attention to the limitations of EBMgt in such settings. An EBMgt approach is mostly concerned with expressible, explicit and manageable forms of knowledge as tangible phenomena (as opposed to tacit, intuitive and embodied knowledge forms). It neglects how evidence is actually used and applied in practice and interacts with accumulated experience.

There is a growing influence of practice-based thinking in the healthcare management literature (e.g. 136, 176, 139, 132) as authors attend to the limitations of current models of knowledge dissemination and an evidencebased paradigm for dealing with the social, informal, contextual and embodied aspects of knowledge use in healthcare settings. For example, Dopson et al (177) illustrate that where evidence is contestable, it necessitates 'interactive processes' such as 'debate' and 'negotiation' between individuals and groups. Social interaction and the production of shared meanings or sensemaking (178) are thus relevant factors for understanding how new types of knowledge may be successfully embedded in particular contexts, or even rejected.

Social-cultural perspectives in the organisation and management literature are indeed valuable for conceptualising how knowledge is socially mediated and transformed through action. However, practice-based theories are susceptible to criticism for marginalising the individual and the role of subjective experience if practice becomes the main unit of analysis. Finally, macro institutional power relations may not readily be discerned through practice-based accounts.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

3 Study design and methods

This chapter is concerned with the approach, design, methods and analysis strategy used for this research. It considers why this research design was adopted and then gives the rationale for and details of the operational methods utilised. Design choices were informed and shaped by the extensive literature review detailed in the previous chapter.

The study uses comparative and processual (i.e. the study of organisational processes over time) case study methods. Specifically the research focuses on six case sites purposely selected for their significance to facets of processes of knowledge production and utilisation in a 21st century health knowledge economy which has become more diverse and multilayered.

3.1 Qualitative methods – comparative case studies

As the study objectives related to interpretive 'how' and 'why' questions rather than measurement based questions, the overarching design drew on qualitative methodologies (179, 180). A qualitative design enabled the exploration of processes through time and also the meaning that actors attach to their actions. Qualitative designs may contain an element of induction and deduction so that findings and concepts can emerge in the course of the study as well as being identified and tested from the start, as in deductive or more hypothesis based studies. Some qualitative designs are purely inductive as in grounded theory (181), however, others mix inductive and deductive elements, the latter being the case in this study.

Multiple case designs are noted for increasing external generalisability beyond what is possible in a single case study, especially with purposeful selection of cases (179, 180, 182). Multiple case designs can also retain strong internal validity. They provide the opportunity for structured comparison between cases (183).

3.2 Case study and respondent selection

A purposeful selection of six distinctive healthcare organisations was made, following consultation with the steering committee and within the research team. Criteria for selection were: a) that a key figure or figures in these organisations (the primary contacts or 'gatekeepers') were reputed to have an interest in management research and to be using acquired management knowledge to influence colleagues and to bring about change; b) that each represented a different type of healthcare organisation; and c) practical considerations, such as the organisation's willingness to co-operate and reasonable accessibility for fieldwork Respondents were nearly all healthcare managers, whether general managers or those doctors, nurses and other professionals with clinical as well as managerial responsibilities (called here

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

clinical managers or sometimes 'clinical hybrids'). However a few respondents in Phase 2 did not have managerial responsibilities and were interviewed to shed light on staff perceptions of the tracer issues.

The case sites, which were given pseudonyms, were:

- *Beechwell, a Policy Unit.* Beechwell aims to improve healthcare through health policy analysis, research, and leadership development. The policy unit offered an opportunity to consider the knowledge flows between these areas.
- *Elmhouse, a Health Care Consultancy.* Consultancy has been increasingly drawn upon by healthcare organisations and as such access to Elmhouse enabled exploration of the impact of consultancy knowledge on managers in the NHS.
- *Firgrove, an Academic Health Sciences Centre (AHSC)*, recently established to provide opportunities for transforming healthcare, by narrowing the gap between basic and clinical sciences. The AHSC offered an opportunity to study the use of management knowledge in a networked partnership.
- *Mapleshire, a Collaboration for Leadership in Applied Health Research and Care (CLAHRC).* The CLAHRC's were set up across the UK in response to the Cooksey Report (42). The aims include developing innovative models for conducting applied health research and translating research findings into improved outcomes for patients. The CLAHRC enabled exploration of the role of management knowledge in achieving this aim.
- Oakmore, an Independent Sector Hospital. Oakmore is a private charitable trust offering specialist services, offering the opportunity to study the role of management knowledge in a setting outside the NHS, but working closely with it.
- Willowton, A Primary Care Trust (PCT). This organisation commissions a broad spectrum of healthcare services on a population basis. This site is undergoing structural and strategic change as it establishes a local, clinically-led commissioning group and devolves decision making in response to national policy. This major development provided an opportunity to study management knowledge use at a time of transition and radical organisational redesign.

The research was organised as three phases. Team members worked in pairs in negotiating access, undertaking 'scoping' interview work, sometimes interviewing jointly and always sharing discussion of the analysis. The actual writing of the case was led by one researcher, however, as explained later, all team members read the cases as they emerged and contributed to the cross case analysis.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

3.3 Data collection

3.3.1 Phase 1

Phase 1 involved conducting interviews with a selected group of general managers and clinical managers from each site. These were individuals identified by the primary contact for each site as interested in using management research and knowledge. 'Interest' was defined as having researched or published on a management related topic or holding a higher degree in a management-related subject or devising a new evidence-based training, consulting, management or policy programme. Nearly all (more than 90%) of those approached agreed to participate and between six and eight individuals (including the primary contact) were interviewed at each site.

This phase focused on exploring the individual's perspective about what motivated them to seek management knowledge, what search processes and sources they used, how management knowledge was utilised within their work and finally, what were the main influences of their 'knowledge career' on their management practices.

As discussed in Chapter 2, the team reviewed relevant streams of literature early on and were thus sensitive to possible theoretical modes before commencing fieldwork. In particular, Crilly et al (46) was reviewed to inform the thematic structure of the interview protocol. The interview schedule was piloted in Elmhouse where early access was achieved. Lessons from the pilot were fed back to the team, and an agreed semistructured interview schedule was formed (see Appendix 1). An example of the consent forms used for the study is given in Appendix 2.

Each interview in Phase 1 lasted 1 to 2 ½ hours, was recorded and transcribed. Prior to the interview, each respondent was asked to provide an up-to-date CV that was used to explore the influences of 'career' on management knowledge acquisition and use. Respondents were also asked to complete a tick list (see Appendix 1). This proved useful in exploring the relative weight of possible influences on current management practice (discussed in Chapter 5). At the end of each Phase 1 interview respondents were asked if they would be willing to take part in the Phase 3 Action Learning Sets.

3.3.2 Phase 2

The primary focus of Phase 2 was the utilisation of management knowledge in context. In discussion with the primary contacts and other key members of each organisation a stream of management activity, utilising a specific management text based on a management theory or theories, was selected to use as a tracer study(see Chapter 6 Figure 3). This generated six indepth comparative case studies (see Chapter 4).

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

A strategy of triangulation through multiple data sources (183) was operated. That comprised:

- Factual data on the context of the case: this included archival data and relevant contextual data. The definition of context used revolved around the notion of the organisation being divided between the inner and outer context of the organisation (184, 185). Each case organisation was influenced by its outer context, such as aspects of its position in a sector and in an economic and social system and also by its inner context, which included its history; its competitive strategy and position (in a for-profit organisation) or its relative importance to the policy agenda (in the public sector).
- Interviews with a range of stakeholders in the organisation who were identified as being able to comment on the tracer. In one instance it was deemed appropriate to convene a focus group of senior managers, including the primary contact, to gain a deeper understanding of the use of a particular text in the organisation
- Observation of meetings concerning the progress of the particular management activity being studied. Observation of relevant meetings and knowledge dissemination events occurred in all sites but was most extensive in Willowton given the need to keep up to date with the speed of the changes.

The interview schedule used for Phase 2 (see Appendix 1) was designed to generate a rich narrative and explore the use of management knowledge in context. Phase 2 also represented another opportunity to explore the learning from Phase 1, and where possible respondents in Phase 2 who had not previously been interviewed as part of Phase 1 were asked Phase 1 questions. As with Phase 1, all interviews were recorded and transcribed. Typically, interviews lasted between 40 minutes and 1½ hours.

The plan was to conduct the six cases concurrently; however issues surrounding ethical approval in Mapleshire (see below) meant that this case was started some 6 months later than the others.

Characteristics of research participants for Phases 1 and 2 are given in tabular form in Appendix 3. Note, their career backgrounds and education are included as well as their current roles, as this information was crucial for the cross-case analysis. The codes given to individuals in the table are not used in the empirical chapters to protect anonymity.

3.4 Approach to analysis for Phases 1 and 2

The factual data collected on the case study organisations was a constituent part of the analysis. These comprised information about the external and internal context, including each organisation's history, purpose, size, scope and performance. Individual interview data was analysed drawing on the iterative qualitative methods proposed by Miles and Huberman (186), Glaser and Strauss (181) and Rubin and Rubin (187) on interview analysis. NVIVO was utilised to assist in the analysis of the Phase 1 interviews (see Appendix 5).

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

3.5 Cross case analysis for Phases 1 and 2

Following discussions on data analysis between the pair of team members assigned to each site, detailed reports on the individual cases, varying between 20,000 and 30,000 words each, were produced to a standardised template. Each case was then the subject of discussion with the full team at the monthly project meetings, thus encouraging a deeper understanding by team members of the nuances of the material, bearing in mind the existing quality assessment frameworks available to comparative case study researchers (188-191). The Management Fellow also participated in the analysis process (see Appendix 9).

The cross-case analysis process commenced with an interrogation of the data based on the core research questions. The data on these questions was compared across the sites. Core themes which had emerged were examined and compared across sites. Overall themes emerging from the cross-site comparison were then listed. The literature review was then interrogated to explore whether candidate theories enabled an explanation of the data. Finally, how the data might extend, develop or refute existing research was considered. For an example of this process see Appendix 4

3.6 Action learning sets (ALSs) Phase 3

Three ALSs were formed in order to test and evaluate this form of intervention as a method of sharing knowledge and learning. Details of methods and processes in the ALSs are given in detail in Appendix 6, which also supports Chapter 7, a brief summary is provided here.

3.6.1 Purpose

Phase 3 was always classed as 'experimental'. The research protocol states that the ALSs were 'to test and evaluate this form of intervention as a method of sharing research-based learning and of encouraging and facilitating the uptake and utilization of research based evidence.'

3.6.2 Methods and process

Three ALSs staggered through the period of research were planned. The three sets ran between October 2010 and July 2011, and each set was planned to meet three times with several months between each meeting. The idea was that each set would contain the maximum variety of participants, from as many of the case organisations as possible. The recruitment process in order to obtain this mix proved much more difficult than had been foreseen. This was partly due to the staggered nature of the process necessitated by the restricted period of the research project and also to a delay in one organisation (Mapleshire) joining the project.

Each set was supported by one facilitator and attended by one nonparticipant observer from the team. The facilitators were all experienced in running ALSs. Invitations were sent to potential participants. Once they

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

had agreed to join a set it was attempted to allocate them to the set with the best mix of participants. Guidance was sent to each set member describing the approach taken. Telephone contact was also made with each set member prior to their first set meeting to brief them on the process and discuss with them their ideas for the topics they wished to discuss in the set.

The observers of each set (the Management Fellow or a member of the research team) took no part but recorded their observations throughout the set meetings. The middle meeting of each set was also recorded and a transcript was made. The facilitator's role was gradually developed through the course of the set meetings from a strictly low interventionist to a more active style, offering ideas for academic sources (the journey is discussed in Appendix 6).

After each meeting, the observer produced a set of field notes which detailed their observations of the set in terms of the content of the discussion; the interactions of all the participants including the facilitator and the atmosphere and emotions displayed during the meetings. The facilitator also produced a set of notes on each meeting, which detailed their reflections to the content of the meeting and their experience of facilitating. The middle meeting of each set was recorded and transcripts made.

3.6.3 Participants

It was planned that each set would contain between 4-7 participants. In the event, set 1 had 5 participants (at the start); set 2 had 3 participants and set 3 had 4. Recruitment to the sets was by invitation to all those who had participated in the research at each of the six research sites. Thus all participants were volunteers and all were middle-level to senior-level health managers. As far as possible, it was aimed to have individuals from at least three of the research sites in each set, to produce variety in background, profession and experience.

3.6.4 Analysis

The data for each set consisted of the observer and facilitators' field notes and reflections and the transcripts. The observer and facilitator from each set began by analysing the data separately on a set-by-set basis. From this, each pair of researchers compared their analyses and then produced a single set of analytic themes deriving from the data. Then, a group of all the analysts plus an additional team member, met to review the themes. From this meeting, the group produced a set of overarching themes from the data on all three sets. Finally, these themes were reviewed and interrogated by the whole research team.

3.6.5 Supervision space

At the beginning of the ALS, it was decided to create what was described as a 'supervision space'. Drawing on ideas from psycho-therapy, the concept

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

of the supervision space was that it would offer the researchers involved in running the ALSs (i.e. the facilitators and observers) to work with an experienced research team member to debrief and reflect on their experiences. So this group met after each ALS meeting. The research group's meetings were recorded and transcribed. It was hoped to thus create some additional understandings of the content of the knowledge bases discussed during set meetings and issues in running the sets and sharing learning.

3.7 Feedback opportunities

In each site the draft case study was circulated to key respondents for verification and comment. An executive summary and a feedback opportunity was offered to all sites. The steering committee recruited for the project also proved very helpful in challenging the emerging findings. A final project conference inviting representatives from all six case sites, the management fellows host organisation, academics and policy makers took place following submission of the draft report.

3.8 Limitations of the research

It is important to consider the limitations of this research design in terms of:

- the extent to which the design and methodology allowed the research question to be answered for the cases examined
- the extent to which the findings from these cases may be generalizable to other settings
- practical issues and problems in carrying out the research

3.8.1 Was the research question answered?

The original question read as follows:

"Under what circumstances and how do managers (both general managers and hybrid clinical managers) access and use management research-based knowledge in their decision-making?"

There are of course well known caveats and difficulties around all types of research methodology. However, it is argued (see Section 3.1) that the research design and the qualitative methodology used were the most appropriate available for addressing this type of question, and that the research did generate valid data which gave some insight into the complexities of healthcare managers' personal characteristics, motivations and actions in accessing and using management research in the organisations studied.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

3.8.2 Can the findings be generalised?

Though it is possible to be reasonably confident that the data collected did accurately represent the views of those interviewed and the organizational processes studied, there are, nevertheless, questions which should be raised about the reliability and thus generalisability of the data; i.e. the extent to which a) the results give a replicable depiction of the managers and organisational processes which would be found again if the team, or other researchers, revisited the sites. Changing times and contexts are beyond the control of a research study, but there are also issues around selection of sites, respondents and of the 'tracer issues' to be examined which had potential to bias the findings.

First, site selection. While a desirable mix of different sites was achieved, in an ideal world it would have been preferable to have gained potential access at a larger number in each category. This would have allowed both piloting of schedules and the ALS and subsequent random selection of the actual cases. This process was not practicable within the time frame of the study.

Second, it is inescapable that Phase 1 respondents were almost all chosen by the person who was the 'primary contact' in each organisation. While it was clear that the respondents identified met the selection criteria, (i.e. they were interested in using management research and knowledge), there could have been others who met these criteria but were deliberately not selected because they might have presented a different picture of the organisation from that which was felt desirable. Also it was primarily data from these Phase 1 interviews which determined selection of the knowledge tracer texts. Again it must be asked if other respondents might have cited different texts, leading to investigation of different organisational processes. The 'snowballing' selection of respondents in Phase 2, though necessitated by time pressures, is also notorious for introducing bias.

Finally, the arbitrary, though practical, determination of between 20 and 25 interviews per case meant that in smaller organisations a large number of those involved in the knowledge tracer could be interviewed (preferable, but giving problems with anonymisation of data) but in the larger, many people who could have contributed did not.

3.8.3 Issues, problems and responses

A major challenge related to securing ethical approval for the work. This proved confusing and time-consuming and compromised progress. The project did not seem to fit neatly into a system designed to protect NHS patients participating in clinical trials. For example, the ALS phase had originally included asking participants to keep blogs or diaries. The protocol was revised to accommodate these challenges. Setting aside the complexity of tailoring the research protocol to address the substantive issues in the IRAS forms (time-consuming in itself), considerable difficulty was encountered in determining the correct answers to the questions of

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

sponsorship, insurance and R and D site-specific issues. In many cases team members were handed from person to person within the system, all of whom were anxious to help, but none of whom knew the answers to the questions asked. The problems encountered were reported to the team's SDO manager.

A second challenge simply related to the time period covered by the research fieldwork. It was a time of great turbulence and change in the health service and many managers were concerned about their jobs. This most certainly compromised recruitment to the ALS phase.

In the view of the team, none of the above caveats invalidate the findings. As with any real-world, real-time qualitative research the process was necessarily imperfect and subject to bias of various kinds. Nevertheless, the cross-case analysis demonstrated some themes so clearly that a degree of confidence in the key findings is possible, although caution should be exercised in assuming that these can automatically be generalised across all health service settings, particularly those where no obvious knowledge leaders or knowledge culture can readily be identified.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

4 Summary of the six cases

This chapter summarises the overall stories of the six cases studied (presented in alphabetical order) and introduces the organisational context and culture (see Appendix 7 for some illuminating metaphors generated by respondents at interview). Description of the type of knowledge organisation is mixed with the start of within case analysis (e.g. the role of knowledge actors and the introduction of the concept of the 'knowledge leader' - see definition in 5.1). In the following Chapters 5, 6 and 7 the three phases of the research are explored in more detail and the cross-case analysis developed further.

4.1 Beechwell – what kind of knowledge organisation was this?

Beechwell was an influential and widely-respected policy think tank. It had a long history of supporting the healthcare system in the UK through influencing policy and provider organisations to deliver change in healthcare. There was a departmental structure: a policy department focused on producing policy knowledge through policy analysis and research and a leadership development department which sought to influence healthcare leaders through leadership and organisational development.

The organisation had a strong value orientation towards improving the UK healthcare system. Organisational members described strong emotional investment and a sense of belonging. While its departments tended to be orientated to different audiences in the field, a theme that unified them was an underlying commitment to improving the healthcare system.

The organisation's knowledge identity centred on producing knowledge that was practically useful to the wider healthcare system. It took a futureorientated, horizon-scanning approach to knowledge, and changes to the policy environment were significant stimulants for producing new knowledge.

4.1.1 Knowledge management system

Beechwell's access and use of management knowledge was not merely one of handling and translating existing knowledge, but of actively producing new knowledge. Originality and creativity were valued as a means of tackling 'real world' problems. There was a strong value orientation towards pragmatism as a means of achieving change in the healthcare system, and finding innovative means of doing so.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

However its departments had quite different knowledge orientations. Although the organisation had developed a sharepoint collaboration programme as a means of increasing knowledge exchange between departments, this was not a significant source of accessing and using knowledge in this case, although it did serve as a repository for written (codified) knowledge outputs.

This relatively low use of a common Knowledge Management System may partly have reflected departments' contrasting knowledge activities and use. The orientation of the policy department tended to be rational-analytic and data-driven, using established methodologies for engaging both expert opinion and practitioner experience, whereas in leadership development the focus was more experiential, people-orientated, and experimental – with the emphasis on 'aligning hearts and minds.'. However Beechwell did have a significant shared library facility, including extensive access to electronic journals. This was well used by departments across the organisation.

4.1.2 Knowledge actors

Key knowledge actors at Beechwell included prominent experts who played a visible role influencing healthcare policy through frequent media outputs and public events. The Chief Executive and directors had significant externally-facing knowledge roles.

The executive tended to exercise strong hierarchical authority in stimulating knowledge activity, and shaping knowledge projects (for instance, in response to developing policy contexts). Knowledge leadership tended to be diffuse, and was contested between different departments.

Individuals tended to have short stays of around two years and then leave. A flattened hierarchy within each of the departments meant there was little opportunity for promotion. Accordingly, being successful in the organisation meant making a distinctive and often publically visible contribution.

4.1.3 Highlights of findings from the case

Beechwell was a knowledge producing organisation. Its departments produced pragmatically useful knowledge for both health policy and practice audiences. A shared value-rationality of advancing high quality health services connected the different ways in which its departments sought to influence their wider audiences. Nonetheless, the departments appeared markedly separate, with quite distinct cultural legacies and associated forms of management knowledge.

Respondents' knowledge work was shaped by the heads of the different departments. While the executive centre exercised hierarchical authority, it was not a strong source of management knowledge. Respondents expressed a sense of hierarchical distance, with direct contact being quite

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

formalised, taking the form of presentations, with little opportunity for interaction and knowledge-sharing.

Whereas executive decision-making was important in steering and legitimating knowledge activity, this was not experienced as providing sufficient knowledge leadership to bridge Beechwell's distinct activities. For instance, as a means of increasing collaboration between departments, the organisation had developed a number of cross-departmental themes, intended to increase potential innovation and translation across knowledge boundaries. The management knowledge tracer study was the progress of one of these themes which had been identified as strategically important by the executive. A senior academic in the policy department had produced original, research-based knowledge on healthcare economics that had made a significant impact on the wider policy environment. Adopted by the organisation as a cross-departmental strategic theme, it was initially viewed by staff as a promising means of focusing joint effort around a strategic priority, and being potentially translatable into distinct knowledge products across each of Beechwell's departments.

However, the intended translation of this knowledge theme failed to materialise, and it was subsequently seen as having failed its purpose. Despite initially resonating with participants across departments, a sense of insufficient knowledge leadership meant it failed to attract 'natural synergy' and consequently, cross-departmental support.

Even if this theme was seen as failing its stated purpose of crossdepartmental collaboration, it does elucidate an interesting feature of this case, which was its function as an important textual device. The theme may have failed to translate, but as a textual - or perhaps rhetorical – device, it served to reinforce participants' sense of purpose and overarching organisational identity.

4.2 Elmhouse – what kind of knowledge organisation was this?

Elmhouse Consulting was a management consultancy, advising clients about strategy, leadership and change in the private and public sectors around the world. Elmhouse had several interrelating sector-specific and national practices. Elmhouse's UK healthcare practice was the focus of investigation.

Elmhouse had a particularly strong culture and respondents often described the organisation using quasi-religious imagery (see Appendix 7). This culture was reinforced by careful recruitment and retention of the highest calibre consultants, all with outstanding records of achievement. Elmhouse was a demanding and competitive place to work and operated an 'up or out policy'. New consultants came from elite universities and commonly stayed for two years, getting training and formative work experience before going off to 'high-flying' careers elsewhere. Elmhouse recruited senior 'superstar'

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

consultants externally, although many had formative training and work experience at Elmhouse and returned to company after a few years experience in senior roles in other organisations.

Recruitment and retention ensured Elmhouse consultants were of universally high standard and were highly diverse in terms of ethnicity, nationality, religion, and gender. However as a senior Elmhouse respondent put it: '*what strikes me is how different people can be and yet utterly the same.*' A homogenous workforce enabled Partners to 'plug and play' consultants from anywhere in the world into any project, which was described as a 'fearsomely efficient' model.

There was ubiquitous performance management. Consultants received feedback after every assignment, from everyone they had worked with, about every aspect of their performance, which fed into compensation and promotion decisions. Promotion was also dependent upon developing a good reputation, social capital and networks within Elmhouse and among its clients. Performance management criteria included being 'nice', 'a person who says "yes", sharing knowledge and helping others. Elmhouse was a 'team-driven' culture and respondents said they liked their work and colleagues, despite the pressures they were under.

A final factor shaping the culture was excellent training and development, including challenging and developmental opportunities and work assignments, and working alongside 'inspirational' colleagues and mentors. Senior Elmhouse consultants also had an impact on the company's culture as role models and mentors.

4.2.1 Knowledge management system

Elmhouse derived income from selling knowledge, and knowledge generation, management and application was of crucial importance. Elmhouse invested heavily in managing knowledge to support consultants, which included employing generalist, industry and function-specific experts, researchers and information specialists, and also publishing bulletins. Elmhouse had a global knowledge management portal containing PowerPoint presentations about previous Elmhouse projects, including the contact details for consultants involved, which was where consultants first looked for knowledge and information. Consultants classified, tagged and rated this information, so (like Google) the information perceived to be most valuable came to the fore. Consultants were incentivised to contribute to the knowledge management portal because they developed their reputations (and hence are promoted) from their work being known and used.

Consultants next commonly turned to immediate colleagues and Elmhouse consultants worldwide for knowledge and advice. If consultants were unable to get the knowledge they needed from the portal or consultant colleagues, they could finally ask 'information specialists' to look for it.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

Some Partners had links with elite management academics, who alerted them to new and interesting ideas, but only one respondent reported reading any academic management journals other than Elmhouse's inhouse publications or the Harvard Business Review. This was linked to the time-pressures consultants were under and their difficultly interpreting and extracting key points from academic sources. Instead, consultants commonly drew upon Elmhouse's own client work-based case studies (in the knowledge management portal). A respondent noted:

The natural impulse at Elmhouse is to be... amazingly inward... [without] intellectual curiosity to anything produced by anyone that isn't Elmhouse. If we write it, everyone reads it.

Adding that:

Our own knowledge generation is sometimes very good and it's sometimes not at all good... it's quite limiting.

4.2.2 Knowledge actors

Key actors in this case study were the Elmhouse senior consultant who authored the Elmhouse management text, a monograph. This, (given the pseudonym of the Elmhouse Text) was explored as part of the management knowledge tracer study. Senior Strategic Health Authority (SHA) managers played an important role in commissioning Elmhouse to conduct the Quality, Improvement, Productivity and Prevention (QIPP) project. PCT Managers and PCT-based clinicians played a counter role by raising doubts about the Elmhouse analysis and its 'fit with reality' and perverse effects on patients in NHS practice.

4.2.3 Highlights of findings from the case

Consultants were aware that they might rely too much on Elmhouse's own internally produced evidence. Combined with Elmhouse's strong culture, homogenous elite recruitment and transparent performance management system, this risked hermetically sealed learning, 'superficial innovation' and missing new ideas from academia. One Partner had recognized this problem and established an 'Academic Board' to challenge Elmhouse' ideas and thinking with new and different academic standards. However, there was also awareness of the need to balance academic collaborators' desire to 'experiment' with 'exciting' new theoretical ideas on Elmhouse's clients with 'client impact' and 'pragmatically' keeping clients happy. The comment was made that:

Academia and consulting are two worlds that find it difficult to work together, however, where we get the overlap right it's a real piece of magic.

The Elmhouse tracer study (see Section 6.2.2) examined the application of the model of management based on the Elmhouse Text in a PCT ('NHS

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

County'), as part of a QIPP project during 2009-10, commissioned and funded by its 'Regional SHA'. Regional SHA commissioned Elmhouse to rapidly identify and begin making productivity gains in Regional PCTs in line with QIPP. Senior SHA managers knew and respected Elmhouse consultants, who they believed fully understood QIPP. Elmhouse consultants were viewed as being 'expensive' but their fees were seen to be relatively affordable, given the scale of the financial challenge and SHA budget associated with the project.

Elmhouse's approach was to help PCTs organise services better and

Absorb that increase in activity [through] uniformity ... it doesn't actually demand any real innovation... it demands the systematic application of what's already known to be best practice.

Elmhouse first analysed the PCTs' performance, benchmarking them against national best practice to establishing potential quality and productivity gains. Elmhouse's analysis suggested that if PCTs redesigned services so that they performed in line with the upper quartile of PCTs nationally, they could meet national QIPP targets. Elmhouse then set about helping the SHA with action-planning, running pilot redesign projects, and developed 'golden rules' and 'prescriptions' for redesigning and delivering healthcare.

Elmhouse then ran three structured learning events for senior PCT managers, in which they set about '*persuading people about the benefits*' of QIPP and equipping them with skills to take it forward. Elmhouse devised a PowerPoint-based template, based upon its 'prescriptions' and 'golden rules', which PCTs were instructed to complete to demonstrate how they would make productivity gains, to discuss these plans at local [clinical] stakeholder workshops, and then report back a few weeks later at the next structured learning event. Elmhouse consultants facilitated this process.

Views in the PCT about Elmhouse's approach were mixed. While PCT managers were impressed by individual Elmhouse consultants, they were more critical of Elmhouse's structured PowerPoint-based approach and how it translated into their context.

As the Elmhouse contract finished (in the site studied), the NHS White Paper 'Equity and Excellence: Liberating the NHS' (192) was published proposing the abolition of SHAs and PCTs, which stalled the QIPP project's progress. Some PCT managers described feeling relieved that Elmhouse had left and the pressure to implement QIPP was gone. However, other PCT managers believed that after an intense period there was still a lot of work to do.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

4.3 Firgrove - what kind of knowledge organisation was this?

The AHSC of which this case study was a part was a recently-formed partnership between leading NHS Foundation Trusts and a University, each of which had long traditions and international reputations for excellence in the field of healthcare sciences. The AHSC linked these institutions through network-based forms of organising, rather than through an integrated governance model. Collaborating across basic and clinical sciences, along with healthcare practice and education, was regarded as presenting pioneering opportunities for more rapidly translating innovation and learning into healthcare. Newly developed clinical-academic collaborative groups (CAGs) were intended to be the central means of innovation, by integrating healthcare sciences, education, and practice.

Research-based knowledge in the AHSC overall was predominantly from health sciences, but both social science and management knowledge appeared important. This was particularly evident in the alliance of two organisations offering specialist services which had a world- wide reputation as centres of excellence in their field and had a history of collaboration going back as far as the mid 1900s. At the time of this research, these two organisations had made rapid progress within the AHSC in aligning and reorganising their structures and services to create CAGs, and it was this alliance (henceforth referred to as Firgrove) which was the subject of this case study.

Unlike more hierarchical structures adopted in the wider AHSC, Firgrove with a long history of collaboration and a strong ethos of locally designed, participatory and negotiated services, had developed a team-based model of CAG leadership, directed by three or four senior academics, clinicians and managers.

The Firgrove alliance was led by a strong and visible collaboration between the Chief Executive and Dean, who were seen as embodying the spirit of collaboration. This was supported, moreover, by the wider leadership team. Firgrove had an unusually stable board (with key members having held positions for a decade), and the organisation featured strong relational engagement and identification with its leaders who 'evoke a certain amount of pride' and were perceived as 'punching above their weight' in their field.

4.3.1 Knowledge management system

Firgrove 's openness to ideas and innovation, and its aspirations for development meant that there was an overall interest in creative ideas and practice. Respondents described a strong ethos of listening to and taking seriously others' views, which tended to encourage creativity. An OD internal consultancy unit (ODIC) was one example of a local initiative which

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

was playing an increasingly more prominent role not only within the trust, but in the AHSC overall.

Whereas a rational-analytic focus on research evidence and 'hard data' was respected as highly significant and important in building international prestige, respondents were also orientated to 'soft' data that was more qualitative in character, involving narratives and stories, political dimensions, and more reflective approaches to management knowledge and practice. Accordingly, senior managers advocated a knowledge framework of an 'extended epistemology' in which '*very, very different ways of knowing*' were used to combine 'sanitised data' which might *lose meaning* with a 'local feel' of experience and relationships that *take on meaning*. Accordingly, management theories and models, case studies, uses of narrative, and organisational development frameworks were regarded as important in providing theoretical frameworks to support management reflexivity.

Developing an integrated knowledge management system across the AHSC was a significant challenge to the new partnership, and connectivity between the different Firgrove systems was partial. Nevertheless, an innovative development of the electronic clinical record system was a new research tool to conduct Google-like search and interrogation of the complete dataset of qualitative clinical records. This had strong application as an expert system for identifying qualitative texts that could improve clinical care and research, as well as improving organisational performance, governance and learning.

4.3.2 Knowledge actors

Key knowledge actors in Firgrove included members of the senior leadership team who were known as internationally elite scholars, clinicians and managers. In particular, the Chief Executive and the Dean were experts in academic health science collaboration. They both had international reputations as knowledge leaders in the field; together with their wider team, they may be seen as embodying the tripartite AHSC mission of integrating academic research, the organisation and delivery of healthcare, and education.

An unusual knowledge actor in this case was a director in the researchbased ODIC. The unit supported leadership team development across the partnership – including at board level, where the director was regarded as playing a key role in translating management knowledge into practice, particularly in developing a coaching culture.

At an intermediate level, innovative CAGs were seen as the 'powerhouse' of collaborative working through a team-based department model integrating academic, clinical and management leadership. CAGs were regarded as a key technique to bring together multiple knowledges. The Firgrove CAG leadership structure differed from that of the wider AHSC in producing a

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

team-based leadership model, designed to integrate management knowledge alongside clinical and academic knowledges.

4.3.3 Highlights of findings from the case

Firgrove was a knowledge-producing partnership which had a strong history of knowledge creation and translation between the academic institute and the specialist health services. Their linked reputations as internationallyacclaimed centres of excellence attracted both academics and academicallyorientated practitioners, engaged in linking knowledge production with testing and translation in the clinical unit. Medical practitioners and doctorate-level practitioners were jointly appointed as senior lecturers in the academic institute, and linked academic knowledge with service innovation and clinical delivery. This tradition of collaboration across academic and service boundaries brought together diverse knowledges – biomedical laboratory research and clinical sciences in the academic institute, with multiple and plural knowledges in the clinical service, including social sciences, social psychology and management knowledge.

While this shared history of organisational collaboration was valued as important, the recent formation of the AHSC placed greater emphasis on multidisciplinary, team-based collaboration. Whereas the academic institute's knowledge production was widely respected within the partnership, a distinctive feature of the new clinical-academic teams was a strongly pluralist epistemology, bringing together '*really different belief systems*'. This emphasis on energised relational engagement was an important characteristic of this case, and it was regarded as key to engaging diverse constituents and perspectives.

This orientation towards collaboration and knowledge pluralism was widely reflected, moreover, across the partnership. Team-based leadership had been strategically adopted at senior management as well as practitioner levels, bringing together academic, clinical and manager leadership. Moreover, management knowledge appeared as an important and valued source of knowledge in supporting this organisational approach. In particular, the work of the internal ODIC unit had gained increasing prominence. Its method of 'facilitating conversations' -drawing upon Schein's (193) process consultation - had been significantly adopted in building collaboration and trouble-shooting problems – at senior management as well as service levels.

In Phase 2, the tracer study was the development of a strategic initiative to build a coaching culture advanced by the ODIC unit, based on their work in the field. This approach was adopted at board level, and used to develop 'coaching conversations' in the senior management team. Although the ODIC unit's methods were widely adopted, and were seen as pragmatically important in building collaboration, the codified (text-based) knowledge it sought to promote was only partially adopted as one amongst several

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

'flavours of the month'. Participants cautioned against 'buying into it', as an example of a management fad which tended not to be implemented as its proponents intended.

4.4 Mapleshire - what kind of knowledge organisation was this?

CLAHRCs (Collaboration for Leadership in Applied Health Research and Care) were set up in response to the Cooksey Report (42). The organisations were to address the problem of translation from academic research to clinical practice. Mapleshire CLAHRC, formally constituted in late 2008, was situated within a successful university research department. It was partnered by a number of NHS Trusts drawn from more than one county, an NHS SHA and a local authority. It was financed by matched funding, half from its partners and half from the NIHR.

The first Director was a senior social scientist with a track record in health services research. The fifty full and part-time staff comprised academic research staff as well as a small number of managers and administrators, many recruited from existing university staff or local NHS Trusts. A number of senior staff also held various university and/or NHS posts.

There were six work programmes. Four involved clinical research; the other two addressed the key implementation task. The Implementation Programme was tasked with translating research findings into practice. The other programme, IFCaSS (Involvement, Fusion, Communication, and Sharing and Spread of information - a pseudonym), was the tracer study for this case. It had three distinct areas of work: encouraging Involvement of others with the CLAHRC; promoting Fusion by sharing data and analytical perspectives and extracting common themes from the research projects; and fostering the Communication, and Sharing and Spread of information.

Each partner organisation seconded a number of 'CLAHRC Collaborators' (a pseudonym) to the CLAHRC for one day a week. People with local influence, the Collaborators were to be advocates for the CLAHRC and to facilitate dissemination of research knowledge within their organisations. Some hundreds of interested people, 'CLAHRC Supporters' (a pseudonym), were signed up to receive regular online updates and access to workshops with other stakeholders.

Progress was slow initially. Many different funding bodies made contractual issues complicated. Turnover of academic staff was unexpectedly high because of the lack of promotion opportunities and restricted opportunities to further their careers through publications. Some Collaborators had problems with meeting time commitments and found their roles lacked clarity. Interacting effectively with the large and diffuse group of Supporters also proved difficult. Start up of clinical research projects was held up by the lengthy process of getting permissions for projects through

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

the National Research Ethics Service. Three years into the project, the original Director left and a new Director with a background in management rather than academia was appointed.

4.4.1 Knowledge management system

A knowledge management system is usually constructed *within* an existing organisation. Mapleshire CLAHRC was uniquely created to *be* a knowledge management system, using theoretical insights from social sciences and health services research to assist knowledge translation. Its core objective was to increase receptivity for getting research findings into practice. Key to this strategy was the development of new social networks and COPs, with effective implementation seen as a non-linear social process.

The structure of Mapleshire CLAHRC can be conceptualised as a series of concentric circles with, at its core, a tangible organisation with a Director, Programme Managers, and other employed staff, but becoming increasingly virtual towards its perimeter. Collaborators, with their one day a week commitment, occupied an intermediate space, and the Supporters were on the periphery as 'a kind of, a looser outer shell'.

The Collaborators were a crucial element of the structure and strategy. Drawn from senior clinical and managerial staff in the partner organisations, their status and expertise were expected to enable them to act as 'knowledge brokers'. They were tasked with working alongside research staff to ensure that findings would have practical value and relevance to local needs.

The Supporters were also fundamental to the plan of developing social networks by enhancing and enlarging existing COPs. Signed up Supporters would form a virtual community to be given privileged access to knowledge through web and print-based publications and opportunities to meet through workshops and conferences.

Formal inputs to the Mapleshire knowledge management system were to come from Collaborators; from stakeholders in the form of feedback from a panel of users and carers potentially affected by the research projects; and from commissioners and researchers through specific links with members of the CLAHRC team. Less formally, the backgrounds and experience of members of the CLAHRC team itself provided knowledge to feed into and refresh the system. This could happen directly, by passing on acquired expertise from previous employments to others, or more indirectly through trying to utilise knowledge of management theory as they went about their work.

A brand new organisation, Mapleshire CLAHRC needed time to bed down and start to produce knowledge through the system. Clinical research projects in particular were slow in coming on stream, with a dearth of emergent findings leaving little opportunity for dialogue about

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

implementation. Outputs from the system have thus focused mainly on more generalised communications to raise the profile of the CLAHRC through various media. These have included a website, circulated newsletters and (recently), tweets; academic papers discussing the principles on which the CLAHRC is based; workshops to facilitate development of wider COPs; and a large conference bringing together academics, researchers and practitioners.

4.4.2 Knowledge actors

Key knowledge actors at Mapleshire's inception were the original director (a social scientist) and the director of the university research centre within which it was based. Their long track record covered aspects of sociology, social policy, academic health services and management research.

4.4.3 Highlights of findings from the case

Staff at Mapleshire CLAHRC were united in their support for the key objectives of the project, to develop a new cultural approach to translating research into practice, and to foster better understanding between different COPs. They knew this would require much time and effort, but did not anticipate the degree to which change would be required from members of the organisation's own clinical work programmes who came from different academic backgrounds.

Another feature of the case was a gap between theoretical and practical approaches to management. Academics (even from business schools) do not necessarily have specific management training and many staff appointed to managerial positions in Mapleshire were primarily academics.

The change of leadership may radically alter the academically dominated culture within Mapleshire CLAHRC. The second Director's background and experience in the NHS rather than academia is seen as a possible advantage in terms of the overall mission. A different cultural climate and management style may impact on the way in which the original vision, based on academic theories of COPs and social networks, plays out in practice.

The IFCaSS Programme, the tracer in this case, dealt with a key aspect of the CLAHRC's purpose. Its role was:

...to ensure that relevant stakeholders are involved in our work, connections are made across each of the research themes, and outputs are produced that meet the needs of health service users and carers, providers, commissioners and the third sector.

IFCaSS comprised an eclectic group of people, mainly academics, involved in different aspects of these tasks. Health economists looked at finance in relation to the clinical research programmes, social science researchers were to facilitate the development of COPs and to write up cross-project

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

findings, and some part-time fellows were tasked with raising the profile of the CLAHRC with key stakeholder groups. IFCaSS was also responsible for the on-going support of the Collaborators, NHS employees who worked with the CLAHRC one day per week. Coming from different (often in this case clinical) backgrounds, they were envisaged as boundary spanners, linking the worlds of research and practice.

Information Technology Communications(ITC) and communications were also a key aspect of the IFCaSS programme, in particular to recruit and keep informed the large group of Mapleshire CLAHRC Supporters who were envisaged as extending the sphere of influence of communities of practice.

Management of IFCaSS and the Implementation Programme was initially combined. As these were arguably the two most complex of the six CLAHRC programmes, this task proved very difficult for the original manager, who came from an academic background and had no management experience. Later the programmes were separated and a new professional manager, solely for IFCaSS, seemed to be providing leadership.

The IFCaSS programme was successful in meeting the objective of 'Communication and Sharing and Spread' of information in that large numbers of Supporters had registered their interest. Facilitating 'Involvement' was more difficult. Face-to-face contacts to develop COPs were encouraged through a number of workshops, but opportunities for participation were limited by availability, finance, and travel time. 'Fusion', achieving a synthesis of outputs from the various projects, also proved difficult. Research outputs were slow in emerging and clinical researchers were reluctant to share data at an early stage.

Some of the problems with involvement and fusion were likely to decrease with time. The new leadership was building a more cohesive team and staff were becoming more skilled in managing their resources and improving relationships with clinical teams. The second Director planned to take charge of the programme directly, thus IFCaSS seemed likely to take an even more prominent communications role.

4.5 Oakmore – what kind of knowledge organisation was this?

Oakmore Healthcare was a long established and independently run specialist medical charity. Its headquarters and largest number of beds occupied the original site, a large estate in a Midlands city. Over the years many prominent local families had been involved with the charity, some still retaining close links with the organisation as governors, trustees and board members.

The charity was run by a board of executive and nonexecutive directors. The current CEO, a clinician, joined the organisation in 2000. Shortly afterwards the posts of Medical Director and CEO were amalgamated and

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

since then Oakmore had expanded until at the time of this study a third of its beds were spread between several other sites elsewhere in the UK.

The specialist services offered by Oakmore were not readily available elsewhere and most of its referrals came from NHS commissioners. Until the recession beginning in 2008, demand for its services had ensured Oakmore was in a good financial position, its charitable status allowing profits to be ploughed back into improvement and expansion of its facilities. However, at the time of this study referrals were not so plentiful and the organisation was reviewing its strategy and considering new ways of responding to current demand, including price revision, cost savings and variations to the service packages provided.

4.5.1 Knowledge management system

Knowledge management systems around clinical practice had been in place at Oakmore for many years. In any case, doctors and nurses have statutory professional requirements to refresh and update their clinical knowledge. Hospitals also have statutory obligations to ensure staff are adequately trained in various practical and clinical areas. Additionally at Oakmore there was a strong cultural tradition of encouraging the acquisition and use of knowledge. Originally this was primarily medical knowledge. When it was founded, the organisation was in the vanguard of innovation in its field, and its website listed a large number of published research papers dating from the early 70s to the current day. Oakmore had also established an academic research centre in partnership with another acknowledged centre of excellence and offered clinical placements to staff from other institutions.

A more recent focus on systems for acquiring and using management knowledge dated from the arrival of the current CEO, who, as well as pursuing a career in medicine, had always been fascinated by management and brought a new, business-oriented focus to the organisation. The process of turning a 'slightly old-fashioned trading charity' into a dynamic and expanding organisation required the recruitment of an experienced top management team with a strong knowledge-base and the current team reflects this. As well as considerable management experience in public and/or private organisations, all but one of the non-clinical senior managers interviewed had completed various formal management courses before coming to Oakmore. During the last decade, as the organisation adopted a more business-oriented approach, an increasing number of publications related to management had been circulated.

Part of the new focus on management knowledge was the development of performance management systems, notably Kaplan and Norton's (194) Balanced Score Card, introduced by one of the senior management team members as a relatively objective measure of service quality. Translated into a matrix format, Key Performance Indicators for each ward and

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

department were available online to all management staff and allowed managers at every level to monitor and revise procedures as necessary. Some data were also available directly to customers, mostly NHS commissioners, to help them understand the rationale behind the care packages they were paying for. The other key knowledge management system at Oakmore was an extensive and carefully crafted management training programme. It was clear that by choosing to participate in the management training programmes, using the performance management systems and accepting promotion to managerial positions within the organisation, staff were also signalling their acceptance of the new management ethos and would pass on these values to other staff.

4.5.2 Knowledge actors

The CEO's strategy had been to change the culture of the organisation through the top down introduction and application of management knowledge. This was achieved through employing people with a management background at senior level; co-opting non-executive directors with a track record in the commercial sector to provide a counter-balance to the more traditional views of some other board members about how a charity should behave, and through an extensive training programme for all staff.

At senior management level, the acquisition and utilisation of management knowledge was celebrated and seen as hugely important for running the organisation effectively. For most clinical/managerial respondents, whether doctors or nurses, the idea of acquiring management knowledge and skills was something that they had come to after establishing a clinical career. Management was often seen as an inevitable part of moving into more senior positions. There was nonetheless a degree of enthusiasm amongst clinician respondents in this study for their new managerial roles, though some did talk of tensions experienced in reconciling the needs of their patients with the managerial needs of the organisation.

4.5.3 Highlights of findings from the case

In recent years Oakmore had undergone a remarkable transformation into a modern and expanding healthcare organisation run on the lines of a profitable business (though with profits re-invested in patient care). Meanwhile it had maintained and enhanced its reputation as a leader in its clinical specialist field. The introduction of the blended knowledge management system discussed in Section 4.4.1 was an important feature of this case.

Crucial to this transformation had been the leadership of the CEO, who may be seen as the archetype of a successful clinical/managerial hybrid, though preferring now to identify with management, rather than clinical colleagues. Unusually amongst the managers interviewed for this project, Oakmore's

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

CEO was an avid scholar, reading and writing journal articles, seeking out the latest management texts and putting together a like-minded team of senior managers. Thus, the impetus for change had been driven from the top and linked closely to acquired management knowledge.

Respondents indicated that this new managerial approach, while originally received with some suspicion by some long-serving staff members, had now become largely accepted and acceptable throughout the organisation. It appeared that much of the credit for this could be attributed to the effective way in which the extensive and accessible training programme was able to tailor its courses to the needs and values of staff and the perceived utility of the KPIs generated by the use of the Balanced Scorecard methodology.

4.6 Willowton-what kind of knowledge organisation is this?

Willowton PCT was a commissioning organisation responsible for managing a healthcare budget of around £500 million. It was funded via allocation from the DH. Created in the early 2000's, the organisation planned and purchased a variety of health services for a highly diverse urban population of over 250,000 people. The PCT had a duty to meet national performance targets and standards, safeguard public funds and manage contracts with external health providers (for example, across general practice, community services, secondary care and mental health). More broadly, it aimed to improve the quality of the healthcare delivered to the local population as well as population health. An essential task of the PCT was assessing the health determinants of the local population, understanding broader epidemiological trends and gathering local intelligence to make wellinformed commissioning decisions. It worked closely with the local authority to plan service provision, especially those services that crossed health/social care boundaries, and was committed to partnership working with agencies in the community.

The PCT was financially audited by the Audit Commission and accountable to its local SHA. It reported quarterly to a local Board. The PCT had to comply with the National Operating Framework set out by the DH and ensure that its contracted providers complied with Care Quality Commissioning (CQC) standards.

Like all PCTs in England, Willowton PCT had undergone major upheaval and turbulence following the publication of the White Paper and the passage of the *Health and Social Care Bill* through Parliament in 2011, signalling the restructuring of healthcare commissioning and primary care management in England. This policy had required Willowton PCT to enter a period of transition and prepare for its demise in April 2013. The organisation was working to support the development and progress of a local, GP-led Clinical Commissioning Consortium which would take over many of its commissioning responsibilities, in a staged process, until 2013. This wide-

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

scale restructuring had arisen at a time of prominent fiscal restraint with considerable deficits existing in the local health economy. Consequently, the PCT made management cost reductions in the period 2010-2011 - of around 50% - resulting in staff redundancies, re-deployment and an organisational merger with neighbouring PCTs.

Prior to the structural changes of 2010-11, Willowton PCT supported staff in undertaking further academic qualifications and proactively appropriated ideas aimed at quality improvement and innovation (across both provider and commissioning functions). These included the introduction of lean thinking via the NIII 'Productive Ward Series', whole systems learning and PDSA methodology ('plan-do-study-act'). Senior leadership also enabled the creation of an 'Applied Research Unit' (ARU) which promoted research activity and engaged with external organisations, such as universities. A 'D&R' ('Development and Research') network was similarly established across several GP practices. Within the ARU and D&R network the emphasis had been on work-based learning and action research that engaged with 'real world' problems, both clinical and organisational.

Despite respondents clearly striving to 'make a difference', the PCT's performance management and audit culture was viewed as a constraint on creativity and risk taking. The PCT was described as being '*run on outcome measures, it has to report everything it does in outcome measures*', leading to a preoccupation with data capture and reporting. This would appear to explain, in part, some of the benefits to the organisation of forging academic alliances that could assist with the evaluation of some of its more innovative projects and initiatives.

4.6.1 Knowledge management system

The PCT was informally involved in a constant process of policy filtering, knowledge interpretation and local translation. It could be seen to act as a mediator between governmental-regional authority, the local population and professional groupings, often giving rise to tensions between following guidance from 'the Centre' and tailoring solutions to the local environment.

Respondents noted the many languages spoken in the healthcare field, with different types of knowledges utilised for particular purposes. Thus, if working with the SHA, the PCT might 'talk all about databases and outcome measures'; if engaging with external stakeholders from other sectors (e.g. voluntary, third sector) 'NHS speak' might isolate those 'who inhabit other worlds'; if engaging with clinicians, 'clinical evidence' and peer pressure is likely to be most persuasive.

Individuals observed that 'hard knowledge' had become increasingly important and 'business skills' highly valued in the 'new climate' of healthcare. Interestingly, clinical leaders discussed being exposed to a new management lexicon when entering managerial or strategic roles – where legal, organisational and financial knowledge had to be comprehended to do

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

the job. This was unfamiliar terrain compared to a validated biomedical knowledge base, and a managerial role could potentially isolate lead clinicians from their peers.

There was no singular knowledge management system at the PCT or systematised approach to knowledge sharing. A barrier was simply the fact that different organisations (hospitals, community services, GP surgeries) with which the PCT did business used different IT systems and software, amounting to a 'mixed economy of computer systems' and each organisation communicated its own internally-facing updates/bulletins. Knowledge management was felt to be generally poor, even 'shoddy', with multiple spreadsheets existing in place of usable databases. This meant that data-gathering and cross-organisational knowledge exchange could be cumbersome and problematic. An off-site library was reportedly little used and, on an individual basis, knowledge search strategies tended to occur on a project-specific, need-to-know basis.

4.6.2 Knowledge actors

The original senior leadership team at Willowton PCT (i.e. CEO, directors) received outside assistance from organisation development consultants over the years and cultivated relationships with external, specialist organisations in order to facilitate knowledge acquisition and personal learning. The leadership ostensibly supported the principle of organisational learning and 'grassroots' approaches to service improvement. For example, a group of staff were financed to attend the annual Conference of the Institute for Healthcare Improvement in 2005 which stimulated interest in the PDSA methodology as a mechanism for change. Attempts were made to 'cascade' new knowledge and evidence throughout the organisation using internal seminars.

Alongside these developments, a clinical director - with an academic background - was entrusted to lead the ARU and import their ideas about whole systems engagement and organisational learning to the local primary care community – as outlined above. This individual was perceived both inside and outside of the PCT as academically-minded and a source of theoretical management/organisational knowledge. Responsible for forging outward-facing partnerships with several universities and applying for external research grants, this clinical director acted as a knowledge broker between academic-research and practitioner communities. In addition, through structured stakeholder learning events and their own professional network, they sought to facilitate dialogue and perspective exchange between different occupational groupings in the local primary care community to bring about change.

It was commonly observed that strong leadership and communication skills were required for commissioning and service improvement in primary care, but that leadership had to go '*beyond just the stick approach*' associated

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

with the PCT's performance management function. Due to the clinical director's personal credibility – and their having access to some independent sources of funding, the clinical director was able to adopt a 'softer' approach to organisational change and development locally, with further financial assistance and oversight provided by the PCT executive. The clinical director's ability to challenge and enthuse other professionals was understood by external stakeholders as a praiseworthy, non-hierarchical form of leadership which resulted in an expanding network or community of practice.

4.6.3 Highlights of findings from the case

The management knowledge tracer was an 'initiative for integrated care' (IIC), instigated in 2009. It was premised upon a 'whole systems' and 'action research' approach, a methodology outlined theoretically in several publications and a book authored by the clinical director.

The initiative attempted to establish 'connected learning spaces inside a local health community'; multi-disciplinary opportunities for learning, critical reflection and dialogue. The idea was that learning spaces become mechanisms for generating solutions to tangible problems which could be applied or trialled in other parts of the healthcare system. The underlying philosophy – espoused by the clinical director and figurehead of the initiative – was that healthcare systems are in a constant state of change, flux and evolution (are 'complex adaptive system[s]'), which necessitates an approach to change that is adaptable and dynamic. 'Whole systems engagement' and learning is reasoned to be a developmental process where connections are made between individuals to bring about incremental, small-scale improvements to practice. The model is purposively 'bottom-up' and designed to ensure that the participants and contributors identify and set the priorities for action.

The project-based learning initiative (a soft and flexible approach to organisational change and service improvement) became increasingly marginalized as financial management imperatives came to the fore and different approaches to organisational change conflicted. Consequently, the project was '*summarily executed*' for six months; a planned summer workshop did not go ahead and email communications to stakeholders ended.

Over the period of the fieldwork, it was striking that the 'whole systems' approach was a philosophy and methodology requiring a strong leader to promote its value, both to multiple professional and public audiences and within the PCT. A critical issue for the sustainability of the IIC was demonstrating the project's success, particularly quantitatively, and aligning its direction with corporate PCT strategy. Data gathering, therefore, remained high on the agenda, reinforced by the clinical director's own links with academics who formally evaluated the project. However, perhaps

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

because of the longer timescales of academic evaluation and research, there remained a sense from interviewees that, despite the IIC's worthy ambitions and valued methodology, 'hard' outcomes had been more limited and difficult to track, with the notable exception of progress made in increasing referrals to a particular mental health provider service. In fact, respondents struggled to see how the IIC's 'softer' processes and lessons *could* be evaluated and channelled into existing performance measures and metrics. There was also a feeling that there had been a lack of formal feedback about the project's progress and achievements.

The lack of 'hard' outcomes and alignment with corporate priorities was identified as a barrier to securing wider endorsement for the project, especially from some individuals within the PCT.

4.7 Summary

This chapter presents edited versions of the contextual material on the six case sites, noting the variety of contextual challenges they faced, the range of knowledge management systems in operation and the importance of certain knowledge leaders. The chapter also identifies the management knowledge tracers in each site. To recap, these were:

Beechwell - The progress of a cross-departmental theme intended to increase potential innovation and translation across the departments.

Elmhouse - The application of the Elmhouse Text in a PCT as part of a QIPP project.

Firgrove - The strategic initiative to build a coaching culture advanced by the ODIC unit drawing on Schein's process consultancy model.

Oakmore - The transformation of the organisation and the role of the Balanced Scorecard in this.

Mapleshire - The role of the IFCaSS programme in meeting the aims of CLAHRC and to develop new social networks and COPs.

Willowton - The initiative for integrated care which was underpinned by a 'whole systems' and action learning approach.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

5 How do managers access and use management knowledge?

5.1 Introduction

This chapter focuses on the analysis of the Phase 1 data and presents findings on individual managers' engagement with management-related knowledge, including, although not exclusively, research-based knowledge. It explores general managers' and clinical managers' own responses to the research question: 'under what circumstances and how do managers access and use management research-based knowledge in their decision making?' In order to situate the enquiry in terms of managers' day to day practice, this question was operationalised by seeking to understand how managers engage with management-related knowledge – including, although not exclusively, research-based knowledge. The chapter draws on Phase 1 data that comprised in depth interviews with 45 general managers and clinical managers (for details of selection see Section 3.3.1) who were interested in using management research and knowledge (as part of Phase 2 respondents were also asked these questions, but not in so much depth as in Phase 1). Analysis was aided by the use of NVIVO software (see Appendix 5).

The findings in this chapter are discussed and illustrated by key quotations from the Phase 1 data (please note that quotes used do not identify either the role of respondents or the case sites from which they come - these were high profile organisations and respondents and a particularly stringent degree of anonymisation was a condition of obtaining access).

First, the data showing influences on management knowledge (Figures 1 & 2) derived from the interview tick list (Appendix 1 Sec. 2.12) described as part of the Phase 1 research design is presented. These figures show that across the cases managers' orientation towards knowledge focused on experiential knowledge and knowledge drawn from relationship-based communities of practice. Management texts appear more useful and adaptable when mediated in training contexts or by respected colleagues, research-based knowledge and particularly management journals appear as the lowest source of interest and influence for most managers. This suggests an interesting and marked tension between two contrasting forms and sources of knowledge: a) relationship- and experientially-based knowledge; b) EBMgt texts and codified knowledge.

In the following sections the findings from analyses of the tick list and interview data are discussed in more detail. It can be seen that these respondents had a particular orientation towards the limits or boundaries of

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

existing knowledge. This orientation is firmly anchored in experiential knowledge and present context. Some examples are given of managers who presented as exceptional knowledge leaders, people who by nature of their standing in the organisation and/or personal characteristics were in a position not only to access management knowledge but also to influence others to consider using such knowledge to address organisational issues. Such knowledge leaders were first and foremost engaged in present experience and relationships, seeking external (and sometimes formal) forms of knowledge for the purposes of addressing issues, questions or puzzles that were firmly anchored in present circumstances (and often personally engaged-with) experiences.

Some knowledge leaders appeared to be capable of modifying abstract knowledge by rendering it useful as a resource for management practice, indeed might even be accomplished at doing so, purposely disrupting local knowledge, brokering inside-outside boundaries, transposing and personally transforming abstract knowledge into a different register through internalised and embodied management practice.

The biographical dimensions of managers' careers were found to play an important (and previously neglected) role in shaping managers' orientation to knowledge – including their motivation and willingness to engage with and broker management texts. Respondents' accounts identify career patterns which are often enduring, and rooted in early formative (and in some cases, childhood) experiences. The findings suggest knowledge attitudes may be significantly anchored in biographical narratives and formative events – in some cases more immediate, as well as historical – which shape managers' identities and orientation towards knowledge. These narratives are useful in understanding the distinctive and positive orientations of these Phase 1 respondents towards knowledge texts and research-based knowledge.

Finally, the chapter focuses on some distinctive aspects of knowledge leadership, in which certain knowledge leaders' orientation towards knowledge appears to straddle (and personally integrate) formal or textbased, and experientially-based forms of knowledge. More than merely *translating* management texts (which suggests a discursive, linguisticallybased process), it is suggested that this might be better understood as *transposing* text-based knowledge into the contrasting register of relationally-based knowledge. Abstract and codified knowledge may thus be transformed into experiential, and intersubjective knowledge, as locally important and legitimate forms of knowledge. It is suggested that this knowledge transposition hinges on the personal qualities and capacities of certain knowledge leaders whose role is not merely one of translation or brokerage, but who are regarded as personally plausible and persuasive leaders.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

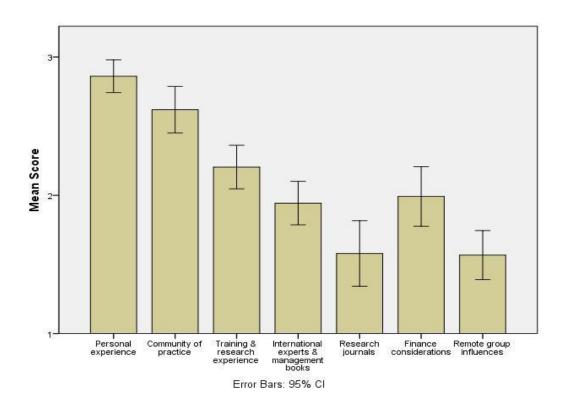
5.2 Influences on management practice

The eighteen categories on the original 'tick list' questionnaire (Appendix 1 Sec. 2.12) of possible influences on management knowledge were grouped as part of the analysis into seven discrete types of influences.

- Personal experience.
- Community of practice (others peers and colleagues, managers in organisation).
- Training and research experience (your early training, training courses, your on-going training, your own research).
- International experts and management books.
- Research journals.
- Finance considerations (market considerations, contract specifications).
- Remote group influences (risk of litigation, mass media, pressure groups).

The results are shown in Figures 1 and 2 (the detailed table of results is available at Appendix 8).

Figure 1 Influences on management practice



[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al.* under the terms of a commissioning contract issued by the Secretary of State for Health.

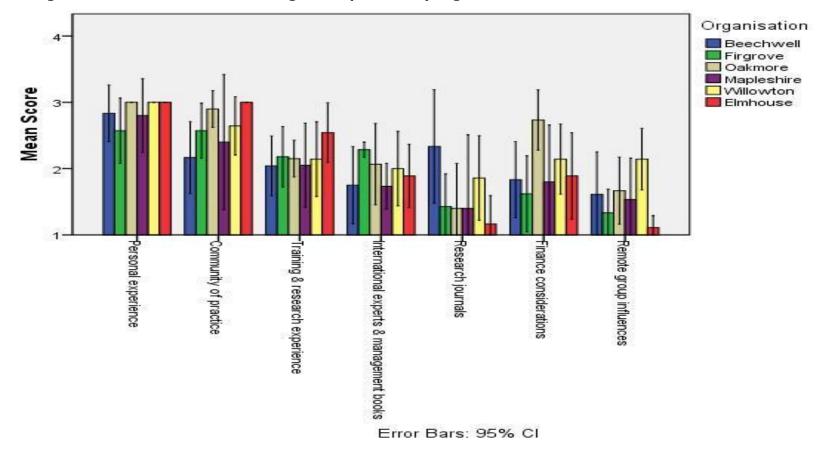


Figure 2 Influences on management practice by organisation*

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

There were three significant findings from this questionnaire:

Firstly, the strongest influence was personal experience, followed closely by the influence of respondents' community of practice, involving other peers and colleagues, and managers in their own organisation. These findings suggest that in this sample, the domain of practice was a far more significant influence than formal knowledge and research evidence.

Secondly, the weakest influences overall were management research journals as well as remote group influences, such as mass media, pressure groups, and risk of litigation. Differences between respondents and cases, as Appendix 8 clarifies, could moderate this. For instance, in Beechwell, research journals appeared to have a significantly higher influence than in Elmhouse; in Elmhouse where training and experience were particularly strong influences, formal management texts had low influence. In general, however, these findings support arguments in the literature review that domains of management practice and formal management knowledge are strongly distinct, and may have varying degrees of commensurability.

Thirdly, the above differences might be mediated by training contexts, as well as through accessible management texts shared between managers and circulated as a form of social exchange. Another important mediating influence could be plausible experts versed in practice and trusted to authentically '*tell their war stories*'. As a respondent pointed out:

I think that the barrier is you have to find somebody. The good idea written by an academic, even if it's in the Harvard Business Review, only goes so far. What you have to do is find somebody that people can really identify with and respect. When <u>they've</u> done it, [they] can tell their war stories, and what they've done to overcome the problem - that's when you're able to get buy in.

It is suggested that this presents an empirical puzzle. Some respondents' knowledge orientations might be predicted to include research evidence, particularly given that respondents in this phase of the study were chosen as having an interest in management knowledge. But how and why might certain knowledge leaders be able to broker these contrasting domains – transposing and transforming abstract knowledge to make it interesting and useful as a resource for experiential, pragmatic and interpersonal knowledge?

The next sections seek to answer these questions, firstly by considering the influences of biographical narratives, career formation and identities, and secondly, by turning to the distinctive practices of knowledge leaders.

5.3 Type of orientation towards knowledge limits/ boundaries

Although most managers interviewed reported accessing and using researchbased management knowledge in a restricted way (if at all), managers across

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al.* under the terms of a commissioning contract issued by the Secretary of State for Health.

all cases described an orientation towards addressing knowledge limits in relation to making progress on a puzzle or an issue faced in their immediate context.

5.3.1 Handling an issue or puzzle to be solved

Respondents described certain issues or puzzles acting as a 'trigger' for engaging with management knowledge. Changes to the policy and stakeholder environment could be significant stimulants for knowledge engagement, as respondents attempted to handle new issues.

There may be suddenly politically a lot of talk about something, and that would trigger me or the organisation to suddenly have to learn about a particular issue. I'm starting a project on mutual ownership, John Lewis-type models, because politically people are talking about it - so I have to learn about it.

Especially for more externally-focused organisations, triggers for new management knowledge might take the form of a challenging puzzle or demand that originates from the environment.

The easiest forcing device for us to work with is the client who says "can you please answer this question?"

Yet internal organisational issues also presented management challenges, where respondents described reaching a particular limit, such as handling a dysfunctional organisation, understanding resistance to change, and dealing with clashes in leadership.

So I've got a problem, I can't make sense of it, often a people problem really, the department isn't functioning well or we're not getting enough business, so I'm looking at the Marketing Director, I'm looking at the Finance Director, I'm looking at the Operations Director. Some kind of frustration [or] puzzlement; it makes me then go off and think about it.

Challenging management experiences tended to shape respondents' thinking about management, often prompting them to deliberately engage with management knowledge. An important question, though, is how respondents orientate themselves towards very different forms – and sources – of management knowledge. Whereas research-based and more formal, theoryorientated management knowledge tended to be under-accessed and underused by most interviewees, practice-based problem-solving and a pragmatic orientation towards business outcomes were stronger influences. As one respondent suggested, this form of knowledge involved seeking to more fully engage with management experience:

I'm not a great seeker after knowledge in a formal sense, what I am a seeker after is experience.

This orientation towards pragmatic knowledge appeared a strong motivation for most managers across the sites, including several academic-manager hybrids engaged in applied research.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al.* under the terms of a commissioning contract issued by the Secretary of State for Health.

One of the reasons I left academia ... was I wanted to do much more policy orientated applied research rather than the academic style of research. ... I wanted to work quickly on policy-based problems, kind of quick turnover stuff; I wanted to be responsive to the real issues that were out there, rather than ticking boxes for the academic but not answering the questions for practitioners.

5.3.2 Organisational knowledge as competitive productivity

An orientation towards new management knowledge may be strongly influenced by organisational context and strategic objectives. Respondents' engagement with management knowledge may not just be a response to dealing with issues to be solved, but a means of building personal and social value – primarily through tools and methodologies with practical application.

The Chief Executive said they're doing such and such in another Trust, and they're doing it really well. So that would cause me to search, to contact the people and find out exactly what this is about, how are we going to develop our own. I might go have a conversation with them... I wouldn't be thinking we need to change this service so what books should I [read]. I will use tools...because I like process, I tend to see the big picture.

Competitive interest in staying ahead of other organisational players was often an important driver, particularly where managers personally identified with a position of being at the organisational vanguard of new ideas, tools and trends. As the following respondent describes, this search for evolutionary ideas may prompt actors to look towards developments in other organisations, as well as ideas gleaned through academic research.

I'm constantly focusing on what the new evolutionary, revolutionary things are in people and leadership development. I'm very much an advocate of experimental learning and looking at different methodologies, models and ways of delivering experiential learning. So I spend a lot of my time academically researching, but also looking at other organisations.

Managers' own experience of being personally engaged with this knowledge appears an important aspect of this endeavour to bring new ideas into their work, and to devise ways of handling and applying them. More than merely using management knowledge as a tool, managers described being personally immersed in knowledge and its application as a sophisticated interpersonal craft.

Part of my role is absolutely to try and stay abreast of the latest thinking, get new ideas and try and apply them, definitely. It's very much like managing a football team. It's really understanding the people that you're working with, finding and understanding what makes them tick and how you need to cajole and work with those people, understanding their needs, their motivators and what influences them, and there are lots of really helpful tools out there to help do that.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al.* under the terms of a commissioning contract issued by the Secretary of State for Health.

This suggests that formal and codified forms of knowledge could be regarded as 'raw materials' which might be transformed into locally useful knowledge through managers' skilful handling and application. Indeed, as this respondent suggests, such engagement with knowledge may be an elaborate practice in which managers' abilities to handle and transform materials may be less a question of knowledge translation than a sophisticated mode of knowledge production.

It's a kind of shared endeavour. I'm offering some of my experience and frameworks in relation to things [others] bring about the real world, and between us we make sense of them. We do very experiential work with people, and therefore the biggest tool we bring to it is ourselves. What influences me is the [knowledge] material out there, but actually it's what I do with it that [matters].

Such experiential dimensions appeared more important for some respondents than others. For instance, some managers primarily sought to apply researchbased evidence - recognising the shaping role of local actors only in hindsight. Nevertheless, an orientation to pragmatic value was strong across all cases, operating as a test of whether – and how – knowledge might ultimately prove to be useful.

But the key issue is what we do about it. The thing that stands out about our work [is] we don't conclude by saying we found this, we conclude by saying "so what?" And that is the difference - the ability to push people to [and I'm bashing the table...] answering the "so what?" question. We have to interact with lots of people to do that, a wider range of stakeholders. What we're trying to look for is: who are the audience we're trying to reach? Does this get our messages across? Are there other things that you would find interesting?

While handling and using forms of management knowledge was thus commonly held to be important for both individual and organisational advancement, the notion of pragmatic value emerged as *the* key test.

My main filter would be about pragmatic value. Face validity would be really important – would it be of practical value... [Some groups aren't] able to understand complex academic models...you've got to give a blend of different learning activities to keep them engaged.

For some respondents, pragmatism and pragmatic value – appeared a dominant form of knowledge in its own right.

They recognise the need to be generating new knowledge just the same as [academics] do... but their notion of knowledge is somewhat different. They have to deliver something which has to be accepted by others and used by others. Not just [knowledge] generation, its sharing and impact... because they think it has great economic value and that it'll impact on the fortunes of the company... they would be open to anything which was of value to them.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al.* under the terms of a commissioning contract issued by the Secretary of State for Health.

Where such a focus prevailed, it tended to preclude academic research and other external knowledge sources, through what one respondent described as a '*terrible not invented here syndrome*':

The natural impulse is to be... amazingly inward, an amazing lack of intellectual curiosity to anything produced by anyone that isn't [ours]. If we write it, everyone reads it... That's compounded by the fact that our own knowledge generation is sometimes very good and it's sometimes not at all good.

5.3.3 Curiosity and innovation

If a dominant organisational focus on 'downstream' knowledge activity may have an attenuating effect on managers' openness to academic and other external sources of knowledge, stronger interest in 'upstream' knowledge may tend to widen actors' curiosity about – and willingness to experiment with – new knowledge.

I am somebody who dabbles in different worlds, compares and contrasts, and doesn't sign up and become a member. I get very frustrated [with] the issue of knowledge, there is an assumption that the paradigm that people learn is the truth. I think we choose academic paradigms because of our preferences and often that relates to our personality. I think I'm existentialist by nature, so I don't treat it as a fixed knowledge base, but I have a pleasure and comfort in grappling with ideas in that context...as opposed to a blueprint for: "this is what knowledge is and this is how you apply it".

Some respondents described accessing a wide range of management knowledge as important sources of creativity and innovation.

I tend to be a flicker and I'll [select] things that I think are topical or might come up. I'm always curious to go and find out more. [Some discussions] just ignite a flame, and I'll be looking to test their thoughts on other people, to sort of encourage conversation about it. My partner says I'm an albatross...I will survey a situation and then I'll swoop. So I want to gather as much information on a very broad sense before I will then filter down and study something in-depth.

Indeed, a number of respondents described being naturally motivated to explore new ideas and possibilities, both stimulating their own curiosity and encouraging it in others.

I'm a curious person, so as a leader of the team I try and encourage other people to be curious. People have a natural curiosity to go off and try and find new things. If we're out somewhere and people mention something to us, then I'll go off. So the 'Fierce Conversations' stuff all came from my coach who said "have you read this book?" So I read this book and contacted [the massive industry behind it]. So that's how it is, you see, natural curiosity.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al.* under the terms of a commissioning contract issued by the Secretary of State for Health.

For some respondents, actively working with curiosity appeared to advance beyond incidental discoveries into a more systematic, and elaborate, art form.

What I've been trying to do in a more systematic way is to start thinking, what solutions do we know are out there... what's the evidence base?

One has to be creative, one has to have ideas. The people who have been most successful [here] have come up with original ideas rather than just done the tasks and delivered. It's people who are kind of creative, more aware of the outside context and able to identify opportunities for us to have an influence... The people who are most successful are those who kind of do that horizon scanning, pre-empt developments, and then design research.

Whereas some respondents' access to knowledge involved reviewing the research literature, their processes of search and transposition into practice could also reflect this orientation towards creativity and innovation. According to the following respondent, inducing organisational and management change is an inherently creative act, in which '*you have to think of some other way*' (besides management research evidence) to build a culture of innovation.

Most management texts don't know how to deal with [NHS] organisations, there's a mismatch...because I don't think there's ever been an organisation as complicated and dysfunctional as the NHS. So you can't rely on the normal texts. People start with Peter Senge on organisational learning, then they roll in Jack Welch from GE, and Takeuchi for Total Quality Management, all this stuff. You say to yourself, "<u>what</u>?"! You're comparing apples with oranges. You have to think of some other way. So the question in my mind becomes, here you have a command and control system. So where's the literature around that? The literature is all in the American military, so I'm beginning to explore that – how are you going to lead a platoon of people without getting them all killed, where your resources are few and are fixed, the information is incomplete and not reliable and a mistake could be catastrophic... So it gets to be a really interesting problem. How do they take a guy who's green and turn him into somebody who could make these kinds of decisions within the space of, say, eighteen months?

5.3.4 The art of knowledge use

While not necessarily eschewing the use of management 'science' through drawing upon research-based knowledge, many respondents emphasised the craft or '*art*' of handling organisational and interpersonal relations.

You don't just dive in...thinking through the argument logically. There's a way to do it, almost like medical [psychiatry] in terms of the actual engagement of the client. There is an art and a science to doing it. The content could have an evidence base, but what might appear to be the woolly aspect actually isn't woolly.

[Using queuing theory] was my idea... I look at the waiting lists, manage the performance and so what are we going to do? It's a nice theory but the issue is you're working with a group of people who do not like to be managed...

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al.* under the terms of a commissioning contract issued by the Secretary of State for Health.

Accordingly, what many respondents found persuasive tended not to be rational-analytic claims to formal management knowledge, but modes of interpersonal and experiential engagement capable of shaping, adapting, and responding to other individuals, groups and organisations.

Yes, so what model did I draw on? There is a way of thinking, which I suppose is about engagement and understanding, and unpacking, unblocking, and trying to get alignment between heart and head... There's a massive assumption in the field that what was blocking [medical consultants] was something cognitive and practical, [whereas] actually they were furious and terrified - we dealt a lot with fury and terror.

Some respondents emphasised the potential of applied and action research in bridging formal knowledge and management practice, potentially to the benefit of both domains. For instance, for the following respondent, action research was seen as facilitating a locally-produced solution to a complex social problem.

I did an action research project with a teacher...where thirty percent of the kids are homeless, all below the poverty level. She not only brought their reading and writing levels up to the city standard, but exceeded them...without any extra staff or any extra resources. She just figured out a way to do it... The key here is that the solution to the problems, they're actually in your head – it's a question of facilitation and you get those solutions out.

Somewhat differently, in another example, the interpersonal dimensions of action research provided what was regarded as an effective means of converting research findings into organisational learning.

Action research methodology influenced the way we spread the knowledge...there were elements of having to form close relationships with people we were working with, developing rapport and... relationships, which really facilitated it. We were working with an organisation that was very centrally driven and it didn't filter down, so we had to do the filtering down ourselves and actually go to the people we wanted to influence...that's what made it effective.

Whereas relational (interpersonal) engagement appears, generally, as a significant element in using and applying management knowledge, a related theme (as later discussed) is leader-follower relations, in which the knowledge leadership of certain individuals may 'strike a chord', resulting in wider engagement.

Partly it's timing, when you get something and it strikes a chord because the time is right for that idea. Partly it's who's saying it, so the credibility of the leader whose idea it is, and who's generating that energy. Partly it is the ability to get cross-divisional input - if it works [for others] as an idea, it makes it much easier. And that's kind of galvanised people across [this organisation] and has worked. Because it's been an idea that's grabbed peoples' minds and attention, vision and values, yes actually having a natural synergy. Don't impose it where there isn't a natural synergy.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al.* under the terms of a commissioning contract issued by the Secretary of State for Health.

5.4 Role of career formation, identities, and biographies

Respondents' accounts suggest that life histories can play an important role in knowledge orientations. For some managers, formative family or early organisational experiences were experienced as providing an early foundation for their knowledge orientations, although professional careers and apprenticeship-like experiences could also provide important formative influences. These narratives were useful in understanding managers' knowledge identities, including orientations towards knowledge texts and research-based knowledge.

5.4.1 Knowledge and personal identity

An important influence for a number of respondents appeared to be a stronglyheld relationship towards certain knowledges which carried personal meaning. Some respondents were also very aware of the boundaries of their knowledge and reported an enduring orientation towards extending their knowledge limits. As the following respondent described, this could involve a personal philosophy of growth, learning and development which might be experienced as 'core' to their self-identity.

I have a philosophy around always learning and never stopping learning and always developing. I mean it's just core to what I do. It's not so much about ambition, it's about growth and development and learning. So in some ways everything makes me want to learn, if something throws up a question and I don't know the answer, I want to learn about it.

Moreover, certain knowledges might be strongly emotionally invested, carrying much personal meaning and value. One respondent recognised that such knowledges might be situated within a personal 'comfort zone', in contrast to more emotionally distant and less familiar knowledges.

I was fascinated by what I saw as certain difficulties that were beginning to become apparent in this service. And so I went to the literature on psychoanalytic systems, I went to the literature on social defence systems...You could well argue that I don't go outside my comfort zone, that's the bit I'm interested in and that's what I want to learn about.

Such patterns may be enduring, arising through formative experiences – including childhood – that may continue to shape respondents' motivation towards knowledge. As this next respondent suggested, certain early experiences – such as humiliation before colleagues – can have a significant effect which is emotionally felt.

What's the state of the literature right now? That's always my starting point. That's really, really important to me. If I don't know what's being written, then I have a fear... so I want to understand what the [academic] community is thinking. Now I'll tell you something - a lot of people could

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al.* under the terms of a commissioning contract issued by the Secretary of State for Health.

misinterpret this and say...he's an academic with chalk up his nose. That's not the answer. The answer is I came from a poor background, and if I tried to take shortcuts when talking with people smarter than me, I always looked stupid. My older brother would tell me something, I would repeat it at university – and people would turn around and say how could you be so naive? And I said enough is enough, I'm not going to go through life like that, looking stupid. I want to do my work before I open my mouth. So I feel it very personally.

More immediate experiences might also prompt respondents to engage with knowledge as a personal resource; for instance as a means of dealing with anxieties about the way they were approaching their management work.

I've been studying at [an elite business school] on a doctorate in organisational consulting. It was the experience of feeling quite stuck in my work. This type of [management] work can have a brutalising effect. I feared I was becoming rather harsh in my approach, and I wasn't happy with [my] style. So that was what led me onto the [doctoral] training.

5.4.2 Career formation

An interesting dimension of managers' identification with certain knowledges appeared to be the career choices they had made. A number of medicallytrained managers interviewed described elite careers through university and prestigious teaching hospitals. However, moves to specific specialties tended to be motivated by personal values, a sense of 'fit' with relational approaches to working with people, and an ambition to 'make a difference'. Sometimes these might be prompted by early life experiences. For instance, one medical manager described feeling a 'pull' towards clinical work, influenced by a family tradition.

I went into general practice because I couldn't think of anything else to do. Something to do with...people and I had a strong family history of general practice. My father died when I was quite young. Probably there's something quite important about my motivation inside that I'm still yet to get to the bottom of...

Similarly, some medical managers described influential exposure to management knowledge which appeared to shape their later interest in healthcare management.

It was probably my childhood...my father was a professor of public health. So he always discussed policy and how you set up health services - a constant family discussion. I was never particularly excited by seeing patients alone. I started to have this realisation that as an individual doctor I was a small cog in a large machine, and thought surely there's a better way of doing this.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al.* under the terms of a commissioning contract issued by the Secretary of State for Health.

The family business [was] healthcare. It was very much always discussed over the breakfast table, and I worked in every role that you could in [the business] from a schoolboy really. So petty cash, double entry bookkeeping and stocktaking, delivery notes and all the sort of healthcare stuff. I'd literally sit on the kitchen table and my father would explain it to me.

Experiences of strong social organisation were also important for some respondents, sometimes shaping long-held personal values and ways of being in organisations. For this respondent, early childhood experiences of organisational structure appeared to have been internalised.

My father was in the [armed forces], so my whole life was exposed to it, I lived on [military] bases – so, interesting in terms of organisational structure and exposure to management structures. Strangely, the way I do things is very systematic and organised and, and my clinical area is a highly structured service. I think a lot of that probably does come from [military] structures.

A very different experience of social organising was experienced as seminal for the following medical manager, who described the origins of a later interest in whole systems development.

[What] influenced me more than the theories I later got to grips with - I was in a South Indian village and once a day the entire village turns out, throws their nets out to sea, and hundreds of people pull in the fish. And when the fish come in, there was about four or five fish inside... At one level that didn't matter because there was something about the communal activity that was meaningful. I remember having this great sense that if healthcare systems could catch this collective endeavour and pull on the same rope for a collective good, that would be a good way of running healthcare systems.

Respondents' formative experiences were sometimes described in terms of influential, apprenticeship-like relationships with knowledgeable supervisors or mentors. Particularly for managers with PhDs, the longevity of such relationships over a formative period in which managers gained intensive familiarity with a body of knowledge appeared to have a significant influence. In the following examples, these managers' doctoral training provided key influences which shaped both respondents' knowledge orientations (for instance, introducing management knowledge as a discipline) and subsequent career direction.

After high school I didn't really quite know what I was going to do... I worked in a library cataloguing department and got really interested in classification systems, so when I was doing my PhD, [working] for a large library was probably my favourite job. That really formed the person I am. When I met my [spouse], I introduced [that person] to these professors before I even introduced [that person] to my parents - that's how close I was to these guys.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al.* under the terms of a commissioning contract issued by the Secretary of State for Health.

I wanted to be a psychologist...but it wasn't until I did my Master's that I realised that I liked doing research. I found this research assistant job with [a business school professor], and it was a definite trigger point. He definitely looked after me [during my PhD], has been a huge influence, and I'm infinitely grateful to the role he's had in my career. [He] is still in my head, making me think about the independence of what I do and the rigour.

Finally, work settings can also have an important role. 'Being discovered' by senior managers who then helped steer junior colleagues' development provided another means of shaping respondents' orientation to management knowledge as an inherent aspect of their developing careers. For the following clinical managers, chance encounters with senior executives ultimately led them to develop careers in senior management.

I moved from being a ward sister to a hospital management role through a [chance] meeting with the chief executive. I won't tell you the embarrassing story but I asked him a question which drew me to his attention. Many other chief executives would have been affronted by the cheekiness of that question. But out of that encounter he came to see me and said that he was looking for somebody to support [a hospital structure].

I trained as an occupational therapist and did various roles. But I did my Masters, got really interested in organisational consultancy [and] Edgar Schein - and the chief executive asked me to start a consultancy unit.

For other respondents, their experience was one of seeking out and eventually discovering more varied organisational settings which seemed to fit their interests in a range of knowledge areas and management practices. As the following respondent described, moving to a healthcare consultancy provided a greater variety of management projects than seemed possible in clinical medicine.

I started reading chemistry, completed my medical degree, and then I really ended up here because places like Elmhouse are fantastic for giving you exposure to numerous different organisations and ways of working. I certainly wouldn't go back to clinical medicine...you pick up so many skills very fast, so you start getting good at being a consultant as opposed to [being] good at the healthcare business.

Likewise for this manager, the consultancy setting provided a 'great home' which suited his/her personal working style, as well as his/her orientation to project work.

I couldn't really see myself in an academic life. So I left for a job where I felt I could change the world, and spent the next eight years working in a huge range of projects, then went to business school and I absolutely loved it - an MBA is super practical. My biggest challenge in life [is] I have a very short attention span, I get bored very easily. Elmhouse is a great home for people

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al.* under the terms of a commissioning contract issued by the Secretary of State for Health.

who don't know what they want to do when they grow up, because you can try lots of different things. I joined with the intention of staying for a year or two - and somehow I find myself, a little bit to my surprise, still here.

5.5 Knowledge leadership

As noted in the introduction to this chapter, knowledge leaders have not only unusual motivation and the ability to transpose text-based knowledge into practice-based knowing but are also able, by virtue of their personal standing within the organisation, to ensure that knowledge can be accessed and used by others. This section describes some interesting and surprising aspects of knowledge leadership, which suggests that certain managers are able to connect effectively with both formal or text-based and experientially-based forms of knowledge. Moreover, their accounts indicate efforts to personally integrate these knowledges, and to draw upon this integration as part of their management practice.

5.5.1 Knowledge transposition

In contrast to the notion of knowledge *translation* which suggests a discursive, even linguistically-based process, it is suggested this process might be better understood as *transposing* text-based knowledge into the contrasting register of relationally- and experientially-based knowledge. As described in this section, such transposition may hinge on the personal qualities and capacities of knowledge leaders who may be regarded as personally plausible.

As the following respondents described, efforts to transpose research-based knowledge into management practice could come at a significant personal cost, including disrupting relations and creating bad feeling which might persist long afterwards. Despite partly anticipating such reactions, one respondent painfully experienced the level of disruption as a burden even years later and experienced a degree of regret and self-blame about their handling of the project.

My MBA project has gone down quite badly [with] managers. It had a lot of research evidence, interviews, and flow data. My previous experience with management here is that numerical-focused data was thrown out the window. Who could shout loudest wins the argument. But it was the interviews that they weren't so happy with, they wanted to know names...I wasn't surprised, I think I expected it. It's been a weight around my neck. There are a few people who are still smarting from it even three years on. It was definitely taken up because we ran a project following it... [but] it didn't get that far because there was a difficulty and tension. It's fair to say that the blame laid on both sides.

The next account suggests a more deliberate process, in which introducing new knowledge may be inherently disruptive to the setting. As this manager described, the work of transposing research literature into management

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al.* under the terms of a commissioning contract issued by the Secretary of State for Health.

practice may involve purposefully raising tensions and creating problems, even if this comes at a personal cost.

I really want to get a transformative way of working. So I go to the management literature about this - Leigh Star and what made different groups of people collaborate...What you really want to be able to do is say, "Where is the tension? What's at stake? What do we believe in?" One way of doing that is by making differences explicit, it's about raising tensions in some ways. I want people to make explicit what their expectations are. In a sense you're making problems for people, you step back and say, "Look at the problems I've created for you, what does this tell us?" And you just have to wait for them to calm down, because there's a hell of a lot of emotion in organisations... It's hard to say, why are you so upset - they'd want to wring your neck. I discovered what you need to do is to back off [a bit], so you've got to be really, really careful, recognising the traps.

5.5.2 Plausible knowledge leadership

These accounts of relational tensions when transposing codified management knowledge into management practice may not be surprising. Even in this group with positive attitudes to management knowledge, managers are significantly more strongly orientated to experiential and relationship-based knowledge rather than codified, evidence-based knowledge. Yet, an interesting element of knowledge leadership is the degree to which respondents purposefully work as change agents, rehearsing practices of transposing formal into experiential knowledge, and by recounting their '*war stories*' may establish themselves as plausible leaders.

As the following respondent emphasised, knowledge leadership can involve a search for truth that is experienced as personally important and may be strongly integrated, and identified with, as part of a practice of creating change.

I became very frustrated with [the] paternalism of general practice and the seeming certainty of science. I gravitated towards the kind of role I [have] now, which is helping people to think broader. I had deep questions in my mind about contemporary understandings of health, organisational development and science [so] I get to a different kind of language. Well that is very uncomfortable for most academics to relate to, because it strikes at their entire discipline and sense of meaning. Managers find this deeply discomforting – where's the beginning, where's the end and how do you manage it? It's very scary, like witchcraft. [My project] had a period when it got summarily executed, a difficult six months when I was marginalised from everything. One manager was extremely destructive, and saw me personally as a threat. The combination was rather toxic - these ideas were extremely controversial and extremely uncomfortable.

If the above account suggests an unusual degree of disruption to established practices, similar elements of disruption – and even provocation – also appear in other accounts of knowledge leadership. For example, for the following respondent, transposing management knowledge took the form of deliberate

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al.* under the terms of a commissioning contract issued by the Secretary of State for Health.

and skilful rehearsal in which a senior leader's high degree of responsiveness to the setting was accompanied by persistently *'hammering down'* commercial management knowledge.

Earlier in my career, a mastery of detail was necessary to be a competent doctor. I've moved on from that model to a complexity systems model where I wander around seeing where there are emergent patterns, you know, encouraging some patterns to form and squashing others. In that different way of being, you learn differently, you're looking for patterns, for a fit between ideas in a very chaotic way and then getting that, "oh that's what we need to do"... You have to dive in, go to the frontline, have long conversations, get drowned in the stuff, make lots of mistakes early on... [I look at the key business figures]... every week...I'm hammering down on them all the time... If I pay attention to it, everybody else just has to keep at it.

Moreover, some managers described using evidence to disrupt established practices as inherent to the task of knowledge leadership. As the following senior manager points out, such efforts to straddle contrasting knowledge domains may be instilled through early professional experiences, as well as expert academic training. Yet, transposing management knowledge involves persistently *'bringing back its applicability'* in the form of usable practices, tools and perspectives.

I never fitted into the traditional box for what nurses are meant to be. [My training] was at the vanguard of changing the educational base, the use of research, and protecting us...from [traditional nursing] socialisation. We were trained to be mavericks, the grit in the oyster. In my first one to one meeting with the ward Sister she said to me, "Some mornings I look at your face and I want to hit you." I didn't have a hierarchical notion about whether staff nurses ever spoke to consultants. I trod on traditional notions that ward sisters spoke to consultants, and I kept breaking all those rules. That's what I was there to do, because I went at it like a bull at a gate, and that's what led to [a] six-week catastrophe... I went off to [a leading business school], I have enough education to sink a bleeding battleship, should I choose to. But really it's the learning that I get from some of these other experiences like being on [a national strategy group], having a secondment to the Department of Health, then internalising and bringing that back its applicability – skills, toolsets and perspectives – which are of benefit as I come back to this job.

5.6 Conclusions

The managers interviewed in Phase 1 were orientated towards knowledge limits in the form of puzzles. This orientation was strongly geared towards the domain of practice-based, experiential and interpersonal knowledge. This suggests that management research and codified management knowledge is not seen as a source of innovation or ideas, even though the managers reported being strongly orientated to tackling pressing issues and puzzles. Indeed, codified management knowledge and particularly research-based

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al.* under the terms of a commissioning contract issued by the Secretary of State for Health.

management knowledge was reported to be the least significant influence on practice, overall. Nevertheless, there were some notable differences between the cases. For instance, from the case separated influence table data (Figure 2), respondents in Beechwell appeared significantly more orientated towards research-based knowledge than in the other cases studied, and they were motivated to transposing formal knowledge into locally useful practice.

Thus the data present an empirical puzzle: why and how do certain managers seem able to straddle these distinct knowledge domains, and are even skilled at transposing formal/codified knowledge into experience-based practice? The data suggest this involves a process of transforming text-based knowledge into a contrasting domain of practice. Respondents engaged in knowledge leadership tended to draw upon formative personal experiences which had shaped their identities and motivation to seek out management knowledge. The work of transposition often involved disruption to the established practices of settings, which could even come at a personal cost to the knowledge leader in terms of disrupting working relationships. Yet, such disruption might be central to the task of transposing knowledge, requiring deliberate rehearsal and refinement, as well as '*knowing when to back off a bit*'. Gaining plausibility and authority as a knowledge leader may thus inherently involve provoking and handling tensions, perhaps providing the foundation of knowledge leadership practice.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al.* under the terms of a commissioning contract issued by the Secretary of State for Health.

6 Properties of management knowledge and the relationship between knowledges: lessons from the Phase 2 data

6.1 Introduction

This chapter explores further the important role of knowledge leaders in relation to the management knowledge tracers studied in Phase 2 of the research, and considers the process of the transposing of formal management knowledge and the role of contextual factors in mediating this process.

The Phase 2 research question was to explore management knowledge use in context: what management knowledges had the case sites debated, used or rejected and what could be learnt from the relationship between such knowledges? This question was addressed by purposively studying as tracers the use of one or more management knowledge texts found being cited and used in some way in the sites (see Figure 3 below). Thus the case settings provided another lens for studying how the two knowledge domains of formal/codified and experiential/relational knowledges interacted in these settings. What did the sites demonstrate about how and why research-based management knowledge of different forms might be transposed and used or rejected?

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al.* under the terms of a commissioning contract issued by the Secretary of State for Health.

Figure 3 Phase 2 tracer texts and organisational issues/puzzles to be addressed

	Beechwell Think tank	Elmhouse Consultancy	Firgrove AHSC	Mapleshire CLAHRC	Oakmore Healthcare	Willowton PCT
Tracer texts	Think tank policy document, based on Beechwell's health economics research. Source text: the 'Beechwell Text'.	An in-house authored monograph on change management Source text: the 'Elmhouse Text'	PhD thesis based on Schein's process consultancy. Source texts: Schein (193); Schein (195)	The IFCaSS Programme based on communities of practice concepts. Source texts: Wenger (105); Bate et al (196)	The Balanced scorecard. Source text: Kaplan and Norton(194)	Clinical Director's book show- casing whole systems organisational learning. Source text: the 'Willowton Text'.
Issue or puzzle to be addressed	Historically separate departments with low integration and knowledge sharing.	Within Elmhouse, how to maintain strong reputation and profitability. In the tracer, how to make major efficiency savings.	Organisational development and inter- organisational learning in the context of a new AHSC.	Top down instrumental opportunity to obtain significant funding. Academic puzzle and practice problem. How to get research into practice.	Organisational transformation oriented towards commercial success.	Systemic fragmentation.

© Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

Following cross-case analysis and team discussions of the Phase 2 data, the role of epistemic cultures (see Section 2.3.2) proved significant in assisting understanding of formal management knowledge transposition and use. Epistemic cultures refer to the 'different practices of creating and warranting knowledge in different domains', such as those found in the subdisciplines of the natural sciences (123). Different practices and values are associated with particular knowledge domains, meaning that knowledge will not necessarily flow across domains that draw upon different practices (114). Knorr-Centina (123) argues that the variation in the processes and mechanisms of knowledge contexts demands further attention over and above the content of the knowledge produced. The empirical work described in this chapter seeks to fill this major lacuna.

Findings from Phase 2 are summarised in the form of vignettes (again in alphabetical order) outlining the ways in which the management knowledge tracer texts were utilised in the case study organisations. These texts were analysed for their evidence-base, with the findings presented here via discussion of a cross-case comparison table (Figure 3) where the impact of the management knowledge is also assessed.

Several major empirical themes emerge in this chapter. There were a wide range of diverse formal management knowledges in use in the sites. Within single organisations there were some examples of different types of management knowledge coexisting (e.g. performance management knowledges are found alongside whole systems ideas in Willowton). As found by others commenting on the field it was clear that management knowledge is not one unified thing; rather it involves multiple formal and informal aspects.

The importance of the predominant episteme(s) of the existing communities of practice and the mediating role of 'epistemic fit or clash' in the transposing of management knowledge were noted. The findings imply that a knowledge leader's success in transposing an 'external' management knowledge into practice and use depends in large measure on epistemological and methodological alignment with internal (often dominant and embedded clinical and scientific) knowledge bases- an organisation's 'prior related knowledge'.

The activities of knowledge leaders (as identified in Phase 1) who drew upon biographical narratives and formative experiences in transposing management knowledge, were key to the process in Phase 2; as were the seeking and use of formal management knowledge for the purposes of practically addressing challenges or puzzles that were firmly anchored in present circumstances.

Finally, the data suggest that particular organisational mechanisms and systems, including the provision of formative spaces, and blended and

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

complementary incentive and training programmes, all facilitated change in management knowledge use.

6.2 Phase 2 tracer vignettes

6.2.1 Beechwell vignette

There were contrasting and structurally separate episteme(s) in existence in Beechwell, each of which connected to distinct external audiences. Within policy there was a strong preference for data and evidence based academic knowledge, although largely drawing upon clinically based studies.

Evidence based academic, sort of peer review articles from research institution's...it's not all secondary literature we also collect our own evidence as well.

In leadership development, knowledge legitimacy involved strong philosophical pragmatism, in which knowledge not only needed to have practical application but was tested against experience in the field. Experiential forms of management knowledge are seen as legitimate. Respondents' accounts suggest that this is not mere experience but draws on a strongly relational aspect of experimentation and knowledge production. The work of transposing formal management knowledge here is seen as requiring strong social capital and storytelling narratives.

It's a kind of shared endeavour. We do very experiential work with people and therefore the biggest tool we bring is ourselves.

The tracer

The tracer was a think tank policy document based on Beechwell's health economic research (anonymised text) regarded as distinctive internally and a means of encouraging collaboration across the departments. The senior team initiated the tracer. It was seen initially as a means of focussing joint effort around a strategic priority and being potentially translatable into distinct knowledge products across each of Beechwell's departments.

Despite a strong sense of internal and external support for the strategic theme, there was a strong underlying tendency to continue to work in parallel streams.

[T]he groups are set up and we have cross-departmental meetings, each department has one or two representatives who come in...but what has actually happened is that each department is doing its own separate project...and every quarter we come together and report on what we've done and what we are doing and then go back and work on our own.

Leadership of the theme was an issue:

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al.* under the terms of a commissioning contract issued by the Secretary of State for Health.

There was a challenge because a lot of the work was within policy and having a director who wasn't in policy [created] this issue about leadership because they couldn't commit resources.

'*It's a theme without a leader*' and leadership changes (two key managers left) increased a sense of lost knowledge. Yet, another perception was of emergent and fluid governance arrangements, both operationally inadequate and only loosely tied to strategic intentions.

Epistemic fit?

Knowledges were found to be coexisting but without real dialogue, such as the distinct rational analytic and experiential leadership knowledges. Respondents spoke of different languages existing and described them as reflecting quite different cultural orientations, and relating to distinct external communities. These epistemological frameworks, which were often deeply held, made translation and negotiation between them problematic.

So in policy it's a language which is a language of policy and a lot of it is economics and a lot of it is sociology, it's language that I find to be fairly precise. And if you work say in another ... [department] they'll talk about energising individuals, empowering individuals which to other people, particularly like me, it's meaningless, you know, like what does it mean... It's all to me a lot of like kind of psychobabble [...]

Impact assessment

The empirical data suggest that the impact of this tracer was low. A combination of uncertain and changing leadership of the knowledge theme, fluid governance arrangements and low knowledge leadership from the executive were in evidence. However, low impact may also be linked to the fact that this knowledge-sharing effort cut across quite distinct epistemological frameworks and orientations.

6.2.2 Elmhouse vignette

As noted in Section 4.2, Elmhouse had a strong organisational culture and effective management knowledge system for Elmhouse generated management knowledge. In Elmhouse, the knowledge that was valued was previous Elmhouse research. Hence Elmhouse's management knowledge was internally-oriented, self-referential and thus risked hermetically sealed learning and 'superficial innovation'.

The tracer

The textual model of management studied at Elmhouse was outlined in a monograph, here called the Elmhouse Text (a pseudonym). This monograph was research-based and took an evidence-based approach using case studies from Elmhouse's worldwide client work, survey-based statistical analysis of Elmhouse's client data, and academic journals

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

(commonly Elmhouse's own journal and Harvard Business Review). A respondent observed that while there was extensive evidence underpinning the Elmhouse Text it did not display this evidence, associations between variables, or demonstrate how conclusions were reached. Nonetheless, the rhetoric of being 'evidence-based' appeared important in terms of legitimating the Elmhouse Text with clients. The monograph also had a powerful effect within Elmhouse in providing a coherent point of view and avoiding 'paradigm wars'.

The application of the Elmhouse Text in a Primary Care Trust, as part of a QIPP project during 2009-10, was examined. Elmhouse proposed that the 'systematic application of what's already known to be best practice' would enable PCTs to meet QIPP targets. Its consultants analysed PCTs' performance and 'benchmarked' them against national best practice to establishing potential quality and productivity gains. Elmhouse management consultants developed 'golden rules' and 'prescriptions' for redesigning healthcare to achieve targets in line with best practice. The Elmhouse team also ran conferences explaining the necessity of change and devised a PowerPoint-based template, which PCT managers and clinicians were instructed to complete to achieve productivity gains.

The Elmhouse Text convinced the SHA that commissioning Elmhouse would produce results. Elmhouse's 'benchmarking' analysis of Regional PCTs' performance was also valued by the SHA. The series of 'structured learning events' and a set of change tools and techniques was the mechanism used to enrol PCT managers.

SHA managers were questioned about their views of the evidence underpinning the Elmhouse Text. One respondent noted that they accepted its evidence-base because it:

[M]irrored my own experience ...[Elmhouse] came across as folk who knew what they were doing... [and] their knowledge base was drawn from public and private sector organisations throughout the world rather than a couple of health authorities.

Another SHA manager was less interested in academic evidence than

evidence of delivery... that would give us a measureable change.

PCT managers' views about Elmhouse's application of their text were mixed. One PCT manager argued that the QIPP project required:

A systematised, programmatic approach and a standard format... which Elmhouse are very good at... They don't want creativity; they want you to use their forms... Their horrible PowerPoint slides.

and went on to argue that:

The Elmhouse [way] of doing business is if you can't measure it you can't manage it... [this is a] huge cultural shift [for the PCT].

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

NHS County PCT struggled in aligning its own and Elmhouse's data and analysis, which managers argued would mean closing wards and risked '*a complete loss of credibility*' with local clinicians. Other PCT managers criticised Elmhouse for being too high-level, abstract and disregarding local context. Nonetheless, NHS County accepted the analysis even though they were at loss to make the figures add up because '*we didn't feel we had an argument that said "no".*' However, this created resentment among clinicians and '*everyone wanted… to challenge the validity [and] … credibility of the numbers*', questioning how it translates from a spread sheet into a reality. A senior PCT finance manager commented:

It wasn't clear where that saving was coming from....we were bridging a gap by putting in things that everybody wasn't necessarily signed up to.

As the Elmhouse contract ended, PCT managers were impressed by individual Elmhouse consultants, however they were more critical of Elmhouse's approach, arguing that they had been '*left with lots of spread sheets*' and that '*creativity is crushed out by this need to turn it all into bloody PowerPoint.*' SHA managers on the other hand were more positive about Elmhouse's approach to QIPP which one of them described as '*one of the best consultancy support arrangements I have seen.*' The value was that measurable targets for productivity improvement were now in place. One SHA manager noted being less interested in the evidence base than 'evidence of delivery'.

Epistemic fit?

In the Elmhouse vignette different knowledges were valued by different communities of practice. The Elmhouse epistemology fitted well with the SHA task of aiming to redesign healthcare services to achieve measurable quality and productivity gains, but clashed with the practice and patientoriented epistemology in NHS County.

Impact assessment

The empirical data from the tracer study suggest a rather mixed picture with respect to the impact of the Elmhouse Text. The programme had high impact with the DH and the SHA managers because it provided quantified data of the outcomes achieved and measurable quality and productivity gains. However, its epistemology clashed with PCT managers and clinicians in NHS County and they struggled to apply it to the realities of the challenges they faced locally and the local political context.

6.2.3 Firgrove vignette

It was noted in Chapter 4 that in Firgrove, a rational-analytic focus on 'hard data' and randomised controlled trials (RCTs) associated with the academic institute was regarded as persuasive, but participants also valued 'soft' data, involving narratives and reflective and relational approaches that encouraged discussion. Senior managers advocated an extended

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

epistemology with '*very, very different ways of knowing*'. The mental health division valued team-based collaboration in which the many clinical knowledges co-existed, and were regarded as intrinsic to joint working:

I'd really struggle with the idea that you could run mental health in any other way actually. You've got a set of professionals who can't agree on the basic diagnosis and conceptualisation of a problem - you can present a case and you'll get five different opinions and formulations.

Whereas formal EBMgt knowledge might appear a better fit with the rational-analytic episteme(s) of the academic institute, it tended not to be so readily used in management practice. In one example, a senior medical consultant led a project on capacity management, as part of an MBA research project. Although its resulting report gained senior management approval, and led to an external consultancy being appointed to support the project's implementation, it provoked local resistance for using acontextual length of stay and flow data and private sector comparators and consequently 'failed on the ground'.

The active encouragement and interest of the Chief Executive and the Dean here seemed particularly important. There was a strong sense of facilitative leadership from the top team which encouraged a sense of innovation and change. Novelty and creativity were thus actively encouraged, partly as a means of 'bringing everyone with us'. In Firgrove, there was a circulation of management theories, models, ideas, and persuasive stories such as case studies and leader biographies. What began as a personal interest or whim could thus develop into an organisational project in which personal energies and enthusiasm played a determining role. Projects tended to be identified with certain individuals and indeed often had a relational value, being regarded as 'belonging' to a particular knowledge leader. For instance, a clinical director was associated with service line management; the chief executive was seen as championing the Toyota Way, and the ODIC unit director was associated with developing a coaching culture. Enlisting multiple perspectives - from service users and carers to clinicians, managers and academic researchers – created a setting in which plural forms of knowledge and knowing were brought into play.

The tracer

In the tracer, the development of a strategic initiative to build a coaching culture advanced by the ODIC unit based on Schein's model of process consultation (193) was studied. The internal consultancy unit was originally established as 'a different approach to help people change their practices', facilitating change through a participatory consultancy model, reflecting a clinical perspective. Rather than 'just fly in, do a bit of work and fly off again', the unit worked alongside leaders and teams, as well as services in conflict, helping them to make changes. The work was led by a non-medical director who had completed a PhD on consulting in the (clinical)

© Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

academic institute. This PhD research (using questionnaire instruments and in-depth qualitative interviews) provided further legitimacy in the organisation and the director increasingly operated at executive levels, facilitating board-level decision-making and advising executives on organisational dynamics.

This consultancy knowledge was readily used by the organisation as it was seen as a philosophy of collaboration that fitted with organisational values, creating so called 'productive conversations' (described as 'fierce' and 'tough') in which contrasting perspectives are openly discussed and worked with: '*They're not there to put a glossy spin on everything; they're there to do work with leadership teams that don't really get on.*'

Although the coaching approaches were less empirically tested or evaluated as evidence-based, they were readily adopted across diverse teams and used within facilitated organisational consultancy projects. Newly formed CAG leadership teams engaged the consultancy unit to facilitate leadership teambuilding, as well as providing workshops bringing together different actors in newly-established CAGs. Efforts to develop a coaching culture were adopted by the executive team and implemented as part of the organisation's strategy. One respondent described facilitated 'fierce conversations' as providing learning experiences which 'unblocked' conflict:

So clinicians or academics would be saying quite openly, "Look, I'm having problems dealing with my Academic Director - how are you guys dealing with that?..." I've actually found that a really interesting conversation to have... that was a really good learning experience, absolutely. Because we all know who the psychopaths are and who the good guys are – and you want to know how to deal with this situation, you've got to learn from each other.

Epistemic fit?

In Firgrove, diverse knowledges were not merely co-existing, but such plurality was also regarded as a valuable source of learning and innovation. Indeed, attempts to impose knowledge hegemony by giving preference to one particular approach might have proved less effective and might have led to conflict in a setting where diverse professions existed. As one respondent described:

It's not enough just to have the tablet... you've got the diabetic and giving them the right medication, but they're eating cream cakes... [So] different types of knowledge might be useful!

Knowing how to skilfully operate using diverse knowledges might partly reflect the multivocality that tends to characterise multidisciplinary healthcare settings. As some respondents described, use of facilitative methods, building therapeutic relations, and reflexive learning might be more effective aspects of clinical practice than use of codified, evidencebased knowledge. Certain OD techniques appeared important in increasing

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

participants' abilities to engage in collaborative, team-based approaches. The work of the ODIC unit appeared particularly important in this respect as a resource for facilitating team development, resolving conflict, and promoting more experimental and exploratory processes of enquiry.

Impact assessment

Despite high profile endorsement, respondents expressed scepticism about the actual adoption of the formal knowledge component of this tracer. They pointed to the Schein text (193) as one of various 'flavours of the month'. However the impact was rated as medium because the process consultancy methods – and particularly its underlying epistemology – resonated with respondents' values and were adopted and seen as pragmatically useful. Whereas the specific knowledge tracer might be seen as only partially effective (its translation into practice was limited), a more significant finding in this case was that ODIC unit's epistemology and process consultancy methods were widely adopted and internalised, thereby translating management knowledge into practice.

6.2.4 Mapleshire vignette

Mapleshire CLAHRC was created through and structurally contained within a university, which had a strong and distinctive approach to the generation and dissemination of knowledge.

... [T]he value that is placed on published peer reviewed knowledge, that's the culture that academics live in ... only academic knowledge is valued.

Other knowledge bases were evident in the University-based research centre within which Mapleshire was formed. Headed by a social scientist, the centre's involvement with both clinical and sociological research brought a mix of knowledges into the equation, which seemed likely to predispose in favour of the understanding and acceptance of the aims of the CLAHRC programme. Despite this, the initial bid to NIHR was headed up by a clinician and was heavily focused on clinical projects, suggesting that the predominant epistemology was that of traditional clinical research. A change in emphasis and theoretical approach occurred when that proposal was deferred and a business school academic became Director. The revised CLAHRC proposal emphasised implementation, drawing heavily on the management and social science literatures.

At its inception, it could be said that Mapleshire was an organisation trying to create a new epistemology which linked research and practice. One respondent described it as trying to:

Understand and unpack the difficult issues of getting from testing some widget to getting the local general practitioners to use it. ...[So that] implementation and the process of doing research are intimately connected.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

The tracer

The IFCaSS programme (see Section 4.5) was selected as the tracer issue and was devised to deal with some key aspects of the CLAHRC's purpose, drawing on organisational learning, communities of practice, knowledge brokering and social network theory. The programme represented a huge and complex body of work, and although the theoretical basis for the programme was well established, what was not so clear was how, in practice, these aims were to be achieved. Respondents spoke of having difficulty in linking the theoretical ideas with the 'practicalities' of what they were doing.

When the CLAHRC was constituted the focus was on the research skills needed to run the project. It had not been recognised that another crucial body of knowledge, that of 'practical' management skills, would be required; thus initially very few career managers were recruited. This meant that academic staff, particularly those in charge of programmes of work, were faced with a series of practical tasks for which they were illprepared and ill-suited, and which took up far more of their time than they had anticipated.

It's putting together all those things, then all of the recruitment, the HR, job descriptions, all of that, and monitoring peoples' workloads, supervision, making decisions about who goes on what conferences, choosing what rooms we have for our meetings...

To begin with, both the IFCaSS programme and the programme focusing on implementation were managed by a single academic with no background in practical management. Although the two programmes were separated when the difficulties became obvious, the difference when, after two years, a manager with many years experience was appointed to run IFCaSS was very noticeable.

We were getting on with what we needed to do but maybe not so sharply focused, and maybe with a level of uncertainty ... [and] our new manager ... has made a tremendous difference to our focus and us achieving our strategic objectives. ... and setting the priorities.

Epistemic fit?

As well as a lack of practical management expertise, Mapleshire CLAHRC also experienced a number of problems stemming from the applied research model it was promoting. Firstly, a perceived lack of opportunities for academic staff involved heavily in dissemination and implementation activities to further their university careers through publications, resulted in high staff turnover, delaying planned work programmes.

It also became clear that within the CLAHRC itself there was still a lack of understanding of the aims and objectives of the project. In some ways the CLAHRC seemed to reproducing in itself the kinds of tensions which it had been designed to study.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

There are people who are doing healthcare research doing ... randomised control trials of actual real healthcare ..., and they're not social scientists for the most part, but we've got a bunch of social scientists like me saying I'm very interested in implementing, the problems of doing research and the implementation. So we have people in a sense sitting around looking glum if their recruitment rate isn't good for their ... trial, thinking "God, is this going to work?" And I've been saying to them that's terrific because it's really good data for me.

Impact assessment

In Mapleshire the IFCaSS programme was designed to develop communities of practice seen as crucial to effective implementation of research findings. There was engagement with the theoretical text-based management knowledge described in the CLAHRC project proposal, but many challenges in transposing this theoretically-oriented formal knowledge into practice were noted. However, and most importantly, although the empirical data suggested the impact of the management knowledge tracer had been low so far, there appeared to be some grounds for believing that with more time and the injection of practical management skills that progress could be achieved.

6.2.5 Oakmore vignette

In Oakmore two coexisting epistemes were identified which appeared to be blending well. The one with the longest history was clinical knowledge. Not only did Oakmore represent itself as being in the forefront of up-to-date clinical thinking and practice, but it also had a tradition of research in the field, represented by hundreds of papers written and published in medical journals by Oakmore clinicians, attesting the pervasiveness and importance of this type of knowledge within the organisation. However, since the arrival of the current CEO, a clinical manager and a keen consumer of multiple management knowledges and practices, management and commercial knowledge bases had gradually become more evident.

Over the past ten years more and more management knowledge had been introduced into the organisation. This had been effected by various means: through employing senior people with a management background; by instituting an extensive training programme, available to all clinical and non-clinical staff; by actively encouraging one-to-one mentoring both within and (occasionally) from outside the organisation; and by funding selected staff to take diplomas and degrees from various academic institutions.

The financial imperatives of running an organisation which not only delivered an excellent product, but did so profitably, meant that not only clinical and management knowledges, but commercial knowledge was required. This was the most controversial of the knowledge bases evident at Oakmore. Many staff found it hard to reconcile the twin objectives of providing the best possible care for patients and also profiting from the

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

enterprise. Marketing, for instance, was referred to by a respondent as '*the evil M word*'. Also useful as sources of further commercial knowledge were some non-executive board members, selected specifically because of their knowledge of the hard commercial realities that needed to be tackled.

There's pretty strong ripples of a business driver going through the charity from our business non-Execs ... who have very, very strong business backgrounds.

The tracer

For the last decade, organisational performance had been monitored at Oakmore through an adaptation of Kaplan and Norton's (194) Balanced Scorecard. This was introduced to the organisation by one of the senior managers, who had studied this as part of a MBA project.

The Balanced Scorecard ... has definitely been a very big success. It's just in the DNA of the place now. ... [T]he KPIs [i.e. Knowledge Performance Indicators] as they're called, and they form the agenda for the performance management meetings that we have with each of our business units.

The Balanced Scorecard had more recently been available in database-form on the intranet, where it was known by most staff as 'the Matrix'. Staff entered data, and had different levels of access to the information it held, depending on their seniority.

A ward manager would have access to their ward and maybe the hospital, the hospital Director will have access to the whole hospital. ... [Executive Directors] have access to everything. ... The ward managers have their eye on the Matrix and so they can go in to it, it's got a dashboard there of their service and what's going on from a budgetary point of view, from an occupancy point of view... cleanliness... food, etc, etc.

A key knowledge management system supporting the Balanced Scorecard approach was the extensive and crafted management training programme. This had two objectives. The first was to equip its doctors, nurses and other staff with the knowledge and skills to take on new management responsibilities and to utilise tools such as the Balanced Scorecard effectively. The programme offered a wide range of in-house behavioural/management development training, including a leadership course franchised from an external provider but developed specifically for Oakmore. Those who wished to learn were encouraged and supported and space and/or funding for external management studies, up to and including MBAs, was available. The second objective of the training programme was arguably just as important. In moving to a more business-oriented approach, a crucial task for Oakmore had been to find ways of reconciling two apparently conflicting sets of values, as represented by the perennial tension between clinical and managerial/financial priorities in healthcare.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

Clinicians, in particular, frequently expressed some ambivalence about the new emphasis on management priorities.

[*I*]*t*'s very businesslike, it doesn't feel like a charity at times.

The corporate vision, however, sought to blend clinical and management values by emphasising Oakmore's charitable status.

The charity's come a long way in how it's enhanced the performance and decision making capacity of various managers. So if we look as an example the way the ward managers work, they work at a much more senior level as compared to say ten years ago. ...So that has been a switch. And in terms of management development ... it's been about how do we influence others, how do we influence the wider team, how do we influence our customers, how do we influence other professions...

There was also recognition at Oakmore of the importance of enhancing employees' understanding of themselves and others. Hence, some of the courses available focus more on developing self-awareness and selfknowledge than on specific competencies (e.g. Myers Briggs Type Indicator and Belbin's Team Role analysis).

At the time of the study, Oakmore was undertaking an in-depth review of their current version of the Balanced Scorecard with the aim of aligning it better with Kaplan and Norton's (194) intention that it would be used as a strategic tool.

[Going] back to Kaplan and Norton's original books, it was really interesting how far people who are presenting themselves as experts ... without really understanding where the book had come from in the first place. ... They'd really seen it as a way of presenting KPIs ... so none of them were doing like strategy maps or anything like this. ... I think there's a very clear process that Kaplan and Norton defined for trying to figure out how you map that strategy on to KPIs. And what I see a lot of out there is people doing a lot of the KPIs ... And there's almost a concentration at the wrong end of the process because they haven't really looked at the issues.

Epistemic fit?

In this case there is a blending and hybridisation that increases management knowledge fit and internalisation with traditional epistemes. The CEO, who embodied both managerial and clinical skills and was an avid scholar, was able to deal with the two different epistemologies and blend them. The CEO's knowledge leadership was crucial in this case.

Impact assessment

The empirical data suggest that the impact of the Balanced Scorecard management knowledge tracer was high. It played an important role in providing timely and accessible management information enabling significant strategic progress. It was, however, supported by multiple

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

management development opportunities linked to career progress and complementary facilitative systems. What is particularly interesting is that, having initially utilised the tool as it stood, in a fairly straightforward and pragmatic manner, the senior team were in process of revising the system by investigating the core concepts from the literature and then adapting them to be a more effective fit for their organisation's current context.

6.2.6 Willowton vignette

Multiple knowledges appeared to co-exist in Willowton, there were two strongly contrasting episteme(s): whole systems thinking (oriented towards clinicians) and increasingly dominant performance management (oriented towards the management centre).

The application of ideas about learning organisations, action research and whole systems thinking had occurred under the leadership of an influential academic-clinical manager hybrid, who had experience of leading change in urban areas with high social deprivation.

I'm trying to embed this idea of connected learning spaces inside a local health community. And perhaps the most helpful thing for the PCT as a whole is to see that as a way of developing future staff. Instead of going into a room and writing strategy notes and then asking everyone to adopt them, setting up a series of conversations out of which people can move things forward.

In Willowton, management techniques or 'tool kits' tended to be thought of as more directly applicable than academic theories and knowledge. This fitted with a practical orientation to management and demand for readily accessible, usable knowledge products. Knowledge products produced by NHS institutions and leading healthcare think tanks were widely cited; for example, materials from the CLAHRC; the NHS Institute for Innovation and Improvement (e.g. the 'Productive Series' drawing on 'Lean Thinking'); the Institute of Health Improvement, Boston (e.g. 'PDSA cycle'). Other healthcare organisations said to be useful for acquiring knowledge and keeping up-to-date were the King's Fund, NHS Confederation, and Nuffield Trust.

The tracer

An initiative for integrated care (IIC) was explored. In 2009, a service improvement initiative was launched in a specific locality (with poor health outcomes) using the ideas of whole systems thinking. The text that captured the approach drew upon: Complexity theory; Learning organisations and organisational learning; Systems thinking / whole systems; Action learning and research and Appreciative enquiry.

The IIC utilised a mixture of methods as part of its process of collaboration: stakeholder workshops run at quarterly intervals; face-to-face interactions and meetings; targeted email communications to stakeholders. A timetable

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

of activity provided a formal structure for experimenting and testing improvement strategies that were agreed upon, thus closely emulating the PDSA cycle. In formal documents, the IIC was described as a process that 'allows people from all parts of the system to dip in and out of service improvement programmes when it suits them, shaping them at four strategic stakeholder workshops.'

Those individuals that participated in the workshops spoke of a range of reasons for their involvement: improving overall service quality and health outcomes for local patients (in a deprived area with high mortality rates); forming relationships with other professionals; and raising the profile of their host organisation among other groups. In this way, the IIC provided a space to re-establish communication flows and working relations between primary care and other healthcare providers, especially where relationships had become strained or where there was poor knowledge about service provision.

The initiative was described by participants as offering 'a safe playground for people to explore', where individuals could form working relationships and cooperate across organisational boundaries. They could adopt a 'softer' approach to organisational development when compared with the performance management functions associated with the PCT. The clinical director and nominated project leaders facilitated dialogue and reflection at organisational interfaces across general practice, primary care, secondary care and the community sector.

Such a bottom up and conversational approach to change, which encouraged exchanging perspectives on improvement, proved popular with respondents, particularly clinicians and senior managers. For example, a consultant psychiatrist in the acute sector reflected that:

I think I have learnt ... about primary care and the challenges there as the most important.

Similarly, a GP noted how they had come to appreciate that 'essentially there isn't one solution, there are several solutions.' Managers and nonclinicians also reported learning about the variations between distinct areas of the health system and more about doctors' perspectives. There was evidence that a whole systems model provided a formal vocabulary for enacting change:

I've learnt a whole new thing, a sort of set of words that try and describe what I talk about in terms of integrated working, which is "oh that sounds good", like collaborative approach and boundary spanning, that's really nice, so it takes the whole notion of integration further forward.

Terminology such as 'whole systems', 'cross-boundary working' or 'whole collaborative boundary spanning' gradually became more widely understood and accepted. An underlying issue was how to spread the reach of the

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

project to clinicians in the local area who were not currently engaged. As one respondent described it:

In terms of the clinicians involved in the project, I thought it was very good [...]. My only anxiety is that often it tends to be the same old people, the same old faces of those people who are committed and come along.

Epistemic fit?

The application of 'whole systems' thinking and organisational learning principles highlighted underlying tensions within the PCT. It was difficult to performance manage general practice and external providers using a combination of financial incentives and 'stick' tied to 'outcome measures' and, simultaneously, build trusted, professional partnerships across the health and social care community. The PCT was increasingly required to demonstrate quality and efficiency improvements in primary care, leading to internal organisational conflicts over resources and the use of explicit methods to measure impact. As one manager stated:

[The clinical director] felt that actually it was the relationships that we were building that were the most critical,...but the AD [assistant director] was saying, "Actually we need to develop these practices for the future, so what's the learning that we're going to take out of this? So let's put a formal questionnaire together and let's put a formal way of measuring this ..." The problem was because the GP's practices had signed up to [the clinical director's] way of working, when we did the formal report they weren't as open to the challenges as they could have been had there been in a more formal challenging way of running the clinics.

There was, therefore, an epistemic fit in that the complexity of the primary healthcare field matched an epistemology grounded in a dynamic theory of systemic change. However, an epistemic clash with performance management logic surfaced when the results of the learning initiative needed to be expressed in the language of 'hard evidence and numbers' as the PCT entered a period of fiscal restraint and management cutbacks.

An internal leadership clash emerged when a whole systems epistemology, which emphasised complexity and long-term, small-scale improvement detracted attention from the PCT's shorter-term imperative of controlling financial spend and implementing structural reforms.

Impact assessment

The empirical data suggest the formal management knowledge in operation in this tracer as having medium impact. While the whole systems approach was a valued methodology for enabling conversations and collaborations to occur between diverse groups, it proved difficult to evaluate and therefore could not be channelled into existing performance measures and metrics. The lack of hard outcomes and alignment with corporate priorities was identified as a barrier to wider endorsement of the approach.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

6.3 Themes from the cross-case comparison analysis of Phase 2 data

In this section a cross-case comparison analysis table (Figure 4) derived from the Phase 2 data is shown and the empirical themes that emerged discussed.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

Figure 4	Cross case analysis of the Phase 2 data
----------	---

	Beechwell T- tank	Elmhouse Consultancy	Firgrove AHSC	Mapleshire CLAHRC	Oakmore Healthcare	Willowton PCT
Prevailing organisational episteme(s)	Contrasting (and structurally separated) epistemes, strongly connected to distinct external audiences.	One homogenised data-orientated episteme(s) internally; connected to external health policy and management audiences.	A pluralist, multidisciplinar y and collaborative epistemology, (team-based and inter- organisational relationships matter).	Multiple and competing epistemic communities.	Two epistemes becoming blended: Traditional team-based episteme(s) of clinical setting being blended into (more dominant) commercial knowledge.	Two contrasting epistemes: whole systems learning (orientated to clinicians); increasingly dominant performance management (orientated to managerial centre).
Epistemic fit/clash	Epistemic clash between economic and leadership development knowledges.	Strong fit and ready appropriation by SHA. Poor fit and clash with clinical providers.	Strong fit between OD knowledge and common ethos of team-based collaboration.	In-commensurability between competing epistemic communities.	Blending and hybridisation increases fit and internalisation with traditional epistemes.	Mostly fit with clinical teams & services (model allows dipping in & out). Clash with emerging performance management.

© Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

	Beechwell T- tank	Elmhouse Consultancy	Firgrove AHSC	Mapleshire CLAHRC	Oakmore Healthcare	Willowton PCT
Knowledge leadership	Low overarching knowledge leadership from the centre and strongly distinct epistemes within the departments.	SHA manager and Partner. Absence of local clinical leadership.	Strong knowledge influence of consultancy director sponsored by CEO and the board.	CLAHRC director; Institute director; New Director.	CEO-MD hybrid; Commercial NEDs.	CEO and Clinical Director, create experimental approach. SHA and DH source of performance management.
Facilitative systems and formative spaces encouraging facilitative interactions	Absence of formal facilitative systems and sustained leadership.	Template structure captures information, applies formulaic knowledge, and creates a solution for SHA management.	Structural alignment of two units and creation of leadership teams, reflecting an established multidisciplinar y team model.	Diffusion structure is formalised. Very little evidence of facilitative systems and interactions.	Rich complementary systems (performance management, career development. management development) and many opportunities for informal interactions.	Whole systems methodology is personally and visibly orchestrated by the clinical director. Many opportunities for informal interactions.
Impact assessment	Low	Mixed	Medium	Low	High	Medium

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

6.3.1 The tracer texts, management knowledges and the relations between these knowledges

Healthcare organisations have been held up as strategic sites for EBMgt, given the legacy of and possible spillover from EBM. But what kind of formal management knowledges do they use in practice? A range of diverse and even competing formal knowledges in use were found across the different sites (e.g. performance management knowledges alongside whole systems learning ideas in Willowton). They tended to cluster in two main areas: performance management and productivity/quality improvement represented one group and approaches to desired organisational change a second (the Elmhouse Text was a hybrid of these two knowledge types). By contrast, other areas of management knowledge, including HRM, strategy and marketing were less well represented. Some of these formal knowledges were in frank tension: as in the desire of the proponents of the ascendant performance management knowledge in Willowton PCT to 'metricise' the outputs of the softer and longer term whole system learning knowledge base in the search for performance assessment and rapid productivity improvement. In Willowton, Firgrove and Oakmore diverse formal management knowledges were co-existing and this plurality was regarded as a valuable source of learning and innovation.

The vignettes demonstrate formal knowledge being complemented by a range of other sources of more experiential knowledges (for example, cases studies, stories, training and development activities, workshops, role models, mentors, coaches, organisational development knowledge, relationships with management researchers and universities and enrolment in formal management qualifications).

It seemed that the tracer texts (and other formal management knowledges) were more easily transposed if they were 'filtered' texts rendering them more accessible. A detailed analysis of all the texts studied is beyond the scope of this report and will be addressed in future publications, however one example is offered here as illustration; the filtering process undertaken by Schein, whose work (195) influenced the OD Director's PhD and the approach taken by OD unit in Firgrove. This work takes the form of a book rather than a peer reviewed article. Schein is an academic social psychologist who uses OD techniques with managers in consulting assignments and also teaches OD to executive managers in class, using his book in the curriculum. The book does not contain an explicit chapter on methods or data sources but appears to be based on Schein's reflections on his consulting assignments with major firms from which generalisations and models are induced. The text links such concepts with real world case examples, referencing key academic texts.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

Schein (195) advances a new model of 'process consultancy' as opposed to existing models of the expert consultant or the doctor/patient model: 'the most central premise of PC is that the client owns the problem and continues to own it throughout the consultation process ...' (p.29) and again: 'the client must share in the process of diagnosing what may be wrong (or learn to see the problem for himself) and must be actively involved in the process of generating a remedy because only the client ultimately knows what is possible and what will work in his culture and situation.' (p.30)

Theoretically, Schein (195) draws on a number of basic concepts from social psychology and psycho therapy [e.g. attention to interpersonal process (p.45), psychological safety (p.97) and intra psychic processes, p.63)] and uses them to create a new model and approach to organisational interventions which he has himself used in the field. This text also values the concept of employee participation in change and is closely associated with Schein's O.D. work.

It appears that few (if any) of the formal knowledge texts studied as part of Phase 2 were based on data and methods that would be highly ranked according to EBM criteria, namely RCTs or quasi experimental methods. There are some basic quantitative data: tests of statistical significance are mentioned as providing support for the Elmhouse Text and their comparative benchmarking techniques used quantitative metrics. Other influential texts such as Schein's, do not use quantitative data at all or give opaque accounts of methods. It would be extremely difficult to conduct a standard systematic review of these texts in a conventional hierarchy of evidence model (as Reay et al (81) have already found).

A major additional complexity derives from the presence of many different theoretical orientations and disciplines, even within the same field: namely organisational change knowledges. The nature of theory has, therefore, to be handled in any overview alongside questions of methods and data. For example, social movement theory (196) appeared influential in the organisational change strategy in Mapleshire, but in no other site. Social movement theory comes from political science and sociology, operating with a distinctive set of concepts (and also values) radically different from conventional and more consensual OD/change programme perspectives. The social movement literature [McAdam et al (197); Crossley (198); both cited in Bate et al (196)] draws on a distinct constellation of oppositionist concepts: mass struggle; anti authoritarianism; ideological challenge; creativity; consciousness raising; identity construction; the emergence of new social movements (such as anti-psychiatry).

In studying the journey of the management knowledge tracers, it was observed that managers often drew on these texts because they had used these ideas before in their practice, or they saw the knowledge as a way of making progress on a local puzzle or challenge, and sometimes sought to disrupt local knowledge and practice. In Firgrove, for example, the

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

adoption of a coaching approach as a method of cultural change was not based on evidence that a coaching methodology was effective, but was seen as a means to improve inter-organisational learning in the context of a new AHSC.

The Balanced Scorecard, originally the subject of a senior manager's MBA project, was supported by the CEO and senior management in Oakmore and was seen as useful knowledge to help to establish Oakmore's credibility as a commercial enterprise.

We just had a culture where some patients came in and some staff were employed and there was a budget which was kind of a rollover from that last year or whatever ... so we needed to seem more businesslike... [and the Balanced Scorecard] provided some nice, clear graphs of, you know, number of patients and income costs and surplus and staff sickness and staff turnover, and made it very visible.

The Elmhouse Text, which assembled academic articles, Elmhouse data and case study into a coherent 'evidence-based' and practice-oriented change model for use in consulting practice, served as the basis for Elmhouse's approach to change management. The Willowton Text discussing whole systems approaches was seen as valuable in helping the CD to create connected learning spaces to encourage learning and cooperation across professional and organisational boundaries. Overall, in Beechwell the Beechwell Text was used to increase knowledge sharing and synergy across the organisation. However, it did not appear as accessible and people did not fully understand how this theoretical textual knowledge could be useful to them in working together.

Mapleshire was perhaps an extreme case of the challenges faced by knowledge leaders in transposing theoretical management knowledge. Academic knowledges about the efficacy of communities of practice ensured acceptance of the grant proposal for CLAHRC funding, and was thought to help solve the puzzle of how to get research into practice. However, the social science academics charged with improving co-operation across the COPs relied on workshops with diverse groups, hoping cooperation would occur 'naturally'.

6.3.2 Local epistemic cultures and the role of epistemic fit

The role of 'communities of practice' and professional networks has been extensively discussed in the healthcare literature as social and interactive processes seen to be valuable for knowledge management (199). However, Ferlie et al's (2) empirical research across different sectors of the UK healthcare system (primary and acute care) revealed significant 'knowledge boundaries' between professional groups that rendered them less permeable to external knowledge. In fact, even where professionals were co-located and functioned under the remit of a 'multidisciplinary' team,

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

'social and cognitive barriers' set them apart, impeding learning and knowledge-sharing with other professional communities. They observe:

Different professional groupings develop distinctive knowledge bases and research cultures within professionalization projects. They talk past each other: concretely, there are different definitions found of what counted as good evidence at the local level. Where communities of practice have different epistemologies, innovations that do not bridge these divides will literally be judged incredible. These social and cognitive barriers may be present in the case of different segments within the same profession (such as primary care doctors versus acute sector doctors) as well as between professions (such as obstetricians and midwives).

The role of epistemic cultures and epistemic fit in knowledge use appeared as an important theme in the analysis of findings from this research. The vignettes not only illustrate plural forms of formal management knowledge, but also some very different ways of knowing in evidence. The predominant episteme(s) of the existing communities of practice in each of the sites proved highly significant in the form (and success) of the transposing of knowledge that took place. The introduction and journey of the formal texts identified in the sites, reveals epistemic fit to be a significant factor in determining potential readiness for more theoretical and academic knowledge to be transformed, used and appropriated as a local and practice-based resource.

In the Willowton, Oakmore and Firgrove vignettes the impact of 'soft' relationship-building management approaches to facilitate multidisciplinary and inter-disciplinary dialogue was evident. Coaching approaches, OD methodologies and whole systems philosophies appeared fluid and malleable enough to accommodate the plurality of knowledges and perspectives associated with multidisciplinary settings. The Oakmore case demonstrated that commercial and management knowledge can be blended and these knowledges were incorporated into multidisciplinary team-based knowledge to provide a modified collective orientation within the organisation's communities of practice.

In Elmhouse there was epistemic fit between Elmhouse's offer of the systematic application of what is known to be best practice (as discovered in Elmhouse's work) and the SHA. However, the time the consultants were in the site was not enough to carry out the blending of this knowledge in the local context. This led to an epistemic clash of Elmhouse generated knowledge with local PCT managers and clinicians.

In Mapleshire there was little common ground between the different knowledge communities of academics in the natural and social sciences, and the challenges faced by academics in undertaking transposition work and carrying out the more practical aspects of implementation and management of complex projects were evident.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

It is suggested that the role and importance of epistemic fit in management knowledge use is a promising theme to be further explored.

6.3.3 The role of knowledge leaders in transposing management knowledges

There was evidence of knowledge leaders who were able to make connections between management knowledge proposed by external knowledge agencies or ideas, management knowledge that had been an important part of their formative career experiences (including periods of academic study, attendance of management development courses or management knowledge events and interactions with key mentors or respected colleagues), and experimental efforts underway in their organisation. In Firgrove it could be seen how the personal interest of general managers and clinical managers could develop into organisational projects, for example the Toyota way and the development of the coaching culture initiatives.

Knowledge leaders did not appear to be *translating* formal management knowledge - i.e. transferring it from one place to another- implying movement in which the original sense is retained – rather it seemed they were part of a process of *transposition*, implying a more far reaching, nonlinear process of converting knowledge from a field of expertise to the field of practice.

It seemed that transposing codified management knowledge into practice involved, altering, repositioning and exchanging formal and experiential knowledge elements into the register of practice. Practices of transposition moreover, seemed to involve a greater degree of personal engagement and interpretation than mere technical expertise. It was not just the texts themselves that were transformed in this process; aspects of the setting, the identities of individuals, and especially interactions between participants were also altered. There was strong evidence of general managers and clinical managers starting from experiential knowledge, testing out management knowledge in context, then re-evaluating it and refining the theory or evidence. Transposition should not therefore be seen as a unilinear and uncontested process.

The vignettes reveal significant roles for knowledge leaders acting with varying degrees of presence and knowledge transposition effectiveness. Transposing formal and experiential forms of evidence into local management practices involved them in inventiveness and improvisation, not captured by conceptual models. Certain knowledge leaders (the Clinical Director in Willowton, the hybrid Medical Director/CEO in Oakmore and the Consultancy Director sponsored by the CEO in Firgrove) appeared able to straddle formal codified management knowledge and experiential relational knowledge. In Oakmore, the academically curious CEO personally

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

embodied and created an organisational form that was able to blend management, medical and commercial knowledges.

In Firgrove, the strong pairing between the CEO and the Dean offered a model of collaboration in which OD knowledge flourished. In Willowton, the CEO and the Clinical Director created an environment where experimentation could take place and experimented with a whole systems approach. In Elmhouse, the SHA manager and the Partner/lead consultants showed a ready strategic fit.

The vignettes also expose the consequences of the absence of knowledge leadership. In Mapleshire, the original academic director appeared distant from practice and failed to transpose the (largely theoretical) management knowledge into the contrasting local knowledge domains. In Beechwell, the CEO embodied policy knowledge and practice, but was relationally distant and so failed to transpose and bridge the two existing communities of practice with their distinct episteme(s), while the Elmhouse intervention, lacing local clinical leadership and support, was essentially rejected by the PCT (despite fitting well with the SHA).

6.3.4 Formative spaces

The analysis of both the interview data and that from the Phase 3 Action Learning Sets suggests that knowledge leaders are greatly assisted in transposing management knowledge if there are formative spaces where people can step away from their immediate context and engage with formal management knowledge and the experiences of others. However, as the Elmhouse case illustrated, there may be dangers in making these spaces too structured. Elmhouse's work on the QIPP project involved the creation of conversational spaces to debate knowledge in a very organised way and some respondents spoke of the 'creativity' being crushed out by having to turn ideas into templates and PowerPoints in these discussions.

In Firgrove, the management method of process consultancy involving the use of formative spaces was seen to be pragmatically useful as a means of bringing together diverse knowledge communities (and facilitating 'heavy duty communication' between them). It was seen as increasingly important to the central AHSC task of knowledge sharing.

Spaces for informal interactions also proved influential in the use of whole systems methodologies in Willowton. These spaces were seen as opportunities for productive, informal interactions that are valued as a safe playground to experiment by those involved. Respondents reported learning about the work of others and improved cooperation. However, in this case, although whole systems terminology served as a new vocabulary for enacting change locally, there were challenges in spreading this vocabulary and work beyond the immediate locality because of an absence of facilitating organisational systems, the disruptive nature of central

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

performance measurement logic and the lack of hard outcomes and alignment with corporate practices.

6.3.5 Facilitative organisational systems

Several examples of facilitative organisational systems that assisted knowledge leaders in their transposition work were identified. The ODIC unit in Firgrove proved to be a resource for facilitating team development and informal interactions. Also important were the structural alignment of two units and the creation of CAGs as leadership teams, mirroring the very well established multidisciplinary team model. Restructuring the organisation in this way was seen as a significant step in increasing interorganisational learning across historically separate areas.

The power of complementary performance management, career and knowledge management systems was clearly seen in Elmhouse where the consultants were rigorously incentivised to use Elmhouse internallygenerated management knowledge. Oakmore also had multiple blended facilitative systems (KPIs, carefully crafted management development and career systems, good IT infrastructure) forming incentives for knowledge use. In contrast, the Mapleshire case highlights the consequences of the absence of aligned organisational systems and career incentives, while in Beechwell, despite strong internal support for its strategic cross departmental themes, the tracer failed not only because of the absence of knowledge leadership but also because of the absence of positive facilitative organisational systems and an effective governance structure.

6.4 Conclusions

The scale of the challenge of using management knowledge is demonstrated in this section. Healthcare settings, particularly such diverse settings as studied for this research, are complex and either comprise or seek to influence multiple occupational groups, all of whom operate within their own communities of practice and are influenced by distinct hierarchies of evidence, socialisation, training and development processes experienced in their career journeys. The case sites came from very different contexts, within which funding circumstances and governance arrangements mediated the freedom of managers to innovate in their knowledge transposition work. In facing local challenges and dealing with the constraints of the contexts of which they are a part, knowledge leaders drew on a potpourri of management (formal and experiential) knowledge sources.

The application of the concept of epistemic cultures to the study of knowledge transposition and use in healthcare organisational settings would appear to be promising. Where healthcare professionals draw exclusively upon uni-professional research cultures and knowledge bases, knowledge exchange with external epistemic communities and other professional

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

groups is likely to be problematic. The existence of organisational incentives to encourage knowledge exchange, and support for professionals who can communicate effectively across multiple epistemic domains, may become increasingly relevant to the delivery of complex healthcare services.

The case material reveals that epistemological fit, formative spaces as well as certain facilitating mechanisms and systems may be useful for knowledge leaders in their complex transposition work, while factors that that increase management knowledge transposition and use include:

- The existence of a pressing puzzle
- Epistemic fit
- Strong knowledge leadership
- Opportunities for informal interactions
- Multiple and complementary facilitative systems

Oakmore proved to be the case where formal management knowledge had the highest impact. Here there was evidence of a successful combination of the factors listed above. It is important to note that Oakmore, as an independent organisation, had degrees of freedom to experiment and invest in knowledge exchange that was not seen in the other cases.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

7 Action learning as an aid to facilitate knowledge sharing and knowledge utilization

7.1 Introduction

This chapter examines Phase 3 of the project, which investigated a particular type of learning space, the Action Learning Set (ALS), a novel aspect of the research design.

This phase was devised as an 'evaluated capacity building intervention' through the formation of sets for Action Learning (AL), where it was intended to 'test and evaluate this form of intervention as a method of sharing research-based learning and facilitating the uptake and utilization of research-based evidence'. The adoption of the method of AL connects particularly with two strands of the academic literature discussed in Chapter 2, namely individual and cognitive approaches to learning and practice-based theories of knowing and learning.

The approach taken was to form three Action Learning Sets, drawing middle and senior managers from the research sites by invitation, and mixing both public and private sector organisations. The sets were run at the same time as the middle and later phases of the fieldwork. In facilitating the sets, a coaching approach was adopted, encouraging the use of open questions and the exploration of options. It was explained to the participants that:

The Facilitator will not act as an 'expert' but support the group's processes... and wherever possible, act as an intermediary to aid participants by suggesting resources which they can use to develop their learning or resolve work based issues.

For the detailed processes of set formation and operation, refer to Appendix 6.

The inclusion of this intervention as part of the research is highly relevant and timely. Recent reforms in public organisations (42; 46) have led to a demand for the creation and sharing of organisational knowledge (200) and a commitment to knowledge diffusion from the academic into practitioner domains (201). Public organisations are an important context for studying shared learning and knowledge exchange, but most theoretical and empirical research focuses on the private sector (200). This chapter addresses this deficiency, examining real time examples of healthcare managers accessing, sharing and using management research and other forms of knowledge. This contributes to earlier work on practice and learning in healthcare (202; 203; 160; 204; 205; 132; 206; 207; 208).

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

Multiple conceptualizations of learning appear in the organisational literature and many of these have been reviewed in Chapter 2. This phase of the research is on the borderline between individual and organisational learning and we are interested in the application of learning and practice improvement. Authors (209; 210; 211) suggest the organisational learning scholarship has considerable potential for improvement. Raelin (212) called for an epistemology that 'appreciates the wisdom of learning in the midst of action' (p.513). Revans, who is perceived as the 'father' of action learning, described it as 'a means of development, intellectual, emotional or physical that requires its subjects, through responsible involvement in some real, complex and stressful problem, to achieve intended change to improve their observable behaviour henceforth in the problem field' (213: pp.626-627). Rigg (214) proposes that AL should be perceived not simply as a small group process for problem-solving or individual development, but as a collective process to inquire and take action on projects and practices within complex, multi-agent contexts. Recently, criticizing the individualistic focus of much action learning, it has been combined with a critical perspective (215; 216) to promote critical thinking and acknowledge politics.

AL may also be seen as the enactment of the ideas of practice-based knowing and learning, (as discussed in Section 2.3.1 of the literature review) and the embodiment of these concepts in a process of management learning. Within this research, it is the concept that '[p]ractice connects 'knowing' with 'doing'' (210: p.136), which is central. Studies by Orlikowski (108) and Scarbrough et al (217) highlighted the knowledge and practice link, arguing that learning is 'situated' since '*it relates to specific hopes and expectations within groups and communities, as well as to the practices that emerge within specific locations and contexts*' (215: p.451).

This chapter explores AL utilized in a novel way, focusing solely on the data from observing and facilitating the three ALS. It first investigates whether AL can aid and facilitate managers from different organisations and different professions to share and understand research-based management evidence. Is sharing stimulated in this process and might this be achieved? Next, key issues arising from the data on the AL sets are presented and the final section offers some conclusions.

7.2 Orientations to new management knowledge in the ALS context

A core question for this research project was '*what motivates a manager to seek out management knowledge?*'. Here this question is discussed from two perspectives: what was the nature of the work-based projects which managers presented in their ALS? And how did the issue relate to their desire to seek out and engage with knowledge? This is an attempt to discover some of the triggers to learning.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

Set participants were offered written guidance, in advance, on the selection of an appropriate project topic. This stated:

Primarily, you will be offered the opportunity to work on your own personally specified problem or issue and to learn and develop your coaching skills by working on other group members' problems; 'learning via doing'. We offer the following guidance for thinking about your choice of work problem:

- Choose a management or organisational issue or question to which you do not currently have the answer;
- Select a topic or issue that stimulates your curiosity and about which you want to learn more;
- Choose an issue that can be worked on between the meeting dates and within the time-frame of the life of the Set.

Additionally, set members received one-to-one guidance, via telephone from the facilitator (see Appendix 6).

One common finding was that participants presented projects that had closely intertwined 'personal' and work-related components, though occasionally these were not overtly acknowledged by participants at the outset. It was this combination of personal and professional need which 'activated' their knowledge search. As a consequence, in describing their organisational issue, in the set, the participants displayed and shared strong elements of their personal anxieties; dissonance between personal values and their organisational culture and fear of failure.

These interrelated elements are illustrated further in the examples below, where the complex nature of the work projects which set members presented is explored, followed by discussion of how these issues were presented and related to the individual's desire to learn new management knowledge.

Example: From medical leader to Board Director-professional transitions in a political climate

One set member described his/her career background as being a 'medical leader', explicitly placing this term in inverted commas. The issue related to a combination of the current and future situation. Currently s/he was deputising for a senior colleague and doing a lot of their work while at the same time taking on a new more senior role which lacked clarity in terms of the priorities and boundaries. The set member described the issues going forward as very political and challenging. Whilst excited by this challenge, s/he was personally inhibited by the lack of role clarity.

Example: Creative programme design? Or in reality, major organisational change?

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

In a new role, and against what was described as the organisation's mandate that there should be 'a root and branch review of the Department', one set member presented the project issue as the design and introduction of a new and innovative management development programme. However, s/he stated 'what I heard about the staff before I met them was that they were a bunch of losers, but when I met them I quite liked them.' Additionally, the set member presented a number of other associated issues of governance and standards in his/her employing organisation. So the task of designing the management development programme was overlaid by complex issues of organisational performance, of developing productive work relationships, as well as potentially evaluating the competence of some current staff to deliver a high standard programme.

Example: Designing integrated services and inter-organisational care pathways-but is there a personal future?

The specifics of the issues presented in this example focused on the future development of a specialist health service, against the background of a merger between a primary care trust and a hospital. The set member hoped the service could be one of the early innovators of vertical integration of community and secondary care following the merger. But a key part of what s/he really wanted to focus on was building personal credibility during the transition and developing a strategy to create a personal role appropriate to the new arrangements.

In each of these examples, the project issue presented is a complex organisational issue, but there are varying forms of personal anxieties embedded in this.

Initially, ideas, suggestions and questions were prompted by other set members. Ultimately, as the sets progressed, any ideas for action going forward and the resolution of issues emerged from these discussions and were normally summarized by the facilitator. Section 7.4, discusses how 'knowledge' was interpreted as meaning experiential; formal; and filtered. Thus, discussions of knowledge requirements were an essential aspect of issue resolution. One part of the feedback to participants was about care of the 'self', concomitant with dealing with the issue.

Across several sets, the data suggest that management knowledge seeking behaviour may be generated when individuals have to cross new disciplinary boundaries in their work due to a career transition, promotion or the expansion of a role. Examples of this scenario occurred in every set. One exemplar was a set member who through progression had taken up a senior management role and now sought to extend his/her knowledge base in order to build credibility with doctors (since s/he saw him/herself as formed by his/her originating discipline outside the health services).

Many set members initially construed their need for management knowledge in one of two ways: firstly, they felt they needed to extend and delve into their current realm of expertise; and secondly, they believed, but

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

did not know, that there might be some useful management knowledge 'out there' from a different discipline or realm of knowledge. So in many instances, the ability to access new knowledge is bounded by what the individual already knows. It is rare for senior managers to experience the opportunity to openly explore new knowledge domains.

Because of their career history, there was a sub-set of 'learners' who had experience of academic approaches to literature searches and expertise in accessing sources and others who through personality and history adopted a more exploratory approach. More negatively, some set members anticipated gaining a 'product' from their participation in the set, some defined piece of knowledge or tool, which would explicitly enable them to resolve their issue. There was also evidence of members accessing knowledge via mentoring and from external and personal interests, e.g. athletic competition; volunteering.

Two themes emerge from the analysis so far:

- The importance of career transition stages in activating individuals to search for knowledge; and
- The manner in which developmental tasks often engender a search for more or different knowledge. A developmental task frequently cues the need or desire for knowledge from a different domain or the curiosity to extend a known domain.

Set members engaged in knowledge search activities when the work issues they faced had personal elements, which challenged self-defined work standards and sense of identity. Thus, in the sets, many participants were experiencing periods of stress. So, one component of their learning in the set centred on the care of self.

7.3 Manifested attitudes to sharing and learning in a set

As Huxham and Hibbert (218) usefully highlight, one under-researched topic is the attitude and orientation of managers to sharing what they know with others, especially those from other organisations. The data illustrate interesting differences in the attitudes manifested by the participants in each of the three sets, which contributed towards the set members' preparedness to learn and the atmosphere within the set. Comparing sets, the attitudes manifested in each set may be characterized as 'competitive' (in set A); 'supportive' (in set B) and 'enquiring exchange' (in set C).

From the start, Set A, consisting of five senior managers displayed competitiveness and mildly belligerent questioning. Two examples from the first meeting of Set A illustrate this competitiveness:

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

After a casual, coffee break discussion on cars and motor bikes, a Set member laughed and said 'oh we're on bike one-upmanship already'; everyone laughed.

During a discussion, a Set member intervened:

I'm hearing a lot of intellectual angst, but not much analytical argument about the need for change.

Later s/he said:

I still don't know what you are most worried aboutif it's a political power struggle, that's fine I can help with that; if it's your existential angst, I can't help as I don't know you.

In Set B, the Observer noted at the first meeting:

As a set member arrives – I notice x puts on ... glasses to see who x is approaching in this rather large room [full of strangers]. A lot of warm hand-shaking.

In discussing his/her project, one set member described the endless issues s/he had experienced in writing a strategy document for the Board and received the following feedback:

[I]t's fascinating for me having your perceptions, it's very powerful – I'm going to say some quite provocative things[but let's do this W, we can look after ourselves !!]...you saying you are on your own in this is very powerful – you are managed by the Medical Director in theory!

This quote describes the moment when the individual set member is encouraged to re-define a personal problem as an issue resulting from the operation of the organisation's hierarchy. So the set then discuss how the problem emanates not from one individual, the set member, but the organisation more broadly.

In Set C, the atmosphere was characterized as 'enquiring exchange' because set members listened to each other; questioned strongly and utilized feedback. All members decided they wanted to continue and create a supportive and creative space. Quotes illustrate their attitudes:

A set member explained how things have progressed in his project since the first set meeting:

And, it was the commissioner going "oh yes, well we actually agree with that", and consequently it was done then.

A set member responded:

Can I just feed that back to you? There was a factual view, you know, you are treating people with (a specific medical problem), they are not the same as everybody you've met. So, you know, there was a factual content. And the other thing you just said was that, you know, your people in contracting said it to the commissioning people and then

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

the commissioning people went and, you know, chatted to their expert and got it reconfirmed.

Then followed an important discussion about how to use evidence based knowledge and expertise in this organisation.

Evidentially, attitudes could be shaped by processes within the set, for example, by phoning each participant personally before the meetings; in creating an atmosphere through the facilitation style and the degree of direction and intervention style. But it was also apparent that set members' own attitudes were influential in participants' sharing and learning.

7.4 Management knowledge: interchange, absorption and transposition

7.4.1 Interchange absorption and transposition

This section discusses data on the exchanges which occurred during the learning sets and the evidence on absorption and transposition of all forms of knowledge. Once individuals in a set are triggered to learn, what processes occur?

The variety and scale of the work issues and projects presented in the sets suggests that the interchanges might be similarly divergent in nature. Though the topics discussed varied substantially, there were some interesting common themes. As previously stated, individuals wished to work on and resolve work issues which had strong 'personal' components to them, including, in a number of instances, major career transitions. So one common theme was the way in which interactions, advice and ideas focused on enabling participants to deal with the personal:

A set member advising caution:

[You need to] just to find out what's happened, in that, does it matter how much are you going to get hurt or are they- they're going to cram you in or how much of a call you've got. I don't know, I don't know but...

Participant responds:

Yes, essential training queen, which is what I really didn't want, which is why I was so pleased that I've, you know.... And so XXX [organisation] have made a real commitment that I'll be able to focus on clinical learning this coming year and given me a bit of resource to take away some of the, but it's the ZZZ [merging organisation], I have got to work out the ZZZ bit.

Next, is offered two alternate illustrations of the exchanges which occurred in sets.

First, a participant's action plan- note the mix of actions and learning:

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

- Think about the "currency" /currencies I have gained in overcoming the previous issue and how this currency can be used to advantage in the current challenge;
- Consider how I can lead the implementation work yet not have to feel as if it's "my problem" all the time;
- Think about how the clinical leadership issue may be linked with my own leadership e.g. self as a role model for clinicians in the ways he deals with his own leadership development needs by getting a mentor;
- Look at literature on clinical leadership XXX (other set member) suggested things produced by British Academy of Medical Management.

Next, a member's evaluation in his/her own words:

The atmosphere was more challenging than I expected – but in a good way. The group posed thought-provoking questions that forced a plan or response to take shape. Normally it's easy to complain about something without even having the intention of doing anything about it.

The exchanges and advice offered to participants centred on two other common themes. First, feedback from participants stressed the critical importance of carefully assessing the stakeholders in an organisation and understanding the organisation from the stakeholders' perspective. So attention is shifted from more concrete forms of 'task' based knowledge to focusing learning on the social context of an organisation and on developing understanding of the political dynamics. Second, advice frequently suggested individuals should seek and secure allies or other change agents in managing change. Thus several discussions revolved around developing the concept and practices of shared leadership.

7.4.2 Local knowledge communities and community exchange

Building on the data in the previous sections, the ALS can be perceived as a specific form of 'interactive space', which may facilitate the transposition of knowledge and ways of knowing from a variety of sources. So within the sets, an extensive range of knowledge sources offered was observed and discussed. These included: mentors; vicarious learning from credible role models; peers; training programmes, internal and external; accredited qualification courses; accessing data via formal academic search modes; internal libraries; grey literature; filtered academic literature, e.g. in the Harvard Business review; and finally academic journals and books. It was noted that when specific recommendations for articles were offered, discussion then focused on the way the ideas might be used in the participant's own organisation. We observed that many exchanges started from a description of events and experiential knowledge and subsequently, through debate, experiential knowledge was combined with cognitive knowledge. Specific ideas surfaced and were drawn in, such as ideas on clinical leadership (as above) or in an alternative example, Grint's (219)

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

ideas on the sacred in leadership. Participants drew on and used their total experience, as in the case of one set member drawing on their athletic experience for concepts of team leadership.

7.4.3 Transposing knowledge

Though it was variable, there was evidence in each of the sets that individuals had progressed towards action and moved on in some way. Furthermore, members' issues and perspectives changed over time. There was a real co-evolution of learning and the dynamics of organisational life demonstrated within and between meetings. One quote illustrates this:

And what I took away from the day was that maybe I should look at how to influence something else that was more established and actually have a much better chance... So it's gone from this grand oh yes, I really want to set up something that organises community education-- to OK, we're working together and it's in YYY [location], and across YYY, and we're going to set up a preceptorship programme for Allied Health Professionals, because they don't access post registration training in the universities and they have this scheme they do but it's not quality assured or anything. So it's a way of starting small...

Having stepped out of their immediate organisational context, some set members felt they were returning to the organisation as a slightly different person with different approach and counter-cultural risk attached to that.

The pace of change and dynamics of organisations and the daily uncertainties faced was strongly in evidence in the ALS.

Synthesising themes, some important features of these exchanges are noted.

- There was no strong evidence that one form of management knowledge was considered more credible than another. Indeed, participants alluded most frequently to their use of social contacts and drew heavily on their experiential management knowledge base. There was little evidence that academic publications were privileged.
- Critically, the debates within the ALSs facilitated the process of transposing knowledge. Transposition enabled the application of management knowledge to specific situations and the conversion of formally sourced knowledge into experiential management knowledge. The coaching approach enabled participants to explore options for action in relation to their issue or puzzle.
- The extreme difficulty of orientating towards knowledge from a different domain without the help of others was noted. Here an academic facilitator may play a key role in filtering management knowledge from an array of disciplines.
- There were numerous examples of the value of an independent viewpoint and advice. The role of mentors was noted here.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

7.5 Academic / practitioner interfaces

7.5.1 Within set interfaces

Oliver (220) underlines that one of the factors which negatively impacts on the effectiveness of an ALS is the facilitator being seen as a threat to set members' credibility and a source of complexity. However, neither academics nor practitioners are uniform groups, and the facilitators in this study all had managerial, academic and executive development experience. Further, the boundaries between academics and practitioners were blurred, with many set members having considerable knowledge of 'academic' work and sources. They might have been called 'reflective practitioners'. The data and experience gathered from the ALSs reported here suggest that academic and practitioner interfaces may be perceived as a point of stimulating exchange (and not a one-way flow of knowledge) and that ALSs of the type conducted for this study have potential as a mechanism for facilitating shared learning.

The mix of academics and practitioners in a set enabled several processes to occur. First, it provided a convened, physical and interactive space, where individuals could *legitimately* focus on management issues. Significantly, the ALSs provided an arena in which to debate both the legitimate and illegitimate discourses from organisations. It appears that one of the useful purposes of the ALS was as an alternative space where topics and reactions to events unfolding in participants' organisations which were difficult to discuss within the organisation, could be openly debated and yield learning. Organisations appeared to be difficult/or perceived as inappropriate forums for dealing with emotions. So an ALS can provide 'added value' by dealing with a wider range of problems, which might otherwise fester within the organisation.

Second, the ALSs offered a *reflective space* in which through scene-setting and narratives, members learnt about each others' organisations and drew parallels and ideas from the experiences presented and lessons. Thus debate and feedback assisted in the transposition of the knowledge for the individual. Participants especially valued the 'filtering' of knowledge by other credible and supportive professionals and academics, acting as a short cut to relevant knowledge.

There was evidence that ALSs offered a shared sense of the benefit of a distinctive reflective space and time out from the work setting. Participants described a sense of being forced (usefully) to do something more reflective, circuitous, tangential and uncertain than normal. This enabled the reconstruction of the original problem.

Third, participation in the ALSs and the experience of progressive learning led to greater *confidence* & *personal reinforcement*. Several quotes exemplify this:

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

I think I went away feeling much more validated than I had felt when I walked through the door...

An exchange in another set:

Set member:

[B]ut I did have the most fantastic day, so thank you very much. In terms of how things have gone since then, it went very downhill, but it's coming back up again.

Facilitator:

Oh good, good.

Set member:

And I'm feeling actually quite pleased with myself secretly.

A view was expressed that there was an element of people aspiring to be 'closer' to academics and academia for their own self esteem.

7.5.2 The 'supervision' space

As part of the experiment, a 'supervision' space was created. This was a formative arena for the academics (space precludes extensive exposition here, some further details are offered in Appendix 6). Here in discussions on credibility and empathy, it was highlighted that academics are not one homogeneous group. This reflection led to experimentation with progressive intervention by the facilitator in terms of challenge to the set members and the offer of text-based codified management knowledge that the research team felt might assist set members in making progress on their topic. Over the project period, the facilitation progressed from reflective questioning and summarizing to more active interventions and suggestion on academic sources.

7.6 Conclusions

The literature proposes a number of factors which may contribute to or inhibit successful ALSs. These are: set members' degree of openness to the emergent learning about the action learning process; supportive/unsupportive external environment for set members which impacts upon the set's ability to create a positive and supportive culture (221); and openness/resistance to participation in assumption-breaking and reflective practice and the perceived timeframe to apply the AL methodology (220). The data collected in this research extend and develop understanding of ALSs through examining 3 ALSs deployed, initially, as a means to facilitate the sharing of formal and codified knowledge. A number of core themes emerge from the analysis of the transcripts of the sets and the facilitators' and observers' notes:

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

ALS as a process for inter-mixing codified, experiential and interpersonal knowledges

Notwithstanding the initial starting point, it emerged that the participants in ALSs sought an opportunity to debate and share their colleagues' experiential management knowledge and interweave this experiential knowledge with more formal and codified academic management knowledge. Thus ALSs may be important sites where codified and research-based knowledge could be transposed and used as a resource through the domain of practice-based, experiential and interpersonal knowledge. But it was also the case that experiential knowledge was used to 'test out' the relevance and validity of more formalized management knowledge.

Kolb (87) advocates the integration of the scholarly and the practical learning styles. ALSs, through debate, can offer contextualized knowledge and knowledge filtering. The processes of sharing and exchange within an ALS can be likened to an individualized 'bench marking' process, similar to organisational bench marking, a proven process of learning and improvement (56).

Crossing disciplinary boundaries through AL

The data from these Action Learning Sets underline one of the key difficulties of evidence-based management - orientating to and comprehending knowledge from outside one's disciplinary domain. Essentially, it is challenging for managers to skilfully access knowledge from a range of disciplines, thus non-competitive interaction with academics and other skilled professionals in an ALS can enable different world views to emerge and be absorbed.

One essential element in this process draws on different individuals' current disciplinary knowledge to 'filter' knowledge appropriate to the 'puzzle' presented *and* its organisational context.

Motivation-combining personal and organisational need

The motivation to acquire management knowledge is strongly associated with facing the challenge of personal and work interrelated issues (222, 223). Career transitions or a challenging developmental work agenda were key tipping points. Essentially, learning was utilized to serve a personal, as well as an organisational purpose.

The sets also illustrate the isolation of senior managers and the deficiencies of developmental support. Foucault's 'ethics of care for the self' comes to mind, defined in terms of the ways in which one attempts to master oneself, to transform oneself and to give shape to one's life (224). It was observed that individuals were being actively shaped by the knowledge they were orientated towards and engaged with.

Orientations to sharing knowledge and manifested attitudes

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

In this under researched area, the data in Section 7.3 demonstrate that the orientation of the set members and their manifested attitudes to sharing do affect the interactions in the set. These manifested attitudes are further testimony to the fact that individuals' approaches to learning are influenced by their life pathways (not just their career pathways) as demonstrated in Chapter 5.

Debate at the academic, managerial, professional and disciplinary interfaces

Participants' responses to debate with academics, other managers and professionals in the ALSs were generally positive. Participants welcomed the opportunity to collaborate with credible others (both the academic facilitators and managerial colleagues). The data confirm the research by Randall and Munro (207) with participants adopting a relatively critical attitude towards expert knowledge and authority.

Some implications are that the ALS method may provide a useful framework or starting point, and may be particularly useful in management learning contexts (such as business schools). However, for its benefits to be fully realized (for the purposes of bringing together contrasting knowledge domains), critical reflexivity and adaptation are important, as practiced by facilitators within their supervisory settings, as well as in the sets themselves.

Pragmatically, it is evident that set processes; the formation, preparation and composition of the set have impacts. Having set members from the same organisation in a set worked well in one instance, but less well in another.

ALS as a reflective and interactive space

There are different ways of describing the AL experience as a medium for knowledge transposition, e.g. reflective space; reconstruction of the original problem, de-constructor of mental models. The particular contribution made by this project of bringing critical and reflexive elements into ALSs meant that the sets were not merely 'facilitated' interventions, but served as a means of drawing upon academic inquiry in studying *both* dimensions of practice *and* research-based knowledge/theory, through critical inquiry. Thus it was hoped to simultaneously use theory/codified knowledge to investigate practice and at the same time, test, deconstruct and potentially contribute to theory, via experience and practice.

The reflexive element that was emphasized in the supervision arena provided learning and adjustment to facilitators and observers own practice and use of codified knowledge within as well as between sets, was informed by and tested against the earlier research findings. These 'formative spaces' were seen as being creative and useful for organisational productivity (225).

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

Overall, the findings from Phase 3 suggest that ALSs, using a coaching approach and with adequate facilitation, are a positive medium for facilitating EBMgt.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

8 What factors increase management knowledge use?

8.1 Introduction

This chapter reflects on the factors which, from the data collected in Phases 1, 2 and 3 of the project, appear to potentiate the use of management knowledge across the cases. The question is: what mechanisms, processes or contexts have been revealed that facilitate the process of transposition of management knowledges and enable use? Some of those identified have already been signposted in the literature, others seem to provide a novel perspective from which to view the acquisition and use of management knowledge within healthcare organisations. What can be said to have been learned about what worked in these cases at the level of practice, and so may be promising if utilised in other settings?

It has been shown in the empirical chapters that the managers interviewed were often motivated to seek management knowledge when confronted with a puzzle or when they reached the limits of their (formal or practice knowledge). The importance of their life histories, formative training and careers in their knowledge seeking behaviour, a clear theme in the various theoretical literatures on how people learn, was noted. In the Action Learning Sets, it was seen that individuals may seek new knowledge when they have to cross new disciplinary boundaries in their work due to career transitions, promotion or expansion of their role.

It was observed that there is no such thing as a unified body of management knowledge and that multiple management knowledges were in operation in the cases. A potpourri of knowledge sources was used: texts, grey literature, policy reports, consultancy reports, mentors, vicarious learning from credible role models and peers, training programmes (internally and externally), accredited qualification courses etc.

It was found that managers were strongly oriented to experiential learning and local relationships in their knowledge acquisition. It was also seen that they are overwhelmingly not orientated towards research-based and codified texts, although filtered formal management knowledge supported by a combination of knowledge leadership, informal 'workshop' discussions, cases, narratives and OD techniques appear to increase accessibility and use. The importance of the formal management knowledge inputs having an 'epistemic' fit with the prevailing episteme(s) in operation in the local context has been highlighted. Finally, the role and importance of informal formative spaces and blended facilitative organisational mechanisms and

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

systems in assisting knowledge leaders in increasing the use of management knowledge via the complex transposition processes outlined in Section 6.3. was noted

An example of the complexities involved in producing a discussion of promising factors can be seen in the Elmhouse case. The Elmhouse portal, containing information about previous Elmhouse projects, appeared to work very well as a means of capturing aspects of practice; and was used as a source of templates and experiential knowledge in the field by Elmhouse consultants. However the tracer study found that while such templates were attractive to SHA managers seeking to legitimize rationales and solutions, they did not transpose easily to the domain of practice, that is to say, template knowledge was less successful in the PCT setting where the appetite was for a more bottom-up approach.

In the following four sections, the factors that appeared from the data to facilitate the use of management knowledges are discussed in more detail. The final section summarises the conclusions reached about the impact of these factors on management knowledge use in the case study organisations and some suggestions are made about possible implications for practice.

8.2 Strong credible knowledge leaders exist in the site and are skilled at transposing management knowledge enabling it to be more accessible

The importance of human agency in facilitating the transposing of management knowledge, as emphasised by Elkjaer (104), appears as a strong cross-case theme. Knowledge leaders not only have an interest in accessing and transposing management knowledge but also have the power to influence others to utilise that knowledge in pursuit of organisational goals. Previous chapters have highlighted examples of important knowledge leaders (the CEO and the Clinical Director in Willowton, the hybrid Medical Director/CEO in Oakmore and the Consultancy Director, sponsored by the CEO and the board in Firgrove) able to straddle formal codified management knowledge and more experiential relational knowledge.

There are other examples in the data of leaders who were less visible in promoting particular management knowledges but did provide a supportive setting for its discussion and experimentation and created an environment which allowed knowledge leaders to flourish. In Firgrove, for example, the CEO and Dean who had worked together for many years, encouraged people to exchange management texts, attend international conferences, introduce novel management techniques, get advanced management

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

qualifications and enabled the director of the coaching unit to have the impact reported as knowledge leadership.

The credibility of knowledge leaders appeared important across all cases. For instance, the senior SHA manager involved with Elmhouse knew and respected the partners involved, which was an important influence in selecting Elmhouse:

By and large I never use management consultants and I'm loath to do so. Elmhouse had three things: fantastic insight and analytical abilities, quality people who provided capacity so we made progress quicker than we would on our own and knowledge of global healthcare which they could customize for local implementation.

Being associated with a postgraduate qualification that had explored the management knowledge in depth also assisted the uptake of management knowledge in some of the cases, for example in Firgrove, gaining a PhD increased a respondent's level of engagement with senior people in the organisation. In Oakmore, a member of the senior management team studied the Balanced Scorecard as part of a thesis for an MBA degree. This in-depth knowledge of the Balanced Scorecard was valued by the CEO and was discussed and adopted by the leadership of Oakmore.

In the cases, 'being impressive' as a knowledge leader meant being able to tell stories convincingly, failures as well as successes, in a way that 'rang true' for the audience, and that fitted with their own experiences and sensemaking. This was particularly evident in Firgrove, where the CEO and Dean were widely respected for their personal abilities and well-proven experience of organisational leadership. The power of rich case studies appeared important across the sites in facilitating management knowledge use. Whereas respondents tended to question the idea and validity of evidence-based management, case studies of what had worked elsewhere (public and private sector and international cases) were influential.

Multiple languages were spoken in the healthcare economy. Respondents repeatedly stressed that management ideas and research knowledge needed to be expressed in the 'local' language and knowledge leaders were aware of this. For example, in Willowton, one of the challenges over the years had been to translate national policy directives and its own strategy into a meaningful local language: one capable of instigating change, promoting communication and integration across the different healthcare specialties and engaging professionals and the public. This challenge was said also to exist in the provider units. There were many comments about 'management and NHS speak' obscuring meaning for non- managers and clinicians.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

We had to have an interpretation of the strategy for staff on the ground...if seventy to eighty percent of your organisation is clinical it should be in a language they understand...I've never been a great lover of all that 'flying kites' and god knows what else, when you sit in meetings and they all start, it makes me laugh. I'm quite pragmatic so I just think well no, you're at work, you're not going to fly a kite today.

At Oakmore there was a successful blending of knowledges to create a new language, which appeared to overcome the differences in episteme(s) in the site:

One group of languages is the healthcare languages. The other group of languages are business and management language. And that's the basic conflict in healthcare resources. The first language is really about, particularly about current patients. The business language is about freeing up resources for future investment in healthcare and the people at the coalface don't really understand that too well. I think the questions about translating the solution to that first is the common frame of the common language of the charity, so our core marketing message for our staff is the charity. The common language becomes the mission of the charity to treat as many people as possible and we don't exist if we don't fill our wards. So we want to treat as many people now and in the future, and it provides a common language between the kind of here and now healthcare staff stuff and the kind of plan for the future business.

Part of what the knowledge leaders did in their transposition work was to improve the accessibility of formal management knowledge. Developing 'home grown' knowledge and tailored learning opportunities appears important across cases. The Oakmore example is particularly strong and illustrative. In this case, a highly valued and bespoke training, based on Franklin Covey, was adapted and integrated into an established framework for organisational learning. Some doctors who were initially reluctant to come to these management training and development events were persuaded by this customized approach to undertake training beyond their professional remit.

We adopted a process (for the doctors) of "its here if you want it and need it", we're happy to help you rather than you must attend, people put more value on it. They choose the training they need; we even allow them to choose the delivery style in that training. So if we have a workshop and somebody would prefer a one to one session for whatever reason, were happy to deliver that in a one to one setting.

Unusually, in these cases, transposition work may also involve the creation of 'template' structures for management knowledge. This was particularly seen in the Elmhouse case. The Elmhouse Text integrated both hard and soft forms of knowledge, creating a unified and coherent point of view for the Elmhouse consultants, which informed their practice. Elmhouse's

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

benchmarking analysis and PowerPoint templates emerged as important and were valued by the SHA in helping them fulfil their management tasks and financial savings targets.

8.3 The existence of 'formative spaces' and opportunities for informal interaction and discussion

Social learning theorists such as Lave (116) and Gherardi (117) stress the importance of considering social factors which affect how and what people learn, and there was some evidence from the cases and also from the ALS data of a positive impact made by opportunities for informal interaction with colleagues to discuss local challenges with some form of management knowledge input. Willowton, Firgrove and Oakmore were the most proactive of the sites in this respect. Away days, and training/management development events that were not meaningfully integrated into work and career incentive systems tended not to function strongly as vehicles for knowledge use, however, they did provide forums of exchange. Such fora may be important in their own right and may have potential to become sources of exchange, in the context of a 'dense' and more elaborate knowledge system. In Willowton for example, bottom up service quality improvement was favoured and the productive series (lean thinking theory) was viewed as successful for enabling knowledge exchange between multi professional and multi-agency actors.

I think the strength of the Productives is it is quite bottom –up so the services themselves get to think about what to choose or what they want to focus on, what that would mean for them, how they do that. And when we did it here there was some money available to do it, so there was money to release staff.

Locally-led whole systems knowledge exchange events emerged in the data as offering safe yet challenging, 'formative spaces' which became important in facilitating multi-professional problem solving and engagement. In Mapleshire the formation and promotion of such groupings was part of the remit of the IFCaSS Programme. Such groups drew on OD knowledge and facilitation as an influential source of management knowledge.

Multidisciplinary teams could also facilitate the acquisition of new knowledge. Firgrove's CAGs were led by an unusual leadership group of three to four academic, clinical and managerial directors. The deliberately flat structure of this group appeared effective in creating a strong arena for knowledge sharing within the team, generating ideas, dealing with disagreements, and producing shared solutions that 'everyone can sign up to'.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

The managers studied reported having very little time to reflect. This was especially true of those undergoing change (and indeed turmoil in the case of Willowton). In some cases, respondents also reported isolation. The Phase 3 data from the ALSs suggest that this medium offered several unique characteristics not available to individuals within their own organisations at that time. These included: independent perspectives; credible other professionals whom individuals could consult; and the opportunity to debate both legitimate and illegitimate subjects (i.e. topics, including those with personal and emotional relevance for individuals, which could not be openly discussed inside their organisations).

People appeared able to learn within the ALS because:

- Learning was filtered for them.
- They were aided to translate learning to their own organisational contexts.
- They learned to innovate; to deconstruct puzzles and to search for creative solutions.

Here it appeared that credible academics could play a key role in facilitating such groups.

Physical arrangements such as geographical distance-proximity and architecture appeared as important factors influencing management knowledge exchange in some sites. In Mapleshire, for example, the challenge of the geographical distances involved adversely affected both attendance at and frequency of the knowledge exchange events they sought to promote. In Beechwell, the organisation's architecture played a striking part in both reflecting and maintaining epistemological differences between what had historically been separate institutions. Although the architecture supported team-level communication, it tended to inhibit informal exchange between departments.

I'm on the x floor...Oh well somebody said to me that they had never been up to the x floor.when I first came here I got shown around and met the leadership team, they've got a soft area...that's where they sit and have their team discussions and create ideas, its lovely...

8.4 Management knowledge has a positive epistemic fit with prevailing episteme(s) in the local context

The finding that formal management knowledge is likely to be transposed more readily where there is stronger epistemic fit with prevailing 'knowledges' within an organisation is congruent with much of the literature on communities of practice and epistemic cultures, as was discussed in Chapter 6. Theories and ideas from systems thinking, relational and team-

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

based approaches were more easily transposed and seemed to align with underlying episteme(s) in multidisciplinary settings, as demonstrated in Willowton, Oakmore and Firgrove. This finding underlined the importance of creating organisational formative spaces where such relational exchanges amongst epistemic communities of practice can more easily take place.

Interestingly, the findings suggest that time could be an important factor in the successful blending of management knowledge with existing epistemes. In Oakmore, and to some extent Firgrove, management thinking had been introduced gradually over a number of years. This contrasted with Mapleshire where the development of communities of practice and blending of knowledges was at an early stage with the IFCaSS programme having had a very short time frame in which to accomplish change.

8.5 Facilitative systems and mechanisms are in place

The importance of facilitative systems and mechanisms in facilitating management knowledge use was discussed briefly in Chapter 6. Below a range of such mechanisms that emerged from the data as helpful is highlighted.

8.5.1 Structural alignment

Prior to the formation of the AHSC and the introduction of CAGs in the Firgrove case, there was a historical focus on developing site-specific solutions and this was reported to limit opportunities for organisational and inter-organisational learning:

In terms of knowledge and training, that's always on offer and very good, compared to other organisations. In terms of shared learning across the [departmental] boundaries, it's (historically) remarkably poor. ... And that to me is the failing of the organisation; you've got huge variability between boroughs. Why has the organisation allowed completely different design of services and not allowed learning to happen across borders. "What are the similarities between (here and next door) there must be similarities?" "No, no we're very very different." I took the staff on a trip to a ... hospital which had ... a different way of working. The whole way back was "its so different and we wouldn't do it like that". So there's this closed off thing

Restructuring the entire organisation as CAGs (rather than its traditional geographically-based structure) was widely held as a significant step in increasing inter-organisational learning across historically separate areas. The AHSC appeared as a strong opportunity to facilitate learning across institutional boundaries.

I think we're all learning hugely through the AHSC, (Firgrove) is such a different organisation ... our culture is different . We are not hierarchical

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

... [W]e have a huge sense of everyone has an entitlement to be involved in every discussion

8.5.2 Strategically-connected and incentivised management systems

A well-developed Balanced Scorecard system was widely regarded as an important part of the success of Oakmore. However its success was linked to the existence of other supportive systems such as incentivising career progression and performance management and training systems. There was also clear evidence of the system's utility in shaping organisational strategy and operational decisions.

The importance of having multiple, blended and mutually reinforcing systems is highlighted by the negative experience in Beechwell where, although a collection of indicators to measure the impact of the organisation in terms of reports, training and citations of outputs had been introduced, the information appeared to be gathered in a rather ritualistic way and seemed not to be meaningfully connected to practice.

We have a [collection] of indicators. Everyone feeds it in certain ways...some kind of traffic light system..we feed it quantitatively and qualitatively, which is a real positive that they do value qualitative outputs such as networking opportunities.. But the information does not come back, I've never been questioned on anything.

8.5.3 Career systems aligned to human resource development and organisational development

Elmhouse and Oakmore demonstrated the potential power of aligning and integrating management development, training, well-developed incentive systems, a strong culture that embraced learning and knowledge-sharing, and 'up or out' career pathways. Weaker training structures and less coherent strategy with respect to knowledge sharing could be seen in Beechwell, Willowton and Mapleshire, where training/learning cultures were more individualistic.

The importance of career incentives being aligned to support knowledge sharing is vividly illustrated in the case of Mapleshire where an absence of incentives for academics who had moved into management roles to engage in practical management work required by the CLAHRC was noted. Newly created managerial roles and project management responsibilities could distract from the writing of peer-reviewed publications that would enable them to progress their academic careers.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

8.5.4 Access to practice- and case-based knowledge portals that capture and codify practice

The positive view of the Elmhouse portal by Elmhouse consultants was unusual, and indeed contrasted with the views of existing portal systems in the wider health knowledge system from a number of other respondents in this study. The Elmhouse portal captured experience-based case material; it was not a portal to formal externally codified knowledge (as used in Firgrove and Beechwell). It may be that this practice based dimension facilitated its use and positive reception. Consultants were incentivised to add information to the knowledge management system through career development and financial reward, and this might have been a factor in their active use of the knowledge portal. Firgrove and Beechwell also had access to information specialists but they were not used so systematically as in Elmhouse, partly because in the former sites it was seen primarily as a resource for individual learning rather than part of an organisational knowledge system.

8.5.5 On line learning and knowledge sharing

In Oakmore the intranet was reported to be crucial in the day-to-day running of the organisation itself. This technology, for example, had enabled all the mandatory training to be put online as well as facilitating access at ward level to management information from the Balanced Scorecard.

I think also the way we make information available for people within the organisation So we've got an intranet where information about our performance, our financial performance or our business performance, our occupancy can be circulated in real time to anybody in the organisation and they can be at a macro level or they can be at a micro level.., it depends on where you want to drill down. So a ward manager might see the divisional bed occupancy results, but they can go from the division into the wards and then into their ward to see over the month or year where it may have peaked or troughed.

8.6 Summary of findings and implications for practice

The role of the existence of a pressing local challenge or a puzzle as a background factor impacting on management knowledge use was noted, as was the importance of the setting and context within which managers were operating. With these points in mind, the four key findings are listed below, each followed by some suggestions, based on evidence drawn from the ALSs and empirical case studies (though not necessarily from every case), of ways in which the uptake and use of management knowledge may be facilitated.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

8.6.1 Strong, credible knowledge leaders

Finding: Management knowledge use is increased if strong, credible knowledge leaders exist in the site and management knowledge is transposed to be more easily accessible enabling a greater fit with the local context

- Management knowledge leaders may need to be identified, nurtured and supported in their transposing work. Clinical managers who are curious about management knowledge and willing to experiment with it may be better placed to adapt and blend different knowledges to improve epistemic fit.
- Knowledge leaders may need to be helped to gain credibility via formal qualifications. Certainly, there was evidence that higher academic qualifications were considered a necessity for career progression in the NHS, while a clinical background was valued for personal credibility when leading change locally.
- Functional senior teams may need to be protected to enable them to continue their management knowledge transposition work
- Academic management knowledge may need to be synthesized and skilfully filtered and transposed by knowledge leaders to make it more accessible.
- It may be important to ensure the management knowledge resonates with 'local' languages and avoids jargon.
- It may be helpful to provide benchmarking data and rich case studies including examples from national and international healthcare systems.

8.6.2 Opportunities for informal interaction and discussion

Finding: Management knowledge use is increased if there are formative spaces that provide opportunities for informal interaction and discussion allowing people to explore other knowledges and practices and problem/puzzle solve

- It may be helpful to consider how learning might be filtered to make it more accessible
- Managers may need to be aided to translate learning into their own organisational contexts.
- Managers may need to be encouraged to innovate; to deconstruct puzzles and to search for creative solutions.
- Consider the introduction of safe yet challenging 'formative spaces' providing opportunities for informal interaction and the exchange of management and experiential knowledge between different professional groups – managerial and clinical.
- Ensure senior management team meetings include time for informal interactions and reflection.
- Create and support multi-professional leadership teams.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

- Consider creating facilitated Action Learning Sets to address organisational puzzles or individual work challenges.
- Consider the role of the organisations' internal architecture on facilitating or compromising both informal and formal knowledge exchange.

8.6.3 Positive epistemic fit

Finding: Management knowledge use is increased if the management knowledge accessed has a positive epistemic fit with the prevailing episteme(s) in operation in the local context

- Seek to understand the prevailing episteme(s) in the local context and across different professional communities of practice.
- Consider management knowledge(s) that may have an 'epistemic' fit.
- If working in multidisciplinary and non-hierarchical settings relational and team based management knowledge may be practically useful.
- In settings where there are competing epistemologies allow realistic time frames for the introduction of new management knowledge(s).

8.6.4 Facilitative systems

Finding: Management knowledge use is increased if complementary organisational facilitative systems and mechanisms are in place

- AHSCs and CAGSs appear promising structural innovations to assist knowledge-sharing across institutional boundaries.
- Consider how knowledge sharing systems and knowledge exchange may be aligned with career incentives and other rewards.
- Consider the introduction of practice-based knowledge portals.
- Seek compatible data management systems. This is challenging across health settings that use different forms of software and data management systems.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

9 Conclusions

In the last chapter a number of possible implications for practice have been offered for consideration. In this concluding chapter, the key empirical findings are reiterated and possible policy implications are discussed. The chapter also reflects on what this work might contribute to theory in this area and offers some thoughts on future research.

The empirical work and analysis documented in this report testifies to the enormous challenges organisations face in sharing and using management knowledge to achieve positive change. In the more fragmented health system that is emerging following recent and ongoing policy changes, knowledge-sharing and use may well be made even more difficult. This final chapter summarises the findings in relation to the original research questions, it then considers the implications of the findings for theory and for policy and practice. Finally, some ideas for future research are offered.

9.1 Returning to the original research questions

Reflecting on the original research questions as captured in the protocol, the static nature of the language used is noted. At the heart of these conclusions is, therefore, is a desire to signal the complexity of the social processes involved in accessing, contextualising and using management knowledge both for individual managers and in organisational settings such as those studied. As with others who have commented on this field it was seen that management knowledge is not one unified thing; rather it involves multiple formal and informal aspects. It can be codified in books, templates, reports etc, but can also have a more experiential character. Sources might include: mentors; coaches; training and development events to mention but a few. If knowledge is not thought of as a static entity, the focus can shift to knowing as an activity that is mediated, situated, political and contested (76). These caveats need to be borne in mind when considering the findings in relation to the original research questions.

9.1.1 Under what circumstances and how did managers access and use management research based knowledge in their decision making?

This question was operationalised by seeking to understand how managers in healthcare organisations, both with and without clinical backgrounds, engage with management-related knowledge, including - although not exclusively- research based knowledge.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

It is worth noting here that the data gathered did not indicate any systematic difference between general managers and clinician managers in this sample in the ways in which they accessed and utilised management knowledge. This suggests that the deliberate selection of managers with a known interest in using management research and knowledge, particularly in Phase 1(See Section 3.3.1), meant that few of those interviewed were likely to be indifferent or antagonistic. In other words, whether or not they had a clinical background, these respondents all tended to answer the questions that were being asked of them from a managerial rather than a clinical perspective.

The findings, which thus relate equally to both general and clinical managers, are summarised below:

- In all cases, managers' orientation towards knowledge focused on experiential knowledge and knowledge drawn from relationship-based communities of practice. The motivation to learn about management knowledge was strongly associated with facing the challenge of workrelated or career transition issues. Respondents often sought new sources of knowledge or experiences if they were confronted with a new puzzle or challenge that their current experience/ knowledge base could not help with. They were also motivated by encountering in some way a new idea or practice employed by respected others or reputable institutions (e.g. King's Fund, IHI, NIII). There were also examples of managers whose motivation was stimulated by a natural curiosity and appetite for learning.
- Biographical dimensions of managerial and clinical hybrid careers play an important (and previously neglected) role in shaping managers' orientation to knowledge – including their motivation and willingness to engage with and broker management texts. Respondents' accounts suggest career patterns which are often enduring, and rooted in early formative (and in some cases, childhood) experiences. The findings suggest knowledge attitudes may be significantly anchored in biographical narratives and formative events – in some cases more immediate, as well as historical – which shape managerial and leadership identities and orientation towards knowledge. These narratives are useful in understanding the distinctive orientations of the knowledge leaders selected (discussed in Section 5.4) towards knowledge texts and research-based knowledge.
- It was noted in Chapters 5 and 6 that accessible texts which synthesise and filter knowledge, such as the Harvard Business Review, were valued. Indeed the tracer texts studied in Phase 2 of the study that had most impact on knowledge leaders in the cases (for example the Elmhouse Text, the Schein (193) text used by the ODIC in Firgrove, the Balanced Scorecard (194) in Oakmore and the Willowton Text) were

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

themselves syntheses of a field or a body of knowledge, were accessible and had some practical value. Management texts also appear more useful and adaptable when mediated in training or discussion contexts or by respected colleagues. That said, research-based knowledge and particularly management journals appear as the lowest source of interest and influence for most managers in the knowledge influences table (Figure 1) presented in Chapter 5. This suggests an interesting and marked tension between two contrasting forms and sources of knowledge domains: a) relationship- and experientially-based knowledge; b) evidence-based management texts and codified knowledge.

Certain knowledge leaders (for example the CEO in Oakmore, the Clinical Director in Willowton, the Director in the ODIC in Firgrove) appeared to broker theoretical and practice domains, and some of these were accomplished at doing so, purposely disrupting local knowledge, brokering inside-outside boundaries, transposing and personally transforming abstract, academic knowledge into a different register through internalised and embodied management practice and leadership. More than merely translating management texts (which suggests a discursive, linguisticallybased process) it is suggested this might be better understood as transposing text-based knowledge into the contrasting register of relationally-based knowledge. In this way, abstract and codified knowledge may be mediated, interpreted and transformed into a more personalised mode of knowing that incorporates knowledge of the local context. It is suggested that this knowledge transposition hinges on the personal qualities and capacities of certain knowledge leaders whose role is not merely one of translation or brokerage, but who are regarded as personally credible and persuasive leaders. The existence of these knowledge leaders themselves proved important in motivating others to access and use forms of management knowledge, particularly academic texts and publications.

9.1.2 What were the barriers and facilitators of management knowledge use in the contexts studied?

This question was addressed by purposively studying as tracers the use of management knowledge text(s) cited and used in some way in the sites. The case settings provided another lens for studying how the two knowledge domains of formal/codified and experiential / relational knowledges interact in these settings.

 A wide range of diverse formal management knowledges were in use in the sites. Formal management knowledges tended to cluster in two main areas: performance management and productivity/quality improvement represented one group and approaches to desired organisational change, another.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

In studying the journey of these management knowledge tracers, it was observed that knowledge leaders often drew on the texts because they had used the ideas before in their practice or they saw the knowledge as a way of making progress on a local puzzle. In this way they tested out 'evidence based' knowledge in context, re-evaluating the issue and indeed the management knowledge they referenced. Knowledge leaders did not appear to *translate* formal management knowledge, which implies the more immediate transfer from one place to another - implying movement in which the original sense is retained (such as between languages) – rather, they were part of a process of *transposition* implying a more far-reaching, nonlinear process of transforming knowledge from a field of expertise to the field of practice.

Transposing codified management knowledge into practice involves altering, repositioning and exchanging(formal and experiential) knowledge elements into the register of practice, thus implying greater plasticity in actual use of codified texts and published knowledge products than is assumed in the literature or aspiration for EBMgt. Practices of transposition, moreover, seem to involve a greater degree of personal engagement and interpretation than mere technical expertise. It is not just texts that are transformed by this process, but aspects of the setting itself: the identities of individuals (e.g. the CEO of Oakmore and the Director in the ODIC in Firgrove) and, especially, interactions between participants are also altered.

Managers often described how the introduction of texts had provoked tensions, disruptions and even conflict within the organisation, altering previous patterns even in cases where texts were ultimately rejected. Knowledge leadership is not just championing a favoured approach, but can involve personal cost to one's reputation and working relationships. There was strong evidence of general managers and clinical managers starting from experiential knowledge of an existing issue, testing out management knowledge in context, then re-evaluating it and refining the theory or the evidence. Transposition should not, therefore, be seen as a uni-linear and uncontested process.

The importance of the predominant episteme(s) of the existing communities of practice and the mediating role of 'epistemic fit or clash' in the transposing of formal management knowledge was noted. The findings imply that knowledge leaders' success in transposing an 'external' management knowledge into practice and use depends in large measure on epistemological and methodological alignment with internal (often dominant and embedded clinical and scientific) knowledge bases- an organisation's 'prior related knowledge'. Ansari et al (226), in a recent paper, offer a useful analytical framework for understanding adaption patterns and explore the fit between differing practices and the adopting organisation. It is intended to engage with

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

and develop this framework drawing on the empirical work from this project.

- The analysis also suggests that knowledge leaders are greatly assisted in transposing management knowledge if there are formative and intermediate spaces such as workshops, discussion groups etc, where people can step away from their working context and engage with theoretical management knowledge and the experiences of others. Informal engagement that is supported and developed through safe -yet challenging- 'formative spaces' can enable participants to engage more personally, deepening inter-subjective exchange, learning, and appreciation of different perspectives. These were found to be creative areas of exchange for testing ideas and exploring potential scenarios and actions, which may both facilitate and draw upon academic management knowledge exchange.
- Certain facilitative organisational systems also appear to assist knowledge leaders in their transposing work. Some examples from the study are discussed in Chapter 8 and include: the structural alignment seen in Firgrove following the AHSC (reconfiguration and the introduction of CAGS); practice- and case-based knowledge portals that capture and codify practice (Elmhouse); online learning and knowledge sharing; strategically connected incentive systems and management development linked into career systems (Oakmore and Elmhouse) and supported learning events/spaces (Willowton, Firgrove).
- Figure 4 (Section 6.4) shows that three of the sites demonstrated relatively successful (and extremely complicated) knowledge transposition in the management knowledge tracer studies.
 - a) Oakmore was high impact because its knowledge leader (a clinical hybrid and an avid consumer of management scholarship) effectively transposed text-based knowledge, which resonated with or had potential to resonate with practice-based and experiential knowledge. The freedom (and resources) this organisation had to marshal and deploy effort to create opportunities for staff to interact informally (largely in training settings) and implement facilitative organisational systems that were complementary and blended, greatly assisted management knowledge exchange and use.
 - b) Firgrove was medium-high impact because its knowledge leaders effectively brought unfamiliar knowledges together in a strongly supported interdisciplinary and inter-organisational partnership model.
 - c) Elmhouse was mixed impact because its knowledge leaders brought unfamiliar texts and codified knowledge, transposing them effectively for SHA managers (high impact), but less well for the PCT management and clinicians (low impact).

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

9.1.3 What was the role of the Action Learning Sets in facilitating the use of management knowledge?

- The empirical work found very few organisational forums where managers could share and learn about knowledges from other disciplines alongside learning about management theory or research. The ALSs offered a relatively unique forum for doing this. Participants welcomed the opportunity to collaborate with credible and experienced others (both academic facilitators and managerial colleagues).
- The study of data from the ALSs confirmed and extended understanding of the motivation of individuals to seek new knowledge. In the sets, individuals were found to be driven to look for knowledge when they had a personal commitment and involvement with a work issue.
- It is suggested that ALSs may be an important tool for intermixing codified, experiential and interpersonal knowledges, enabling the crossing of disciplinary and institutional boundaries.
- The medium of the ALS was found to offer several unique characteristics seemingly not available to individuals within their own organisations. These include: independent perspectives; credible other professionals whom individuals can consult and the opportunity to debate both legitimate and illegitimate subjects (i.e. topics, including those with personal and emotional relevance for individuals, which could not be openly discussed inside organisations). The ALS space potentially allows time and opportunity for reflection that may be especially helpful in times of change and turbulence within the organisation.

Managers appeared to learn within the medium of the ALS largely because of the interactive nature of the space. In particular, learning was enhanced because: learning was directed and supported for set members; they were aided via facilitation in transposing their learning to their own organisational context and they learned to innovate and to deconstruct organisational and individual puzzles and to search for creative solutions. It is suggested that the ALS offers a different approach to EBMgt in that participants are guided to relevant knowledge that fits with their contexts and challenges.

9.2 Implications for theory

In Chapter 2 it was noted that much of the EBMgt debate has taken the form of manifestos or critique. In the authors' empirically grounded work on EBMgt in a number of key healthcare sectors, it was observed that organisational contexts and professional identities exert a mediating

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

influence on the utilisation of evidence and innovations in healthcare settings. This necessitates greater attention to the limitations of EBMgt in such settings. A purist EBMgt approach, it is argued, neglects how evidence is actually used and applied in practice and how formal, text-based knowledge interacts with accumulated experience. Some theoretical implications which come out of the empirical findings are suggested here.

9.2.1 From micro to micro/macro

The literature review noted the growing influence of practice- based thinking in the healthcare literature as authors (e.g. 109, 176) attend to the limitations of current models of knowledge dissemination. In the analysis of data from this project, practice-based theories discussed in Section 2.3.1 of this report were found useful in explaining the relationship between situated practice, knowledge products and artefacts and the mediating role of context on knowledge utilization in healthcare. The concept of 'communities of practice' (105, 114, 125) usefully interpreted knowledge sharing and learning as a socially embedded activity, entailing individual belonging and identify formation, as well as conflict and power struggles. Social-cultural perspectives were, therefore, found useful for demonstrating how material knowledge products and tacit forms of knowing are socially mediated and transformed through micro-level practice.

However, it is suggested that practice-based theories (103, 105-108, 110, 112-113) could be usefully extended in a number of areas. First, the role of individual subjective experience could be considered in more detail. Secondly, it could be further extended by factoring in the role of macro-institutional forces and organisational structures (132). Although practice-based accounts usefully address issues of contextual-dependency and local meanings, they are weaker on theorising broader institutional or field-level effects and power relations that may legitimate or de-legitimate specific practices in organisations. For example, in the cases studied there was strong evidence of the use of particular management knowledge artefacts (i.e. texts and concepts) led by the senior managers and teams or by highly credible individuals with influence in the organisational power structure. At the same time, boundaries around different academic or 'epistemic' communities and professional identities impacted upon prospects for meaningful knowledge exchange and individual knowledge selection.

It is therefore recommended that further empirical research should be undertaken into the types of knowledge practices that are prioritised at the individual /micro level of healthcare management, and how these relate to macro pressures and forces – such as the institutionalisation of evidencebased medicine as a knowledge paradigm, the professionalisation of management, the power/knowledge nexus which privileges certain forms of knowledge or the effects of the system-wide restructuring of the healthcare economy with an increasing diversity in provision and new organisational forms. Theoretically, this could enrich over micro-based accounts and

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

respond to criticisms that social learning and practice-based theorists overlook the role of agency and power effects in organisations.

9.2.2 Epistemic fit and clash

It is suggested that the concept of 'epistemic clash/fit' is an interesting and novel one, which emerges from this research. It indeed involves a field level focus of analysis more than a micro level: the 'clash' idea sees epistemic communities (123, 2) as generating strong knowledge paradigms (127, 227-228), which may prove highly resistant to new forms of external knowledge, which are seen as alien.

Conversely, the epistemic 'fit' concept suggests that certain clinical and organisational/managerial knowledges can indeed blend, where they share some underlying paradigmatic assumptions. In the case of health care organisations, these interrelationships may be generated by the underlying patterns of clinical work, which then become expressed at a more macro organisational level. For instance, OD ideas appeared to be relatively well received in some multidisciplinary settings. Similarly, whole systems working ideas were readily embraced by at least some elements of the primary care setting as it made sense to clinical practitioners. In complex settings, epistemic fit and clash points may be evident at the same time. For example, the consulting knowledge generated in one site fitted well with the knowledge system of the SHA, yet at the same time clashed with that of the PCT/clinical field.

9.2.3 Nonlinearity – transposition rather than high fidelity implementation

Prevailing models of knowledge flows (42, 74-75, 78) are criticised for their assumption of linearity, assumption of fixed stages and of a clear knowledge flow from upstream to downstream. But what does 'nonlinearity' mean? Clearly, one scenario is that knowledge will be resisted as unfounded or unwelcome by particular communities with distinct outlooks or even interests, as in the epistemic 'clash' concept discussed above. A second scenario is one of adaptation to local circumstances or (as suggested) of 'transposition'. As argued earlier, transposition can be seen as a nonlinear testing out of 'evidence based knowledge', in context, involving a degree of personal engagement and interpretation.

9.2.4 A more modest project for EBMgt?

What, finally, are the implications of this work for the EBMgt debate reviewed in Chapter 2? While not wishing to throw the EBMgt 'baby out with the bathwater', a move to a more modest project which stands less in the shadow of EBM is advocated. Firstly, it is suggested that a looser, narrative-based, review methodology (as in the review of the diffusion of innovations literature by Greenhalgh et al (229)) may be helpful. In this

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

more modest project, there would still be conventions of explicit and transparent search and inclusion criteria, although searches may be of a more limited and structured nature (perhaps confined to a set of 'high quality' academic journals) rather than conventional systematic review. Secondly it is suggested that reviewers should include and assess a wide range of methodologies, where various checklists are now available to assist the reviewer (e.g. Popay et al (191)). Thirdly, reviewers will need to discuss the role of theory, or rather different and sometimes incompatible streams of theory, within the texts reviewed, as well as methods and empirical findings (see Crilly et al (46) for a worked example in the field of knowledge mobilization).

9.3 Policy implications

These findings question the assumption that knowledge translation is a linear and rational process as often assumed in policies in this area (42). The failure of linear models of knowledge diffusion and translation, particularly those that emphasise a downward stream of research entering practice in a 'bench to bedside' manner, is an emergent theme in the socialscience based healthcare literature (136). The plurality of knowledge forms (tacit; explicit; embodied; codified) and proliferation of products and organisations available in a 'knowledge economy' suggests that more complex models of knowledge flow and exchange may be timely. This is particularly relevant to healthcare organisations where multiple professional groups and epistemic communities interact. In the empirical cases, a plurality and blending/transposing of knowledge sources was found that gave rise to a nonlinear and dynamic picture of knowledge utilisation; one less congruent with rational accounts of evidence-based knowledge transfer. The concept of knowledge transposition, it is believed, better captures the complexity of the processes found informing management knowledge use. Converging theories /formal evidence with experiential forms of evidence into the local management practices involves knowledge leaders' being inventive and improvising, not currently captured by conceptual models or rational toolkits. This begs the question of what might policy makers do to support transposition work. Below are a number of suggestions:

- 1. Opportunities could be created for people, groups, organisations to work across disciplines on work projects.
- 2. Multi-professional (not only uni-professional) learning forums that broker different epistemic communities and knowledge paradigms could be supported.
- 3. Business schools, HEI and government departments could offer filtered management knowledge products that are more accessible and oriented to puzzles relevant to organisational challenges as they present themselves in local contexts.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

- 4. An integrated knowledge management system for the wider health system could be developed (acknowledging the limitation of any system to capture experiential and tacit forms of knowing, which may be better supported by interactive learning events).
- 5. Performance management and reporting systems imposed on the NHS could have the capacity to be tailored to allow feedback from individual organisations about ways in which they are incorporating new knowledges into their practices.
- 6. Formal mentoring systems could be improved.
- 7. Coaching skills of managers could be developed and supported.
- More systematic support could be put in place for NHS general managers and clinical managers to access research-based knowledge in the management and organisational fields (i.e. through training or accessible evidence reviews).

9.4 Implications for higher education institutions and business schools

There was little evidence that business schools and their faculty are active in supporting knowledge transposition work and dissemination in the healthcare sectors studied. For instance, Elmhouse partners were keen to engage with academics and business schools, but had failed to do so because of the very different timescales academics work to and the career incentive system, where publication is the main career driver. They also had pragmatic aims for management knowledge and junior management consultants found it hard to find the time to consider the abstract and rather inaccessible knowledge produced by academics.

Business schools may currently provide group work on problem-solving, but rarely work on actual work-based problems of the participants in real time. Yet, business schools and other HEI settings might increase managers' access and use of management knowledge if academics could facilitate through learning spaces (such as case study discussions, drawing on practical exercises, research-based knowledge and theory) in the service of stimulating critical inquiry, testing both knowledge and practice. Such interventions could connect the two domains of formal and experiential knowledge, with the aim of generating ideas and creativity. This is a very different model from business schools as a source of codified knowledge, which is then meant to be translated into practice. It is suggested that it is timely to rethink the business school and explore alternative career incentives for academics, enabling richer forms of engagement to take place. It could be helpful to consider what might be the prospects of encouraging academic learning in organisational contexts where external research/empirical evidence and local case-based evidence are combined to address local puzzles.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

9.5 Implications for health professionals' education -Masters and PhD level training

Postgraduate degrees were found to be important opportunities for critical and reflexive learning, increasing interest in both codified texts, other industries and more critical approaches to practice. Moreover, increased engagement with codified knowledge at postgraduate level appeared to stimulate 'lateral' interest in formal/theoretical management knowledge (for those in managerial or leadership positions).

These findings suggest that there may be some disadvantages of uniprofessional education and Continuing Professional Development allowances that do not adequately factor in both clinical and managerial training. Multi -professional programmes are more likely to lead managers to venture from their core knowledge domains and epistemic communities to explore new knowledge domains as well as granting access to experiential knowledge derived from a variety of different contexts.

9.6 Implications for commissioning bodies, CLAHRCs, AHSCs and other intermediary institutions

AHSCs as a structural form appear to be promising in terms of encouraging knowledge-sharing and exchange across traditional institutional boundaries. It may be helpful to invest in studying the AHSCs and their organisational learning at a national as well as at a local level.

CLAHRCS are relatively new institutions, and achieving complex change requires time (for instance Oakmore's transformation to a business-oriented mode took 10 years). Five years may not be long enough to deliver on their potential. The goals set for them are complex and challenging. They offer rich opportunities for learning and it is suggested formative rather than summative evaluations would be most useful. If policy makers set up such novel organisations, then it may be important for the leaders of these organisations to be encouraged to engage in constructive processes of quarterly review and learn as they go. Contracts could specify and build in requirements for these types of processes for reflection. The evidence from the CLAHRC studied suggests that leaders with wide ranging experience, who can blend the academic and implementation aims of the CLAHRC and have credibility with both scholars and practitioners should be selected.

The question is, therefore, can imposed solutions/initiatives to policy problems be fashioned to better fit issues or puzzles that are locally important? How might policy initiatives be drawn upon and used by local participants to address locally important issues or puzzles? This process might be aided by regular, shared learning forums. Support structures could be built into the development of initiatives like the CLAHRC and the AHSC. The idea of regional support structures has worked in Ireland and with Beacon projects in the UK (230).

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

9.7 Promising future research

Space does not allow an extended discussion of all ideas for future projects, however, it is suggested the following topics may be worth considering. They are listed in a suggested order of importance :

- 1. The sample of managers was too small and selective to draw any firm conclusions about any differences between general managers and clinical managers in the way in which they access management knowledge; however this is a fruitful area for further exploration.
- 2. Seeking to understand the nature of knowledge flows in a more competitive and diverse health care environment?
- 3. Exploring how primary care commissioning groups access management knowledge in their decision making may be helpful to the leaders of these emergent organisations.
- 4. If research-based texts function not so much as a 'knowledge objects for translation' but as potential background resources for knowledge leadership, it could be helpful to explore what texts function most effectively and/or more readily for the purposes of transposition?
- 5. Exploration of the value of critical action learning incorporating reflexive methodology.
- 6. Rethinking business schools and other HEIs as 'reflective learning spaces' may be worthwhile, particularly as MBA and PhD learning were found to be important.
- 7. Exploring the possibilities of codified portals of case-based management practice in healthcare organisations as a step towards knowledge creation and wider learning (i.e. not only portals of formal research-based knowledge, but rich empirical material that might be useful as both a practitioner and researcher resource)?
- 8. It is considered that the epistemic 'fit/clash' idea is promising both theoretically and empirically and needs more development.
- 9. Further exploration of 'transposition' and how it occurs in practice could be fruitful.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

References

- (1) Dopson S, Fitzgerald L. Knowledge to Action? Evidence-Based Health Care in Context. Oxford: Oxford University Press; 2005.
- (2) Ferlie E, Fitzgerald L, Wood M, Hawkins C. The nonspread of innovations: the mediating role of professionals. Academy of Management Journal 2005; 48(1): 117-34.
- (3) McGivern G, Lambrianou A, Ferlie E, Cowie M. Enacting evidence into clinical practice: the case of coronary heart disease. Public Money & Management 2009; 29(5): 307-12.
- (4) Duncan WJ. Transferring management theory to practice. Academy of Management Journal 1974; 17(4): 724-38.
- (5) Shrivastava P, Mitroff II. Enhancing organizational research utilization
 the role of decision makers assumptions. Academy of Management Review 1984; 9(1): 18-26.
- (6) Duncan WJ. Making management useful the foundations of meaningful action research. Human Systems Management 1980;1(4): 287-300.
- (7) Starkey K, Madan P.Bridging the relevance gap: aligning stakeholders in the future of management research. British Journal of Management 2001; 12: S3-S26.
- (8) Mitton C, Adair CE, McKenzie E, Patten SB, Waye Perry B. Knowledge transfer and exchange: review and synthesis of the literature. Milbank Quarterly 2007;85(4): 729-68.
- Bowman JS. Managerial theory and practice: the transfer of knowledge in public administration. Public Administration Review 1978;38(6): 563-70.
- (10) Hirsh W. Evidence-based HR: from fads to facts? Corporate Research Forum Report; 2011. www.crforum.co.uk/
- (11) Walshe K, Rundall TG. Evidence based management: from theory to practice in health care. Milbank Quarterly 2001;79(3): 429-57.
- (12) Lawler E. Why HR Practices are not Evidence-Based. Center for Effective Organizations Publication, Marshall School of Business; 2007.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

- (13) Pfeffer J, Sutton RI. Management, half-truths and nonsense: How to practice evidence-based management. California Management Review 2006;48(3): 77-100.
- (14) Abrahamson E. Managerial fads and fashions: the diffusion and rejection of innovations. The Academy of Management Review 1991;16(3): 586-612.
- (15) Abrahamson E, Fairchild G. Management fashion: lifecycles, triggers, and collective learning processes. Administrative Science Quarterly 1999;44(4): 708-40.
- (16) Doh JP, Stumpf SA. Executive education: a view from the top. Academy Of Management Learning & Education 2007; 6(3): 388-400.
- (17) The Association of Business Schools. Available from: http://www.theabs.org.uk/
- (18) Abbott AD. The System of Professions: An Essay on the Division of Expert Labor. Chicago: University of Chicago Press; 1988.
- (19) Khurana R. From Higher Aims to Hired Hands: The Social Transformation of American Business Schools And The Unfulfilled Promise of Management as a Profession. N.J.: Princeton University Press; 2007.
- (20) AACSB-International . Management education at risk. Report of the Management Education Task Force to AACSB International. St. Louis, MO: AACSB International; 2002.
- (21) Ivory C, Miskell P, Shipton H, White A, Moeslein K, Neely A. UK business schools: historical contexts and future scenarios: Summary report from an EBK/AIM Management Research Forum; 2006. www.aimresearch.org
- (22) Bennis W G, O'Toole J. How business schools lost their way. Harvard Business Review 2005;83(5): 96-104.
- (23) Beyer JM, Trice HM. The utilization process: a conceptual framework and synthesis of empirical findings. Administrative Science Quarterly 1982;27(4): 591-22.
- (24) Rynes SL, Bartunek JM, Daft RL. 'Across the great divide: Knowledge creation and transfer between practitioners and academics. Academy of Management Journal 2001;44(2): 340-55.
- (25) Pettigrew AM. Management research after modernism. British Journal of Management 2001;12: S61-S70.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

- (26) Lemieux-Charles L, Champagne F (editors). Using Knowledge and Evidence in Health Care: Multidisciplinary Perspectives. Toronto: University of Toronto Press ; 2004.
- (27) Sackett D, Rosenberg W, Muir Gray J, Haynes B, Richardson S. Evidence based medicine: what it is and what it isn't. British Medical Journal 1996;312: 71-2.
- (28) Thomas G, Pring R. Evidence-Based Practice In Education. Maidenhead: Open University Press; 2004.
- (29) Petrosino A, Boruch RF, Farrington DP, Sherman LW, Weisburd D. Toward evidence-based criminology and criminal justice: Systematic reviews, the Campbell Collaboration, and the crime and justice group. International Journal of Comparative Criminology 2003; 3(1): 42-61.
- (30) DeAngelis T. Shaping evidence-based practice. APA Monitor 2005; 36(3): 26-31.
- Rousseau D. Presidential address: is there such a thing as 'evidence based management'? Academy of Management Review 2006a;31(2): 256-69.
- (32) Rousseau D. Keeping an open mind about evidence based management: a reply to Learmonth's Commentary. Academy of Management Review 2006b;31(4): 1091-3.
- (33) Pfeffer J, Sutton R. Suppose we took evidence based management seriously: implications for reading and writing management. Academy of Management Learning & Education 2007;6(1): 153-5.
- (34) Axelsson R. Towards an evidence based health care management. International Journal of Health Planning and Management 1998;13(4): 307-17.
- (35) Kovner AR, Elton JJ, Billings J. Evidence-based management. Frontiers of Health Services Management 2000;16(4): 3-24.
- (36) Department of Health. Research and development towards an evidence-based health service. London: Department of Health; 1997. (Crown Copyright)
- (37) Department of Health. Best research for best health a new national health research strategy. London: Department of Health; 2006. (Crown Copyright)
- (38) Fulop N, Allen P, Clarke A, Black N. Studying the Organisation and Delivery of Health Services – Research Methods. London: Routledge; 2001.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

- (39) Iles V, Sutherland K. Change management: a review. LSHTM: NHS SDO R and D Programme; 2001.
- (40) Berwick D. A primer on leading the improvement of systems. British Medical Journal 1996; 312: 619-22.
- (41) Buchanan D, Fitzgerald L, Ketley D. The Sustainability and Spread of Organizational Change. London: Routledge; 2007.
- (42) Cooksey Report. A review of UK health research funding, chaired by Sir D. Cooksey. London: HM Treasury, HMSO; 2006.
- (43) Ghoshal S, Moran, P.Bad for practice: a critique of the transaction cost theory. The Academy of Management Review 1996; 21(1): 13-47.
- (44) MacKenzie D. An equation and its worlds: bricolage, exemplars, disunity and performativity in financial economics. Social Studies of Science 2003; 33(6): 831-868.
- (45) Ferraro F, Pfeffer J, Sutton RI. Economic Language and Assumptions: How Theories Can Become Self-Fulfilling. Academy of Management Review 2005; 30(1): 8-24.
- (46) Crilly T, Ferlie E, Jashapara A, Peckham A. Research utilisation and knowledge mobilisation: a scoping review, NIHR SDO Programme, Project 08/1801/220, Final SDO Report 9; 2010. http://www.sdo.nhs.ac.uk
- (47) Kovner AR, Rundall T. Evidence based management reconsidered. Frontiers of Health Service Management 2006;22(3): 3-22.
- (48) Walshe K. Kieran Walshe on evidence based decision making in the NHS. Health Services Journal; 2009. http://www.hsj.co.uk/comment/opinion/kieran-walshe-on-evidencebased-decision-making-in-the-nhs/5000529.article
- (49) Rousseau D. A sticky, leveraging, and scalable strategy for highquality connection between organizational practice and science. Academy of Management Journal 2007;50(5): 1037-42.
- (50) Rousseau D, Manning J, Denyer D. Evidence in Management and Organizational Science: Assembling the Field's Full Weight of Scientific Knowledge Through Syntheses. AIM Working Paper Series, 067. London: AIM; 2008.
- (51) Landry R. Amara N, Lamari M. Utilization of social science research knowledge in Canada. Research Policy 2001;30(2): 333-49.
- (52) Weiss C. The many meanings of research utilization. Public Administration Review 1979;39(5): 426-31.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

- (53) Cascio WF. Evidence-based management and the marketplace for ideas. Academy of Management Journal 2007;50(5): 1009-12.
- (54) Rousseau D, McCarthy S. Educating managers from an evidence based perspective. Academy of Management Learning & Education 2007;6(1): 84-101.
- (55) Pfeffer J, Sutton RI. Hard Facts, Dangerous Half-Truths, and Total Nonsense: Profiting From Evidence-Based Management. Boston, MA: Harvard Business School Press; 2006.
- (56) Pfeffer J, Sutton RI. Evidence-based management. Harvard Business Review 2006. 84(1): 62-74.
- (57) Olivas-Lujan MR. Evidence-based management: a business necessity for Hispanics. The Business Journal of Hispanic Research 2008;2(2): 10-26.
- (58) Briner RB, Denyer D, Rousseau DM. Evidence-based management: concept cleanup time? Academy of Management Perspectives 2009; 23(4): 19-32.
- (59) Briner RB, Rousseau D. Evidence based I O psychology: not there yet but now a little nearer? Industrial and Organizational Psychology 2011; 4(1): 3–22.
- (60) Ramanujam R, Rousseau DM. The challenges are organizational not just clinical. Journal of Organizational Behavior 2006;27(7): 811-27.
- (61) Kaissi AA, Begun JW. Fads, fashions, and bandwagons in health care strategy. Health Care Management Review 2008;33(2): 94-102.
- (62) Shortell SM, Rundall TG, Hsu J. Improving patient care by linking evidence-based medicine and evidence-based management. JAMA -Journal of the American Medical Association 2007;298(6): 673-6.
- (63) Learmonth M. "Is there such a thing as 'evidence based management'?" A commentary on Rousseau's 2005 Presidential address. Academy of Management Review 2006;31(4): 1089-91.
- (64) Tranfield D, Denyer D, Smart P. Towards a methodology for developing evidence-informed management knowledge by means of systematic review. British Journal of Management 2003;14(3): 207-22.
- (65) Scherer AG. Pluralism and incommensurability in strategic management and organization theory – a problem in search of a solution. Organization 1998;5(2): 147-68.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

- (66) Scherer AG, Steinmann H. Some remarks on the problem of incommensurability in organization studies. Organization Studies 1999; 20(3): 519-44.
- (67) Morrell K. The narrative of `evidence based' management: a polemic. Journal of Management Studies 2008;45(3): 613-635.
- (68) Hewison A. Qualitative management research in the NHS. A classic case of counting to one? Journal of Health Organization and Management 2003;17(2): 122-37.
- (69) Mays N, Pope C, Popay J. Systematically reviewing qualitative and quantitative evidence to inform management and policy-making in the health field. Journal of Health Services Research & Policy 2005;10(1): 6-20.
- (70) Pawson R, Greenhalgh T, Harvey G, Walshe K. Realist synthesis: an introduction. ESRC Research Methods Programme, Working Paper Series; 2004.
- (71) Pawson R. Evidence-based Policy: the promise of 'realist synthesis'. Evaluation 2002;8(3): 340-58.
- (72) Bhaskar R. The Possibility of Naturalism: A Philosophical Critique of the Contemporary Human Sciences. 3rd ed. London: Routledge; 1998.
- (73) Polanyi M. The tacit dimension. Garden City, NY: Doubleday; 1966.
- (74) Nonaka I, Takeuchi H. The Knowledge-Creating Company. New York, NY: Oxford University Press; 1995.
- (75) Nonaka I. A dynamic theory of organizational knowledge creation. Organization Science 1994; 5(1): 14-37.
- (76) Blackler F. Knowledge, knowledge work and organizations: an overview and interpretation. Organization Studies 1995;16(6): 1021-46.
- (77) Contu A, Willmott H. Re-embedding situatedness: the importance of power relations in learning theory. Organization Science 2003;14(3): 283-96.
- (78) Lam A. Tacit knowledge, organizational learning and societal institutions: an integrated framework. Organization Studies 2000; 21: 487-513.
- (79) Learmonth M. 'Evidence based management': A backlash against pluralism in organizational studies? Organization 2008;15(2): 283-91.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

- (80) Arndt M, Bigelow B. Evidence-based management in health care organizations: a cautionary note. Health Care Management Review 2009;34(3): 206-13.
- (81) Reay T, Berta W, Kohn MK. What's the evidence on evidence-based management? Academy of Management Perspectives 2009;23(4): 5-18.
- (82) Illeris K. A comprehensive understanding of human learning. In: Illeris K, editor. Contemporary Theories of Learning: Learning Theorists... In Their Own Words. London: Routledge; 2009. pp.7-20.
- (83) Illeris K. How We Learn: Learning and Non-learning in School and Beyond. London: Routledge; 2007.
- (84) Mezirow J. Transformative Dimensions of Adult Learning. San Francisco: Jossey-Bass; 1991.
- (85) Mezirow J. Transformative Learning: Theory to Practice. New Directions for Adult and Continuing Education 1997;1997(74): 5-12.
- (86) Kolb DA. Learning Style Inventory Technical Manual. Boston, MA: McBer and Company; 1976.
- (87) Kolb DA. Experiential Learning: Experience as the Source of Learning and Development. Englewood Cliffs, N.J.: Prentice-Hall; 1984.
- (88) Kolb DA, Boyatzis RE, Mainemelis C. Experiential learning theory: Previous research and new directions. In: Sternberg RJ, Zhang LF, editors. Perspectives on thinking, learning, and cognitive styles. Mahwah, NJ: Lawrence Erlbaum Associates; 2001. pp.193-210.
- (89) Argyris C. Single-loop and double-loop models in research on decision making. Administrative Science Quarterly 1976;21(3): 363-75
- (90) Argyris C. Knowledge for Action: A Guide to Overcoming Barriers to Organizational Change. San Francisco: Jossey-Bass; 1993.
- (91) Argyris C. On Organizational Learning. Oxford: Blackwell Publishing; 1999.
- (92) Lord R, Maher K. Alternative information-processing models and their implications for theory, research, and practice. The Academy of Management Review 1990;15(1): 9-28.
- (93) Simon HA. A behavioral model of rational choice. Quarterly Journal of Economics 1955; 69(1): 99-18.
- (94) Kahneman D. A Perspective on judgement and choice: mapping bounded rationality. American Psychologist 2003;58(9): 697-720.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

- (95) Kahneman D. Maps of bounded rationality: psychology for behavioral economics. The American Economic Review 2003b;93(5): 1449-75.
- (96) Kahneman D. Thinking, Fast and Slow. London: Allen Lane; 2011.
- (97) Gigerenzer G. How to make cognitive illusions disappear: beyond "heuristics and biases". In: Stroebe W, Hewstone M, editors. European Review of Social Psychology (Vol.2). Chichester: Wiley; 1991. pp.83–115.
- (98) Dane E, Pratt MG. Exploring intuition and its role in managerial decision making. Academy of Management Review 2007;32(1): 33-54.
- (99) Tversky A, Kahneman D. Judgment under uncertainty: heuristics and biases. Science 1974;185(4157): 1124-31.
- (100) Tversky A, Kahneman D. Extensional versus intuitive reasoning: the conjunction fallacy in probability judgement. Psychological Review 1983; 90(4): 293-315.
- (101) Senge PM. The Fifth Discipline: The Art and Practice of the Learning Organization. London: Century Business; 1990.
- (102) Barclays Wealth Insights Report, vol. 13, 2011. Available at: http://www.barclayswealth.com/insights/library.htm
- (103) Miettinen R, Samra-Fredericks D, Yanow D. Re-turn to practice: an introductory essay. Organization Studies 2009;30(12): 1309-27.
- (104) Elkjaer B. Social learning theory: learning as participation in social processes. In Easterby-Smith M, Lyles MA, editors. The Blackwell Handbook of Organizational Learning And Knowledge Management. Oxford: Blackwell Publishing Ltd; 2003. pp.38-53.
- (105) Wenger E. Communities of Practice: Learning Meaning, and Identity. Cambridge: Cambridge University Press; 1999.
- (106) Bourdieu P. The Logic of Practice. Cambridge: Polity Press; 1990.
- (107) Schatzki TR. Introduction: practice theory. In: Schatzki TR, Knorr Cetina K, von Savigny E, editors. The Practice Turn In Contemporary Theory. London: Routledge; 2001.
- (108) Orlikowski WJ. Knowing in practice: enacting a collective capability in distributed organizing. Organization Science 2002;13(3): 249-73.
- (109) Nicolini D. Practice as the site of knowing: insights from the field of telemedicine. Organization Science 2011;22(3): 602-20.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

- (110) Corradi G, Gherardi, S, Verzelloni, L. Through the practice lens: where is the bandwagon of practice-based studies heading? Management Learning 2010;41(3): 265-83.
- (111) Gherardi S. Translating knowledge while mending organisational safety culture. Risk Management 2004;6(2): 61-80.
- (112) Sandberg J, Tsoukas H. Grasping the logic of practice: theorizing through practical rationality. Academy of Management Review 2011;36(2): 338-60.
- (113) Nicolini D, Gherardi S, Yanow D. Knowing in Organizations: A Practice-Based Approach. Armonk, NY: M.E. Sharpe; 2003.
- (114) Brown S, Duguid P. Organizational learning and communities-ofpractice: toward a unified view of working, learning, and innovation. Organization Science 1991;2(1): 40-57.
- (115) Elkjaer B. Pragmatism: a learning theory for the future. In: Illeris K, editor. Contemporary Theories of Learning: Learning Theorists... In Their Own Words. London: Routledge; 2009. pp.74-89.
- (116) Lave J. The practice of learning. In: Illeris K, editor. Contemporary Theories of Learning: Learning Theorists... In Their Own Words. London: Routledge; 2009. pp.200-8.
- (117) Gherardi S. Practice-based theorizing on learning and knowing in organizations. Organization 2000;7(2): 211-223.
- (118) Borgatti SP, Cross R. A relational view of information seeking and learning in social networks. Management Science 2003; 49(4): 432-45.
- (119) Gherardi S. Organizational Knowledge: The Texture of Workplace Learning. Oxford: Blackwell Publishing; 2006.
- (120) Yakhlef A. The corporeality of practice-based learning', Organization Studies 2010;31(4): 409-430.
- (121) Certeau M de. The Practice of Everyday Life. California: University of California Press; 1984.
- (122) Bourdieu P, Wacquant L. An Invitation to Reflexive Sociology. Chicago: University of Chicago Press; 1992.
- (123) Knorr-Cetina K. Epistemic Cultures: How the Sciences Make Knowledge. London: Harvard University Press; 1999.
- (124) Geiger D. Revisiting the concept of practice: toward an argumentative understanding of practicing. Management Learning 2009; 40(2): 129-44.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

- (125) Wenger E. Communities of practice and social learning systems. Organization 2000;7(2): 225-46.
- (126) Lave J, Wenger E. Situated Learning: Legitimate Peripheral Participation. Cambridge: Cambridge University Press; 1991.
- (127) Luhmann N. Social Systems. Stanford, CA: Stanford University Press; 1995.
- (128) Gittelman M, Kogut B. Does good science lead to valuable knowledge? Biotechnology firms and the evolutionary logic of citation patterns. Management Science 2003; 49(4): 366-82.
- (129) Leigh Star S, Griesemer J. Institutional ecology, 'translations' and boundary objects: amateurs and professionals in berkeley's museum of vertebrate zoology, 1907-39. Social Studies of Science 1989;19(3): 387-420.
- (130) Carlile P. A pragmatic view of knowledge and boundaries: boundary objects in new product development. Organization Science 2002;13(4): 442-55.
- (131) Carlile P. Transferring, translating, and transforming: an integrative framework for managing knowledge across boundaries. Organization Science 2004;15(5): 555-68.
- (132) McGivern G, Dopson S. Inter-epistemic power and transforming knowledge objects in a biomedical network. Organization Studies 2010;31(12): 1667-86.
- (133) Lamont M, Molnár V. The study of boundaries in the social sciences. Annual Review of Sociology 2002;28(1): 167-95.
- (134) Bechky B. Sharing meaning across occupational communities: the transformation of understanding on a production floor. Organization Science 2003;14(3): 312-30.
- (135) Szulanski G, Capetta R. Stickiness; conceptualizing, measuring, and predicting difficulties in the transfer of knowledge. The Blackwell Handbook of Organizational Learning and Knowledge Management. Blackwell Publishing; 2003.
- (136) Greenhalgh T, Wieringa S. Is it time to drop the 'knowledge translation' metaphor? A critical literature review. Journal of the Royal Society of Medicine 2011;104(12): 501-9.
- (137) Orr JE. Images of work. Science Technology & Human Values 1998;23(4): 439-55.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

- (138) Greenhalgh R. Intuition and evidence uneasy bedfellows? British Journal of General Practice 2002;52(478): 395-400.
- (139) Gabbay J, Le May A. Practice-Based Evidence for Healthcare: Clinical mindlines. Abingdon: Routledge; 2011.
- (140) Schon DA. The Reflective Practitioner: How Professionals Think In Action. New York: Basic Books; 1983.
- (141) Foucault M. In: Rabinow P (editor). The Foucault Reader: An Introduction to Foucault's Thought. Harmondsworth: Penguin; 1991.
- (142) Foucault M. The archaeology of knowledge. Abingdon: Routledge; 2002.
- (143) Rose N. Government, authority and expertise in advanced liberalism. Economy and Society 1993; 22(3): 283-99.
- (144) Rose N. Powers of Freedom: Reframing Political Thought. Cambridge: Cambridge University Press; 1999.
- (145) Rose N. The politics of numbers. Accounting, Organizations and Society 1991; 16(7): 673-92.
- (146) Rose N, Miller P. Political-power beyond the state problematics of government. British Journal of Sociology 1992;43(2): 173-205.
- (147) Jacques R. Manufacturing the Employee: Management Knowledge from the 19th to 21st Centuries. London: Sage Publications Ltd; 1996.
- (148) Epstein S. Impure science: AIDS, Activism, and the Politics of Knowledge. Berkeley: University of California Press; 1996.
- (149) Gordon R, Kornberger M, Clegg S. Power, rationality and legitimacy in public organizations. Public Administration 2009;87(1): 15-34.
- (150) Clegg SR. Radical revisions power, discipline and organizations. Organization Studies 1989;10(1): 97-115.
- (151) Fincham R. Perspectives on power processual, institutional and internal forms of organizational power. Journal of Management Studies 1992;29(6): 741-59.
- (152) Karreman D. The power of knowledge: learning from 'learning by knowledge-intensive firm'. Journal of Management Studies 2010;47(7): 1405-16.
- (153) Townley B. Foucault, Power/Knowledge, and Its Relevance for Human Resource Management. The Academy of Management Review 1993;18(3): 518-45.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

- (154) Karreman D, Alvesson M. Resisting resistance: counter-resistance, consent and compliance in a consultancy firm. Human Relations 2009;62(8): 1115-44.
- (155) Alvesson M, Willmott H. Identity regulation as organizational control: producing the appropriate individual. Journal of Management Studies 2002;39(5): 619-44.
- (156) Townley B. The role of competing rationalities in institutional change. Academy of Management Journal 2002;45(1): 163-79.
- (157) Freidson E. Professional Powers: A Study of the Institutionalization of Formal Knowledge. Chicago: University of Chicago Press; 1986.
- (158) Freidson E. Professionalism: The Third Logic. Cambridge: Polity Press; 2001.
- (159) Harrison S, Pollitt C. Controlling Health Professionals: Future of Work and Organization in the NHS. Open University Press; 1994.
- (160) Waring J, Currie G. Managing expert knowledge: organizational challenges and managerial futures for the UK medical profession. Organization Studies 2009;30(7): 755-78.
- (161) Currie G, Finn R, Martin G. Professional competition and modernizing the clinical workforce in the NHS. Work Employment and Society 2009;23(2): 267-84.
- (162) May C. Mobilising modern facts: health technology assessment and the politics of evidence. Sociology of Health & Illness 2006;28(5): 513-32.
- (163) Karreman D, Alvesson M. Cages in tandem: management control, social identity, and identification in a knowledge-intensive firm. Organization 2004; 11(1): 149-76.
- (164) Alvesson M Knowledge Work and Knowledge-Intensive Firms. Oxford: Oxford University Press; 2004.
- (165) Alvesson M. Organizations as rhetoric: knowledge-intensive firms and the struggle with ambiguity. Journal of Management Studies 1993;30(6): 997-1015.
- (166) Alvesson M, Johansson AW. Professionalism and politics in management consultancy work. In: Clark, T, Fincham R, editors. Critical Consulting: New Perspectives on the Management Advice Industry. Oxford: Blackwell Publishers; 2002. pp.228-46.
- (167) Sturdy, A. The adoption of management ideas and practices theoretical perspectives and possibilities', Management Learning 2004;36(2): 155-79.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

- (168) Ferlie E, Ashburner L, Fitzgerald L, Pettigrew A. The New Public Management in Action. New York, NY: Oxford University Press; 1996.
- (169) Fitzgerald L. Moving clinicians into management: a professional challenge or threat? Journal of Management in Medicine 1994; 8(6): 32-44.
- (170) Thorne M. Colonizing the new world of NHS management: the shifting power of professionals. Health Services Management Research 2002;15(1): 14-26.
- (171) Llewellyn S. 'Two-way windows': clinicians as medical managers. Organization Studies 2001;22(4): 593-623.
- (172) Fitzgerald L, Dufour Y. Clinical management as boundary management: A comparative analysis of Canadian and UK health-care institutions, International Journal of Public Sector Management 1997; 10(1/2): 5-20.
- (173) Kurunmaki L. A hybrid profession the acquisition of management accounting expertise by medical professionals. Accounting Organizations and Society 2004;29(3-4): 327-47.
- (174) Currie G. Reluctant but resourceful middle managers: the case of nurses in the NHS. Journal of Nursing Management 2006;14(1): 5–12.
- (175) Currie G, Proctor SJ. The antecedents of middle managers strategic contribution. The case of a professional bureaucracy. Journal of Management Studies 2005;42(7): 1325-56.
- (176) Gkeredakis E, Swan J, Powell J, Nicolini D, Scarbrough H, Roginski C et al. Mind the gap: understanding utilisation of evidence and policy in health care management practice. Journal of Health Organization and Management 2011;25(3): 298-314.
- (177) Dopson S, Fitzgerald L, Ferlie E, Gabbay J, Locock L. No magic targets! Changing clinical practice to become more evidence based. Health Care Management Review 2010;35(1): 2-12.
- (178) Weick KE. Sensemaking in Organizations. Thousand Oaks, CA. Sage; 1995.
- (179) Yin RK. Enhancing the quality of case studies in health services research. Health Services Research 1999; 34(5): 1209-24.
- (180) Yin RK. Case Study Research Design and Methods. 4th ed. Thousand Oaks, CA: Sage; 2009.
- (181) Glaser B, Strauss A. The Discovery of Grounded Theory: Strategies for Qualitative Research. Chicago: Aldine; 1967.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

- (182) Fitzgerald L, Dopson S. Comparative case study designs: their utility and development in organisational research. In: Buchanan D, Bryman A (editors). The Sage Handbook of Organisational Research Methods. London: Sage; 2009. pp.465-83.
- (183) Stake RE. Case studies. In: Denzin N, Lincoln Y (editors). Handbook of Qualitative Research. 2nd ed. London: Sage; 2000. pp.435-454.
- (184) Pettigrew AM. Context and action in the transformation of the firm. Journal of Management Studies 1987; 24(6): 649-70.
- (185) Pettigrew AM, Ferlie E, McKee L. Shaping Strategic Change: Making Change in Large Organizations: The Case of the National Health Service. London: Sage; 1992.
- (186) Miles MB, Huberman AM. Qualitative Data Analysis: An Expanded Sourcebook. Newbury Park: Sage Publications; 1994.
- (187) Rubin HJA, Rubin IS. Qualitative Interviewing: The Art of Hearing Data. 2nd ed. London: Sage; 1995.
- (188) Blaxter M. On behalf of the BSA medical sociology group 'criteria for the evaluation of qualitative research'. Medical Sociology News 1996;22: 68-71.
- (189) Mays N, Pope C. Quality in qualitative research. In: Pope C, Mays N (editors), Qualitative Research in Health Care. 2nd ed. London: BMJ Books; 2000. pp.89-101.
- (190) Mays N, Roberts E, Popay J. Synthesising research evidence. In: Fulop N, Allen P, Clarke A, Black N. (editors). Studying the Organization and Delivery of Health Services: Research Methods. London: Routledge; 2001. pp.188-220.
- (191) Popay J, Rogers A, William G. Rationale and standards for the systematic review of qualitative literature in health services research. Qualitative Health Research 1998; 8(3): 341-51.
- (192) Department of Health. White paper, 'equity and excellence: liberating the NHS. London: Department of Health; 2010.
- (193) Schein E. Process Consultation-its role in organization development. 2nd ed (Vol. 1). Prentice Hall; 1969.
- (194) Kaplan RS, Norton DP.The Balanced Scorecard: Translating Strategy into Action. Boston, MA: Harvard Business School Press; 1996.
- (195) Schein E. (1987) The clinical perspective in fieldwork. Newbury Park, CA: Sage Publications.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

- (196) Bate P, Bevan H, Robert G. Toward a million change agents- a review of the social change movements literature. NHS modernisation agency; 2005.
- (197) McAdam D, McCarthy D, Zald MN (eds). Comparative Perspectives on Social Movements. Cambridge: Cambridge University Press; 1996.
- (198) Crossley N. Making Sense of Social Movements. Buckingham: Open University Press; 2002
- (199) Nicolini D, Powell J, Conville P, Martinez-Solano L. Managing knowledge in the healthcare sector. A review. International Journal of Management Reviews 2008; 10(3): 245-63.
- (200) Rashman L, Withers E, Hartley J. Organizational learning and knowledge in public service organizations: a systematic review of the literature. International Journal of Management Reviews 2009; 11(4): 463-94.
- (201) Knights D, Scarbrough H. In search of relevance: perspectives on the contribution of academic—practitioner networks. Organization Studies 2010; 31(9/10):1287-1309.
- (202) McNulty T. Reengineering as knowledge management: a case of change in UK healthcare. Management Learning 2002; 33(4): 439-58.
- (203) McCormack B, Henderson E, Boomer C, Collin I, Robinson D. Participating in a collaborative action learning set (CAL): Beginning the journey. Action Learning: Research & Practice 2008; 5(1): 5-19.
- (204) Gherardi S. Telemedicine: a practice-based approach to technology. Human Relations 2010; 63(4): 501-24.
- (205) Kellie J, Henderson E, Milsom B, Crawley H. Leading change in tissue viability best practice: an action learning programme for link nurse practitioners. Action Learning: Research and Practice 2010; 7(2): 213– 9.
- (206) Mørk BE, Hoholm T, Ellingsen G, Edwin B, Aanestad M. Challenging expertise: On power relations within and across communities of practice in medical innovation. Management Learning 2010; 41(5): 575-92.
- (207) Randall J, Munro I. Foucault's care of the self: a case from mental health work. Organization Studies 2010; 31(11): 1485-1504.
- (208) Gherardi S, Perrotta M. Egg dates sperm: a tale of a practice change and its stabilization. Organization 2011; 18(5): 595-614.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

- (209) Argyris C. Reflection and beyond in research on organizational learning. Management Learning 2004; 35(4): 507-9.
- (210) Gherardi S. From organizational learning to practice-based knowing. Human Relations 2001; 54(1): 131-9.
- (211) Fenwick T. Understanding relations of individual-collective learning in work: a review of research. Management Learning 2008; 39(3): 227-43.
- (212) Raelin JA. Toward an epistemology of practice. Academy of Management Learning & Education 2007; 6(4): 495-519.
- (213) Revans RW. The Origin and Growth of Action Learning. London: Chartwell Bratt; 1982.
- (214) Rigg C. Systemic action and learning in public services. Action Learning: Research & Practice 2011; 8(1): 15-26.
- (215) Reynolds M, Vince R. Critical management education and action-based learning: Synergies and contradictions. Academy of Management Learning & Education 2004; 3(4): 442-56.
- (216) Ram M, Trehan K. Critical action learning, policy learning and small firms: an inquiry. Management Learning 2010; 41(4): 415-28.
- (217) Scarbrough H, Swan J, Laurent S, Bresnen M, Edelman L, Newell S. Project-based learning and the role of learning boundaries. Organization Studies 2004; 25(9): 1579-1600.
- (218) Huxham C, Hibbert P. Manifested attitudes: intricacies of inter-partner learning in organizations. Journal of Management Studies 2008; 45(3): 502-29.
- (219) Grint K. The sacred in leadership: separation, sacrifice and silence. Organization Studies 2010;31(1): 89-107.
- (220) Oliver J. Reflections on a failed action learning intervention. Action Learning: Research and Practice 2008; 5(1): 79–83.
- (221) Holmes M. What do set facilitators bring to the party? (And do we need them?). Action Learning: Research & Practice 2008; 5(3): 249-53.
- (222) Mangham I, Cooper CL. The impact of T-groups on managerial behavior. Journal of Management Studies 1969; 6(1): 53-72.
- (223) Campbell JP, Dunnette MD. Effectiveness of T-Group Experiences in managerial training and Development. Psychological Bulletin 1968; 70(2): 73-104.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

- (224) Foucault M. The Care of the Self. London: Penguin; 1986.
- (225) Fischer MD. Organizational turbulence, trouble and trauma: theorising the collapse of a mental health setting. Organization Studies 2012; 33 1153-1173.
- (226) Ansari SM, Fiss PC, Zajac EJ. Made to fit: how practices vary as they diffuse. Academy of Management Review 2010; 35(1): 67-92.
- (227) Kuhn TS. The Structure of Scientific Revolutions. 2nd ed. Chicago, IL: University of Chicago Press; 1970.
- (228) Burrell G, Morgan G. Sociological Paradigms and Organisational Analysis. London: Heinemann; 1979.
- (229) Greenhalgh T, Robert G, Macfarlane F, Bate P, Kyriakidou O. Diffusion of innovations in service organizations: systematic review and recommendations. Milbank Quarterly 2004; 82(4): 581-629.
- (230) Stuteley H. The Beacon Project a community-based health improvement project. British Journal of General Practice 2002; 52(suppl.): 44-6.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

Appendix 1 Interview schedule and Tick List for Phase 1 and an example of Phase 2 questions

Interview Protocol SDO project

Before starting the Interview: Ensure the information sheet has been read, anonymity and confidentiality issues discussed and consent form is signed.

Overall aims of Phase 1 Research:

- To understand how and under what circumstances managers access and use management research-based knowledge in healthcare-related settings, and
- The extent to which management research-based knowledge is understood to impact on managerial decision-making and practice, and
- To ascertain if there is a desire amongst managers to improve access to knowledge from the organizational studies and management fields
 - And if so, to discover what type of information would be most useful

Your organization suggested you for interview as someone who is interested in reflecting on management practice, so we would like to talk about your career background and experience in management

[Note to interviewer: CV and basic demographic information to be collected at the end of the interview]

1. Characteristics of the Interviewee

Aim:

Understand interviewee's career trajectory and present job role

Understand broad influences on interviewee's management thinking and approach

- I. What is your current role? (Ask for description)
- II. Can you tell me about your life and career since you left school?

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

III. Have any particular (i) experiences, (ii) training, (iii) ideas or (iv) people had an effect/formative influence on how you think about/do your job? [**Prompt**: this may include their current role as well as influences on previous job roles]

[Note to interviewer: Give out handout (see 2.12)on influences on management practice. Ask interviewee to tick and comment.]

2. Thematic Domains

2.1 The Nature of Knowledge and Knowing

Aim:

Explore previous and current experiences of accessing management knowledge

Understand motivations for seeking new knowledge

Ascertain valued and de-valued aspects of management knowledge and evidence

What might cause you to search for new knowledge/ideas to help you in your work? Where would you get that from? PROBE: Examples?

Have you ever discarded an aspect of knowledge that you once valued? PROBE: What? Why?

If you were to mentor a colleague, what advice about managing would you give? PROBE - What would you tell them to avoid?

- I. What might cause you to search for new knowledge/ideas to help you in your work? Where would you get that from? PROBE: Examples?
- II. Have you ever discarded an aspect of knowledge that you once valued? PROBE: What? Why?
- III. If you were to mentor a colleague, what advice about managing would you give? PROBE: What would you tell them to avoid?

2.2 Evidenced Based Management

Aim:

Explore the meaning of EBMgt to individuals

Find out what types of management knowledge and evidence are said to inform their practice

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al.* under the terms of a commissioning contract issued by the Secretary of State for Health.

- I. What does Evidence-based Management mean to you?
- II. What kinds of evidence or research do you use to inform your work as a manager?
- III. Why do you find this evidence persuasive? Do others agree?
- IV. Are there any controversies/debates going for you in relation to this at the moment?

2.3 Information Science and Information Technology

I. What aspects of communication technology do you find useful in practice? / not useful?

2.4 Barriers to Transfer, Organizational Development and Change

Aim:

Explore attempts to directly apply management ideas or evidence in practice

Understand barriers and facilitators to adopting and using management evidence

Understand other drivers for change

- I. Have you tried to change something i.e. a work practice, system or technology using management ideas?
 - a. **Prompt**: What worked/not barriers/facilitators? Control, authority, power to effect change based on evidence? Examples?
- II. Have you made changes that are not based on evidence? Examples? Consequences?

2.5 Knowledge Transfer and Performance

Aim:

Explore perceived impact of knowledge on organizational performance

Understanding processes for knowledge transfer and diffusion in the organization

Understand current performance pressures

I. Can you give an example of how management knowledge has been used to improve performance in your organization?

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

- II. Does the pressure to demonstrate performance affect the kind of knowledge you value and use? PROBE: Sources of pressure?
- III. How do you evaluate performance?
- IV. Do you feel you are able to be creative in your practice? How?

2.6 Communities of Practice

Aim:

To identify any groups of persons sharing common ideas and objectives related management knowledge and evidence

To further explore personal influences

- I. Thinking now about your circle of colleagues and other groups you relate to in your work and social life, which group(s) of people would you say you feel part of? PROBE: Within organization, beyond?
- II. How do they influence your work?
- III. Who thinks most like you?

2.7 Organizational Learning

Aim:

To identify any processes of shared learning and practice in the organization

- I. Does this organization encourage learning and/or knowledge-sharing? IF YES PROBE, How? What? Examples?
- II. What changes could the organization make to improve learning and knowledge sharing?

2.8 Anthropology, Culture and Conversation Management

- I. Thinking about communication, do people in this organization speak the same or different languages?
- II. How do you interpret management ideas into these different languages?

2.9 Use of/need for research (magic wand)

I. Have you ever commissioned or carried out any management research? PROBE: How? When? Examples?

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

II. If you could commission some management research, what would it be about?

2.10 Organizational Form

- I. If you had to choose one word, metaphor or image to describe your organization, what would it be?
- II. How do you succeed around here?
- III. What forms of knowledge are seen as legitimate in this organization? PROBE: Who decides? How does that happen?

2.11 Tracer issues

Aim:

- To identify tracer issues for Phase 2 of research
- To potentially identify other stakeholders for Phase 2
- I. Are there any key projects or organizational developments that you think would make interesting case study issues? Views on possible case study tracer issue. What would be your initial comments on this? Who do we need to interview as part of this?
- II. Check do they need to be interviewed again for the case study. Are they willing? Are they keen to join a learning set?

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

2.12 Tick List(to be handed to interviewee and completed during the interview)

How important are each of these items in			
terms of influencing your present management practice?	High	Medium	Low
Management Research Journals (if so, please indicate which ones)			
Professional organizations or groups			
Management books			
Managers in this organization			
Other peers / colleagues			
International experts / gurus			
Financial considerations			
Market considerations / competition			
Contract specifications			
Your early training			
Training & development courses			
Your ongoing training			
Your own research			
Mass Media			
Pressure groups			
Risk of litigation			
Personal experience			
Other (please state)			

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

Guideline questions for Phase 2 work:

The implementation of an Integrated Learning Initiative.

[Intention is for open interviewing]

Part 1 – Background and management knowledge

- Please could you tell me a bit about your career background, and your current role in this organization
- Have you done any management training before?
 - (If yes) What have you found useful? Not useful?
- Have you tried to make changes in this or another organisation using management ideas or concepts?
 - (If yes) What has been your experience?
- Are there any ideas / concepts about management that you consider particularly useful to health care organizations?
 - (If yes) How might you go about finding this information?

Part 2 – Integrated Learning Initiative involvement

- Please tell me how you came to be involved with the Learning initiative?
- What problem(s) is it attempting to solve?
- Who leads it?
- How often do you participate?
 - (If limited participation / participation dropped off, explore reasons.)

Part 3 – Practice and implementation

- What type of concepts or evidence do you think this initiative is drawing upon?
- Have you implemented any changes because of it?
- How did you decide on what to do?
- How did it work out?
- What have you learnt from the experience so far?

Part 4 – Local context

- Is there anything about the local context that supports this initiative? Anything that makes it difficult to? [Explore barriers / facilitators to implementation]
- What influence do you think the project is having locally?

- Where do you hope it will go from here?
- Do you have any suggestions for how it could be improved?
- Have you been involved with other service improvement projects before?
- How do they compare?

Part 5 – Broader environment

- How are you making sense of wider changes in the NHS and primary care at the moment?
- What impact are they having on you and your work?
- Do you think the wider changes in the NHS will impact on the x project?
- Is there anything you would like to add?

Thanks and close.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

Appendix 2 Examples of Information Sheet and Consent Form used

Increasing the Motivation and Ability of Health Care Managers to Access and Use Management Research (NIHR SDO Research Project 08/1808/242)

Principal Investigator: Professor Sue Dopson (University of Oxford)

Research Participant Information Sheet (Interviews)

We would like to invite you to take part in a research project conducted by University of Oxford Saïd Business School and King's College London Department of Management. The study is commissioned and funded by the NIHR Service Delivery & Organization (SDO) research programme, and hosted by Oxford Said Business School, Park End Street, Oxford OX1 1HP.Telephone: +44 (0)1865 288800. <u>www.sbs.ox.ac.uk</u>. Please read the following information carefully and take time to decide if you wish to take part.

What is the purpose of the study?

While much is known about clinicians' use of clinical research, we know less about healthcare managers use of management research. This research study investigates how and under what circumstances managers in a variety of health care settings access and use management research-based knowledge in their decision-making. The research project team includes experienced researchers from the Said Business School, University of Oxford, and King's College London, bringing together expertise from the fields of healthcare management, knowledge utilization and organizational change. The study is split into three Phases: Phase 1 focuses on individual managers' perspectives; Phase 2 comprises in depth comparative case studies of management knowledge utilisation and transfer; Phase 3 consists of the formation of action learning sets as a method of encouraging and facilitating the uptake and utilisation of research based learning.

Why have I been invited to participate?

Managers are being selected from different types of healthcare settings, spanning public and private provider organizations, management consultancies, translational research and healthcare regulatory and policy

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

organizations. In all we expect to interview around 120 people. Your name was suggested by a member of your organization as someone who might be willing to be interviewed.

Do I have to take part?

No, it is entirely up to you to decide. If you think you would like to take part a member of the research team will go through this information with you and answer any questions before you sign the Consent Form (sample attached). Even after you have signed the Consent Form you are quite free to change your mind and decide not to continue.

What will be involved if I decide to take part?

If you choose to take part, a member of the research team will interview you, in confidence, at a time and place to suit you. The interview will last approximately 1 to $1\frac{1}{2}$ hours and will be digitally recorded and professionally transcribed. You will be asked to sign a Consent Form agreeing to the interview,

If at any time during or after the interview you decide that you do not wish to continue to participate in the study, you may withdraw your consent. Any data relating to your interview will be deleted, and no one within your organization will be informed of your decision.

As well as the interview, you will be offered the opportunity to take part in the Action Learning Sets in Phase 3 of the project, but you are not being asked to decide about that at this stage.

Are there any possible disadvantages or risks involved?

None that can be foreseen except in relation to the investment of your time involved.

What are the possible benefits of taking part?

You will have the opportunity to express your views in confidence. The research will create a strong and robust evidence-base on the factors (individual, group and organizational level) that impact on the access and use of managerial knowledge. This will provide useful data for policy makers on how to improve knowledge flows between these settings crucial to the healthcare economy. The research is anticipated to identify examples of 'good practice' in leading sites, useful for the design of education programmes, selection, support and mentoring of managers in use of research.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

At an individual level, engagement with the research process should provide an opportunity during the action learning sets phase of the research for individuals to access new knowledge and networks that positively influence practice.

Will the information obtained in the study be confidential?

Yes. Your participation in the study will be **strictly confidential**. Any information you provide will be coded and carefully anonymised so that you cannot be identified by this information, except by the researchers who interview you. However, **you should note** that in the unlikely event that you should disclose something during an interview which the researcher considers puts anyone at serious risk, the interview would be terminated immediately and you would be informed that this information would have to be shared with others.

The information collected at interview will be digitally recorded and professionally transcribed. The audio recordings will be securely stored for the duration of this study and then permanently erased. All the remaining project information will be securely stored for up to seven years after the study has been completed. After this period, all hand-written information and computer data will be deleted.

The information you provide will be included in our overall findings, and will be anonymised so that you cannot be identified. When the study is completed, a report will be produced and the findings will be published. If you would like a copy of the finished report, we will provide this to you free of charge.

Confidentiality will be ensured at all times in accordance with the **Data Protection Act 1998**. Some parts of the data collected for the study may be looked at by authorized persons from the University of Oxford to ensure that the study is being carried out correctly. All will have a duty of confidentiality to you as a research participant and nothing that could reveal your identity will be disclosed outside the research site.

What do I do if I would like further information?

You will be briefed on the study by the researchers allocated to your research site. If you would like to discuss this study in further detail, either over the telephone or in person, then please contact Professor Sue Dopson, Principal Investigator, at Oxford Said Business School, <u>sue.dopson@sbs.ox.ac.uk</u> telephone 01865 288800.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

What if there is a problem?

You may choose to withdraw your consent during the study at any time. Should you have a concern about the conduct of the study or wish to make a complaint, please contact, in the first instance, Professor Sue Dopson, Principal Investigator, at Oxford Said Business School, sue.dopson@sbs.ox.ac.uk telephone 01865 288800, or you may contact the University of Oxford Clinical Trials and Research Governance (CTRG) Office 01865 857939, the head on or of CTRG, email heather.house@admin.ox.ac.uk. If you remain unsatisfied with this and the matter relates to the way the research has been carried out you can make formal complaint through the NHS Complaints Procedure at www.nhs.uk.

Given the nature of this study, it is highly unlikely that you will suffer harm by taking part. However, the University has arrangements in place to provide for harm arising from participation in the study for which the University is the Research Sponsor.

What will happen to the results of this study?

The full research report will be published in 2012. Details of other publications and presentations arising from the study will be made available, as and when they are produced, on the project web pages at www.sbs.ox.ac.uk/research/health/research/Pages/management.aspx.

Has the study been approved?

Full been obtained Leicestershire, ethical approval has from Northamptonshire and Rutland Research Ethics Committee Ref: 10/H0406/44 Details can be provided to you on request.

Thank you for taking the time to read this Information Sheet. We hope you will be interested in taking part in the study. If so, please contact the researcher involved with your organization, whose name and contact details are on the bottom of the covering letter.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

Consent Form (Interviews)

Please read this form in conjunction with the Research Participant Information Sheet, initial each box and sign and date at the bottom where indicated.

I agree to take part in this study as described in the Research Participant Information Sheet, *dated 12 April 2010 – Version 2*. I confirm that I have read and understood this information, and have had the opportunity to discuss details with a member of the research team, to ask any questions and to have these answered satisfactorily. The nature and purpose of this study has been explained to me, and I understand what will be required if I take part.

I understand that my participation is voluntary, and that I may withdraw from this study at any time without justifying my decision and without affecting my legal rights or my normal working relationship with my employing organization.

I consent to this interview being recorded. I consent to the processing of my personal information for the purposes explained to me. I understand that such information will be treated in accordance with the terms of the Data Protection Act 1998

I understand that the audio recording will only be accessed by the research interviewer and the transcriber, and the anonymised and coded transcript of the interview recording will only be accessed by members of the research team. I also understand that the audio file will be deleted upon conclusion of this study, and that any quotations used in publications will be anonymised.

I understand that in the unlikely event that any of the information I give is considered to put others at risk, I would be informed of this, the interview would be terminated and that particular item of information would be reported to an appropriate person.

Name of participant (I	BLOCK CAPITALS)
------------------------	-----------------

Signed

Date						

 $[\]bigcirc$ Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al.* under the terms of a commissioning contract issued by the Secretary of State for Health.

Name of researcher taking consent (BLOCK CAPITALS)

Signed _____

Date _____

[When completed, 1 copy for the participant and 1 copy for the researcher]

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

Appendix 3 Interviewees profiles

Beechwell Think Tank	Participant	Career Background	Education	Role (academic/clinician/ manager ideal types + hybrid variants)
1	BE01A	 Policy, Academia 	Doctorate (Mgt)	Academic (applied)
2	BE02A	 Research, Management consultant 	Undergraduate (SocSci)	Academic (applied)
3	BE03A	 Clinical (O), Management 	Masters (SocSci)	Management consultant
4	BE04A	 Academia, Applied Academia 	Doctorate (SocSci)	Management consultant – academic hybrid
5	BE05A	 Clinical (N), Academia, Management 	Masters (SocSci)	Management consultant
6	BE06A	 Management, Occ. Psychology 	Masters (SocSci)	Management consultant

Interviewees profile: Beechwell – Phase 1

Interviewees profile: Beechwell – Phase 2

Beechwell Think Tank	Participant	Career background	Education	Role
1	BE07B	 Academia, Policy 	Doctorate (Mgt)	Academic
2	BE10B	 Management, Policy 	Masters (SocSci)	Management consultant
3	BE12BB	 Academia, Policy 	Doctorate (SocSci)	Academic (applied)
4	BE08B	 Policy, Journalism 	Undergraduate (SocSci)	Management consultant
5	BE09B	1. Academia,	Doctorate (SocSci)	Academic (applied)

		2. Policy		
6	BE15B	1. Clinical (N),	Masters (Mgt)	Management consultant
		2. Management		
7	BE11B	1. Research,	Masters (Mgt)	Management consultant
		 Management, Policy 		
8	BE13B	1. Clinical (D),	Masters (Mgt)	Management consultant
		 Management consultant 		– clinical hybrid
9	BE14B	1. Clinical (N),	Masters (Mgt)	Management consultant
		 Management, Policy 		
10	BE16B	1. Research	Masters (Clinical)	Academic (applied)
11	BE17B	1. Clinical (D),	Masters (Mgt)	Management consultant
		2. Management consultant		

TOTAL = 17

Interviewees profile: Elmhouse – Phase 1

Elmhouse Consultancy	Participant	Career Background	Education	Role
1	EH01A	1. Clinical (D)	Masters (medicine)	Management consultant
2	EH02A	 Diplomacy Management Policy 	Undergraduate (clinical science)	Management consultant
3	EH03A	1. Management	Undergraduate (SocSci)	Management consultant
4	EH04	1. Clinical (O)	Doctorate (clinical science)	Management consultant
5	EH05A	 Clinical (D) Management (& Journalism) 	Undergraduate (medicine)	Management consultant
6	EH06A	1. Management	Undergraduate	Management consultant
7	EH07A	Clinical (D) Research (management)	Undergraduate (medicine)	Management consultant
8	EH08A	1. Management	Masters (management)	Researcher

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

9	EH09A	1. Management	Masters (management)	Management consultant
10	EH10A	1. Academic	Doctorate (management)	Academic

Interviewees profile: Elmhouse – Phase 2

Elmhouse Consultancy	Participant	Career background	Education	Role
1	EH11B	1. Management	Undergraduate (not mentioned)	Manager
2	EH12B	1. Management	Undergraduate (not mentioned)	Manager
3	EH13B	1. Management	None	Manager
4	EH14B	1. Clinical (D)	Undergraduate (medicine) & Masters (Management)	Manager
5	EH15B	1. Management	Undergraduate & accountancy professional training	Manager
6	EH16B	1. Clinical (D)	Undergraduate (medicine)	Clinician
7	EH17B	1. Clinical (N)	Undergraduate (clinical)	Manager
8	EH18B	1. Management consulting	Undergraduate (management)	Manager
9	EH19B	1. Management	Undergraduate	Manager
10	EH20B	1. Clinical (D)	Undergraduate (medicine)	Academic, clinician
11	EH21B	1. Management	Undergraduate & accountancy professional training	Manager
12	EH22B	1. Management	Masters (management)	Management consultant
13	EH23	 Management consulting, Policy 	Undergraduate	Management consultant
14	EH24	 Academia, Management 	Doctorate (management)	Management consultant partner

TOTAL = 24

Interviewees profile: Firgrove – Phase 1

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

Firgrove AHSC	Participant	Career background	Education	Role
1	FI08	 Clinical (D), Management 	Doctoral (Clinical) & Masters (Mgt)	Manager – academic- clinical (D) hybrid
2	FI09	 Clinical (D), Management 	Doctoral (Mgt)	Manager
3	FI14	 Clinical (D), Management 	Masters (Mgt)	Manager – clinical (D) hybrid
4	FI15	 Clinical (D), Management 	Masters (Mgt)	Manager
5	FI16	 Academia, Clinical (N), Management 	Doctoral (Clinical)	Manager – clinical (N) hybrid
6	FI17	 Clinical (O), Management consultant 	Doctoral (Mgt)	Management consultant
7	FI19	1. Management	Masters (Clinical)	Manager
8	FI25	 Clinical (O), Academia, Management 	Doctoral (Clinical)	Manager – academic – clinical (O) hybrid

Interviewees profile: Firgrove – Phase 2

Firgrove AHSC	Participant	Career background	Education	Role
1	FI03	 Academia, Clinical (D), Management 	Doctoral (Clinical)	Manager – academic – clinical (D) hybrid
2	FI06	1. Management	Undergraduate	Manager
3	FI07	 Clinical (O), Management Consultant 	Doctoral (Mgt)	Management consultant
4	FI11	 Clinical (D), Academia 	Doctoral (PhD & MD)	Manager – academic hybrid
5	FI18	 Clinical (O), Academia, Manager 	Doctoral (Clinical)	Manager – academic – clinical (O) hybrid
6	FI21	1. Social Work,	Barrister	Manager

		2. Academia,		
		3. Law		
7	FI22	 Clinical (N), Management 	Undergraduate (Clinical)	Manager
8	FI23	 Industry, Management consultant 	Masters (Mgt)	Management consultant
9	FI24	 Academia, Occ. Psychology, Mgt Consultant 	Masters(Clinical – O)	Management consultant
10	FI26	 Social Work, Clinical (O), Mgt consultant 	Masters (Clinical – O)	Management consultant
11	FI27	1. Management consultant	Masters (SocSci)	Management consultant
12	FI29	 Academia, Clinical (D), Management 	Doctoral (Clinical)	Manager – academic – clinical (D) hybrid
13	FI30	1. Management	Undergraduate	Manager
14	FI31	 Teaching, Clinical (N), Management 	Undergraduate (Clinical – N)	Manager
15	FI32	 Clinical (D), Academia, Management 	Doctoral (Clinical – D)	Manager – academic – clinical (D) hybrid
16	FI33	1. Management	Undergraduate (Mgt)	Manager
17	FI34	1. Management	Undergraduate (SocSci)	Manager
18	FI35	 Clinical, Academic, Management 	Doctoral (Clinical – D)	Manager – academic – clinical (D) hybrid
19	FI39	 Clinical (D), Management 	Masters (Clinical – D)	Manager – clinical hybrid
20	FI37	 Clinical, Management 	Undergraduate (Clinical – D)	Manager – clinical – academic hybrid

21	FI36	1. Management	Masters (Mgt)	Manager
22	FI38	1. Clinical (D),	Doctoral (Clinical –	Manager – academic
		2. Academia	D)	hybrid
23	FI40	1. Clinical (D),	Doctoral (Clinical –	Manager – academic –
		2. Academia	D)	clinical hybrid

TOTAL = **31**

Interviewees profile: Mapleshire – Phase 1

Mapleshire	Participant	Career background	Education	Role
1	MA01A	1. Academia	Doctorate (management)	Academic/Manager Hybrid
2	MA02A	1. Clinical (D)	Undergraduate (medicine)	Clinician/Manager Hybrid (D)
3	МАОЗА	1. Clinical (D)	Undergraduate (medicine)	Clinician/Manager Hybrid (D)
4	MA06A	1. Academia	Doctorate (sociology)	Academic/Manager Hybrid
5	MA07A	 Academia, Management 	Undergraduate (psychology), Prof. Qual. (social work)	Academic
6	MA08A, 15B	1. Management	Masters (management)	Manager

Interviewees profile: Mapleshire – Phase 2

Mapleshire	Participant	Career background Education		Role
1	MA01B	1. Academia	Doctorate (health economics)	Academic
2	MA02B			Academic/Manager Hybrid
3	MA03B	1. Academia	Doctorate (psychology)	Academic
4	MA04B	1. Academia	Masters (history)	Manager
5	MA05B	1. Clinical (N), 2. Academia	Doctorate	Academic
6	MA06B	1. Academia	Doctorate (sociology)	Academic/Manager Hybrid
7	MA07B	1. Social Work,	Prof. Qual. (soc. Work), 2 Masters	Manager

		2. Management	(pub. Hlth., mgmnt.)	
8	MA08B	 Clinical (N), Management 	Masters (medical science)	Manager
9	MA09B	1. Management	None	Manager
10	MA10B	1. Academia	Doctorate (health economics)	Academic
11	MA11B	 Civil Service, Management 	None	Manager
12	MA12B	1. Clinical (N), 2. Management	Masters (social policy)	Manager
13	MA13B	1. Management	Masters (management)	Manager
14	MA14B	1. Academia	Doctorate (public health)	Academic/Manager Hybrid

TOTAL = 20

Interviewees profile: Oakmore – Phase 1

Oakmore	Participant	Career background	Education	Role
1	OA01A	1. Management	Undergraduate (Accountancy), Postgrad diploma (mgt)	Manager
2	OA02A	1. Management	Undergraduate (history), Masters (management)	Manager
3	OA03A	1. Clinical (D) Undergraduate		Clinician/Manager Hybrid (D)
4	OA04A	1. Clinical (D)	Undergraduate (medicine)	Clinician/Manager Hybrid (D)
5	OA05A	1. Clinical (D)	Undergraduate (medicine), Doctorate (management)	Manager
6	OA06A	1. Clinical (N)	Masters (management)	Manager
7	OA07A	 Engineering, Management 	Undergraduate (engineering), Masters	Manager

Interviewees profile: Oakmore – Phase 2

Oakmore	Participant	Career background	Education	Role
1	OA01B	1. Clinical (N)	Professional qualification (nursing)	Clinician/Manager Hybrid (N)
2	OA02B	 Trade, Clinical (N) 	Professional qualification (nursing)	Clinician/Manager Hybrid (N)
3	OA03B	1. Clinical (N)	Professional qualification (nursing)	Clinician/Manager Hybrid (N)
4	OA05B	1. Clinical (D) Undergraduate (medicine)		Clinician (D)
5	OA06B	1. Management None		Manager
6	OA07B	1. Management	Management diploma	Manager
7	OA08B	1. Clinical (N)	Professional qualification (nursing)	Clinician/Manager Hybrid (N)
8	OA09B	1. Clinical (D)	Undergraduate (medicine)	Clinician/Manager Hybrid (D)
9	OA10B	1. Clinical (N)	None	Clinician (NO
10	OA11B	 Trade, Clinical (N), Management 	Undergraduate (psychology)	Manager
11	OA12B	1. Clinical (N) 2. Management	Management diploma	Manager
12	OA13B	1. Clinical (D)	Undergraduate (medicine)	Clinician/Manager Hybrid (D)
13	OA14B	1. Management	Undergraduate (accountancy)	Manager
14	OA15B	 Law, Management 	Undergraduate (law), Professional qualification (law)	Manager
15	OA16B	1. Management	Undergraduate (engineering)	Manager

TOTAL = 22

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

Willowton PCT	Participant	Career background	Education	Role	
1	WI01A	1. Clinical (D), 2. Academic	Masters (medicine), Doctorate (SocSci)	Academic – clinical hybrid (D)	
2	WI02A	1. Management	None	Manager	
3	WI03A	1. Clinical (O) 2. Academic	Doctorate (Clinical)	Academic, Clinician (O)	
4	WI04A	1. Clinical (N) 2. Academic 3. Management	Undergraduate (Clinical), Masters (Mgt)	Manager	
5	WI05A	1. Clinical (N)	Undergraduate (Clinical), Masters (Mgt)	Clinical hybrid (N)	
6	WI06A	1. Clinical (N)	Postgraduate diploma (Mgt)	Manager	
7	WI07A	1. Clinical (O)	Undergraduate (Clinical)	Manager	
8	WI08A	1. Management (Policy)	Undergraduate	Manager	

Interviewees profile: Willowton – Phase 1

Interviewees profile: Willowton – Phase 2

Willowton PCT	Participant	Career background	Education	Role	
1	WI01B	1. Management	Masters (Clinical)	Manager	
2	WI02B	1. Clinical (N)	Masters (Clinical)	Clinical (O)	
3	WI03B	1. Clinical (N)	None	Manager	
4	WI04B	1. Management	Masters (2: management & clinical)	Manager	
5	Wi05B	1. Management	Masters (2: science & management)	Manager	
6	WI06B	1. Clinical (D)	Masters (medicine)	Clinical Hybrid (D), Academic	
7	WI07B	1. Management	None	Manager	
8	WI08B	1. Clinical (N)	Diploma (Mgt)	Manager	
9	WI09B	1. Clinical (D)	Masters (Medicine)	Clinician-Hybrid (D)	
10	WI10B	1. Clinical (D)	Masters (Medicine)	Clinician (D)	

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

11	WI11B	1. Clinical (D) Masters C (Medicine/clinical)		Clinician-Hybrid (D)
12	WI12B	1. Management Professional M qualification (social work) Masters (medicine)		Manager
13	WI13B	1. Clinical (D) 2. Postgrad diploma Academic (Mgt)		Clinician-Hybrid (D)
14	WI14B	1. Clinical (N)	Undergraduate (Clinical – O), Masters (SocSci)	Manager
15	WI15B	1. Management	Undergraduate	Manager (administrator)

TOTAL = 23

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

Appendix 4 Case analysis process

An illustration of the process followed is given below:

For instance, a key theme which emerged across all the cases was the concept of epistemic cultures/communities

Process	Those involved	Outcome	Examples
Search of all transcripts from single case study	Both team members	Candidate quotations selected seeming to refer	"there's the medics tribe, there's the accountants tribe, the Board
site (Oakmore)	assigned to case, working	to a specific theme, e.g. epistemic communities	tribe" (Oakmore)
	separately		"getting (staff) out of their day to day silos" (Oakmore)
Discussion of selected quotations	Pair of team members assigned to case	Agreement that the examples appear to illustrate candidate theme	
Search for other examples from the same site	Pair of team members assigned to case	More quotations selected	"we're seeing less friction between the professions"(Oakmore)
			"one group of languages is the healthcare languages other languages are business and management languages"(Oakmore)
Discussion of selected quotations	All team members at monthly meeting	Tentative agreement on emerging core theme	
Comparison with those on the same theme selected from other sites	All team members at monthly meeting	More confident agreement on emerging core theme	"there's a difference culturally between the clinical scientists and the social scientists" (Mapleshire)
			"its hard to get teams to accept the evidence from somewhere else" (Firgrove)
Literature interrogated for theoretical perspectives to explain the data	All team members	Identification of theoretical perspectives/theories	
Discussion with steering committee	Steering committee members and team members	Agreement on core theme - epistemic cultures/communities	

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

Appendix 5 NVIVO analysis

This qualitative data analysis was conducted with the help of the QSR Nvivo8 software. With the help of NVIVO, the interviews per case study were organized into "sets", i.e. all the interviews per case study would form one set. This allowed to compare the answers both within each case study and across-cases. Each thematic domain in the interview protocol (see Appendix 1) and the respective interview questions within each of these thematic domains were assigned to a code (or a "node" in NVIVO For example, a thematic domain is "2.1. language). The Nature of Knowledge and Knowing". The first interview question under this domain is "What might cause you to search for new knowledge/ideas to help you in your work? Where would you get that from? PROBE: Examples?" and this question was simply coded as "triggers for new knowledge"). Similar coding was assigned to all the thematic domains and their respective interview questions. These were the only pre-assigned codes. The rest of the coding was developed based on the themes that emerged through the analysis of the interviewees' answers. Typically, within each answer there were more than one emerging themes and these were coded accordingly (for instance in the aforementioned coded question about what triggers new knowledge, there were a number of sub-codes/sub-themes emerging from interviewees' responses such as competition, one's earlier training and education, the nature of one's work etc).

As the data analysis progressed, the list of sub-codes responding to the answers that interviewees gave to each interview question expanded. With the help of NVIVO, text searches were run so as to identify terms that may be frequently used by interviewees or differences observed on a specific topic within and across the case studies. Moreover, for the purpose of more in-depth data analysis, an additional type of coding was assigned to each interview transcript: Each interviewee was classified and coded based on his/her personal attributes on 3 different parameters: a. gender (male or female), b. type of work (e.g. if s/he is a researcher, manager, consultant, is doing medical/clinical work etc) and c. years of work in the organization (sorted into the following categories: less than 5 years, 5 to 10 years, 10 to 20 years and more than 20 years). This gave the opportunity to do comparisons within each case study regarding similarities and differences in interviewees' responses based on each of these 3 parameters.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

Appendix 6 Methods and processes in the action learning sets

1. SET FORMATION, COMPOSITION & PREPARATION

The original plan was to form sets consisting of 6-8 individuals, preferably including a mix of individuals from at least four of the participating organisations. However, after further discussion and due to time limits for each set meeting, the numbers were revised to 4 -7 people per set.

Every individual who was interviewed was automatically invited to join an Action Learning set (ALS). In addition, it was envisaged that the liaison person for each participating organisation would be offered the chance to nominate additional managers.

Once an individual had expressed interest in joining and participating in an ALS their name was placed into a pool, so that each set could be formed from groups of managers across at least four of the participating organisations.

There were considerable logistical difficulties in achieving this plan within the timescale of the project and concurrent with the ongoing fieldwork. The field work had not commenced in all sites as we prepared to organise the first set in August/September 2010, thus the composition of the first set was especially challenging as fewer organisations from which to invite participants were available. In addition, despite many of the Phase 1 respondents indicating a willingness to participate, in reality individuals were frequently prevented by other commitments from taking part. Indeed, one of the 'early' field sites (Elmhouse) was not able to provide any participants. The issues of mix of membership in each ALS were therefore interconnected with issues of timing, which would not have been present if one were organising ALSs independent of a research project. Ideally, to run an effective ALS, the maximum available mix was needed, from a minimum of four sites, which was the case for sets 2 and 3. It was also attempted to mix backgrounds, via experience and discipline.

Nevertheless, three sets were formed consisting of 5 persons (Set1); four persons (Set 2) and 5 persons (Set 3, unfortunately one of the set 3 volunteers pulled out a day before the first meeting).

Considerable care was taken in preparing individual participants for attendance of the set meetings. In order to confirm their commitment to participating in an ALS, each individual was sent an invitation and a set of dates and asked to confirm if they were willing to 'sign up' for the ALS. A copy of the Invitation letter is provided at the end of this section. Interviewers also used this information to answer questions on our

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

approach to ALS. Prior to the first set meeting, the facilitator rang each set member and discussed their prospective project with them as well as explaining the approach being taken to the ALS, its role in our wider research project and answering any questions they had.

Copy of the Invitation letter - on Headed paper

Increasing the Motivation and Ability of Health Care Managers to Access and Use Management Research

Dear Research Participant,

The Action Learning Sets : Invitation and Briefing Note

When you were interviewed during Phase 1 of our research, you expressed interest in joining an Action Learning Set (ALS) and this letter invites you to participate and sets out the approach and the practical details.

Why join?

The purpose of the Action Learning Sets as part of our research project is two-fold:

Firstly, and primarily, to develop participants' capacity to observe their own learning-in-action (much the same as traditional Action Learning Sets).

Secondly, to observe to what extent the Action Learning Set environment facilitates knowledge exchange.

We hope that both aspects will be of benefit to you personally and to your organisation.

During the meetings, you will be open to exchange and stimulation within a mixed group; the ALS will deliberately be composed of individuals from differing health care organisations, public and private, and from differing backgrounds. In a confidential environment, you will have the opportunity to benefit from the diversity of the group.

Primarily, you will be offered the opportunity to work on your own personally specified problem or issue and to learn and develop your coaching skills by working on other group members' problems; 'learning via doing'. We offer the following guidance for thinking about your choice of work problem:

- Choose a management or organisational issue or question to which you do not currently have the answer;
- Select a topic or issue that stimulates your curiosity and about which you want to learn more;

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

• Choose an issue that can be worked on between the meeting dates and within the time-frame of the life of the Set.

In our view, the concept of the ALS incorporates the core idea of active learning and of learning from feedback and debate. This then is a highly interactive process. It requires *all* participants to be willing to undertake preparation before and between the set meetings. During the set meetings, each member of a set has also to be willing to respond constructively and practice questioning skills to aid other members' with their projects. It is imperative to this process that set membership remains stable and that the set has the opportunity to build camaraderie and knowledge of each other. We will provide two members of the research team to support each set. One person will act as the set Facilitator and one will act as the neutral Observer.

Our approach to supporting and facilitating the sets is to provide the opportunity for members to reflect upon their own learning and wherever possible, to act as an intermediary to aid participants by suggesting resources which they can use to develop their learning or resolve work based issues. The Facilitator will not act as an 'expert' but support the group's processes. The Observer will connect the information from the ALS to the overall research project.

Thus participants must be prepared to commit time and effort to preparation for the sets and to commit to all the dates of the set meetings.

You are invited to join a Set and the dates and locations of the meetings are laid out below:

Sets will meet at Egrove Park, University of Oxford Executive Education Centre, located at (indicate location map) between 11.00am-4.00pm on these dates.

First Set meeting = 27 October, 2010

Second Set meeting = 13 January, 2011

Third Set meeting = 12 April 2011

Please could you complete the attached sheet and e mail me your reply by **deadline????** if you wish to join an ALS and if you will be able to attend on all of these dates. If you wish to participate in a set, but these particular dates are not suitable, we will send you one set of three alternative dates for your consideration. Whilst we shall attempt to accommodate everyone who wishes to join, we cannot guarantee this.

A participant Information Sheet is also attached and if you join us, you will be asked to sign an individual consent form. If you have further questions, at this stage, please contact me

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

Thank you again for your contribution to our research – it is much appreciated.

Yours sincerely,

Professor Sue Dopson Address

2. SET FACILITATION & PROCESSES

We composed a cycle of sets which ran as follows: Establish Set 1—By August/Sept 2010; Facilitator: Louise Fitzgerald Observer: Janette McCulloch Run Set 1, Session 1, 27 Oct. 2010; Session 2, 13 Jan. 2011; Session 3, April 2011 (this set did not run).

Establish Set 2 – By Dec. 2010;

Facilitator: Janette McCulloch

Observer: Gerry McGivern

Run Set 2, Session 1, 28 Jan 2011;

Session 2, 8 April 2011;

Session 3, 20 May 2011.

Establish Set 3 – By Jan 2011;

Facilitator: Sue Dopson

Observer: Janette McCulloch

Run Set 3, Session 1, 11 March 2011;

Session 2, 13 May 2011;

Session 3, 8 July 2011.

With the exception of one set, all the meetings ran as planned. One set was impacted by the national policy changes and structural re-organisation being made in primary care (as it included two primary care managers) and the final meeting did not run as a result.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

Set meetings started with a brief introduction by the Facilitator and the presentation of guidelines (see below). Each set member presented their issue or project at the first set meeting and each person was allocated the same amount of time within the set. Thereafter the second and third meetings focused on progress on the issue and on any responses to actions and where necessary, on the changing dynamics of the organisations. In several instances, set members presented different re-capitulated versions of their issues at meeting two, or they added new issues to work on during meetings two and three.

Facilitation and Observation

As the list above establishes, for each set meeting, two members of the research team were provided to support the set. One person acted as the set Facilitator and one acted as the neutral Observer. The approach to supporting and facilitating the sets was to provide reflective feedback and wherever possible, to act as an intermediary to aid participants by suggesting resources which they could use to develop their learning or resolve work based issues or puzzles. The Facilitator did not act as an 'expert' but supported the group's processes. All the facilitators were experienced in interactive learning and development processes with middle and senior managers, from both the public and the private sectors. In addition, two were academics with extensive experience of health care and one was an ex-senior health care manager with current experience of consultancy work.

At the start of the set, the Facilitator laid out 'Guidelines' for the interaction and these were reiterated before each meeting. A copy of the Guidelines is provided below:

Basic Guidelines for Action Learning Sets

Confidentiality: the confidentiality of everything said in the room is guaranteed.

Participation is voluntary and any action agreed by individuals will be entirely voluntary.

Full benefit of the Action Learning Set will be realised through 100% attendance.

We adopt a non-judgemental & respectful attitude as we are all here to learn – including the facilitators/observers.

Constructive challenge and feedback is welcomed within the group.

Air time at each meeting is shared equally.

We support each other by respectful listening, insightful questioning and reframing of the problem rather than by offering solutions.

Deep listening is valued at least as much as talking.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

We enjoy ourselves.

We start and finish on time.

As the invitation letter explained, a coaching style to facilitation was adopted and participants were also encouraged to use this approach with each other. The use of the GROW model was advised initially. This contains the following ideas:

GROW MODEL

Useful questions – these are intended as prompts & ideas only, rather than a list to be worked through.

Goal

What is the problem/issue/ challenge?

Is this an example of a wider issue/problem in your organisation?

What do you want to achieve or change?

How will you know when you achieve it?

What will it look like when you have achieved it?

Reality

What have you done specifically to achieve your goal so far?

What challenges have you met and overcome?

What other challenges do you expect to meet?

Who are the key personnel involved and who are your allies in this situation?

What way of seeing this situation (problem/issue) are you attached to and possibly defending?

What assumptions are inherent in your view of the situation? (probe for self-limiting beliefs etc)

"Where are you" in this problem/issue? What is your role in it?

What do you know about this problem now that you don't want to think about or that you hope we won't ask you?

Options

What could you do?

What else could you do....?

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

If there were no constraints, what would the options be?

What are the strengths and weaknesses of each option?

Where can you find knowledge or information to help you in this?

Will/way forward

Which option do you prefer?

Which options scare you? (Why is that?)

Can you map out the steps in your action plan and the timescales to go with them?

Who can you work with? What are the most likely constraints?

What might stop you?

What will it be like if you don't progress this problem?

On a scale of 1 to 10, how feasible is it to take action?

Emerging from discussions in the Research Team Supervisory meeting, some marginal experimentation was decided on. It was decided to progressively increase the extent and nature of the intervention by the Facilitator. For example, in sets 2 and 3, the Facilitator fed a research based model of learning and reflection, based on Kolb's model of the learning cycle to participants at the start of the meeting to encourage thought. So through the three sets the volume of suggestions, feedback and ideas proposed to set members by the three facilitators was gradually increased.

The observers' role was to act as neutral and non-participant observers and to record field notes throughout the set meeting. Their remit was to observe and note, focusing on questions such as:

What kind of knowledge is shared and discovered by the group members?

Do they discuss accessing management knowledge? Of what nature?

What sources of knowledge are used and what search strategies (if any) are employed?

What do they reject?

3. DATA CAPTURE AND ANALYSIS

Field notes from each session were produced by the Observer.

Facilitators also produced reflective field notes from each session.

The Observer took responsibility for running a review session at the end of each meeting and recording the groups' thoughts/ reactions/ reflections.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

A sample of the meetings of each set was also audio recorded and a verbatim transcript from this was produced.

Data Analysis

Our process of analysis of these action learning data went though several phases. Using observers' field notes, facilitators' reflections and set transcripts, the organising Facilitator produced an initial embryonic analysis of themes emerging from each individual set.

Next two team members, in pairs, which included the Facilitator, completed an in-depth analysis of each set and identified themes emerging from the interactions. One by one, these analyses were then presented back for a team discussion.

Finally, the three pairs met to compare across the sets and identify and discuss the overarching themes which had emerged.

4. FACILITATORS' SUPERVISION MEETINGS

Immediately after the first set meeting of Set 1 had taken place, the suggestion was made by one team member that a deliberate 'reflective' space was created, the 'supervisory space', only for those actively involved in the running of the ALSs and guided by a member of the research team who is a psychotherapist. It was unanimously agreed that this would be an interesting addition to the research approach. It seemed that the role of the Facilitator was both interesting and under-researched. In addition, from the point of view of the individuals in the role, these meetings offered an important reflective and collegiate space. The roles adopted were found to be challenging and emotional requiring high empathy. So, just as a consultant may find it helpful to have co-consultancy support, it was perceived that the Facilitators might find it useful to have support in a space which was reflexive by design with a strong learning element. It was also recognized that the Facilitators' reactions and the more neutral reflections of the observers generated some unique data. So the 'supervisory space' focused on a) unfolding/refining design of the sets (through observation and continuous adjustment), and particularly through responsiveness to participants' needs; b) organisational learning between sets; c) deepening and extending research team knowledge of the participants and organisations; d) supporting facilitator and observer 'emotional intelligence' through reflection and sharing perceptions and learning.

All the supervisory meetings were audio-recorded and transcribed. It is planned to undertake analysis of these data at later date.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

Appendix 7 Organizational metaphors and associations from Phase 1 analysis:

Site Pseudonym	Metaphors / words ascribed to site by interviewees
Oakmore -	Matron
(Independent Charitable	Gentry (governors)
Trust)	Ship ('ship of fools')
	• Tug-of-war
	 Dog sledge race (some huskies good and some terrible)
	 Cedar tree (spanning the cloud line – above it there is happiness; below, injuries, difficulties and problems)
	Charity
Elmhouse (consulting)	The 'great gate of Camelot'
	Jesuits (fear, yet certainty)
	A velvet glove with 'an iron fist'
	• German car (remarkably efficient, engineered)
	• Optimistic
	A pie eating contest
	• A club / university (more than a company)
	A tight ship
Beechwell (policy think	• Venn diagram (some circles overlapping, some not)
tank)	 A cat (independent, reassuring to have around, but can be vicious)
	• A leopard (sleek, but can pounce) / Golden Retriever
	• A jazz band (rather than an orchestra – loosely connected)
	• Zebra
	 Owl (wise, aloof, looks around) (x2) / lioness (has bite) / rabbit
Willowton (PCT)	Aspiring

		1
	•	Ambitious
	•	Ball of wool
	•	Egg
	•	Onion (lots of layers, 'know your onions')
	•	Provocative
	•	Sunflower (positive)
	•	Swallow
	•	The Underground (old, it works, it's complicated, it needs new lines – the NHS)
Mapleshire (CLAHRC)	•	Silos (different communities of practice completely separate from each other)
	•	A jungle (overgrown and wild)
	•	Improvisation ('you make it up as you go along')
	•	Fragmented (lots of different pieces with CLAHRC staff trying to hold it all together)
	•	A jigsaw (trying to fit together lots of different priorities
Firgrove (AHSC)	•	A lion leading their pack; with a beautiful mane; a kitten strutting around, trying to be scary - but really isn't underneath
	•	Ivory tower, great association with academic unit – but hard for nurses to penetrate
	•	A tennis ball, bit fluffy on the outside, becomes solid when challenged, & bounces around a bit
	•	A collection of 'communities': nice listed Georgian house,1950s semi, flashy skyscraper flats, shabby but comfortable Victorian terrace
	•	An amoeba constantly changing shape, and you can't get hold of it

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

Appendix 8 Data analysis leading to the development of the influences on management practice categories

		A	NOVA Table				
			Sum of			_	0.
		(2 , 1, 1, 1)	Squares	df	Mean Square	F	Sig.
Personal experience *	Between Groups	(Combined)	.958	5	.192	1.717	.161
Organisation	Within Groups		3.348	30	.112		
	Total		4.306	35			
Community of practice *	Between Groups	(Combined)	2.479	5	.496	2.192	.080
Organisation	Within Groups		7.238	32	.226		
	Total		9.717	37			
Training & research experience * Organisation	Between Groups	(Combined)	.910	5	.182	.770	.579
	Within Groups		7.571	32	.237		
	Total		8.482	37			
International experts &	Between Groups	(Combined)	1.823	5	.365	1.758	.150
management books *	Within Groups		6.637	32	.207		
Organisation	Total		8.460	37			
Research journals *	Between Groups	(Combined)	5.858	5	1.172	2.797	.033
Organisation	Within Groups		13.405	32	.419		
	Total		19.263	37			
Finance considerations *	Between Groups	(Combined)	5.489	5	1.098	3.379	.015
Organisation	Within Groups		10.397	32	.325		
	Total		15.886	37			

Remote group influences * Organisation	Between Groups	(Combined)	3.979	5	.796	3.971	.007
	Within Groups		6.213	31	.200		
	Total		10.192	36			

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

Appendix 9 The management fellow report

Report on the Management Fellow Grant

Janette McCulloch

Sue Dopson

1. Introduction to the report

Janette McCulloch was the Management Fellow attached to the research team. The Management Fellowship Scheme was established by the SDO NIHR in 2009, and gave SDO-funded project teams the opportunity to apply for additional resources to allow them to second a local health services manager to work with their team. The fellowship post was supernumerary to the research team.

Janette was one of 6 Management Fellows appointed in 2009, and attached to research teams around the country. Different ways of working have been developed across the group of Fellows but overall the objectives for the initiative have been to:

- improve the quality and relevance of the respective funded research projects through greater managerial involvement
- develop capacity in the managerial community for accessing, appraising and using research evidence
- encourage greater engagement, linkage and exchange between the local research producers (usually universities) and potential local research users within the NHS. (SDO Guidelines)

Most Management Fellows are practising health care managers, and many have been employed full-time for a 12 month period during the research project. However this team deliberately took a different approach to the initiative. While Janette has worked as a health care manager in the past, her current professional life is that of a freelance mediator and organisational consultant. Thus Janette was able to devote 1.5 days a week to the project over the life of the research study.

This report is organised as follows. Firstly the aims and objectives of the Management Fellow scheme are considered. Secondly the work of the Management Fellow over the course of the project is documented and reflected upon. Then a narrative of the work done in the Management Fellow's host site, 'Extead' (a pseudonym) Provider Services (EPS), is provided and finally assessment is made of the value of the role for the Management Fellow and the research team.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

To assist in writing the report a simple questionnaire was designed and sent to the team members for completion. The replies were analysed on a confidential basis by the Management Fellow (see exhibits at the end of this Appendix). The rest of the report draws on these data as well as the reflections and discussions of the authors of this report.

2. The aims and objectives of the Management Fellowship

2.1 Reflections upon the original aims

Setting objectives for Janette was difficult due to the fact that this was a new role, the dynamics of having a Management Fellow in the team was untested, and there was a (understandable) tendency to view the Management Fellows' role in terms of traditional management activities such as project management.

The aims of the fellowship as set out in the original application (December 2008) were envisaged as:

- 1. An additional input into the detailed design of the research fieldwork capacity and analysis.
- 2. A seasoned project management input ensuring timescales are met and outputs achieved.
- 3. A theoretically and empirically informed understanding of the challenges of engaging managers in using knowledge.
- 4. Assistance in generating a respected approach to running effective action learning sets (ALS) that result in knowledge being acted upon and practice reflected upon in a contextually sensitive and informed manner. The production of a workshop/monograph on this topic.
- 5. A model for a boundary spanning the role between 'University' and NHS that makes an impact.

In retrospect it is worth noting that these objectives envisage either a more academic input (1,3,4 & 5) or a more traditional managerial one (2); with none getting close to the 'hybrid', unpredictable and boundary-spanning type of activity which the Fellow actually found herself engaged in, nor to the emergent nature of the real activity of the Fellow.

2.2. Expectations and objectives recalled by the research team.

The two senior members of the research team (SD and EF) responsible for the Fellow's appointment were clearly ambassadors for the role and could see the benefit of a management perspective particularly given the research question central to the project. They state their expectations as having been:

"An opportunity to explore implications for practice in much greater depth"

"What I wanted was for the MF to strengthen the practice connectedness of the study"

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

"A safety check that our research was connecting to the field and was of use"

It is worth noting however that beyond the aims of connectedness with the field, both senior colleagues approached the Fellowship venture with open minds, deliberately allowing the role to emerge naturally rather than setting out any prescribed ideas.

"I was not sure what to expect"

"Very loose and vague initially, wanted to see how it would develop"

In retrospect this approach worked very well as it gave the Fellow the opportunity to carve out a role which went beyond the obvious, and to interpret the original objectives of the fellowship scheme in a way which was more sensitive to the on-the-ground reality of the life of the project and to the conversations the team were having about how the different phases of the research fitted together and interacted with each other. An example of this is that aim 4 above was fulfilled in a more complex and nuanced way than envisaged – some of the significance of the ALS experience for the research team was the challenge to the traditional objectivity of the researcher, the concept of inter-connecting reflective spaces for the team and the nature of the relationship which developed through the ALS with Extead Provider Services – all of this unexpected and unpredictable.

However this open and emergent approach to the Fellow's role required some forbearance from the other team members.

"Initially the role appeared a little unclear - and not particularly differentiated from that of other team members".

"I didn't have clear expectations about what the role was meant to contribute in the beginning."

"Initial expectations were very vague indeed. I don't think we shared enough information early on about how SDO had defined the Management Fellow role. I suppose I saw the role as being self-defined."

2.3 Objectives for the Fellow

Janette's objectives in taking up the role were to widen her professional knowledge and perspective through the research question itself and to extend her experience of operating as a boundary-spanner. There are several elements to this.

Firstly, the Fellow's professional background is in organisational and personal development, particularly how and why people learn. Much of her coaching and personal development work is aimed at helping cultivate curiosity within professionals (and often within teams) about 'why we always do things this way?' or 'I wonder why this always happens?' A way of facilitating this is to help colleagues step back and take a more objective

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

perspective; to see the bigger picture and challenge the well-worn tracks of unquestioned practice.

Consequently as an organisational consultant and a coach working in complex settings like the Health Service, she has a long-standing interest in how managers and clinicians move fluidly between those two dimensions – total immersion 'in the moment' faced with the task in hand and then pulling back to take the stance of an observer of the bigger picture and of their own practice in order to learn or to access more and new data. The central research question of this project: how managers use management knowledge (in other words, become open to taking on new knowledge and information that may change their view of the world) offered an intriguing route through which to pursue her professional interests.

Secondly, boundary-spanning has been a characteristic of much of Janette's career up until now, as an organisational consultant and latterly as a mediator, and she has a strong interest in this way of operating (probably as much to do with her personality as professional background). Over the previous ten years, Janette has taken a series of freelance contracts in educational or facilitative roles with primary care research networks; and had been exposed to discussion about ways to span the boundaries between research/academia and practice. However none of her previous roles had allowed her to explore ideas of research translation on a more personal level. The Management Fellow role appeared to offer an opportunity to approach this challenge from a different angle – within a given structure certainly, but the role remained sufficiently 'underwritten' to enable day-by-day immersion in an emergent story that contained both researchers and the management community as characters.

"When I was offered the role it felt extremely woolly and undefined but I could just about see through the mist that something interesting may happen if I lived in that role over time"

(Janette McCulloch in interview, July 2011)

3. The work the Management Fellow has undertaken.

3.1. Background

The original application outlined a depth of engagement for each phase of the research process which was probably over-ambitious given the 1.5 day a week commitment of time from the Fellow. The commitment of time was originally envisaged as being evenly spread through the 2.5 years. In reality, Janette's involvement has been much more intensive during certain phases of the research than others. This flexible approach was felt by the team to be more responsive to the pace and rhythm of the research project, and to the availability of Janette who is self employed and runs a small business.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

Decisions about what she should get involved in have been determined by her particular professional interests, the nature of the Fellow's role lending itself to a contribution in a particular area of the research (the ALS), and – crucially- an opportunistic approach which lent itself to the nature of the role. Early on, the PI offered the option of some training in research methods at the Said Business School. However, the Fellow had already acquired a certain level of knowledge through her work in primary care research networks (and indeed had taught basic research methods to health care workers); and both she and the PI were wary about turning the role into that of a quasi-researcher.

Finally, by way of background it should be noted that setting up the contractual and payment arrangements for the Fellow was arduous and protracted. This was documented in the progress reports. It seemed that neither the university administration, nor the NHS administration could cope with dealing with such an unusual role. The administrative complexities were very time consuming for the PI and very challenging for the Fellow who effectively received no payment during the first 12 months of the research, and payment was not regularised until 18 months in. While work was still being undertaken by the Fellow, this bureaucratic impasse was a serious obstacle during the first half of the research project.

3.2. Narrative of the Fellow's involvement over the life span of the research

The following sections set out the *anticipated role* of the Fellow as anticipated in the original Fellowship application in December 2008, alongside a commentary on the *actual activities* and achievements of the Fellow during different phases of the research.

3.2.1 Phase 1 Identifying manager cohort

".....Janette would accompany researchers when interviewing some of the managers in order to get a feel for the emerging patterns in the data. She will take a major role in the analysis of the cv and data from the interviews and drawing on her experience of managerial practice in the NHS, will provide a validity check to the researcher's views. We will also look to her to invite and encourage respondents to join the action learning sets proposed in Phase 3. ..."

(December, 2008 Management Fellow application to the SDO)

During the first three months of the research, the final selection of research sites was being made in discussion with the project steering group. As a health care manager who would eventually be a recipient of the learning from this research, Janette was able to comment on the mix of research sites needed to ensure credibility and transferability of learning amongst managers in the field.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

From her experience as an organisational consultant, Janette was also able to reflect upon the challenges of going into an organisation 'cold', and on how to build relationships. Building upon this she worked with the PI to describe the 'Relationship Manager' model and to set out some guidelines for this role with the six sites, including a briefing note on how to present to the sites the benefits of engagement with the research (see exhibits at the end of this Appendix).

A plan was devised for the Fellow to be a relationship manager for one site of particular interest to her (Mapleshire CLAHRC) and to take part in some of the interviewing at that site with another team member. The early stages of this role involved establishing personal contact with five research offices and introducing the research to them. Later however, major bureaucratic problems in obtaining ethical approval for that site (documented in the chapter 3 of the research report), meant that field work was delayed by about 12 months - by which time the Fellow was fully committed in contributing to Phase 3 and was unable to continue her involvement in that site as planned.

When the field work was underway, Janette triggered a discussion on how the research design (exploration across 6 sites) could usefully be supplemented by observations on organisational culture and context, and how this might be achieved. From her experience as an organisational consultant Janette produced a checklist of useful areas for exploring context; this was then developed into a framework by another team member (see exhibits at the end of this Appendix).

Janette also undertook a small number of interviews in two sites alongside other members of the team during late 2009 and early 2010.

3.2.2 Phase 2 Case studies

.........""we would expect Janette to accompany researchers doing the case studies at least twice to each site in order that she can play an active role in the analysis of cross-case comparisons. During this phase we would be looking to her to take a lead on planning the action learning set phase.she would assist in the planning of the facilitation process and how to capture data from this phase.

(December 2008, Management Fellowship application to SDO)

During this period (January 2010 onwards) Janette contributed to team discussions on the choice of management knowledge tracers in all the sites, with the objective of ensuring that the management knowledge tracer had credibility, relevance and interest to the health care manager community and to wider policy audiences.

The original idea of the Fellow visiting the 6 sites at least twice was not carried out for a variety of reasons. Firstly, data collection at the sites was

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

managed by pairs of research team members, and consideration would have had to be given to how the addition of the Fellow could have been managed without the appearance of overload to the site. Secondly, until late spring 2010 it was still hoped that Janette's more substantial involvement with the Mapleshire CLAHRC would be possible (and would be time-consuming). However, delays regarding ethical approval for work in this site in fact dragged on until early 2011. Thirdly, making (approximately) 12 visits around the country would have been timeconsuming, and as no payment had yet been made to the Fellow at this point in Phase 2, and her continuance in the project looked in serious doubt, it was not considered feasible to commit the time.

3.2.3 Phase 3 Action learning sets

"....we are looking at evaluating action learning as a capacity-building intervention. We would see Janette's background as enhancing and enriching the research team's capacity in this area."

(December 2008, Management Fellowship application to SDO)

For the team, this Phase probably represents one of the two (the other being the translation pilot below) most significant contributions to the research, and substantially occupied the Fellow's time from the summer of 2010 (initial planning and recruitment), through the operation of the set meetings (autumn 2010 to summer 2011), to autumn 2011 (data analysis).

It was decided that due to the Fellow's background in management education and facilitation, she would support the lead team member for this phase. The work involved:

- drafting with the lead, an offer letter and description of how the sets may be of benefit, so ensuring an attractive offer was made to senior managers in the sites;
- handling the telephone recruitment to sets 2 and 3 while the lead was away on holiday August 2010;
- contributing to delicate team discussions regarding the desire to "feed in" the ALS data to the whole research team without compromising the confidentiality agreements made with ALS participants taking part in the sets, who would be known to the researchers via other phases of the research. These discussions led to the setting up of an innovative 'parallel space' supervision group that ran from September 2010 to March 2011;
- helping to ensure a consistent approach by team members acting as facilitators and observers;
- taking on the role of the observer and writing fieldnotes for sets 1 and 3 (October 2010 to July 2011)
- facilitating set 2, January- May 2011;
- contributing to data analysis August December 2011 (see exhibits at the end of this Appendix).

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

3.2.4 Facilitating contact with other research teams

Through her networking with other Management Fellows Janette suggested a meeting with one of the other SDO-funded teams at Kingston/St. George's, to share progress and areas of interest. This meeting took place at King's College on 21st May 2010, was felt to be very useful and may lead to other contact between the two teams (e.g. discussion around findings some time in 2012)

3.2.5 Final phase: Reporting and Dissemination

"We would expect Janette to be involved in dissemination and reporting, making use of not only her background as a processional communicator but also putting into practice the learning gained from Phase 3."

(December 2008, Management Fellowship application to SDO)

This final phase has been the second major contribution of the Fellow. Born partly from the experience of Phase 3, and partly from a feeling that managers would be most open to the research findings in certain critical (environmental) circumstances, Janette developed an idea of a Translation Pilot that would test out and transform emerging research findings through their application to a real life organisational issue. Plans for this began in December 2010 and the pilot event took place in December 2011.

The approach goes way beyond the original dissemination and reporting activity envisaged for Janette; and has been named Phase 4 by the research team – a reference to the fact that it is seen as an interesting hybrid phase between the main planned research and "dissemination" (and indeed puts into practice some of the learning from the case studies about the importance of relational engagement in the transforming of management knowledge). In other words, Phase 4 uses the insights from the research directly to explore the research findings, hence creating a tight 'learning feedback loop' over the 2.5 years of the research.

4. What was achieved?

4.1 View from the PI and the research team

Although some contributions to the research have been made at all stages, the two main areas of achievement identified by the PI and the research team are undoubtedly the Fellow's involvement in Phase 3 (ALS) and in Phase 4 the Translation Pilot. (Objectives 4 & 5 in the original December 2008 application).

It is worth noting here the approach taken by the team to the 'supernumerary rule' stipulation attached to the Fellowship. Overall this worked well as a useful boundary, and prevented role-blurring with other team members. For example, when conducting interviews in Phase 1, it was easily possible for Janette to be co-interviewer (and observer) while one of the other team members retained the lead for data collection. However, there were occasions when it was felt that too strict an adherence

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

to the supernumerary rule would have not only removed a potential learning opportunity for the Fellow, but also would have watered down her contribution to the project and the teams learning from her. (The point here being that learning from colleagues is often about experiencing the *means and manner* of the way they work).

It may even be that this approach – the Fellow 'getting stuck in' as one senior member of the research team put it, and taking personal responsibility for deliverables, is the very thing that enabled flesh to be put on the bones of the role and ensured a real psychological engagement for Janette with the full experience, tensions and discomfort of operating at this particular boundary. The same colleague suggested that through this approach:

"You were not in fact a pure outsider...... and I think that was important for legitimacy within the team . The Management Fellow was not disconnected from the research core.'

Indeed it could be argued that for Janette's way of working to encompass moving between an engaged experience of 'the research core' (through being a research team member with real responsibilities) and an engaged experience of the context of health care practice (working alongside EPS) was the dynamic that made the role come alive.

Phase 3 of the research, consisted of three ALS's for Phase 1 and 2 participants, running more or less contemporaneously. From the beginning, it was apparent that Phase 3 stood out from the rest of the research – it was innovative, it envisaged taking individual managers outside their organisations, the process (facilitation of action learning) is not a core skill of most academics, its' 'fit' with Phases 1 and 2 was not obvious, and the outcome (in terms of useful data) was truly unknown territory.

For these reasons, and because Phase 3 required early and careful planning independently of Phases 1 & 2, it was agreed that Phase 3 would be led by one senior member of the research team, with of course the PI. This was a hugely responsible (and potentially isolating) role, and it was felt from the outset that it would be useful to have another team member in effect as "deputy lead" role. Janette was the obvious choice, partly due to her familiarity with the day-to-day lives of health care managers, and her experience of setting up and facilitating Action Learning Sets (one of the original reasons for her appointment). In terms of the research design, Phase 3 sat on the boundary between academia and management development and so seemed suited to the Fellow's boundary-spanning role.

Janette took the role of observer in Set One, facilitator in Set Two and observer in Set Three. As such, she was the only team member to be involved in all parts of this phase of the research.

4.2 The work on ALS

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

The achievements of the Fellow with regard to Phase 3 fall into three categories which are listed and elaborated on below:

- 1. Developing an awareness of the physical and psychological 'space' offered by this phase and helping the team tease out what that meant for the research;
- 2. Producing field notes and developing a particular style in writing these;
- 3. Contributing something different to analysis which was a 'felt sense' of the data.
- 1) Developing an awareness of the physical and psychological "space" offered by this Phase

Janette's experience as a boundary-spanner and her professional background in counselling and mediation have given her an awareness of the significance of how different spaces and different roles can liberate or constrain in organisational settings.

Early on in the life of Phase 3, a 'supervision space' was set up by a research team member who is an experienced group analyst. This supervision space was extremely important for the quality of reflection upon Phase 3. Janette was one of the team members most aware of the different dynamics of this phase (being immersed in it for over a year) and developed a kind of watching brief on boundary and spatial issues for the team. For example, this involved her in discussing with the Phase 3 Lead and drawing the team's attention to the different ways in which academic/practitioner roles were being challenged, tested and blurred through Phase 3. Another example would be how her familiarity with boundary-spanning roles (and the accompanying need to manage ambiguity and uncertainty) enabled her to inject a degree of confidence into the team about this (fairly experimental) phase.

b) Producing field notes and developing a particular style in writing these.

Conversations about data capture led to the idea that the observer for each set would write field notes of their experience during the set. This meant that the Fellow was charged with producing field notes from 6 meetings (3 of Set One and 3 of Set Three). This was a completely new venture for her – the nearest previous experience from her management background being the writing of minutes!

The supervision group for Phase 3 was an arena where ideas such as 'playing' with spaces and roles could be discussed; and this along with Janette's existing professional interest in reflection-in-action group dynamics; and a (much more recent) personal interest in mindfulness meditation contributed to her taking an approach of participant-observer rather than purely 'note-taking'

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

Encouraged by a colleague on the team to look at some of Emerson's writing on fieldwork and 'participating in order to write', Janette developed a particular style of writing the field work observations. Her field notes, which took days to write up, were structured around four levels: factual record of conversations in the sets; observer's real-time personal response; slightly more arms-length observations on what may be going on in the space vis a vis the rest of the research and, occasionally, real-time reflections upon typing them up a day or so later. These notes were a rich source of data considered in the supervision space and due to their multi-layered nature, served to flush out interesting reflections from the other members of the Phase 3 team. Furthermore, at the end of Phase 3, the field notes alongside the transcription of the set and the facilitator notes were a key source of data for analysis.

c) Contributing a 'felt sense' of the data.

When it came to data analysis, it was apparent that although the Fellow was the only member of the research team who had experienced all three sets, she was also the only team member with no significant experience of data analysis. (It's worth noting that this was probably the moment when the 'risk' attached to the nature of the Fellow's involvement in Phase 3 was made apparent.)

To manage this situation, Janette's perspective was used to add something different over and above the "standard practice" of data analysis.

Data from each of the three sets were analysed independently by pairs of research team members, for verification, who then compared. All pairs then met with Janette who was able to add her "felt sense" of the data. (What is meant by 'felt sense' is her experiential engagement over time in all three sets, both as facilitator and participant-observer whilst writing field notes).

This approach worked well, as it allowed for different perspectives to be added; and provided one of the moments during the whole research project where the Fellow was most aware of differences in managerial and academic approaches.

"I became aware that as a manager I am in the habit of analysing data with the mindset of looking quickly for themes and connections – because in a management role I am always focused upon sense-making for a particular audience, probably my staff or colleagues. Compared with my academic colleagues I look at data thinking "I will need to explain this and it's application to someone else who will need to act upon it" instead of staying with the confusion or messiness of the data itself a while longer. I am rather horrified at having caught myself out cutting corners....."

(Janette McCulloch in interview July 2011)

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

4.3 Phase 4 Translation Pilot.

The inception of this idea came about during a joint SDO & Health Foundation seminar held in November 2010, (Thinking Differently – helping social research make a difference) which Janette attended on behalf of the PI. The seminar was intended to challenge the usual means of disseminating research results and explore more innovative ways to encourage the uptake of new ideas. Through various exercises and 'play', participants were helped to engage with the experiential dimensions of acquiring new knowledge. This approach made a big impact upon Janette and led to her thinking about the whole knowledge translation issue from a different perspective. Rather than focussing upon the *message*, her idea involved paying much more attention to the state of preparedness and receptiveness of the *environment* in which the knowledge translation activity would take place. This approach is entirely congruent with a key finding from the research that new ideas, new ways of doing things and knowledge are most likely sought when people are faced with a significant challenge or a puzzle

Following this reflection and after discussion with team members and the SDO, it was decided to approach Extead (a pseudonym) Provider Services (EPS)to discuss the possibility of the team helping with a workshop focussed on organisational issue, problem or puzzle of their choosing, where some of the emerging research findings could be shared.

4.3.1 Narrative of Phase 4

Although Janette presented this idea to the research team at meetings as early as December 2010 (at that point called "the event for 'Extead'"), and outlined it to her organisational sponsor (the Assistant Director of R&D) and the Head of Organisational Development at EPS in the early spring of 2011, it was not until the Head of OD joined the third Action Learning Set later in the spring, that the plans began to shape up. An account of how the translation pilot took shape cannot be divorced from the narrative of the research team's evolving and unforeseen relationship with EPS.

At the outset of the Fellowship, when EPS agreed to host the contract for the Management Fellow, it was not envisaged that this relationship would be as interesting, unpredictable and emergent as it has transpired. Inviting the Head of OD at EPS to be a member of the third ALS was in itself a slightly unusual step (other invitations only being extended to research sites) and only came about because it proved difficult to recruit to the ALS, and Janette had recently met with her and felt she would like to be involved. (The PI facilitated this ALS and Janette was the observer)

After attending just one ALS meeting, the Head of OD at EPS (having made links between the nature of the research and organisational needs at EPS) invited the PI and the research team to offer some organisational consultancy to the EPS Executive team. This took the form of a one-off

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

facilitated event in the spring of 2011, following which the PI undertook some further coaching work with the CEO. These unusual developments were discussed with the SDO where the PI received helpful guidance.

The full time-line for Phase 4 is set out in attachment 3 to this report, however, the point to be made here is that the 'Translational Pilot' was part of a complex and multi-layered relationship with EPS, and the team was not in any sense going in 'cold'.

In September, Janette arranged for herself, the PI, and another research team member with experience of organisational consultancy, to meet with the CEO and the Head of OD of EPS. At this meeting the 'vision' of Phase 4 was shared with the CEO – although at this stage it was still quite hard to articulate – and the CEO talked about organisational issues within the provider service. This approach was warmly received, partly because the CEO of EPS is research-friendly and was interested in a connection with the King's/Oxford research team; and partly because the Head of OD is well-respected and trusted within the organisation and the team's introduction was through her. It was at this meeting that the Head of OD had what she later described as a 'light-bulb moment'– a helpful insight into the way in which the provider organisation had up until then, developed it's Team Leaders.

The CEO and the Head of OD suggested the 'location' in the organisation where the outcome of the research may be usefully applied was with the Team Leaders and Service Line Managers; and focus-group type meetings with each group of staff were arranged for three weeks hence. It's worth noting at this point that again and again during Phase 4, the Fellow and other colleagues were forced to reflect – are we straying into offering traditional pro bono consultancy? Or are we offering something different? And where is that boundary? At all times of uncertainty and confusion in Phase 4, the approach has been to ask "What is most helpful for the organisation – EPS – right now?" So rather than adopt an overly rigid way of managing the research/action research/consultancy boundary, the team continued to play with this dilemma and was guided by what they felt would be most useful for EPS.

The focus groups with Team Leaders and Service Line managers were facilitated by the Fellow and the research team member with particular experience of organisational consultancy. The question was asked "what is it like to be at your place in the organisation?" and a very early taster of emerging research findings was fed in to one of those groups with a light touch.

Four themes arose from the Team Leaders and four from the Service Line Managers. These were discussed with the Head of OD and then with the CEO. The decision was taken to focus upon working with the Team Leaders and a half day was planned for early December.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

The Event December 2011 (Details of the programmes - see exhibits at the end of this Appendix)

The half day was planned in detail by the Fellow and the Head of OD at EPS; and facilitated by them, the PI and a member of the research team. It took place over a morning, followed by lunch, and attracted 36 Team Leaders – 9 more than had been expected.

The objectives of the event were to:

- help the Team Leaders (who are all clinicians) to reflect upon their role as managers and leaders of a team;
- start to test out in what way were the emerging research findings of use in considering this question

The morning was opened by the PI talking briefly about six key emerging findings, and then continued with facilitated group work interspersed with whole-group exercises. Insights from the small groups were captured on flip-charts and have fed into a Team Leader development programme being run by the Head of Organisational Development.

Reflections on outcomes

The event itself was extremely well-received by the participants and the Head of OD has had much positive feedback from individuals since. The decision to work with Team Leaders as a group was undoubtedly the right one at the time for the organisation as it revealed where further work is required; and in the words of the Head of OD "the Team Leaders loved being recognised as Team Leaders; and it did it's job as a catalyst for the Team Leader development programme".

The degree to which the participants could apply the research findings (at least on the day) is more doubtful. This is partly due to the fact that many do not see themselves as managers at all; they only represent part of the organisation; and although the findings were presented with a light touch and in laymen's language it was the first time that those present would have been exposed to some of the ideas, such as how people learn in organisations.

Next steps

At the time of writing, the Head of OD is running the Team Leader development programme, in the form of 5 small groups, and this has proved useful. She describes the disruption provided by national policy changes in health care and local pressure to save costs as a "wrecking ball" having been thrown through development plans. The community of Team Leaders has been substantially disrupted through changes in organisational structure and ways of working; and because of this it is not feasible to do further work with the Team Leaders within the life-span of the research funding – and even if funding were available, the organisational reality is such that this would probably not be possible until the autumn of 2012.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

Plans are in hand for the Fellow and PI to meet with the CEO of EPS again, and take stock of where the organisation is now (three to four months on) and share with him the key themes from the research report. It is anticipated that sharing of research findings to another more senior group may be useful for the next stage of transition of EPS, and this will probably take place in April or May.

Learning about the Translation Pilot

- 1. Great flexibility, (in terms of timing and manner of working) is required to be truly responsive to changing organisational realities in a health care organisation. Without this flexibility, there is little possibility of translating research findings in any meaningful way.
- 2. The temptation to present research findings to senior managers/the CEO alone and then to depart, should be resisted. Impact and understanding of the significance of findings can be enhanced if translation activities (group discussions, individual briefings, facilitated events) take place at several different levels within an organisation and over a period of time; and in particular it is essential to build in feedback and reflection time to include colleagues at the most senior level. This ensures continued buy-in, sensitivity to changing circumstances of the host organisation, and space to reflect on the significance of findings in the "organisational here and now" which may change over time.
- 3. The approach of sharing tentative *emerging* findings before they were fully formed and described by the team was innovative (and felt risky) but was worthwhile. One member of the research team commented that it was challenging but ultimately useful to take a concept that had arisen from the original research data, had then been defined and conceptualised through discussion, and then *take it back* into another real organisational setting for re-examination and testing.
- 4. The task of leading this kind of research translation work can be a lonely and slightly scary one. In this case, the Fellow was supported by the PI and another research team member; nevertheless sharing early findings with colleagues who may or may not relate to those findings, felt like a large step of faith. Working alongside another boundary-spanner from the other side of the boundary, is recommended as good practice.
- 5. Translation activities are by their nature, going to take place at the very end of the research project, when most of the team are occupied with writing up and preparing publications. This presents a real challenge in terms of time and headspace of the team to contribute to this important activity. Additionally, the experience here is that translation if it is to be meaningful is likely to be an ongoing commitment lasting several months. This kind of commitment does not fit neatly into the timescale of traditional research funding streams.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

5. What has the Management Fellow learnt from the experience of the Fellowship? How will newly-acquired skills be used going forward?

There are four broad and significant areas of learning that are likely to impact upon the Fellow's future career.

5.1 *Boundary-spanning*.

It was mentioned above, that before the Fellowship, boundary-spanning had been a feature of Janette's career. It is interesting that the Fellowship has turned out to be one of her most challenging examples of that and has enhanced Janette's understanding of the boundary role considerably. For example the experience of leading the Translation Pilot in particular has demonstrated that the boundary-spanning role requires a preparedness to 'walk into the unknown' to a degree not experienced previously. In the case of the Translation Pilot, this meant identifying and creating opportunities for dialogue and learning without always being able to articulate - or justify to others- what that learning might be.

I was convinced that coming together to share our early findings with an organisation in transition would be a significant experience for us all, but I really struggled to put this into words.

I just had a hunch that something new would come out of it – maybe something new that we couldn't imagine in advance.

(Janette McCulloch in interview December 2011)

Janette approached the planning of the Translation Pilot by working closely with a colleague from EPS, the Head of Organisational Development – someone who was, in effect, a boundary-spanner from the other side of the boundary. This turned out to be an exceptionally successful approach. Although it was time-consuming to share detailed planning to that degree, it ensured much more sensitivity to the academic/service interface issues and meant that the Pilot was firmly anchored in current capacity-building activities within the organisation.

The longer-term learning for the Fellow from this successful collaboration may be about populating the 'boundary space' with a number of key boundary-operators, and avoiding isolation – a lesson which the Fellow will take forward to future roles.

This newly-acquired confidence, skillset and experience of boundaryspanning will be used by Janette in the context of some immediate job choices. For example one of her clients (a community mediation provider) is expanding geographically and there is a role available to support and manage the expansion.

From her experience on the research project Janette can see that this is fundamentally a boundary-spanning role; in this case across widely differing

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

cultures of new funders, the mediation organisation itself and the (very diverse) mediator community.

5.2. Reframing and moving between different perspectives

Over the life of the research project, Janette has been exposed to several circumstances where it has been useful and necessary to reframe ideas, perspectives and relationships. One example of this is the way in which the support mechanism for Phase 3 of the research was constructed (including the supervision space) and how the whole team grappled with where Phase 3 sat within the project and how the 'Phase 3 team' related to and shared data with the full team.

Another example would be the processes occurring within the ALS's themselves, when the participants were supported to reframe the issue/problem they were bringing and their relationship with it. A third example would be the early stages of the Translation Pilot when it was necessary to make sense of/diagnose key organisational issues for EPS, in the context of the emerging themes from this research project and at the same time to bear in mind the variety of dimensions of the team's relationship with EPS. This last example in particular required a lot of effort from those working on the Translation Pilot to be inventive in finding different ways to look at the planned intervention (e.g. consultancy, dissemination or shared venture?)

All of these examples have to some extent involved reframing between big picture and small picture or changing the nature of the question asked (using a different lens). A different type of example, but one that illustrates the importance of recognising and observing one's own world view , is how during the taking and writing up of field notes (Phase 3) Janette became acutely aware of her own assumptions, prejudices and her own professional interests and found it hard to keep to the task of 'objective' recording.

In addition to learning the skill of how to reframe and change the perspective on an issue, the Fellow has (perhaps even more importantly) acquired the habit of doing this much more fluently and regularly. This is of enormous importance to her working life as a mediator, coach, supervisor and organisational consultant, and this skill has already impacted upon her professional practice as a coach.

5.3 Use of Mindfulness

Janette has had an interest in the practice of mindful meditation for the last 3 years. The research project started only three months after she first trained in mindfulness techniques in early 2009 and in unexpected ways it has provided an arena for developing her practice of mindfulness. Interestingly, some of the central tenets of mindfulness such as stepping aside from being on automatic pilot, opening up new choices for action and accessing embodied knowledge all have a contribution to the debate on how

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

people acquire new knowledge and change behaviour - fundamental to the research question of this project.

The best example of this was provided by Phase 3, when Janette used mindfulness while writing field notes; and also when facilitating one of the Sets. (The intention to be mindful in both these examples was to widen access to a variety of data and perceptions).Talking about mindfulness in the team led Janette to discover that three other research team members have an interest in mindfulness, and on one occasion a small meeting was held to discuss its relevance and application to the research. The opportunity to explore this personal interest in a professional setting has been very significant for Janette and has given her confidence about using mindfulness in her own future coaching and mediation practice. Janette will be training as a mindfulness meditation teacher during 2012.

5.4 Being a generalist

Management is one of those occupations where a working knowledge about a wide variety of subjects is useful. In the healthcare setting this inevitably sits alongside the specialist and detailed expertise of clinicians. During a working lifetime in this environment it is easy to underestimate the value of the generalist perspective. Being appointed to the role precisely because she is a generalist, and being valued as such, has been one of the most useful aspects of the Fellowship experience for Janette. She has learnt *where* and *how* there is a 'fit' for the generalist perspective (i.e. someone who reads very widely and is interested in most things at an "intelligent person in the street" level) to operate alongside academics who may be world authorities in their own specialist subject area.

This example of learning from the Fellowship is probably more about confidence than anything more tangible - but it is of considerable importance due to the nature of the Fellow's current and future work, where she will continue to relate to colleagues from highly specialised backgrounds such as health care and the criminal justice system.

6. Reflections that might be useful for SDO thinking about the future of the programme.

Below are noted some reflections on the future of the programme.

- The flexibility of the day and a half a week during the lifetime of the programme worked well with the rhythm of the project. It would have been difficult to find relevant work and experiences if given the Fellow for a year full time.
- Assistance in streamlining the contractual and payment arrangements for the role would have been welcome. The Management Fellow role is unusual and therefore a puzzle to HR systems in the NHS and the University. Janette's employment status was unusual as she is

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

freelance and not a currently serving NHS manager. Ironically, given the contractual and payment problems which dogged the first 18 months of the Fellowship, this has meant that she has been insulated from current upheavals in the NHS and has been able to complete her Fellowship undisturbed.

More specifically, the PI and the Fellow have the following reflections upon how to maximise benefit from any future Fellowships or the future use of an NHS manager within a research team.

i) With hindsight, greater involvement in initial data collection would have helped the Fellow contribute more to the final stages of discussion and writing up. There were serious resource issues which got in the way of this happening in this Fellowship (explained in 3.2.2) but it would have added to both the learning experience and the benefit to the team.

ii) Academic learning for Janette could have been more structured. While she gained great benefit from exposure to theory in the field, this was somewhat ad hoc. A more structured approach would have been to set reading projects to complement theoretical ideas under discussion by the team, and perhaps monthly tutorials either with a research team member or with an existing Masters cohort at either King's or Oxford.

Exhibits to the Report on the Management Fellow Grant.

Documents/briefing notes prepared by the Management Fellow.

1. What do we require of our sites and what can we offer them?

(A briefing note to aid negotiations in Phase 1)

Produced 08.07.09

We require of them:

Sept – beginning of March 2010

Access to 4-6 managers or hybrid managers, their cvs and availability to be interviewed.

Willingness/time to discuss selection of tracer issue before Phase 2 (Jan 2010 – end of May 2011)

Willingness to join ALS in Phase 3 (April 2011 – Dec 2011)

<u> Jan 2010 – June 2011</u>

Access to an additional 12-15 people for interview about tracer issue

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

Access to stake-holders (internal and external) Someone to look at/comment upon written case study

<u> April – December 2011</u>

Participants for 3 action learning sets (approx 4-5 from each site) Willingness to engage in keeping diary/learning log

We can offer them:

Kudos of being "chosen"

Value of an interview

Reflection process for the organisation in thinking about/addressing VFM of their tracer issue

Access/discussion with five other leading edge sites – a community of practice

Free management development through the ALS

Access of the written case study of their own organisation

Publicity of being involved in a high-profile prestigious piece of research

2. Briefing note on organisational culture. Produced 21.03.2010

I think the idea of this exercise is to create a shared broad brush idea of what to look out for regarding culture/context, [and will therefore notice when our antennae pick something up] rather than a "checklist of things we have to find out", which is probably not feasible and would be a rather cumbersome add-on to the research method at this stage. Do you agree?

So I have come up with a list of things which I can't help looking out for when I walk into an organisation [as an OD consultant or not!]

Some of these things are standard indicators of what's going on e.g. sickness rate, and others simply reveal my own views/prejudices about what kind of organisation is open to new knowledge, [some of it is probably evidence-based if you pushed me] or are just things that I find interesting....

Looking back what I have come up with is mostly culture rather than context, so perhaps we need to think more about that.

Very happy to have this list radically edited.

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

Bye for now Janette

Culture and context

Rewards/incentives scheme

Are meeting agendas "controlled" and formal? or more informal with a range of people able to get items on the agenda?

What is the turnover of staff?

Absenteeism/sickness rates?

What other kinds of behaviour are rewarded? (e.g. consensus-building; questioning; coming up with ideas from left-field; being a safe pair of hands?)

Hours worked and how this is viewed (e.g. Is it a badge of honour to be a workaholic?)

How long does it take to get into the CEO's diary?

Is showing respect for authority important?

What is the dress code?

Do senior managers have an open door policy?

What goes on in meetings /conversations between managers (middle or senior)? Is it acceptable to challenge the status quo and think the unthinkable?

Do people argue and debate issues?

Do informal meetings happen – in the coffee bar etc or do meetings tend to be scheduled well in advance?

How does an employee get a bright idea listened to?

Are doctors called Dr. xxx or by their first names?

Who is the steward of the organisational memory? Is the organisational memory valued?

What stories or anecdotes or apocryphal tales are told and retold? E.g at induction or to visitors like us?

Is "finding the answer quickly" rewarded? Is this ever at the expense of a more creative exploring of the question or "reframing of the problem"?

How risk-averse/risk-friendly is the organisation?

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

What is the organisations' attitude to failure

3. Agenda for discussion meeting with another project in Management Practice call. Produced May 2010

Meeting between Kingston and Oxford/King's SDO research teams

Friday 21st May 2010

12 noon – 2pm

Room G93 Franklin-Wilkins Building,

King's College London

Stamford Street, SE1

Sandwiches and tea/coffee will be available

1. Welcome

2. Brief introductions around the room from each team member - who am I / my role/special interests

3. Why are we interested in this research area? What questions are we asking?

Outline of research design.

- 4. How's it going so far?
- Ideas emerging
- Things we don't yet know/things we wonder about
- Obstacles/challenges
 - 5. Cross-study themes.
 - 6. Any messages/reflections back to the SDO?
 - 7. AoB

Kingston team

Rebekah Fox Christine Edwards Stephen Gourlay Chris Smith Pinar Guven

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

Oxford/KCL team

Ewan Ferlie Sue Dopson Gerry McGivern Chris Bennett Michael Fischer Jean Ledger Janette McCulloch

4. Action learning set

Facilitators Guide produced 12.08.2010.

Useful questions – these are intended as prompts & ideas only, rather than a list to be worked through!

Based on the GROW model (Goal – Reality – Options – Way forward)

Meeting One

Goal

What is the problem/issue?

Is this an example of a wider issue/problem?

Is there any other way to frame this issue? This and the following question are aimed at helping flush out what the individual "knows" or thinks they know. Bit clumsy at the moment.

OK, and what would be another way?

Can we spot the assumptions that have led you to frame the issue like this? (probe for self-limiting beliefs; particular view of the world)

What way of seeing this situation (problem/issue) are you attached to and possibly defending?

What do you want to achieve or change?

How will you know when you achieve it?

What will it look like when you have achieved it?

Reality

What have you done specifically to achieve your goal so far?

What knowledge or information have you used so far?

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

What challenges have you met and overcome?

What other challenges do you expect to meet?

Who are your allies in this situation?

"Where are **you**" in this problem/issue? i.e. What is your role in it? How are you contributing to it?

What is it about this problem that you don't want to think about or that you hope we won't ask you?

Options

What could you do?

Ok, what else could you do....?

And what else?

If there were no constraints, what would the options be?

If we could shake this magic wand, what would the options be?

Where can you find knowledge or information to help you pursue any of these options?

Will/way forward

Which option do you prefer?
Which do you like the least?
Which options scare you? (Why is that?)
Do you think you will take action and what will you do?
When will that be?
What might stop you?
On a scale of 1 to 10, how likely are you to take action?
What will it be like if you don't progress this problem i.e at the next Set meeting and for you generally?
What have you learnt from this conversation?
How can you connect your learning here with taking action in the real world?

Do you need any particular resources to do that effectively?

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

Evaluation & review **not sure if this bit should be done quickly and** with a light touch after each person's moment in the limelightor included in the end of day review

What were the most helpful questions for you? How were they helpful? What were the less helpful questions? How were they less helpful? What surprised you about this session?

Meeting Two

What have you done since we last met? What happened? What worked and didn't work? What did you learn? What did you not do? What did you learn? Have you drawn upon any new sources of knowledge? How has your view of the situation changed? "Where are **you**" in the situation/problem now? Are you surprised by any of that? What options are now open to you? And what other options...? Ok, and what other options? Where can you find knowledge or information to help you with this next stage? What have you learnt from this conversation? After this one cycle of reflection and action, does anything strike you about your learning process? How can you connect your learning today with taking action in the real world? Do you need any particular resources to do that effectively? Evaluation & review What were the most helpful questions for you?

Project 08/1808/242

Health.

How were they helpful?

What were the less helpful questions?

© Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for

How were they less helpful? What surprised you about this session?

Meeting Three

What have you done since we last met? What happened? What worked and didn't work? What did you learn? What did you not do? What did you learn? How has your view of the situation changed? Where are you in the situation/problem now? Are you surprised by any of that? What options are now open to you? And what other options...? Given that this is the last time we will meet, is there anything else about this issue that you would like to run by us? Where can you find knowledge or information to help you with this next stage?

What have you learnt from this conversation?

How can you connect your learning with taking action in the real world?

Now that we've had two cycles of reflection and action, what strikes you about your learning process?

After today, what will sustain this learning & reflection process for you?

Do you need any particular resources to do that effectively?

Evaluation & review

What were the most helpful questions for you?

How were they helpful?

What were the less helpful questions?

How were they less helpful?

What surprised you about this session? and about the ALS experience in general?

5. Ground rules for action learning sets. Produced 20.09.2010

Confidentiality. We may need to write a fuller script to cover this and reassure people vis-à-vis the research

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

Participation is voluntary and any action agreed by individuals will be entirely voluntary.

Full benefit of the Action Learning Set will be realised through 100% attendance.

We adopt a non-judgemental & respectful attitude as we are all here to learn – including the facilitators/observers.

Constructive challenge and feedback is welcomed within the group.

Air time at each meeting is shared equally.

We support each other by respectful listening, insightful questioning and reframing of the problem rather than by offering solutions.

Deep listening is valued at least as much as talking.

We enjoy ourselves.

We start and finish on time.

6. Briefing note for phone conversation with ALS members. Produced 20.01.11

Helping Set members select their issue/problem to work on, prior to the first meeting.

Ideally topic/issue should be:

- One where you really don't know the answer already
- Something that will make a real difference to your work
- Something upon which you feel they would like some fresh insight.
- One where there is a sense of urgency to get it sorted not just vague "would be nice to do..."
- One that excites/challenges/worries you
- Something you have already started upon at the very least given considerable thought to i.e. not a blank piece of paper with little thought given to it.
- One where you will definitely find the time to work on it between meetings

7. Invitation for translation pilot with Extead provider services

HOW WELL ARE WE DOING FOR PATIENTS?

Thursday 8th December

At ... (just 5 minutes walk from ... station)

9.00-1.30pm followed by LUNCH

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

Dear Team Leader,

I am delighted to invite you to a half day workshop on Thursday $8^{\mbox{th}}$ December to explore

i) what are we currently doing really well for patients?

ii) how do both our clinical and managerial roles contribute to this?

iii) what does this mean for how we wish to work in the future?

This event is a joint initiative between Extead Provider Services and a research team led by King's College London and the Said Business School, Oxford.

In our research we have been looking at how health care managers use knowledge (e.g. information, data, ideas, research-based evidence, "best practice") in order to provide the best possible care for their patients and in order to learn and develop as professionals.

Our intention in this workshop is to share with you some of the themes and ideas that are coming out of our research and to test out how they can be applied to some of the key challenges for you as Team Leaders in Extead Provider Services.

In other words - do the ideas from our research make sense? Are they useful? Can they help you look at things differently? Do they suggest ways to meet the challenges of the future?

We intend this to be a packed and interactive morning – please come along prepared to have fun but also be challenged.

Extead Provider Services has identified that Team Leaders play a key role in the organisation and we see this event as the launch of a new way of working with yourselves to develop the role over the coming year.

Lunch will be provided and this will give you the chance to talk informally with other Team Leaders.

I very much look forward to meeting you next Thursday.

With best wishes

Janette McCulloch (Management Fellow, EPS & Said Business School, Oxford) on behalf of the research team.

Evaluation questionnaire to the rest of the team on the Fellowship.Circulated 03.03.2011

QUESTIONNAIRE ON IMPACT OF MANAGEMENT FELLOW.

Dear Colleague

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

I am now in the process of writing (with Sue) my end of project Report as your Management Fellow.

I would like to weave into the report the perspectives of team members and have designed this questionnaire with that in mind.

It would help me enormously if you could find the time to complete this – or as many of those questions where you feel you have something to say.

I would love to use some direct quotations in my Report but will only do that with your express permission.

Please feel free to be ruthlessly honest – I would like to think we know each other well enough for that by now – and it will be much more interesting!

There is no word limit on any of your answers, and you don't have to answer all the questions.

It should take 20-30 minutes max.

Best wishes

Janette

- 1. What was your reaction when you heard that the research team was to have a Management Fellow attached? (Sue & Ewan you can either skip this question or re-interpret it as you please)
- 2. What were your initial expectations and impressions (i.e. first couple of months) of the Management Fellow role?
- 3. Did your expectations of the role change at all as time went on? If so, in what way and why?
- 4. What do you think the Fellow has been able to contribute overall to the research project? And in what way
 - on the outcome of the research
 - on possible outputs of the research
 - on effective teamworking
 - other
- 5. Is there any one Phase of the research where you felt the Fellow was able to make a particular contribution? If so, which is it?
- 6. Did you experience a more managerial/pragmatic or 'real-world' perspective from the Fellow and if so, how did you respond to it?
- 7. Were there any times when you thought that (due to the Fellow's presence or contribution) there was a real dissonance or clash between perspectives, approach or assumptions? If so, what was that and how did you respond?

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.

- 8. With regard to your answers in Qs 4 & 5, do you think this was due to the Fellow's
- work background (e.g. NHS management, OD consultancy, mediation)
- particular qualifications (e.g. MSc in Organisational Behaviour)
- personality
- personal and professional interests (e.g. organisational and personal learning; team dynamics; Mindfulness)
- effect of adding one more person to the team
- being an "outsider" /not an academic
- other
- 9. Do you think there are other ways that the Fellow could have contributed to the research that were (for whatever reason) unexplored/unrealised and if so, what were they?
- 10. Has the experience of having a Management Fellow on the team influenced your ideas on how to access the management perspective in future research projects? If so, how?
- 11. If you had to name one thing that could have made the Management Fellowship experiment more effective for you/the team/the research, what would it be?
- 12. Do you have any anecdotes you would like to offer about the 2 years of working with the Fellow?

Thanks a lot for your time

Janette

[©] Queen's Printer and Controller of HMSO 2013. This work was produced by Dopson *et al*. under the terms of a commissioning contract issued by the Secretary of State for Health.