Accountability and Patient Safety: A Study of Mess and Multiplicities

Su-yin Hor Doctor of Philosophy 2011

CERTIFICATE OF AUTHORSHIP/ORIGINALITY

I certify that the work in this thesis has not previously been submitted for a degree nor has it been submitted as part of requirements for a degree except as fully acknowledged within the text.

I also certify that the thesis has been written by me. Any help that I have received in my research work and the preparation of the thesis itself has been acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

Signature of Candidate

Acknowledgements

This research would not have been possible without the financial support of the Australian Research Council, who funded my scholarship over the course of this research. I also thank the Faculty of Arts and Social Sciences in the University of Technology, Sydney, for their excellent research facilities.

I am indebted to the following people, without whom this thesis would not exist.

To Rick Iedema, for being an excellent supervisor, in giving me the freedom to explore as I wished, and guiding me by sending appropriate ideas and readings my way. Thank you for always taking me seriously, even at my most ignorant, and for your generous faith in my abilities. I have enjoyed our conversations which meander in all kinds of unexpected and fascinating directions, and I look forward to many more.

To my participants, who shall regretfully remain anonymous, I am grateful for your generosity of time and spirit, your patience and kindness, and your sensitive engagement with my research. I remain in awe of the work that you do.

To my dearest friends and mentors Katherine Carroll and Peter Nugus, who not only showed me by example what it means to write a brilliant thesis and be a brilliant researcher, but also what it means to be a wonderful friend. Thank you both for your unyielding support, for your belief in me when I was in doubt, for your enthusiastic and incisive intellectual engagement with my work, and also your generosity in sharing your own ideas and experiences. I am a better researcher because of the both of you.

To Natalya Godbold and Amy Chen, for sharing this remarkable journey with me as fellow research students and truly excellent friends. Thank you Natalya for keeping me sane with our joint insanities, theoretical adventures and afternoon tea extravanganzas. Thank you especially for your careful reading of my chapters at a time when you had many other pressing matters to attend to. This is a much better thesis because of you. Thank you Amy for being such a joy to share an office with, for sharing my enthusiasm for food, and for injecting your sense of beauty and wonder into our otherwise wordy and drab environment. Thank you also for your careful formatting of this thesis, making it much easier on the eye.

To my other friends who have supported me during this journey: Nour Dados, Gloria Chung, Rowena Forsyth, Nadine Hackl, Kerin Robinson, Meher Nigar, Verena Thomas, Susi Woolf, Marie Manidis, Masafumi Monden, Katie Hepworth and Aileen Collier. Thank you for the shared meals, the shared stories, and the shared laughter and good times. Thank you also for your warm encouragement and quiet understanding at more difficult times.

To my mother and father, Lee Kim Yeok and Hor Chook Lam, for their moral and financial support. Thank you for giving me the freedom to pursue my interests in unusual directions. I am truly privileged and grateful to be your daughter.

Finally, and most importantly, to my dear husband, Ian Salmon, who has suffered the most. Thank you for taking care of me this past year especially, for holding my hand, for cooking me dinner, for being my comfort and my strength. Thank you for *everything*. I was only able to do this because of you, and I dedicate this thesis to you.

Abstract

Over the past decade, patient safety has emerged as a major issue in hospitals, arising from reports of unacceptable levels of harm to patients caused by the process of health care itself rather than any underlying disease. A growing research movement has developed around finding out why so much harm occurs, and what can be done to reduce it. The ever-increasing complexity of health care provision is consistently cited as an underlying factor, and alongside calls for more accountability and transparency, formal systems of accountability such as guidelines and incident reporting have emerged in response, designed to govern frontline activities and to manage complexity through standardisation. As popular as these approaches are however, they are also controversial, and a large subset of patient safety research is focused on identifying and overcoming local 'barriers' to their implementation.

In this thesis, I analyse the problematic implementation of this formal accountability and challenge its assumptions. I propose that we insufficiently understand how safety is currently practiced by clinicians, and likewise, how accountability is practiced. My thesis therefore focuses on exploring safety and accountability as *practices*. I describe accountability not only in formal terms, but also as informal and everyday talk and behaviour. Furthermore, I propose that the problems of implementation described above can be reframed instead as tensions *between accountabilities*. In this study therefore, I examine how clinicians negotiate multiple accountabilities in their practices of safety. With a multidisciplinary group of 72 clinicians in a children's hospital in New South Wales, Australia, I created ethnographic data through observations, field interviews and feedback sessions in two phases of field work, over ten months in total. Following each phase, data were iteratively coded and analysed using a grounded theory approach.

With these data, I show how clinicians are enacting safety through their practices of accountability, in contexts complicated by multiple accountabilities and multiple meanings of safety. I show how clinicians inevitably produce accounts that are partial and 'incomplete', at risk of becoming problematically disembedded from complexity. I also show how clinicians are re-embedding these partial accounts, by engaging in accountability practices that foreground multiplicity, diversity and reciprocity. I argue that if we wish for practices of accountability to reflect and support clinical practices that we see as complex and interconnected, then we need to embrace more complex and interconnecting practices of accountability. Rather than calling for more accountability, we need to practice more accountabilities instead, to increase the reciprocal and reflexive engagement of participants with one another in (and beyond) the health care system. In doing so, we would enable care that is 'safer' by enabling more people to participate more variously and directly in negotiating the complexity and shifting boundaries of health care delivery.

Glossary of abbreviations

ANT Actor-Network Theory

CEC Clinical Excellent Commission

CNC Clinical Nurse Consultant

CNE Clinical Nurse Educator

CNS Clinical Nurse Specialist

EBM Evidence-Based Medicine

HA High Acuity

HD High Dependency

ICU Intensive Care Unit

IIMS Incident Information and Management System

IOM Institute of Medicine

M&M Morbidity and Mortality

NSW New South Wales

NSW Health New South Wales Department of Health

NUM Nurse Unit Manager

RCA Root Cause Analysis

RCT Randomised Controlled Trial

RN Registered Nurse

SAC Severity Assessment Code

Glossary of key terms

Accountability A practical and on-going accomplishment, enacted through the

creation, exchange and use of accounts that can be representative of practice, as well as explanations or justifications of practice.

See below for Informal Accountability and Formal

Accountability.

Articulation work Work that is involved in coordinating action around formalised

models of work, that deals with unanticipated contingencies, and

is generally invisible in formalised models of work.

Combinability Combinability allows for accounts to be *paired* and *compared*

across distances and time, at the risk of estrangement from more

local and complex understandings and interpretations.

Directionality / unidirectionality / multidirectionality

Directionality attunes us to consider for whom accounts are created, whose accounts are made visible, and the reciprocity of their exchange. Unidirectionality describes the exchange of

accounts in only one direction, lacking reciprocity. Multidirectionality describes a multiplicity of reciprocal

interactions between people.

Distance Not necessarily geographical, it can also refer to hierarchical

differences or differences in perceived power, for example.

Dis/embeddedness The degree to which an enactment of accountability engages

with, and adequately represents the complexity of contexts in

which multiple meanings of safety may co-exist.

Dis/embeddedness has implications for how practices of accountability connect and disconnect practices of safety.

Evidence-based medicine (EBM)

A movement that emphasises the use of scientific evidence in clinical decision making, particularly evidence that meets standards of objectivity and generalisability, epitomised by the

randomised controlled trial (RCT).

Formal accountability

An approach designed to act 'at a distance' to control or impact

upon local frontline activities, in what is imagined to be a

unidirectional relationship.

High dependency / High acuity

High Dependency patients are those who are determined by doctors and/or nurses to require increased nursing care, for

various reasons. High Acuity patients are a subset of HD

patients, who are determined by doctors to be acutely unwell, and are to be seen by a medical team at least once every shift.

Informal accountability

Accountability that is not formal (see Formal accountability) or otherwise formally prescribed, usually initiated locally and contingently.

Intercontextuality

The re-creation of accounts and/or accountabilities across different contexts such as when past accounts are repeated or reproduced in subsequent account-exchanges, via the clinicians who are also situated within and across these contexts

Mobility

The ability of an account to travel between contexts and across distances.

Multiplicity

The claim that there is more than one way of describing or defining something, as opposed to singularity.

Reciprocity

A relationship describing the continual and mutual exchange of accounts between parties, as opposed to unidirectional accountability.

Resilience

The ability of actors to recover from unexpected change, or other adversity.

Stability

Can be thought to have two facets, namely the durability of the physical/tangible form of an account, and the reliability of its interpretation or meaning. These facets are inseparable, with the interpretation of an account emerging from the interaction between the form of the account and the context of its interpretation, rather than being somehow distinct and independent. Stability therefore is a contingent, relational effect, always in production. It is dependent on the relations generated between contexts by the accounts and accountabilities that flow between them.

Transparency

A relational effect, linked with stability, mobility and visibility, achieved by the interconnectedness of practices and people through the reciprocal flow of accountabilities.

Visibility

The degree to which an account (and the practices represented therein) is able to be 'seen' or otherwise attended to by others. Inextricably linked with the mobility and stability of the account.

Glossary of participant titles

Clinical Nurse Consultant (CNC)

An experienced nurse with expert skills and knowledge in one particular area. The CNC manages the overall care for their group of patients and helps the medical team with clinical decisions. They may also do procedures, provide education and support.

Clinical Nurse Educator (CNE)

An experienced qualified nurse who works with nursing staff to develop their nursing skills and knowledge and develops hospital-wide nursing education.

Clinical Nurse Specialist (CNS) / Specialist nurse

An experienced registered nurse with demonstrated competency in an area of specialisation.

Consultant The most senior doctors in the team, who have finished their speciality training.

Dietician An allied health professional who gives parents, nurses and doctors advice on nutrition. This includes assessing

patients' needs and devising and managing nutritional

care plans for patients.

Fellow A doctor who is finishing their specialty training. They

will usually become a consultant within a year or two. A fellow works under the supervision of a consultant, and is

more experienced than a registrar.

Junior doctor In this thesis, a junior doctor can refer to a fellow, a

registrar, or a resident (see relevant entries in this

glossary)

Nurse Unit Manager

(NUM)

The nurse in charge of managing the ward. They are in charge of staffing, and coordinate admissions, discharges and transfers of patients. They do not care directly for

patients.

Play Therapist Play therapists use play to help children have a positive

experience of hospital by encouraging normal appropriate

play activities.

Nurse / Registered Nurse

(RN)

A trained nurse who cares for patients in the wards.

Registrar A doctor who is training in a particular medical specialty,

such as paediatrics. They rotate placements about every three months. A registrar is more experienced than a

resident.

Resident The most junior doctor on the team, also known as a

Resident Medical Officer (RMO). They rotate

placements about every three months.

Senior doctor A consultant (see glossary entry above).

Senior nurse In this thesis, a senior nurse can refer to a CNC, CNE or

CNS (see glossary entries above), or another experienced

nurse, such as the shift team leader on the ward.

Social worker An allied health professional who works with families

and health professionals to help with practical and personal issues a child and family may be facing.

Speech therapist An allied health professional trained to assess and treat

people with a communication disability or a problem

with eating or swallowing.

Table of Contents

Ackı	nowledgements	i
Abst	ract	iii
Glos	sary of abbreviations	V
Glos	sary of key terms	vi
	ssary of participant titles	
Cha	apter 1 Introduction	1
1.1	Background and approach	1
1.2	An overview of the thesis	3
~ 1	and an O. Bali and Gafal and I Assessment hills	
Cna	apter 2 Patient Safety and Accountability	
2.1	Introduction	9
2.2	On patient safety	9
	Summary of patient safety	15
2.3	On accountability	15
	A brief history	15
2.4	Systems of accountability	17
2.5	Standard setting – Evidence based medicine	19
2.6	Guidelines as standards of practice	21
	Guidelines as challenges to autonomy	24
	Guidelines as authority	28
	The applicability of EBM and guidelines	30
	The applicability of "gold standard" evidence in safety research	33
2.7	Summary	35
~ 1		_
una	anter 3 Accountabilities in Practice	27

3.1	Introduction	37
3.2	Creating formal accounts: The problem of representation	38
	On distance	38
	On decontextualisation and disembeddedness	39
	On visibility	43
3.3	Using formal accounts	47
	On transparency	47
	On articulation work	52
	'Re-embedding' the disembedded	54
	On formal accountability – A summary	58
3.4	Multiple accountabilities	60
	Informal accountability	61
	Accountabilities in tension	63
3.5	Summary	66
Cha	npter 4 Methodology	69
4.1	Introduction	69
4.2	Methods of researching patient safety	69
	Why ethnography?	70
	What kind of ethnography?	72
	A reflexive account of a reflexive approach	74
4.3	Theoretical perspectives	75
4.4	This study	83
	Background	83
	Research aims and research questions	84
	A conceptual framework for analysis	85
	The researcher	85
	The field site: Locations	87
	Participants	90
	The field work schedule	92
4.5	Data creation	93
	Observations	
	Field interviews	
	Feedback sessions	
		•
	Data analysis: A grounded approach	98
	Data analysis: A grounded approach Ethics and accountability in practice	

Cha	apter 5 Finding Safety and Accountability in the Field	106
5.1	Introduction	106
5.2	The ubiquity of safety	107
	Vignette 5a – Syringe sizes for line flushing	108
5.3	Informal checking	115
	Excerpt 5b – Has the team seen the patient?	116
	Excerpt 5c – Is the patient High Acuity?	117
5.4	Accountabilities in contrast	118
	Excerpt 5d – Anna in the doctor's room	119
	Vignette 5e – High dependency nurse-patient ratios	122
5.5	Discussion	128
	The conceptual framework: describing accountability as practice	129
	Dis/embeddedness and the multiplicity of safety	132
Cha	apter 6 Multiple Accountabilities in Incident Reporting	134
6.1	Introduction	134
6.2	Incident reporting systems	135
	Multiple accountabilities in incident reporting	135
	Intertwining learning and punishment	137
	The NSW Health IIMS	139
6.3	Accountabilities in tension: Reporting as learning and as blame	142
	Vignette 6a – To report or not to report	143
	Excerpt 6b – Making trouble	145
	Vignette 6c – Being blacklisted	147
	Vignette 6d – Feeling guilty	147
	Vignette 6e – Determining severity	149
6.4	Accountabilities in tension: Incident reporting 'at a distance'	151
	Excerpt 6f – Talking about mistakes	151
	Vignette 6g – Bypassing personal communication	152
	Excerpt 6h – Lack of feedback	154
6.5	Discussion	155
	Describing the movement of accounts in practice	
Cha	apter 7 Multiple Accountabilities in Confluence	160
7.1	Introduction	160
7.2	M&M meetings: A local use of formal accounts	161
	Excerpt 7a – Managing a wrong drug administration	162

	Vignette 7b – Interdepartmental communication	163
	Excerpt 7c – Overworked staff	166
	Excerpt 7d – Not a team issue	167
7.3	Team meetings: Enacting multiplicity and intercontextuality	169
	Excerpt 7e – Reusing syringes	170
	Excerpt 7f – Arranging an external consult	171
	Excerpt 7g – Anxious parents	173
	Excerpt 7h – A more complete picture	174
	Excerpt 7i – Debating an albumin infusion	175
	Excerpt 7j – A mother's concerns	176
	Excerpt 7k – Multidirectional accountability	178
7.4	Discussion	180
Cha	pter 8 Discussion and Conclusion	184
8.1	Introduction	184
8.2	The literature on accountability and patient safety	184
	The problem with formal accountability	185
	Safety and accountability as everyday practice	186
8.3	On methodology: Accounting for accountability and safety in practice	e187
	A conceptual framework for analysing accountabilities in practice	188
8.4	Finding safety in practice	190
	The ubiquity of safety	190
	Safety as multiple	191
	On interconnectedness through intercontextuality	192
	Matching complexity with complexity	193
8.5	The problem of disembeddedness	195
	Disembedded accountability as transgressive and conflicting	196
	Disembedded accountability as distancing and disconnecting	198
8.6	Re-thinking accountability	199
	Re-thinking stability and form	199
	Inclusions and exclusions: the partiality of accountability	204
	Engaging with multiplicity and multidirectionality	206
8.7	Conclusion	208
	Implications for 'improving' safety in clinical practice	209
Cha	pter 9 Reflections and Recommendations	211
9.1	Introduction	211

9.2	Recommendations for health policy212	
9.3	Recommendations for medical education213	
9.4	Recommendations for safety research, and research in general215	
9.5	Admitted exclusions, and/or proposed future inclusions217	
Dof	ferences	
Kei	219	
	t of Appendices244	
List		
List	t of Appendices244	
List App	t of Appendices	
List Appe	t of Appendices	