Describing and enhancing audit and feedback in dementia care:
An intervention development study

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Abstract

Background

Approximately one in four people in general hospitals have dementia. Patients with dementia do not always receive best care. To improve care, health services assess ('audit') current care and provide staff with 'feedback' about how well they are doing.

Audit and feedback is a variably effective complex intervention. Both evidence and theory identify components associated with the effectiveness of audit and feedback.

This thesis asks the research questions, how is the national audit of dementia currently undertaken, are there potential enhancements that could improve the effectiveness of the national audit, and if so, how should these enhancements be implemented?

Method

There were two phases to the work, each supported by stakeholder involvement (co-production group n=9; advisory group n=9). In phase 1, I undertook a multi-method qualitative exploration at six hospitals, involving semi-structured interviews (n= 32), documentary analysis (n=39) and observations (44 hours). I analysed the data using inductive framework analysis and iteratively presented the findings to stakeholders for challenge and synthesis. In phase 2, the stakeholders used evidence from phase 1, literature and theory to: determine how to enhance the process; specify the enhancements; and develop a theory-informed strategy to implement the enhancements.

Results

I found common stages to the audit, although the content and delivery of each stage differed between sites. The stakeholders identified potential enhancements to data collection, feedback and action planning. The stakeholders specified enhancements to organisational action planning and co-developed a strategy to implement the enhancements. I called the strategy *Logical Improvement Planning*.

Discussion

This thesis extends previous knowledge by describing the intervention content across stages of the national audit, including a detailed exploration of the current sense-making work of committees. The national audit of dementia has an organisational-level affect that is influenced by the sense-making work of quality assurance committees. I describe twenty-four evidence- and theory-informed potential enhancements to the national audit. *Logical Improvement Planning* is an intervention to enhance committee sense-making. The findings have informed the commissioning of future audits. The next step is to assess the feasibility and impact of these enhancements.

Acknowledgements

Throughout the thesis I use the first-person singular pronoun when describing the work undertaken. However, the work would not have been possible without the involvement of a much wider team. I am particularly grateful to my supervisory team (Richard Thomson, Niina Kolehmainen, Louise Allan and Tracy Finch) for their endless support and guidance from funding through to thesis submission, and for co-coding of the qualitative data (TF) and the behaviour change techniques (NK). The research was supported by co-production group members who provided an on-going supply of enthusiasm and expertise. I am unable to name them here, but they know that I will always be immensely grateful. I would also like to acknowledge the support of all the participants, the input of the advisory group (Mirek Skrypak, Alan Quirk, Chloe Hood, Ed Baker, Carl Walker, Dawne Garrett, and researchers named below) and the valuable guidance from my progress reviewers, Jo Patterson and Joy Adamson. I would also like to thank my examiners Jo Rycroft-Malone and Falko Sneihotta for their assessment, feedback and decision!

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Glossary

AChE	Acetylecholinesterase
BCT	Behaviour change technique, a technique proposed to be an active ingredient of an intervention
CHI	Commission for health improvement
Component	Constituent element that contains the active ingredient(s)
CP-FIT	Clinical performance feedback intervention theory
CQC	Care quality commission
CQUIN	Commissioning for quality and innovation
EBC	Evidence-based care
e.g.	For example
Enhancements	Content / delivery that differs from current which, if implemented, may lead the audit to deliver greater improvement in care (e.g. better feedback)
FIT	Feedback intervention theory
HQIP	Healthcare quality improvement partnership
IQR	Inter-quartile range
MS	Michael Sykes
NCAPOP	National clinical audit and patient outcome programme
NHS	National health service
NICE	National institute for health and care excellence
NIHR	National institute for health research
NK	Niina Kolehmainen
NPT	Normalisation process theory
QIC	Quality improvement collaborative
RCN	Royal college of nursing
RCT	Randomised controlled trial
Step	The specified operationalisation of components
TF	Tracy Finch
TIDieR	Template for intervention description and replication
NHS Trust	An organisation providing healthcare
UK	United Kingdom

The structure of the thesis

Within this thesis, I answer the research questions: how is the national audit of dementia currently undertaken, are there potential enhancements that could improve the effectiveness of national audit, and if so, how should these enhancements be implemented? I present the work over six chapters:

In chapter 1, I present the background to the study. I define dementia and describe the delivery of care for patients with dementia. I describe the wider context influencing the care of people with dementia, including policy drivers behind the delivery of high-quality care for all patients, and more specifically those with dementia. I highlight that the focus on best practice that is informed by different sources of evidence. I define implementation and describe gaps in the implementation of best practice in dementia care; for example, the national audit of dementia finding that half of patients did not have a multi-disciplinary assessment and two-thirds of patients/carers were not asked about factors that cause distress to the person with dementia. I describe the national audit of dementia as a strategy to increase the use of best practice. Finally, I provide a summary of the evidence about the effectiveness of audit and feedback.

In chapter 2, I set out the research question, aims and methodology of the study. I describe audit and feedback as a complex intervention. I summarise guidance for the development of complex interventions, and focus on the integration of evidence, theory and stakeholder input, and the consideration of implementation. I present an overview of the study design that incorporates these elements into intervention development. I describe methodological considerations in the application of stakeholder involvement, interviews, observations and documentary analysis. I present my epistemological and ontological position and my positionality in relation to the thesis. Finally, I describe ethical considerations to this doctoral study.

This thesis describes work to identify enhancements to the national audit of dementia. To do this, I described the current content and delivery; I then identified gaps between current audit practice and evidence and theory, and developed a strategy to implement potential enhancements. In chapter 3, I describe theoretical perspectives relevant to these aims and set out key terms for the conceptual work undertaken, for example, distinguishing between enhancements, components and mechanisms. I initially consider theoretical perspectives related to enhancing the national audit. I describe organisational readiness to change theory (Weiner, 2009) that supported the understanding about how the enhancements might lead to improvement (chapter 5). I then move from whole theories to describe theory-informed constructs that offer potential enhancements to audit and feedback. Guidance (e.g. Craig et al, 2008) recommends consideration of both the content of an intervention and its implementation. Within the current study, implementation of enhancements to the national audit was informed by theory, and chapter 3 summarises normalisation process theory (NPT) (May and Finch, 2009). I describe implementation strategies and influences upon their effectiveness, and frameworks that help specify the content of interventions.

In chapter 4, I present the multi-methods qualitative study to describe the current content and delivery of the national audit. This work provided the foundation on which to identify potential enhancements. This study involved interviews, observations and documentary analysis at six hospitals. There were ten stages to the national audit. The function of each stage was similar between sites, but they varied in content and delivery. I describe the content and delivery of the different stages. I discuss the findings and the strengths and limitations to the method.

In chapter 5, I present the intervention development study both to identify and specify enhancements to the national audit of dementia and to develop a strategy to implement the enhancements. This work resulted in an educational intervention to improve the organisational response to feedback from the national audit of dementia. I describe the target behaviours (action planning), the actors (hospital clinical leads for dementia and hospital clinical audit leads) and the content and delivery of the intervention. I discuss the strengths and limitations of the intervention development method.

In chapter 6, I summarise the method, and describe the key findings and the strengths and limitations of the study. I then consider the contributions that the thesis makes to knowledge, methodology, theory and practice. Finally, I describe implications for future research.

Chapter 1. Background

1.1 Introduction

In this chapter, I define dementia, and describe the delivery and experience of care for people with dementia. I outline wider influences upon care, including population health, technology and funding. I explore policy influences, including the evolution of the concept of quality of care, before focusing upon the definitions of best practice and implementation used in this thesis.

Having dementia is associated with worse outcomes from hospitalisation and there are gaps in the delivery of best practice. I detail policy drivers behind the implementation of best-practice in dementia care, including support for the national audit of dementia. I outline variation in the extent to which strategies to implement best-practice, including national audit, are associated with improvements in care.

1.2 Describing dementia

In describing dementia, I consider the diagnosis and clinical definition of dementia, as well as the lived experience of people with dementia and their carers.

In terms of the diagnosis and clinical definition, dementia is a term that covers a number of conditions that progressively affect neurones in the brain. Dementia is associated with an ongoing reduction in brain functioning and may lead to problems with memory, speed of cognitive process, language and comprehension, mood, movement and judgement (National Institute for Health and Care Excellence, 2018). These changes may lead to a loss of functioning. Amongst the most common forms of dementia are Alzheimer's disease, vascular dementia, frontotemporal dementia and dementia with Lewy bodies (Dementia UK, 2018). The diagnosis of dementia involves a brief assessment, consideration of other potential causes of the symptoms, followed by a specialist assessment (Pink, 2018). In the UK in August 2018, 540,000 people were recorded as having a dementia diagnosis, although it is thought that about 850,000 people may have dementia (Dementia statistics, 2019a). Some people have more than one type of dementia (Dementia UK, 2018).

In terms of the lived experience of people with dementia, this varies between individuals, between types of dementia, over time and depending upon care (Kitwood, 1997; NHS, 2019). People with dementia may become increasingly forgetful and misplace belongings. They may not be able to concentrate, become disorientated about time or have difficulty making decisions (Dementia UK, 2018). People with dementia may have changes in their personality and behaviour which can affect their sense of self, confidence and social life (Kitwood & Bredin, 1992). Qualitative studies of the experience of dementia describe a range of feelings associated with having dementia; these include fear, anger and embarrassment (e.g. Dementia UK, 2019b, MacQuarrie, 2005, Clare, 2003). The experience of dementia has also been described in terms of loss and impacts upon relationships (e.g. Harman and Clare, 2006), although quality of life may not decrease with disease progression (e.g. Bosboom et al. 2013) and may even increase (e.g. Selwood et al. 2005; Beerens et al, 2015). A systematic review of papers exploring the patient experience of dementia (de Boer et al, 2007) identified facets of coping with dementia, including denial and avoidance (e.g. MacQuarrie, 2005) and minimization and/or normalisation (e.g. Harman and Clare, 2006).

In terms of lived experiences of dementia by carers, dementia can cause difficulties in the families of people with dementia. This includes denial and the need for increased support that can affect carers' physical and emotional wellbeing, and whether they are able to socialise and retain employment (Chenoweth et al, 1986). A systematic review (Prorok et al, 2013) of forty-six qualitative studies, exploring the experiences of people with dementia and their primary caregivers (e.g. friends and family) from different settings found that the management of the disease and the communication with and attitudes of health care providers were important to the experience of people with dementia and their carers.

In summary, dementia can be defined clinically as a syndrome that can include memory loss, and difficulty communicating and reasoning. Dementia may alter someone's personality and impact upon their ability to undertake daily activities. Dementia is a progressive, chronic condition that affects approximately 850,000 people in the UK and impacts upon the lives of carers.

1.3 General hospital care for people with dementia

As I describe here, people with dementia have an increased risk of being admitted to a general hospital than those without dementia. Once in hospital, people with dementia have longer admissions and worse outcomes (Sampson et al, 2009). Patients, carers and staff prioritise different elements of hospital dementia care, and the care to people with dementia is of a lower quality than the care others receive (Sampson, 2009; Care Quality Commission, 2014). Delirium can be associated with dementia, and can make the patient, carer and staff experience of dementia worse.

1.3.1 Increased risk of, and from, hospitalisation

People with dementia have more co-morbidities (Poblador-Plou et al, 2014) than those who do not have dementia, such that 91.8% of people with dementia have another health condition, the most common being hypertension, pain and depression (Browne et al, 2017). There is evidence that dementia increases the risk of hospitalisation (Malone et al, 2009; Phelan et al, 2012). In the UK, 6% of people with dementia are in general hospital at any one time, compared with 0.6% of all people over 65 years (Russ et al, 2012).

Approximately 25% of general hospital inpatients have dementia (Dementia statistics, 2019b). In hospital patients over 70 years, more than 40% have dementia, although half did not have a known diagnosis of dementia prior to admission (Sampson et al, 2009). The most common reasons for admission are pneumonia (16.0%), urinary tract infection (9.1%) and acute cardiac ischaemia (9.2%) (Sampson et al, 2009). Stroke and hip fracture may also be common in people admitted with dementia (Briggs et al, 2016). People with dementia are at greater risk of falls, and fractures may be more prevalent in people with dementia (Mukadam & Sampson, 2011; Malone et al, 2009). Their risk of falls may be linked to co-morbidities (Allan et al, 2009). People with dementia may be at increased risk of surgical admission (Toot et al, 2013), although there have been calls for further research to explore surgical admissions of people with dementia (Mukadam & Sampson, 2011).

Wong et al (2014) describe hospitals as “ill prepared to care for older adults” (p2163). They highlight that hospitals are designed for an episode of general illness, not complex multimorbidities and, as a result, patients with dementia are prone to more adverse events.

People with dementia in UK NHS general hospitals have longer admissions and worse outcomes than other patients, including increased short-term mortality; this might be because they receive poorer care (Sampson, 2009). For example, people with dementia may not receive help to eat or drink (Lakey, 2009) and be more at risk of undertreated pain (Morrison and Siu, 2000). Gaps in the implementation of high-quality care for people with dementia in general hospitals is explored further in section 1.6.2 (Table 1.2).

1.3.2 Lived experience of hospital care – Patients and carers

The experience of hospitalisation is one element of the experience of dementia. Communication and orientation are important influences upon the experience of hospitalisation. People with dementia may be less likely than the general population of hospital patients to describe communication by general inpatient services as good (Care Quality Commission, 2019). An ethnographic study by Prato et al (2019) found evidence that patients with dementia perceived interactions with staff negatively, but that where patients were empowered, they had a more positive experience of hospitalisation.

Patients with dementia may experience hospitalisation as one of boredom (Prato et al, 2019), and the change of routine upon admission may be distressing (Cowdell, 2010; Gladman et al, 2012). Admission to a general hospital can involve several moves of bed which can disorientate the patient, reduce their ability to cope (Digby et al, 2011) and impact negatively on their experience (Digby & Bloomer, 2013). For example, spatial disorientation in people with dementia is associated with increased agitation, aggression (Marquardt, 2011) and anxiety (Digby et al, 2012). Disorientation may be further exacerbated by unfamiliar noises (Dewing, 2010; Cowdell, 2010).

The experience of patients with dementia may differ from the perceptions of their care by family caregivers. Jackson et al (2017) found that 87% of caregivers of cognitively impaired older adults, including older adults with dementia, were mostly or very satisfied with hospital care overall, but 54% were dissatisfied with some aspect. Aspects of dissatisfaction included outcomes (e.g. patient symptoms, caregiver strain) and the receipt of care from non-specialist medical and mental health wards. Jurgens et al (2012) interviewed 35 family carers of people with dementia and found an often-negative experience of hospital care in

England. The events which participants drew attention to were admission, ward care and discharge from hospital. Ward care events that influenced experience included a lack of communication, bed moves, appropriateness of interventions and deterioration in condition. They also found that carers described food, hydration, safety, compassion, and competently managing agitation and pain as important indicators of quality. Prato et al (2019) identified tasks that relatives of people with dementia described as important. The relatives described adequate food and clean clothing as more important than emotional and social elements of care. However, the relatives also identified staff communication and humour as important to patient experience of hospitalisation. Carers' interpretation of care for patients with dementia may demonstrate a "cycle of discontent" (Jurgens et al, 2012; p1) whereby events create negative expectations which lead to increased monitoring for poor care by the carers, causing conflict between the carers and staff and/or a reduction in carer engagement.

The design of the clinical environment can affect patient experience (Waller et al, 2017). There are a number of tools to assess the clinical environment for people with dementia (e.g. The Kings Fund, 2014). In a study in a new intermediate care setting, where patients may stay longer than in general hospitals, Digby and Bloomer (2013) found that the quality of care and outcomes for patients with dementia were more important to people with dementia and their relatives than the clinical environment.

1.3.3 Staff perspectives of hospital care for people with dementia

There is a substantial literature about staff perceptions of hospital care for people with dementia. Key themes relate to the hospital context, which may not prioritise person-centred dementia care, and factors associated with staff (e.g. they report a lack of competence and low satisfaction with the quality of care). These themes may be inter-related, for example, staff report a lack of training which may reflect a lack of priority at hospital level.

An international review (Digby et al, 2017) of 24 qualitative studies exploring general hospital staff's experiences of delivering care to patients with dementia found that professionals' narratives focused on physical care over mental health and emotional well-being. They also found the staff explicitly prioritised acute conditions over, for example, “time consuming interactions” (p51, Nilsson et al, 2016) with people with dementia. The review identified that staff were risk averse and care was not patient-centred (e.g. staff report prioritising safety above dignity; Moyle et al, 2011), with a lack of support for staff and low staff satisfaction.

An earlier review of 14 predominantly UK-focused qualitative studies of the experience of staff caring for patients with dementia in hospitals (Turner et al, 2017) identified five themes: overcoming uncertainty; contextual constraints; inequality; understanding the importance of person-centred care; and the need for training. Uncertainty related to the documentation of a diagnosis of dementia (e.g. Nilsson et al, 2013) and how to manage behaviours that challenge staff (e.g. Cowdell, 2010). Staff also reported a lack of competence at identifying cognitive impairment, assessing the needs of patients with dementia and communicating with them (Turner et al, 2017). The inappropriateness of the ward environment (e.g. Nilsson et al, 2013) and the lack of staff and time to provide care (e.g. Baille et al, 2012) were important contextual constraints identified by staff. The review (Turner et al, 2017) identifies further influences upon the care of patients with dementia, including describing the interviewees reporting that care often focused on managing patients’ behaviour that challenges, and that this was seen as a low priority and typically undertaken by the most junior staff (Moyle et al, 2010). Finally, Turner et al highlight that staff report that the care of people with dementia was not prestigious (Cowdell, 2010).

Dementia in hospital patients is frequently associated with delirium[i] (Fick et al, 2002), and the addition of delirium can affect staff experience of providing care. Belanger and Ducharme (2001) reviewed qualitative studies of nurses’ experience of caring for patients with delirium. They synthesised six international studies and found descriptions of nursing staff motivated to assess and meet the needs of patients with delirium but feeling uncomfortable, unsure, upset, ambivalent and frustrated in how to provide care.

In summary, dementia increases the risk of admission and, once admitted, people with dementia are more likely to stay longer, have worse care and have poorer outcomes. The

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[i] Delirium is a disturbance in attention and awareness that develops over hours or a few days and fluctuates (American Psychiatric Association, 2013).

aspects of care which are considered important differ between three stakeholder groups: people with dementia, carers and health care workers. Organisation- and individual-level factors may affect healthcare workers experiences of dementia care.

1.4 Wider context of care for people with dementia in hospitals

The care for people with dementia in hospitals is affected by wider influences upon hospital care, both from within the hospital and beyond. Here I will briefly consider funding, the influence of changes in social care and the role of wider staffing changes upon quality of care.

1.4.1 Funding, staffing and workforce

The NHS in England is mainly funded through general taxation. In 2019, the UK Government provided £131.9 billion for health and social care, with £113.8 billion going to NHS England for the provision of care (Department of Health and Social Care, 2019). Whilst funding is increasing, it is reducing as a percentage of gross domestic product and is not keeping pace with increased healthcare costs (Stoye, 2018). The increasing cost of healthcare is driven by changes in population health (notably multi-morbidity), technology, pay and policy decisions and demographic changes (The Academy of Medical Sciences, 2018).

Within England, 1.2 million full-time equivalent staff work in the NHS, but there is a growing number of vacancies, particularly in nursing where one in eight posts is vacant (The Kings Fund, 2018). Hospital staffing levels have been associated with the quality of care (e.g. McHugh et al, 2017), although this might be moderated by other work environment factors (Aitken et al, 2012) and the direction of causation is unclear (Griffiths et al, 2016).

The State of Care report (Care Quality Commission, 2019) describes that 27% of hospitals core services were rated as ‘requires improvement’ (25%) or ‘inadequate’ (2%), with services accessed by people with dementia more likely to receive these ratings from the regulator. There is evidence that overall quality of general hospital care in England is deteriorating (Care Quality Commission, 2019). The regulator describes increased emergency attendance and admissions, demand for elective treatments and hospital bed occupancy as being associated with the deterioration in quality. The quality of general hospital dementia care are explored in section 1.6.2.

1.4.2 Support for carers

Against the backdrop of healthcare cost inflation, an ageing population and constrained health and social care funding and workforce gaps, the prevalence of dementia is increasing (Prince et al, 2013). This increase in prevalence has not been matched by a similar increase in community care (Charlesworth & Watt, 2019) which might prevent admission to hospital (Lyketsos et al, 2000). AgeUK (2018) estimates that 1.4 million older people (about 14% of the age group) do not have access to all the adult social care and support they need. Alongside this, carers are experiencing increasing challenges, with 68% using their income to cover the cost of care and 39% struggling with finances (Carers UK, 2019). Under the Care Act in England (National Archives, 2014), people with dementia who use social care are entitled to an annual review of their social care needs, which might help support carers and prevent hospital admission; in practice only 45% receive these reviews (Healthwatch England, 2019).

1.4.3 Dementia policy

Globally, at least 32 countries have national policy or plans to address dementia (Alzheimer's Disease International, 2019), and the Wold Health Organisation has a target that 75% of countries will have national plans for dementia by 2025 (World Health Organisation, 2018).

In 2007, the English Department of Health stated that dementia was a national priority. This was formalised by the strategy, "Living Well with Dementia" (Department of Health, 2009), although progress with delivering the strategy was criticised by the National Audit Office (2010). Dementia care remained a priority under the new government in 2010, with the new Prime Minister promising, "major improvements in dementia care" by 2015 (Department of Health, 2012; p1). Interventions to achieve these improvements included financial incentives to hospitals for meeting care process performance targets (Department of Health, 2013). These financial incentives were part of the Commissioning for Quality and Innovation (CQUIN) framework. As part of the CQUIN, hospitals would be rewarded for submitting data that met performance targets for patients aged 75 or above. These measures related to patients admitted as an emergency for more than 72 hours, and described whether patients: had a diagnosis of dementia, delirium or complained of memory symptoms; were assessed for dementia and delirium; were referred for further assessment on discharge, where appropriate (NHS England, 2016). In 2017, the collection of these data became part of the standard contract, whereby performance of less than 90% could result in a financial penalty (NHS England, 2017). CQUIN data provide evidence for variation in the assessment of dementia in hospital; for example, the dementia assessment and referral CQUIN data (NHS England, 2016) has showed that 20.7% of Trusts are not achieving the 90% target for identifying people with dementia. Further evidence describing the implementation of best practice is discussed in section 1.6.2.

In 2015, the Department of Health published the “Prime Minister’s Challenge on Dementia 2020” (Department of Health, 2015), promising that England would become, “the best country in the world for dementia care and support” (p3). It aspired that people with dementia would receive care in line with guidance from the National Institute for Health and Care Excellence (NICE), stating that, “effective metrics across the health and care system, including feedback from people with dementia and carers, will enable progress against the standards to be tracked and for information to made publicly available”(p7). The strategy also described changes to hospital regulation, with the Care Quality Commission having a duty to focus specifically on the care for people with dementia in hospital. In 2019, a review of progress with the 2015 strategy (Department of Health and Social Care, 2019b) highlighted a need for further improvement in hospital care for people with dementia, including continued implementation of NICE guidelines, to meet the aim of the strategy. The review emphasised the need for a particular focus on hospital care and described the national audit of dementia as a key measure of success, specifically referencing work needed to improve audit findings relating to the nutritional needs of people and the assessment for delirium. The national audit of dementia remains a prioritised audit undertaken to support and monitor the implementation of NICE dementia guidelines (Healthcare Quality Improvement Partnership, 2020).

In summary, the care for people with dementia takes place within the context of health and social care. In the UK, increases in funding for health and social care have not kept pace with increased costs, which are driven by changes in population health, technology, pay and policy. There are increasing staff vacancy rates in England and the quality of care in general hospitals is deteriorating. There is increasing prevalence of dementia and reduced funding for social care to support people with dementia. Against this backdrop, there have been repeated global and UK policy initiatives to improve dementia care, including the provision of financial incentives and prime ministerial commitments to increase the implementation of NICE guidelines for people with dementia and to improve the results of the national audit of dementia.

1.5 Quality of care

This section describes that there are different definitions of the quality of care, and that the delivery of evidence-based care has been a common and enduring element to high quality care. I highlight that evidence-based care combines with shared decision making to produce best practice. I define implementation and gaps in the implementation of best practice in hospital dementia care. I highlight the use of audit and feedback to implement best practice (Figure 1.1), both through supporting the use of shared-decision making (e.g. the national audit of dementia assesses whether patients have been involved in decisions about discharge) and the use of evidence. Finally, I define and describe evidence about audit and feedback.

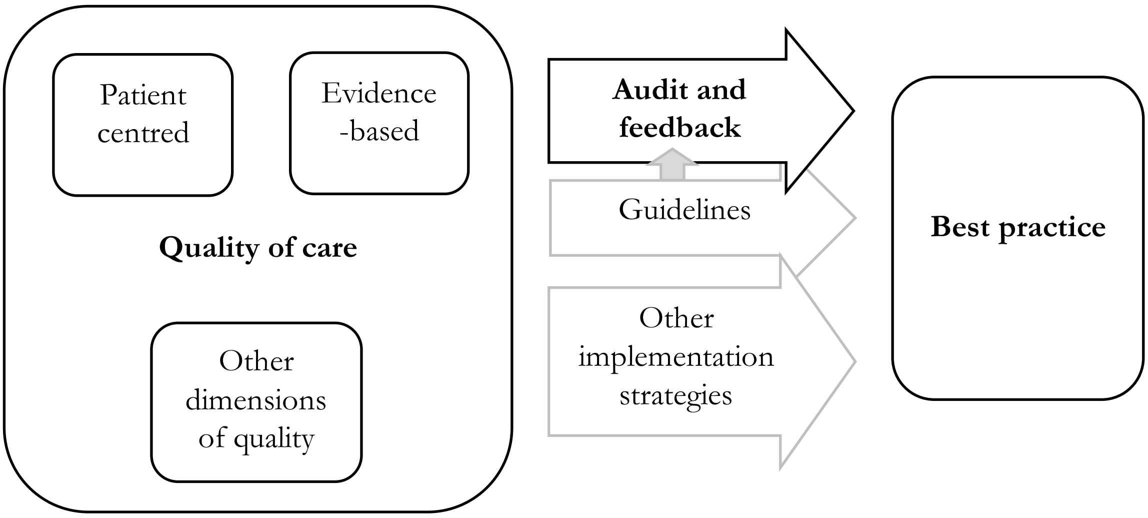

Figure 1.1: A conceptual model of quality of care, implementation and best practice

1.5.1 Defining quality

Quality of care is a multi-faceted construct that authors have described differently (Table 1.1). In 1974, a report by the Canadian Minister of Health and Welfare described eight contributing elements affecting the quality of a health-care system: acceptability, accessibility, appropriateness, competence, continuity, effectiveness, efficiency and safety (Lalonde, 1974). In the United States, the Institute of Medicine (Lohr et al, 1990) drew upon public consultations, literature and qualitative research in order to define the quality of care as, “the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge” (p707). In developing this definition, Lohr and colleagues identified 18 dimensions to quality, including risk versus benefit trade-off, interpersonal skills of practitioners, acceptability, continuity, documentation and standards of care. The Institute of Medicine later proposed that high-quality health care should be: safe, effective, patient-centred, timely, efficient and equitable (Committee on Quality of Health Care in America and Institute of Medicine Staff, 2001). The Council of Europe describe quality of care as the degree to which the treatment dispensed increases the patient’s chances of achieving the desired results and diminishes the chances of undesirable results with regard to the current state of knowledge.

Within the UK, concerns about the quality of care and “variation in standards of care” (Scally and Donaldson, 1998, p62) led to a statutory duty upon health organisations to improve quality (Secretary of State, 1997). This required the components of quality of care to be defined. In doing so, the UK Government built upon the World Health Organisation description of quality of care as incorporating technical quality, efficiency, risk of injury and patient satisfaction. The white paper (Secretary of State, 1997) describes high quality care as incorporating: evidence-based practice; risk reduction programmes, mechanisms for learning from incidents and complaints; leadership; quality improvement capabilities; mechanisms for assuring quality. Importantly for this thesis, the white paper describes 'clinical governance' as the system to guarantee quality, with audit and feedback at local, regional and national level as a driver for both improving and assuring quality.

Lalonde 1974 (Canada)	**Institute of medicine, 2001 (US)**	**Secretary of state, 1997 (UK)**	**Commission for health improvement, 1999 (UK)**	**Department of health, 2008 (UK)**	**Care quality commission, 2019 (UK)**
Acceptability					
Accessibility					
Appropriateness					
Competence					
Continuity					
			Education and training		
Effectiveness	Effective	Evidence-based	Clinical effectiveness; Audit and feedback[i]	Effective	
Efficiency	Efficient				
Safety	Safe	Risk reduction	Risk management	Safe	Safe
	Patient Centred		Patient involvement		
	Timely				
	Equitable				
		Mechanisms for learning from incidents and complaints			Responsive
		Leadership			Well-led
		Quality improvement capabilities			
		Mechanisms for assuring quality			
			Staffing and management		
			Use of information		
				Compassion	Caring
				Dignity and respect	

Table 1.1: Elements[ii] within selected definitions of quality

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[i] CHI referred to audit and feedback as clinical audit

[ii] Elements are aligned broadly based upon degree of overlap. Elements in different rows may still have a relationship (e.g. Safety (Lalonde, 1974) and staffing and management (Commission for health improvement, 1999))

The definition of quality used within the English National Health System has evolved over time and has been described by arms-length bodies responsible for reviewing clinical governance. From 1999, this was undertaken by the Commission for Health Improvement (CHI) which initially assessed seven clinical governance domains. Audit and feedback was one of the domains, alongside: patient involvement, risk management, staffing and management, education and training, clinical effectiveness and the use of information.

In 2007, the then Prime Minster David Cameron requested Lord Darzi to produce a report that might create a vision for healthcare over the next ten years. The subsequent report (Department of Health, 2008) stated that, "high quality care should be as safe and effective as possible, with patients treated with compassion, dignity and respect" (p11). In 2009, responsibility for inspecting healthcare providers passed to the newly formed Care Quality Commission (CQC). The CQC described quality in terms of regulations, essential standards, fundamental standards and outcomes. At the time of writing, these outcomes are assessed through five key lines of enquiry: is the service safe, effective, caring, responsive and well-led (Care Quality Commission, 2019b).

In summary, the description of quality has varied over time and between stakeholders. The delivery of effective care that applies evidence has been common throughout policy definitions of quality. The requirement to demonstrate that care meets set standards, both through regulator inspections, and to improve and assure care through clinical audit have also been important to the quality of care for over thirty years. Section 1.7 describes the development of audit and feedback and provides a critique of its impact.

1.5.2 Evidence-based care

The Care Quality Commission describe the delivery of evidence-based care as a facet of effectiveness[i] (Care Quality Commission, 2019b). Evidence-based care is practice based upon

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[i] The CQC describe the other facets of effectiveness as: assessing need; monitoring outcomes and comparing with similar services; staff skills and knowledge; how staff, teams and services work together; supporting people to live healthier lives; and consent to care and treatment (Care Quality Commission, 2019b).

the evaluation and implementation of research, rather than intuition and unsystematic experience (Guyatt et al, 1992). Evidence-based care came to the fore in the 1990s (Guyatt et al, 1992), although its origins may be 150 years earlier (Sackett, 1997). Evidence-based care incorporates different sources of evidence as informing best practice (Figure 1.2) and can be viewed as having influence at different levels.

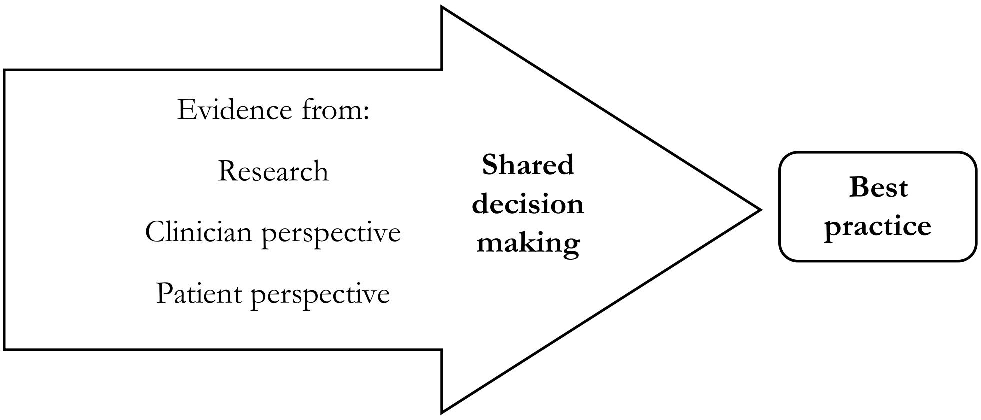

Figure 1.2: The integration of research with clinical and patient perspectives
(Adapted from Hoffmann et al, 2014a)

The integration of evidence from different perspectives happens at different levels, and is described in policy, for example, *High quality care for all* (Department of Health, 2008) notes, "as well as clinical quality and safety, quality means care that is personal to each individual" (p11). At a national level in England, the National Institute for Health and Care Excellence (NICE) provides guidance and quality standards. NICE guidance considers evidence for the effectiveness and cost of care, making recommendations about care (e.g. National Institute for Health and Care Excellence, 2018). National contracts provide incentives for meeting NICE guidelines (McCartney et al, 2016). At a regional level, oversight by commissioners of services includes consideration of whether NICE guidance has been incorporated into commissioned care (NHS England and NHS Improvement, 2019). The use of NICE guidance by English healthcare organisations is the assessed by commissioners and the Care Quality Commission (Care Quality Commission, 2019b). At an individual level, the use of 'best practice' is a legal requirement where evidence for benefits and risks of different interventions is viewed within a particular clinical encounter and from the perspective of the patient (McCartney et al, 2016; Chan et al, 2017).

In considering the implementation of evidence-based care, it is important to consider what is meant by evidence and, in the NHS England context, what is included in NICE guidelines. Research evidence about effectiveness (e.g. Evans, 2003) has been described as a research hierarchy from: systematic reviews and meta-analyses; randomised controlled trials with definitive results; randomised controlled trials with non-definitive results; cohort studies; case-control studies; cross sectional surveys; to case reports. Quality of evidence and the extent to which inference can be made to clinical care, has been graded in different ways. For example, the assessment of quality has included consideration of the importance of the outcomes assessed, any adverse effects, study limitations, consistency and precision of findings, the directness of comparison, publication bias, magnitude of effect, dose-response gradient and consideration of confounders (Guyatt et al, 2008). The hierarchical view has been questioned, such that research needs to be considered alongside the quality of the individual study's design (Pettigrew and Roberts, 2003). Guyatt et al (2008) recommend reviewing research evidence and considering the quality of the research, but also highlight that such reviewing needs to be put in context by patients and clinicians, in order to determine best practice.

Evidence-based care (EBC) has been criticised as 'cookbook medicine' (Liang, 1992), that under-values tacit knowledge (Greenhalgh et al, 2014) and risks applying results from populations inappropriately to individuals (Greenhalgh et al, 2014). There have been fears that EBC would be used as a way to cut costs at the expense of clinical quality (Sackett et al, 1996) and that EBC is a form of managerialism synonymous with 'new public management' that curtails the application of clinical expertise and judgement (Ferlie et al, 1996). EBC has been criticised for minimising the patient voice (Ferlie et al, 2012), although Hoffmann and colleagues have shown how communication can bring together research, clinician and patient perspectives to deliver shared decision-making about best practice (Hoffmann et al, 2014a; Figure 1.2). More recently, evidence-based care has been challenged as poorly addressing multi-morbidity, as being influenced by vested interests and leading to an overwhelming volume of evidence (Greenhalgh et al, 2014). For example, a Google scholar search for 'dementia' generates 2,340,000 results. The volume of literature is a challenge to implementation of evidence-based care (Greenhalgh et al, 2014). Systematic reviews and guidelines have a role in managing the volume of evidence, although the volume can remain substantial; for example, the Guidelines International Network (2020) has identified 52 dementia guidelines.

In this PhD thesis, I have adopted the view that best practice can be identified for a population of patients, (e.g. patients with dementia in hospital), and that this best practice is best defined by stakeholders informed by evidence. I take the view that different forms of evidence are needed for different domains of quality, and that these need different methods. I propose that the best practice for a population of patients can be identified and implemented; for example, the national audit of dementia describes best practice for patients with dementia in hospital. Undertaking audit and feedback might increase the use of best practice for a population of patients (section 1.7.3). However, best practice for a population of patients might not be best practice for an individual patient and, as such, high-quality care requires individual-level shared decision-making and the freedom to choose not to receive guideline-defined ‘best practice’.

1.6 Implementation, knowledge transfer and knowledge mobilisation

High quality dementia care needs to be implemented to achieve best practice and improved outcomes. Implementation describes the work undertaken to increase the adoption and sustainment of clinical interventions by clinicians and/or systems of care (Proctor et al, 2013). Staged models of implementation have been proposed, for example, Aarons and colleagues (2011) describe exploration, adoption decision, active implementation, and sustainment. Process models describing activities that together form the implementation work have also been described (e.g. NPT; May and Finch, 2009). Chapter 3 describes the implementation theories relevant to this thesis.

An alternative way to characterise implementation is to consider the outcomes one might evaluate or measure. Proctor et al (2011) describe acceptability, adoption, appropriateness, feasibility, fidelity, implementation cost, penetration and sustainability as characteristics of successful implementation work. Proctor and colleagues note that there are other outcomes, and that different authors use different terms to describe these outcomes; for example, adoption might be referred to as uptake, utilisation, initial implementation or intention to try (Proctor et al, 2011).

Knowledge transfer is also known as knowledge translation (e.g. Grimshaw et al, 2012) or knowledge mobilisation (e.g. Wye et al, 2019) and is a term closely related to implementation. Ferlie et al (2012) describe knowledge transfer as strategies that seek to move specific information from a source to a recipient; for example, educational strategies that move research evidence from academia to clinicians. Alternatively, knowledge mobilisation approaches consider research as one of many sources of information or evidence. Through this lens, evidence-based care requires unearthing tacit knowledge and / or merging it with existing experience including that of patients, carers and healthcare workers (e.g. Gabbay and le May, 2004), for example through the co-production approaches that are employed within this thesis. Knowledge transfer and knowledge mobilisation approaches are not distinct. For example, knowledge gained from reading a guideline or through educational outreach could still be merged with tacit knowledge in the delivery of care. Knowledge transfer approaches may incorporate facets of knowledge mobilisation, for example, audit and feedback strategies that include social interaction with opinion leaders and/or the co-development of action plans (e.g. Colquhoun et al, 2017).

1.6.1 Guidelines

Guidelines are a strategy to improve care by making it easier to identify, and then implement, evidence. Guidelines also inform the use of other strategies to implement best practice, for example, audit and feedback (NICE, 2020b). Collating evidence involves expert consensus decision making approaches to determine the topics to include and what types of evidence to draw upon (NICE, 2020a). Topics to be described by NICE guidelines are identified by commissioners and organisations for service users, carers and professionals.

In the context of dementia care, NICE commissioned a joint dementia guideline (NICE, 2006) from the National Collaborating Centre for Mental Health and from the Social Care Institute for Excellence. These two organisations created a Guideline Development Group involving senior clinicians, a service user, two carers, a healthcare inspector, academics, a social worker and information scientists. Group members proposed and consulted upon the scope. Once agreed the scope was translated into systematic review questions through which the literature was searched, reviewed (including an assessment of the quality of the evidence (Grading of Recommendations Assessment, Development and Evaluation, 2019)) and summarised by information scientists. Additional evidence was then sought, reviewed and summarised. The research evidence, and expert testimony, were used to develop the draft recommendations. The draft guidance was consulted upon, responses reviewed, and the process quality assured by an independent Guideline Review Panel involving clinicians, academics and a patient and a pharmaceutical industry representative.

NICE have produced and updated dementia guidelines (2006, 2018) and a health technology appraisal for donepezil, galantamine, rivastigmine and memantine[i] (2011). In addition, the NICE (2018) dementia guideline references standards in related NICE guidelines, for example, delirium guideline (NICE, 2019) and falls in older people (NICE, 2013). The NICE (2018) dementia guideline covers topics relating to the assessment and diagnosis of dementia, pharmacological and non-pharmacological person-centred care, care coordination and staff training. Like other guidelines, the dementia guideline (NICE, 2018) makes recommendations where there is sufficient evidence, and provides advisory considerations where the development group's judgement of 'best practice' is given.

The topics selected in the NICE (2018) guideline overlap[ii] with those identified as best care by the Alzheimer's Society (2018). The Alzheimer's Society 'hospital care' guideline was produced by clinicians and reviewed by people affected by dementia, and centres on the care from family and friends who support people with dementia. Both the NICE guideline and the Alzheimer's Society guideline inform the standards in the national audit of dementia.

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[i] Donepezil, galantamine and rivastigmine are acetylcholinesterase (AChE) inhibitors recommended for people with mild to moderate Alzheimer's disease. Memantine is a glutamate receptor antagonist recommended for people unable to take AChE inhibitors, and those with severe Alzheimer's disease.

[ii] For example, the NICE dementia guideline (2018) says, "Before starting non-pharmacological or pharmacological treatment for distress in people living with dementia, conduct a structured assessment to: explore possible reasons for their distress and check for and address clinical or environmental causes (for example pain, delirium or inappropriate care)" (Section 1.7.1). The Alzheimer's Society guideline (2018) says, "It is helpful for relatives and friends to share information with ward staff on how the person's dementia affects them. You can also suggest tips on the best ways of assisting and communicating with the person… As information can be lost or forgotten, it can help if a friend, carer or family member writes down some important facts about the person with dementia. This can then be given to the named nurse at the first meeting and should be held in the person's medical notes." (Section 1)

1.6.2 Implementation of best practice in dementia care, and the use of national audits

At a European level, there is variation between countries in the delivery of evidence-based dementia care (Act on dementia, 2019). In the UK at the start of the current study, the then Prime Minister (David Cameron) highlighted gaps in the delivery of evidence-based care for people with dementia, including: the use of clinical risk management; interventions to reduce vascular dementia; support for carers; and transfer between care homes and hospital (Department of Health, 2015). Increasing the implementation of best practice remains a policy priority (Table 1.1).

Gaps in the delivery of best practice for people with dementia may be greater in hospital than in care homes. In England, the Care Quality Commission (2014) has examined the experience of people with dementia and found that 56% of hospitals have gaps in the assessment of patient need, whilst 46% of hospitals have aspects of variable or poor care in the meeting of physical, mental health, emotional and social needs. This compares to 29% and 34% respectively in the care homes the Care Quality Commission assessed. The Care Quality Commission also found that both staff knowledge and use of NICE guidance was poor or variable in 33% of hospitals.

To assess and close the gap between current and best practice, NHS England commissions national audits through the National Clinical Audit and Patient Outcomes Programme (NCAPOP) (HQIP, 2020a). National audits are a form of audit and feedback. Audit and feedback is a ’summary of the clinical performance of healthcare provider(s) over a specified period of time’ (p5, Ivers et al, 2012). Prior to undertaking the current study, there had been two national audits of dementia care in general hospitals (Table 1.2). These previous audits reveal opportunities to improve aspects of care important to patients and carers (section 1.3.2), including nutrition, managing agitation and pain, communication and discharge from hospital. These gaps may indicate factors associated with findings that people with dementia have longer admissions and worse outcomes (Sampson, 2009).

Case notes contained:	2011 (%)	2013 (%)
Multidisciplinary assessment	70	50
Evidence that the patient was asked about any continence needs	81	87
Evidence that the patient was asked about the presence of pain	76	87
A referral for assessment by liaison psychiatry	17	16
A section dedicated to collecting information from a carer, friend or relative	43	45
Information collected about the person with dementia regarding:		
Personal details	45	55
Support with personal care	73	71
factors that might cause distress to the person with dementia	24	34
Support to calm	18	25
Life details which aid communication	34	46
Evidence that a copy of the plan had been passed on to patients or carers	41	66
Evidence that cognitive impairment was assessed by standardised testing at the point of discharge	17	19
Evidence that symptoms of delirium (where present) were summarised for discharge	27	48
Summary of symptoms of persistent behavioural and psychiatric symptoms of dementia (where present) for discharge	28	43
Evidence that an assessment of the carers current needs had taken place before discharge	75	72
Evidence that the place of discharge and support needs had been discussed with the person with dementia	42	57
Evidence that the place of discharge and support needs had been discussed with the carer/relative	80	80

Table 1.2: Selected national audit of dementia results (Royal College of Psychiatrists, 2011; Royal College of Psychiatrists, 2013)

The first cycle of the national audit collected data about the quality of care through observations, surveys with carers and staff, an organisational checklist completed by positional leaders and case note review. The second cycle collected data through an organisational checklist and case note review. Based upon the results from the use of different methods, the authors drew conclusions about the nature of the implementation gap:

> "There is little correlation between the two elements of the core audit (organisational checklist and case note review), indicating that the presence of a hospital policy or procedure is not a good marker of actual practice. This finding was borne out at the level of individual standards. For example, at hospital level the percentage of case notes showing that a mental state assessment had been carried out was not significantly different between those hospitals that had a policy specifying the assessment and those that did not," (Royal College of Psychiatrists,2011; p11).

As this statement indicates, hospital policy may not be sufficient to increase the implementation of best practice (e.g. Capoccia et al, 2012; Beidas et al, 2013). I now describe background, content and effectiveness of a strategy to implement best practice, audit and feedback. Further implementation strategies are discussed in section 3.5.

1.7 Audit and feedback (A&F)

Audit and feedback is a complex intervention that involves gathering data ('audit') and giving feedback on performance over a specific period of time (Ivers et al, 2012). It has been much used in healthcare to assess and increase the delivery of best practice.

1.7.1 History to audit and feedback

Audit has been part of healthcare for over 150 years (e.g. Semmelweiss, 1851; Nightingale, 1863). In the 1950s, there were examples of systematically gathering and feeding back clinical performance data at a state or national level (e.g. 1950s Michigan described in McWhinney, 1972; Instigation of the National Confidential Enquiry into Maternal Deaths in 1952, described in Duncan, 1980). The provision of feedback on clinical performance began to be routinely implemented in healthcare in the United States and United Kingdom (UK) in the 1970s under the name medical audit (e.g. McWhinney, 1972; Curtis, 1974). In the UK, the use of audit and feedback was formalised in the white paper *Working for patients* (Department of Health, 1989), which sought to "improve the quality of patient care by creating the conditions which would lead to clinical audit becoming part of routine practice for all health care professionals” (p1; National Audit Office, 1995). By 1998, the then UK Chief Medical Officer, Liam Donaldson, wrote that,

> “the implementation of clinical audit in the NHS is not a complete success. Concerns have focused: on the failure of audit processes to detect and moderate significant clinical failures; on incomplete participation; on the lack of connection and flow of information to those responsible for managing services; on substantial declines in the amount of regional audit; and on the value for money for what amounts to a significant annual investment.“(p62)

Subsequent work to improve the use of audit and feedback has included regulation (e.g. Care Quality Commission, 2019), education (e.g. Intercollegiate surgical curriculum programme, 2017) and the creation of organisations to support both the implementation (e.g. National Quality Improvement and Clinical Audit Network http://www.nqican.org.uk/) and commissioning (e.g. Healthcare Quality Improvement Partnership https://www.hqip.org.uk/) of audits.

Audit and feedback has been criticised for undermining public confidence in healthcare (Baron, 1983), reducing time to care (Baron, 1983) and feeling threatening and/or boring (Paton, 1987; Dixon-Woods et al, 2019). More recently, a link between the perception of audit and feedback and its effectiveness has been identified: Hysong et al (2006) proposed that feedback perceived to be punitive may be less actionable, and as a result less likely to lead to improvement. Evidence describing the effectiveness of audit and feedback is discussed below.

Within large-scale audits, such as national audits, there are challenges in data accuracy, reliability and completeness (Black and Nossiter, 2011). Clinical audit has been criticised as a way of increasing management influence over professional clinicians (Tomlin, 1991; Black and Thompson, 1993), however participation in high-quality audit and feedback has also been described by clinical leaders as a way for professionals to demonstrate trustworthiness and retain self-governance (Dixon-Woods et al, 2019). Exploring ideas of managerialism and professionalism, Dixon-Woods et al (2019) postulate that national audit forms part of the managerial-professional hybrid work where, “local creativity in use of data and technology for professionally led change interacted with the national-level movement towards transparency" (p9). That audit may increase management influence, support professional self-governance and align with policy drivers demonstrates that audit and feedback may have a role as a 'boundary object', affecting power dynamics both between and within organisational structures (Star, 1990). This thesis describes external influences upon the audit work and how healthcare workers use the audit to generate organisational change. However, the focus is on the content and delivery of the national audit in order to find ways to enhance its impact on care, rather than power dynamics between actors.

1.7.2 Descriptions of the content of A&F

There are different conceptual models describing stages to the audit and feedback process. Healthcare Quality Improvement Partnership is the organisation responsible for commissioning many of the national audits in England. They describe four stages: preparing and planning; measuring performance; implementing change; sustaining improvement. Recent guidance (Healthcare Quality Improvement Partnership, 2020b) describes what should happen during each of these stages, for example, "where data collection takes place over an extended period, or multiple data collectors are involved, a protocol for data collection should be developed. This should define the data sources and provide all the information necessary to ensure that data is collected consistently" (p6), and "the results should be shared with the stakeholder group. If the findings show non-compliance with standards, the underlying causes for non-compliance must be established using various methods/ tools/ creative approaches to enhance understanding of results" (p8). In 2002, the then National Institute for Clinical Excellence (NICE) described five stages: preparing for audit; selecting criteria; measuring performance; making improvements; sustaining improvements. They proposed that alongside these stages there should be work to create a supportive environment involving staff preparation and an understanding of audit methods. They expand on this describing structural aspects (e.g. leadership, personal development plans, advice, training) and cultural aspects of a supportive environment (e.g. positive attitude, lack of fear and audit given a high priority). NICE (2002) also stated that, "the NHS needs to make sure that it uses audit methods that…result in real improvements" (p8). This thesis explores what happens in practice with the national audit of dementia, describing the audit's current content and delivery and the considering the extent to which this can be enhanced through the implementation of evidence- and theory-informed components. The next sections provide a foundation for the thesis by describing evidence for audit and feedback, characteristics associated with greater improvement and the extent to which these are applied in practice.

1.7.3 Evidence about A&F

One challenge made by Scally and Donaldson (1998) was that audit and feedback may fail to improve care. There have been over 140 randomised controlled trials of audit and feedback and five Cochrane reviews of the evidence described. The reviews have shown that audit and feedback leads to approximately a 5% absolute improvement in care (4.3%, Ivers et al, 2012; 5%, Jamtvedt et al, 2006; 7%, Thomson et al, 2000), but that as with other implementation strategies, there is important variation in the effectiveness of the audit. The most recent Cochrane review (Ivers et al, 2012) reviewed 140 trials and found the interquartile range in absolute improvement for continuous variables was 0.5% to 16%. Importantly, the review described a number of influences upon the effectiveness of A&F. These relate to: initial baseline performance, the frequency of the feedback, the nature of the feedback (the person giving feedback is a supervisor or colleague and whether feedback is both verbal and written); and the inclusion of targets and an action plans as part of the feedback. The type of practice change required (e.g. to decrease or increase the frequency of a behaviour) may also affect the extent to which audit and feedback changes practice. The review also examined whether the health professional receiving the feedback was a physician and found no significant impact of this upon the effect. A review of feedback from medical registries (defined as, “systematic and continuous collection of a defined data set for patients with specific health characteristics” (van der Veer et al, 2010; p1)) found included studies reported that the perceived quality of the data, the motivation of the recipients, organisational factors (e.g. quality improvement capabilities, lack of alignment to financial incentives, resources, management support) and feedback recipients’ outcome expectancy may influence the effectiveness of medical registry feedback.

Looking beyond randomised controlled trials and focusing on the use of audit and feedback in dementia care, Sykes et al (2018) searched eight databases to identify influences upon the effectiveness of audit and feedback in dementia care. Four thousand five hundred and eight titles and abstracts were screened, 120 articles assessed, and 13 studies were included. I quality assessed the included studies and extracted data using the template for intervention description and replication (TIDieR) (Hoffmann et al, 2014b). None of the included studies had a comparison group, and all studies had at least three sources of bias. Two-thirds of the information in the TIDieR framework was present in the included studies. Data were synthesised graphically using adapted harvest plots (Ogilvie et al, 2008), however bias within included studies and gaps in reporting hindered the ability to draw conclusions about effectiveness. I found weak evidence that stakeholder engagement in the audit and analysing influences upon performance may increase improvement.

Recognition of the variation in the effectiveness of audit and feedback has led to a call (Grimshaw et al, 2019) to increase the use of head-to-head trials that test different content and delivery of audit and feedback. For example, Kiefe et al (2001) found that providing a peer comparator increased the improvement from audit and feedback, compared to audit and feedback without a comparator. Mitchell et al (2005) found that giving additional information that prompted action in relation to specific patients led to increased improvement, although Herrin et al (2006) found no influence from additional patient-specific information. More recently, Roos-Blom and colleagues (2019) found giving selectable barriers and actions with the feedback led to improvements in care delivery, compared to feedback alone.

An exploration of the UK National Health Service Blood and Transplant National Comparative Audit (Gould et al, 2018) describes what happens when feedback from the audit reaches the hospital. This study of four hospitals used interviews, observations and documentary analysis. They found that the data were initially received by members of the blood transfusion team and disseminated to member of the blood transfusion committee (typically including a blood transfusion practitioner, laboratory manager and medical consultant). At each hospital there was evidence that people involved in prescribing transfusions did not receive feedback. Participants described barriers and enablers to the use of performance feedback (Table 1.3). They described that audit and feedback may not influence practice change and that this was influenced by the nature of the feedback and participants' reported beliefs about implementing change:

Theoretical domain (Atkins et al, 2017)	**High frequency theme**
Social influences	Feedback is (not) shared and discussed with the relevant staff Feedback should come from someone whom staff know or respect, to influence change Comparing our performance against national performance is (not) useful for identifying areas for improvement I (do not) have influence over practice change
Behavioural regulation	We have to amend the feedback to make it relevant to our hospital We try to monitor practice by re-auditing, re-feeding back and following up We (do not) set goals or make action plans as a team Support materials could be useful for some staff We need or use strategies to remind staff of actions and recommendations
Social/professional role and identity	It is clear who is responsible for audit and feedback
Knowledge	Staff (do not) know about NCA audits
Motivation and goals	Other demands take priority over responding to audit and feedback
Environmental context and resources	We require sufficient staff to conduct audits and/or respond to feedback
Beliefs about consequences	Audit and feedback does (not) influence practice change
Memory, attention and decision processes	I notice only information that is new, 'leaps out' as different or is clinically relevant to me

Table 1.3: Reported theory-informed influences upon the effectiveness of the national blood transfusion audit (Gould et al, 2018)

Christina et al (2016) used semi-structured interviews to explore the reported perceptions of audit of 14 Canadian nurses who provide direct patient care and receive audit feedback.

Their responses identified components of the content and delivery of audit and feedback that were important to participants. Nurses reported that it was important that they understood the purpose of the audit, and that it was relevant to personal and team priorities. The content and delivery of feedback was also important, including the timing of feedback as important, referring to how feedback fits into their daily workflow. Individual differences between nurses in terms of their receptiveness to feedback, desire to support team performance and their perceived accountability were also identified as important. Also in Canada, Sinuff et al (2015) interviewed 72 intensive care clinicians about their experience of audit and feedback. The clinicians again described their response being affected by the content and delivery of the audit and feedback, including transparency of the audit and the credibility and timeliness of the feedback. Feedback was described as not being actionable, in part because it was delivered by email or via a noticeboard. In addition to the content and delivery of the feedback, D'Lima et al's (2015) study of UK anaesthetists' views found that the reported usefulness of audit and feedback was affected by departmental climate for quality improvement. More recently, an interview study of the experience of workers at five UK hospitals (McVey et al, 2020), described opportunities to enhance national audits. These included reducing the cost of data collection and delays in getting feedback and improving the delivery of the feedback so that it reaches clinicians or hospital board members. Those who received feedback reported consideration of the credibility of the feedback and the organisation response being affected by competing priorities.

In summary, there is evidence from randomised controlled trials that audit and feedback is an effective strategy to improve clinical performance, however, there is variation in its effectiveness. Systematic reviews of the literature have identified sources of variation relating to baseline performance and the content and delivery of the feedback (namely repeated, verbal and written feedback from a peer or supervisor and including an action plan). Qualitative studies describe further potential sources of variation and opportunities to enhance audit and feedback. Potential enhancements may relate to clarity of purpose for the audit and feedback, data collection, the content, delivery and reach of the feedback (including the timeliness and credibility of feedback). The subsequent organisational response may be affected by the climate for quality improvement and the fit between the audit and local priorities. Chapter 3 describes further, theory-informed potential influences upon the effectiveness of audit and feedback.

1.8 Positionality

Describing the position of the researcher (Pope and Mays, 2020) at the outset of a study, and subsequent reflexivity (Hammersley, 1990), are important to enable the reader to interpret the findings. Here I describe my position at the start of the work. Later chapters present my reflections upon the study, including a description of my role, potential influence, mitigations and potential residual influence at different stages of the study (Table 5.7).

I am a male nurse and health service manager, with a nursing qualification, psychology degree and a masters' degree in business administration. At the start of the work, I had been a nurse for 19 years. I had clinical experience principally in acute care, but with little involvement in the care of people with dementia. My health service management work was in clinical governance and quality improvement. Dementia care was selected as the focus of the current study based upon prevalence, gaps in care and being a national priority. I had undertaken audits at a ward level and facilitated organisation-level audits. I had never been involved with the national audit of dementia, although ten years before the start of the study I had facilitated the development of a care pathway for dementia across a Scottish health board. I had managed the clinical governance teams at hospitals in England and in Scotland but had never been responsible for the local co-ordination of national audits. After commencing the study, but prior to data collection, I became the quality improvement lead to a different national audit provided by a different organisation (national diabetes audit provided by DiabetesUK). The national diabetes audit has the same audit commissioner as the national audit of dementia (HQIP). My motivation for seeking the national diabetes audit role was to provide further opportunities to improve care, to implement research and to inform future studies.

I anticipated that different stakeholders would view me differently, and that this might affect engagement and openness. In interacting with study participants, gatekeepers and stakeholders, I primarily introduced myself and enacted in my role as a nurse undertaking a PhD, although I also disclosed my clinical governance experience where this came up or I was asked about it. As my national audit role emerged in the course of the study, I did not go back to specifically disclose that, however the audit commissioner involved in the advisory group was aware.

I am interested in audit and feedback as it is a much-used intervention which is variably effective. I was aware of evidence and theory describing influences upon effectiveness and thought that identifying gaps and a strategy to implement enhancements could impact upon the care of a large number of patients. In developing the study, I drew upon my experience of leading organisation- and national-level quality assurance and improvement approaches and was self-critical of my own lack of reference to literature. I anticipated that others may also not use theory or evidence and felt that this may be as a result of a lack of implementation activity to increase the use of best audit and feedback practice. I viewed audit and feedback as an intervention used both to assure and improve the use of best practice. I thought that the development of skills addressing gaps in the design of audit and feedback may provide an avenue to future work to increase the use of evidence and theory in other organisation-level interventions. Reflexivity and stakeholder involvement mitigated the opportunity for my work motivations to influence unduly the study findings.

At the outset, I drew a diagram illustrating what I thought happened in audit and feedback. This diagram demonstrated a multi-stage process based upon prior reading and experience. Surfacing these pre-conceptions increased my awareness that they may affect the method and outputs from the study. I used personal reflexivity, participant validation, stakeholder involvement in sampling and synthesis, and supervisory team input to minimise the potential influence of my pre-conceptions.

1.9 Conclusion

A quarter of patients in hospital have dementia. They may experience hospital care negatively and receive poorer quality care than other patients. Increasing the quality of care has been a government priority since 1997. More specifically, improving hospital care for people with dementia has been a priority since 2007. The national audit of dementia is a policy-led intervention to improve care for people with dementia. The national audit of dementia is a form of audit and feedback. Audit and feedback is a variably effective intervention. This doctoral study aims to describe the content and delivery of the national audit of dementia, identify and specify potential enhancements and develop a strategy to implement the enhancements. The purpose of this work is to improve the hospital care for patients with dementia.

Chapter 2. An overview of the aims and methodology

2.1 Research question

This thesis asks the research questions, how is the national audit of dementia currently undertaken, are there potential enhancements that could improve the effectiveness of the national audit, and if so, how should these enhancements be implemented?

2.2 Aims

This study aimed:

1. To describe the content and delivery of the national audit of dementia
2. To identify and specify enhancements to the national audit of dementia in order to increase the receipt of evidence-based care by patients with dementia.
3. To develop an organisation-level focused strategy to implement the enhancements.

2.3 Developing complex interventions

Audit and feedback is a complex intervention[i] (Ivers et al, 2012). There is a lack of evidence about the best method for developing complex interventions (O'Cathain et al, 2019), however there are common elements to existing best practice principles (e.g. Craig et al, 2008; Czajkowski et al, 2015; Kok et al, 2014; Bleijenberg et al, 2018; O'Cathain et al, 2019). In Table 2.1, I bring together the key sources of guidance and illustrate how selected guidance supported the use of evidence, theory and stakeholder involvement and a defined approach to implementation. This guidance also advocated the use of iterative methods to develop complex interventions, for example, O'Caithain et al (2019) highlighted that co-production can provide a method through which repeated cycles of assessment, review and refinement involving stakeholders are undertaken.

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[i] Craig et al (2006) define complex interventions as having several interacting components which may involve multiple behaviours, have a range of possible outcomes, target different levels and/or populations, and allow variation in how they are delivered.

	Evidence	Theory	Stakeholder	Implementation
Craig et al (2008)	Identify the evidence base, ideally by carrying out a systematic review Test procedures	Identify / develop theory from relevant disciplines. Model the process and outcomes	Engage stakeholders, including through primary research and/or in the development / delivery of the intervention.	Disseminate, monitor implementation and sustainability. Think about implementation at an early stage. Identify stakeholders and what they need to know, who/what might facilitate implementation and what are the barriers
Czajkowski et al (2015)	Identify a clinical problem Identify / generate evidence of intervention components that affect drivers of risk	Identify drivers of risk and the methods by which these drivers can be altered. Present this as a pathway.	Identify a clinical problem Engage the community in user-centred strategies	Identify the attitudes, norms and values that affect intervention acceptability and feasibility.
Kok et al (2014)	Understand the need for the intervention and community capacity (context) Select important and changeable determinants (variables) Specify the evaluation design	Select important and changeable determinants Identify theoretical methods (model of link between method, variable and outcome) Select or design application Ensure application addresses change objectives	Establish participatory planning group and later re-evaluate membership Select important and changeable determinants Generate programme ideas with planning group Consult intended participants and implementers	Design the intervention to facilitate adoption and implementation

Bleijenberg et al (2018)	Synthesise existing evidence to identify what works, for whom, which components are modifiable. Additional research may be required to fill gaps in existing theoretical understanding.	Develop strong conceptual and theoretical basis, including a theoretical understanding of the change process. This may build upon existing theory or use a grounded theory approach. The theory needs to be translated into practical application. Presentation of a logic model may help clarify causal pathway.	Define the problem and the stakeholders. Understand context, including individual needs, capacities, preferences and fit with routine practice. Model the intervention with the multidisciplinary team. A user-centred approach involving multidisciplinary team of researchers and experts. Consult stakeholders.	Examine existing practice to identify barriers and facilitators to implementation. Use this information to optimise the intervention and consider the implementation route and potential impact on stakeholders.
O'Cathain et al (2019)	Review published research about existing interventions and each intervention component. Use a wide range of research methods throughout. Understand the context. Check proposed mechanisms are supported by early testing. Identify the best way to work with stakeholders	Identify theory or framework to inform intervention. Where relevant, draw on more than one theory or framework. Develop a programme theory, potentially represented as a logic model. Test and refine the programme theory throughout development.	Identify the problem and address whether it is a priority, needed and the intervention justifies development costs. Identify the best way to work with stakeholders. Include people with relevant expertise in the development team.	Understand facilitators and barriers to implementation and sustainability. Each iteration includes assessment of acceptability, feasibility and how engaging the intervention is.

Table 2.1: Recommendations for the use of evidence, theory, stakeholder involvement and consideration of implementation drawn from selected complex intervention guidelines

2.4 Study design

Figure 2.1 represents the study design and illustrates the integration of evidence, theory and stakeholder input. Stakeholder involvement described in this thesis was underpinned by my synthesis of the literature (Section 2.5.1). I worked with stakeholders to co-produce the description of current audit and feedback practice. This involved working closely with a co-production group, supported by an advisory group of wider stakeholders. I defined co-production as, “an approach in which researchers, practitioners and the public work together, sharing power and responsibility from the start to the end of the project, including the generation of knowledge” (p4, Involve, 2018). Section 2.5.1 provides a detailed description of the methodology for stakeholder involvement. It also illustrates that both the co-production group and the advisory group undertook important roles in the study, as such I refer here to stakeholder involvement (rather than co-production) as the methodology.

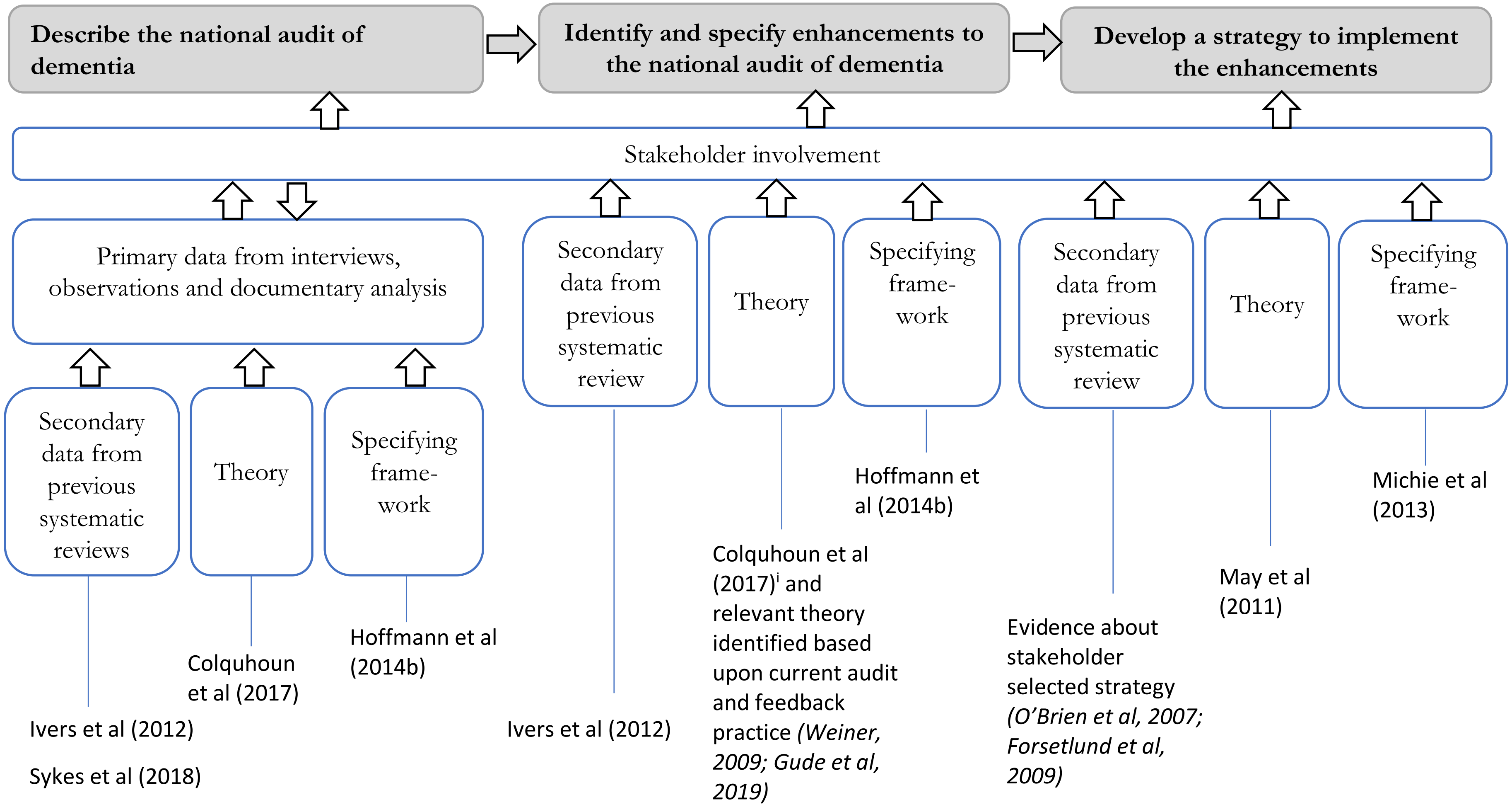

Figure 2.1: An overview of the study design indicating key inputs to intervention development

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[i] Brown et al (2019) is applied in the description of potential enhancements in this thesis, but was published after the intervention development work and, as a result, did not inform intervention development

2.5 Methodology

This study employed multiple qualitative methods to describe the current content and delivery of the national audit of dementia. The description was used to support a complex intervention development study. Stakeholder involvement was central to the method of both the description and intervention development work and was undertaken through the creation of two groups: a co-production group and an advisory group. Here, I provide background to the stakeholder involvement methodology, and to the multiple qualitative methods used within the thesis. Throughout this thesis, I take the interpretivist perspective that reality is constructed and needs to be interpreted (Pope and Allen, 2020).

2.5.1 Stakeholder involvement

As illustrated in figure 2.1, stakeholder involvement supported each aim. Stakeholder involvement is a form of participation, which "as a research method means that people are involved in health research in specific ways in order to improve the quality of the research" (p4; International Collaboration for Participatory Health Research, 2013). Stakeholder involvement is an important method for intervention development (e.g. O'Caithain et al, 2019). This section describes stakeholder involvement as a methodology and highlights key decisions that determined the design of the study. Within the design work, later methodological considerations were based upon earlier decisions (for example, the determined reason for involvement affects how stakeholders are prepared). As a result, whilst this section focusses on methodological considerations relevant to the study, it is necessary to summarise the decisions made and methods selected. The stakeholder methodology in the current study predominantly draws upon literature describing involvement in complex intervention development, but also includes salient messages related to patient and public involvement in research (e.g. Involve, 2018).

Figure 2.2 presents a synthesis of the methodological considerations to the design of stakeholder involvement in the current study. It illustrates that the reason for involvement is central to the determination of the method for involvement. It also shows that planning the method is a non-linear process, with feedback loops between decisions.

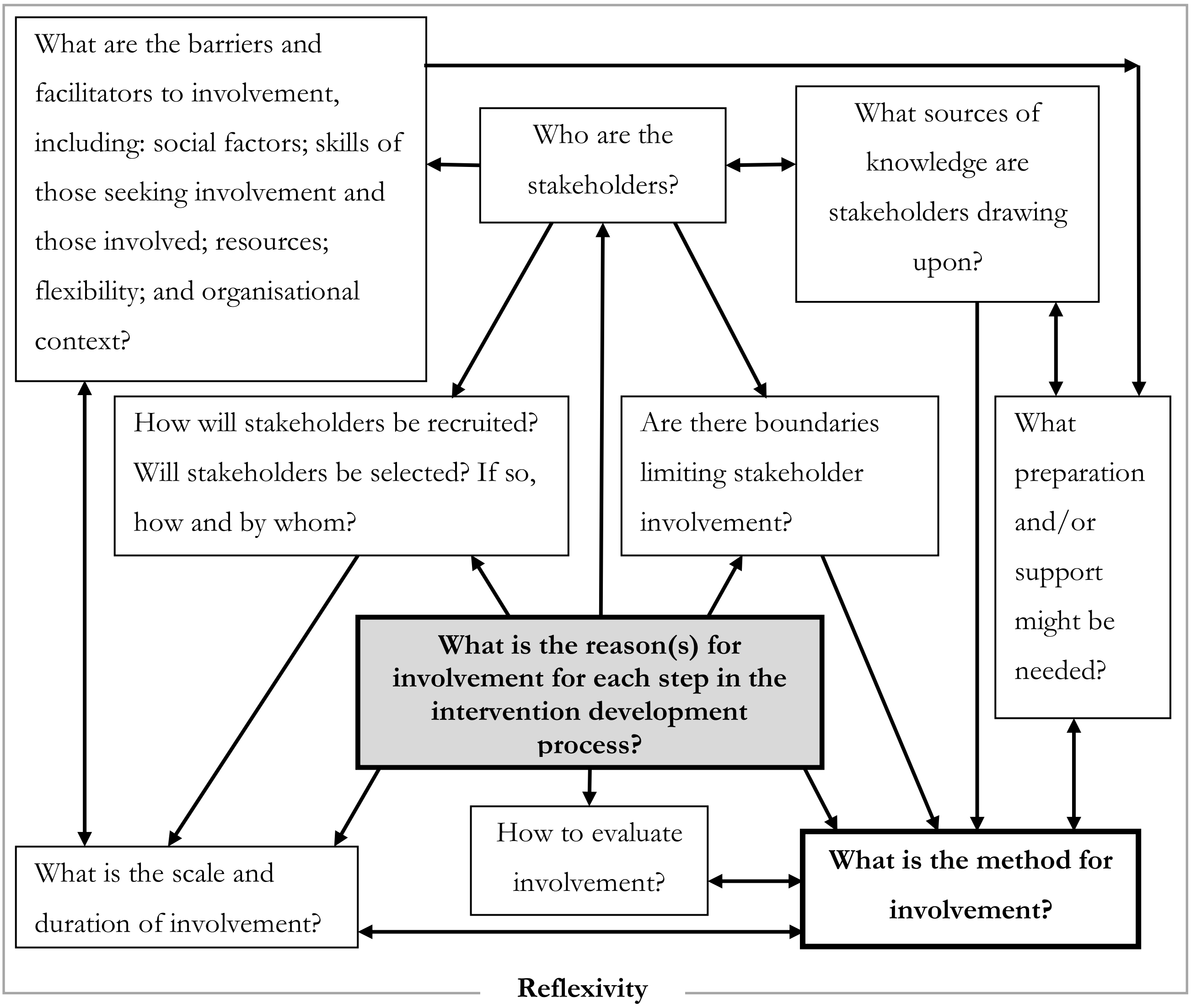

Figure 2.2: My synthesis of the key methodological considerations in designing stakeholder involvement in the present study

Intervention developers involve stakeholders for a broad range of reasons (Blackstock et al, 2007). Normative reasons include, the enrichment of society and individual citizens (Involve, 2018) and the development of social capital (Ziersch and Baum, 2004). Instrumental involvement seeks to meet other goals. For example, involvement has been used: to support implementation; to meet the expectations of journal editors (Mayo-Wilson et al, 2013), funders (Madden et al, 2020; Lowes et al, 2010) and regulators (Ives et al, 2013); to gain access to a research environment (Doyle and Timonen, 2010); and to advance personal goals, such as to understand the views of others or to create the opportunity for self-promotion (Johansen, 2019). Stakeholder involvement may support implementation by increasing the acceptability, feasibility, practicability and appropriateness of the intervention (O’Cathain et al, 2019). Stakeholder involvement may also increase ‘buy-in’ (e.g. Breuer et al,

2014) and the willingness to support the intervention (e.g. Craig et al, 2008), including through the development of consensus (Craig et al, in press). Box 2.1 presents reasons for involvement sometimes undertaken in the development of complex interventions. There might be multiple reasons for each stakeholder, and these might vary over time (Hewitt et al, 2013; International collaboration for participatory health research, 2013; Hayes et al, 2012).

1. As identifiers of the need for research, recognising that different stakeholder groups identify different priorities (Kok et al, 2004; Craig et al, in press).
2. To support recruitment (O'Cathain et al, 2019)
3. As theory developers about how the intervention works, the context and opportunities for enhancement (Kok et al, 2004; O'Cathain et al, 2019, Craig et al, in press).
4. As boundary setter or enabler, where the stakeholder constrains or facilitates the design, implementation or evaluation design (Craig et al, in press).
5. As determiners of the potential outcomes from the intervention (e.g. Craig et al, 2008; Kok et al, 2004; Potter et al, 2016), both desirable and not.
6. As facilitators to implementation (Kok et al, 2004; Craig et al, in press).
7. As those who identify these facilitators and barriers, as such addressing ideas of feasibility, and acceptability (Bleijenberg et al, 2018; Craig et al, in press).
8. To support the dissemination of research (Mayo-Wilson et al, 2013; Craig et al, in press).

Box 2.1: Reasons for stakeholder involvement identified in complex intervention guidance

Clarity about the reason for involvement in a particular study informs whom to involve (Lomas, 2007; Armstrong et al, 2013). Stakeholders have been described as people with a legitimate interest (Donaldson and Preston, 1995) and, "those who are targeted by the intervention or policy, involved in its development or delivery, or more broadly those whose personal or professional interests are affected" (p18) (Bryson et al, 2011). Recent guidance has highlighted the importance of identifying and involving members of the target population (O'Caithain et al, 2019). Stakeholder analysis (Bryson et al, 2011) can provide a framework through which stakeholders are identified, although different criteria have been proposed for their selection (e.g. interest, power, salience; Mitchell et al, 1997).

The reason for stakeholder involvement in the methodology for this thesis is to support implementation. I proposed that developing the intervention using the different perspectives, knowledge and language of stakeholders could support implementation, by improving feasibility and acceptability (Bleijenberg et al, 2018). I undertook stakeholder analysis (Bryson et al, 2011) and considered the power dynamics between groups (Ottmann et al, 2011); for example, the presence of a regulator may inhibit the expression of views by clinical audit staff. It is important that the method places those people most affected by the feasibility, acceptability and implementation of the intervention at the centre of its development (O'Caithain et al, 2019; Bray-Burrows et al, 2016; Arnstein, 1969). Within the current study, I decided that those stakeholders most affected by the intervention should be more central to its design and that this should be reflected in differences in the objectives they were asked to support.

There are contested views about the role of patient involvement in implementation research (such as research into audit and feedback), where the goal is behaviour change in health care workers (Gray-Burrows et al, 2018). Healthcare Quality Improvement Partnership (HQIP) (2020) described multiple opportunities for patient and public involvement in audit and feedback. HQIP proposed that patients and the public are recipients of audit feedback and should be involved in developing the audit measures and supporting the use of audit results. The funder (National Institute for Health Research, 2019) and journal editors (Mayo-Wilson et al, 2013) provided further support for patient and public involvement. The current study involves patients and carer stakeholders as they are affected by the intervention and their involvement can inform the design of audit and feedback.

The current study involved a co-production group including: carers (n=3), clinical leads for dementia care (n=3) and organisational leads for clinical audit (n=3). The advisory group included a patient (n=1), and representatives from the regulator (CQC) (n=1), relevant professional bodies (RCN) (n=2), audit provider organisation (Royal college of psychiatrists) (n=1), audit commissioner (HQIP) (n=1) and behaviour change researchers (n=3). The co-production group objectives are illustrated in figure 2.3. The objective of involvement of the wider stakeholders (the advisory group) was to provide advice to the co-production

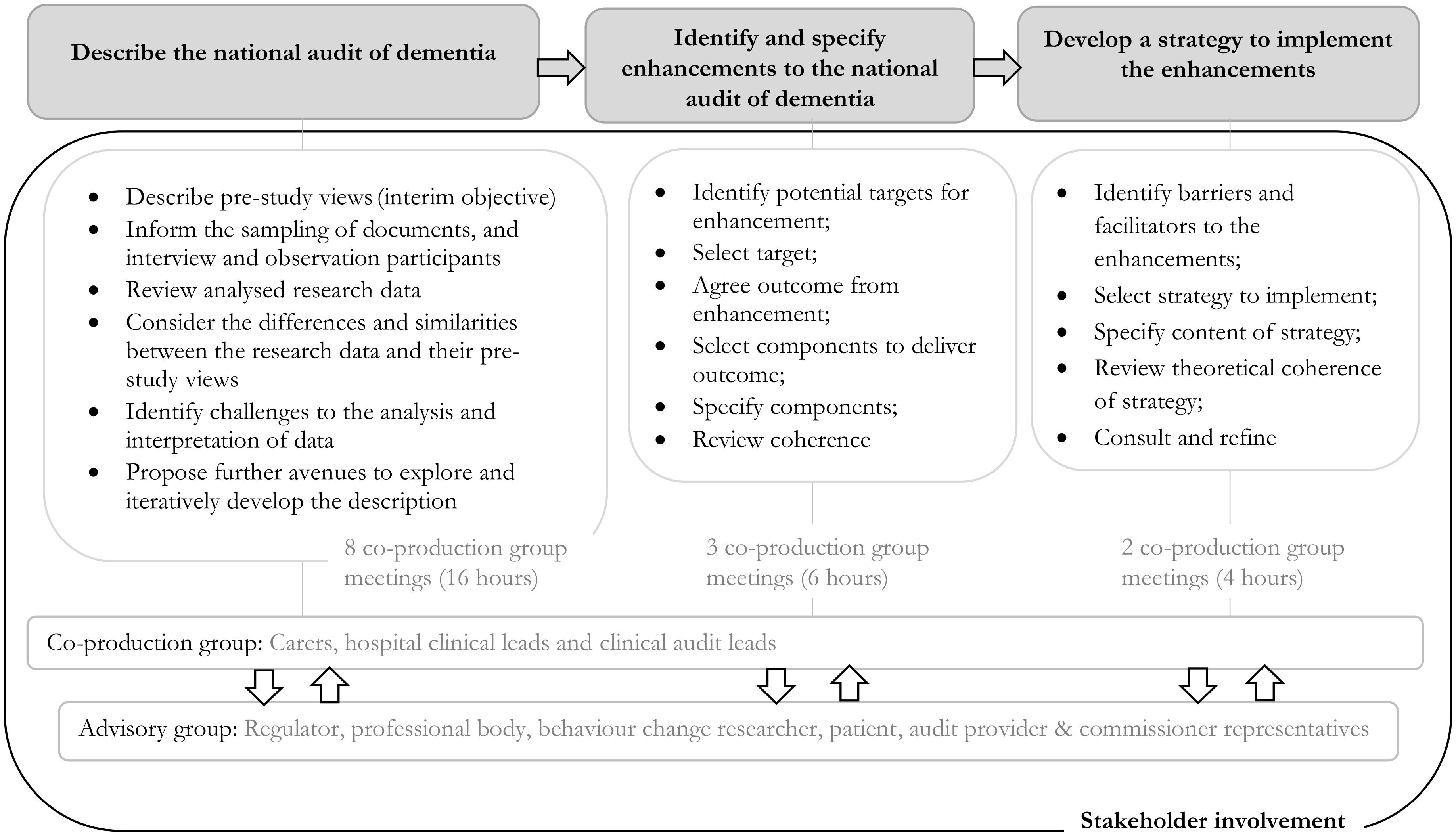

Figure 2.3: An overview of the stakeholder involvement indicating aims, objectives and group structure

group. Feedback loops between stakeholders, such as between the co-production and advisory groups, may allow cumulatively emergent learning (O'Caithain et al, 2019).

Consideration of the reason for involvement of specific stakeholders should also explore whether there are boundaries to their involvement (Arnstein, 1969; Department of Health, 2008b). For example, depending upon when involvement commences, the theory of change of an intervention could be based on an explicit theory, and as such, stakeholder input might be limited to how the theory is operationalised, rather than which existing theory to use. Figure 2.1 illustrated that the current study applied particular sources of evidence (including stakeholder views) and theory; I decided upon the use of some of these sources *a priori,* with other sources selected based upon findings and decisions made in collaboration with the stakeholders.

Stakeholders may draw upon distinct types of knowledge. The design of stakeholder involvement should consider which stakeholders draw upon which sources of knowledge. For example, it might be possible to involve stakeholders able to apply: tacit knowledge about practice (Mason and Barnes, 2007); evidence (Mason and Barnes, 2007); their personal agendas (Mason and Barnes, 2007); values, experience, intuition and professional rules of thumb (Rist and Stame, 2006); and expert hunches based upon political and other imperatives (Coote et al, 2004). Within the current study, work undertaken to understand the pre-study views of the co-production group members (section 1.8) sought to identify their reported prior knowledge, in recognition that this might be informed by each of the above sources. The work undertaken by the co-production group was further informed by the explicit use of both primary data from the description of the content and delivery of the national audit, and secondary sources (e.g. Ivers et al, 2012; Colquhoun et al, 2017; May and Finch, 2009).

There may be different barriers and facilitators to the involvement of different stakeholder groups. This might include the skills, resources and organisational context of the researchers seeking to involve stakeholders (Coupe et al, 2019) and of those involved (Ives et al, 2013). Guidance recommends considering the number of people involved (O'Caithain et al, 2019).

Decisions about the scale of involvement may require further trade-offs. For example, a large number of stakeholders may increase reach, but reduce feelings of safety (Anderson et al, 2016). Large numbers may also make it difficult to find a convenient time and place (Potter et al, 2016), thereby reducing consistency of group membership important to iterative development. Scale can also be informed by research resources available for the study, group dynamics and decisions about the potential activities the groups would undertake (Lowes et al, 2010). The relative number from each stakeholder population is an indicator of potential power dynamics in both a symbolic and practical way (e.g. having more clinicians involved might indicate that they are more important) (Lowes et al, 2010).

Careful consideration of the recruitment[i], selection and preparation of stakeholders is required, for example, to ensure the appropriate diversity of perspectives (Hayes et al, 2012; Charlesworth, 2018). Selection could also reinforce hierarchy between the selector and the selected, thereby impacting upon their willingness to voice diverse perspectives. The current study involved stakeholders who might provide diverse perspectives; recruitment sought co-production group members from different organisations. In relation to the hospital clinical leads and clinical audit staff, I recruited members from differently performing organisations (according to regulator assessment) that also varied in size. They were recruited by email via the hospital research team. Patient and carers were recruited based upon experience of hospital dementia care, a willingness to give their views and living in the in the North East of England. The patients and carers were recruited via an advert to four patients'/carers' groups (Appendix F). The other involved stakeholders were recruited via email. Recruitment explained that an accessible location would be agreed by those subsequently involved, and that expenses would be paid.

It was important for stakeholders to understand and agree with their potential roles and responsibilities (Armstrong et al, 2013). In terms of preparing stakeholders for involvement,

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[i] Involved stakeholders have been described as "researcher-participants" (p17 ; Robertson, 2000) As will be briefly expanded upon in section 2.8, within the current study, stakeholders will be positioned as neither 'participants' nor 'researchers'. This is because their work will be to challenge and synthesise data collected from elsewhere by someone else, before going on to design enhancements to audit and feedback and a strategy to implement those enhancements. As such, the stakeholders' input is their interpretations of the data and their development and application of evidence and theory, rather than data.

Blair and Minkler’s (2009) review of participatory research involving older adults found that researchers often trained the people being involved; such training might empower stakeholders (Ives et al, 2013). However, previous authors have noted that preparing people for involvement through training may limit innovation (Mason and Barnes, 2007), set a dynamic indicative of expert and non-expert (Wehrwein, 1996) and prevent those involved acting as a lay person (Ives et al, 2013). Reflexivity and consideration of positionality were important to the stakeholder involvement work (Sultana, 2007). Within the current study, ‘preparation’ of the co-production group members was through discussion of the research objectives and fixed elements to their involvement, the agreement of the ground-rules, the use of an ice-breaker and work to expose pre-study understandings of audit and feedback. The fixed elements were to use evidence, to challenge assumptions, to seek consensus and to capture complexity. An ‘ice-breaker’ exercise sought to flatten hierarchy within the group and demonstrate the value of different perspectives and experience. Preparation of the advisory group involved introductions and the agreement of ground-rules.

In the context of stakeholder involvement, method(s) for involvement refers to the practical ways to meet the aim of involvement. Within this thesis, the method involved consideration of group dynamics. The method sought to enable involvement whilst maintaining feelings of safety (e.g. in the presence of someone with regulatory authority; Ottmann et al, 2011) and hence openness and willingness to contribute divergent opinions were important (Mason and Barnes, 2007; Arnstein, 1969; Backhouse et al, 2016).

Facilitation can support involvement in complex intervention development (Madden et al, 2020). Facilitation is a diverse concept that seeks to guide development along a set path and/or to alter group processes (Anderson et al, 2016). Facilitation is typically responsive, such that the facilitator intervenes should dynamics become detrimental, but be less involved at other points (Baur and Abma, 2012). The facilitator can be from the research team or external to it (Lowes et al, 2010). Within the current study, I facilitated both the co-production and advisory groups.

Face-to-face discussions can support transparency of decision-making and trust (Rocco, 1998). Within the current study, meeting face-to-face might hinder feelings of safety, and these feelings might undermine group members' willingness to give diverse perspectives. I used facilitation to support feelings of safety, and to mitigate risks to engagement from face-to-face involvement. The facilitation plan differed between objectives, as described in chapters 4 and 5. The plans described the intended activities, required materials, the rationale and potential challenges, and the room-layout for different activities (Thayer-Hart, 2007) (Appendix G). Facilitation, through a series of workshops, supported the stakeholders to develop a description of the national audit of dementia (chapter 4), the identification and specification of enhancements to the national audit and the development of a strategy to implement the enhancements (chapter 5).

Evaluation of involvement can be formative and/or summative, and both are important to understand the process and outcome of involvement (Staniszewska et al, 2017). Formative evaluation of involvement can guide the content and delivery of the involvement activities. For example, feedback forms at the end of each meeting can be used to discover how the experience could be improved (Lowes et al, 2010). Within the current study, formative evaluation was through questions at the end of each co-production group workshop and reflexive practice within and between workshops. In undertaking a summative assessment, it was important to consider the chosen reason for involvement and unanticipated effects (Cornwall, 2008). There can be a difference between the intended and the experienced method of involvement. For example, a co-design approach may feel like consultation to participants rather than co-working (Bowen et al, 2013). Evaluation is often overlooked (Fudge et al, 2007).

There is a relationship between evaluation and reflexivity[i]: formative evaluations can inform reflexivity and reflexivity should examine the role of the researcher in the evaluation (Sultana, 2007). Reflexivity is important to participatory research (Sultana, 2007). Lather

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[i] Reflexivity involves, "reflection on self, process, and representation, and critically examining power relations and politics in the research process, and researcher accountability in data collection and interpretation" (p376; Sultana, 2007)

(1986) described that reflexivity requires a dialogic encounter, “to protect research from the researcher’s own enthusiasms” (p268; Lather, 1986). Whilst presented here at the end of the description of stakeholder involvement methodology, reflexivity is an on-going process (Collier and Lawless, 2016) as illustrated in figure 2.2. Reflexivity upon stakeholder involvement is considered further in section 5.4.2; reflexivity about my role in the research is explored in section 5.4.5.

In conclusion, this section describes a new synthesis of considerations in the design of stakeholder involvement (Figure 2.2). It demonstrates that the reason for involvement is central to the design of involvement. It also illustrates that the design process is non-linear. Within this thesis, the approach to stakeholder involvement was primarily designed to support implementation. I proposed that by seeking diverse perspectives from people involved with and/or affected by the national audit of dementia, I would develop an intervention based upon their language and their interpretation of evidence and theory about the national audit and strategies to implement enhancements. My reflections upon the process are presented in section 5.4.2.

2.5.2 Observational methodology

Observation seeks to discover what people do, rather than what they say they do (Saldaňa et al, 2018). In this study, I take the perspective that these observations are interpreted at the point of data collection and analysis, and during synthesis by the co-production group.

Access to the observation setting is often negotiated through a gatekeeper (Pope and Allen, 2020), and is described in chapter 4. The choice of setting to observe is often purposive, to demonstrate features, events or behaviours relevant to the aims of the study (Pope and Mays, 2011). Observations can vary based upon the extent to which the observer participates in the situation being observed, and the development of rapport with participants is important (Atkinson, 1995). Observers may (or may not) ask questions to extend their understanding. Both the inclusion and exclusion of questions and participation affects the data collected; for example, not asking questions may miss opportunities to understand or may make the situation more artificial, creating discomfort in those observed and resultant changes in behaviour. Data gathering (e.g. by note-taking or video-recording) can reduce the impact of memory, but may be more obtrusive to those being observed, thereby having a greater impact on their behaviour (Pope and Mays, 2011). Field notes may include description and inferences and should be expanded upon prior to analysis (Saldaňa et al, 2018). Data gathering can also vary between inductive and more structured, with the former being employed within the current study in order to ensure that the description of the content and delivery was rooted in current practice. Verification of observation field notes may involve seeking documents or undertaking interviews, whilst comparison with similar studies may support credibility (Pope and Allen, 2020). The method for observations in the current study is described in section 4.2.3.

2.5.3 Interview methodology

As stated above (section 2.5), I took an interpretivist stance and, as such, I recognise that the interviews are affected by how the interviewee interpreted my interest and my questions, as well as how I interpreted their response. From the interpretivist perspective, these interpretations are inevitable.

Interviews can vary in the extent to which they seek to generate a naturalistic interaction (Rapley, 2004). Semi-structured interviews include questions or prompts to seek to understand / explore and have been used to explore audit and feedback (e.g. Dixon-Woods et al, 2019; Gould et al, 2018). The prompts can be both open-ended to explore experiences and perceptions, and closed questions to clarify (e.g. did you get feedback). Prompt sheets allow flexibility to exclude the identified prompts and/or to discuss issues that emerge during the interview (Rapley, 2004).

Semi-structured interviews can take place face-to-face, or via other means (e.g. telephone, web-based). Face-to-face interviews may enable additional non-verbal cues to be read or given and may facilitate the generation of understanding and rapport (Rapley,2004). Undertaking interviews on a one-to-one basis may increase the feeling of security; both rapport and security may support participant openness. Interviews can take place at different venues and this may influence the data they generate (Rapley, 2004); for example, taking place in a workplace may improve convenience and therefore access to participants, but may lead to distraction that might affect data collection. Note taking may also affect the interaction, whilst recording the interview provides a record of the verbal content of the interview but may also affect the interaction (Rapley, 2004).

Interviews are affected by power dynamics and degree of neutrality, that is the extent to which the researcher introduces their own thoughts. Being non-neutral may lead to greater disclosure as the interviewee is treated more naturalistically and less as the object of interview (Fontana and Frey, 1994), and from a constructionist perspective being neutral may not be possible. The current study sought to use verbal and non-verbal cues naturalistically, prompting the giving of a response in relation to an aspect of the audit whilst having minimal impact on the content of the response. I made reference to previous findings without intentionally disclosing my own thoughts. Data from the interview were complemented by intra- and post-interview notes capturing details of the setting and immediate thoughts and reflections upon what was being said.

2.5.4 Documentary analysis

Documentary analysis gathers data from secondary sources (e.g. minutes of meetings, policy documents). These documents can provide a different insight, for example, describing what gets prioritised or recorded, or detailing expected behaviour (e.g Dixon et al, 2010). Documents may be publicly available or may require formal requests; both types may have an element of selection by actors deciding what gets recorded, stored and made accessible. Interpretation of documents involves consideration of the authorship, date and purpose for writing the document, including the intended audience (Gorsky and Mold, 2020). Issues associated with authorship include consideration of the roles of those involved and the process of document production (for example, are they minutes taken as a verbatim record by an administrator but subsequently amended and approved by a committee). Each person who influenced the document may have different motivations which may affect the content. The author’s relationship with the intended audience may also influence the content; for example, a policy document written for use by staff but also for presentation to a regulator may have different content than a purely internal document. This may also be affected by the context at the time. Analysis of the document can be deductive, for example, seeking information about a specific theory, or be used as a source from which to develop theory.

There are ethical considerations to documentary analysis. As described above, the document is the product of those who have been involved in its production. It provides an insight not only to a particular phenomenon but also to the author's interpretation of the phenomenon. Documents may be publicly available (e.g. policies), may be available to a select group of members (e.g. members of an on-line chat group) or may be intended for a very small number of people (e.g. emails). Documents should be anonymised or pseudonymised prior to analysis. Interpretation should seek not to misrepresent the author's meaning and should be undertaken in recognition that the analysis of documents has the potential to cause harm to individuals (Sixsmith and Murray, 2001). The method for documentary analysis in the current study is described in section 4.2.4.

2.5.5 Qualitative analysis

Mays and Pope (2020) described qualitative research as incorporating both qualitative methods and qualitative data analysis. Interview recordings and qualitative field notes are usually transcribed prior to analysis. The choice of analysis can influence the nature of this transcription (e.g. conversational analysis capturing and analysing intonation and pauses). Prior to analysis, it is important to check the accuracy of transcription. There are different types of analysis; in this study, I used framework analysis (Ritchie and Spencer, 1994). Ritchie et al (2013) described that analysis begins with data management, which for framework analysis involves familiarisation with the data set (typically by reading and re-reading) and the development of an initial framework of themes; these can be deductively based on a theory or inductively generated from data familiarisation (the current study used the latter approach). The data is then indexed into the framework and sorted so that themes and sub-themes are grouped together. Data extracts are linked to different themes, and additional themes sought amongst the un-indexed data. Consideration of coherence across themes and sub-themes enables the researcher to seek opportunities to divide/merge data sets. Looking for gaps (e.g. where a participant does not provide data towards a particular sub-theme) can help understand the data, particularly in relation to contextual differences, and identify further themes. Software (e.g. QSR nVivo) can help manage the data. The researcher then produces a summary, using the language of the participant where possible to ensure that the analysis remains tied to the data.

Once data management has been completed, the focus moves to abstraction and interpretation. In framework analysis, this involves developing categories by seeking elements and dimensions to the themes, creating a description of the category and applying it to the data set. Researchers then seek to link the data to existing knowledge or theory, considering similarities and differences in order to challenge their analysis and place it in the context of earlier work.

Framework analysis enables comparison between cases (e.g. individual participants, organisations), enabling differences and similarities to be identified. It can also be applied inductively or deductively, is not linked to a particular epistemology, can be used for different data sources, and has been much used in health services research (Ritchie et al, 2013). It is however time-consuming and can lead to a temptation to draw quantitative conclusions about the number of cases providing evidence for a particular category (Gale et al, 2013). Framework analysis in the current study is described in section 4.2.5.

2.5.6 Methodology summary

Within the current study, stakeholder involvement (involving co-production and advisory group input) was used as the method for intervention development. It was used within the work to describe the content and delivery of the current audit. Stakeholder involvement was also used to identify and specify the enhancements and to develop the strategy to implement the enhancements. Within the qualitative methods (interviews, observations and documentary analysis), I used a common approach to sampling and recruitment: Purposive sampling sought to identify data sources that help address the research question and was set in advance by the research team. Theoretical sampling (e.g. Glaser and Strauss, 1975) involves choosing participants based upon ideas emerging as a result of iterative data analysis. My approach sought to capture diverse perspectives by purposive sampling of sites, whilst using theoretical sampling of participants and documents to confirm/disconfirm early findings. Recruitment was through the hospital research department, which used a standard email and information sheet to potential participants. This may have increased trust in the recipient, as the source was from a hospital employee, and ensured compliance with information governance requirements about access to personal information.

2.6 Ontology and epistemology

This study aimed to describe the content and delivery of the national audit of dementia, including factors that may affect how much it improves care. The study also aimed to identify potential enhancements to current practice in order to improve care and outcomes for patients and carers. This implied that there were different forms of audit and that these can be described. It further implied that there is a better form of audit which can be identified and implemented. Differences between feedback recipients and contexts may mean that the 'enhanced' form may not be better for all participants, in all organisations.

Ontology relates to the nature of being and includes consideration of whether there is an objective reality. Where epistemology considers the gathering of knowledge, ontology describes the concept or entity that knowledge relates to. As regards ontology, in this thesis I take the interpretivist perspective that the external world cannot be reached without being seen through social constructions. This had implications for the description of the national audit, as how one person constructed reality may differ from others.

In the current study, evidence of current practice was gathered through interviews, observations and documentary analysis. This enabled richer exploration of participants' interpretations than may have been possible through more structured methods, such as surveys. The findings were reflected against the stakeholders' prior understanding. Facilitating stakeholders to reflect their pre-study views against the research evidence enabled the stakeholders to challenge their pre-study views, to identify what did not move their view, and to identify further sources of evidence that may challenge their views. From an epistemological perspective (e.g. Greener, 2001), this approach gives research evidence greater agency than experiential knowledge. An alternative approach may have been to accept their pre-study views as a representation of current practice. It could be argued that this happened in the use of interviews, where the participant gave their representation of current practice. However, the use of multiple qualitative methods to gather perspectives from multiple participants provided diverse perspectives upon the components of national audit. It also created the potential for me to influence the gathering and analysis of data and the sense-making of the co-production group, as discussed further in section 5.4.5, and led me to introduce mitigations to maintain the trustworthiness of the data (Table 5.7).

In facilitating the co-production group to compare their pre-study views with the evidence from the interviews, observations and documentary analysis, stakeholder agreement was not seen as ‘truth’, but as an indication that this is how something is understood. One implication from this is that seeking full consensus amongst stakeholders involved in the project was not appropriate. However, a group understanding of each other’s beliefs and perspectives produced a description that diverse stakeholders accepted as a representation of what happened during the national audit of dementia, and what might enhance current audit practice.

In relation to the aim to describe the national audit, “good knowledge” (Greener, 2001; p4) was that which informed the description. It included knowledge describing co-production group members’ pre-conceptions and language, describing the content and delivery of the national audit, describing existing evidence and theories of audit and feedback, and describing facets to a complex intervention. To aid reflexivity, I asked the co-production group to describe their pre-study views. I undertook interviews, observations and documentary analysis to inductively describe the content and delivery of the national audit of dementia. The data was analysed for similarities and differences between data sources and presented to the co-production group. The group considered the differences and similarities between the research data and their pre-study views, identified challenges to the analysis and interpretation of data, proposed further avenues to explore, and iteratively developed the description of audit and feedback. In doing so, they drew conclusions from the data, developed hypotheses and tested them through the collection of further data. As a description developed, their synthesis was challenged by explicit consideration of an intervention framework (TIDieR, Hoffmann et al, 2014b) and by existing evidence and theory-informed hypotheses (Ivers et al, 2012; Colquhoun et al, 2017). Their description was further challenged by using it to inform the collection of data at a fourth site. The final description was written from the perspective of, and in the language of, the co-production group; the deliberate use of their perspective and language was to support implementation.

The work to develop enhancements to the national audit sought to provide the basis for a later effectiveness study. In identifying and specifying enhancements, I took the ontological position that better audit and feedback exists, but that this could not be separated from interpretations. Epistemologically, in this study good knowledge about this better audit and feedback came from previous studies testing the effectiveness of audit and feedback or from theories that describe how audit and feedback might change practice. These sources were interpreted and prioritised by stakeholders involved in the national audit of dementia. As such, the stakeholders' perspectives and language were important forms of knowledge.

In addressing the final aim, to develop an organisation-level focused strategy to implement the enhancements, good knowledge again included knowledge of stakeholders' perspectives. These were exposed through use of the NPT toolkit (May et al, 2011) drawing upon previous research of factors influencing implementation; whilst exposed, they remained subject to interpretation. Research describing the effectiveness of different implementation strategies and describing behaviour change techniques identified through consensus methods was used to select and specify strategy to implement the enhancements.

In summary, good knowledge within the current study included knowledge of stakeholders' language and perspectives, knowledge from other research studies, and from conceptual and theoretical descriptions drawn from empirical evidence. I took a constructionist epistemological stance, that knowledge from each of these sources reflected the perspectives of those generating the knowledge (Pope and Allen, 2020). In the context of this study, the approach of labelling the source of evidence made no claims as to one source being privileged over another. Instead, comparison between the interviews, observations and documentary analysis sought to make the description more comprehensive in anticipation that commonalities and differences may highlight opportunities for enhancement (Gorsky and Mold, 2020). However, the selection of enhancements privileged stakeholder-prioritised, theory-informed empirical evidence over other forms of knowledge.

2.8 Ethics

This study was approved by Newcastle University Faculty of Medical Sciences Ethics Committee (Application: 01266/12984/2017) (Appendix A). All participants gave informed consent to participate (Appendix B, C, D and E). Written informed consent was sought from potential participants for interviews and one-to-one observations. For observations of groups, information was given in advance to the Chair of the meeting or senior member of the group, with a request to distribute it to all members. This information included details about the study aims, methods, risks and benefits, and how participants were able to have their data excluded from the study. Organisational permission for the study, including access to internal organisational materials for the documentary analysis, was sought and obtained.

There have been calls to consider the ethics of stakeholder involvement (Oliver et al, 2019). The ethics form described that, as “group members, rather than participants, (the stakeholders) will all be given information about their role prior to involvement and will be able to leave the group at any time. Involvement will be on the basis of being identified as having capacity to agree to be part of the group”.

Chapter 3. Theoretical perspectives, implementation strategies and specifying frameworks

3.1 Introduction

To address the research questions, and to meet the aims, the following literatures were examined and synthesised:

- theories and evidence related to audit and feedback;
- theories and evidence related to implementation;
- frameworks to specify interventions and strategies.

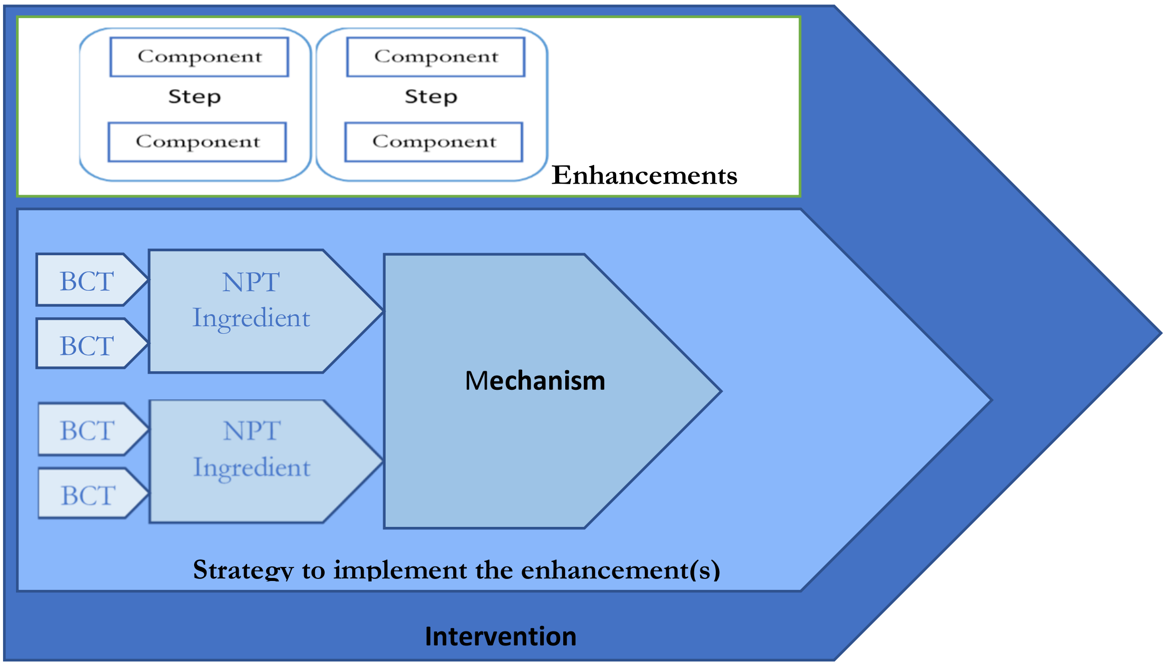
Theories describing how audit and feedback might change behaviour may, when compared with current practice, identify potential enhancements. For example, audit and feedback may have its effect by providing information enabling people to compare their performance against others. A potential enhancement to the national audit then might be to provide comparator information as part of the national audit feedback. Evidence describing content and delivery that influences the effectiveness of audit and feedback might, when compared to current practice, also identify further potential enhancements.

Once enhancements have been identified, I developed a strategy to implement them. This strategy applied theory about what influences implementation, and evidence about what influences the effectiveness of different implementation strategies.

As will be discussed, it is important to specify the content and delivery of interventions and strategies. In this chapter, I examine and synthesise existing frameworks in order to identify how to specify the intervention to enhance the national audit.

3.2 Terminology

The terms used in this chapter are described in Figure 3.1, but in summary, this thesis describes work to develop an intervention. This intervention includes both the enhancements and the strategy to implement the enhancements, as shown below.
The enhancements refer to improvement of a stage of the national audit (e.g. internal feedback). The stage is improved through changing components (e.g. increase the credibility of the feedback). These components are evidence- and theory-informed proposals; once



Term	**Definition**	**Example**
Enhancements	Content / delivery that differs from current which, if implemented, may lead the audit to deliver greater improvement in care	Better feedback
Component	Constituent element that contains the active ingredient(s)	Credibility of the feedback
Step	The specified operationalisation of components	See Figure 5.7
Strategy to implement	"Methods or techniques used to enhance the adoption, implementation, and sustainability of a clinical program or practice" (p1, Proctor et al, 2013)	Educational meeting
Mechanism	"process that brings about or prevents some change in a concrete system, that unfold[s] over time, and expresses contributions of human agency" (p3, May et al, 2013)	Coherence
NPT Ingredient	"Factors that shape socially patterned implementation work" (p546, May and Finch, 2009)	Individual differentiation
Behaviour change technique	A technique proposed to be an 'active ingredient' of an intervention (Michie et al, 2013).	Instruction on how

Figure 3.1: A diagrammatic representation and description of selected terms

they are specified (that is, describing how they are to be operationalised), they are referred to here as steps.

I developed a strategy to implement the steps. To do this, I identified influences upon implementation (e.g. stakeholders thought that the clinical leads might not understand the meaning of the steps). I developed a strategy to address the influences; for example, to increase coherence[i] (section 3.4) (May and Finch, 2009) by delivering information about what the steps require of them. The active ingredients in the strategy are delivered through behaviour change techniques. In this way, the overall strategy (e.g. educational workshop) contains behaviour change techniques, which influence ingredients, which shape mechanisms to support implementation of the step. Chapter 5 describes how this is proposed to happen within the intervention to enhance the national audit of dementia.

3.3 Theoretical explanations of how audit and feedback influences the delivery of best practice

Theory has been defined as, “a coherent and non-contradictory set of statements, concepts or ideas that organises, predicts and explains phenomena, events (and) behaviour.” (p362, Bem and Looren-de-jong, 1997). Theories move beyond listing potential determinants and seek to explain the link between variables and outcomes. The use of theory has been advocated in the development and evaluation of complex interventions (Craig et al, 2008), and may increase generalisability (Eccles et al, 2005). The impact of using theory may be dependent upon theory selection and application (Prestwich et al, 2014). There are many theories, and these can be placed on different taxonomies (e.g. by discipline[ii], by level of theory[iii], by level of focus[iv]). In this section, I consider theories and theory-informed hypotheses that relate to this thesis.

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[i] How the new practice is defined and understood, including factors that affect whether it is considered meaningful

[ii] (e.g. psychology, sociology, management)

[iii] grand, mid-range and micro theories (also known as programme theories e.g. Craig et al, in press) (The Improved Clinical Effectiveness through Behavioural Research Group, 2006)

[iv] Ferlie and Shortell (2001) describe a multilevel framework, where influence can be at the individual, group/team, organisation, or larger system level.

It may be beneficial to apply theories that describe different influences upon an intervention (e.g. individual level and organisational level theories) (Craig et al, 2008). Different theories have been used to explain how audit and feedback may affect practice. A review of trials of audit and feedback (Colquhoun et al, 2013) found that 18 theories were applied during intervention development, prediction and post-hoc explanation of findings. Box 3.1 summarises two theories that have been applied to interpret the effectiveness of audit and feedback (Gardner et al, 2010; Hysong, 2009).

Brown et al (2019) synthesised qualitative evidence related to feedback interventions to produce a health care specific theory to support the design, implementation and evaluation of audit and feedback, Clinical Performance Feedback Intervention Theory (CP-FIT) (Figure 3.2). CP-FIT proposes that the influence of feedback varies according to recipient variables (for example, recipient beliefs about the feedback, and their knowledge and skills in quality improvement), feedback variables (for example, the feedback goals, data collection and analysis methods, feedback display and delivery) and context, including team or organisation characteristics such as resources, priorities and leadership. The theory describes seven mechanisms, such as credibility and social influence, through which these variables affect the feedback cycle and hence clinical performance.

CP-FIT was published after completion of the intervention development work in this study but is applied within the thesis to identify further potential enhancements and to consider consistency between the developed intervention and theory. CP-FIT has yet to be tested empirically, but offers a potentially valuable lens through which to consider whether and how audit and feedback might increase the use of best practice, and hence how the national audit might be changed in order to enhance the audit's effectiveness. Indeed, Brown et al (2019) describe 42 hypotheses based upon CP-FIT; for example, feedback interventions might be more effective where, "they report the performance of individual health professionals rather than their wider team or organisation", and "they target health professionals with greater capability in quality improvement" (p9-10).

Control theory (Carver and Scheier, 2001)

Describes self-regulation of human behaviour to achieve hierarchically ordered reference points ('goals'). It involves a feedback loop where present condition is sensed and compared against these reference points. Perception of a discrepancy between the present condition and a reference point leads to a behaviour aimed at reducing the discrepancy. There are multiple levels to the control system, and these are hierarchically ordered. People often function at the lower 'program level' of control, and therefore give attention to feedback at this level, but can shift to higher 'principle level' or 'system concept'. In terms of audit and feedback, this might mean that if the gap between current performance and the reference point (performance goal) is too large and/or associated with negative emotions, the actor may not pursue the goal. If they have action plans to support the adjustment to behaviour, they may be more likely to change behaviour.

Feedback intervention theory (Kluger and DeNisi, 1996)

Feedback Intervention Theory (FIT) demonstrates similarities with control theory. FIT proposes that behaviour is regulated by comparing feedback to hierarchically ordered goals. FIT also describes the role of limited attention and that attention is needed in order to stimulate a change in behaviour. As a result, feedback effectiveness is affected by the nature of the feedback, the behaviour on which feedback is being given, situational factors and feedback recipient personality factors. FIT proposes that discrepancy from the goal may have two affects, one where a large discrepancy may be perceived as pleasant and stimulate creativity and one where a large discrepancy may increase arousal which may reduce it. Kluger and DeNisi posit that supporting employees to think of their jobs in terms of their values may mean feedback addresses higher order goals and that might increase action to meet performance standards.

Box 3.1: A brief description of control theory and feedback intervention theory

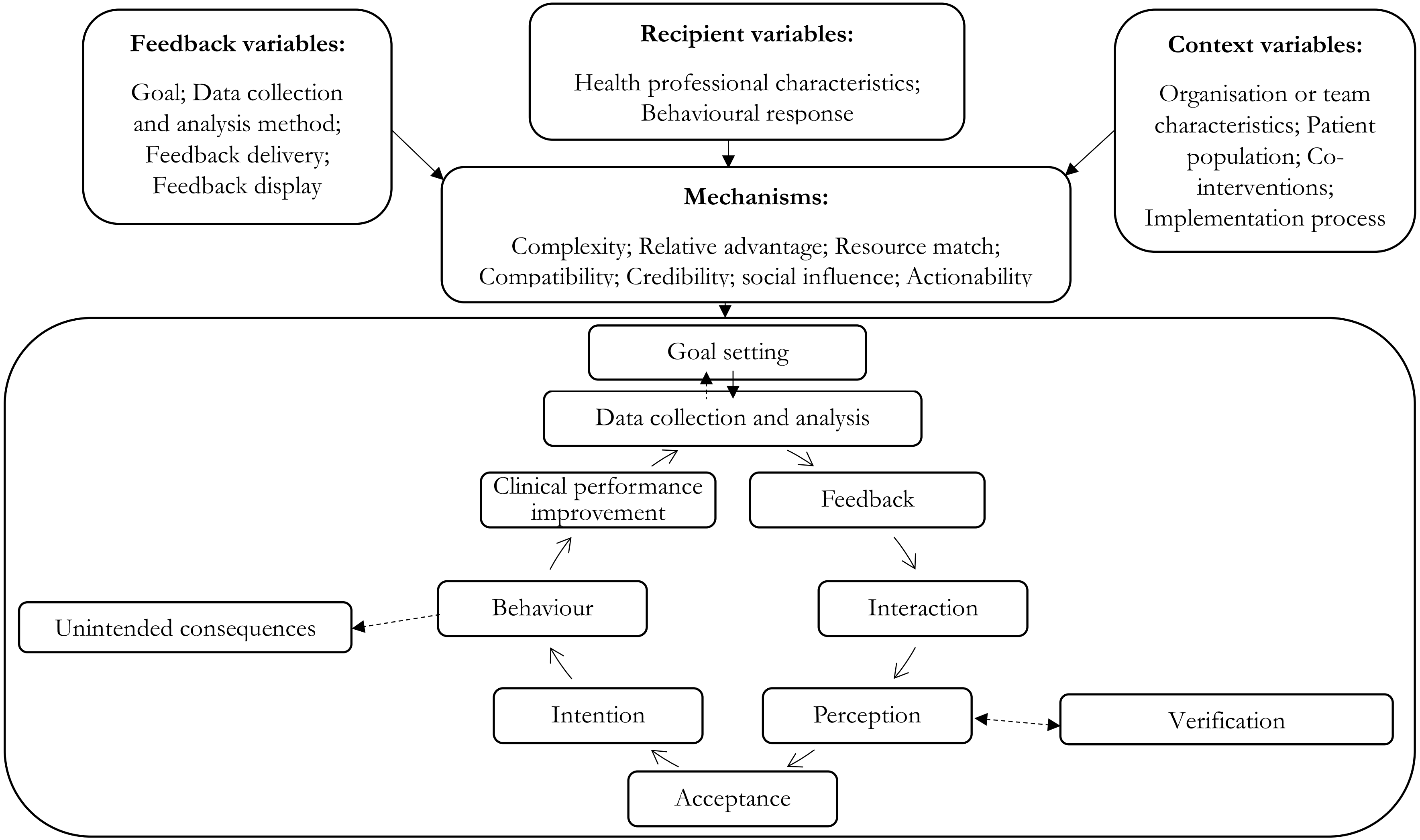

Figure 3.2: A summary diagram of Clinical performance feedback intervention theory (p8; Brown et al, 2019)

Brown et al report that organisation-level responses to audit and feedback often led to greater improvement in clinical performance as they resulted in behaviours that affected multiple patients (e.g. changing storage to reduce delays to medication administration; Dixon-Woods et al, 2013). Such co-interventions may themselves be variably effective (Grimshaw et al, 2012), as is illustrated in section 3.5.

Organisational readiness to change theory is a management theory that describes organisational change processes (Figure 3.3) (Weiner, 2009). It highlights the role of individuals within groups developing a collective commitment to implement an organisational change, in the shared belief that they are able to make the change. It posits that contextual factors (potentially including organisational structure, culture, policies, experience, resources) influence change valence and informational assessment; change valence and informational assessment are expressed through the attitudes, beliefs and actions of those working in a particular setting. Change valence is a multi-faceted construct describing commitment to change based upon the value placed on the change by the individuals involved. This value may stem from potentially diverse beliefs in the need for change, their anticipated outcomes for the organisation, patients, staff or themselves and/or their beliefs about the views of others towards the change. The informational assessment involves collective consideration of the demands of the change task, perceptions about resources required and available to enable and support the change process, and situational factors, including time and political support. The informational assessment results in organisation members having an appraisal of change efficacy. Weiner proposes organisational readiness for change is through members' appraisal of change efficacy and commitment. Organisational readiness to change then affects the change-related effort made, which in turn influences the effectiveness of implementation.

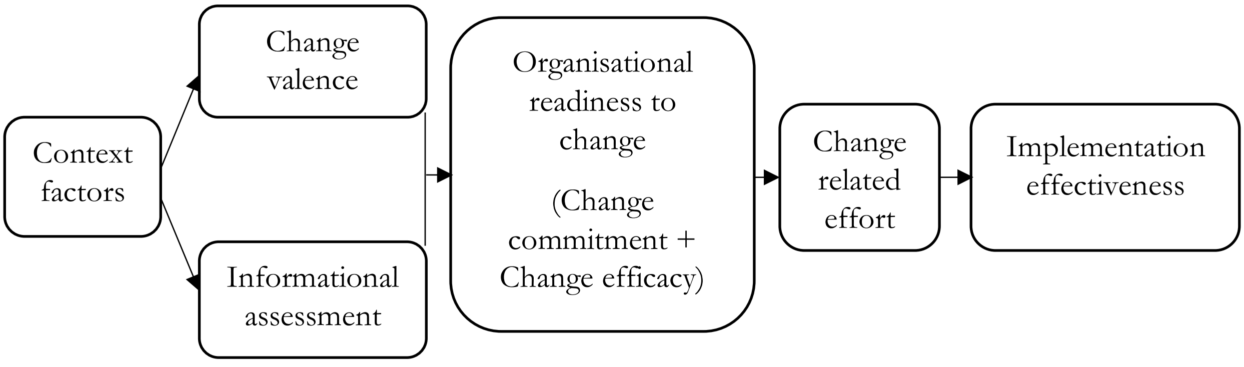

Figure 3.3: Determinants and outcomes of organisational readiness to change (p4; Weiner, 2009)

In addition to the application of whole theories to describe audit and feedback, a ‘menu of constructs’ (Brehaut and Eva, 2012) approach to intervention description and development has also been proposed. This approach describes that, for a particular strategy, there may be constructs from different theories that could be applied to explain how the strategy generates a particular outcome. Theory-informed hypotheses describing constructs that might affect the effectiveness of audit and feedback have been identified through interview (Colquhoun et al, 2017) and author experience (Brehaut et al, 2016), as described in table 3.1. Of note with these papers is the difficulty of positioning the active ingredients to audit and feedback; for example, Colquhoun et al (2017) describe credibility of the audit and feedback as related to the recipient, however the same authors’ earlier paper (Brehaut et al, 2016) describe credibility as a component of audit and feedback. The hypotheses described in the Colquhoun et al paper (2017) also hint at a lack of clarity about the boundaries of an audit and feedback intervention; such that, work to analyse and present barriers to change or to include reminder messages at the point of care may constitute a co-intervention alongside audit and feedback.

Both Colquhoun et al (2017) and Brehaut et al (2016) highlight the potential role of comparators in feedback. Gude et al (2019) investigated the theoretical rationale for the use of selected comparators within trials of audit and feedback (Table 3.2). Gude et al found that 60% of trials provided comparisons against other healthcare professionals, 11% compared against a target, 10% compared against own performance over time and 13% used a combination. Only eight trials (6%) gave a rationale for the choice of comparator. Gude and colleagues describe potential mechanisms and the theoretical support for each of the above types of comparator. Importantly, they propose that different types of comparator may increase or decrease change.

Theme (as described in Colquhoun et al)	Colquhoun et al (2017)	Brehaut et al (2016)
Related to the recipient	Trust / credibility of the audit and feedback Motivation / intention Recipient characteristics Recipient priorities Self-identity Attracts/maintains attention Self-efficacy[i] / control	Feedback addresses credibility Feedback prevents defensive reaction
Related to the behaviour	Barriers Aspects of the behaviour Decision processes / conceptual model	Consistent with existing goals and priorities Under the recipient's control Recommend specific actions
Related to the content of audit and feedback	Cognitive load Comparison Action planning / coping strategy Feedback specificity Goal setting Justify the need for change Cognitive influences Nature of the data Guides reflection Improve memory	Cognitive load Comparison Address barriers to feedback use Feedback specificity Provide brief, actionable messages with optional additional detail Link visual display and summary message closely
Related to the delivery of the audit and feedback	Timing Social engagement Knowledge User-guided In-person feedback Responding to audit providers	Timing Construct feedback through social interaction Feedback in more than one way Repeated feedback
Other	Opportunity cost Environment Development process Other specific hypotheses	

Table 3.1: Theory-informed potential influences upon the effectiveness of audit and feedback

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[i] Self-efficacy is the belief in one can produce desired effects as a result of one's actions

Comparator	May support change	May hinder change
Mean	Social influence (e.g. Social comparison theory; Festinger, 1954)	Deflect attention (e.g. Feedback intervention theory; Kluger and DeNisi, 1996) (Box 3.1) Too small performance gap may reduce action (e.g. Control theory; Carver and Scheier, 1982) (Box 3.1)
Top performer	Social influence (e.g. Social comparison theory; Festinger, 1954) Increased gap may increase action (e.g. Goal setting theory; Locke and Latham, 2002)	Reference group considered unfair (e.g. Reference group theory; Merton, 1950) Too large performance gap may reduce action (e.g. Goal setting theory; Locke and Latham, 2002)
Peer group	Social influence (e.g. Social comparison theory; Festinger, 1954)	Reference group considered unfair (e.g. Reference group theory; Merton, 1950) Similar performance may reduce action (e.g. Control theory; Carver and Scheier, 1982)
Own performance over time	Reduces complexity, increases understanding, increases observability (e.g. Feedback intervention theory; Kluger and DeNisi, 1996)	
Target	Reduces complexity, (e.g. Feedback intervention theory; Kluger and DeNisi, 1996) Personalisation can increase commitment (e.g. Goal setting theory; Locke and Latham, 2002) If perceived as achievable (e.g. Feedback intervention theory; Kluger and DeNisi, 1996)	If source lacks credibility (e.g. Theory of cognitive dissonance; Festinger, 1957)

Table 3.2: The influence of different comparators (Adapted from Gude et al, 2019)

In this section, I have described that there are theory-derived propositions which may help explain the variable effectiveness of audit and feedback. Theory and theory-informed constructs might, when operationalised and implemented, influence the effectiveness of audit and feedback. These may be implemented into the content of the audit (e.g. automated data collection; Brown et al, 2019) or the content of the feedback (e.g. comparators; Gude et al, 2019). The theory-informed propositions may also relate to recipient factors (e.g. quality improvement skills; Brown et al, 2019) and context (e.g. competing priorities, Brown et al, 2019). There have been calls to test the inclusion of theory-informed enhancements in order to increase the effectiveness of audit and feedback (Grimshaw et al, 2019), and thereby increase the implementation of evidence-based dementia care (Sykes et al, 2018). Enhancing the content of the national audit of dementia to incorporate theory and evidence (section 1.7.3) involves the implementation of different audit and feedback practices.

3.4 Frameworks and theories of implementation

Implementation describes the work to increase the adoption and sustainment of clinical practices by healthcare workers and/or systems of care (Proctor et al, 2013). Understanding influences upon implementation provides a foundation upon which to develop interventions to support the implementation, and use, of best practice. Different lenses have been used to explore implementation, and over 100 theories and frameworks have been developed (Birken et al, 2018). These theories and frameworks have identified diverse factors that influence implementation, although there is evidence of overlap in the factors identified by different theories (Nilsen, 2015). Selecting theories and frameworks based upon their analytic level, logical consistency, empirical support, application to the setting and process guidance has been recommended (Birken et al, 2017b). In this section, I focus on a purposive selection of theories relevant to my PhD research, as identified in the overview of the study design (Figure 3.1).

Briefly, NPT (May and Finch, 2009) describes the mechanisms that lead to normalisation, where a change goes beyond adoption to become embedded within organisational practices (Table 3.3). May and Finch (2009) describe mechanisms which influence change. Each NPT mechanism has different ingredients[i]. For example, actors generate coherence: by investing meaning through differentiation of the new target practice from current practice; by individual and communal specification of the purpose and work of the new practice; by internalisation of this meaning of the work for the actor[ii].

Mechanisms	Brief description
Coherence	How the new practice is defined and understood, including factors that affect whether it is considered meaningful. This involves individual and communal differentiation from current, specification and an assessment of perceived suitability, such that a collective meaning is gained within a specific context.
Cognitive participation	How participants become committed to undertake the practice. This involves defining and organising those involved, interaction that supports or inhibits their participation, such that they individually and collectively buy into the practice and prepare to undertake it.
Collective action	The effort towards the goal of implementing the practice, which may be affected by supporting or inhibiting factors. These include qualities of the practice, of the participants, of the relations between those involved and of the existing structures and procedures.
Reflexive monitoring	The continual, individual and collective, formal and informal evaluation of the practice by participants. Embedding is affected by factors which support or inhibit this evaluation work. This monitoring may alter prior ideas about the practice, impacting upon participants' willingness to invest meaning in it.

Table 3.3: An overview of constructs within Normalisation Process Theory (May and Finch, 2009)

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[i] Ingredients are referred to as 'components' by May (2013), however I will use the former term of 'ingredient' to avoid confusion with components of the intervention.

[ii] NPT informed the development of the strategy to implement enhancements to the national audit. Further detail about NPT is provided in chapter 5 (Box 5.2).

NPT has been widely applied to a diverse range of interventions (May et al, 2018), has previously been applied to the implementation of effective quality systems in hospitals (Leggat and Balding, 2017; Desveaux et al, 2017), and has been used to support intervention development (e.g. Brooks et al, 2015).

Whilst organisational readiness to change theory (Weiner, 2009) and NPT (May and Finch, 2009) respectively focus upon preparedness for change and the longer-term embedding of a new practice, there are important similarities in their approach and content. Although developed separately, both are mid-level theories which describe collective behaviour change. They highlight the role of collective sense-making, determination of value and commitment to the new practice, the undertaking of work in support of implementation and participants' appraisals of the practice. Both theories also ascribe importance to the role of context, including organisational resources, structures and procedures, and situational factors that impact upon the implementation of a practice.

For both organisational readiness to change theory (Weiner, 2009) and NPT (May and Finch, 2009), further work is needed to identify the interventions, strategies or techniques which might generate the ingredients. In relation to NPT, Johnson and May (2015) describe the NPT ingredients associated with different implementation strategies (Figure 3.4). Work to model the association between behaviour change techniques[i] and NPT ingredients has begun (Band et al, 2017); for example, information from a credible source may support individual specification and enrolment. Further work is needed to consider and test the full taxonomy of both the techniques and the ingredients and mechanisms within both organisational readiness to change theory and NPT. In the current thesis, the strategy to implement enhancements to the national audit drew upon NPT to identify influences upon implementation. Information about influences upon implementation were used to develop a strategy to implement the enhancements, which were specified using behaviour change techniques. Applying organisation and individual level approaches to implementation addresses Wensing and Grol's (2019) criticism that researchers often focus on individual

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[i] A technique proposed to be an 'active ingredient'" (p82) of an intervention (Michie et al, 2013).

behaviour change (at the expense of organisation or system-level change), and rarely integrate both individual and organisational approaches.

NPT construct[i] →	Coherence			Cognitive participation				Collective action				Reflexive monitoring		
Implementation strategy ↓	Individual specification	Communal specification	Internalisation	Initiation	Legitimation	Enrolment	Activation	Interactional workability	Relational integration	Contextual integration	Skill set workability	Systematisation	Individual appraisal	Communal appraisal
Audit and feedback			▨		▨	▨				▨		▨		▨
Educational outreach				▨						▨	▨		▨	▨
Educational meetings		▨				▨					▨			
Educational materials			▨					▨	▨					
Consensus process		▨			▨	▨								
Opinion leaders				▨										

Figure 3.4: The NPT constructs (indicated by shading) acted on by selected implementation strategies (Adapted from Johnson and May, 2015)

In summary, analysing the factors that might affect the uptake and sustainment of best practice can inform the selection of effective implementation strategies. Implementation scientists report different considerations in the selection of theories and frameworks, including analytic level, logical consistency and empirical support (Birken et al, 2017b). There are over a hundred theories and frameworks of implementation identifying different factors, although there is some overlap between theories and frameworks (Nilsen, 2015). The next section describes a range of available strategies to support the implementation of best practice and presents evidence for influences upon their effectiveness.

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[i] Johnson and May (2015) excluded the NPT ingredients ‘differentiation’ and ‘reconfiguration’ as both were identified as required features of the intervention studies being reviewed.

3.5 Implementation strategies[i]

This thesis describes work to implement enhancements to current audit practice in the national audit of dementia. There is a wide range of strategies to change practice. Nutley et al (2003) categorised these as:

- Professional strategies (e.g. educational meetings, audit and feedback);
- Financial strategies (e.g. patient incentives);
- Organisation strategies (e.g. revision of professional roles);
- Patient-orientated strategies (e.g. patient suggestions, patient involvement in governance);
- Structural strategies (e.g. changes in medical records, changing the organisation of quality management);
- Regulatory strategies (e.g. peer review).

Powell et al (2015) used consensus methods to define 73 implementation strategies; for example, audit and feedback was defined as "collect and summarize clinical performance data over a specified time period and give it to clinicians and administrators to monitor, evaluate, and modify provider behaviour" (p8). In this section, I briefly describe selected systematic reviews of randomised controlled trials in order to illustrate that there is variation in the effectiveness both between and within different implementation strategies, and to explore strategies relevant to this thesis.

Variation within strategies can be used to explore factors affecting effectiveness; for example, Mathes et al (2019) reviewed studies testing the effectiveness of financial incentives and penalties upon the quality of care. They included studies using different designs, including those with or without a control group. Their narrative synthesis describes

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[i] Within this thesis, I will refer to implementation strategies (rather than interventions), in recognition that an intervention may contain multiple strategies (for example, audit and feedback with reminders) and to distinguish from clinical interventions. I will however continue to refer to audit and feedback as a 'complex intervention', and to the process as 'intervention development' (Craig et al, 2008).

that there is little effect from financial incentives, however the content of the strategy may influence effectiveness. For example, non-payment (that they characterise as ‘sticks’) may be more effective that additional payments (‘carrots’). The strategy may have an impact upon the implementation of care processes, but not necessarily patient outcomes. Of relevance to this thesis, Martin et al (1980) found that financial incentives were less effective than audit and feedback at increasing the use of best practice.

Table 3.4 below summarises the effectiveness of selected implementation strategies, as identified through systematic reviews of randomised controlled trials. The strategies presented here were selected for relevance to the thesis, both in terms of potential enhancements to the national audit (itself an implementation strategy) and in how to implement the enhancements. For each of the studies in the below table, the participants were health professionals, although these were across different health settings (e.g. hospitals, primary care). The selected strategies are presented to illustrate potential sources of variation in the extent to which they improve care and to highlight challenges within the design of such studies. The reviews of selected strategies describe factors associated with effectiveness related to the target behaviours (e.g. prescribing), the context (e.g. low baseline) and the content of the strategy. This resonates with a synthesis of the content of eight implementation determinant frameworks (Nilsen, 2015). Nilsen describes that implementation may be affected by characteristics of the:

- evidence (Rycroft-Malone et al, 2004; Nutley et al, 2007; Cochrane et al, 2007);
- context, including: culture and leadership (Rycroft-Malone et al, 2004; Grol et al, 2005); organisational factors and readiness to change and outer context, such as political factors and wider networks (Greenhalgh et al, 2005; Damschroder et al, 2009); and economic, administrative and organisational context (Grol et al, 2005); barriers and facilitators (Nutley et al, 2007; Cochrane et al, 2007);
- the strategy used (Rycroft-Malone et al, 2004; Grol et al, 2005; Greenhalgh et al, 2005; Nutley et al, 2007; Damschroder et al, 2009).

Strategy (Reference)	Median effect size	Potential limitations	Reviewed factors that lacked evidence of an affect upon outcome	Association between increased effectiveness and: Target	Context	Content
Audit and feedback (Ivers et al, 2012)	4.3% (IQR: 0.5% to 16%)	Included 91 multi-faceted strategies (n=140) with reviewer assessment of whether audit and feedback was core to the strategy. Did not explore difference between individual- and organisation-level feedback. Focus on primary outcomes may have excluded reported patient outcomes.	Recipient (physician v non-physician);	Less complex behaviours	Low baseline performance	Format of feedback; Source; Frequency
Educational meetings (Forsetlund et al, 2009)	6.0% (IQR: 2.9% to 15.3%)	Educational meetings were often part of multi-faceted strategies. Attendance was often not reported, and where possible was then estimated. Didactic education included lectures where there may have been question and answer sessions.	Intensity (incorporating the source (e.g. from an external review organisation), frequency, duration); Setting; Baseline compliance.	Less complex behaviours; Less serious outcomes		Mixed interactive and didactic meetings; Higher attendance
Educational outreach (O'Brien et al, 2007)	5.6% (IQR: 3.0% to 9.0%)	Included heterogenous strategies where components were not included in the assessment of variation (e.g. some outreach: included performance feedback; was tailored based upon identified barriers to change; was by someone from same/different organisation. Not powered to explore further potential effect modifiers or the impact upon patient outcomes	Target behaviour; Baseline compliance; Number of clinicians included at each visit; Frequency of visits; Nature of the outcome; Extent to which the strategy was core to strategy.			

Table 3.4: Effectiveness of selected implementation strategies relevant to this thesis (Adapted from Grimshaw et al, 2012)

Nilsen's synthesis also describes that implementation may be affected by:

- personal characteristics of the users or adopters; for example, psychological antecedents such as cognitive, attitudinal and emotional response (Greenhalgh et al, 2005; Grol et al, 2005; Cochrane et al, 2007; Damschroder et al, 2009)
- patient factors (Rycroft-Malone et al, 2004; Grol et al, 2005; Cochrane et al, 2007; Damschroder et al, 2009)

These characteristics add to previous work advocating the specification of the target, action, context and time when seeking to predict and explain human behaviour (Fishbein, 1967; Arjen, 1991), recently expanded to specify who is to perform the action, recognising that implementation may involve multiple, diverse actors (Presseau et al, 2019) (section 3.6).

Table 3.4 describes a number of limitations of the reviews of the effectiveness of implementation strategies. A further limitation is that each of the above reviews focused on randomised controlled trials. Randomisation may have reduced the influence of context upon the findings. However, there may be important interactional affects between the strategy and the context hidden by the review methodology. The reviews also group measures (e.g. grouping prescribing together), but it is possible that the influence of the strategy may be differ between target behaviours (e.g. prescribing may be more complex for some medications, and as such the strategy may have a greater influence on prescribing some medications than on others). The reviews also limit the variables studied in their assessment of impact due to omission in the reported description at the individual study level and the requirement to focus the meta-analysis (e.g. Ivers et al did not include the use of peer comparators, the quality of the data or the motivation of the recipients). It is possible that there are further factors, including those within the content and delivery of audit and feedback, which affect the effectiveness of the above strategies.

Variation in the effectiveness of implementation strategies underpins the work described in this thesis. That audit and feedback is a variably effective implementation strategy provides the opportunity to develop enhancements that might increase improvements in care. In chapter 5, I describe the development of an educational strategy to implement the enhancements that draws upon evidence about the selected implementation strategy, as well as stakeholder perspectives and theory about influences upon implementation. Finally, that the effectiveness of interventions and strategies might be affected by who, where, when, how and with what materials they are delivered, means that these elements were explicitly specified.

Ivers et al (2012) describe that the search for factors affecting the effectiveness of audit and feedback was hampered by gaps in reporting. Guidance (e.g. Craig et al, 2008; Proctor et al, 2013; Hoffmann et al, 2014) recommends specifying the content and delivery of complex interventions, including implementation strategies (Proctor et al, 2013). Here I describe two frameworks, relevant to this thesis, that can guide the reporting of an intervention (template for intervention description and replication; Hoffmann et al, 2014b) and be utilised to specify its content (behaviour change techniques; Michie et al, 2013).

3.6 Specifying frameworks

As described above, there are different ways to specify an intervention (e.g. Presseau et al, 2019). The template for intervention description and replication (TIDieR) provides a checklist to those reporting the content of an intervention (Hoffmann et al, 2014b). TIDieR was developed using Delphi consensus methods involving clinicians and academics with expertise in developing, testing and reporting interventions. In my systematic review of audit and feedback in dementia care (Sykes et al, 2018), I explored the effectiveness of audit and feedback in dementia care and whether the content and delivery of audit and feedback affect its effectiveness in the context of care for people with dementia (section 1.7.3). Whilst gaps in reporting (Table 3.5) created difficulty in drawing conclusions, it demonstrated the applicability of items within the TIDieR framework to the description of audit and feedback.

TIDieR item	Included studies reporting item (n=13)
Brief name	13
Theory	1 (4 further studies used a framework)
What materials	12
What procedures	13
Who provided	9
Mode of delivery	9
Where	13
When and how much	12
Tailoring	2
Modifications	6
Fidelity (Planned)	0
Fidelity (Actual)	0

Table 3.5: The reporting of the content of audit and feedback in dementia care (Adapted from Sykes et al, 2018)

I have described variation in the effectiveness of implementation strategies, the impact of different content and delivery, and a framework to describe the content and delivery of a complex intervention. In doing so, I highlight a challenge to the work to identify different implementation strategies: that strategies with the same name differ (e.g. audit and feedback includes interventions: where healthcare workers have collected their own data or been given it; with or without comparator information; where feedback is given at an individual or at an organisational level). Grouping 'types' of strategy (e.g. audit and feedback) enables exploration of variation and demonstrates the range of available strategies (e.g. Powell et al, 2015). However, a greater degree of specificity may be valuable to increase replicability of the intervention and help understand effectiveness. Understanding the mechanism of action may also support cost-effective development of interventions; for example, to consider a cost-effective design to achieve enrolment or individual specification (May and Finch, 2009).

Michie et al (2013) used Delphi consensus methods to define 93 distinct behaviour change techniques (BCTs) clustered into 16 domains. A BCT is a "systematic procedure included as an active component of an intervention designed to change behaviour" (p1; Michie and Johnson, 2013). For example, behavioural practice or rehearsal is defined as, "prompt practice or rehearsal of the performance of the behaviour one or more times in a context or at a time when the performance may not be necessary, in order to increase habit and skill" (p10, Electronic Supplementary Materials 3; Michie et al, 2013). BCTs are observable and replicable (Michie and Johnson, 2013) and were applied here during my work to specify the strategy to implement enhancements to audit and feedback.

Whilst used here to specify the strategy to implement the enhancements, rather than the audit and feedback process, it is valuable to reflect upon how they might relate to audit and feedback. There are different BCTs relevant to audit and feedback, these include:

- Feedback on behaviour: To monitor and provide informative or evaluative feedback on performance of the behaviour (e.g. form, frequency, duration, intensity)
- Monitoring of behaviour by others without feedback: To observe or record behaviour with the person's knowledge as part of a behaviour change strategy
- Self-monitoring of behaviour: To establish a method for the person to monitor and record their behaviour(s) as part of a behaviour change strategy
- Self-monitoring of outcome(s) of behaviour: To establish a method for the person to monitor and record the outcome(s) of their behaviour as part of a behaviour change strategy
- Monitoring outcome(s) of behaviour by others without feedback: To observe or record outcomes of behaviour with the person's knowledge as part of a behaviour change strategy
- Feedback on outcome(s) of behaviour: To monitor and provide feedback on the outcome of performance of the behaviour

For each of these examples, the technique needs to be part of an approach to change behaviour; for example, if monitoring is part of a data collection procedure without the intention to change practice, it would not be considered a BCT. There are other BCTs which may be relevant to audit and feedback, for example, credible source has been hypothesised to affect whether audit and feedback leads to change in practice (e.g. Colquhoun et al, 2018; Brown et al, 2019). BCTs are intended to be irreducible, and so may provide a level of specificity that supports replicability and exploration of effectiveness. However, whilst the definition of feedback includes "e.g. form, frequency, duration, intensity" (p3), the technique does not differentiate between forms of feedback. The form of feedback delivery (e.g. written versus written and verbal) may affect practice change (Ivers et al, 2012), which might indicate that some BCTs are further reducible. BCTs seek to describe components of the intervention rather than contextual influences, this may mean that they do not consider factors that affect effectiveness of the intervention within a particular setting. For example, audit and feedback may be more effective when there is a low baseline; whilst there are potentially related BCTs (e.g salience of consequences, social incentive, restructure the social environments) it may be beneficial to supplement their use with consideration of contextual factors (e.g. Damschroder et al, 2009).

3.7 The use of theory

'Theory' has been defined as, "a coherent and non-contradictory set of statements, concepts or ideas that organises, predicts and explains phenomena, events, behaviour, etc." (Bem and Looren-de-Jong, 1997). Theory will be used for different purposes at different stages within this thesis[i] (Figure 2.1):

> Once the co-production group have produced an initial description of the content and delivery of the national audit, I will present theory-informed constructs to the co-production group. The constructs describe potential influences upon the effectiveness of audit and feedback (table 3.1) and were identified during interviews with experts in theories related to audit and feedback (Colquhoun et al, 2017). I will present the constructs to stimulate deductive consideration of the content of the national audit. The use of constructs applies relevant knowledge from a broader range of theories and may prevent the need to apply all components or mechanisms to a situation (Brehaut et al, 2012).
>
> The same theory-informed constructs (Colquhoun et al, 2017) will be used during the work to develop enhancements in order to identify potential components that might deliver the outcome sought. The use of theory-informed constructs to achieve the outcome enables to enhancement to build upon previous understanding of how audit and feedback may improve performance.

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[i] In addition to these *a priori* applications of theory, I found that when the programme theory was presented as a logic model, it resonated with Organisational readiness to change theory (Weiner, 2009). Here, the application of theory serves to demonstrate coherence and alignment with previous literature.

Normalisation process theory (May and Finch, 2009) will be applied as the lens through which to identify mechanisms that might influence implementation of the new components (section 5.4.1). I will facilitate the co-production group to identify mechanisms and use their responses to draft an implementation strategy.

I will use behaviour change techniques to describe the content of the implementation strategy. The programme theory will link the selected BCTs to NPT ingredients (Figure 5.5). This is relatively novel approach that extends previous work (Band et al, 2017), co-authored by the researchers responsible for developing the BCT taxonomy and NPT, by linking BCTs to NPT ingredients. The BCTs provide a complementary, and more focused description of what is being delivered to change the behavioural aspects of the NPT ingredient; For example, 'demonstrate the behaviour' to support 'individual specification'. May (2013) differentiates between resources that contribute between implementation. The BCTs within Logical Improvement Planning address cognitive resources[i] brought to the implementation of the components by the target recipients of the workshop, namely the clinical leads for dementia and the clinical audit lead (e.g. instruction on how, graded task, information about social consequences, social comparison, credible source).

3.8 Conclusion

In this chapter, I have shown that theory can be used to identify potential enhancements to current practice. I have presented theories describing how audit and feedback may affect the use of best practice, and summarised two theories used within this thesis, clinical performance feedback intervention theory (Brown et al, 2019) and organisational readiness to change (Weiner, 2009). I have also described how theory-informed constructs provide a menu of potential enhancements to audit and feedback, and summarise constructs related to the recipient, the target behaviour, and the content and delivery of audit and feedback, including the use of comparators.

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[i] May (2013) defines cognitive resources as, "personal and interpersonal sensations and knowledge, information and evidence, real and virtual objects that reside in a social system, and that are institutionally sanctioned, distributed and allocated to agents. They frame participants' access to knowledge and information needed to operationalize the complex intervention". (p6)

Audit and feedback is an implementation strategy. To reduce confusion, the current chapter described key terms relating to enhancements and their implementation. The current study seeks to implement enhancements to audit and feedback. As such, theories of implementation are relevant both to the intervention and its enhancement. I have described that there are over 100 theories and frameworks describing implementation, and summarised NPT (May and Finch, 2009) used within this thesis.

There is a range of strategies to support implementation. These strategies are variably effective, and work has sought to identify factors associated with increased effectiveness. This thesis applies evidence about factors associated with effectiveness to inform the selection and design of the strategy to implement enhancements to the national audit. It is important to specify the content and delivery of implementation strategies in order to enable replication and investigate effectiveness. The template for intervention description and replication (TIDieR) (Hoffmann et al, 2014b) is a reporting framework that has been used to describe the content and delivery of audit and feedback in dementia care (Sykes et al, 2018). Behaviour change techniques are observable and replicable procedures that deliver active ingredients (Michie and Johnson, 2013). Within the current study, TIDieR and BCTs provide the frameworks through which the enhancements and the strategy to implement the enhancements are respectively specified.

Chapter 4. Describing the national audit of dementia

The content of this chapter has been published:
Sykes M, Thomson R, Kolehmainen N, Allan L, Finch T. (2020) Impetus to change: A multi-site qualitative exploration of the national audit of dementia. Implementation Science; 15:45.

4.1 Introduction

National audit is a key strategy used to improve care for patients with dementia. National bodies (NICE, 2002; HQIP, 2020b) have made recommendations for how audit and feedback should be undertaken. There is evidence that audit and feedback can be effective, and characteristics associated with greater improvement have been identified (Ivers et al, 2012). In addition, theory-informed potential enhancements have been proposed (e.g. Colquhoun et al, 2017). There have been calls to test the impact on care of the implementation of potential evidence- and theory-based enhancements to audit and feedback (Grimshaw et al, 2019). It is unclear to what extent national audit is consistent with audit and feedback best practice.

This chapter reports the methods and findings related to aim 1, to describe the content and delivery of the national audit of dementia. In doing so, it provides the foundation to later work (chapter 5) to identify and specify enhancements to the national audit of dementia in order to increase the receipt of evidence-based care by patients with dementia.

4.2 Methods

This was a multi-method study that used interviews, observations and documentary analysis to develop a rich description of national audit for dementia (Figure 4.1). Multi-methods enable the identification of reported practices and influences, as well as of tacit knowledge and practices taken for granted (Gould et al, 2018; Gorli et al, 2012). The description was produced using a stakeholder involvement method.

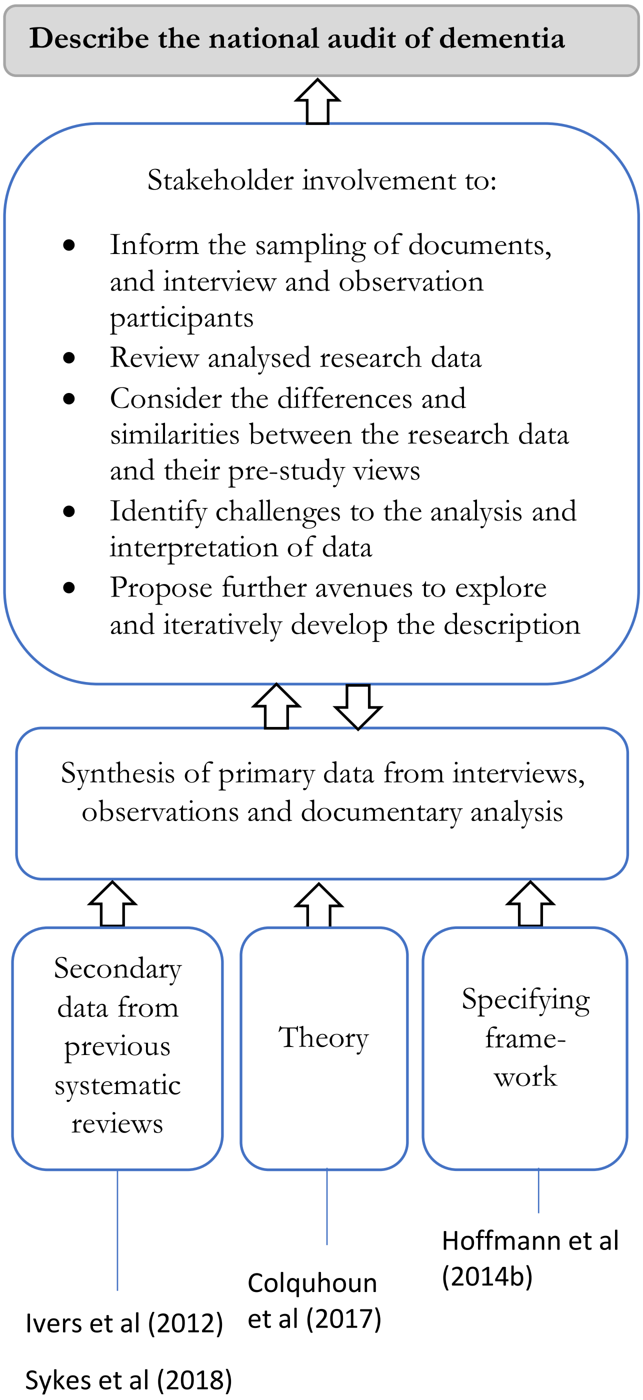

Figure 4.1: An overview of the study design indicating key inputs to the description of the national audit of dementia

Six hospitals (with approximately 4750 beds), within four English NHS organisations, were studied. The hospitals were purposively sampled to maximise diversity. I identified organisations with diverse regulator (Care Quality Commission) ratings for clinical effectiveness, sought hospitals within each rating that were of different sizes (full-time equivalent staff ranged across organisations from 4000 to 15000), and reviewed their previous performance on the national audit of dementia (Table 4.2). Consideration of both hospital and organisation level was important because in national audit of dementia feedback is provided at the hospital level, but staff are employed at the organisation-level. Some hospitals at some sites (NHS Trusts) did not meet the inclusion criteria of the national audit. In such circumstances, all constituent hospitals that were receiving feedback as part of national audit of dementia at each site were included in the study.

The sample of interviews, observations and documents was informed by co-production group input (chapter 2) and emerging findings of the study. The sample sought people, events and documents that could provide diverse perspectives upon the content and delivery the national audit. Data were collected from January 2018 to April 2019.

4.2.1 Stakeholder involvement

Chapter 2 described stakeholder involvement methodology and proposed key questions that informed the design (Figure 2.2). Within the current study, stakeholder involvement sought to gain different perspectives and knowledge, and use the language of stakeholders, in order to improve feasibility, acceptability and hence support implementation. I used stakeholder analysis to identify the stakeholders. The clinical leads for the national audit and hospital clinical audit staff were anticipated to be the target recipients of the intervention, and the patients/carers anticipated to be those most affected by the effectiveness of the intervention. The other stakeholders were staff from the national audit provider (Royal college of psychiatrists) and commissioner (HQIP), the regulator (CQC), professional body (RCN) and researchers. I thought power dynamics between stakeholders may impact upon the willingness of individuals to contribute their perspective, for example, the presence of a regulator may inhibit the clinical audit staff. As a result, I proposed two groups: a co-production group and an advisory group of wider stakeholders. I acted as a conduit for messages between groups in order to create feedback loops between stakeholders to develop cumulatively emerging views.

The co-production group were facilitated through a series of workshops to develop a description of the national audit of dementia. I sought to develop rapport with group members and to reduce perceptions of hierarchical difference within the group. The first group took place on university premises. For later workshops, the group were asked where they would like to meet and chose the university. Co-production workshops only included group members, with me acting as researcher/facilitator. Group members were given information about the work before the first workshop. This was re-visited at the first meeting, and each meeting closed with information about the plan for the next workshop. Group members received travel expenses for attending. Before each group, I developed a facilitation plan (Appendix G). Initially, I facilitated four workshops (eight hours in total) with the co-production group to produce a baseline understanding of what group members report happens during audit and feedback, what influences its effectiveness and of potential enhancements. The workshops involved mixed small group work, presentation and whole-group discussion. Once a description of the co-production group members' pre-study views had been produced, I facilitated the co-production group to: inform the sampling of documents, and of interview and observation participants; review my analysed research data; consider the differences and similarities between the research data and their pre-study views; identify challenges to the analysis and interpretation of data; propose further avenues to explore; and iteratively develop the description. I have masters-level training and extensive experience in facilitation in a healthcare context.

4.2.2 Interviews

Interview participants (Table 4.3) were accessed through the hospitals' research departments, approached by email and gave written informed consent, as described below. Interviews were semi-structured, conducted face-to-face and audio-recorded. The topic guide (Appendix H) explored participants' involvement with audit, their reported perception of why it was undertaken, what happens during audit and feedback, what influences its effectiveness and what could be changed to increase effectiveness. There were also targeted questions based upon earlier findings and the participants' role. Whilst the period of interviews overlapped with the period of observations and documentary analysis, they happened during separate site visits. Concurrent data collection enabled findings from different sources to inform sampling and data collection (e.g. interview responses and documentary analysis targeting later observations, observations informing the interview topic guide). During interviews with the first three participants, I drew a diagram representing that participant’s description of what happens during audit (Appendix I). The diagram was shared with the respective participant for amendment during the interview. The diagrams were discussed with the co-production group and collated into a single diagram. This collated diagram (Appendix J) was used (and further developed) in later interviews as part of an amended interview topic guide. Reflective notes were made after the interviews. Verbatim interview transcription was undertaken by a third party.

Interview participants were each interviewed once, but were on occasion also participants in the observations (Table 4.4) and authors of analysed documents.

4.2.3 Observations

The observations were at ward, specialty (e.g. dementia steering group, care of the older person governance group) and organisation-levels (e.g, organisational quality committee), as well as in meetings to plan, prepare for and respond to the national audit, and the gathering and recording of national audit data. Participants were accessed through the hospital research departments. Where the observations were of individuals, the participants were accessed via hospital research departments. Where observations were of groups (e.g. meetings), the respective ‘gate-keeper’ (e.g. chair of the meeting; team manager) was approached. The approach and request for informed consent was as described in chapter 2.

Observations took place at three of the four organisations. During the observations, I sought to develop rapport. I took field notes and asked exploratory questions. Reflective notes were taken after the observations.

4.2.4 Documentary analysis

I sampled documents about the organisations under study that were produced by external sources (reports by the regulator and national audit provider organisation), and internallyproduced documents (e.g. organisational quality strategy, clinical audit policy, audit training materials, reports to and minutes from governance committees) (Table 4.5). Documents were identified from earlier documents, interviews and observations and from suggestions from the co-production group. Documents were accessed through the hospital research department and/or from interview and observation participants.

4.2.5 Data management and analysis

Notes and reflections from interviews and observations, and interview recordings, were transcribed verbatim, checked for accuracy and anonymised prior to analysis. Transcript data were entered into Nvivo v12 (QSR International) for data management.

I analysed each data source using inductive framework analysis (Richie and Spencer, 1984). This involved becoming familiar with the data through transcribing and reading the observation notes, checking and reading the transcribed interview data, and reading the documents. I identified initial themes and sub-themes from each of the first two observations and interviews. I compared these across data sources and against the diagrams from the first two interviews in order to create an initial analytical framework. The framework contained both higher-level descriptive headings and more thematic, conceptual issues within those categories (Figure 4.2).

The framework theme heading, narrative description and exemplar data extracts were presented to the co-production group alongside their initial views (Table 4.1). Whilst I maintained a log of the role and organisation of participants/data sources, this was not shared with the co-production group. The extent to which a finding was repeated across sites was included in the presentation.

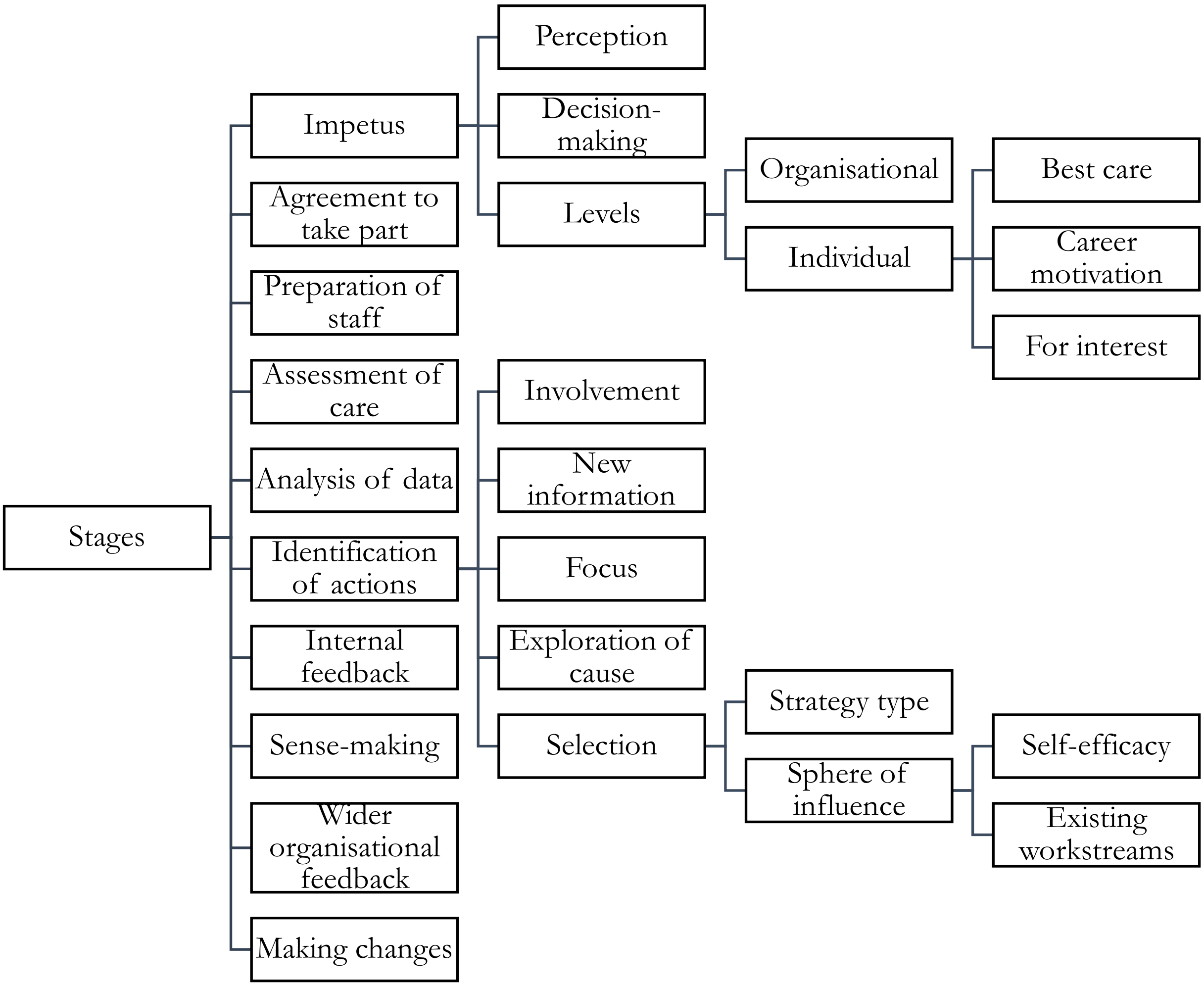

Figure 4.2: A coding map illustrating selected themes and sub-themes

Theme:	Identification of actions
Sub-theme:	Exploration of cause
Description:	The link between the problem, the cause and the action is not clear
Frequency:	One Trust described the problem, cause and action
Data extract:	At the one Trust which described the problem, cause and action, their internal feedback described that: Data: Fewer than 30% of case notes included the causes of distress Reasons why best practice not undertaken: Difficult to identify next of kin; There is no time to deliver best practice; Information is not shared; Cards containing the audited information are lost or thrown away as contaminated; Staff believe that gathering information about the causes of distress is not beneficial to care Actions to improve: Encourage use; Regular audit
Pre-study views*:	Good if clinical and manager ownership, needs manager for resource to audit, feedback and change. Action plan works if “not on shelf, but reviewed and updated, a live document” Getting people to fulfil actions – if in the gift of other teams its harder. Harder if hospital wide If have 30 recommendations, you can only do 10 Process and attitude is important, e.g. who attends training depends on if important to them Use appreciative enquiry about why went right and consider strengths, opportunities, aspirations and resources as this builds confidence. Change electronic record Use incentives Needs rationale for change Describe benefits for staff as well as patients Disseminate findings Changes need to be specific, measurable, actionable, relevant, timely
Participants*:	Improve action plans Someone driving response
Theory-informed hypotheses*:	Development process involvement** If the behaviour is under the control of the recipient Recommend actions that are consistent with established goals and priorities. Address credibility of the information. Recommend actions that can improve and are under the recipient's control. Recommend specific actions with specific goals Address barriers** and reduce costs Use action plans with clear direction of how to change behaviour Reduce cost to change Justify need for behaviour change

	If designed with a clear understanding of the decision-making process underlying the behaviour to be changed Accompany with evidence supporting change

Key:
* Related to theme
** Also relates to evidence from Sykes et al (2018), but not repeated in group feedback

Table 4.1: Example feedback for co-production group 8

The group considered differences and similarities between the findings, their initial views and their emergent understanding; identified challenges to the analysis; and proposed further avenues to explore. This process was repeated twice (Figure 4.3) with additional data and updated categories. I populated a TIDieR framework to identify missing descriptive evidence (appendix K) (Hoffmann et al, 2014b). I presented the data, previous systematic reviews (Ivers et al, 2012, Sykes et al, 2018) and theory-informed hypotheses (Colquhoun et al, 2017) to the co-production at two further co-production workshops. The output from these workshops resulted in a later description which was used to inform the topic guide at the fourth site. Analysis and presentation of the fourth site findings resulted in only minor amendment to the description; this was identified as an indicator of theoretical saturation of the data.

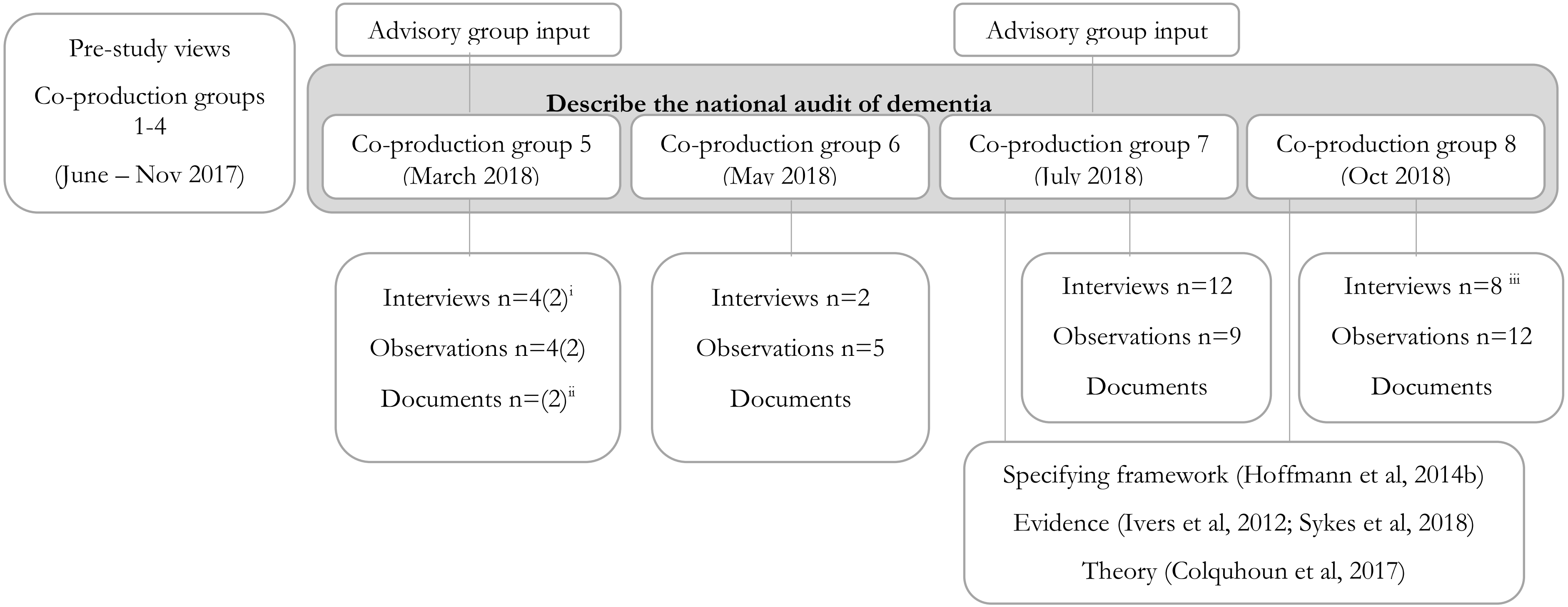

Figure 4.3: A representation of the chronology of the work to describe the national audit of dementia

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[i] Figures in brackets represent the number analysed prior co-production group 5 (Figures exclude iterative revisiting of analysis)

[ii] Date of documentary analysis not recorded

[iii] 6 interviews and 6 observations were undertaken after the last ‘description phase’ co-production group and are presented within the thesis as part of the ‘identification of enhancements’ phase. The phases were labelled afterwards as broad headings for the work undertaken. These later interviews and observations, whilst discussed in the January 2019 co-production group 9, resulted in only minor amendments to the description.

For quality assurance, the data coding was further supported by co-coding by one of my supervisors with expertise in qualitative research (TF). Co-coding involved co-indexing and sorting a sample of data (approximately 100 pages) collated as example quotes across the initial data categories and across all methods, independently reviewing the sample dataset for coding, and subsequently challenging the description and categories through joint discussion, until consensus was reached. Extensive exemplar quotes for each category and code were further challenged by members of the supervisory team at a higher level of abstraction, with credibility further enriched through challenge by the co-production and advisory groups.

4.3 Results

The co-production group included: carers (n=3), clinical leads for dementia care (n=3) and organisational leads for clinical audit (n=3). The advisory group included a patient (n=1), and representatives from the regulator (n=1), relevant professional bodies (n=2), audit provider organisation (n=1), audit commissioner (n=1) and behaviour change researchers (n=3).

The sample is summarised in Table 4.2. I interviewed 32 participants (Table 4.3). Mean interview length was 59 minutes (range 36 to 98 minutes). I undertook 36 observations (Table 4.4). The observations took 44 hours and involved staff participants (n=204). Mean observation length was 74 minutes (range 14 minutes to 226 minutes). I analysed 39 documents (Table 4.5).

Site (Organisation)	**Hospitals in study**	**Regulator assessment** (Rated 2014-16)	**Interviews**	**Observations**	**Documents**
A	2	Requires improvement	9	18	14
B	1	Good	8	10	7
C	2	Outstanding	10	8	14
D	1	Requires improvement	5	0	4
N = 4	**6**	**-**	**32**	**36**	**39**

Table 4.2: A description of the sites and sample

Role	n	Role	n
Deputy directors of nursing	6	Staff nurses	2
Governance staff	6	Allied health professionals	2
Specialist nurses	4	Matrons	2
Directorate managers	4	Medical consultants	2
Ward managers	3	Executive director of nursing.	1

Table 4.3: The roles of the interview participants

Ref	Title	Description
1	Clinical effectiveness committee	Organisation level meeting held in Board room, including presentation about national audit. 17 attendees, interviewees 1 and 6 present. The Committee reports to the Clinical governance committee (observation 5)
2	Clinical audit facilitation meeting	Meeting between dementia nurse specialist and clinical audit facilitator to plan the data collection for the national audit
3	Dementia steering group	Meeting chaired by consultant to discuss improvements in dementia care, includes interviewee 6 and 24.
4	Junior (F1) doctor training and audit recruitment	Meeting to provide training to junior doctors and to seek involvement in data collection
5	Clinical governance committee	Organisation level meeting that reports to the Organisation Board. Presentation about national audit. 15 attendees, including interviewees 5 and 6.
6	National audit preparation meeting	Meeting between dementia nurse specialist (interviewee 6), organisation quality assurance lead and clinical audit lead (Interviewee 1) to plan the data collection for the national audit.
7	Clinical governance meeting	Organisation level meeting including presentation about national audit. 36 attendees.
8	Dementia steering group	Meeting chaired by consultant to discuss improvements in dementia care, 10 attendees including interviewee 14.
9	F1 training and audit recruitment	Meeting to provide training to junior doctors and to seek involvement in data collection.
10	Dementia steering group	Meeting chaired by consultant to discuss improvements in dementia care, 9 attendees including interviewee 6 and 24.
11	National audit preparation meeting	Meeting between dementia nurse specialist and ward manager.
12 - 15	National audit preparation meeting	Meeting between dementia nurse specialist and ward manager.
16	Record review	Data collection by dementia nurse specialist

17	Record review	Data collection by consultant
18	Record review	Data collection by dementia nurse specialist
19	Dementia steering group	Meeting chaired by consultant to discuss improvements in dementia care
20	Record review	Data collection by dementia nurse specialist
21	Record review	Data collection by dementia nurse specialist
22	Record review	Data collection by dementia nurse specialist
23	Record review	Data collection by Junior doctor (F2)
24	Record review	Data collection by dementia nurse specialist
25	Data entry	Data entry by band 6 staff (i.e. Deputy ward manager level)
26	Ward meeting	Multidisciplinary huddle meeting to discuss both patient care and more general issues.
27	Directorate governance meeting	Specialty quality assurance meeting that reports to organisation level committee
28	Data entry	Data entry by band 6 staff (i.e. Deputy ward manager level)
29	Ward meeting	Multidisciplinary huddle meeting to discuss both patient care and more general issues.
30	Directorate governance meeting	Specialty quality assurance meeting that reports to Organisation level committee
31	Organisation Clinical Effectiveness meeting	Organisation level meeting held in Board room, including presentation about national audit. 10 attendees, interviewee 30 present. Committee reports to the Clinical governance committee.
32	Ward meeting	Multidisciplinary huddle meeting to discuss both patient care and more general issues
33	Ward meeting	Multidisciplinary huddle meeting to discuss both patient care and more general issues
34	Record review	Data collection by nurse
35	Clinical governance meeting	Organisation level meeting that reports to the organisation Board. Presentation about national audit. 11 attendees, including interviewee 18.
36	Clinical audit project meeting	Project meeting to discuss set up of new audit process, 7 attendees including interviewee 19.

Table 4.4: A description of the observations undertaken

Ref	Title	Description
1-3	Quality Accounts 2017-18	A publicly available report about the quality of services published each year by NHS healthcare provider
4-6	Care Quality Commission report	A publicly available report about the quality of services published by the regulator
7-10	Internal feedback report	A report for internal organisational committees describing the findings and actions from the national audit of dementia
11-12	Organisational dementia strategy	A document describing actions to improve care
13	Clinical effectiveness paper	A report to the clinical effectiveness committee
14-18	National audit report	A publicly available report on hospital findings from the national audit of dementia.
19	Clinical effectiveness presentation	A presentation to the clinical effectiveness committee
20-22	Specialty governance minutes	Minutes from a specialty-level meeting to consider assurance of quality
23	NICE guideline: Dementia	A publicly available summary of best practice in dementia care
24-27	Trust Board minutes	Publicly available minutes from the most senior Trust Board meeting
28	Clinical audit handbook	Educational material produced within one site
29-31	Trust newsletter	Written information for staff about the quality of care
32	Dementia strategy	A document describing actions to improve care
33-35	Specialty governance minutes	Minutes from a specialty-level meeting to consider assurance of quality
36	Clinical audit strategy	A document describing actions to improve audit and feedback
37	National audit report	A publicly available report on hospital findings from the national audit of dementia
38-39	Clinical effectiveness paper	A report to the clinical effectiveness committee

Table 4.5: Documentary sources

I identified ten discrete stages to the national audit and described their content and delivery. The stages were: impetus, agreement to take part, preparation of staff, assessment of care, analysis of data, identification of actions, internal feedback, sense-making, wider organisation feedback and making changes. The function of each stages was common across sites, however there were differences between sites in the content and delivery of each stage, as described below. Whilst described as stages, there was interaction between them. For example, the impetus for participation impacted upon different stages of the audit, notably how data were collected and improvement actions agreed. The preparation affected the assessment of practice and the selection of actions; and internal feedback affected sense-making and making changes. I also found that whilst the national collection and dissemination of data were organised at a hospital level, sites organised and undertook the stages at the wider organisation level. For example, the agreement to take part was controlled centrally at the organisation level. To unpack the nuances and issues at these two levels, I describe both hospital and organisation-level findings.

4.3.1 Impetus, agreement to take part and preparation of staff

There were different drivers to take part in the national audit. These included it being perceived as mandatory, to enable comparison in performance between organisations, to report on participation externally, and to gain internal resources for improvement:

> "It (national audit) justifies our existence (as a specialist team), I suppose. And it shows that we're doing the right thing…[then later] I think our consultant is very proactive in terms of dementia care. She uses the audit as a stick – with the chief execs – to try to improve care." (Interview 14, Dementia nurse specialist)

The role of the national audit as a lever for gaining internal improvement resources is described in more detail as part of the internal feedback section.

Nationally, 98% of hospitals that meet the eligibility criteria choose to take part in the national audit (Documents 15-18, national audit report). I found that the decision-making process about participation involved a member of the organisation's clinical governance team identifying a lead clinician who advised on whether the data could be collected

(Interview 13, clinical audit facilitator). The clinical lead’s recommendation was reported to an organisation-level governance committee which took responsibility for the decision.

Within three organisations, data collection staff described reluctance to collect data (e.g. Observation 9, junior doctor training / audit recruitment):

> The junior doctor said they did not want to audit the notes but was asked repeatedly by a consultant, stating that the consultant “just kept pushing me to do it.” (Observation 23, record review)

There was evidence that the reviewers found data extraction of low value (section 4.3.2) and uninteresting:

> “You can see why we only do it for a couple of hours, because it’s so soul-destroying.” (Observation 22, Record review)

However, I also found two dementia specialists who attended work to collect data on a non-work day. One had earlier described the audit results as being linked to retaining the dementia role they enjoyed.

To prepare data collectors to gather data, the Royal College of Psychiatrists provided a guidance document, although this may not be used (Observations 11-15, 23, 25). At two organisations where data was collected by dementia nurse specialists, people collecting case note data had impromptu discussions about the interpretation of the standards. These were described as occasional and were typically with others involved in data collection for the national audit. There was however an example of wider engagement in this discussion:

> “I think the biggest discussion we had was around finger foods, and that was because the questions were something like, ‘You provide finger foods one to two meals a week, or five to seven meals a week, or there are only snack boxes available?’ I think for [Name] and I, we were more literal around what finger food

> was. Because on our menu we've got three, what they call, snack finger food meals. But, for me, they're not finger foods.
>
> I think we had more of a discussion around that, and for that we actually brought in- We spoke to somebody in Facilities (department) around that and … Because she said the questions were the same as what they are in PLACE (Patient-Led Assessments of the Care Environment) … So, for consistency, we went for the same reporting" (Interview 27, Dementia nurse specialist)

4.3.2 Assessment of care

The national audit requires collation of data from different sources: an organisational checklist, a staff survey, a carer survey and a review of case notes (Documents 15-18, national audit report). Case note review data were largely collected by senior nurses (deputy ward manager level to specialist nurse level) although at one organisation it was predominantly doctors (junior doctor to medical consultant) (Observations 16-18, 20-24).

During observation of case note reviews (three organisations, n=18), the mean time to review a patient's notes was 25.7minutes (range 9 to 52 minutes). Most case note reviewers recorded their findings on paper forms. The paper forms were subsequently entered into the national audit web portal by deputy ward manager level staff (mean = 11.3 minutes per record; range 6 to 20 minutes) (Observation 25, 28). There was evidence from one site that time assessing practice was prioritised over clinical care. At this site, those assessing practice were told by the clinical lead to wear normal clothes to prevent re-assignment to the wards (Observation 8) and subsequently I observed a request to undertake an assessment on a patient considered ready for discharge was declined in order to gather data (Observation 20).

During data entry, approximately half of the data forms needed to be checked with the data collector (Observation 25, 28). The subsequent clarification was not observed, which prevents description of any further interpretation of the standards or case notes, but also implies an underestimation of the total time taken to collect and finalise data.

The observations and interviews showed that the case note reviews were influenced by the quality of record keeping and the case note reviewer’s expectations.

> “there’s one (question) around, ‘Is there any evidence in the notes that the discharge plan was discussed with the consultant?’ But nobody writes that.” (Interview 27, dementia nurse specialist)
>
> “There is certainly an element of, when you expect something not to be there, you don’t look as hard. I suppose there is an element of it, maybe subconsciously, for instance, if I know that there is always a discharge letter and I don’t find it immediately, I will delve deep until I find it. If I didn’t find a ‘This is me’ (patient/carer assessment) after looking through the notes at a cursory glance, would I go that extra mile? Maybe not.” (Interview 14, dementia nurse specialist)

The reviews were also influenced by interpretations of the standards:

> For the question about whether a formal pressure ulcer risk assessment had been carried out and a score recorded, one reviewer said, “(the patient has got) a pressure sore, so assessed.” (Observation 24, record review). A different reviewer required a different level of evidence, noting that whilst there was a pressure ulcer assessment score, there was no full assessment, before adding that the assessment, “could have been made up” (Observation 22, record review).

The reviews were also influenced by the goals of the case-note reviewer. Goals included to complete the data collection task quickly (observation 23), to show the need for investment and to present the team or organisation positively:

> “I suppose if I’m wanting to drive something forward and I see it as an issue, I can use that figure to help that process… We are a little bit fearful because, ultimately, if we were shown not to be making a difference, then what does that say about our team? We haven't done our job? Would our roles be in jeopardy because we haven’t made a difference? So, there is an element of fear.” … “if I gave it (case note review task) to the tissue viability team, (they would ask) “Why the hell should I audit them?” Can you imagine if we gave them X amount of notes? They probably

> would rush through it, and the results would be more negative – because they don't have a vested interest in the results. I do have a vested interest in the results. That means that, is this accurate? I don't know." (Interview 14, Dementia nurse specialist)

There were examples where reviewers had developed their own complex set of unwritten criteria that needed to be met to reach the audit standard; others required a much lower level of evidence. For example, during observation 22 the participant verbalised different reasons for recording absence of pain assessment, saying out loud that: it was "not done consistently", "no expressed pain … recorded, but they haven't used a tool", "they've put zero but he's drowsy. They haven't said whether he's capable of answering or not" (Observation 22, record review). In contrast, a different reviewer was more lenient in their assessment of practice, deciding that a pain assessment had been undertaken based upon a thumbnail size image where it was possible to see a signature, but not the content of the assessment (Observation 23, record review). A further reviewer interpreted that, if nursing observations are there, then the patient must have had a pain assessment (Observation 17, record review). It appeared that less complex decision-making was used by those reviewers who had been reluctant to undertake the case note review and/or wanted to complete the task quickly.

4.3.3 Analysis of data, identification of actions and wider organisation feedback

Analysis of data is undertaken nationally (Documents 15-18, national audit reports), approximately five months after the delivery of the care assessed. There is a further nine-month gap between national data entry closing and the release of reports to organisations (Document 15-18).

At two organisations, local emergent findings were discussed by those assessing practice and the deputy director of nursing, prior to the national reports being received (Interviews 18, 27). At all four organisations, the national reports were awaited prior to agreeing actions (e.g. Interview 31, deputy director of nursing). Study participants reported that the analysis within the report was robust (Interview 3, directorate audit lead) but took a long time before being received as feedback (Interview 13, Clinical audit facilitator; Interview 27, dementia nurse specialist).

At each organisation, the national report was shared with a small group (approximately two to six) of positional leaders such as the deputy director of nursing or directorate manager, although they may not read it (Interview 6, dementia nurse specialist).

The national report contained 66-pages and had a common structure for every hospital (Documents 15-18). It included a description of the audit steering group members and the audit method, the mean scores for England and Wales, a summary of local performance including national ranked position, key national findings (Box 4.1) and a summary of the local hospital performance on these nationally-identified priorities. The report then provided detailed performance information, including data and narrative information summarised from carer and staff surveys. Recommendations for commissioners, board members, clinical positional leaders and ward managers, based upon national performance, were included. In addition, hospital-level data are available in an online spreadsheet.

The clinical leads who develop the organisation’s response described difficulty understanding the national report and being unclear about how to implement improvement.

> “Some of it I had to go and ask people. I think I went just by the key recommendations, in the end, to be honest because it summarised it all for me.” … “Obviously we understand all of the questions and the reason why we're doing it, but the process isn't necessarily that clear…Definitely what has changed (since undertaking the first National Audit) is the thought process in terms of before it even starts about who we need on board, why we need them on board, what we want them to find or do or see or look at.” (Interview 6, dementia nurse specialist)

Some clinical leads attended a quality improvement workshop run by the Royal College of Psychiatrists approximately three months after the report had been received. The workshop included content about what other organisations had done to achieve their results.

The organisation-identified clinical lead (medical consultant or dementia nurse specialist) translated their organisation's report(s) into a local standardised template, including proposed actions. The deputy director of nursing may also be involved in writing the internal report (Interview 27, dementia nurse specialist).

Whilst the national feedback was at hospital level, information and actions in the internal reports were at the organisation level (Documents 7-10, internal reports). The internal reports appeared to focus more on national than local performance, and relative or absolute low hospital or organisation performance was often not addressed. For example, one organisation with two sites had ten lower quartile results, but eight of these results did not have actions to address performance (Document 7, internal reports). Four hospitals (in three organisations) assessed functioning in fewer than 50% of patients but did not have actions to address performance.

At three organisations, the internal reports described actions targeting all five of the key national priorities (Box 4.1), with three of the five addressed by the fourth organisation (Document 9, internal report).

Delirium recording requires improvement

In more than half of case notes of people with dementia, there was no recording of an initial screen or check for symptoms of delirium. Inconsistency in what is recorded and communicated may affect clinical care and thereby increase a person with dementia's risk to developing delirium.

Personal information to support better care must be accessible

A ward spot check carried out during the audit looked for the document with key personal information about care needs and communication that should be completed for people with dementia, and found that only half of these patients had one in place. Forty percent of staff said that they could not access this information most of the time, and under half of carers said definitely staff were well informed.

Services must meet the nutritional needs of people with dementia

Catering services should be able to provide for the needs of people with dementia, who may not be able to eat full meals at regular times and need finger food meal alternatives and snacks available at any time to ensure they are nourished. Less than 75% of staff said that they could obtain finger foods or snacks between meals for these patients. Twenty-four percent of staff thought people with dementia had nutritional needs met sometimes, or were not met.

Championing dementia means supporting staff

To support staff to deliver better care, nearly all hospitals have created dementia champions at ward level. Just under 70% of carers gave a high rating to care overall. Staff said they needed more support, especially out of hours when less than a quarter of staff said they could access specialist support for dementia always or most of the time.

Involve the person with dementia in decision making

Where a change in residence after discharge (e.g. from their own home to a care home) was proposed, just over one third of patients did not have their consent to begin this process recorded, or evidence that a best interests decision making process had taken place, in the case that they lacked capacity

Box 4.1: Key findings in the national report (p11; Royal College Psychiatrist, 2017)

Two participants who wrote the internal report described undertaking analysis to compare organisational performance with other organisations; this was undertaken to identify high-performers to learn from (Interview 27, dementia nurse specialist) and to compare performance against other similar organisations (Interview 12, deputy director of nursing). Participants described considering organisational context as part of this comparison.

> “I had a look at these (results from neighbouring organisations) and I did some comparing. It’s not really fair to compare because the resources in the two Trusts (NHS organisations) are totally different.” (Interview 18, deputy director of nursing)

Despite this, comparative data were included in only two organisation’s reports, (Documents 9, 10) both comparing themselves against the national average. There were no examples of alternative external comparisons (e.g. comparison against top performers or a peer group) in any internal reports (Documents 7-10, internal reports).

Potential reasons for current performance were not reported in three of the four internal reports (Documents 7,8,10, internal reports). In the site where they were reported, (Document 9, internal reports) it was not clear how the barriers to performance were identified or how proposed actions were linked to the identified barriers. Who should be doing the target care behaviour (e.g. assess pain) was considered in the development of the action plan, but this information was not included in the internal report or action plan (Observation 10).

Proposed actions in the internal reports often reiterated or amended existing actions (Documents 11, 12, organisation dementia strategy) and frequently involved changing the health record, training or further audit (Documents 7-10, internal reports). The selection of actions was constrained by the perceived sphere of influence of those writing the action plan. Action plans described what would be done and by when (Documents 7-10). Most described who would be responsible, some described the outcome sought and one described the possible obstacles to completing the action.

4.3.4 Internal feedback and sense-making

At each site, possible actions to improve care were discussed with a small group of stakeholders during the development of the internal report, typically the clinical lead, dementia nurse specialist and deputy director of nursing. The actions were then amended at specialty (e.g. care of older people) level committees (Observation 3, dementia steering group), and further refined and agreed at organisation-level governance committees (Observation 1, 5, 31, 35). At one organisation, (Observation 7, clinical governance committee) presentation at the organisation-level committee led to further discussion between the clinical lead, director of nursing and medical director prior to agreement.

During committee meetings, positional clinical leaders and senior managers considered whether and how to implement best practice. They discussed the motivation of the audit provider (Royal College of Psychiatrists) and the validity of the data (Interview 19, 30; Observation 35). Verbal feedback supplemented the written report by including information about relative performance, typically describing where the hospital was ranked in the top or bottom six of all participating hospitals. Describing high performance to celebrate was important to participants (e.g. Interview 18, Deputy director of nursing; Observation 2, Clinical audit facilitation meeting; Interview 27, Dementia nurse specialist). As described as part of the impetus to participate in the audit, low relative performance increased commitment to improve:

> "I don't know how valuable the benchmarking is, apart from that it brings it to the attention of the board. If you're somewhere near the bottom then they want something done about it, it's a useful lever sometimes in that way." (Interview 18, deputy director of nursing)

However, comparison can also lead to complacency:

> "So, gather data and then see that a lot of organisations are in a similar position, so it's accepted that that's the position that it is… I think sometimes there's a degree of a) complacency or b) it's not possible to improve." (Interview 19, deputy director of nursing)

One participant described absolute performance as more important as a lever for improvement than relative performance:

> “I’m not so bothered about the difference (between two hospitals), I’m bothered that only 60% of them got one (a discussion about discharge with the carer). What would bother me more, would be why they weren’t being done, because that’s just over half. Two thirds isn’t good.” (Interview 11, directorate manager)

Participants and observations revealed how data may be triangulated with other organisation data. This was a narrative process during meetings (Observations 1, 5, 7, 30, 31, 35). Patient experience data, complaints (e.g. Observation 8) in particular, were often used as a measure of ‘true performance’; that is, that national audit data appeared to be viewed as credible if it agreed with issues raised in complaints. Informing this discussion with narrative case studies may support the engagement of influential positional leaders (Observation 5, clinical governance committee).

Through this sense-making work, concerns may be added to the hospital risk register and scored. The risk score allocated is affected by external pressure, including from regulatory, reputational and financial risk (Interview 20, clinical governance facilitator; Document 36). Some seek to game the risk level by changing it to affect who became aware:

> The Clinical audit facilitator said, “all audits on forward plan get risk rated…if less than 12 they are not escalated”. We “try to keep it at the lower end, nine times out of ten they are…if higher they get discussed at Board.” The dementia nurse specialist said that you don’t want the Board’s input as it was “a hindrance not a help” (Observation 2, clinical audit facilitation meeting).

4.3.5 Wider Organisation feedback

Ward-level staff at all participating organisations may not get feedback on the national audit results.

> "The matrons would get it (committee paper and verbal feedback on national audit) from me at the Matrons' Forum. Then we would expect the matrons to feed that back down to ground floor level. But I would say that's the part that doesn't happen, people on the ward see it. When we start going to introduce new things and when we talk to them about how we're introducing it, it's on the back of the audit. …I honestly don't believe that happens (feedback at ward level). I can't think of any ward sister, even on our older people's wards that would not be aware that we do national audits because they get- We're always on at them about the carers' one (survey) and the staff one (survey). But in terms of the audit results, I don't think it goes that far." (Interview 27, dementia nurse specialist)

However, there was evidence that ward staff may get some information about actions being taken to improve.

> "Following lower than national average scores for discharge planning and carer rating for communication on round 3 of the national audit of dementia an action plan to remedy these shortfalls had been accepted by the executive team." (Extract from directorate newsletter, document 30)

Across the sites, dementia specialists described having a good understanding of the anticipated results. As such, feedback may not alter participants' understanding of performance, and this may affect whether it leads to action.

> "I don't know. I suppose they will be fed back, but would they change their practice as a result of it? I don't know. Really, am I going to change my practice as a result of this audit? No, because I know the deficits anyway," (Interview 14, dementia nurse specialist)

4.3.6 Making changes

At each organisation, actions were monitored (Interviews 1, 13, 20). Monitoring demonstrated that actions were sometimes delayed (Documents 24-27, Observations 5, 31).

Some action owners were unaware of the actions for which they had been assigned responsibility (Interview 11, directorate manager) and some action owners leave and the actions are not completed (Interview 27, dementia audit lead). Across each organisation, many participants (e.g. Interview 14, 24, 27; Observation 8, dementia steering group) reported that the next report of the national audit comes too soon (from July 2017 to July 2019) to see improvements in the results.

4.4 Discussion

In order to describe the content and delivery of the national audit of dementia, I studied how six hospitals completed the audit. Our analysis of documents, interviews and observations, and the co-produced description, revealed similar stages to the national audit of dementia across the sites. The stages were: impetus, agreement to take part, preparation of staff, assessment of care, analysis of data, identification of actions, internal feedback, sense-making, wider organisation feedback and making changes.

This study extends previous work to describe national audits by looking across the audit process, rather than purely at data collection (Dixon-woods et al, 2019) or the response to feedback (McVey et al, 2020; Gould et al, 2018) (section 1.7)[i]. I found data collection to be undertaken by clinicians (deputy ward manager to consultant level), to be a manual process influenced by expectations, interpretations and goals. There was evidence that it was seen as low-value work that required managerial influence by senior clinicians to persuade junior doctors to gather data, but some clinicians (particularly dementia nurse specialists) saw the data as a driver for improvement resources and sustained employment. Dixon-Woods et al's (2019) found clinical leaders sought to nurture a sense of collective responsibility for data collection, but that the gathering of data was considered mundane. In a finding that resonates with my work, they found that leaders sought to present participation in the audit as, "consistent with their own basic interests or identities" (p9). Like Dixon-Woods et al, I

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[i] In summary, Dixon-Woods et al (2019) undertook an ethnographic study of data collection for two national audits, the lung audit and the vascular register. McVey et al (2020) interviewed healthcare workers at five English NHS hospitals about their use of national clinical audit data. Gould et al (2018) interviewed and observed participants from four hospitals who were involved in the national blood transfusion audit.

found that data extraction was reported to be uninteresting work. Dixon-Woods et al (2019) found that data entry was done by non-clinical staff who may misrepresent the data. I also found that non-clinical staff entered data, but they reported following up queries with the clinician who extracted data. Observing this interaction may have extended the current findings and explored the issues of misrepresentation described by Dixon-Woods et al.

I found that the national audit feedback was sent to a small number of people who may not read it. The national report was translated into an internal report which was sent to quality assurance committee members. I found that wider clinical staff did not get performance feedback from the national audit. Participants in the McVey study reported that the internal reports were widely circulated. Gould et al found that members of the hospital transfusion team and clinical governance staff received feedback from the blood transfusion audit, but clinicians involved in blood transfusion may not receive feedback. The difference in reach between the McVey study, where participants reported wide circulation, and Gould et al's (2018) and my findings may be that the latter studies gathered observed (as well as reported) behaviour; it is possible that a desire to present the organisation positively may have affected participants responses.

I found that the national audit of dementia was discussed at committees that reported to boards. Feedback associated with regulatory or reputational risk had greater agency at these committees, and consideration of the source of the data formed part of committee-members' sense-making. That the committees considered the credibility of the feedback resonates with previous findings (McVey et al, 2020; Gould et al, 2018). However, I extend previous work by describing committee sense-making work: Gould et al found that the feedback was discussed at the hospital transfusion committee, and committee members sought routes to get information to executive board level staff. McVey et al found that hospital boards did not receive national audit data except where this data were identified as, "politically sensitive" (p3). Differences between studies may reflect differences between audits studied, for example, that the national audit of dementia has greater reach. Sense-making is described further in chapters 5 and 6.

4.5 Strengths and limitations

There are strengths and limitations to my work to describe the national audit; these relate to the involvement of stakeholders and the gathering and interpretation of data. To aid reflexivity, I facilitated the co-production group to describe their pre-study views. I then facilitated the group to challenge emergent findings through explicit consideration of the group's pre-study views, evidence, theory and an intervention framework. I sought diverse perspectives by involving carers, people from diverse organisations and feedback loops to the advisory group. Sampling was informed by the co-production group members proposing the job titles of key actors in the process, to enable appropriate targeting of participants; sampling was further informed by emergent findings and the advisory group. As a result, whilst it is possible that the involvement of people from the study sites adversely affected the gathering or interpretation of the data, I anticipate that, by drawing upon their knowledge, involvement strengthened the description of the national audit. My involvement of stakeholders extends previous approaches to exploring audit and feedback, where stakeholders have provided advice to the design of data collection topic guide (e.g. McVey et al, 2020) or as part of an "intervention validation consensus panel" (p9, Gould et al, 2014). My approach to involvement sought to generate findings rooted in the language and perspectives of those involved in the national audit and may support implementation of the findings. Concurrent data collection using different methods enabled exploration of themes between data sources and is a further strength.

The national audit was explored inductively during early interviews and observations, before generating a collated diagram to use as a device to explore the content and delivery of the audit within later interviewees and to inform sampling. Synthesis was undertaken with stakeholders, and informed data collection and analysis. Later synthesis involved explicit consideration of a framework to describe complex interventions (TIDieR; Hoffmann et al, 2014b), and consideration of previous evidence (Ivers et al, 2012; Sykes et al, 2018) and theory-informed hypotheses (Colquhoun et al, 2017). It may have been more efficient to focus on the presence or absence of audit practices described as affecting effectiveness in evidence and/or theory informed hypotheses. However, a focus on existing evidence or theory would have missed further potential enhancements (e.g. time costs during data collection) and the interaction between influences (e.g. the development of commitment to change to be described in chapter 5). Previous studies have used frameworks to describe the content and delivery of complex interventions; for example, Gould et al (2018) investigated a national audit using interview and observation prompts informed by the theoretical domains framework (e.g. Francis et al, 2012). It is possible that a topic guide based upon a determinant framework may have omitted influences; for example, Nilsen and Bernhardsson (2019) highlight that organisational structures, time availability, physical environment and patient influences are not included in the theoretical domains framework. Within my study, inductive framework analysis and iterative presentation of analysis to diverse stakeholders who propose further avenues to explore may have mitigated the risk of missing components of the national audit (e.g. a researcher within the advisory group highlighted emotional influences upon behaviour, which stimulated the topic guide inclusion of questions exploring how participants felt about different parts of the audit process). The use of multiple methods may have further reduced the risk of missing theoretical domains (Francis et al, 2014). In addition, being guided by existing theory and evidence, rather than emergent findings, may have negatively impacted upon the use of the stakeholder lens upon the data.

The study explored what happens within six hospitals as part of four NHS organisations. The sites were selected for diversity; however, we cannot assume transferability to other audits, institutions or countries. Data from the fourth site sought to test earlier findings. A limitation of the study is that the timing of data collection did not allow for observation of the national audit, however I was able to explore the content and delivery of the audit through interview and documentary analysis. A further limitation was that the focus was on what happens within the hospital; wider stakeholders (e.g. regulators, commissioners) were not included as contributing participants. Future studies may seek to understand how these wider stakeholders interpret and use the data.

4.6 Reflexivity

There were a number of occasions when I may have affected the findings, and method design features intended to mitigate their influence. During data collection, I may have missed important findings (e.g. intonation not noticed during interviews that meant avenues were not explore; subtle non-verbal communication between group members when I was paying attention to another part of the room or to which I was not attuned). Such omissions are inevitable (Pope and Mays, 2020), however participant verification of early interviews and challenge by the stakeholder groups should have reduced their influence.

During data collection, I was aware that my presence may affect the events I observed. This was most evident during the observation of an organisation-level clinical effectiveness meeting where I noted, “appears choreographed” (Observation 31); for example, the language for the item about the national audit overtly referenced policy and listed the steps to organisational agreement that led to non-verbal disclosures amongst participants (e.g. raised eyebrows and quizzical glances indicative of surprise). I had also asked to stay for the whole meeting, in order to not miss any private discussion about the audit and to collect comparison information about how other items are discussed, but was also told I could only stay for the item about the audit. I interpreted this as intended to reduce the risk of potential criticism and manage potential reputational risk. Triangulation across data sources may have mitigated the likelihood of missing important details about usual audit practice. My interpretation of the role of reputational risk was stimulated by policy documents highlighting the importance of reputational risk and committee consideration of organisational risk (Interview 20, clinical governance facilitator; Document 36). Finally, I sought to work inductively. However, as an experienced nurse and health service manager with an understanding of the literature about audit and feedback, my analysis would have been informed by my prior understanding. Reflexivity in relation to stakeholder involvement method is considered in section 5.4.2.

4.7 Conclusion

In conclusion, my analysis of documents, interviews and observations, and the co-produced description, revealed similar stages to the national audit of dementia across the sites. I also found that 98% of hospitals took part in the audit and committed significant resources to undertaking the audit. Implementing enhancements to the audit provides the opportunity to improve the hospital-based care for a significant number of people with dementia. The next chapter describes the identification and specification of the enhancements and the development of a strategy to implement the enhancements.

Chapter 5. Developing an intervention to implement enhancements to the national audit of dementia

5.1 Introduction

This chapter describes the methods and results in relation to the aims to:

- identify and specify enhancements to the national audit of dementia in order to increase the receipt of evidence-based care by patients with dementia; and
- develop an organisation-level focused strategy to implement the enhancements.

The terms used in this chapter are described in Figure 3.1, but in summary:

Logical Improvement Planning is the intervention. This includes both the enhancements and the strategy to implement the enhancements, as shown in figure 5.1 below. The proposed enhancements were to improve internal feedback. This stage is enhanced by changing components (e.g. increasing the credibility of the feedback). These components are evidence- and theory-informed proposals. The co-production group specified how the components would be operationalised (e.g. who would do what, when and how). The specified proposals are referred to as steps.

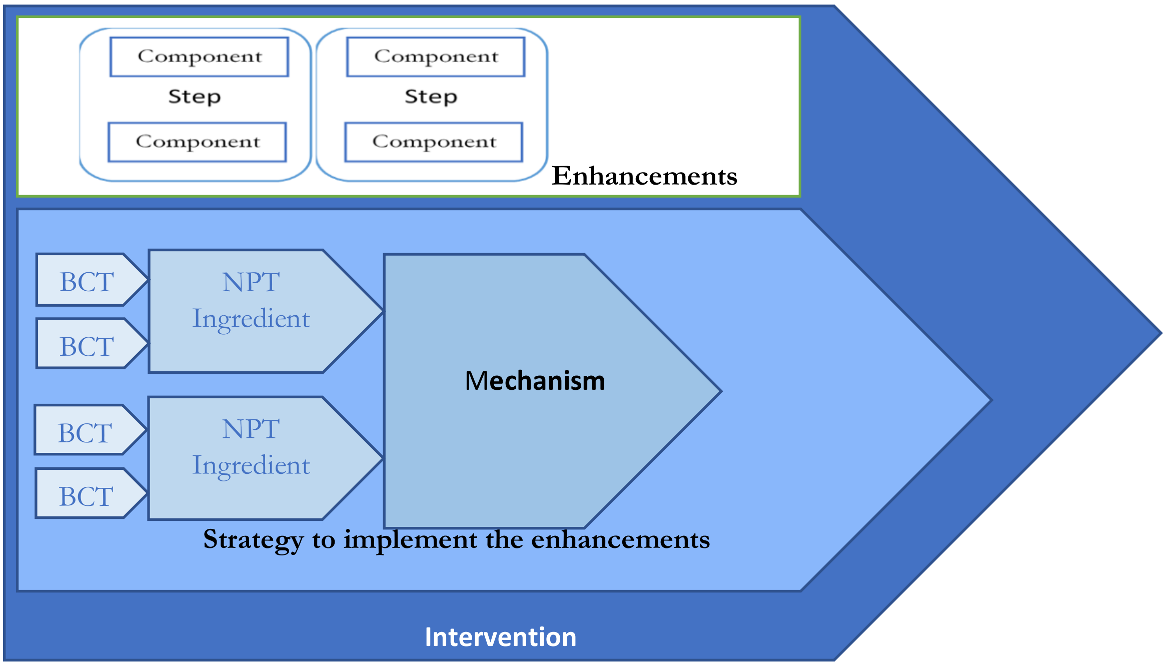


Figure 5.1: A diagrammatic representation of selected terms

The strategy to implement the steps is a face-to-face workshop, followed by post-workshop telephone support. The workshop addresses influences upon implementation. For example, stakeholders thought that the clinical leads might not understand the meaning or have the competencies to increase the credibility of the internal feedback. The strategy therefore seeks to increase ‘coherence’ (May and Finch, 2009) by delivering information about what the steps require of them. The behaviour change technique ‘instruction on how’ is used to shape the understanding of the clinical leads, and so support implementation of the step.

The main study output is an intervention manual describing the content and delivery of an organisation-level focused educational intervention (called *Logical Improvement Planning*) to enhance the organisational response to the national audit. The intervention targets the work to develop organisational action plans based upon the national audit of dementia. Logical Improvement Planning would be delivered to hospital clinical leads for dementia and hospital clinical audit leads. The intervention includes a 6-hour educational workshop and post-workshop telephone support. The intervention is described in an intervention manual (Appendix Q) to a level of specificity and clarity that is recommended for complex interventions (e.g. Craig et al, 2008).

The work to develop the intervention involved identifying and specifying enhancements to the national audit of dementia and developing a strategy to implement the enhancements. The objectives are described in Figure 5.2. This involved the integration of evidence, theory and stakeholder views through iterative facilitated stakeholder discussion, consensus methods and logic modelling (Table 5.1).

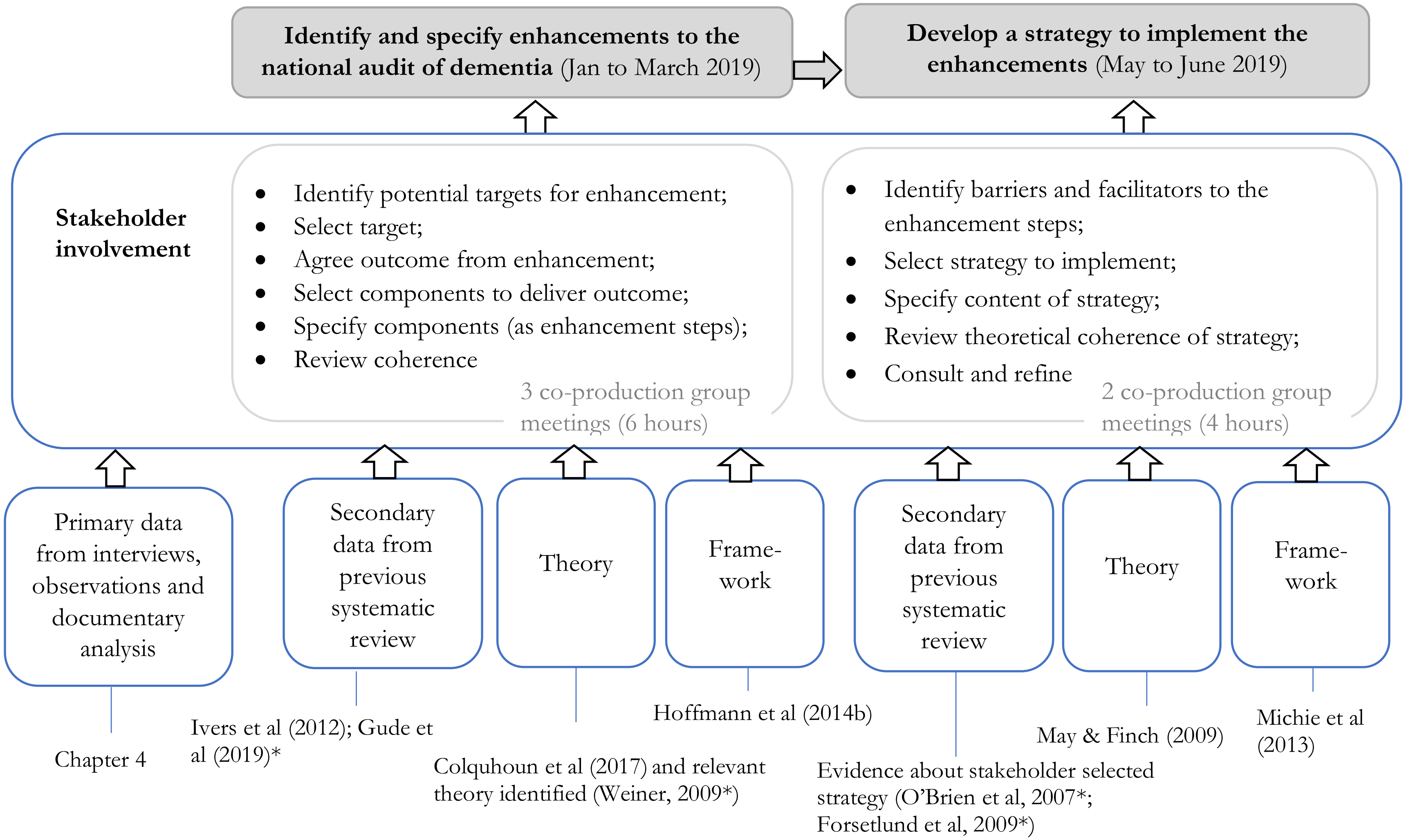


Figure 5.2: An overview of the study design indicating key inputs to intervention development

*Applied following earlier analysis, synthesis and/or decisions

5.2 Method

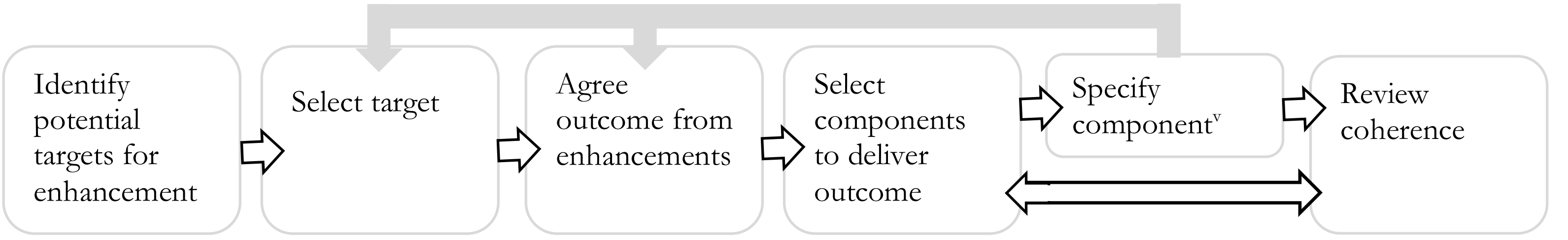
The broad approach and related methodological considerations to stakeholder involvement in the doctoral study have been described in earlier chapters. The involved stakeholders were the same as described in chapter 4, and included two groups: the co-production group, containing carers (n=3), clinical leads for dementia care (n=3) and organisational leads for clinical audit (n=3); and an advisory group of wider stakeholders (n=9).

The present chapter describes the methods to identify and specify the enhancements, before describing the development of a strategy to implement the enhancements. As shown in figure 5.2, the aims were met through stakeholder integration of evidence both from the work to describe the content and delivery of the national audit (chapter 4) and drawing upon both a systematic review of audit and feedback (Ivers et al, 2012) and theory-informed hypotheses describing influences upon the effectiveness of audit and feedback (Colquhoun et al, 2017; Gude et al, 2019). I considered the theoretical coherence of the enhancements (Weiner, 2009).

I developed a strategy to implement the specified enhancements. To do this, I facilitated the co-production group to use the NPT 16-item toolkit (May et al, 2011) (Appendix N) to identify potential influences upon the implementation of the enhancements. Based upon their discussion, I selected a strategy to implement the enhancements, and drew upon existing evidence about the effectiveness of the selected strategy to develop draft materials for the intervention (O'Brien et al, 2012; Forsetlund et al, 2009). I specified the strategy using behaviour change techniques (Michie et al, 2013), reviewed its theoretical coherence and consulted the co-production group about the draft materials.

5.2.1 Identifying and specifying enhancements

As I shall describe, the work to identify the enhancements involved a comparison of current content of the national audit with evidence and theory-informed hypotheses describing influences upon the effectiveness of audit and feedback (Ivers et al, 2012; Colquhoun et al, 2017). Consensus methods, advisory group consultation and co-production group agreement



Objective	Identify potential targets for enhancement	Select target	Agree outcome from enhancements	Select components to deliver outcome	Specify component[v]	Review coherence
Method	Facilitated stakeholder discussion	Nominal group technique	Facilitated stakeholder discussion	Facilitated stakeholder discussion	Small-group stakeholder sorting tasks	Logic modelling
Actors	Co-production group	Co-production & advisory groups, supervisors	Co-production group	Co-production & advisory groups, supervisors	Co-production group members	Co-production & advisory groups, supervisors
Inputs to co-production group	Primary data (Chapter 4); Pre-study views; Systematic review[i]; Theory-informed hypotheses[ii].	Advisory group & supervisory team views on feasibility		Systematic review[i]; Theory-informed hypotheses[ii].	Intervention framework[iii]	Theory[iv]

Key: ⇨ Planned stage ⇦ Unplanned feedback loop

[i] Ivers et al (2012); [ii] Colquhoun et al (2017) and Gude et al (2019);
[iii] Hoffmann et al (2014b); [iv] Weiner (2009)
[v] Components are the constituent element that once specified they are referred to as ‘steps’

Table 5.1: The objectives and method to identify and specify enhancements

were used to select the components to enhance the audit. This involved a funnelling process (Table 5.1), initially identifying the stage for enhancement, then the outcome from enhancing it, and then the components that might deliver the chosen outcome. The components were then specified through stakeholder input from a co-production group supported by an advisory group. Their responses were synthesised using an intervention framework (Hoffmann et al, 2014b). This framework supported the creation of 'steps', whereby activities undertaken at a similar time by the same actors were grouped together. These steps were then refined through consideration of their theoretical coherence and further stakeholder input. The work to identify and specify the enhancements involved three workshops (9, 10 and 11) over a period of three months (from January to March 2019) (Figure 5.2)

Describing the method in more detail, the selection of the target for enhancement involved the identification of potential targets, narrowing this through consensus methods and selecting the target. As shown in figure 5.2, this work involved the co-production and advisory groups, and the supervisory team. The co-production group workshop 9[i] discussed (Table 4.1): their pre-study views about how audit and feedback is conducted; findings from the earlier work to describe the current national audit; previous evidence (Ivers et al, 2012); and theory-informed hypotheses (Colquhoun et al, 2017). This information was presented on slides. The slides highlighted that the current analysis of the national audit was an interim, rather than final, description. There were three rationales for this. Firstly, to open a conversation about whether further data were needed. Secondly, in recognition that later work to select and specify the enhancements and strategy to implement may provide a fresh perspective on the data. Finally, the descriptive work produced extensive amounts of data. There was a pragmatic need to target the analysis in order to maintain group engagement.

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[i] In practice, the move from the work to describe current practice to the work to develop enhancements was incremental with the phases assigned a label afterwards. The facilitation plan set out what to do if the group felt the description either: a) needed more data; or b) was a settled synthesis of what happens in the national audit. Co-production group 9 included the presentation of data from 6 interviews and 6 observations not previously seen by the group, but which resulted in only minor amendments to the description. As a result, the work of the group moved to the identification and specification enhancements.

Later in workshop 9, I facilitated the co-production group to use nominal group technique to prioritise the potential target. Nominal group technique (Box 5.1) is a consensus method which reduces bias associated with socially influenced judgements, through anonymised decision making, and increases transparency through explicit aggregation (e.g. McSharry et al, 2016).

"The process of nominal group technique can be summarised in six stages:

1. Formulation and presentation of the nominal question
2. Silent generation of ideas in writing
3. Round-robin feedback from group members to record each idea in a succinct phrase on a flip chart
4. Group discussion of each idea in turn for clarification and evaluation
5. Individual voting on priority ideas with the group decision often being mathematically derived through rank-ordering or rating
6. Feedback of results, further discussion and revoting"

Box 5.1: Nominal group technique (Extract from Cantrill et al, 1996; p68)

After workshop 9, I had face-to-face discussions with advisory group members and the supervisory team to explore the feasibility of the co-production group's proposed targets.

In workshop 10, the co-production group discussed the feedback from the advisory group and supervisory team and selected the target for enhancement. I asked the co-production group to describe the outcome from enhancement, using prompts such as, "what would better action planning lead to?" and "how would I assess whether the action plan was a good one?". I recorded their responses on a flipchart. Facilitated group work synthesised the responses into a single, multi-faceted outcome statement. After the workshop, I transcribed the flipcharts and outcome statement, and selected potential components that might influence the outcome. The selection drew upon evidence from a systematic review (Ivers et al, 2012) and from theory-informed hypotheses (Colquhoun et al, 2017; Gude et al, 2019) and began the work to consider the theoretical coherence of the components and outcome.

In workshop 11, I presented the selected potential components to the co-production group. I asked whether they agreed with the selected components and whether the group members thought the proposed components might generate the outcome defined in workshop 10. I made notes capturing their responses. To specify the components (e.g. present comparison information), I split the co-production group into sub-groups, each containing a clinical lead, clinical audit lead and a carer, such that the healthcare workers in each group were from different organisations. The sub-groups sat at different tables in the same room. One sub-group met the day after the other two, due to stakeholder availability. Using pre-prepared paper slips, each sub-group undertook three tasks, to cluster the components by: who would do them; where they would be done; and placed them in order by when they would be done. After each task, there was a facilitated, whole group discussion during which I asked questions to explore disagreements. After discussing when the components would be done, I asked the whole group about the materials that would be used and the procedure that would be followed for each. As they did so, the group members and I made notes on the discussion. The group members gave in their notes at the end of the workshop. I transcribed the notes.

After the workshop, I entered the information from workshop 11 into a table (Appendix M) that captures the elements within the TIDieR framework (Hoffmann et al, 2014b). I used the information in the table to narratively describe ‘steps’ to the enhancement:

Step 1:

Aims: To address trust and credibility and prepare for action planning

Who: Clinical lead.

When: Undertaken before the national audit report is received.

Preparation step has two parts:

1. Draft section of report that gives a brief description of:
    a) Source, advisory group representation and external drivers for participation
    b) How data were collected and experienced difficulties with reliable measurement
    c) Refer to later description of triangulation with other data
2. Prepare for next stage by:
    a) Identify influential members of the specialty and Trust governance groups
    b) Gather Trust Board and governance group minutes, Quality Account, Quality Strategy and Care Quality Commission (CQC) report
    c) Identify stakeholder group and arrange meeting(s) to discuss data and improvements

Figure 5.3: An example of the content of a 'step'

To review theoretical coherence, I developed a draft logic model of the selected components and the intended outcome proposed by the co-production group. I discussed the steps, the logic model and theoretical coherence with the supervisory team and with members of the advisory group. In workshop 11, I asked the co-production group to comment on whether the descriptor reflected what they had described in workshop 10, whether the content was clear and whether they wanted to refine the content.

5.2.2 Developing a strategy to implement the enhancements

The strategy to implement the enhancements was informed by normalisation process theory (Box 5.1). In summary, I used the NPT toolkit (May et al, 2011) as a heuristic device to explore group members' reported beliefs about influences upon implementation of the steps (Figure 5.7). The development of the strategy involved: identifying barriers and facilitators to the enhancement steps; selecting the strategy to implement; specifying the content of the strategy; reviewing the theoretical coherence of the strategy; consulting and refining the strategy to implement. The resultant strategy was specified using behaviour change techniques. The development work involved workshops (12 and 13) in May to June 2019. The inputs to deliver each aim are summarised in Figure 5.4.

Describing the method in more detail, the identification of barriers and facilitators to the enhancement steps involved asking stakeholders in the co-production group (Workshop 12) whether each step was implementable and what might affect implementation. The discussion was informed by group members' responses on a 16-item unmarked semantic differential scale NPT toolkit (May et al, 2011) (Appendix N). To do this, the group members individually completed the NPT toolkit on acetate overlays. Once completed, I collated the responses and analysed them visually. I facilitated the group to explore areas of difference using prompts such as, "there appear to be differences of opinion about whether people will understand what the step requires of them, what might influence their understanding?". I used prompts to explore differences between staff groups and organisations, and what might support implementation. Group members and I took notes during the discussion.

The work after workshop 12 sought to select and specify the delivery the implementation strategy: I reviewed the NPT-toolkit responses and notes to identify mechanisms (e.g. cognitive participation) and ingredients (e.g. differentiation) which might affect implementation of each step. I selected a potential type of strategy (educational meeting). The content of the strategy was informed by a review describing factors associated with increased effectiveness of the selected strategy (Forsetlund et al, 2009) and the notes from Workshop 12. Later development of the strategy led to consideration of further evidence (educational outreach[i]; O'Brien et al, 2012) (table 3.4).

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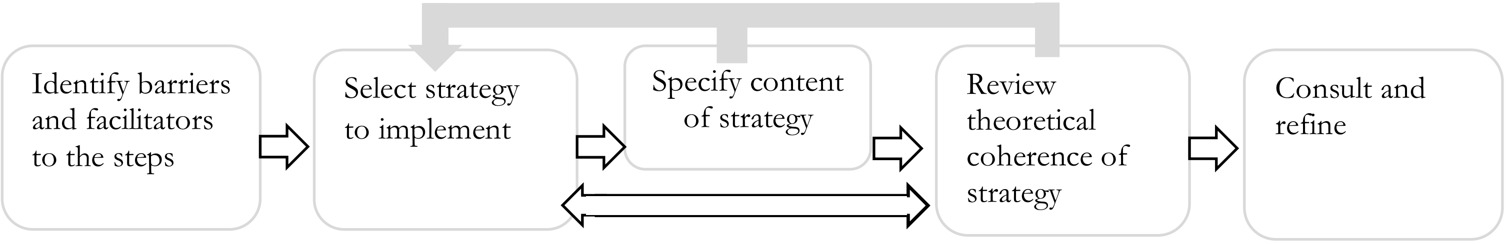
[i] Educational outreach involves, "trained people visit clinicians where they practice and provide them with information to change how they practice. The information given may include feedback about their performance, or may be based on overcoming obstacles to change." (p2; O'Brien et al, 2007). Within the current study, telephone-based education re-iterates workshop content and provides support to overcome obstacles.



Objective	Identify barriers and facilitators to the steps	Select strategy to implement	Specify content of strategy	Review theoretical coherence of strategy	Consult and refine
Method	Facilitated stakeholder discussion of factors affecting implementation	Consideration of existing strategies	Drafting, presenting, co-coding and re-drafting	Logic modelling	Small-group stakeholder sorting tasks
Actors	Co-production group	MS and supervisors, in consultation with stakeholders	MS and Supervisors	MS and supervisors, in consultation with advisory group	Co-production group members
Inputs	NPT toolkit[i]	Systematic reviews[ii&iii]; Stakeholder views on feasibility	Behaviour change techniques[iv]		Stakeholder views on feasibility; Behaviour change techniques

Key: ⇨ Planned stage ⇦ Unplanned feedback loop [i] May et al, 2011; [ii] O'Brien et al, 2012; [iii] Forsetlund et al, 2009; [iv] Michie et al, 2013

Table 5.2: The objectives and method to develop a strategy to implement the enhancements

Normalisation process theory (NPT) is a mid-level theory that describes mechanisms that support implementation and integration, these are: coherence; cognitive participation; collective action; reflexive monitoring (May and Finch, 2009). NPT has been applied to a diverse range of interventions (May et al, 2018), has previously been applied to the implementation of effective quality systems in hospitals (Leggat and Balding, 2017; Desveaux et al, 2017), and has been used to support intervention development (e.g. Brooks et al, 2015).

Mechanism:	**Coherence**	**Cognitive participation**	**Collective action**	**Reflexive monitoring**
Ingredient: [i]	Differentiation	Initiation	Interactional workability	Systematisation
	Individual specification	Legitimation	Relational integration	Individual appraisal
	Communal specification	Enrolment	Contextual integration	Communal appraisal
	Internalisation	Activation	Skill set workability	Reconfiguration
Support actors to invest:	Meaning	Commitment	Effort	Comprehension

Mechanisms, components and investments described within NPT (May & Finch, 2009)

NPT has been developed into a set of 16 unmarked semantic differential scales (Appendix N) for use as a device to explore stakeholders' thoughts about factors affecting implementation and integration (May et al, 2011). The toolkit translates ingredients of the theory into statements (for example, differentiation becomes, 'participants distinguish the intervention from current ways of working' and there is further explanation that, 'whether the intervention is easy to describe to participants and whether they can appreciate how it differs or is clearly distinct from current ways of working'). In responding to the prompts, stakeholders are guided to identify and understand potential influences implementation and integration. Awareness of the challenges and facilitators can then be used to consider how they might be overcome to support implementation and integration.

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[i] May (2013) states, "a mechanism is defined as a process that brings about or prevents some change in a concrete system, that unfold[s] over time, and expresses contributions of human agency"(p3). Each NPT mechanism has different ingredients (e.g. differentiation, individual specification, communal specification and internalisation is proposed to generate coherence through which the actor invests meaning in the work). These are referred to as components by May (2013), however I use the former term of 'ingredient' to avoid confusion with components of the intervention.

Box 5.2: A summary of Normalisation process theory and the NPT toolkit

I used the content of the steps (e.g. Figure 5.7) and the analysis of impacts upon implementation to draft the educational meeting materials. I coded the educational meeting using behaviour change techniques (Michie et al, 2013). I named the intervention *Logical Improvement Planning*. I presented the content of the educational intervention to a senior researcher (NK) trained in the behaviour change techniques taxonomy and experienced at delivering practice change interventions to NHS staff. NK independently coded the behaviour change techniques. Disagreements between coders were resolved through discussion. The presentation and coding of the intervention identified amendments to the content and delivery of the intervention.

To review the theoretical coherence of the strategy, I developed a logic model of the strategy. The logic model linked the intervention outcome, enhancements, NPT mechanisms, NPT ingredients and strategy to implement. I discussed the theoretical coherence of the strategy to implement with a senior implementation scientist and co-author of NPT (TF).

In Workshop 13, I described the content and delivery of the intervention to the co-production group. This involved describing the intervention name, aim, target audience, procedures and duration, and presenting the intervention materials to the group. The co-production group suggested amendments to the content and delivery of the intervention. I refined the intervention and reviewed the behaviour change techniques and logic model.

5.3 Results

In summary, the stakeholders prioritised enhancing organisational action planning, and agreed seven components to the enhancements (Figure 5.4). A strategy to deliver these consisted of a face-to-face educational workshop and phone-based support delivered to hospital clinical leads for dementia and the hospital clinical audit leads. I named the intervention Logical Improvement Planning. Logical Improvement Planning is hypothesised to have its effect through the development of organisational commitment to change and an informational assessment of implementation capability (Figure 5.5). The intended outcome from the intervention is an organisational action plan that identifies and resources actions which are specific, clear, target poor performance and address barriers. It is anticipated that improving the action plan would result in improved care and improved outcomes for patients with dementia.

Component
Target low baseline
Analyse barriers and facilitators to the target care behaviour
Model the link between barrier and action
Address trust and credibility
Target message to recipient priorities
Present comparison
Adapt existing actions

Figure 5.4: Components to enhance the national audit of dementia

Here I present the findings as they relate to each aim and objective, culminating in the Logical Improvement Planning intervention (Table 5.3).

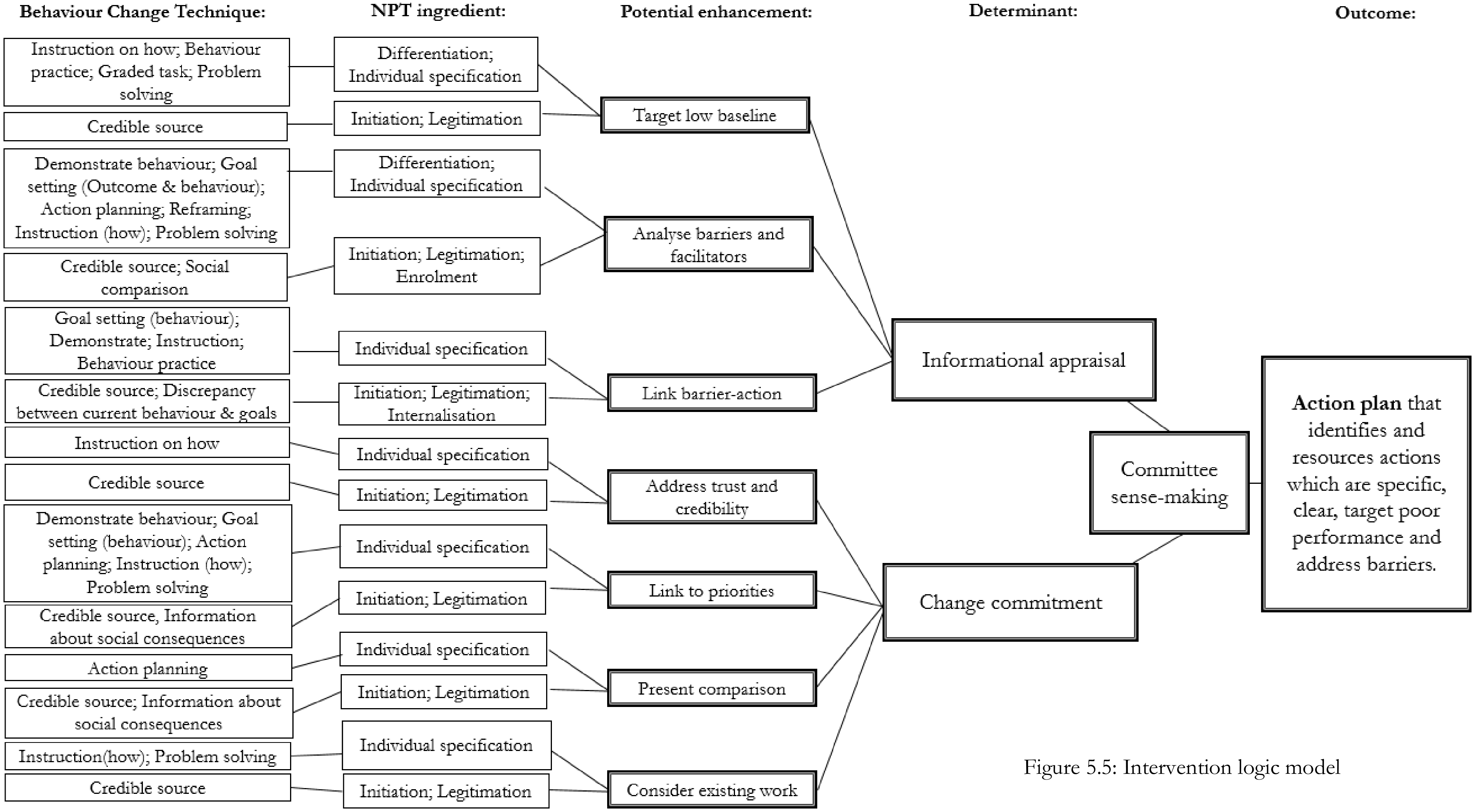

Figure 5.5: Intervention logic model

	Objectives	Results
Enhancement	Identify potential targets	The co-production group prioritised data collection, feedback and action planning
	Select target	Stakeholder consideration of feasibility, and co-production group consultation, led to the selection of action planning from the national audit
	Agree outcome from enhancement	The intended outcome from the intervention evolved through the development process, ultimately becoming, “an action plan that identifies and resources actions which are specific, clear, target poor performance and address barriers”.
	Select components to deliver outcome	The components to deliver the above outcome evolved through the development process, ultimately becoming: to develop logical actions by targeting low baseline, analysing barriers to performance and linking barriers to actions; to gain organisational commitment by addressing trust and credibility, linking performance to priorities, presenting meaningful comparison data and reflecting existing work.
	Specify components	I presented the components as ‘steps’ (Figure 5.7), and described them fully using the TIDieR framework (Hoffmann et al, 2014b) (Appendix M)
	Review coherence of enhancements	The intervention enhances action planning in a manner consistent with the theory of organisational readiness to change (Weiner, 2009)
Strategy to implement	Identify barriers and facilitators to implementing the components	I identified that the clinical audit lead and the Trust clinical lead for the national audit of dementia would *construct potential value* and *buy-into* most of the steps, but that *coherence* and *cognitive participation* were potential barriers to implementation. (Figure 5.5) The co-production group identified ingredients that might affect these barriers, specifically work to: increase differentiation, individual specification, initiation, legitimation, enrolment and activation (May and Finch, 2009).
	Select strategy to implement Specify content of strategy	I developed a training intervention targeted at the clinical audit lead and the Trust clinical lead for the national audit.
	Review theoretical coherence of strategy	I coded the content of the intervention using behaviour change techniques (Figure 5.5). I developed a logic model describing the intervention (Figure 5.5)
	Consult and refine	Logical Improvement Planning is described in the intervention manual (Appendix Q).

Table 5.3: A summary of the intervention development results

5.3.1 Identifying and specifying enhancements

During workshop 9, co-production group members prioritised three stages: data collection, feedback and action planning. Later discussions with the advisory group identified impacts upon the selection of the targets for enhancement (Figure 5.6).

Data collection would not happen again in the study funding period, so there would not be the opportunity to test the feasibility of the enhancements.[i]

Amending the national feedback report from the Royal college of psychiatrists (e.g. to improve the timeliness or content of the report), was not be possible due to a pre-defined development and approval process.

Whilst action planning might be the target, the strategy to implement might involve the preparation stage.

Figure 5.6: Advisory group feedback on selection of targets for enhancement

During workshop 10, co-production group members agreed to enhance action planning. The co-production group proposed an intermediary outcome. Their intermediary outcome was an internal report and action plan that: targets poor performance; describes why not doing well; and contains actions which are relevant, actionable, specific, actionable, time-bound measurable. The group defined these terms as described in Table 5.4.

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[i] Work to explore the feasibility of the intervention was curtailed by the COVID-19 pandemic and will be reported beyond this thesis.

Term	Co-production group definition
'Target poor performance'	Poor performance should be defined by each recipient in both absolute terms and by considering performance relative to other hospitals (e.g. lower quartile).
'Relevant'	Recipients understand and the actions address the reasons for poor performance.
'Actionable'	Action is resourced and agreed.
'Specific'	States who would be doing what, as part of the action to improve care.
'Time-bound'	When the action to improve would be completed.
'Measurable'	How completion of the action will be confirmed.

Table 5.4: Co-production group definitions to terms within the outcome of the intervention

I proposed that these components may deliver the intended outcome: addressing recipient priorities; developing trust and credibility in the results; presenting meaningful comparisons; using cognitive influences by presenting loss-framed data; identifying and addressing barriers to improved performance; developing a conceptual model of the link between the action and improved care; involving people with control of performance and considering the opportunity cost of the improvement action might generate the intended outcome. The rationale for these enhancements is presented in table 5.5.

Theory-informed hypothesis	**Brief rationale**
Recipient priorities	This proposal suggests that feedback which targets performance that the recipient feels is important to their roles or responsibilities is more likely to be effective. Chapter 4 described that quality assurance committee members considered whether audit performance created an organisational risk. The co-production group said that improvement actions should be resourced. Explicitly linking audit performance to organisational priorities may increase support to resource the action, and thereby increase improvement.
Trust / credibility of the audit and feedback	This proposal suggests that feedback that is perceived to be without conflict of interest and based upon good quality evidence is more likely to be effective. This resonates with the chapter 4 finding that committees reviewing the internal report question the data quality. I proposed that data may need to be credible to generate commitment to change. As such, including written and verbal feedback about data quality may increase the trust and credibility placed in the data which may enhance the response to the national audit data.
Comparison	This proposal suggests that feedback that includes comparison to the performance of others, own previous performance or a standard is more likely to be effective. This resonates with the chapter 4 finding that committees sought information about relative performance (e.g. whether the organisation is near the bottom, in terms of performance) but that internal reports did not present this information. Gude et al (2019) present rationales for different comparators. I proposed that adverse comparison (e.g. performance in the bottom 10%) may increase commitment to change. As such, including selectable comparators (e.g. accessible information describing organisational position relative to the top / bottom 10% and/or quartile) may enhance the response to national audit data.
Cognitive influences	This proposal suggests that feedback that emphasises what needs to be achieved (loss framing) (e.g. 40% of patients did not get an assessment of functioning) is more likely to be effective than that which describes what has been achieved (e.g. 60% of patients did get

	an assessment of functioning). Where data were included in the internal reports, it was always framed positively. I proposed that loss framing may increase commitment to change.
Barriers	This proposal suggests that feedback which addresses barriers to change in performance is more likely to be effective. The earlier study found that only one site included information about barriers to performance. Undertaking work to understand barriers to improved performance may improve the selection of actions and enhance improvement.
Conceptual model	This proposal suggests that if there is a clear understanding of the processes affecting performance, feedback is more likely to be effective. Chapter 4 describes that one site that included information about barriers to performance, but was not clear how the proposed action might address the barriers. Identifying barriers to performance and explicitly linking actions to address barriers may enhance the selection of actions.
Control	This proposal suggests that improvement is more likely when the behaviours affecting performance are under the control of the feedback recipient. This resonates with two findings: Firstly, that some people were not aware of actions they had been given responsibility for; secondly, that current actions are often selected because they are actions that the Clinical leads feel able to influence. A clear path from the data, to the analysis of causes of performance, to the agreement of those who are able to influence performance may enhance the audit.
Opportunity cost	This proposal suggests that improvement is more likely when there is a low cost to changing. This resonates with the finding that committees often consider existing actions when reviewing whether and how to improve performance. Seeking existing actions that are perceived to have a lower opportunity cost may increase commitment to change, and thereby enhance the audit.

Table 5.5: The rationale for the selected theory-informed enhancements to the national audit of dementia.

Based upon the work after co-production group 10, I proposed specifying the goal slightly differently to make it more consistent with the framing of evidence and theory, and to make it more concise. I proposed that, "targets poor performance; describes why not doing well; contains actions which are relevant, actionable, specific, time-bound measurable" became, "identifies and resources actions which are specific, clear, target poor performance and address barriers". The co-production group (workshop 11) supported this change and seven of the selected components, but described that 'loss-framing' may not be acceptable, making it difficult to implement and potentially undermining implementation of the other enhancements. Loss-framing remained in the components, but was removed during the development of the implementation strategy.

Work to specify the content and delivery of the components led to the TIDieR table (Appendix M), from which the following steps were generated:

Step 1:
Aims: To address trust and credibility and prepare for action planning
Who: Clinical lead.
When: Undertaken before the National audit report is received.
Preparation step has two parts:

1. Draft section of report that gives a brief description of:
    a) Source, advisory group representation and external drivers for participation
    b) How data were collected and experienced difficulties with reliable measurement
    c) Refer to later description of triangulation with other data
2. Prepare for next stage by:
    a) Identify influential members of the specialty and Trust governance groups
    b) Gather Trust board and governance group minutes, quality account, quality strategy and Care quality commission (CQC) report
    c) Identify stakeholder group and arrange meeting(s) to discuss data and improvements

Step 2
Aim: To identify priorities for action from within the hospital feedback.
Who: Clinical lead and Clinical audit lead
When: Month 0-1.

1. Review full data set for potential priorities, where potential priorities are those:
a) With lower quartile performance
b) Low absolute performance, where not undertaking target care behaviour might result in significant impact on patient/ carer / organisation
c) For which there is not more robust data that indicates acceptable performance
2. Identify high performance to celebrate success

3. Discuss full data set with stakeholder group, targeting on: risks to patient; risks to organisation; triangulation with other data; and successes to be celebrated. Generate a final list of priorities for action with:

a) Lower quartile performance which is considered unacceptable to stakeholder group

b) Absolute performance and impact on patient/carer and organisation which is not considered acceptable

4. Discuss target care behaviours with stakeholder group to identify relationship to other data (e.g. performance, complaints, CQC inspection, length of stay, cost) and organisational priorities (e.g. Trust board, commissioner, CQC).

Step 3

Aim: To align messages about data to organisational priorities

Who: Clinical lead and Clinical audit lead

When: Month 0-1

1. Review the quality account and minutes from quality committee and organisational board that describe organisational priorities. Consider links to national audit priorities for action
2. Identify other stakeholders to seek to involve, based upon audit findings and related organisational priorities. Discuss the audit data and the relationship to their priority, whether there is data and/or existing actions that relates to both with these stakeholders

Step 4

Aim: To present prioritised data items in a way that increases motivation to commit organisational resources

Who: Clinical lead and Clinical audit lead

When: month 1-2.

1. Present loss-framed data (e.g. 40% patients did NOT get…)
2. Present comparison
3. Identify position compared to own previous performance, national and peer group to be able to give verbal feedback at meeting.

Step 5

Aim: To seek evidence about influences upon performance and potential actions to address barriers

Who: Participants as described below

When: Month 1-3

Seek evidence of influences and actions to address barriers by:

1. Literature search by hospital librarian of impacts upon performance of target care behaviour
2. Clinical audit lead reviews Trust data for internal high-performers and national audit data for those beyond the Trust. Ask those identified about what helps performance.

3. Observe care delivery: Look for possible causes of performance and possible waste (e.g. unnecessary dual data entry) that could be removed to create capacity for change. Observations of care delivery. Findings fed back to clinical lead.
4. Clinical audit lead: Share findings on noticeboards and ask for reasons via email / anonymous comments. Collate and feedback comments to clinical lead.
5. Clinical lead: Review list of potential strategies (Powell et al, 2015)(Appendix P). Ask stakeholder group about barriers and what has been done by others to understand the reasons for current performance (e.g. as part of improvement project, incident review)

Step 6
Aim: To model the link between barrier, action and organisational priorities
Who: Clinical lead
When: Month 3-4.
Duration: 6 hours

1. Draft logical improvement plan (Appendix P)
2. Discuss draft improvement plan and whether could/should adapt existing actions with service improvement lead, stakeholder group (including deputy director of nursing and influential voices on governance groups) and potential action owners.
3. Ask whether they agree with the choice of action to address barrier, or whether a different action might be more effective.
4. Ask potential action owner to take responsibility for completion of the action

Step 7
Aim: To present to governance group in order to gain approval for the action plan.
Who: Clinical lead
When: Month 4-5.
Describe, verbally and in an accompanying written report:

1. Data quality;
2. Prioritisation method and how plan developed;
3. Successes to celebrate
4. The logical improvement plans, including relative & loss-framed performance.
5. The action plan that specifies the target care behaviour, the action to improve detailing: what will be done and the rationale for action; by whom; to whom; by when and how it will be monitored

Figure 5.7: A description of the enhancement steps

To consider theoretical coherence, a logic model of the enhancements was developed (Figure 5.5). The logic model illustrated that the intended outcome is achieved through two key inputs: an informational appraisal and organisational commitment. These two inputs inform committee members' sense-making work resulting in an action plan which identifies and resources actions which are specific, clear, target poor performance and address barriers. Aligning the components in this way surfaced similarities with Weiner's (2009) determinants and outcomes of organisational readiness for change[i]. I proposed that the work undertaken to gain organisational resources (e.g. presenting meaningful comparisons and loss-framed data, aligning these to priorities) might lead to change in commitment. The work undertaken to identify low baseline, identify barriers and facilitators to the target behaviours and strategy to implement, and to link improvement actions to this analysis, is similar to Weiner's description of a collective informational appraisal about implementation capability.

5.3.2 Developing a strategy to implement the enhancements

Workshop 12, to explore the factors affecting the implementation of the steps, surfaced the mechanisms and ingredients to be targeted as part of the strategy to implement the enhancements (Appendix O). They also made additional comments that informed the operationalisation of the implementation strategy.

Figure 5.5 illustrates that the key elements to address at the level of NPT mechanism were coherence and cognitive participation. That is, that actors develop an individual and communal understanding of the meaning, uses, and utility of the enhancements, and agree that it should be part of their role. I proposed that this might be done through a face-to-face educational meeting[ii] involving key actors in the action planning stage: the hospital clinical lead for the national audit and the hospital clinical audit lead. The workshop is intended to be delivered to participants from ten Trusts at a time.

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[i] Weiner (2009) described that organisational readiness for change stems from organisational commitment (change valence), and that the efficacy of the change is affected by informational appraisal of thetask demands, resource availability and situational factors.

[ii] Forsetlund et al (2009) found that educational meetings are an effective way to change behaviour, that there is variation in their effectiveness of educational meetings, with education regarding less complex behaviours, less serious outcomes, higher attendance and mixed interactive and didactic meetings being associated with increased change. The Forsetlund et al (2009) review focuses on changes in care behaviours, rather than in audit and feedback practices. I proposed that, whilst the behaviours may differ, the actors targeted in both the review and the intervention being developed are health care workers.

The content of the steps was also changed as a result of the work to understand implementation (Table 5.6)

Amendment to step	Rationale for change
Removed proposal to use loss framed data	Co-production group members said that senior managers had previously stated that data must be positively framed, and that loss-framing may affect the acceptability of the whole intervention.
Remove use of APEASE criteria (Michie et al, 2014) to select the strategy to implement	To reduce complexity
Comparator to be selected by participants from the list of options in the training materials based upon judgement of influence over local change commitment	Co-production group members described organisational differences in the acceptability and anticipated effectiveness of some forms of comparison (e.g. if performance gap to top 10% is too great)
Add that clinical leads were to seek and describe high performance	To provide balance and to reflect finding from descriptive work that celebrating high performance was important to stakeholders
Add 'coping planning' (Kwasnicka et al, 2013) (e.g. what to do if a potential action owner does not agree with the proposed action).	To prepare actors for potential obstacles in the development or completion of actions

Table 5.6: The rationale for amendments to the interventions

The name, Logical Improvement Planning, is intended to differentiate the intervention from current practice in relation to study findings about the current targeting (i.e. based on national performance rather than local performance) and selection of improvement actions. It is also intended to differentiate the intervention from 'action planning' where actions are given rather than locally developed (e.g. Roos-Blom et al, 2019). The name and theoretical coherence of the proposed logic model (Figure 5.5) was agreed with the involved stakeholders.

As a result of feedback on the draft educational meeting, the list describing potential implementation strategies (Powell et al, 2015) from Step 5 was amended to remove strategies that the stakeholder group felt would not be feasible for clinical leads and clinical audit leads in the English NHS context[1].

The group also highlighted similarities between the strategies and proposed grouping them to reduce the time required for participant review (Appendix P). At the end of workshop 13, the clinical leads asked for, and were given, a copy of the workbook from the intervention to use in their response to the national audit of dementia feedback.

5.4 Discussion

I worked with stakeholders to develop an evidence- and theory-informed intervention to enhance the National Audit. I called the resulting intervention Logical Improvement Planning.

Logical Improvement Planning is a co-produced educational intervention targeting the behaviour of the hospital-based stakeholders to improve the organisational response to feedback from the national audit of dementia. The intended outcome of the intervention is a hospital-level action plan that identifies and resources actions which are specific, clear, target poor performance and address barriers. I propose that such an action plan would be better than current practice which did not target low baseline, analyse performance, nor describe actions that might address identified causes of low performance. I propose that the development of such an action plan would, if undertaken, increase improvements in care and improve outcomes for patients with dementia. Logical Improvement Planning involves a six-hour workshop and two half-hour support calls. The target audience is the organisational clinical lead for dementia and the hospital clinical audit lead. The time commitment for

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[1] The removed strategies were: alter patient fees; change accreditation or membership requirements; change liability laws; create or change licensure standards; fund and contract for the clinical innovation; increase demand; make billing easier; use capitated payments; use other payment schemes.

Logical Improvement Planning is equivalent to the current optional multi-site national audit of dementia quality improvement workshop provided by the Royal College of Psychiatrists.

Logical Improvement Planning has features in common with quality improvement collaboratives (QICs). QICs involve teams learning improvement techniques, and working together to share ideas, learning and data (Zamboni et al, 2020). Zamboni et al (2020) propose that QICs may increase confidence in the data and thereby commitment to change. Zamboni also suggest that QICs may improve health professionals’ knowledge, problem-solving skills, attitude and teamwork. There is evidence that QICs may be effective, but gaps in reporting and multiple sources of bias undermine interpretation of the results (Wells et al, 2017). Logical Improvement Planning also has components to address commitment, knowledge and problem-solving and is specified in a manner consistent with intervention development best practice (e.g. Craig et al, 2008; Hoffmann et al, 2014b). Work to test the effectiveness of Logical Improvement Planning is described in section 6.8.

5.4.1 Strengths and limitations

In developing the intervention, I followed complex intervention development guidance to iteratively integrate evidence, theory and stakeholder views, and to give attention to both the intervention and its implementation. The developed intervention incorporates the views of a wide range of stakeholders, including carers, clinical leads for dementia, clinical audit leads, a patient, researchers with behaviour change expertise and representatives of professional bodies, the audit provider and the commissioner of national audits. I applied evidence from the work to describe current practice in the national audit, and the findings from a systematic review of 140 trials of audit and feedback (Ivers et al, 2012). In developing the enhancements to the national audit, I drew on theory-informed hypotheses (Colquhoun et al, 2017) and a theory describing organisational readiness to change (Weiner, 2009). Section 5.4.3 reflects upon the theoretical approaches used throughout the thesis. In considering how to implement the enhancements, I again applied evidence (Forsetlund et al, 2009; O’Brien et al, 2007) and theory (NPT, May and Finch, 2009). Section 5.4.2 reflects upon the strengths and limitations of the stakeholder involvement method.

There are limitations to the development of Logical Improvement Planning that I expand upon within the discussion (chapter 6). These relate to: the focus on one part of the national audit; the selection of an intermediary outcome (an enhanced action plan); the reliance on reviews limited to randomised controlled trials; and the potential influence of context. In addition, the intervention includes both multiple components and multiple behaviour change techniques to implement the components; it is possible that the same outcome could be achieved more efficiently. Future effectiveness studies should use designs able to test the impact of different components (e.g. multiphase optimisation strategy or sequential multiple assignment randomized trial designs; Collins et al, 2007). Intervention development work gave primacy to those people most affected by the intervention (the co-production group members). Whilst the advisory group gave wider perspectives, it is possible that undertaking intervention development work with, for example, the steering group of the national audit, may have developed a different intervention.

It is possible that the implementation strategy does not address influences upon the adoption or sustainment of the enhancements. As described in chapter 3, there are over a hundred theories and frameworks describing implementation. NPT was initially proposed during the research planning stage. Previous implementation researchers (Birken et al, 2017b) have reported basing their selection of theory upon analytic level (e.g. individual, organisational), logical consistency (e.g. explanations with face validity), empirical support, application to the setting and process guidance. NPT considers influences upon individual and collective implementation work and can be applied to different 'fields'[1] (May, 2013). NPT is based upon and refined through empirical evidence (e.g. May, 2013), has been applied to related work (e.g. Leggat and Balding, 2017; Desveaux et al, 2017; Brooks et al, 2015) and developed into a toolkit with practical utility (May et al, 2011). The toolkit was developed iteratively through engagement with teams, families, or other small groups and

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[1] Fields, "may be a macro-level field (in the case of large-scale policy implementation across a whole healthcare system), a meso-level field (in the case of organizations or clusters of organizations that form a sub-set of a large-scale implementation program), or micro-level fields (in the case of specific workplaces)" (May, 2013)

piloting with researchers and practitioners. However, it is possible that an alternative theory may have identified different influences upon implementation and led to the development of a more effective strategy to implement the enhancements.

It is also possible that the proposed strategy does not address the identified influences upon implementation. Johnson and May (2015) identified NPT ingredients associated with different implementation strategies. They found that educational meetings may affect specification and enrolment, and educational outreach may affect initiation (Figure 3.4). This is consistent with the above logic model (figure 5.5).

One advantage of the BCT-level of specificity over the use of strategy labels is that it offers greater granularity; for example, Logical Improvement Planning delivers the BCT 'credible source' and proposes that this might affect initiation and legitimation. The Johnson and May review considers strategies rather than BCTs and as a result does not identify credible source. However, they propose an association between both educational outreach and local opinion leaders, and the NPT ingredient 'initiation'. It is possible that both these implementation strategies deliver credible source (Presseau et al, 2015).

It is possible that the identified BCTs do not activate the identified NPT mechanisms. I have only identified one other paper (Band et al, 2017) that has linked behaviour change techniques to NPT mechanisms. There are some similarities in BCT-NPT linkages between this thesis and Band et al (e.g. both link information about consequences to legitimation), however, the current thesis adds linkages not identified in Band et al's review. The logic model in this thesis was reviewed for coherence by a co-author of NPT, however, future work should explore whether the NPT ingredient is activated by the proposed BCT.

Finally, the logic model describes a linear programme theory of how the intervention may have its affect, where each antecedent affects one variable. It is likely that this is an over-simplification; for example, consideration of existing work may affect both the assessment of opportunity cost hypothesised to affect change commitment and the informational appraisal of implementation capability. Similarly, cognitive participation in one component may affect willingness to buy-in to a later component.

5.4.2 Stakeholder involvement reflections and reflexivity

A key strength of the study was the stakeholder design process. The draft design of the approach to involvement was discussed with a patient and carer group and a public involvement in research group, and presented to a funding panel that included researchers, practitioners and public stakeholders. The approach to stakeholder involvement had a clear reason for involvement and involved an iterative process with feedback loops between stakeholder groups (O'Caithain et al, 2019). I sought diverse perspectives in order to support implementation. Stakeholders' challenge, discussion and proposals for further evidence were indicative of their diverse perspectives, for example, co-production group members had different pre-study views about how organisational action plans were developed, clinical leads had different ideas about influences upon implementation. There was also evidence that involvement supported implementation: the national audit commissioners said that they will also use the study findings when commissioning the next national audit of dementia, as described in chapter 6; the clinical leads sought the intervention material for use within their organisations. Sustained stakeholder involvement can be a challenge (Armstrong et al, 2013); within the current study, I maintained stakeholder engagement for 24 months, including co-production group members taking part in 13 two-hour workshops. As a result of the stakeholder involvement, a specified intervention and intervention manual was produced.

A potential criticism of the approach to stakeholder involvement is that I selected an instrumental reason (to facilitate implementation) over the normative development of social capital (chapter 2). Prioritising an instrumental reason over a normative one may undermine the moral imperative for involvement (Kok et al, 2004; Johansen, 2019). Similarly, the term 'involve' can imply permission for participation being given and that selection by the researcher of the role of those being involved has been criticised as ‘functional participation’ (Cornwall, 2008). However, the study aim was to develop an intervention to increase the implementation of the “best ways to care for people with dementia” (p1; James Lind Alliance, 2019), which was a priority for patients and staff. As such, whilst involvement sought to support implementation (an instrumental purpose), the intervention sought to improve patient and carer outcomes (a normative goal compatible with the moral imperative for involvement). In addition, whilst an instrumental purpose was selected, reciprocity remained important.

I used four routes over five months to gain patient involvement. However, I was only able to engage one person with dementia to the study, and that person was clear that they wanted to be involved on a one-to-one basis. I sought to explore their reasons for not wanting to be part of the group, but they did not want to discuss it. Upon reflection, intervention development was more influenced by people who felt able to be part of a group discussion. Amending the approach to recruitment would still have kept the direct involvement of some patients out of the group work. This reiterates a further trade-off, between the advantages of interactive discussion and the benefits of diverse perspectives. Finding ways to mitigate this trade-off so that people who are not able to be part of a group inform intervention design could have improved stakeholder involvement.

Section 2.5.1 describes the importance of reflexivity in participatory research, and the need “to protect research from the researcher’s own enthusiasms” (p268; Lather, 1986). As I consider my own ‘enthusiasms’ and compare and contrast my pre-study description with the findings presented in chapters 4 and 5, there are some similarities that might be indicative of my influence over the findings. For example, my pre-study view of what happens in national audit described an organisation-level response. This informed the selection of an aim to develop a Trust-level intervention. I subsequently identified a Trust-level response. Reflexive examination of my role in data gathering, analysis and facilitation of the stakeholder synthesis does not undermine this finding. Indeed, stakeholder challenge increases the credibility of the findings. The proposal that I influenced the data is also countered by the observation that the findings did not support my pre-study views: I thought that staff would get organisational-level feedback. I anticipated that they might perceive the feedback as not describing their practice, and as a result may not act to improve performance. I found that they did not receive feedback. A further key difference between my pre-study views and those described is the level of granularity, which is much greater within the thesis. Within the current study, discussions with the stakeholders (e.g. their challenge upon the analysis; their discussion of pre-study views and new and existing research), during supervision, and through a reflexive log provided dialogic encounters through which I considered and mitigated my influence upon the research. However, from an interpretivist perspective, I view my input as inseparable from the findings.

Stakeholder involvement applied facilitation. Facilitation has been described as a reflexive activity (Wildemeersch and Stroobants, 2009). During facilitation, the facilitator, uses, "the information coming out of boundary tensions between their own and their participant's lifeworlds and those of the system, by staying critical and creative about the choices that cannot be seen except through new forms of dialogue, inquiry, and action research in practice" (Weil et al., 2005, p. 159). For example, after initially giving extensive feedback from the primary research, I found that group members were reluctant to speak. I amended the method so that subsequent feedback was broken down into brief two-to-three minute sections, and after each section, group members were asked to say which findings did not fit with their understanding and where or who else might give a different or deeper understanding. I hypothesised that giving longer feedback lost group energy and led to me being more likely to be seen as the expert, and that this may inhibit willingness to give divergent perspectives. I wanted the co-production group members to perceive me as the conduit for research findings, and not as the expert (Morrison et al, 2013). Moving to briefer feedback with explicit questions about where they disagree quickly created a willingness to challenge the findings. Alternatives had been considered; for example, for the group members to be researchers gathering data. However, this was anticipated to be a greater commitment than would be acceptable to those involved and could have undermined the diversity of perspectives.

Facilitation sought to influence power dynamics and to support the group to achieve study objectives. However, it is possible that group activities extenuated hierarchy between group members; for example, the co-production group exercise to describe pre-study views could have reinforced carer perceptions of a lack of knowledge about the audit and/or health service delivery. To minimise this risk, the ice-breaker had highlighted that people hold different perspectives about the same thing, and that to understand something, it was as important to ask questions as to give opinion. The value of asking questions was reiterated during later workshops and through between-workshop contact with group members. During meetings, I also used verbal and non-verbal prompts, and facilitation devices (e.g. small group work; anonymous consensus methods), to encourage quieter members to speak and to create the opportunity for them to do so. That the carer members later felt able to challenge my inadvertent use of specialist language may be an indicator of successful flattening of potential hierarchy. These facilitation approaches sought to address power expressed through agency. In addition, structural power exists through social norms, systems of knowledge and institutions. Facilitation sought to expose individuals' perspectives encapsulated in their social norms and systems of knowledge, whilst group structure sought to reduce the influence of institutional power, including formal power and informal power[1]. The stakeholder involvement work is unlikely to have removed the influence of power, as power can be, "dynamic and multidimensional, changing according to context, circumstance and interest" (p39; VeneKlasen et al, 2002). As described in chapter 5, during the selection of enhancements to audit and feedback, the co-production group's options were selected from previous evidence and theory. As such, the evidence and theory constrained the content and delivery of the potential enhancements and implementation strategy, and structural power was given to academic sources of knowledge. In practice, the selected enhancements related to the co-production group's pre-study views of what might affect the effectiveness of audit and feedback.

The dynamic between different stakeholder groups can influence the outcome from involvement (Ottmann et al, 2011). Within the study, it appeared that the co-production

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[1] Formal power is visible structures, including legitimate authority, whilst informal power includes 'socialised norms, discourses and cultural practices" (p4) (Pettit, 2012)

group challenged feedback from the advisory group less than they would data from interviews, observation or documentary analysis. To address this, the feedback from the advisory group was broken down into small sections and fed back with the data from interviews, observations and documentary analysis. I provided prompts (e.g. “One of the advisors said x, what do you think about that?”) and used probing questions to explore non-verbal cues. Delivering the advisors’ comments with the primary research, and using cues that gave permission to disagree, appeared to increase the frequency of challenge to the advisor input. Providing the advisory group feedback at the same time as the research findings may also have helped to facilitate stakeholder input. This may be because the co-production group members’ interpretations were more fluid or their readiness to question was greater at this point.

The co-production group always met on a multi-disciplinary, face-to-face basis. It is possible that social learning within the group over the duration of involvement may have reduced diversity of perspectives, and is a further potential criticism of the approach. Arranging training in involvement or intervention development skills (e.g. contributing to meetings, critical appraisal) by someone not otherwise involved in the study, may have further increased confidence and the quality of involvement, but was not feasible within the scope of the project.

Whilst initially the advisory group met face-to-face, subsequent advisory group input was on a one-to-one basis. The move to one-to-one involvement was driven by the recognition that different members of the advisory group spoke to different parts of the findings. As a result, there were elements in which some members appeared to be less interested; maintaining their motivation for involvement was important. I perceived sensitivities to the findings that led the me to believe that sharing in a group might inhibit advisor openness about the data. These fears were not present for the co-production group which had more frequent meetings and an open, constructive, self-critical dialogue.

There have been calls to evaluate different methods of involvement (Oliver et al, 2019). The current study lacked a formal evaluation of the process or outcome of involvement. An exploration of stakeholders' reasons for becoming involved and their experience of involvement may have generated valuable learning. However, such work may also have moved those involved to being participants which may impact upon their perception of hierarchy, and hence their willingness to challenge the primary research findings that I presented. I considered observation of the group work by a member of the supervisory team. This could have provided valuable formative information to improve the stakeholder involvement. However, I felt that it would adversely affect the group dynamics by the supervisor being perceived as an expert (whether they contributed or not) and by affecting considerations of trust if they were to observe without speaking. Future work should seek additional funding for an external evaluation of the process and outcomes of involvement in a manner which does not affect power dynamics or create excessive burden upon the stakeholders.

5.4.3 Reflecting on theory

Reflecting on the use of theory, there is potential conflict between the application of both a taxonomic construct approach (through the menu of potential influences upon the effectiveness of audit and feedback and the BCT taxonomy) and the application of whole theory (NPT) to identify influences upon implementation. However, in practice, the NPT toolkit enabled stakeholders to identify those ingredients which may (or may not) be likely to adversely influence implementation and led to the development of a strategy that sought to influence particular ingredients (e.g. initiation, individual specification). The subsequent programme theory, expressed as a logic model (Figure 5.5), provides the overarching theoretical understanding of both the implementation work and how the components achieve the desired outcome.

The current study sought to identify inductively the content and delivery of a national audit. I found that the audit involved the *identification of actions*, which were written in action plans by organisational leads. These leads then presented the action plans to governance committees at specialty and organisational level. The organisational-level committee members' role was to review and approve the action plan, sometimes after amending it. Placing this work in the context of theories applied to audit and feedback, Carver and Scheier (2001) describe action identification by individuals. They propose that in identifying actions, there is a "a natural tendency for people to drift upwards to higher levels of identification" (p74), that is, a preference for the more abstract and focusing on why rather than how to change. Similarly, Kluger and DeNisi (1996) differentiate between higher-level universal plans and more concrete task-specific plans. Action plans within the national audit focused on the more specific 'how to change'. The use of templates specifying who was to do what and when meant that the actions were more likely to be specific ('how'), although two sites described the outcome sought ('why') from the action.

CP-FIT describes the influence of feedback on both individual and group behaviour (Brown et al, 2019), with the latter being described as having a greater impact upon performance. Within the national audit, the primary response was to feedback was the organisational leads' development of organisation-level action plans. CP-FIT differentiates between action planning, where recipients of feedback are also given solutions to suboptimal performance, and individual- or organisational-level behavioural responses. We found that organisational leads developed potential organisation-level solutions and presented them to committee meetings. These solutions described local implementation strategies, for example, to train nurses how to assess pain in people with dementia.

Brown et al proposed that *action planning* is relevant to *intention* and *behaviour* processes in the feedback cycle. Drawing upon constructs hypothesised to influence effectiveness of the national audit (Colquhoun et al, 2017), I inductively developed a programme theory of the action planning process. I found that this resonated with Organisational readiness to change theory (Weiner, 2009). My inductively developed programme theory supports future work focused on organisation-level influence of audit and feedback by proposing antecedents to informational appraisal and commitment that may influence the development, and enactment, of collective intention.

5.4.4 The place of context in the intervention

Programme theory should identify aspects of context that influence mechanisms (Moore et al, in press). Context has been defined as, “any feature of the circumstances in which an intervention is conceived, developed, implemented and evaluated” (Craig et al., 2018). The intervention logic model (Figure 5.6) illustrates the programme theory, showing that the outcome is influenced by determinants that act through committee sense-making. The implicit assumption here is that there is a committee which undertakes the work to refine and approve an action plan. This contextual assumption is based upon findings from four Trusts sampled for diversity and similar findings described previously (Gould et al, 2018; McVey et al, 2020).

Based upon data within the current thesis, I describe informational appraisal and change commitment as important determinants of committee sense-making. I do not specify the barriers or facilitators important to the informational appraisal but propose that stakeholders should analyse these using a range of methods and drawing upon contextual circumstances. Consideration was given to implementing use of the APEASE framework (Michie et al, 2014) to analyse the context-specific suitability of potential actions, however it was rejected due to complexity acting as a barrier to implementation.

Social, political and economic contextual influences are incorporated into the work to develop change commitment, by stimulating key actors to adapt local actions to the local context. Logical Improvement Planning seeks to implement work to link to priorities, address questions of trust and credibility, present comparators that are meaningful to committee members and to consider existing work as a way to reduce opportunity cost. In this way, the intervention incorporates deliberate local adaptation (section 6.3) to context.

5.4.5 My position in the research

Table 5.7 describes that I took on different roles at different times through the research. It illustrates that during data collection, my main role was as researcher. This continued into analysis, but during work to view the data from the perspectives of stakeholders I also took on a researcher-facilitator role. In addition, throughout the study I was a student, working under supervision. This elevated the potential influence of my supervisory team. To seek to ensure that the work was rooted in the language and perspectives of those involved in audit and feedback, the co-production group were positioned to have later involvement over the outputs from each stage. These roles and the work undertaken within them influenced the construction of knowledge, such that knowledge was intentionally informed by different perspectives, and to a degree, limited by previous evidence and theory-informed hypotheses.

As described in section 2.5.1, I sought to employ the different perspectives of stakeholders in order to increase feasibility and acceptability and thereby support implementation. Stakeholder challenge that drew upon exposure of the pre-study views of diverse stakeholders sought to increase trustworthiness; trustworthiness was further supported through participant-checking during early interviews and explicit and iterative consideration of the emergent description by participants and stakeholder groups.

As with all research, there were influences upon the knowledge generated. The focus for the enhancement was determined by stakeholders drawing upon evidence they had synthesised into a description of current practice. The co-production group proposed the outcome, and I presented evidence- and theory-informed components that might generate this outcome. I had consulted with the supervisory team and final selection was by the co-production group. The co-production group members specified how the components would be enacted. As a result, the development of enhancements was limited by the content of a Cochrane review (Ivers et al, 2012), the outcome of a consensus method (Colquhoun et al, 2017) and the perspectives of those involved.

Research design	Potential influence	Strengths, mitigations and residual influence	My role
Sampling	My previous experience of health services influenced who / what I sampled	To root the sample in the perspectives of those affected by the audit, the sample was informed by interview respondents, documents, observations and the reported views of the stakeholder groups. Residual influence: The sample was largely influenced by stakeholders, whether they be within the co-production or advisory groups, or participants.	Researcher
Recruitment	My background may have affected the willingness of participants to agree to become involved in the study	To minimise the influence of participant pre-conceptions, I did not describe my background during recruitment. During consenting for the interviews and observations, I described myself as a nurse only if asked by a participant. Different participants may have perceived me in different ways (e.g. as part of their in-group), but I felt that this response would be preferable to a potentially negative response from describing my clinical governance background. Residual influence: Recruitment may have been influenced by perceptions of me as a researcher, but these may have been tempered by a lack of certainty in the potential participant.	Researcher
Interviews	My perspective influenced the questions asked.	I drafted and piloted the initial interview prompts, discussing these with one of my supervisors (TF). The interview prompts evolved over the study, to explore components described in earlier data. The later prompts were informed by the co-production group's perspectives, based upon explicit consideration of their pre-study views, earlier findings and, after two review cycles, previous evidence and theory-informed hypotheses. Whilst the semi-structured nature of the interviews enabled my own perspectives to influence the responses, this was mitigated by participant check the early responses and presentation to the co-production group for challenge; Such challenge stimulated further data collection. Exposure of my pre-study views and reflexivity sought to ensure that the data captured spoke to the concerns of the participant and the questions of the co-production group. The supervisory team and advisory group did not comment on the later interview prompts. Residual influence: The strongest influence upon the content of the interview prompts was the co-production group (later informed by defined sources such as a systematic review) and earlier participants. The current participant was the principal influence upon the content any particular interview. It is anticipated that I retained some influence, along with the supervisory team, as a result of input into the content and delivery of the interview prompts.	Researcher and researcher-facilitator to develop the later interview prompts

Observations	My perspective influenced my note taking.	Observation data was collected through note taking. These notes sought to describe what was observed and were added to by post-observation reflections and analytical interpretation. Exposure of my pre-study views and reflexivity and presentation and challenge by the co-production group sought to mitigate the influence of my interpretations. Residual influence: Whilst steps were taken to mitigate the influence of my perspectives, this study takes the view that the data would be inseparable from these perspectives.	Researcher
Documentary analysis	My perspective influenced data gathering.	Data was collected from through note taking. These notes sought to describe what was observed and were added to by post-observation reflections and analytical interpretation. Exposure of my pre-study views, reflexivity, and presentation and challenge by the co-production group, sought to mitigate the influence of my interpretations. Residual influence: Whilst steps were taken to mitigate the influence of my perspectives, this study takes the view that the data would be inseparable from these perspectives.	Researcher
Analysis and synthesis	My perspective influenced the categories, codes and synthesised description of the current content and delivery of the national audit	My analysis was discussed with the supervisory team. This included a review of over 100 pages of exemplar quotes and resulted in further analysis and additional data collection. The analysis was presented to the co-production group, giving exemplar quotes to support their assessment. Iterative presentation, challenge and additional analysis and data collection reduced my influence upon the analysis and increased the influence of diverse stakeholder views. This was intentional to ensure that the findings were rooted in their perspectives. Synthesis involved explicit consideration of how the analysis different from the co-production group's pre-study views. Facilitation sought to maintain the diversity of members input and to maintain the link with the data. Facilitation also sought to give explicit consideration of previously identified influences upon the effectiveness of audit and feedback (Ivers et al, 2012; Colquhoun et al, 2017) and a framework for specifying complex interventions (Hoffmann et al, 2014b). Residual influence: The principal influences upon the data came from the co-production group members, with other actors having a lesser influence.	Researcher and researcher-facilitator
Identify and specify enhancements	My perspective influenced the target for enhancement, the selection of the components and the specification of the components	Through a transparent process, the co-production group identified potential opportunities for enhancement. These were discussed with the supervisory team and the advisory group. This resulted in a recommended focus which was discussed with the co-production group and agreed. It is possible that non-verbal communication or stakeholder pre-conceptions about my preference influenced	Researcher and researcher-facilitator

		the outcome of the facilitated discussions, however, the selected target mirrored a pre-study views of the co-production group. This might indicate their influence upon the outcome, however advisory group and supervisory input, and research to explore the propositions of the co-production group were intended to ensure that the work was rooted in the data. That said, the purpose from stakeholder involvement was to reflect their perspectives, in order to support implementation. The co-production group specified the components, through an exercise I facilitated using the TIDieR framework (Hoffmann et al, 2014b). The facilitation of this exercise sought to enable participation by all members of the co-production group. Residual influence: The principal influence upon the target comes from stakeholders in the co-production and advisory groups. I influenced the selection of components, albeit in consultation with supervisors, the co-production and advisory group members (Table 5.1).	
Develop a strategy to implement the enhancements	My perspective influenced the identification of barriers and facilitators to implementation and the content of the subsequent strategy.	The normalisation process theory toolkit was the lens through which barriers and facilitators to implementation were identified and then discussed. This provided a transparent way to identify potential influences upon implementation and differences in the reported views of members of the co-production group. Notes were taken both by co-production group members and by myself. I used these notes (Appendix 0) to develop a strategy to implement the components. The notes included specifics (e.g. refer to opportunities to discuss rather than meeting) and broader influences (e.g. move work to those who may support it being done, such as clinical audit leads) that required more interpretation and therefore provided greater opportunity for my influence. The group members had been facilitated to provide specifics and were consulted upon the outcome. Exploring the acceptability and appropriateness of the implementation strategy will be an important part of the subsequent feasibility study. Residual influence: Whilst the co-production group members were responsible for determining influences upon implementation, I was principally responsible for specifying the strategy, with input from the supervisory team and consultatory input from the stakeholder groups	Researcher and researcher-facilitator

Table 5.7: Mitigations and residual influences upon the nature of knowledge

In determining the implementation strategy, the stakeholders described potential influences upon implementation (Appendix 0). These ranged from the general (e.g. actors might not differentiate the new approach from current practice) to the specific (e.g. refer to ‘an opportunity to discuss’ rather than a ‘meeting’). I interpreted the co-production group’s responses, developed a strategy, consulted upon the strategy and refined it. As a result, the strategy was informed by the views of stakeholders and supervisors, informed by normalisation process theory, but was specified drawing upon my knowledge and experience. A later feasibility study will explore whether this impacted upon its feasibility and acceptability.

5.5 Conclusion

I produced an educational intervention, called Logical Improvement Planning, to enhance the organisational response to the national audit. The intervention targets the work to develop organisational action plans based upon the national audit of dementia. This was developed through iterative facilitated stakeholder discussion, consensus methods and logic modelling to integrate evidence, theory and stakeholder views. The study output is described in an intervention manual (Appendix Q). The next chapter discusses and critiques the study findings alongside previous research and theory. It considers the strengths and limitations to the study, and the contribution of the work to practice, theory and research. Finally, I present implications for future research.

Chapter 6. Discussion

6.1 Introduction

I developed an intervention to increase the delivery of best practice to people with dementia in hospital. The intervention aims to enhance the organisational response to feedback from the national audit of dementia. The intervention, called Logical Improvement Planning, supports hospital clinical leads to:

- identify opportunities for performance improvement;
- analyse influences upon performance;
- select and specify strategies to address influences upon performance;
- present information in order to gain organisational commitment to change.

The main study output is an intervention manual describing the content and delivery of Logical Improvement Planning (Appendix Q). The manual describes the intervention in the level of specificity and clarity that is recommended for complex interventions (e.g. Craig et al, 2008; Proctor et al, 2013; Hoffmann et al, 2014b).

In this chapter, I summarise the work to describe the current national audit of dementia, using multiple qualitative methods, and to develop the intervention. The iterative complex intervention development work integrated primary research findings, secondary evidence, theory and stakeholder perspectives to identify and specify enhancements to the national audit, and to develop a strategy to implement those enhancements. I consider the strengths and limitations of the method, describe the work in the context of previous research and propose implications the findings have for future research.

This chapter describes how the work builds upon existing literature and contributes:

- to knowledge, by extending previous work describing national audit. Previous studies focused on specific stages of national audits: data collection (Dixon-Woods et al, 2019) and the feedback (Gould et al, 2018; McVey et al, 2020). This thesis describes the content and delivery across the stages of the national audit, including a detailed exploration of the current sense-making work of committees. My description of the content and delivery of the national audit of dementia demonstrates a gap between current audit and feedback practice and that described in: previous guidance about the stages of audit (NICE, 2002; HQIP, 2020b); evidence (Ivers et al, 2012); and theory-informed hypotheses (e.g. Colquhoun et al, 2017). In identifying this gap, I have been able to propose potential enhancements to data collection, feedback and actions to generate improvement.

- to theory, by identifying potential antecedents to organisational commitment (e.g. addressing trust and credibility, presenting comparison). I also extend Weiner's (2009) theory of organisational readiness to change by proposing that the effect of *change related effort* upon *implementation effectiveness* may be altered by the alignment of action to implementation barriers and facilitators.
- to methodology, by contributing to intervention development. I have synthesised diverse literature to identify considerations in the design of stakeholder involvement. I also describe that intervention development was a multi-layered process, and highlight the implications from this. Finally, I describe how complex intervention guidance (e.g. developing a theoretical understanding of how the improvement actions cause change through a logic model) and implementation science (e.g the selection of implementation strategies; Powell et al, 2015) might be implemented for use by healthcare workers.
- to practice, by identifying twenty-four evidence- and theory-informed potential enhancements to the national audit of dementia, and developing an intervention that describes how seven evidence- and theory-informed components can be operationalised and implemented. The work led both to: local impact, with co-production group members from three sites asking to use the intervention materials; and national impact, as a result of commissioned changes to the content and delivery of the English national audit of dementia, and the adoption of findings in another national audit (Irish national audit of dementia).

6.2 Summary of aims and method

This multi-method intervention development study sought to describe the content and delivery of the national audit of dementia, to identify and specify enhancements to the audit and to develop an organisation-level focused strategy to implement the enhancements. The work was supported by stakeholder involvement through two groups: a co-production and an advisory group. The co-production group involved carers, clinical leads for dementia and clinical audit leads; the advisory group included wider stakeholders. Stakeholder involvement was designed to improve implementation of the intervention by using the perspectives and language of those involved in the audit.

To describe the current content and delivery of the national audit of dementia, I studied six hospitals within four English NHS Trusts, purposively sampled for diversity. I collected data through interviews, observations and documentary analysis. Initially, I iteratively presented inductively analysed findings to the co-production group for them to challenge, to propose avenues to explore, and to develop a description of the content and delivery of the national audit. I facilitated the interpretation and synthesis work by the stakeholders to explicitly consider components within an intervention framework (TIDieR; Hoffmann et al, 2014b), previous systematic reviews of audit and feedback (Ivers et al, 2012; Sykes et al, 2018) and theory-informed hypotheses (Colquhoun et al, 2017).

I facilitated stakeholders to identify and specify enhancements to current national audit practice through iterative co-production workshops integrating evidence, theory and stakeholder views. During a further workshop, I facilitated stakeholders to identify influences upon implementation (NPT toolkit; May et al, 2011). The analysis from this workshop informed the development of a strategy to implement the enhancements. The behaviour change techniques within the strategy were specified and the theoretical coherence assessed. The stakeholders were consulted upon the strategy, resulting in further refinement.

6.3 Strengths and limitations

There are a number of strengths to this study, including the use of multiple methods, the involvement of stakeholders to increase credibility, and the application of reflexive research practice (including the exposing of the pre-study views of the involved stakeholders). The inductive exploration of influences and further deductive consideration of existing evidence, theories and frameworks is a further strength. Here, I focus on strengths not explored in earlier chapters, namely the integration of stakeholder views, evidence and theory, and the application of theory to intervention development.

Guidance recommends the iterative integration of stakeholder perspectives, evidence and theory (e.g. O'Caithain et al, 2019); however, this is often poorly described (e.g. Gagliardi et al, 2015). I provide a detailed description of the inputs and activities (including 13 co-production workshops) to design the intervention. I identify where decisions were made by stakeholders and where they were made by the research team.

This study addresses a major criticism of the lack of the use of theory in audit and feedback research (Colquhoun et al, 2013). I incorporated explicit theory through the use of theory-informed hypotheses (Colquhoun et al, 2017; Gude et al, 2019), the consideration of theory-informed determinants to the outcome (informational appraisal and change commitment; Weiner, 2009) and the development of a theory-informed implementation strategy (May et al, 2011) (Table 6.1).

The use of theory enabled intervention development to build upon previous findings. Explicit use of theory also enabled stakeholder consideration of cause and effect, and concise articulation of the intervention. I applied NPT to identify influences upon the implementation of enhancements to the national audit. I proposed behaviour change techniques (Figure 5.5) which once delivered would support implementation. For example, I propose that if I deliver four particular behaviour change techniques (instruction on how, behaviour practice, graded task and problem solving), then actors would be more likely to target low baseline because the actors understand what the intervention requires of them (i.e. individual specification). My study extends previous work aligning NPT ingredients both to BCTs (Band et al, 2017) and implementation strategies (Johnson and May, 2015). While using theory may not increase intervention effectiveness (Dalgetty et al, 2019), by articulating a clear programme theory, and specifying the intervention, I provide the foundation for later studies to explore intervention fidelity based upon how the intervention works, rather than what is delivered. Describing the intervention in terms of how it works also enables tailoring of delivery to local contexts (Kislov et al, 2019).

Theory	Meta-level description	Why and how applied
Theory-informed hypotheses (Colquhoun et al, 2017)	Constructs that draw upon cognitive psychology, social or health psychology, education, medical decision-making, organisational psychology, and economics.	To identify components that might enhance the national audit • Used during synthesis as part of the challenge to emergent findings • Selected as potential enhancement to deliver stakeholder identified outcome • Operationalised into steps • Described in the logic model as part of the Logical Improvement Planning workshop
Organisational readiness to change (Weiner, 2009)	Mid-level implementation theory that draws upon social and organisational psychology	To propose determinants through which the components affect the outcome • Identified during consideration of theoretical coherence of the components
Normalisation process theory (NPT) (May et al, 2011)	Mid-level implementation theory that draws upon sociological, psychological and economic theories.	To support development of strategy to implement • NPT toolkit used by co-production group to identify influences upon implementation of the components.

Table 6.1: Explicit application of theory

Like all research, there are potential limitations to the work described here. These include that: the timing of the study did not allow observation of the audit at the fourth site; the description focused on what happens within the hospitals, rather than, for example, the audit commissioner; and the logic model may represent an over-simplification of how the intervention influences audit practice. There are also further potential limitations that I would like to consider here in relation to: influences upon the construction of knowledge, including the selection of evidence to inform the intervention; how the study addressed context; and the focus of the intervention.

Throughout the research I undertook different roles (Table 5.7), these roles influenced the construction of knowledge, such that knowledge was intentionally informed by different perspectives, and to a degree, limited by previous evidence and theory-informed hypotheses. Intervention development should draw upon existing evidence (e.g. Craig et al, 2008). I explicitly applied evidence from systematic reviews of randomised controlled trials of both audit and feedback (Ivers et al, 2012; Gude et al, 2019) and educational interventions (Forsetlund et al, 2009; O'Brien et al, 2007). Systematic reviews identify, assess and summarise findings from individual studies (Centre for reviews and dissemination, 2009), but can be susceptible to bias (Whiting et al, 2016). Three of the included reviews met the standards set out in the Methodological Expectations of Cochrane Intervention Reviews (Cochrane methods, 2020). The fourth review (Gude et al, 2019) included both randomised controlled trials (RCTs) and qualitative studies, however the method by which the authors assessed bias is not clear. By largely focusing on published reviews of RCTs, I excluded evidence from other study designs and from work undertaken since that described in the reviews.

In relation to the selection of the enhancement components, a recent review of audit and feedback in dementia care (Sykes et al, 2018) found weak evidence to support Colquhoun et al's hypotheses that analysing and addressing influences upon performance and engaging stakeholders may influence effectiveness. It is possible that including non-RCTs testing audit and feedback in other clinical settings may have provided valuable evidence. For example, Brown et al's (2019) review synthesised qualitative studies of audit and feedback and proposed 42 hypotheses about influences upon feedback interventions. This review, published after the intervention development work described in this thesis, describes content and delivery that might represent additional potential enhancements to the national audit (Appendix L). For example, Brown et al propose that automated data collection and/or timely feedback may increase the effectiveness of the national audit. The review also offers support for Logical Improvement Planning. For instance, Brown et al propose that helping recipients to understand influences upon performance, linking data to priorities, presenting comparison information, developing an organisation-level response and increasing the quality improvement skills of recipients may increase the effectiveness of feedback.

The use of evidence in the selection and specification of the implementation strategy drew upon a systematic review of studies published prior to March 2006. It is possible that a review of more recent studies may have improved the design of the implementation strategy. The impact on the current study of drawing upon reviews of randomised trials in both the selection of enhancements and the development of the strategy to implement the enhancements is mitigated by the use of stakeholder views and theory-informed hypotheses (Colquhoun et al, 2017; Gude et al, 2019; May and Finch, 2009), both of which draw upon different sources of evidence.

Contextual differences may influence the effectiveness of Logical Improvement Planning. The study purposively sampled diverse organisations, but it is possible that the content and delivery of the internal report at the study sites, the committee sense-making work identified within the study, and/or the factors affecting implementation, are not transferable to other organisations. To mitigate this risk, the intervention includes the application of intended adaptations[i] (Stirman et al, 2013) both as part of the content of the intervention (e.g. through the use of the behaviour change technique ‘problem solving’[ii]) and by the recipient of the intervention as part of their work to analyse and select strategies to generate improvement (e.g. asking clinical leads to identify local priorities and to analyse the causes of performance). Logical Improvement Planning delivers the ‘problem solving’ to

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[i] The approaches to adaptation used in Logical Improvement Planning differ from adaptations to intervention content and delivery (e.g. changing the number of sessions over which the intervention is delivered) (Chambers and Norton, 2016).

[ii] Throughout the training (e.g. after content describing the analysis of performance, selection of comparators, process for addressing trust and credibility), the facilitator asks, “do you feel you understand how to (e.g. analyse performance and select the targets for improvement?) Do you think it is valuable?” These questions seek to explore coherence and cognitive participation (May

and Finch, 2011) and are revisited at the end of the training workshop to deliver the behaviour change technique, 'problem solving'. Problem solving seeks to support recipients to "analyse factors influencing the behaviour and generate or select strategies that include overcoming barriers and/or increasing facilitators" (Electronic supplementary materials, Michie et al, 2013).

implement coping planning (Kwasnicka et al, 2013). For example, the intervention helps the actors to plan what to do if they are unable to engage stakeholders in the analysis of the causes of current performance or if they are unable to identify an improvement action. By supporting actors to target and analyse performance and to select improvement actions themselves based upon this analysis, the intervention may be less affected by context than if I gave them improvement actions (e.g. Rubin et al, 2001). There may also be greater spill-over effects (Michie et al, 2014) as the approach of analysing performance and selecting improvement actions may be applied to other problems, whereas the pre-prepared list may be audit specific.

I describe potential enhancements to the national audit of dementia that were prioritised by stakeholders, namely in data collection, feedback and action planning. Feedback from the advisory group (Figure 5.6) resulted in a particular focus on action planning. A limitation to the current study is that further work to enhance data collection and national feedback may be required to improve the outcomes from the national audit of dementia.

In seeking to improve the care for patients with dementia, there is a risk of unintended negative impact for patients with other conditions. This could happen due to the redirection of resources towards people with dementia as a result of Logical Improvement Planning gaining organisational commitment. However, there are also further potential beneficial spill-over effects. The care for people with dementia represents best practice for people with other conditions (e.g. assessment of pain, nutrition, involvement in discharge planning), as such, increasing the implementation of clinical practices that improve dementia care may also be beneficial for other patient groups. The potential enhancements described here also seek to release clinical time that could be used to deliver care to the wider patient population. For example, the time currently spent undertaking actions not aligned to poor performance or influences upon performance, may be more effectively spent addressing barriers to care.

6.4 Contribution to knowledge

This study extends previous work to describe national audits by looking across the full audit and feedback process, rather than purely at data collection (Dixon-Woods et al, 2019) or the response to feedback (McVey et al, 2020; Gould et al, 2018). The main novel contributions to knowledge are:

- the national audit of dementia has an organisational-level effect that is influenced by the sense-making work of quality assurance committees.
- the potential efficacy of the action plan is undermined by the current approach to select actions.
- the sense-making work generates commitment and results in agreement of an organisational action plan.
- the description of antecedents to the creation of organisational commitment (section 6.6).
- the proposed intervention to support the individuals presenting to the quality assurance committee to provide information to increase the potential effectiveness of the action plan and to generate organisational commitment.

I identify further potential enhancements to the national audit, which I discuss in the implications for practice section. These include new knowledge about the opportunity cost of time-consuming data collection, the timeliness of feedback and the quality improvement skills of feedback recipients.

I found that the national audit of dementia was discussed at quality assurance committees that reported to organisational boards. There was little evidence that feedback from the audit reached clinical staff who were not part of these committees and who are responsible for delivering the care that is being audited. Understanding the reach of the feedback, may identify enhancements to the national audit (Appendix L). The lack of reach differs from previous findings in other clinical areas where participants reported wide circulation (McVey et al, 2020). Differences between my findings and those of McVey et al may reflect differences in sampling or between the audits studied (e.g. the way the myocardial ischaemia national audit project is delivered, or the way cardiology services are structured results in greater reach). Differences between my findings and those of McVey et al might also be a result of my use of multiple methods (e.g. that documentary analysis showed that the data was not reported to wider staff).

I found the sense-making work at the quality assurance committee considered whether and how to change. Sense-making was supported by a written and verbal report from the organisational clinical lead for the national audit of dementia. The discussion about whether to change resulted in organisational commitment. The discussion at the committee explored the quality of the data (focusing on the source and method), relative performance, triangulation of the feedback with other data and consideration of organisational risks (particularly reputational and financial risks). This discussion was informed by discursive recollections both of comparative position and of other sources of data (particularly complaints data). The clinical leads from two sites provided written information comparing Trust performance against the national mean for some standards, but the focus of discussion was on whether the Trust was in the top or bottom five or six nationally. My findings extend previous work describing how participants make sense of feedback from national audits: McVey et al (2020) do not describe the work of the committee, but there are similarities with their finding that individuals compared performance against “competing” (p4) organisations to maintain or increase organisational income. McVey et al also describe the importance of regulatory risk to decision making, and that national audits were not aligned to such organisational priorities. Gould et al (2018) also found participants reported comparison to peer groups to be more valuable than comparing against a national mean, although the study does not report what makes them valuable or what happens as a result of comparison.

The discussion about how to change was informed by a draft action plan included with the written report to the committee. This action plan focused on national, rather than local, performance. At one Trust, this was supported by work to understand the causes of performance, but the selection of actions was constrained by the self-efficacy of the clinical lead, such that the selected actions were within the perceived sphere of influence of the person writing the action plan. Despite exploring causes, it was not clear how this understanding informed to the selection of actions. Previous studies of national audits did not describe how actions were selected (McVey et al, 2020; Gould et al, 2018). Understanding the selection and process for generating organisational commitment informed the development of an intervention to increase the effectiveness of the audit.

I propose that Logical Improvement Planning has the potential to enhance the action plan by supporting the clinical leads to provide information and to generate organisational commitment. The theory- and evidence- informed co-produced intervention is anticipated to enhance the informational assessment about how to improve, and to generate organisational commitment for the enhanced actions. I describe how clinical leads can target poor performance, explore influences upon performance and select appropriate actions to address performance. Recent work has found that presenting locally selectable barriers and potential action plans can increase team-level improvement from audit and feedback (Roos-Blom et al, 2019). My work considers how local analysis and selection of actions may be combined with work to generate organisational commitment, in order to produce organisation-level improvement. To do this, the clinical leads can address trust and credibility in the feedback (including through triangulation with other data), link the data to Trust priorities, describe how performance on the audit compares with other organisations and reflect existing work (e.g. describe minor adaptation of an existing plan rather than more costly project).

6.5 Contribution to methodology

This study presents methodological advances in relation to:

- stakeholder involvement, such that I have synthesised the evidence on what supports effective stakeholder involvement in development of complex interventions.
- the layering of interventions.

Approaches to stakeholder involvement are evolving, as is the evidence describing the effectiveness of stakeholder involvement (Oliver et al, 2019; Greenhalgh et al, 2019; Marjanovic et al, 2019). I found a lack of detail in papers reporting stakeholder involvement in the development of complex interventions and a lack of specificity in guidance papers. To support future work to involve stakeholders, Chapter 2 describes stakeholder involvement in complex intervention development. I present a synthesis of the literature that identifies decision points in the design of stakeholder involvement. I describe factors informing these decisions, including how feedback loops influence other decisions. I found that stakeholder involvement design was an occasionally uncomfortable process (section 5.4.2), involving multiple, interacting and evolving components and diverse potential outcomes. The stakeholder work sought to support implementation, there is evidence that it achieved this objective (Section 6.7).

I describe different layers of interventions (Figure 6.1), such that the delivery of care is a complex intervention to improve patient outcomes, the local improvement actions are complex interventions to improve care, and audit and feedback is a complex intervention that stimulates local improvement actions. I developed Logical Improvement Planning as a complex intervention to enhance audit and feedback; in doing so, I used co-production as an instrumental form of stakeholder involvement designed to support implementation. The layers may happen at different levels (Ferlie and Shortell, 2001); for example, care behaviours at the individual level and improvement actions determined at the organisational level, and the development of Logical Improvement Planning in the wider system. However, this layering of intervention upon intervention is distinct from organisational levels. Presenting the layers in this way may appear overly deterministic (Van de Ven and Hargrave, 2004); the intention is to enable exploration of effect by demonstrating a pathway of complex interventions, whilst acknowledging other influences upon the pathway (e.g. Damschroder et al, 2009). The layering of interventions has important implications for the reporting of studies of audit and feedback:

As can be seen from figure 6.1, audit and feedback may influence healthcare workers' behaviour directly or via organisational improvement actions; reporting both mechanisms may inform understanding of effectiveness.

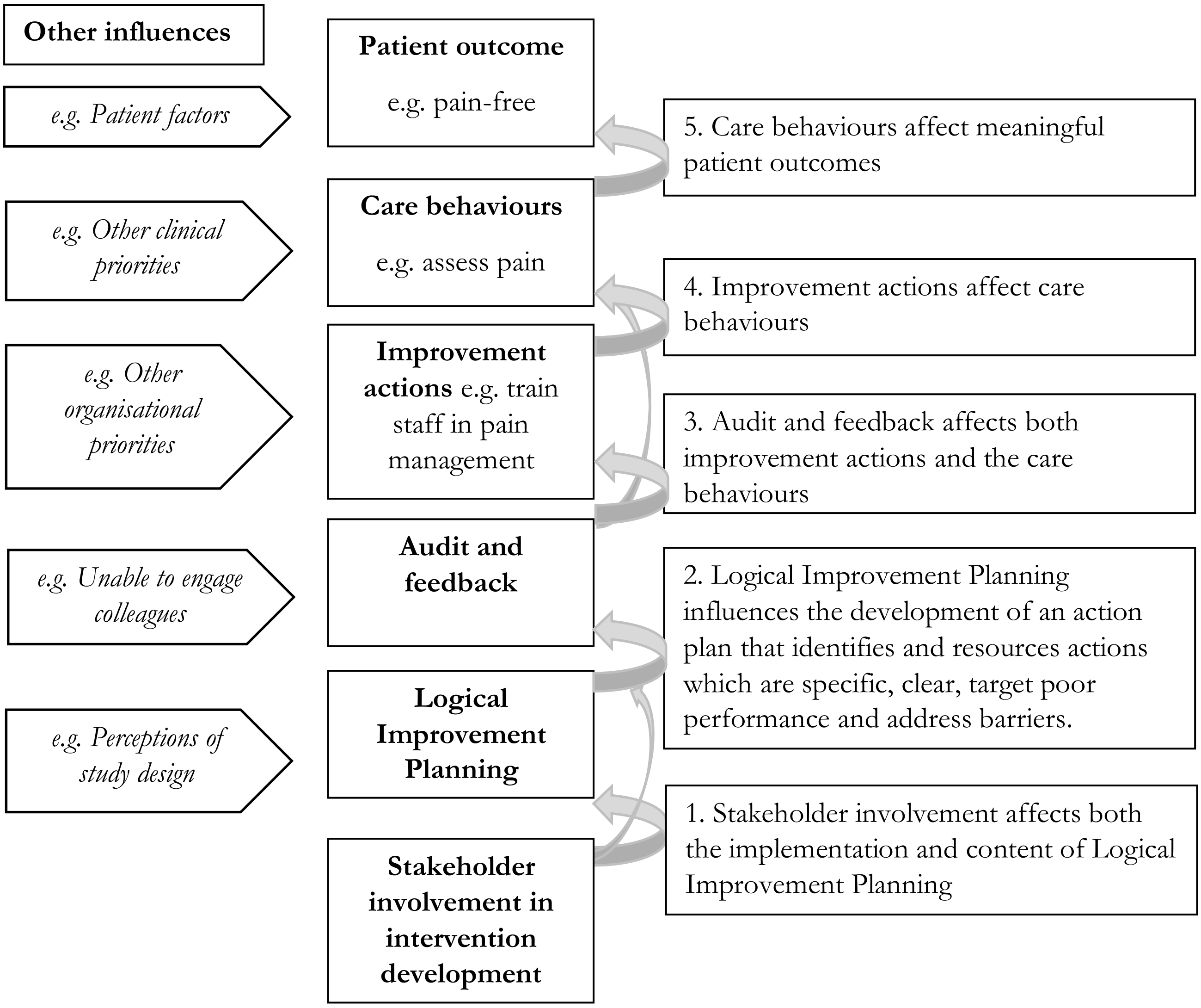

Figure 6.1: Layering of interventions

The figure also highlights that there may be active ingredients in the development of the audit and feedback components (as was proposed in the co-production method here). For example, coding the behaviour change techniques within Logical Improvement Planning noted that description of the intervention development method as part of the workshop delivers ‘credible source’ (Michie et al, 2013). This extends Colquhoun et al’s (2017) hypothesis that involvement in the development of audit and feedback may influence effectiveness, by identifying a behaviour change technique within the development method.

Active ingredients that occur as a result of development should be specified and reported in order to support work to identify influences upon the effectiveness of audit and feedback.

6.6 Contribution to theory

This project contributes towards understanding the sense-making behind the selection of, and commitment to, organisation-level interventions to improve care. Weiner (2009) (Figure 3.3) described that implementation effectiveness is related to the change-related effort which stems from change commitment and change efficacy. Weiner proposed that commitment varies between contexts but may stem from a belief that the change is beneficial (to patients, workers or the organisation), because it aligns with decision-makers' values, is supported by peers or opinion leaders, or is needed to address a particular problem.

I found that change commitment emerged from trust and credibility of feedback about the opportunity for improvement. I explore the role of comparison with other organisations and consideration of the relationship between the feedback and other priorities, and propose here that these are related: for example, adverse comparison may increase the risk of reputational damage, the maintenance of which may be an organisational priority. This provides support for Weiner's proposal that a belief that the change is beneficial (here, to organisational reputation), and that it addresses a problem (here, regulatory risk) is linked to organisational commitment. It also extends Weiner's influences upon change commitment by describing the role of trust in and credibility of the feedback, and describes that this may relate to the source of the feedback, the method of data collection and triangulation with other data.

Weiner described change efficacy as an appraisal of the capability to perform the task. I found evidence for this in the decision-making of the clinical leads proposing improvement actions within their control. Weiner proposed that commitment and efficacy lead to change-related effort to determine implementation effectiveness, but positive outcomes also depended upon the design of the changed practice[i]. However, I also found gaps in the informational assessment determining the selection of actions, such that influences upon implementation

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[i] Weiner noted that, "implementation effectiveness is a necessary, but not sufficient condition for achieving positive outcomes. If the complex organizational change is poorly designed, or if it lacks efficacy, no amount of consistent, high-quality use will generate anticipated benefits" (p7).

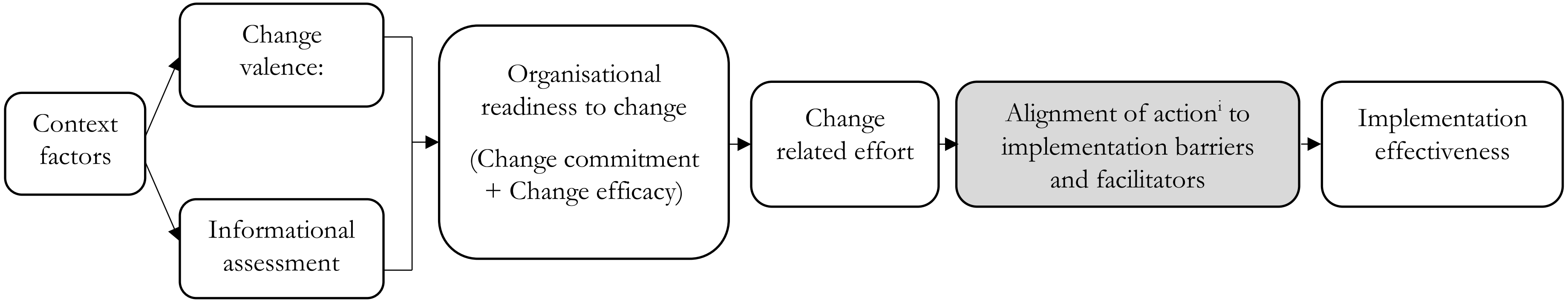

Figure 6.2: A revised theory of determinants and outcomes of organisational readiness to change

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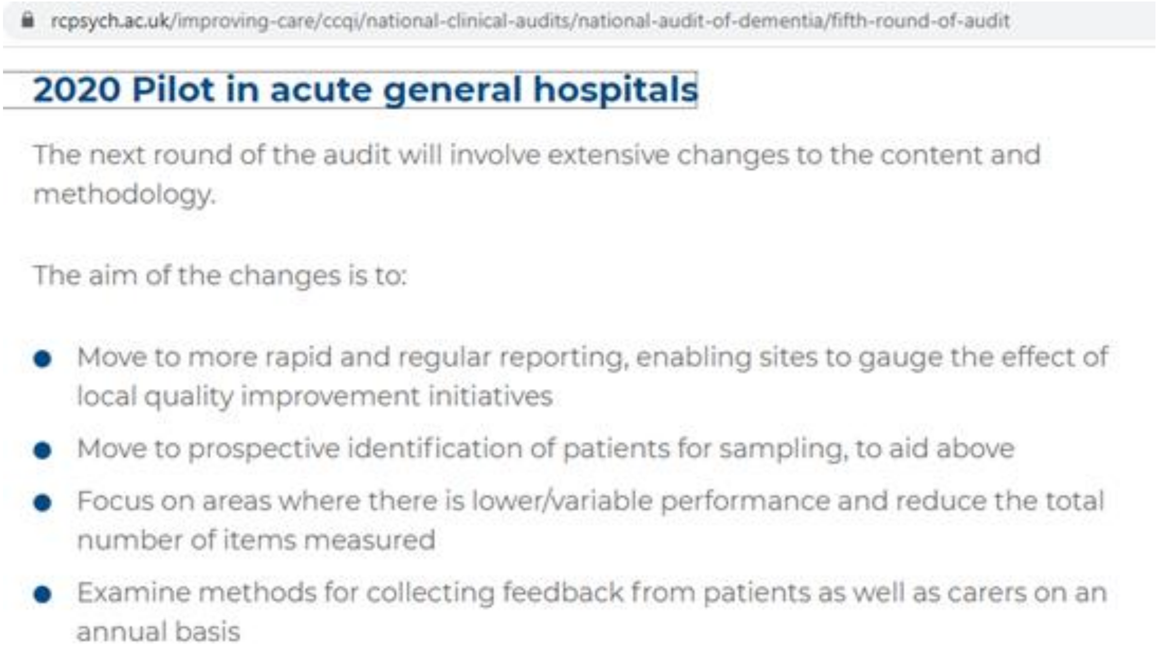
[i] 'Action' here relates to an implementation strategy (e.g. training for healthcare workers to implement patient involvement in care planning). The term action is used to reflect reference to the organisational action plan and to prevent confusion with the strategy to implement the enhancements.

were rarely identified and, when they were, did not align to action selection. The selection of implementation strategies is likely to affect implementation effectiveness; As a result, I propose amendments to Weiner's theory (Figure 6.2).

6.7 Contributions to practice

The findings have already informed the commissioning of the next national audit of dementia. This is as a result of me presenting the findings to Healthcare Quality Improvement Partnership, the organisation that commissions national audits. The presentation highlighted opportunities to enhance data collection, feedback and the organisational response. The commissioning document is not available for commercial reasons, however the resultant changes have been described (Figure 6.3). These changes reflect implications from this thesis, these stem from new knowledge about:

- the opportunity cost of time-consuming data collection – I found that the mean time to extract and enter data from a set of case notes was 37 minutes. The national audit collected data from the case notes of 9782 patients. Purposive sampling challenges the drawing of conclusions from this figure. However, that I found examples of senior clinicians prioritising data collection over patient care point to potentially important opportunity costs to data collection.
- the timeliness of feedback – I found delays in the receipt of feedback (14 months). Timely feedback has been hypothesised to be more effective than feedback which is delayed (e.g. Colquhoun et al, 2017; Brown et al, 2019).


rcpsych.ac.uk/improving-care/ccqi/national-clinical-audits/national-audit-of-dementia/fifth-round-of-audit

2020 Pilot in acute general hospitals

The next round of the audit will involve extensive changes to the content and methodology.

The aim of the changes is to:

- Move to more rapid and regular reporting, enabling sites to gauge the effect of local quality improvement initiatives
- Move to prospective identification of patients for sampling, to aid above
- Focus on areas where there is lower/variable performance and reduce the total number of items measured
- Examine methods for collecting feedback from patients as well as carers on an annual basis

Figure 6.3: A screenshot from the national audit provider website describing changes to the latest version (Royal College of Psychiatrists, 2020)

I have presented my findings from the English national audit of dementia to the steering group for the Irish national audit of dementia. The Irish national audit of dementia uses a process based upon the English version. My presentation included new knowledge about the content and delivery of the English national audit of dementia, including a description of:

- the quality improvement skills of feedback recipients – I found that clinicians given responsibility for leading organisational change from the audit reported being uncertain how to do this. The quality improvement skills of the recipient may affect the effectiveness of audit and feedback (Brown et al, 2019).
- the extent to which sites select effective improvement actions – I found that the clinical leads rarely undertook an analysis of influences upon performance and, where they did, the selected actions did not align to the causes. Removing barriers to the target practice and producing a conceptual model describing improvements that linking barriers to the action, may increase the effectiveness of audit and feedback (Colquhoun et al, 2017).

The minutes from the Irish national audit of dementia steering group include,

> “Following discussion of MS’s presentation, it was agreed that the strategic development and refinement of the report recommendations will be critical in ensuring that audit findings result in service development and improvement. Dementia Champions, members of dementia working groups/quality improvement teams, clinical leads, clinical audit leads, quality and patient safety leads and other relevant individuals and groups may require up-skilling or education to implement changes.”

Work is underway to seek funding to refine the intervention and to test the feasibility of the intervention in Ireland (section 6.8).

Logical Improvement Planning operationalises and implements seven potential enhancements to the national audit of dementia. Appendix L draws upon literature to describe 17 further potential enhancements to current practice. The additional potential enhancements include policy-level proposals (e.g. increasing the attention given to the audit by clinicians), and practice-level proposals (e.g. improving data reliability, automating data collection, improving the content and delivery of feedback). The potential enhancements have been shared with the organisations commissioning (HQIP) and delivering national audits (Royal college of psychiatrists; Irish national audit of dementia; English national diabetes audit). Whilst work is needed to operationalise the enhancements, they offer a theory- and evidence-informed foundation to improvement.

6.8 Implications for future research

I developed an intervention to enhance the national audit of dementia. Further work is required to investigate the feasibility of the intervention and to test its effectiveness (Craig et al, 2008). The feasibility study should assess the cost of intervention delivery and explore whether the enhancements are reported and observed to be feasible, acceptable, appropriate and able to be performed with fidelity (Proctor et al, 2011). The findings from this feasibility study would inform potential refinement of the intervention, and a decision of whether and how to test the impact of the intervention upon care delivery and patient outcomes.

Head-to-head effectiveness studies testing different audit and feedback designs against each other, rather than against no audit and feedback, have been recommended (Grimshaw et al, 2019). Logical Improvement Planning supports clinical leads to develop local improvement actions. Previous studies have found that proposing action plan plans within performance feedback can improve the delivery of care (e.g. Rubin et al, 2001; Roos-Blom et al, 2019). If supported by the feasibility study, I propose a future trial involving three arms, to compare the next cycle of the national audit combined with: the previous support workshop; the delivery of selectable action plans; or Logical Improvement Planning. This effectiveness study should be accompanied by a process evaluation exploring the delivery of components in each arm (Moore et al, 2015).

Logical Improvement Planning was developed from evidence of current national audit practice in England. Section 6.7 described an opportunity to refine the intervention for use in Ireland. This work would involve a co-design workshop with three organisational positional leaders and the national dementia lead to refine the intervention to reflect the Irish context (e.g. who currently receives feedback and in what format(s), the process through which organisation-level actions are identified and approved). A multiple qualitative methods study at hospitals in Ireland would explore whether the intervention is feasible, acceptable, appropriate, and whether it is are able to be performed with fidelity. The findings would be presented back to the Irish co-design group for further refinements to the intervention prior to a potential effectiveness study.

I found that different people got feedback in different ways (e.g. national report was fed back to clinical leads, the internal report was fed back to committee members). Looking beyond studies of Logical Improvement Planning, in order to understand the effectiveness of different forms of audit and feedback, it is important that future studies describe the content and delivery of each of these different feedback routes.

6.9 Conclusions

I found that national audit of dementia has an organisational-level effect that is influenced by the sense-making work of quality assurance committees. This sense-making work is undermined by both the informational assessment work to select actions and by gaps in the provision of information important to the generation of commitment. This new knowledge, and the practical co-produced audit and feedback enhancements through which this knowledge can be applied, has already informed the national commissioning of future audits. The findings also have implications for theorising organisational change. The next step is to assess the feasibility and impact of these enhancements.

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Appendix A: Ethics form

In everyday language, briefly explain the aims of this research including the anticipated benefits and risk. In cases where the use of technical or discipline specific terms is unavoidable please explain their meaning clearly.

People with dementia in acute hospitals do not always get the best care, as defined by NICE. In order to improve their care, hospitals use 'audit and feedback'. This is also called clinical audit and involves monitoring care to see whether what staff do meets a pre-determined standard. Those providing care then get feedback on whether the standard was met. Hospitals use 'audit and feedback' a lot. How audit is conducted affects how much it improves care. This project aims to:

1. describe ‘audit and feedback’ in the care of people with dementia in acute hospitals.

2. design improvements to audit and feedback.

3. design a way to make the improvements happen.

In everyday language, please provide an outline of the research methods in a clear step by step chronological order. Noting any pertinent information such as whether the research involves overseas partners and how you will handle the research data. 500wds

The project will involve two phases.

The first phase will produce a diagram describing the audit and feedback process and the factors believed to affect its effectiveness. In order to produce the diagram, I will undertake interviews, observations and documentary analysis. The analysis from these will be presented to a co-production group involving people with dementia and/or carers, acute hospital staff who provide care to people with dementia and NHS staff involved in the audit process. The group will develop the diagram of audit and feedback and will direct me to undertake further interviews, observations and documentary analysis until a stable diagram is produced. I will present the group with existing evidence and theory in order to support them to do this.

The setting: The acute hospitals within four Trusts

The interviews: A purposive sample of 35-40 staff from different levels in the hospitals and from teams demonstrating diverse care. Semi-structured interviews (upto 1 hour each) will be face-to-face within the hospital. With permission, they will be audio-recorded, transcribed and then pseudonymised. Themes will be sought using appropriate software.

The observations: Structured observations (20-30 hours) of staff involved in different stages of the audit process, such as deciding what to audit, discussing how to do it, collecting data and presenting the audit results back to staff and the staff then discussing and acting upon the results. This will include observations of care, but the focus will be on the behaviour of staff. Structured fieldnotes will be written during each observation, and these may be supplemented by opportunistic questioning of those being observed. The fieldnotes will be pseudonymised prior to seeking themes.

The documentary analysis: Documents which describe or illustrate audit and feedback will be analysed. These are likely to include policies, minutes of meetings and audit reports. Data will include a description of what is intended to happen in audit and feedback, what actually happens, how teams are performing against the audit standards, what influences this performance and how recipients respond. The documents will not include patient names, and staff names will be pseudonymised prior to analysis.

The second phase will design improvements to audit and feedback and a way to make the improvements happen. The output of this phase will be a diagram of enhanced audit and feedback. This diagram will be drawn by the co-production group. The roles of the people in the group will be similar to the group in phase 1, but allowing for turnover and purposively sampled additions to provide further expertise and challenge. To produce this diagram the group will bring together ideas for improvement from phase 1, with evidence, theory and stakeholder experience. This will be done in a series of workshops. There will be approximately 6 workshops, during which existing evidence and potential theories will be presented to the group. The group will use nominal group technique; this will involve the group identifying possible improvements, describing them, identifying what makes a good improvement, voting on the initial ideas to prioritise them, considering refinements and integration of the improvements. The group will then use theory, evidence and their experience to develop a way to implement the improved audit and feedback.

From which source and, by what means do you plan to recruit your participants?

Participants will be recruited from the participating hospitals. They will be selected on the basis of their role in the audit and feedback process.

Interviews: Where those to be interviewed are a sample from a number of people in that role, a random sample will be taken from all possible participants, and they will be emailed to invite participation. The selection process will be described in the email to potential participants. In the event of no response to the email, a second email will be sent. In the event of no response to the second email, a local research nurse will be asked to liaise in order to ascertain their intention to respond.

Observation study: Observations will be identified to describe the different behaviours within audit and feedback. Here the participants will be those involved in undertaking these behaviours. Organisational permission will be sought. Where the observation is of a group, permission will be sought from the Chair or Head of the group. This selection process will be described in an email. In the event of no response to the email, a local research nurse will be asked to liaise in order to ascertain their intention to respond.

Please describe the arrangements you are making to inform potential participants, before providing consent, of what is involved in participating in your study and the use of any identifiable data, and whether you have any reasons for withholding particular information. Due consideration must be given to the possibility that the provision of financial or other incentives may impair participants' ability to consent voluntarily.

Interview study: Potential interview participants will be emailed to ask whether they wish to participate, and provided with the information sheet and consent form. The information sheet provides that study title, an invitation to take part, the reasons for the study and what it will involve, including potential risks and benefits. All participants will have access to information sheets and the ability to contact the research team for at least 7 days prior to the interview date. At the interview session, the researcher will review the relevant information sheet with the participant and answer any questions. All participants will be advised that they are free to decline or withdraw at any point during the interview. If they agree to proceed then the consent form will be signed and the interview will be conducted.

Observation study: For observations of individuals, where the situation allows, written information will be given about the study, and a request for written consent to begin the observation. For observations of groups, information will be given in advance to the Chair of the meeting or Head of the group, with a request to distribute it to all members. This information will include details about the study aims, methods, risks and benefits, and how participants will be able to have their data excluded from the study.

Participants should be able to provide written consent. Please describe the arrangements you are making for participants to provide their full consent before data collection begins. If you think gaining consent in this way is inappropriate for your project, please explain how consent will be obtained and recorded.

Interview study: Written consent will be sought from the interview participants.

Observation study: Written organisational agreement to undertake the observations will be sought. In addition, the approach to seeking agreement will differ dependent upon the location:

Where the observation is of a pre-arranged specific individual, written consent will be sought in advance.

Where the observation is a meeting, it will not be practicable to seek individual consent from everyone present. Instead, the Chair will be provided with an information sheet about the study for sharing with meeting members. Written consent will be sought from the Chair of the meeting. The information sheet for sharing will describe how to have data about an individual's own behaviour removed from the study. This removal can be requested by email.

Where the observation is in another group setting, it will not be practicable to seek individual consent from everyone present. Instead, the senior person present (for example, the nurse-in-charge) will be provided with written information in advance and asked for written agreement to conduct the observation. In addition, they will be sent a poster about the study for placing in the location of the observation. This poster will describe how to have data about an individual's own behaviour removed from the study. This removal can be requested by email.

The researcher will undertake the role of 'observer as participant'. The information provided will note that in this role it may be necessary to ask questions to understand the work being done. On such occasions, the question will be prefixed with an enquiry such as, 'do you mind if I ask a question?'. Verbal agreement will constitute consent.

Study data will be collated into a model by a co-production group including people with dementia and carers as well as hospital staff. As co-production group members, rather than participants, they will all be given information about their role prior to involvement, and will be able to leave the group at any time. Involvement will be on the basis of being identified as having capacity to agree to be part of the group.

It is a researcher's obligation to ensure that all participants are fully informed of the aims and methodology of the project, that they feel respected and appreciated after they leave the study, and that they do not experience significant levels of stress, discomfort, or unease in relation to the research project. Please describe whether, when, and how participants will be debriefed.

A debriefing sheet will be provided to the interview participants upon completion of the interview stage.

For observations, individual participants involved in pre-arranged observations will be given a debrief sheet at the end of the observation stage. For group settings in the form of meetings, debrief information will be provided to the Chair of the meeting after the observation. For nonmeeting group observations, information about the study will be sent to the senior person present in the form of a poster for them to display.

At the end of the study, a summary of the study findings will be sent to the senior manager for the involved services, to those who took part in the interviews and those who acted as gatekeepers for the observations, for example, Chairs of meetings. The service will be thanked for their involvement. An offer to present the information at a Trust venue will also be made.

Identify, as far as possible, all potential risks (small and large) to participants (e.g. physical, psychological, etc.) that may be associated with the proposed research. Please explain any risk management procedures that will be put in place and attach any relevant documents in the section below. Please answer as fully as possible. 300wds

This study is part of a larger piece of work aimed at improving the care for people with dementia in acute hospitals. It is therefore anticipated to have a positive impact. However, there are small risks associated with the project:

Interviews: Minimal distress/intrusion/adverse effects are anticipated, however the following describes potential risks:

There is minimal time disruption (up to 1 hour) for participants. In order to minimise the potential distress staff may feel regarding the nature of the interview they will be given a full information sheet prior to consenting. The researcher is trained in qualitative methods and will ensure a supportive and sensitive approach to interviewing. Questions will probe aspects of audit and feedback, it is anticipated that the participants will not find this topic to be intrusive. In addition, if a participant feels uncomfortable during the interview they are informed that they can withdraw at any time.

Potential risk of breach of confidentiality, described below.

Observations: Minimal distress/intrusion/adverse effects are anticipated from the observations of staff undertaking their role in the audit process. Where this is of an individual, written, informed consent will be sought. It is anticipated that such observations will last upto 1 hour, and can be stopped at any time by the person being observed. If the observation needs to continue beyond an hour, consent to continue will be sought from the person being observed. Where the observation is of groups, this will likely to be fewer than 4 hours (for example, the duration of an extended meeting). In the unlikely event that it needs to last longer, consent to continue will be sought from the person-in-charge or meeting Chair. Participants will be informed that they are free to decide their input to the study and be given information about how to have data about them removed from the study.

In the extremely unlikely event that the interviews or observations lead to concern about the safety of individuals or illegal activity, the issue will be discussed with the supervisory team and potentially raised with the research and development team supporting organisational access.

Please describe how data will be accessed, how participants' confidentiality will be protected and any other relevant considerations. Information must be provided on the full data lifecycle, from collection to archive. Alternatively please upload a copy of your data management plan below.

Confidentiality will be managed through the collection of minimum data regarding participants, and this being held securely. Participants will be informed that their identity will be pseudonymised in all reports. Anonymous coding will be used and all data and information will be stored on encrypted/secure storage systems. A master list of participant number identifying the participant will be stored in a separate folder location and protected with an additional password. Only information required for the research (name, contact details, participant type) will be held. Only the researcher and his primary supervisory will have access to the coding master list. The local NHS R&D office may audit the safe storage of data for governance purposes. Person identifiable information will be removed from transcripts and field notes prior to analysis and will not form part of discussion with the co-production group or of any subsequent reporting.

The project will involve documentary analysis. This will include review of documents such as organisational policies, minutes of meetings and audit reports. These are very unlikely to contain patient identifiable information. Any person identifiable information will be removed prior to analysis and will not form part of subsequent reporting. Organisational consent for the release of these documents will be sought through the research and development team.

What are the potential risks to the researchers themselves? This may include: personal safety issues, such as those related to lone working, out of normal hours working or to visiting participants in their homes; travel arrangements, including overseas travel; and working in unfamiliar environments. Please explain any risk management procedures that will be put in place and note whether you will be providing any risk assessments or other supporting documents.

Risks are considered minimal. The study will be undertaken with staff at venues within acute hospitals. The group meetings will be located for ease of access for group members and will happen within normal working hours. In the unlikely event of lone working, risk assessment and management will be undertaken.

Appendix B - Information sheet – Staff interviews

(Version 9th March)

PROJECT TITLE

Enhancing audit and feedback in dementia care

INVITATION

You are being asked to take part in a research study into how audit is done and what affects how well it works.

WHAT WILL HAPPEN

You will be asked to participate in an interview with a researcher who will ask questions about your experience of audit. These interviews will consider how it is done and what you believe makes it more or less effective. These questions will largely focus on its use in dementia care, but may consider other areas to enable consideration of contrasting approaches.

WHY WE ARE ASKING ABOUT THIS

We want to understand how audit is done and what affects how well it works. This is because there is evidence that it sometimes leads to more improvement than other times. Understanding how it is done in dementia care and how it could be changed could help improve audit and care. The information you provide will be used to better understand this, to share this learning through publication and to inform a later study to test enhanced audit.

HOW LONG WILL IT TAKE?

The interview typically takes 60 minutes.

PARTICIPANTS' RIGHTS

You may decide without explanation to stop taking part in the research study at any time prior to your name being removed from the transcribed data. You have the right to ask that any data you have supplied to that point be withdrawn/ destroyed *without any penalty*.

You have the right to omit or refuse to answer or respond to any question that is asked of you *without any penalty*.

You have the right to have your questions about the procedures answered (unless answering these questions would interfere with the study's outcome). If you have any questions as a result of reading this information sheet, you should ask the researcher before the study begins.

WHAT ARE THE BENEFITS AND RISKS?

There are no known benefits or risks for you in this study.

WILL I BE PAID?

Your participation in this study is voluntary. Interviews will take place at a work base of your convenience or by telephone. Funding is available to reimburse the Trust for your time.

WHAT WILL HAPPEN WITH THE INFORMATION I PROVIDE?

The data we collect does not contain any personal information about you except a broad description label for your job role. This study involves different Trusts. The job role labels used will be common to each Trust. Data may be associated with a job role, but not a named individual or Trust.

The information you provide may be used in the following ways:

- Within a group discussion to develop a diagram about audit.
- Within a published document
- Within a grant application
- Within conference or training presentation

FOR FURTHER INFORMATION

We will be glad to answer your questions about this study at any time. You may contact us at the Institute for Health and Society, Newcastle University or via email Michael.sykes@ncl.ac.uk

Should you wish to speak to someone independent of the research about your involvement, please contact Dr David Hill.

If you want to find out about the final results of this study, you should indicate this during the interview, providing email or postal address.

THANK YOU FOR READING THIS AND CONSIDERING YOUR INVOLVEMENT!

Appendix C - Consent form – Staff interviews

Study: Enhancing audit and feedback in dementia care

Conducted at Trust premises. Chief Investigator & Interviewer: Michael Sykes

Consent Form for semi-structured interviews (Version: 9th March)

	Please tick yes or no next to each statement below		Please initial in each box below.
	YES	**NO**	
1. I have read and understand the information sheet dated 9th March for the above study. I have had time to think about the information, ask questions and have answers to my questions that I am happy with.			
2. I understand that I have free choice whether to take part or not. I understand I can stop taking part at any time without giving any reason, and that this will not affect my NHS employment or legal rights.			
3. I understand that, under the unlikely situation that significant risks to individuals are identified, that these will be raised without reference to my name or place of work through the Trust governance structures.			
4. I understand that if I want to stop taking part in this study I can tell the researcher and the interview will stop. In this case, I understand that what has been recorded up to the point I ask to stop will be kept and used for this research study.			
5. I agree to the audio-recording of this interview and I understand that one of the research team will write out what has been said (but will not include my name in the write-up of the interview). I understand that I can ask the researcher to turn off the recorder at any point I choose.			
6. I understand and agree that data collected during the study may, once names have been removed, be used in the following ways: • Within a group discussion • Within a published document • Within a grant application • Within conference or training presentation			
7. I agree to take part in the above study.			

Name of Participant:

Signature: Date of Signature:

Optional: I wish to receive a summary of the findings via email to:

Name of Person taking consent:

Signature: Date Signature:

When completed: 1 for participant; 1 (original) for researcher file

Appendix D - Meeting Observation Information Sheet

(Version 9th March)

PROJECT TITLE: Enhancing audit and feedback in dementia care

WHAT WILL HAPPEN? I am looking into how audit is done in dementia care in acute Trusts. This study is being conducted at 4 NHS Trusts. I want to learn about the different ways in which audit is done and what appears to make it more or less effective. I will observe what is happening and make notes about this. When the notes are typed, all names will be replaced by role descriptors, for example, 'ward manager' or 'junior doctor'. These role descriptors will be the same across sites to prevent anyone being identifiable.

WHY AM I ASKING ABOUT THIS? I want to know this because there is evidence that audit sometimes leads to more improvement than other times. Understanding how it is done in dementia care and how it could be changed could help improve audit and make care more effective. Information you provide will be used to better understand this, to share this learning through publication and to inform a later study to test a new approach to audit.

HOW LONG WILL IT TAKE? Observations will typically last up to 4 hours, but may be much shorter.

PARTICIPANTS' RIGHTS? You may decide without explanation to stop taking part in the research study at any time prior to your name being removed from the transcribed data. To do this, please email me. If you do, any data you have supplied to that point will be removed *without any penalty to you*. You have the right to have your questions about the procedures answered (unless answering these questions would interfere with the study findings).

WHAT ARE THE BENEFITS AND RISKS?

This is part of work to improve the audits that you are involved with. There are no known risks for you in this study.

WHAT WILL HAPPEN WITH THE INFORMATION YOU PROVIDE?

The data I collect does not contain any personal information about you except a broad description label for your job role. The information you provide may be used in the following ways:

- Within a group discussion to develop a diagram about audit.
- Within a published document
- Within a grant application
- Within conference or training presentation

FOR FURTHER INFORMATION

I will be glad to answer your questions about this study at any time. You may contact me at the Institute for Health and Society, Newcastle University or via email.

Should you wish to speak to someone independent of the research about your involvement, please contact Dr David Hill

If you want to find out about the final results of this study, please email me.

I can be contacted via email to: Michael.sykes@ncl.ac.uk

THANK YOU FOR READING THIS AND CONSIDERING YOUR INVOLVEMENT!

Appendix E – Consent form – Observations

Study: Enhancing audit and feedback in dementia care

Conducted at Trust premises

Chief Investigator: Michael Sykes Interviewer: Michael Sykes

Consent Form for pre-arranged observations of individuals (Version: 9th March)

	Please tick yes or no next to each statement below		Please initial in each box below.
	YES	**NO**	
1. I have read and understand the information sheet dated 9th March for the above study. I have had time to think about the information, ask questions and have answers to my questions that I am happy with.			
2. I understand that I have free choice whether to take part or not. I understand I can stop taking part at any time without giving any reason, and that this will not affect my NHS employment or legal rights.			
3. I understand that, under the unlikely situation that significant risks to individuals are identified, that these will be raised without reference to my name or place of work through the Trust governance structures.			
4. I understand that if I want to stop taking part in this study I can tell the researcher and the interview will stop. In this case, I understand that what has been recorded up to the point I ask to stop will be kept and used for this research study.			
5. I agree to the audio-recording of this interview and I understand that one of the research team will write out what has been said (but will not include my name in the write-up of the interview). I understand that I can ask the researcher to turn off the recorder at any point I choose.			
6. I understand and agree that data collected during the study may, once names have been removed, be used in the following ways: • Within a group discussion • Within a published document • Within a grant application • Within conference or training presentation			
7. I agree to take part in the above study.			

Name of Participant:

Signature: Date of Signature:

Optional: I wish to receive a summary of the findings via email to:

Name of Person taking consent:

Signature: Date Signature:

When completed: 1 for participant; 1 (original) for researcher file

Appendix F: Patient and carer stakeholder involvement advert

Involvement Opportunity

Spring 2017

Help improve dementia care

Would you like to help lead research into how hospitals improve care?

Why is this important?
Patients and staff tell us that improving care is important. One of the most common ways to improve care is called 'audit'. However, audit is done in different ways. Sometimes audit leads to big improvements in care, but sometimes it doesn't. Together we will seek to understand how audit is done and how it could be improved.

What is audit?
Audit involves studying care to see what has been done, and then giving feedback to the staff involved. For example, looking to see whether staff asked patients about pain, and then telling staff how often they assessed pain.

What will you be doing?
I am looking for people to join a group to lead the research. There will be about 9 people in the group. The other members of the group will be clinical staff and staff involved in audit. This group will develop a diagram of how audit is done. To do this, I will interview and observe staff and review documents. I will analyse this information and remove names from it, before bringing it back to the group. The group will challenge the findings and use them to develop the diagram of how audit is done.

The group will meet about 6 times over a year. Each meeting will last 1-2 hours. It is not necessary for all members to attend all meetings and you can stop being involved at any point. After a year, there will then be the opportunity to decide whether you want to continue in the group for another year. In the second year, we will decide how to improve audit and how to make these improvements happen.

The group will decide where we will meet. It will be somewhere easy to get to by public transport. It will also have parking facilities. The group will be led so that all members are supported to be involved equally. I will assist those involved with expenses forms.

Who am I looking for?
I am looking for three people who have experience of dementia, either as a person with dementia or as a carer. I am looking for people who are willing to give their views and who live in the North East of England. If more than three people want to be involved, there will be other opportunities to help. If you think you might be interested, please get in touch.

Will I be paid?
This opportunity is voluntary. Travel expenses will be reimbursed and you will receive a gift voucher to thank you for your involvement in the group.

How can I get more information or get involved?
If you would like more information about this involvement opportunity, please contact:

- Michael Sykes, NIHR Research Fellow, Institute for Health & Society,
  Newcastle University NE2 4AX.

- Please email Michael.sykes@newcastle.ac.uk or call me on #### or go to: http://www.voicenorth.org/opportunities/help-improve-dementia-care/
- **Please contact me by 31st May 2017**

Appendix G - Example stakeholder involvement facilitation plan: Co-production group 1

Aim: To develop a group to produce a framework of audit and feedback in dementia care in acute hospitals

Workshop 1 aim: To engage individuals and develop group
To agree ways of working
To make first draft of framework
To identify initial documents and interviews

Group members: 3 carers, 3 clinical leads, 3 clinical audit leads

Location of meeting: Accessible university building with good public transport links and disabled parking

Timing of meeting: 1-3pm

Room layout: Behind tables so participants feel more secure, in a circle so as no perceived head of the table (Thayer-Hart, 2007)

Time	Purpose	Action	Materials / Recording	Rationale	Consideration
15min	To describe purpose To reduce anxiety To reduce barriers to speaking To help all to understand expertise and motivation	MS introduction and reiterate aim of project (highlighting outcome of professional behaviour change) Introduce self to set example of information giving. Ask all to introduce themselves	Desktop name label Notebook for each group member Pens	To enable members to get to know each other but not predetermining the information to enable people to share as much as feel comfortable.	What are members doing at this point? Thayer-Hart (2007) describes them considering: Will we succeed? Will we be open? Will I have some degree of control? Do I want "in"?
5min	To facilitate later group dynamics	Ask group to propose groundrules. Seek agreement.	Flipchart & pens	Enables return to group's groundrules	Before or after ice-breaker exercise?

		Anonymous voting if needed	Post-it Group pens	should later non-application be impacting upon dynamics. Adili et al (2012) Avoid judging, controlling, superiority, certainty, indifference, manipulation	
20min	To have practice group discussion about a safe topic To flatten hierarchy To demonstrate different perspectives and expertise To demonstrate importance of collaborating towards a common goal To demonstrate importance of flexibility To practice reflexivity	An exercise to illustrate what we will be doing: Cake exercise Draw a cake on numbered paper Demonstrate difference How to identify which is better? Better in what way? Identify ingredients Where go for evidence about ingredients / what's better	Paper Coloured pens	Thayer-Hart (2007) recommends 'warming up' the group so, "participants will give better information when they feel like part of a friendly, problem-solving mission, in which their individual experiences and opinions are valued." Thayer-Hart also highlights the role of flexibility in order to maintain involvement.	Are flat hierarchies achievable?
10min	To give all opportunity to comment on goal	Year 1 goals: 1. To describe 'audit and feedback' in the care of people with dementia in acute hospitals: • How it is done • What affects whether it changes behaviour Year 2 goals:	Pre-printed inside member workbooks	Clarifying purpose was key benefit of facilitator (Lowes et al, 2011)	

		2. To design improvements to audit and feedback. 3. To design a way to make the improvements happen. 4. To study whether the improvements can be made in one hospital.			
3min	To identify things that are fixed	Fixed: 1. To use evidence, 2. To challenge assumptions, 3. To seek consensus 4. To capture complexity 5. I will not identify individuals or Trusts	Pre-printed work-books	Effective use of time Department of Health (2008b) guidance recommends being open about what is not negotiable	Impact on motivation? Whether to differentiate source of input (eg. reported, observed)?
2 min	To describe my position relative to the group	Facilitator Researcher for the group If wish to add content, will verbally label it as neither as facilitator nor researcher		“A facilitator manages the method of the meeting, rather than the content. Facilitators are concerned with how decisions are made instead of what decisions are reached” Thayer-Hart (2007)	Facilitation changes over time / impact upon reflexivity. Balance didactic with interactive.
10min		**Tea/coffee**	**Catering**		
5 min	Review inclusion criteria to: define A&F	A&F involves comparing current care against an evidence-based standard, and giving feedback to staff on whether actual and evidence-based care match in order to improve care. Audits which use a diagnosis of dementia as an inclusion criterion will	Pre-printed workbook		

	define dementia audit	be included. In addition, audits of care described in the NICE and SIGN dementia guidelines			
15 min	To identify what the group thinks prior to research: Audit process (All)	3 x 3 groups Mix Trust staff	Paper Post-it Pens		No need for consensus – aiming to capture range of views
15 min	To identify what the group thinks prior to research: Actors (Group 1) Documents (Group 2) Observations (Group 3)	3 x 3 groups Mix Trust staff	Paper Post-it Pens		Should they bring along (?and leave) initial thoughts / documents Individual or small group?
5 min	To identify next steps	Which documents / roles to interview / events to observe?			All of one job title in 'batch' or spread across project to allow findings to inform questions?
5 min	To agree meeting arrangements	Location Timing			
5 min	To learn from meeting for next time and respond to questions about project	Discussion about experience			Decide re information to potential participants
5 min	To reimburse incurred costs and thank members	Discuss expenses	Travel forms Reimbursement of Trusts		

Appendix H - Interview topic guide v3

1. Could you describe your role?

2. What do you understand by the term audit and feedback? (Can prompt that often called 'clinical audit')

3. Different types of audits have been described.
   a. Do you recognise these types? (Show list)
   b. Which of these types are you involved with?
   c. How do they differ?

4. Do you come into contact with the national audit of dementia? What is your involvement with that audit?

5. The national audit has been described like this (Show collated diagram). Does these match your experience? With which parts of this do you get involved?

6. Explore each part[i]:
   a. When does it happen?
   b. Where does it happen?
   c. Who is involved?
   d. How is it done? Is it always done like that? (If appropriate, prompt about materials involved)
   e. How does that feel? How do other people feel about that?
   f. Which documents and/or potential observations/interview participants could provide more information about this part?

7. Audit is used for different reasons, why do you think it is used here? Any other reasons?

8. Some people use audit to improve care. What do you think about that?
   a. How much do you think it improves care?
   b. How does it improve care?
   c. What affects whether it improves care? (Use collated diagram as prompt)

9. If you could change anything about the national audit, what would you change?

10. What would happen if the hospital didn't do the national audit? (Can prompt: Would things be different, and if so, how?)

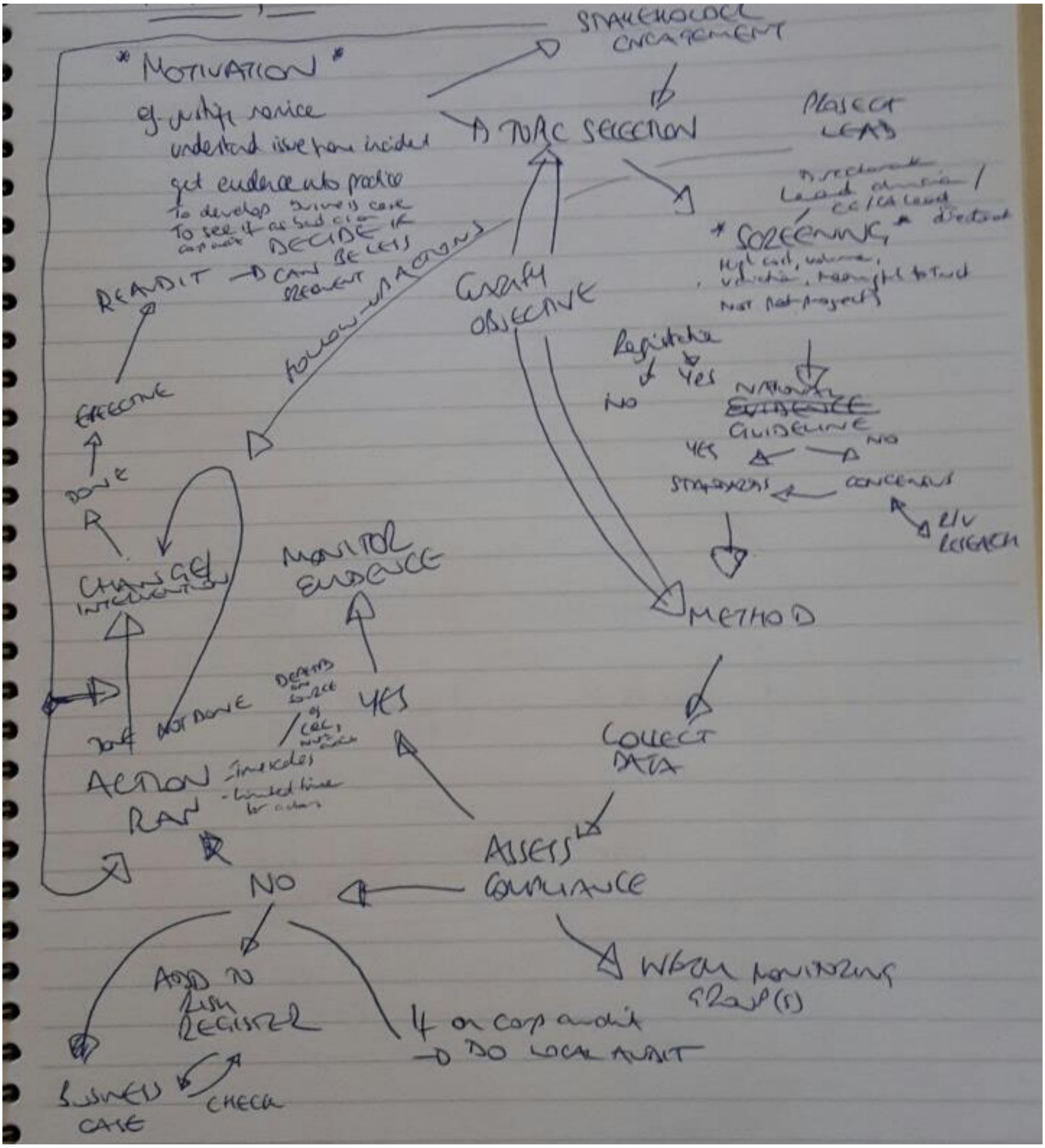
11. Is there anything else you would like to add? Thank you

Footnote:

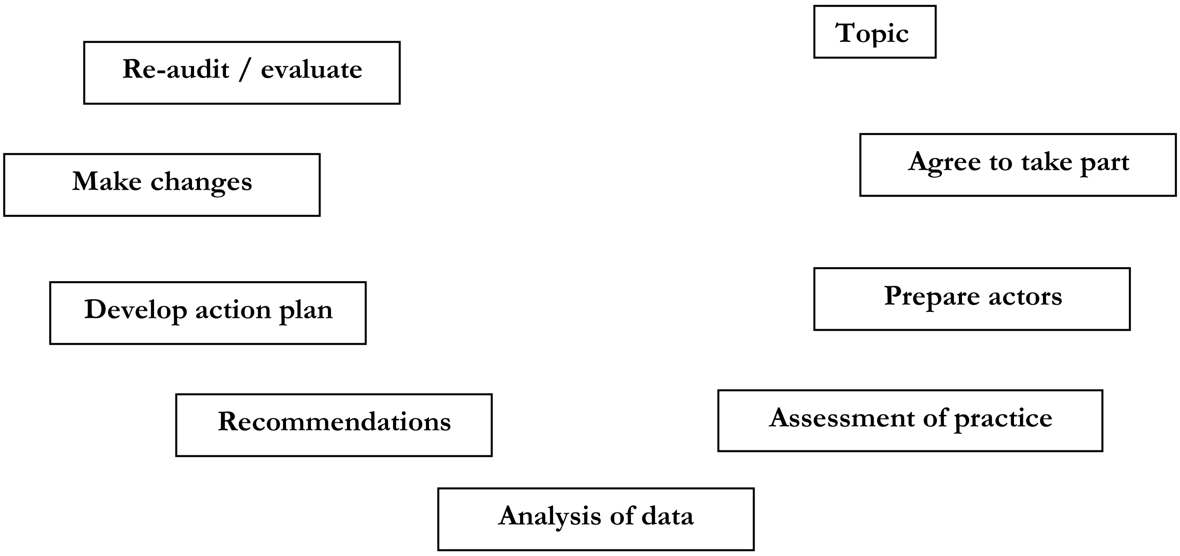
Interviewer has a personal version of the collated diagram with stage and participant specific questions based upon emergent findings and stakeholder feedback

Appendix I - Example interview diagram

(Interview 1, Organisational Clinical Audit Lead):



Appendix J - Example collated diagram (version 3) used as interview prompt



Appendix K – Adapted[i] TIDieR template to inform workshops 7 and 8

1. NAME	Identification of actions - Focus
2. WHY	To prioritise areas for action
3. MATERIALS	Local national audit of dementia report; Local report and action plan template
4. PROCEDURES	Positional leaders direct a clinical lead to develop an action plan. Local report sent to Trust. Clinical lead reads local report. Report contains 136 data items. Clinical lead seeks priorities to include in action plan. Clinical lead finds the report confusing. One page in the local report summarises the national priorities; these are almost always included in the local internal report. Clinical leads also read the rest of the report for additional potential priorities, including ones where there are existing actions and/or planned actions in place. Clinical lead drafts action plan and takes to specialty governance groups, which may propose additional focus. Draft action plan taken to Trust level governance committee where discussion focuses on 2-3 priorities described in the draft action plan.
5. PARTICIPANTS	Clinical lead, clinical governance staff and a senior nurse with responsibility for governance. Senior clinicians at specialty committee (in one instance also external representatives e.g. AgeUK). Clinical directors, non-executive directors and positional nurse and medical leads at Trust governance committee.
6. HOW DELIVERED	Clinical lead reads report in office, presentations to committees are face-to-face
7. WHERE	In office / meeting room
8. WHEN	Action plan taken to Trust-level committee 5-6 months after report published. This is about 20 months after care described in the report.
9. HOW MUCH	Draft action plan presented at two meetings.
10. TAILORING	None
11. MODIFICATIONS	Action plan may include target behaviours within the full local report but not identified as national priorities. Report accompanying action plan may include data that does not lead to action in the action plan.
12. FIDELITY	Focus procedure not included in local policies

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[i] When / how much split, Fidelity (planned and actual) combined

Appendix L – Potential enhancements

Finding	Evidence and theory-informed hypotheses[i]	Potential enhancement to the national audit of dementia
My findings suggest that the national audit attracts the attention of organisational leaders at hospital governance committees (e.g. non-executive director, directors of nursing, medical directors, clinical directors) and clinical leaders (e.g. hospital dementia lead, dementia nurse specialist). I found that the audit was consistent with the priorities of some actors: senior managers were motivated to take part in the audit in order to meet external expectations (of regulators and commissioners), whilst clinical leads sought to gain organisational resources to improve care. That the national audit attracted the attention of, and was a priority to, organisational leaders may have increased the effectiveness of the audit. Feedback may not have attracted the attention of clinicians who were not part of governance committees.	Audit and feedback may be more effective when it attracts attention (Colquhoun et al, 2017; Brown et al, 2019), when it is consistent with recipient priorities (Colquhoun et al, 2017; Brown et al, 2019), when the recipient feels it is important to their professional roles and responsibilities (Colquhoun et al, 2017) and they feel ownership of the feedback (Brown et al, 2019).	Increasing the attention of clinicians who were not part of governance committees may enhance effectiveness.
Feedback reached the hospital fourteen months after the care had been delivered and was perceived as being slow. The feedback received	Feedback may be more effective when it is timely (Colquhoun et al, 2017; Brown et al, 2019), repeated, verbal and in writing, given by	The national audit may be enhanced by reducing the time to the receipt of feedback, increasing the specificity of the feedback and by

by the clinical lead was in writing, with some additional information given verbally at a workshop approximately three months later. Internal feedback was given verbally and in writing by a colleague to a group (governance committee), where it was discussed. Feedback reached organisational leaders, but did not reach clinicians who did not attend the governance groups. The national report included comparison against previous performance and against average (mean) performance, two of the four organisations in the study used this comparison information in their internal reports to the governance committees. Hospitals also have access, but may not use, a spreadsheet containing the data from all hospitals, enabling them to identify the performance of peers (e.g. other large teaching hospitals, local hospitals) and of other comparator groups (e.g. top 10% performers). Recipients of the 66-page national report found it confusing. Further information (audit tools, an outlier report and the data spreadsheet) were also available on-line. Both the national and local reports were gain-framed.	a peer or colleague (Ivers et al, 2012) and/or in a group setting (Brown et al, 2019). Feedback may also be more effective if it is specific (Colquhoun et al, 2017; Brown et al, 2019), given to those in control of performance (Colquhoun et al, 2017; Brown et al, 2019), contains actively selected comparators (Colquhoun et al, 2017; Brown et al, 2019; Gude et al, 2019) and illustrates room for improvement (Brown et al, 2019). Feedback which has a low cognitive load (Colquhoun et al, 2017) and high usability (Brown et al, 2019), with information 'scaffolded' so that further detail was available to those who sought it (Colquhoun et al, 2017) may be more effective. The use of loss-framed data (Colquhoun et al, 2017) (e.g. 40% of patients did not have a nutritional assessment) may be more effective (Colquhoun et al, 2017).	facilitating the use of alternative comparators that show room for improvement. The national report may be enhanced by making it simpler and shorter, with more optional ('scaffolded') information. Both the national and local reports may be enhanced by presenting data in this way, if it is acceptable and if it can be done without adversely affecting the complexity (and therefore cognitive load) of the reports.
I found that senior leaders questioned the motivation of the source of the feedback	Feedback may lead to greater improvement when the feedback provider is perceived to	Providing feedback about the diverse stakeholder involvement in the national audit

(Royal College of Psychiatrists). Participants described the analysis in the national report to be robust. I found that the work to assess data quality was done collectively in committee meetings and involved discursive triangulation with a sub-set of the available data, typically patient experience data. I found variation in the assessments of care, for example, assessors using different definitions of whether a pain assessment had been completed. The variation in data collection did not appear to be recognised by feedback recipients.	have a high level of knowledge and skill (Brown et al, 2019). Recipient perceptions of data accuracy (Brown et al, 2019) and their assessment of credibility and development of trust in the performance feedback may affect the effectiveness of audit and feedback (Colquhoun et al, 2017).	may inform feedback recipients' assessment of the source of the feedback. Committee members' assessment of the accuracy and credibility of the feedback may be enhanced by providing related data from a range of sources (e.g. hospital audits, patient feedback, patient safety incidents) in the internal report alongside feedback from the national audit. It is possible that feedback recipients over-estimated the reliability of the data. The national audit may be further enhanced by increasing the reliability of data collection.
I found that both the national and the internal reports included actions to improve, however the actions in the internal report focused on national priorities, rather than local poor performance. The actions in the internal reports were at the organisation-level, whereas the feedback was at the hospital-level.	Feedback that targets poor performance (Ivers et al, 2012; Colquhoun et al, 2017), and that includes a goal relevant to the recipient (Brown et al, 2019), actions to improve (Ivers et al, 2012; Colquhoun et al, 2017; Brown et al, 2019) and helps recipients identify and develop solutions (Brown et al, 2019) may increase the effectiveness of audit and feedback. Using the feedback to inform the development of organisation-level actions, rather than patient-level actions, may be more effective (Brown et al, 2019).	The national audit may be enhanced by proposing actions to be undertaken by the recipients of the national report (namely the clinical leads). The proposed actions in the national report should describe a goal and actions targeted at recipients, such as to disseminate feedback to clinicians, to identify local poor performance and analyse the causes of performance. Where organisations receive reports for more than one hospital, actions to address poor performance may be more effective at the hospital (rather than organisation) level.
There was little evidence that barriers to high performance were identified. The internal	Identifying and removing barriers to high performance, producing a conceptual model	The internal audit may be enhanced by analysing the causes of performance, selecting

report at one site described barriers to performance, however the link between the barriers and the selected actions was not clear. The selection of actions was constrained by the perceived sphere of influence of those writing the action plan.	describing improvements (Colquhoun et al, 2017), and delivering feedback to recipients with quality improvement skills (Brown et al, 2019) may increase the effectiveness of audit and feedback.	actions based upon this assessment and describing the decision-making process behind the improvement actions. Training feedback recipients in quality improvement may enhance the audit.
I found that positional leaders' assessment of the internal report was associated with organisational priorities, risks and comparative performance.	Brown et al (2019) propose that demonstrating benefits to, and gaining the support of, positional leaders may increase improvement from audit and feedback.	The effectiveness of the national audit may be enhanced by providing internal feedback that gains local positional leader support for change, for example, by addressing credibility, linking the feedback to priorities and by providing selectable comparators. Demonstrating the link between the causes of performance and the selection of actions may further increase the commitment to the proposed improvement actions.

Box #: A summary of the rationale for potential enhancements to the national audit of dementia

i The development of the enhancements was undertaken prior to the publication of Clinical performance feedback intervention theory (Brown et al, 2019) and a review of evidence and theory for clinical performance comparators (Gude et al, 2019), and as a result, those potential enhancements that were described in chapter 3 and based upon Brown et al (2019) and Gude et al (2019) were not incorporated into intervention development.

Appendix M - TiDieR framework – Logical improvement planning (v3)

Glossary:

Target care behaviours = The findings from the audit which have been prioritised for improvement

Organisational priorities = The goals of positional leaders

Name	Preparation	Leadership	Engagement
Why	To address trust and credibility To prepare for later stages	To identify 'low baseline' target care behaviours To target message to Organisational priorities To present loss-framed data To present comparison	To identify barriers to target care behaviour To model the link between barrier, action and Organisational priorities To align to existing actions
What materials	Trust Board and governance group minutes, Quality Account, Quality Strategy and Care Quality Commission report	National data set Excel Related data Documents collected in preparation stage	Existing evidence from literature and clinical networks Email Posters Comments boxes Logical improvement plan template
What procedures	Seek information about people of influence on specialty and Trust governance group through observation, asking others and reading minutes. Seek information about procedure for assessing practice as part of audit by reading method and asking those involved. Write description of: source, advisory group, external drivers for participation; how data were collected and reliability of collection.	Download data set Identify lower quartile performance Meet with stakeholders To identify target care behaviours from the full data set discuss with stakeholder group and: Include any with lower quartile performance unless performance considered acceptable Exclude remaining data items unless absolute performance is unacceptable	Ask stakeholder group about barriers to target care delivery and what has been done to understand current performance. Ask librarian to search for evidence of barriers and actions to address barriers. Look at national and local data for low and high-performers and seek to understand differences in care delivery

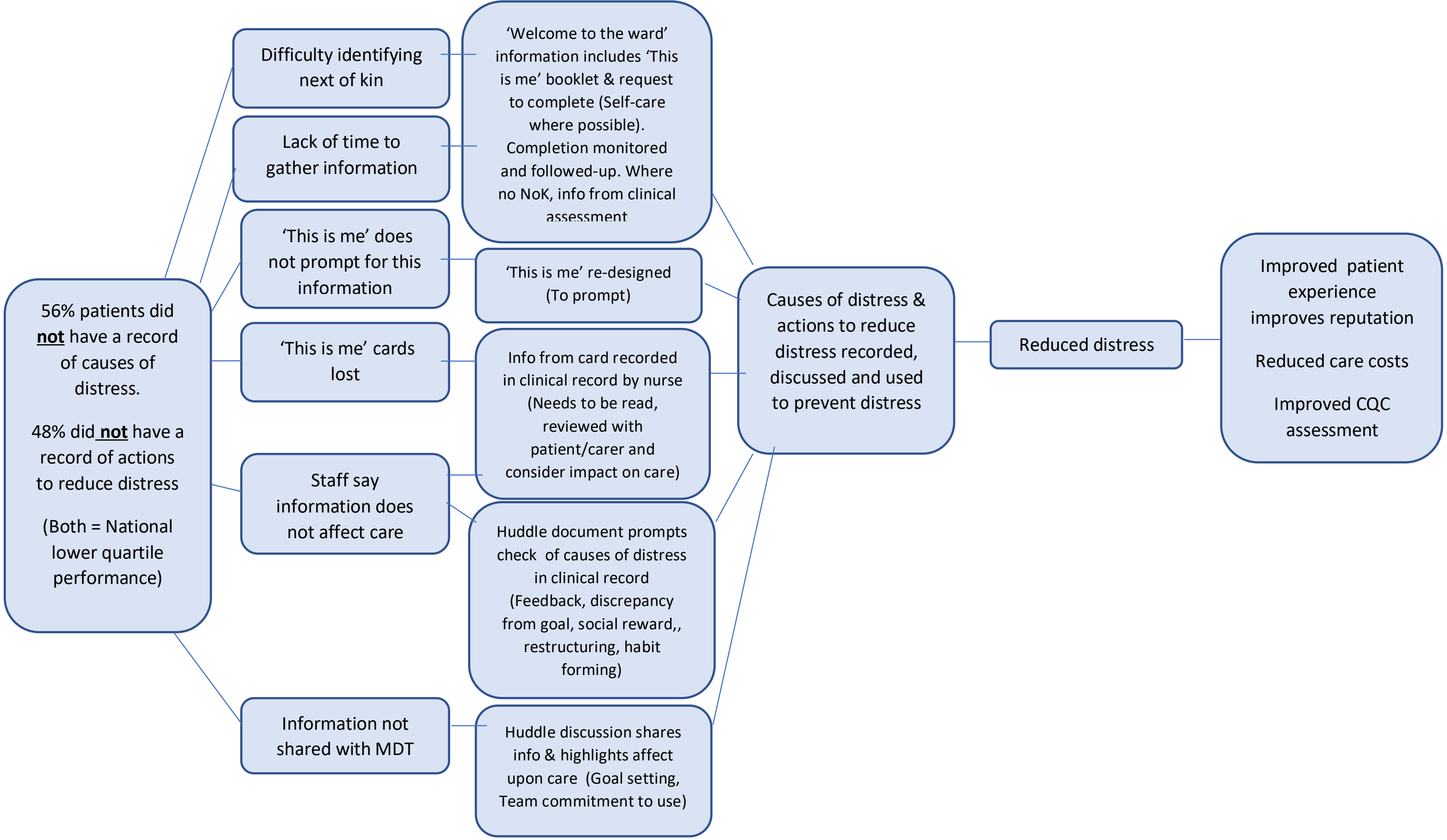
	Arrange meeting(s) with stakeholders	Review list and remove any where more robust data indicates acceptable performance. Items should not be removed based on inability to identify ways to improve. Identify Organisational priorities by: Seeking priorities from documents Discussing priorities with stakeholders Link target care behaviours to related data and Organisational priorities Write prioritised data in internal report using loss-framing and meaningful comparison Seek other comparisons (self, peer, national) to be able to give verbally if questioned.	Observe care to understand barriers to delivery and possible waste that might create capacity for change Share findings on noticeboards and ask for ideas of what might help improvement by email / comment box. Review reasons for performance Draft logical improvement plan (See figure A1) Discuss draft improvement plan and whether could/should adapt existing actions with service improvement lead, stakeholder group (including deputy director of nursing and previously identified influential voices on governance groups) and action owners Verbally and in report present to governance group: Data quality Prioritisation method and how plan developed The logical improvement plans, including relative & loss-framed performance. The action plan that specifies the target care behaviour, the action to improve detailing: what will be done and the rationale for action; by whom; to whom; by when and how it will be monitored.

Who provided	Clinical lead for audit supported by hospital clinical audit lead	Clinical lead for audit supported by hospital clinical audit lead	Clinical lead and locally identified stakeholders (including service improvement lead, deputy director of nursing and influential voices on governance groups) Hospital librarian
How	-	-	-
Where	Clinical lead office	Clinical lead office and elsewhere in for stakeholder discussions	Clinical lead office, Governance committee meeting room and elsewhere in for stakeholder discussions
When and how much	2 hours	5 hours	30 hours
Tailoring	Tailored to address previously raised concerns about the data	-	-
Modification	No	No	No
Fidelity (Planned and actual)	Assessed by post-intervention interview	Assessed by post-intervention interview	Assessed by post-intervention interviews, observation and documentary analysis

Figure A1: Logical improvement plan

Logical improvement plan - *Example:*

Audit results *(Relative performance)*	**Barriers to care**	**Action to address barriers** *(Rationale)*	**Improvements in care and audit result**	**Patient outcome**	**Organisational outcome**



Appendix N: Normalisation process theory toolkit (May et al, 2011)

1. Participants distinguish the intervention from current ways of working.

Not at all ——— Completely

Whether the intervention is easy to describe to participants and whether they can appreciate how it differs or is clearly distinct from current ways of working.

2. Participants collectively agree about the purpose of the intervention.

Not at all ——— Completely

Whether participants have or are able to build a shared understanding of the aims, objectives, and expected outcomes of the proposed intervention.

3. Participants individually understand what the intervention requires of them.

Not at all ——— Completely

Whether individual participants have or are able to make sense of the work – specific tasks and responsibilities - the proposed intervention would create for them.

4. Participants construct potential value of the intervention for their work.

Not at all ——— Completely

Whether participants have or are able to easily grasp the potential value, benefits and importance of the intervention.

5. Key individuals drive the intervention forward.

Not at all ——— Completely

Whether or not key individuals are able and willing to get others involved in the new practice.

6. Participants agree that the intervention should be part of their work.

Not at all ——— Completely

Whether or not participants believe it is right for them to be involved, and that they can make a contribution to the implementation work.

7. Participants buy in to the intervention.

Not at all ——— Completely

The capacity and willingness of participants to organise themselves in order to collectively contribute to the work involved in the new practice.

8. Participants continue to support the intervention.

Not at all ——— Completely

The capacity and willingness of participants to collectively define the actions and procedures needed to keep the new practice going.

9. Participants' perform the tasks required by the intervention.

Not at all ———————————— Completely

Whether people are able to enact the intervention and operationalise its components in practice.

10. Participants maintain their trust in each other's work and expertise through the intervention.

Not at all ———————————— Completely

Whether people maintain trust in the intervention and in each other.

11. The work of the intervention is appropriately allocated to participants.

Not at all ———————————— Completely

Whether the work required by the intervention is seen to be parcelled out to participants with the right mix of skills and training to do it.

12. The intervention is adequately supported by its host organisation.

Not at all ———————————— Completely

Whether the intervention is supported by management and other stakeholders, policy, money and material resources.

13. Participants access information about the effects of the intervention.

Not at all ———————————— Completely

Whether participants can determine how effective and useful the intervention is from the use of formal and/or informal evaluation methods.

14. Participants collectively assess the intervention as worthwhile.

Not at all ———————————— Completely

Whether, as a result of formal monitoring, participants collectively agree about the worth of the effects of the intervention.

15. Participants individually assess the intervention as worthwhile.

Not at all ———————————— Completely

Whether individuals involved with, or affected by, the intervention, think it is worthwhile.

16. Participants modify their work in response to their appraisal of the intervention.

Not at all ———————————— Completely

Whether individuals or groups using the intervention can make changes as a result of individual and communal appraisal.

Please write other comments about what might affect intervention use on post-it notes
(Please remember to put the *Step number* on the note)

APPENDIX O – Output from workshop 12

Step	Key findings and messages from NPT toolkit exercise	Implications for implementation strategy
1 **Aims: To address trust and credibility and prepare for action planning**	The semantic differential scale responses indicated the step may not be understand what the intervention requires of them, may not agree that it should be part of their work, or 'buy-in' to the intervention. Narrative responses indicated that: Triangulation would be seen as different; the method could come from existing report; clinical leads may not have the time/capacity to undertake the work (especially in relation to gathering and reading the minutes) but that job planning may be an opportunity but depends upon clinical director; clinical audit staff may support the step more than clinical lead; may need to be negotiated / arranged well in advance and this may need data, "to hook them in".	**Responses were interpreted as a need to develop individual specification (a conceptualisation and understanding of the practices and its suitability for the goal), initiation (bringing the practitioner to start to become involved in the practice) and legitimation (the development of shared beliefs that 'buy-in' to the practice).** As a result, the following were considered: Ask audit provider to refine method section so can be copied into report. Consider how to get organisational support, including for clinical time to do the work e.g. Give rationale to the intervention and link to priorities. Clinical audit staff may support the step more than clinical lead, so consider moving some roles to them. Remove reading of minutes if that is seen as unachievable and so potentially a barrier to engagement with the intervention.

		Need to surface knowledge about who to meet and where to find information about priorities. Change reference to ‘meeting’ with stakeholders to ‘opportunity to discuss’, to reflect might be brief opportunistic discussions. Describe time needed to undertake step.
2 **Aim: To identify priorities for action from within the hospital feedback.**	The semantic differential scale responses indicated the step may not be distinguished from current ways of working and key individuals may not drive the step forward. Narrative comments included: • There may be different perspectives about what constitutes a priority between the clinical group and the senior leaders. • A suggestion to clearly state the aim from prioritising. • Suggestion to filter data to short list, rather than review full data set. • That those writing the local improvement plan may wish to exclude a target behaviour if they believe they are unable to improve it.	**Responses were interpreted as a need to develop differentiation (perceiving a practice as different from other practices), individual specification (a conceptualisation and understanding of the practices and its suitability for the goal), initiation (bringing the practitioner to start to become involved in the practice) and legitimation (the development of shared beliefs that ‘buy-in’ to the practice).** As a result, the following were considered: Need to illustrate links to different priorities and potentially demonstrate who to be involved in agreeing priority where consensus needed. Needs to gain key individuals’ support. Describe time needed to undertake step. Be clear not to exclude potential target behaviour on the basis of beliefs about ability to change.

3 **Aim: To align message about data to organisational priorities**	The semantic differential scale responses indicated that individuals may not understand what the step requires of them, may not agree to it becoming part of their work and may not 'buy-in' to the intervention. Narrative comments included that: It may be difficult to find documents and time to review minutes; those involved may be aware of CQC priorities; that clinical audit staff may be happy to help; that other stakeholders may not engage, so perhaps need to link to money (e.g. via length of stay).	**Responses were interpreted as a need to develop individual specification (a conceptualisation and understanding of the practices and its suitability for the goal), initiation (bringing the practitioner to start to become involved in the practice) and legitimation (the development of shared beliefs that 'buy-in' to the practice).** As a result, the following were considered: Step 3 amended to remove need to review minutes in order to identify priorities. Describe time needed to undertake step Need to if-then plan for non-engagement of stakeholders.
4 **Aim: To present prioritised data items in a way that increases motivation to commit organisational resources**	The semantic differential scale responses indicated that individuals may not understand what the step requires of them, may not agree to it becoming part of their work and may not 'buy-in' to the intervention. Narrative comments included that: Including positive framing may increase support of key individuals; Comparison should be locally defined, for example, against local hospital; Trust may not allow use of loss-framed data.	**Responses were interpreted as a need to develop individual specification (a conceptualisation and understanding of the practices and its suitability for the goal), initiation (bringing the practitioner to start to become involved in the practice) and legitimation (the development of shared beliefs that 'buy-in' to the practice).** As a result, the following were considered: Increasing knowledge and to demonstrate capability.

		Developing a plan for how to define comparison for report. Remove use of loss-framed and comparison. Amend enhancement to include celebration of success. Describe time needed to undertake step
5 **Aim: To seek evidence about barriers and potential actions to address barriers**	The semantic differential scale responses indicated that individuals may not understand what the step requires of them, may not perceive value in it, may not agree to it becoming part of their work and may not 'buy-in' to the intervention. Narrative responses indicated that: May not be hospital librarian doing evidence summaries, maybe this should be done by the audit provider; clinical audit team may be pleased to do work to identify high- & low-performing teams and data for triangulation; finding staff time to undertake observation of care may be difficult, service improvement team might be an option, but could only do for a few priorities; need to give examples of what 'waste' might look like.	**Responses were interpreted as a need to develop differentiation (a practice as different from other practices), individual specification (developing a conceptualisation and understanding of the practices and its suitability for the goal), initiation (bringing the practitioner to start to become involved in the practice), legitimation (the development of shared beliefs that 'buy-in' to the practice) and enrolment (practitioners working together to organise themselves to undertake a practice).** As a result, the following were considered: Need to give rationale for analysis of barriers and facilitators. Make presentation of analysis into something that is sought by the recipient (e.g. committee members) If-then plan for if hospital librarians do not do evidence summaries.

		How to build observations into work – job plan, junior doctor project, improvement workplan, response as to whether done. Describe time needed to undertake step
6 **Aim: To model the link between barrier, action and organisational priorities**	The semantic differential scale responses indicated that individuals may not understand what the step requires of them, may not perceive value in it, may not agree to it becoming part of their work and may not continue to support the intervention. Narrative responses indicated that: Need to seek agreement from action owners and know what to do if don't get it.	**Responses were interpreted as a need to develop individual specification (a conceptualisation and understanding of the practices and its suitability for the goal), internalisation (adopting the developed meaning for the practice), initiation (bringing the practitioner to start to become involved in the practice) and legitimation (the development of shared beliefs that 'buy-in' to the practice)** As a result, the following were considered: How to get positional leader support? Make it a requirement of study/audit provider? Create clinical lead expectation of getting feedback about process as well as outcome. Describe time needed to undertake step
7 **Aim: To present to governance group in**	The semantic differential scale responses indicated that individuals may not understand what the step requires of them, may not agree to it becoming part of their work and may not 'buy-in' to the intervention.	**Responses were interpreted as a need to develop individual specification (a conceptualisation and understanding of the practices and its suitability for the goal), initiation (bringing the practitioner to start**

order to gain approval for the action plan.	Narrative responses indicated that: May only be given a couple of minutes	**to become involved in the practice) and legitimation (the development of shared beliefs that 'buy-in' to the practice)** If-then plan needed Describe time needed to undertake step

Appendix P: Logical Improvement Planning workbook

Logical Improvement Planning

Workshop

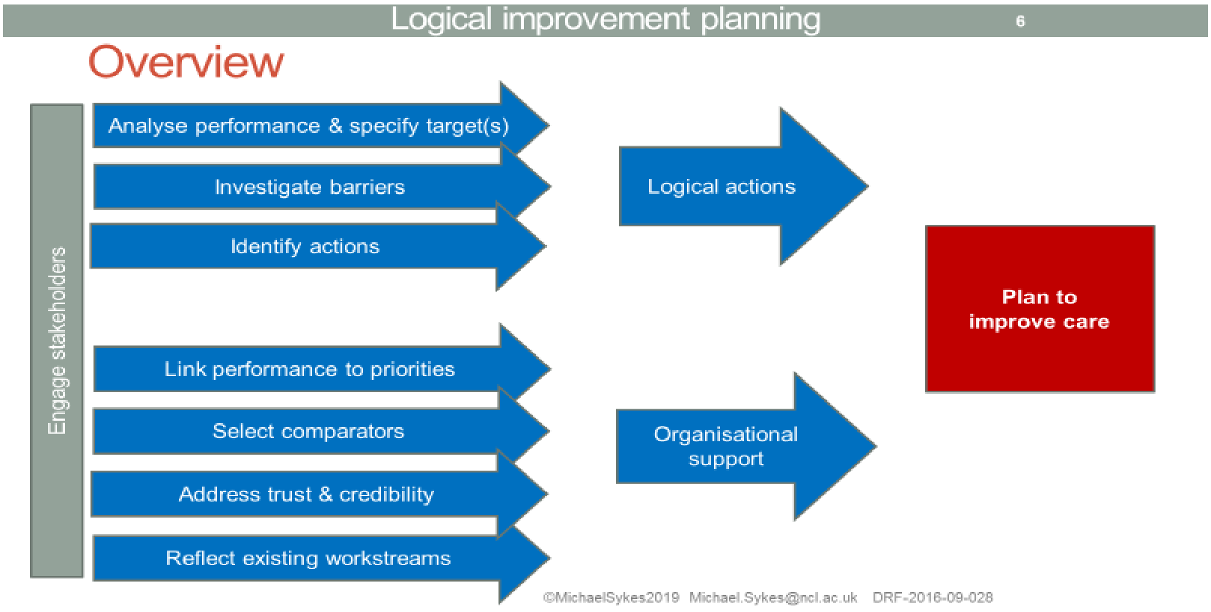
This workshop contains independent research arising from a Doctoral Research Fellowship, Michael Sykes, DRF-2016-09-028 supported by the National Institute for Health Research. The views expressed in this presentation are those of the author(s) and not necessarily those of the NHS, the National Institute for Health Research or the Department of Health.

These worksheets complement the presentation. They are designed to help you to identify actions based upon engagement analysis and to generate organisational support for the actions.

During the workshop you will use the worksheets as an educational activity. An additional blank copy will be sent to enable you to complete with stakeholders.

After the workshop, there will be further opportunities to discuss progress with the organisational response to the audit.

This approach to developing improvements is based upon evidence from six hospitals, input from our co-production group, as well as previous audit research and theory. You will be asked for your thoughts on how to improve it after the session.



Logical improvement planning 6

Overview

Engage stakeholders

Analyse performance & specify target(s)

Investigate barriers

Identify actions

Link performance to priorities

Select comparators

Address trust & credibility

Reflect existing workstreams

Logical actions

Organisational support

Plan to improve care

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Contents:

<u>Worksheet 1:</u> Analyse performance and specify target(s)

1a) Which standards would you like to celebrate?

(E.g. They are in the top quarter, they represent significant improvement)

Standard	Result

P.T.O.

1b) Which standards are in the bottom quarter compared to other English hospitals? What is the result?

Standard	Result	Acceptable?

1c) It is possible to be in the bottom quarter, but still have high performance, so please identify whether you consider performance to be acceptable.

1d) It is possible that results not in the bottom quarter still have the opportunity to improve. Which results, whilst not bottom quarter, do you think need to be improved?

Standard	Result

Remember, don't exclude results because you think that it is not possible to improve them. The ability to improve will be considered later.

Worksheet 1 post-workshop actions:

Worksheet 2: Stakeholder engagement

2a) Who are the stakeholders with an interest in dementia and / or any of the opportunities to improve from worksheet 1?

Name / role	Chatted?	Name / role	Chatted?

Action: Seek a chat with them about the results. [Note: Not necessarily a formal meeting!]

During the chat discuss:

- Performance: Successes & the selection of priorities for improvement
- Related data
- Specify the target: Who, where, when
- Barriers & facilitators for each
- Risks and priorities (including things discussed a committees)
- Existing and new actions
- Other stakeholders / sources of information (e.g. minutes, Trust papers)
- Relevant comparators (Previous, All hospitals, Top performers, Locally-defined peer-group)

Describe the final list of care practices to improve (Overleaf)

2b) Specifying the target(s)

For each prioritised standard, identify what needs to be done to meet the standards

Prioritised standards	**Care behaviour:** What needs to be done as part of meeting the standard(s)	**By whom**	**Where**	**When**	**Barriers / facilitators**

Worksheet 2 actions:

Prioritised standards	**Care behaviour:** What needs to be done as part of meeting the standard(s)	**By whom**	**Where**	**When**	**Barriers / facilitators**

2c) Capturing stakeholder feedback

Standard	**Existing actions**	**Other sources of data that help describe current performance** e.g. complaints, coroner reports, local audits	**Other (Stakeholders**

Worksheet 3: Selecting comparators

Options:

- National mean
- Top performers
- Peer group
- Locally determined target
- Previous performance

Preferred choice(s):

Rationale:

People to be involved in agreeing comparator e.g. Deputy director of nursing	**Who will have this discussion**	**When**

Worksheet 4: Analysing barriers and facilitators

Multiple perspectives will give a richer picture of the barriers and enablers to each selected aspect of care. Here are some questions to help design how you will understand these different perspectives:

1. There are many different ways to understand the barriers and facilitators (e.g. observing care, asking those involved (face-to-face, noticeboard, email), reviewing literature (published or improvement stories from peers). For each selected care behaviour, which would be the most appropriate way. Select at least two methods for each.

2. Consider, can any of the selected care behaviours be grouped, for example, because the same sources can give you information about each?

3. Who might be able to help? For example, would it make an appropriate junior doctor quality improvement project, do the hospital librarians offer an evidence-synthesis service, could the quality improvement team help.

4. Does any of the information you gain change how you specified the care behaviour, that is where, when it is done or by whom?

Care behaviour	**Methods for gaining perspective**	**Who may be involved**	**When will they feedback**	**Other comments** (e.g. whose support needed)

Care behaviour	**Methods for gaining perspective**	**Who may be involved**	**When will they feedback**	**Other comments** (e.g. whose support needed)

Worksheet 5: Logical actions

5a) Add lines to link the care behaviours, barriers and actions

Audit results

56% patients did **not** have a record of causes of distress.

48% did **not** have a record of actions to reduce distress

(Both = National lower quartile performance)

Specify current behaviour(s)

What: Ask next of kin and write on 'This is me' card

Who: Admitting nurse

Where: At bedside

When: On admission to hospital

What: Read 'This is me' card, alter care plan accordingly

Who: Named nurse

Where: Ward

When: On admission

What: Provide written & verbal feedback to staff providing care to patient

Who: Named nurse

Where/when: During huddle

Barriers

Difficulty identifying next of kin

Lack of time to gather information

Forget as 'This is me' does not prompt for this information

'This is me' cards lost

Staff say information does not affect care

Information not shared with MDT

Action

'Welcome to the ward' information includes 'This is me' booklet & request to complete. Completion monitored and followed-up. Where no NoK, info gathered from clinical assessment

'This is me' re-designed

Info from card read, impact on care considered & recorded in clinical record by nurse

Huddle document prompts check of causes of distress in clinical record

Huddle discussion shares info & highlights impact upon care

5b) A range of actions (Adapted from implementation strategies by Powell et al, 2015)

Read through the list. Which might be helpful? Which might not be possible?

Strategy	**Definition**
1. Access new funding	Access new or existing money to facilitate the implementation
2. Develop resource sharing agreements	Develop partnerships with organisations that have resources needed to implement the innovation
3. Develop academic partnerships	Partner with a university or academic unit for the purposes of shared training and bringing research skills to an implementation project
4. Alter incentive/allowance structures	Work to incentivize the adoption and implementation of the clinical innovation
5. Use other reward schemes	Introduce payment approaches (in a catch-all category)
6. Develop disincentives	Provide disincentives for failure to implement or use the clinical innovations
7. Mandate change	Have leadership declare the priority of the innovation and their determination to have it implemented
8. Obtain formal commitments	Obtain written commitments from key partners that state what they will do to implement the innovation
9. Develop a formal implementation blueprint	Develop a formal implementation blueprint that includes all goals and strategies. The blueprint should include the following: 1) aim/purpose of the implementation; 2) scope of the change (*e.g.*, what organisational units are affected); 3) timeframe and milestones; and 4) appropriate performance/progress measures. Use and update this plan to guide the implementation effort over time
10. Stage implementation scale up	Phase implementation efforts by starting with small pilots or demonstration projects and gradually move to a system wide rollout
11. Develop an implementation glossary	Develop and distribute a list of terms describing the innovation, implementation, and stakeholders in the organisational change

12. Assess for readiness and identify barriers and facilitators	Assess various aspects of an organisation to determine its degree of readiness to implement, barriers that may impede implementation, and strengths that can be used in the implementation effort
13. Visit other sites	Visit sites where a similar implementation effort has been considered successful
14. Identify early adopters	Identify early adopters at the local site to learn from their experiences with the practice innovation
15. Capture and share local knowledge	Capture local knowledge from implementation sites on how implementers and clinicians made something work in their setting and then share it with other sites
16. Tailor strategies	Tailor the implementation strategies to address barriers and leverage facilitators that were identified through earlier data collection
17. Conduct local needs assessment	Collect and analyze data related to the need for the innovation
18. Conduct educational meetings	Hold meetings targeted toward different stakeholder groups (*e.g.*, providers, administrators, other organisational stakeholders, and community, patient/consumer, and family stakeholders) to teach them about the clinical innovation
19. Make training dynamic	Vary the information delivery methods to cater to different learning styles and work contexts, and shape the training in the innovation to be interactive
20. Conduct educational outreach visits	Have a trained person meet with providers in their practice settings to educate providers about the clinical innovation with the intent of changing the provider's practice
21. Shadow other experts	Provide ways for key individuals to directly observe experienced people engage with or use the targeted practice change/innovation
22. Conduct ongoing training	Plan for and conduct training in the clinical innovation in an ongoing way
23. Develop educational materials	Develop and format manuals, toolkits, and other supporting materials in ways that make it easier for stakeholders to learn about the innovation and for clinicians to learn how to deliver the clinical innovation
24. Distribute educational materials	Distribute educational materials (including guidelines, manuals, and toolkits) in person, by mail, and/or electronically
25. Model and simulate change	Model or simulate the change that will be implemented prior to implementation

26. Use train-the-trainer strategies	Train designated clinicians or organisations to train others in the clinical innovation
27. Work with educational institutions	Encourage educational institutions to train clinicians in the innovation
28. Identify and prepare champions	Identify and prepare individuals who dedicate themselves to supporting, marketing, and driving through an implementation, overcoming indifference or resistance that the intervention may provoke in an organisation
29. Inform local opinion leaders	Inform providers identified by colleagues as opinion leaders or "educationally influential" about the clinical innovation in the hopes that they will influence colleagues to adopt it
30. Involve executive boards	Involve existing governing structures (*e.g.*, boards of directors, medical staff boards of governance) in the implementation effort, including the review of data on implementation processes
31. Recruit, designate, and train for leadership	Recruit, designate, and train leaders for the change effort
32. Facilitation	A process of interactive problem solving and support that occurs in a context of a recognized need for improvement and a supportive interpersonal relationship
33. Start a dissemination organisation	Identify or start a separate organisation that is responsible for disseminating the clinical innovation. It could be a for-profit or non-profit organisation
34. Use mass media	Use media to reach large numbers of people to spread the word about the clinical innovation
35. Involve patients/consumers and family members	Engage or include patients/consumers and families in the implementation effort
36. Prepare patients/consumers to be active participants	Prepare patients/consumers to be active in their care, to ask questions, and specifically to inquire about care guidelines, the evidence behind clinical decisions, or about available evidence-supported treatments
37. Obtain and use patients/consumers and family feedback	Develop strategies to increase patient/consumer and family feedback on the implementation effort

38. Intervene with patients/consumers to enhance uptake and adherence	Develop strategies with patients to encourage and problem solve around adherence
39. Audit and provide feedback	Collect and summarize clinical performance data over a specified time period and give it to clinicians and administrators to monitor, evaluate, and modify provider behaviour
40. Facilitate relay of clinical data to providers	Provide as close to real-time data as possible about key measures of process/outcomes using integrated modes/channels of communication in a way that promotes use of the targeted innovation
41. Develop and implement tools for quality monitoring	Develop, test, and introduce into quality-monitoring systems the right input—the appropriate language, protocols, algorithms, standards, and measures (of processes, patient/consumer outcomes, and implementation outcomes) that are often specific to the innovation being implemented
42. Develop and organise quality monitoring systems	Develop and organise systems and procedures that monitor clinical processes and/or outcomes for the purpose of quality assurance and improvement
43. Provide clinical supervision	Provide clinicians with ongoing supervision focusing on the innovation. Provide training for clinical supervisors who will supervise clinicians who provide the innovation
44. Conduct cyclical small tests of change	Implement changes in a cyclical fashion using small tests of change before taking changes system-wide. Tests of change benefit from systematic measurement, and results of the tests of change are studied for insights on how to do better. This process continues serially over time, and refinement is added with each cycle
45. Create a learning collaborative	Facilitate the formation of groups of providers or provider organisations and foster a collaborative learning environment to improve implementation of the clinical innovation

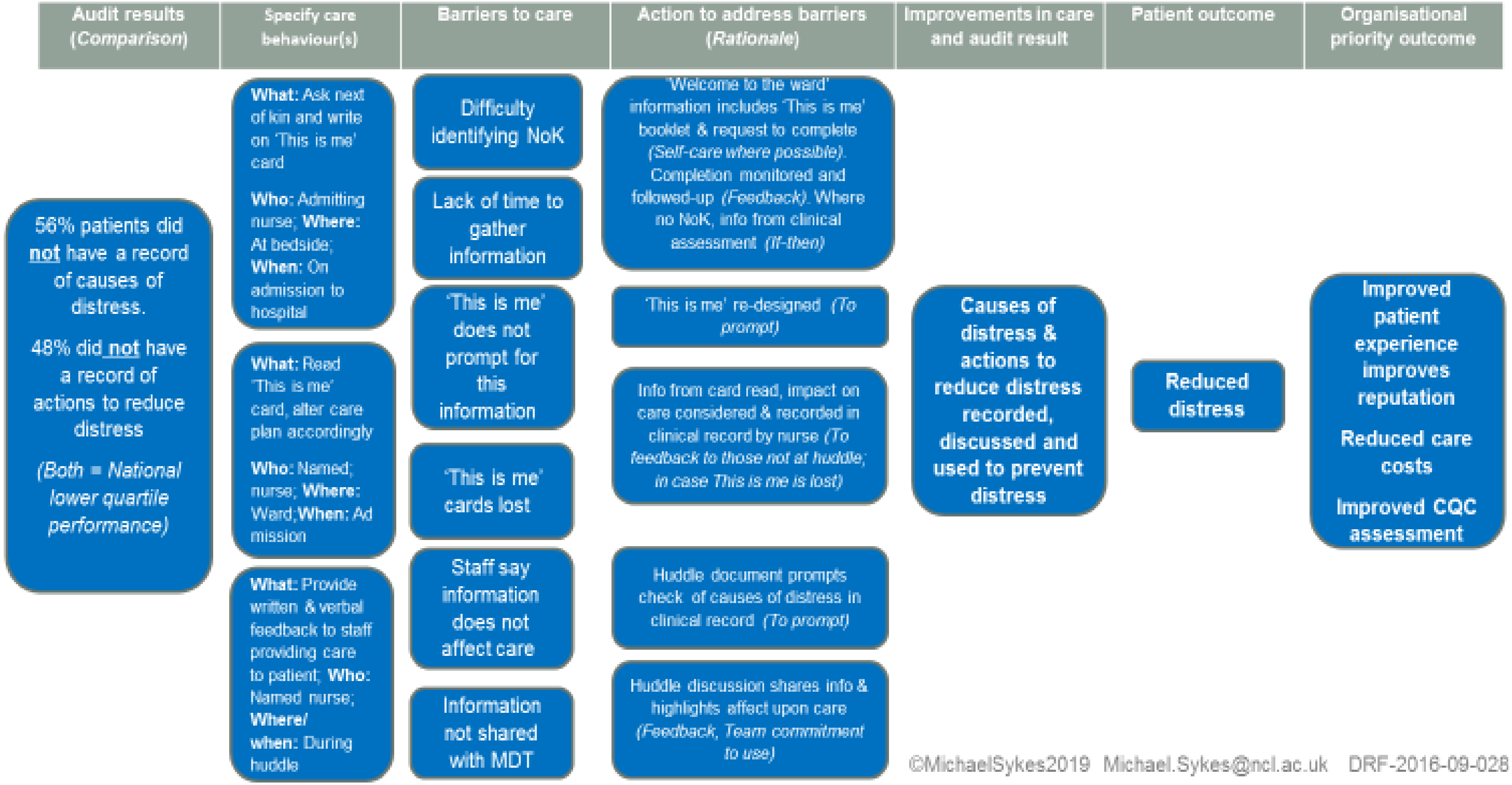
46. Promote network weaving	Identify and build on existing high-quality working relationships and networks within and outside the organisation, organisational units, teams, etc. to promote information sharing, collaborative problem-solving, and a shared vision/goal related to implementing the innovation
47. Build a coalition	Recruit and cultivate relationships with partners in the implementation effort
48. Conduct local consensus discussions	Include local providers and other stakeholders in discussions that address whether the chosen problem is important and whether the clinical innovation to address it is appropriate
49. Centralize technical assistance	Develop and use a centralized system to deliver technical assistance focused on implementation issues
50. Use advisory boards and workgroups	Create and engage a formal group of multiple kinds of stakeholders to provide input and advice on implementation efforts and to elicit recommendations for improvements
51. Use an implementation advisor	Seek guidance from experts in implementation
52. Use data experts	Involve, hire, and/or consult experts to inform management on the use of data generated by implementation efforts
53. Change record systems	Change records systems to allow better assessment of implementation or clinical outcomes
54. Use data warehousing techniques	Integrate clinical records across facilities and organisations to facilitate implementation across systems
55. Change physical structure and equipment	Evaluate current configurations and adapt, as needed, the physical structure and/or equipment (*e.g.*, changing the layout of a room, adding equipment) to best accommodate the targeted innovation
56. Change service sites	Change the location of clinical service sites to increase access
57. Redesign job characteristics	Shift and revise roles among professionals who provide care, and redesign job characteristics
58. Create new clinical teams	Change who serves on the clinical team, adding different disciplines and different skills to make it more likely that the clinical innovation is delivered (or is more successfully delivered)

59. Organise clinician implementation team meetings	Develop and support teams of clinicians who are implementing the innovation and give them protected time to reflect on the implementation effort, share lessons learned, and support one another’s learning
60. Provide local technical assistance	Develop and use a system to deliver technical assistance focused on implementation issues using local personnel
61. Provide ongoing consultation	Provide ongoing consultation with one or more experts in the strategies used to support implementing the innovation
62. Purposely re-examine the implementation	Monitor progress and adjust clinical practices and implementation strategies to continuously improve the quality of care
63. Remind clinicians	Develop reminder systems designed to help clinicians to recall information and/or prompt them to use the clinical innovation
64. Promote adaptability	Identify the ways a clinical innovation can be tailored to meet local needs and clarify which elements of the innovation must be maintained to preserve fidelity

Action plan template

Care behaviour to be improved (What, done by whom, to whom, where, when)	**Action to improve**	**By whom**	**By when**	**Outcome / measure**

Example: Logical improvement plan



Audit results (*Comparison*)

56% patients did **not** have a record of causes of distress.

48% did **not** have a record of actions to reduce distress

(Both = National lower quartile performance)

Specify care behaviour(s)

What: Ask next of kin and write on 'This is me' card

Who: Admitting nurse; **Where:** At bedside; **When:** On admission to hospital

What: Read 'This is me' card, alter care plan accordingly

Who: Named; nurse; **Where:** Ward; **When:** Ad mission

What: Provide written & verbal feedback to staff providing care to patient; **Who:** Named nurse; **Where/ when:** During huddle

Barriers to care

Difficulty identifying NoK

Lack of time to gather information

'This is me' does not prompt for this information

'This is me' cards lost

Staff say information does not affect care

Information not shared with MDT

Action to address barriers (*Rationale*)

'Welcome to the ward' information includes 'This is me' booklet & request to complete *(Self-care where possible)*. Completion monitored and followed-up *(Feedback)*. Where no NoK, info from clinical assessment *(If-then)*

'This is me' re-designed *(To prompt)*

Info from card read, impact on care considered & recorded in clinical record by nurse *(To feedback to those not at huddle; in case This is me is lost)*

Huddle document prompts check of causes of distress in clinical record *(To prompt)*

Huddle discussion shares info & highlights affect upon care *(Feedback, Team commitment to use)*

Improvements in care and audit result

Causes of distress & actions to reduce distress recorded, discussed and used to prevent distress

Patient outcome

Reduced distress

Organisational priority outcome

Improved patient experience improves reputation

Reduced care costs

Improved CQC assessment

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Sample text for report (*Italics* and ### to be tailored to audience and reflect practice)**:**

This report describes the findings from the national audit of dementia. It has been discussed with stakeholders including ### *(include committee members)* prior to being presented at the committee.

The national audit of dementia is an NCAPOP audit undertaken by 97% of hospitals. It includes data from casenote review, carer and staff survey and organisational checklist. The local report was published in July 2019 and is written by a group including representatives from hospitals, charities, the royal colleges of nursing and psychiatrists, the Healthcare Quality Improvement Partnership (HQIP), and patients and carers.

To support the local response to the national audit, we are taking part in an NIHR-funded (DRF-2016-09-028) research study aiming to implement enhancements to national audit of dementia. This involved attending a 'logical improvement planning' workshop in September 2019. The workshop was based upon evidence, including findings from six other hospitals about how they developed actions from the previous cycle of the national audit.

To identify potential improvements, we considered those with both low absolute and relative (lower quartile) performance. In presenting the data, we consulted on the most relevant comparator; ### was agreed. We also triangulated the findings with other sources of local data, in particular ###.

There is evidence that presenting data positively may provide reassurance. We have chosen to present the data negatively to enable more active consideration of assurance.

<u>Worksheet 6:</u> Agreeing who does what

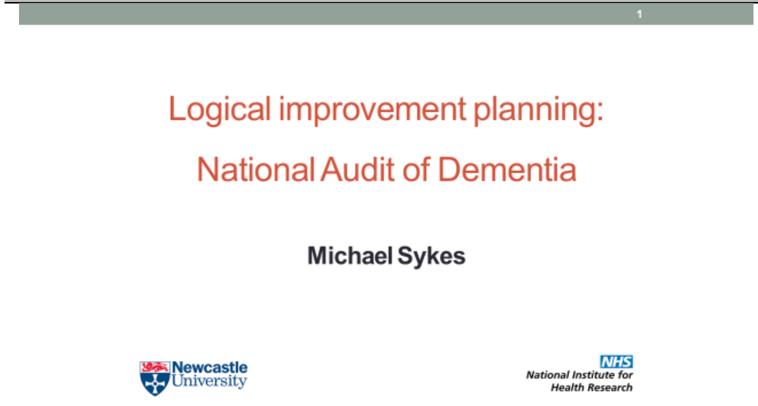
Use the below to agree who will be doing what to develop actions and report from the national audit.

Check the action notes added to this booklet for additional steps

Action	By when	By whom
Check other sources of data		

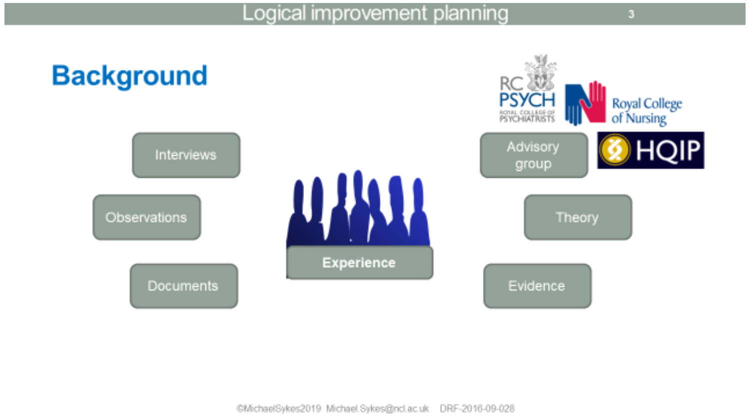
Appendix Q – Intervention manual

Logical Improvement Planning Workshop v1 content and delivery

Slide	Verbal content	Behaviour change technique
 Logical improvement planning: National Audit of Dementia **Michael Sykes** 	Aim: To introduce myself and the intervention I am NIHR research fellow and National audit QI lead. It would be helpful if you could introduce yourselves. This is a feasibility study. I will use prompts on my facilitation guide in order to increase fidelity, that is, to deliver the content I planned to deliver. I will seek your views afterwards about the content and delivery of the workshop.	 Credible source
 **Background** ©MichaelSykes2019 Michael.Sykes@ncl.ac.uk DRF-2016-09-028	Aim: For participants to know how and why we developed the workshop There are gaps in care, for example: 58% of case notes had an initial assessment of delirium or delirium already noted on admission Of those who had symptoms of delirium during admission, just under half (47%, 1210/2594) had their symptoms summarised for discharge (in round 3 of the National Audit of Dementia it was 48%) 52% had standardised assessment of functioning (round 4) *[Note: Don't just select actions from national priorities as don't want to reinforce focus on them.]* Note that example didn't improve from round 3 to round 4 National audit undertaken to improve care	

I worked with a co-production group (carers, clinical leads & clinical audit leads) to explore how we do national audit and how it could be enhanced. This workshop is the result of that work.

Credible source



Logical improvement planning

Background

Interviews

Observations

Documents

Experience

Advisory group

Theory

Evidence

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Aim: For participants to know how and why we developed the workshop

Credible source

6 diverse sites

36 interviews, 32 observations (+44 hours), 39 documents

Input from external stakeholders as part of the advisory group

Potential reputational benefits: You may wish to tell CQC, Commissioners or others that you are part of a study to enhance how you improve from national audit. I won't name the site.

Potential social reward

Logical improvement planning

Background

Specific

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Aim: For participants to know how and why we developed the workshop

Information about antecedents

Through this workshop, I seek to help you to:

- Address poor performance – by looking at analysis of site data
- Address barriers to good performance
- Be specific about care behaviours & how to improve it. For example, avoid actions like promote, support, encourage
- Gain organisational support, by providing information that addresses priorities discussed in committees, namely the source of the data, triangulation with other data, risks associated with performance, comparison with others.

[Avoid: Social comparison, such that saying this was not done by study sites, as this might reinforce performance like others]

Describe structure of workshop: Each of the above will be described and discussed, with a focus on how & what it means for your hospital

Logical improvement planning 5

Overview

Logical actions

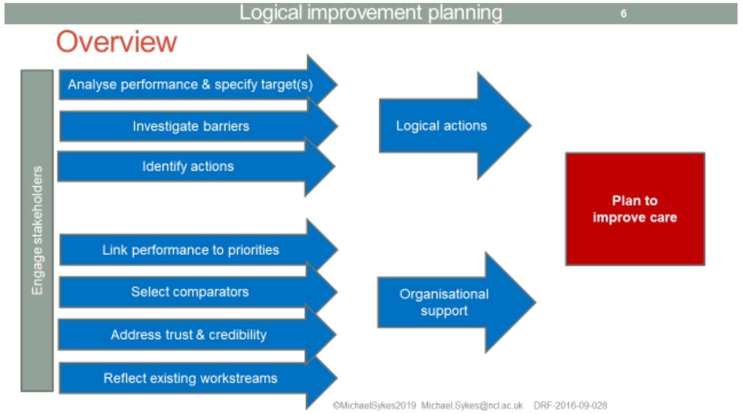
Organisational support

Plan to improve care

[Non-active ingredient: Orientating to structure by detailing learning outcomes]
Aim: To orientate participants to the structure of the workshop by detailing learning outcomes

The workshop seeks to support you to develop an action plan which is evidence-informed, specific and resourced and that targets low baseline and addresses barriers.

This will involve developing logical actions and gaining organisational support, also known as the 'what' and the 'why'



Logical improvement planning 6

Overview

Engage stakeholders

Analyse performance & specify target(s)

Investigate barriers

Identify actions

Link performance to priorities

Select comparators

Address trust & credibility

Reflect existing workstreams

Logical actions

Organisational support

Plan to improve care

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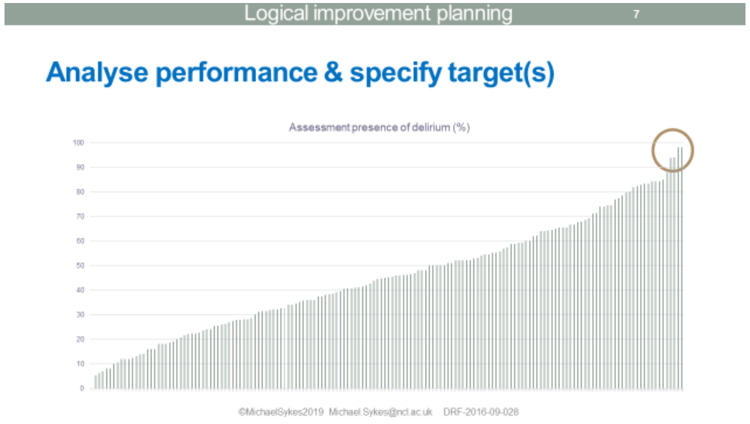
Aim: To orientate participants to the structure of the workshop by detailing learning outcomes

List the behaviours (e.g. analyse performance and specify target) and say that they link to the interim outcome (e.g. logical actions) intended to deliver the improved action plan.

"We will look at them each, but do not see them as separate or linear, for example, conversations with stakeholders may cover specifying the target, linking it to priorities and considering existing workstreams." Put up poster of this slide on wall.



Logical improvement planning 7

Analyse performance & specify target(s)

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Aim: For participants to know how and why prioritise improvement action
Prioritise if feel unable to improve all standards

One way to do this is to select based on opportunity to improve care. The Cochrane review found association between low baseline and improvement – if top performing, focus on other areas

Here want to discuss how to identify low baseline (and how not)

Learn how to select target behaviours based upon relative and absolute performance (and not based on ability to change)

Credible source;
Instruction on how to perform the behaviour;
Behavioural practice;
Graded tasks;
Problem solving.

Logical improvement planning 8

Analyse performance & specify target(s)

"I think I went just by the key recommendations, in the end, to be honest because it summarised it all for me." (Interview 6, Trust's clinical lead for National audit of dementia)

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If relative poor performer, consider the opportunity to improve

Quote to illustrate why suggesting to do this, and to challenge potential existing plan.

Logical improvement planning 9

Analyse performance & specify target(s)

Key questions:

- What are our strengths / achievements?
- Where is there low relative performance?
  - Is it acceptable?
- Where is there low absolute performance?

~~Unable~~

See Worksheet 1

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Aim: For participants to know how and why to select target care behaviours to improve

The outcome sought from this session is a list of care behaviours to be discussed with stakeholders
Importance of identifying performance to celebrate (from study of current content), and opportunities for improvement based upon absolute and relative performance, that is, how you are doing and how you are doing compared to others.
Don’t consider ability to change at this point – that will come later

Give out workbook and data sheet

Note that on the data sheet, those in dark green = top 10%; light green = top 25%; yellow = bottom 25%; amber = bottom 10%

Task 1: Look along row for your hospital, where are you top 25%? Add these to the worksheet. Of these, where are you top 10%. Record these on Worksheet 1a.
Task 2: Where is there performance which you think represents an improvement (based on memory, you will need to check previous results). Add these to Worksheet 1a with a note to check previous.
Task 3: Where are you in the bottom 25%? Add these to the worksheet. Of these, where are you bottom 10%. Record these on Worksheet 1b.
Task 4: Of the potential targets in task 3, are there acceptable results? E.g. 97% might be both lower quartile and acceptable. Amend Worksheet 1b accordingly.
Task 5: Look along row for low absolute performance results, for example those that are unacceptable based upon patient/carer/organisational risk. Record these on Worksheet 1d.

Instruction on how to perform the behaviour;
Behavioural practice through a graded task

Logical improvement planning

Analyse performance & specify target(s)

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Aim: For participants to know how and why to check the data within their report that is not available in spreadsheet form

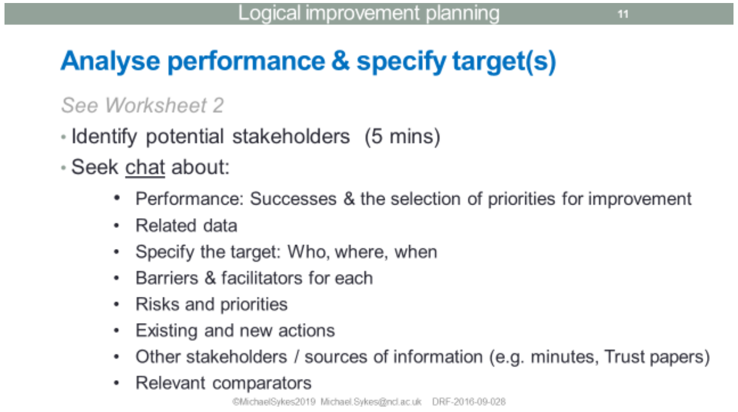
Remember, there are other sources!

Spreadsheet only includes case note review data. The reports also include findings from staff and carer surveys and from the organisational checklist.
Participants should review the report to identify other possible targets for improvement. Use the same approach of looking for high performance and low relative and absolute performance.

Action: Make a note on the action plan at the back to review the rest of the report.

Before move to next section:
- Do you feel you understand how to analyse performance & select target for improvement? (Addressing coherence)
- Do you think it is valuable? (Addressing cognitive participation)
FACILITATOR: Make note of any that lack coherence / cognitive participation.

Instruction on how to perform the behaviour



Logical improvement planning

Analyse performance & specify target(s)

See Worksheet 2

- Identify potential stakeholders (5 mins)
- Seek chat about:
  - Performance: Successes & the selection of priorities for improvement
  - Related data
  - Specify the target: Who, where, when
  - Barriers & facilitators for each
  - Risks and priorities
  - Existing and new actions
  - Other stakeholders / sources of information (e.g. minutes, Trust papers)
  - Relevant comparators

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Aim: For participants to know how and why to discuss performance with stakeholders.

This session is to help you identify stakeholders with whom to discuss performance in the national audit. This is important because involvement may help implement change. Outcome sought from session is a list of potential stakeholders, recorded on Worksheet 2a.

Discuss with each other to identify potential stakeholders that relate to potential target care behaviours. Engage stakeholders in discussion about performance, related data, risks and priorities, existing and new actions, other stakeholders and relevant comparators.

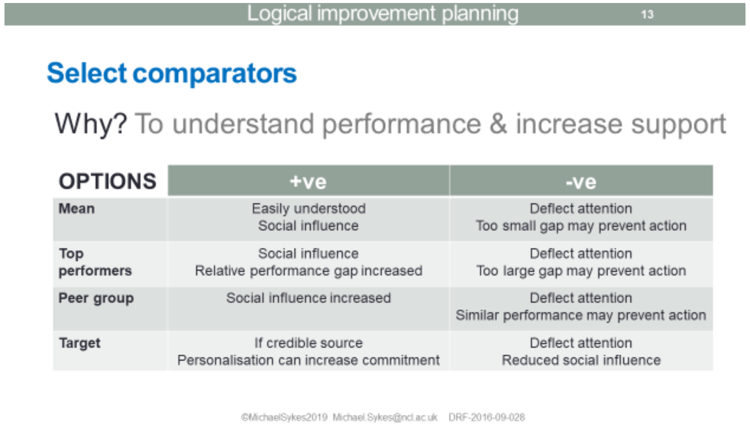
Credible source

Goal setting (Outcome and Behaviour); Action planning; Behavioural

	Frame involvement as brief chat rather than meeting. Relate discussion to priorities & ask about related data. Ask about each of the list headings in 2a (e.g. Performance: Successes & the selection of priorities for improvement, Related data, Specify the target…) Practice conversation with clinical lead asking clinical audit lead For one standard, identify what needs to be done to meet the standard (2b). Note: This is an example to learn about specifying, not the real thing which requires further information to be discussed later. Write your plan for this work in Worksheet 2a. Capture the feedback of those involved on Worksheet 2c.	practice/rehearsal; Reframing; Instruction on how to perform the behaviour
 Logical improvement planning 12 Analyse performance & specify target(s) If – then planning ©MichaelSykes2019 Michael.Sykes@ncl.ac.uk DRF-2016-09-028	Aim: To familiarise participants with if-then planning, a technique to be used throughout the workshop If-then plans = a strategy to deal with a common implementation problem, barriers to plan A preventing reaching goal. Instead, anticipate what might go wrong and how you will deal with it. Analogous with both organisational risk management and clinical treatment decisions (ie. second line treatment). The co-production group said sometimes people were not available for a meeting. If-then plan for non-engagement might include: • Going to where they are • Using other ways of learning about priorities, including through minutes, quality account, CQC report, discussion with clinical audit staff +/- minute writer.	Problem solving

We will be using if-then planning throughout the workshop

Do you feel able to identify stakeholders and seek chat?
Do you think it would be valuable?
FACILITATOR: Make note of any that lack coherence / cognitive participation.


Logical improvement planning 13

Select comparators

Why? To understand performance & increase support

OPTIONS	+ve	-ve
Mean	Easily understood Social influence	Deflect attention Too small gap may prevent action
Top performers	Social influence Relative performance gap increased	Deflect attention Too large gap may prevent action
Peer group	Social influence increased	Deflect attention Similar performance may prevent action
Target	If credible source Personalisation can increase commitment	Deflect attention Reduced social influence

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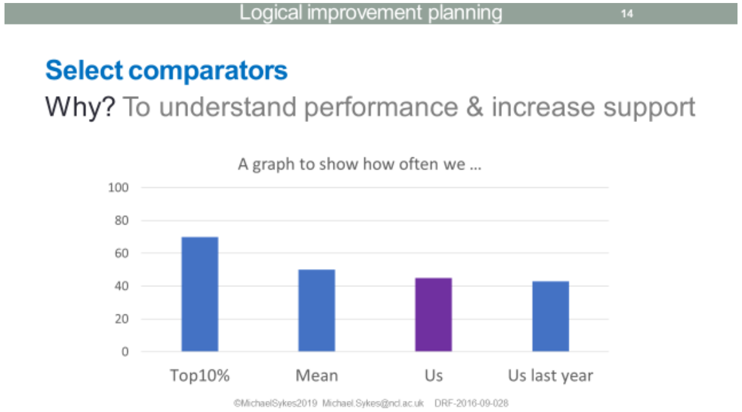
Aim: To enable participants to know how and why to select comparators.

Comparing performance against others my help develop organisational commitment to change.

There are different types of comparators. Each type may have different influence upon commitment to change.
[Talk through content of slide]
It will be important to involve stakeholders in selecting the type of comparator (i.e. to negotiate institutionally sanctioned rules)

Information about social consequences;


Logical improvement planning 14

Select comparators

Why? To understand performance & increase support

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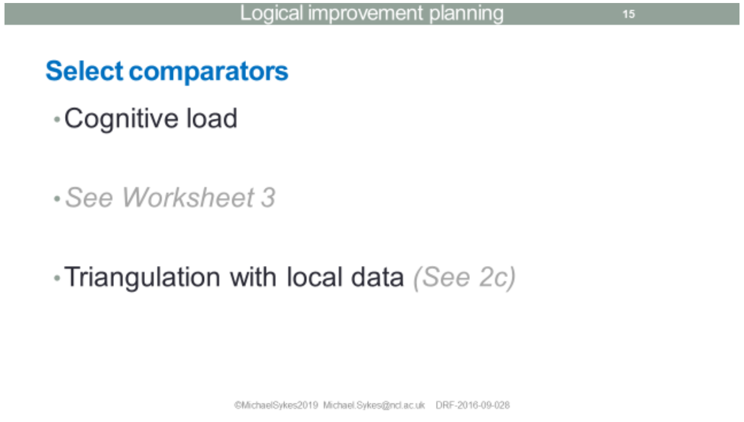
Aim: To enable participants to know how and why to select comparators.

In addition to those in the table, may use a historical comparator (e.g. the last audit). This may show the effect of previous actions & may acknowledge improvement BUT may be random variation and may reduce social comparison.

How to identify different comparators. As a team, discuss
Who would you discuss it with?
Who would be best-placed to have the discussion? Where? When?
Record plan on Worksheet 3.

Action planning;
Information about social consequences


Logical improvement planning 15

Select comparators

- Cognitive load
- *See Worksheet 3*
- Triangulation with local data *(See 2c)*

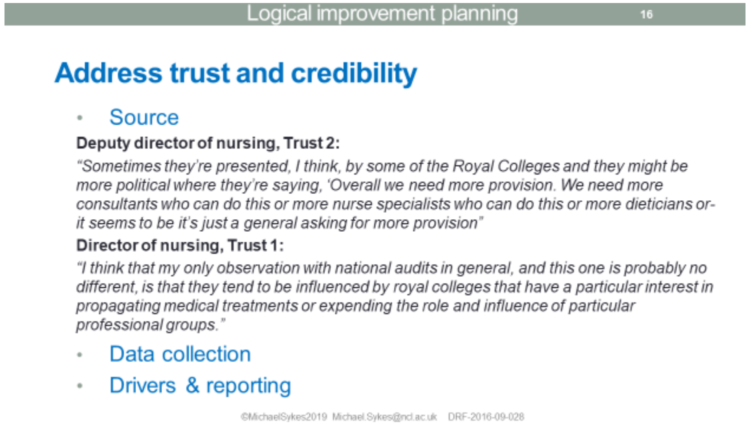
Aim: To enable participants to know how and why to use data to develop commitment

When choosing comparators, may wish to think whether using multiple different forms of comparator may be confusing and that might reduce impact upon commitment.
We found that Trusts compared the audit data with other data, often based upon committee members' recollection of complaints.
Presenting information about the other data may help the stakeholders to commit to action to improve.
Record plan on Worksheet 3.

Before move to next section:
- Do you feel you understand how to analyse performance & select target for improvement?
- Do you think it is valuable?

FACILITATOR: Make note of any that lack coherence / cognitive participation.
[Note: Resistance in workshop participants may be a sign of getting traction likely to increase change.]

Credible source;
Instruction on how to perform the behaviour


Logical improvement planning 16

Address trust and credibility

- Source

Deputy director of nursing, Trust 2:
"Sometimes they're presented, I think, by some of the Royal Colleges and they might be more political where they're saying, 'Overall we need more provision. We need more consultants who can do this or more nurse specialists who can do this or more dieticians or- it seems to be it's just a general asking for more provision"
Director of nursing, Trust 1:
"I think that my only observation with national audits in general, and this one is probably no different, is that they tend to be influenced by royal colleges that have a particular interest in propagating medical treatments or expending the role and influence of particular professional groups."

- Data collection
- Drivers & reporting

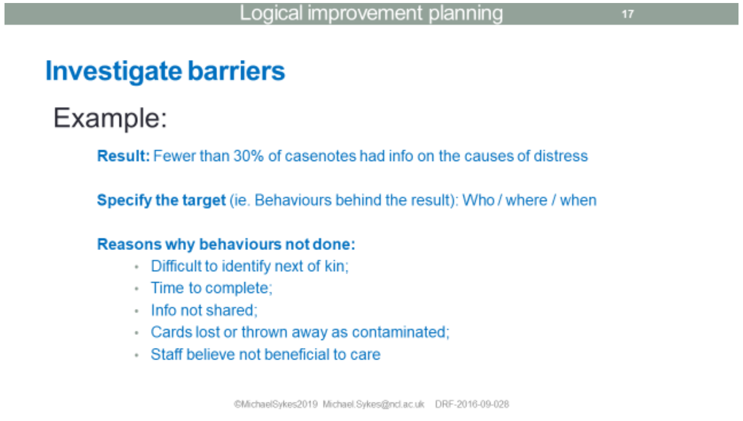
Aim: To enable participants to know how and why to need to address trust and credibility in national audit of dementia.

Describe importance of including information about source, advisory group, external drivers for participation and data collection in the report.
There is draft content in the workbook that addresses this issue. It needs to be reviewed and amended, but is important as it was a key question for stakeholders we observed / interviewed.

Ask whether this is information they would normally include in the verbal and/or written feedback.

Credible source;
Instruction on how to perform the behaviour

FACILITATOR: Make note of any that lack coherence / cognitive participation.



Logical improvement planning 17

Investigate barriers

Example:

Result: Fewer than 30% of casenotes had info on the causes of distress

Specify the target (ie. Behaviours behind the result): Who / where / when

Reasons why behaviours not done:

- Difficult to identify next of kin;
- Time to complete;
- Info not shared;
- Cards lost or thrown away as contaminated;
- Staff believe not beneficial to care

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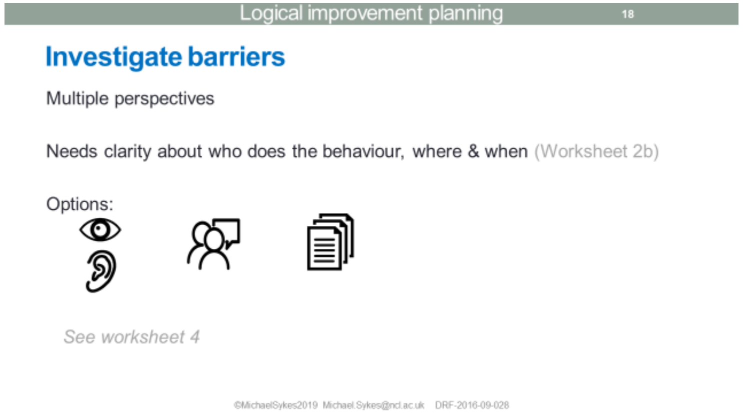
Aim: To enable participants to know how and why to need to investigate barriers

To identify barriers, need to specify the behaviours behind the result. Ask participants what they consider to be the actions needed to for a case note to have information on the causes of distress. Consider who does what, where, when?
Note: This is deliberate iteration of previous exercise as it is important to be able to do this.
Then investigate the barriers by asking, what stops this from happening?
The reveal content from slide showing that one Trust had evidence that they sought barriers/facilitators to care delivery, and these were the reasons they identified.
It was not clear how they gathered this information.
[Avoid negative social comparison by NOT revealing the lack of link between this analysis and the action]

Credible source;
Goal setting (Behaviour)

Social comparison



Logical improvement planning 18

Investigate barriers

Multiple perspectives

Needs clarity about who does the behaviour, where & when (Worksheet 2b)

Options:

See worksheet 4

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Aim: To enable participants to know how and why to need to investigate barriers

Value of different perspectives about barriers/ interventions to improve target care behaviour (e.g. hospital librarian, prof networks, Royal College)

May need to go back to those who were involved in identifying target care behaviours in order to balance capacity for analysis of barriers and facilitators and the number of priorities.

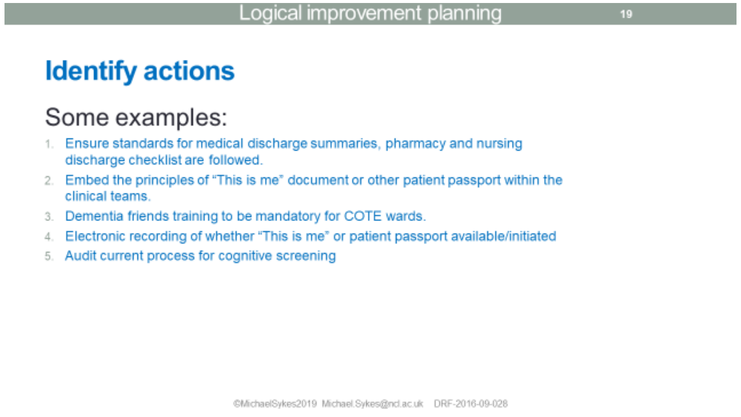
Options (choose 2)

Demonstration of the behaviour;
Instruction on how to perform the behaviour;
Goal setting (Behaviour)

- Observations: How to carry them out, what to look for (barriers, facilitators) and who might do them (e.g. junior doctors, improvement team)
- Ask those involved in the target care behaviours (Go to the actors, Noticeboards / ideas boxes, Email). Discuss workshop attendees views about advantages / disadvantages of each.
- Review what is written about barriers to the behaviour. A lot of hospitals have a library service that provide evidence summaries. Others who may help include Royal College / prof networks

Collate barriers, facilitators and implementation ideas and add barriers to the logical improvement plan. Consider how you will respond if others prioritise different barriers.

Outcome sought: A plan to present analysis of barriers recorded on Worksheet 4.
Before move to next section:
 - Do you feel you understand how to analyse performance & select target for improvement?
 - Do you think it is valuable?
FACILITATOR: Make note of any that lack coherence / cognitive participation.



Logical improvement planning 19

Identify actions

Some examples:

1. Ensure standards for medical discharge summaries, pharmacy and nursing discharge checklist are followed.
2. Embed the principles of “This is me” document or other patient passport within the clinical teams.
3. Dementia friends training to be mandatory for COTE wards.
4. Electronic recording of whether “This is me” or patient passport available/initiated
5. Audit current process for cognitive screening

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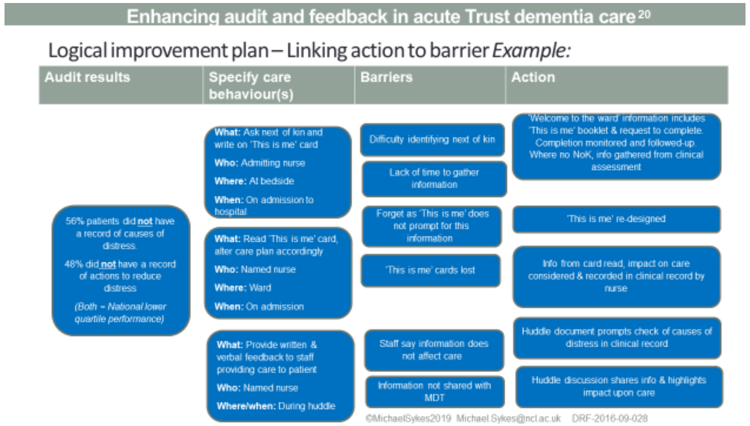
Aim: To enable participants to know how and why to select actions

For each action, discuss what it is seeking to achieve:
1&2=restating what must happen, not how;
3=training, perhaps addressing knowledge/skills gap;
4=documenting action done, not saying what will make it happen;
5=monitoring whether action happening, not saying what will make it happen

Key message: Once you have identified who needs to do what in the delivery of the target behaviour, need to clearly specify the action and think about how it links to the barriers and facilitators. This can sometimes be called the implementation strategy.

Discrepancy between current behaviour and goals;
Demonstration of the behaviour;
Goal setting (Behaviour)



Enhancing audit and feedback in acute Trust dementia care 20

Logical improvement plan – Linking action to barrier *Example:*

Audit results

56% patients did **not** have a record of causes of distress.

48% did **not** have a record of actions to reduce distress

(Both = National lower quartile performance)

Specify care behaviour(s)

What: Ask next of kin and write on 'This is me' card
Who: Admitting nurse
Where: At bedside
When: On admission to hospital

What: Read 'This is me' card, alter care plan accordingly
Who: Named nurse
Where: Ward
When: On admission

What: Provide written & verbal feedback to staff providing care to patient
Who: Named nurse
Where/when: During huddle

Barriers

Difficulty identifying next of kin

Lack of time to gather information

Forget as 'This is me' does not prompt for this information

'This is me' cards lost

Staff say information does not affect care

Information not shared with MDT

Action

'Welcome to the ward' information includes 'This is me' booklet & request to complete. Completion monitored and followed-up. Where no NoK, info gathered from clinical assessment

'This is me' re-designed

Info from card read, impact on care considered & recorded in clinical record by nurse

Huddle document prompts check of causes of distress in clinical record

Huddle discussion shares info & highlights impact upon care

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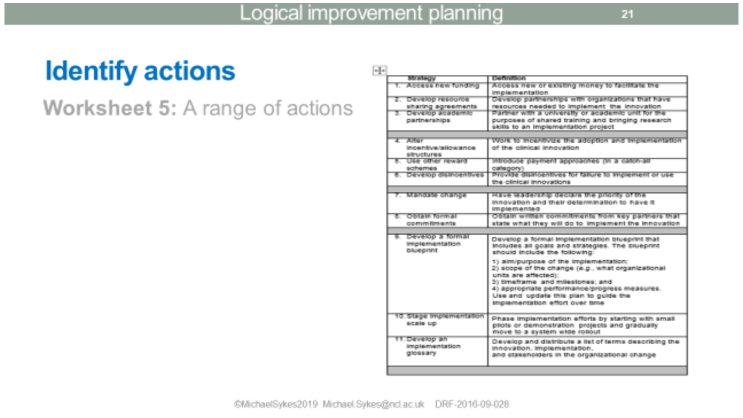
Aim: To enable participants to know how and why to link the audit result to the barriers to care and potential actions.

See Worksheet 5

Ask participants to read and add in lines to link the boxes.

Demonstration of the behaviour



Logical improvement planning 21

Identify actions

Worksheet 5: A range of actions

Strategy	Definition
1. Access new funding	Access new or existing money to facilitate the implementation
2. Develop resource sharing agreements	Develop partnerships with organizations that have resources needed to implement the innovation
3. Develop academic partnerships	Partner with a university or academic unit for the purposes of shared training and bringing research skills to an implementation project
4. Alter incentive/allowance structures	Work to incentivize the adoption and implementation of the clinical innovation
5. Use other reward schemes	Introduce payment approaches (in a catch-all category)
6. Develop disincentives	Provide disincentives for failure to implement or use the clinical innovations
7. Mandate change	Have leadership declare the priority of the innovation and their determination to have it implemented
8. Obtain formal commitments	Obtain written commitments from key partners that state what they will do to implement the innovation
9. Develop a formal implementation blueprint	Develop a formal implementation blueprint that includes all goals and strategies. The blueprint should include the following: 1) aim/purpose of the implementation; 2) scope of the change (e.g., what organizational units are affected); 3) timeframe and milestones; and 4) appropriate performance/progress measures. Use and update this plan to guide the implementation effort over time
10. Stage implementation scale up	Phase implementation efforts by starting with small pilots or demonstration projects and gradually move to a system wide rollout
11. Develop an implementation glossary	Develop and distribute a list of terms describing the innovation, implementation, and stakeholders in the organizational change

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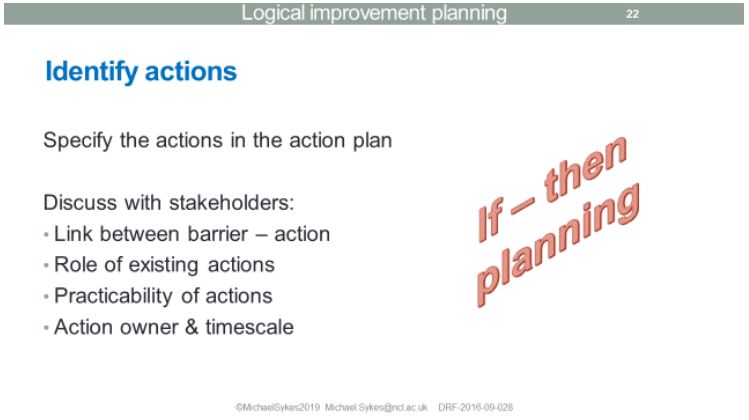
Aim: To enable participants to know how to select actions that relate to the barriers to care.

Ask the group to read through the range of action options (Workbook 5b).

Which might be helpful for the barriers they might find? Which might not be possible?

Note that this will relate to their initial ideas about barriers, but participants need to allow opportunity for new evidence to challenge their initial ideas

Demonstration of the behaviour



Logical improvement planning 22

Identify actions

Specify the actions in the action plan

Discuss with stakeholders:
- Link between barrier – action
- Role of existing actions
- Practicability of actions
- Action owner & timescale

If – then planning

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Aim: To enable participants to know how and why to specify actions.

Actions to be described on an action plan template (Workbook Exercise 6 gives an example).

Stakeholder involvement seeks to refine and gain agreement to the proposed actions. Include committee decision-makers in this work.

The involvement in Worksheet 2 and later discussions with stakeholders may have identified existing actions. Using these can be helpful to gaining commitment, but be careful because selecting existing actions may reduce burden BUT may not align to barrier to performance.

Instruction on how to perform the behaviour; Problem solving; Credible source

If-then planning:
Discuss what to do if can't think of an action, consider:
Engaging other stakeholders in discussion;
Include in report but without an action – to be discussed at Committee & potentially added to the organisational risk register.

Liaise with external stakeholders about potential actions others have taken or that external stakeholders might be able to take.

Discuss what to do if action owners decline action, consider:
Engaging stakeholders in discussion to understand rationale (e.g. different assessment of barriers may need further evidence collecting, capacity to undertake action may need organisational resource);
Include in report but without an action owner – to be discussed at Committee & maybe add to risk register

Before move to next section:
- Do you feel you understand how to analyse performance & select target for improvement?
- Do you think it is valuable?
FACILITATOR: Make note of any that lack coherence / cognitive participation.

Logical improvement planning 23

Drafting the report

- Analysis of performance:
  - How and why selected (including link to priorities & triangulation with related data)
- Specified target(s)
  - Clear description of target behaviour(s)
- Barriers
- Actions
  - Linked to barriers & reflecting existing workstreams
  - Detailed in an action plan
- Address trust & credibility
- Selection of comparator

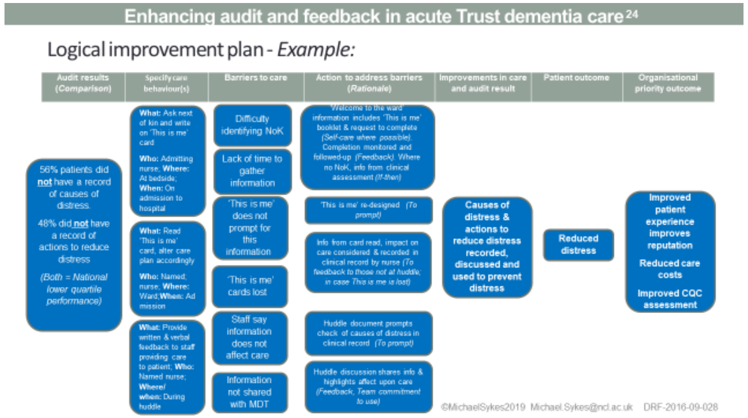
- Consider summary flowchart linking result to action to priorities

Aim: To enable participants to know how to draft the report that includes specific content

The group developing this workshop recommend including the information we have been discussing, as outlined on the slide.

Workshop participants may need to negotiate new report template with stakeholders (incl committee decision-makers). What would need to be done to do this?

Goal setting (behaviour); Instruction on how to perform the behaviour; Action planning.



Enhancing audit and feedback in acute Trust dementia care[24]

Logical improvement plan - *Example:*

Audit results (*Comparison*)	Specify care behaviour(s)	Barriers to care	Action to address barriers (*Rationale*)	Improvements in care and audit result	Patient outcome	Organisational priority outcome
56% patients did **not** have a record of causes of distress. 48% did **not** have a record of actions to reduce distress *(Both = National lower quartile performance)*	**What:** Ask next of kin and write on 'This is me' card **Who:** Admitting nurse; **Where:** At bedside; **When:** On admission to hospital	Difficulty identifying NoK Lack of time to gather information	'Welcome to the ward' information includes 'This is me' booklet & request to complete *(Self-care where possible)*. Completion monitored and followed-up *(Feedback)*. Where no NoK, info from clinical assessment *(If-then)*	**Causes of distress & actions to reduce distress recorded, discussed and used to prevent distress**	**Reduced distress**	**Improved patient experience improves reputation** **Reduced care costs** **Improved CQC assessment**
	What: Read 'This is me' card, alter care plan accordingly **Who:** Named; nurse; **Where:** Ward; **When:** Ad mission	'This is me' does not prompt for this information 'This is me' cards lost	'This is me' re-designed *(To prompt)* Info from card read, impact on care considered & recorded in clinical record by nurse *(To feedback to those not at huddle; in case This is me is lost)*			
	What: Provide written & verbal feedback to staff providing care to patient; **Who:** Named nurse; **Where/ when:** During huddle	Staff say information does not affect care Information not shared with MDT	Huddle document prompts check of causes of distress in clinical record *(To prompt)* Huddle discussion shares info & highlights affect upon care *(Feedback, Team commitment to use)*			

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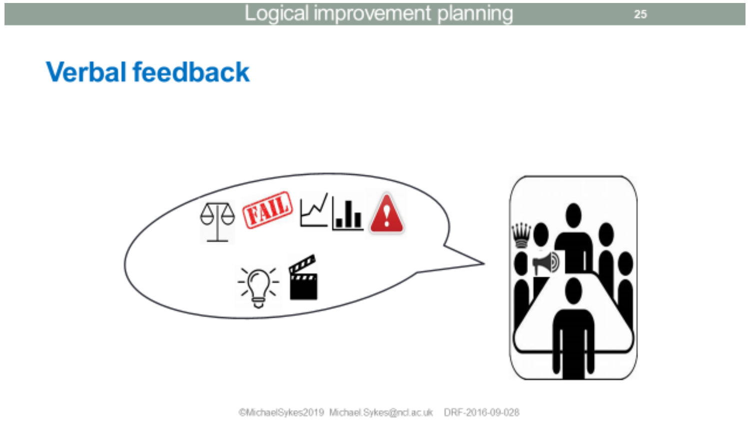
Aim: To demonstrate an example of the 'Logical Improvement Plan'

Here is an example of a summary flowchart linking the results to the analysis, to the actions and to organisational priorities.

It is a visual way to show how the actions are linked to the analysis and is intended to help committee members make sense of the work needed to improve. It describes both why the actions are logical but also why they are important to priorities. The latter helps generate organisational commitment to change.

Demonstration of the behaviour



Logical improvement planning 25

Verbal feedback

FAIL

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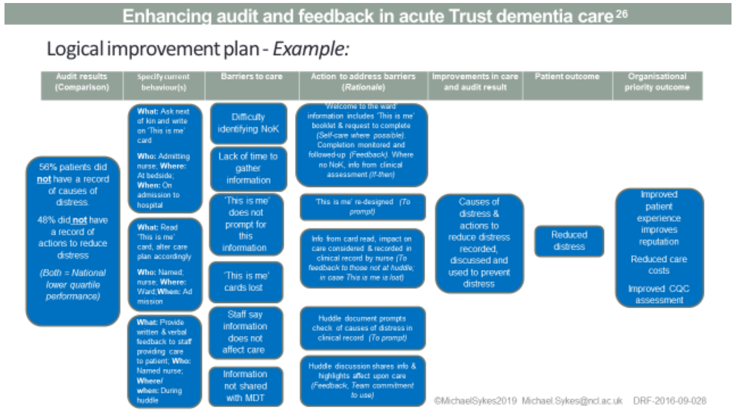
Aim: To enable participants to know how and why to provide verbal feedback to committees

Give background:
Leads felt unprepared, had not provided such feedback previously.
Focus of discussion: Trust & credibility; Failure; Related data; Risks; Ideas / existing actions

Half not read
Prior discussion with influential members was observed to be important
Need to address these issues to get organisational support for actions
Committee presentation practice: Ask the clinical lead to verbally present the information in the columns on the next slide

Credible source; Goal setting (behaviour); Action planning; Problem solving; Behavioural practice/rehearsal.



Enhancing audit and feedback in acute Trust dementia care 26

Logical improvement plan - *Example:*

Audit results (Comparison)

56% patients did **not** have a record of causes of distress.

48% did **not** have a record of actions to reduce distress

(Both = National lower quartile performance)

Specify current behaviour(s)

What: Ask next of kin and write on 'This is me' card **Who:** Admitting nurse; **Where:** At bedside; **When:** On admission to hospital

What: Read 'This is me' card, alter care plan accordingly **Who:** Named; nurse; **Where:** Ward;**When:** Ad mission

What: Provide written & verbal feedback to staff providing care to patient; **Who:** Named nurse; **Where/ when:** During huddle

Barriers to care

Difficulty identifying NoK

Lack of time to gather information

'This is me' does not prompt for this information

'This is me' cards lost

Staff say information does not affect care

Information not shared with MDT

Action to address barriers (*Rationale*)

'Welcome to the ward' information includes 'This is me' booklet & request to complete *(Self-care where possible).* Completion monitored and followed-up *(Feedback).* Where no NoK, info from clinical assessment *(If-then)*

'This is me' re-designed *(To prompt)*

Info from card read, impact on care considered & recorded in clinical record by nurse *(To feedback to those not at huddle; in case This is me is lost)*

Huddle document prompts check of causes of distress in clinical record *(To prompt)*

Huddle discussion shares info & highlights affect upon care *(Feedback, Team commitment to use)*

Improvements in care and audit result

Causes of distress & actions to reduce distress recorded, discussed and used to prevent distress

Patient outcome

Reduced distress

Organisational priority outcome

Improved patient experience improves reputation

Reduced care costs

Improved CQC assessment

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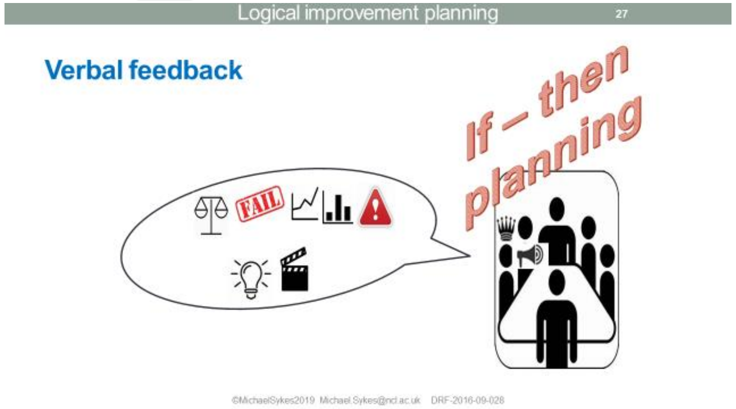

Logical improvement planning 27

Verbal feedback

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For practice presentation

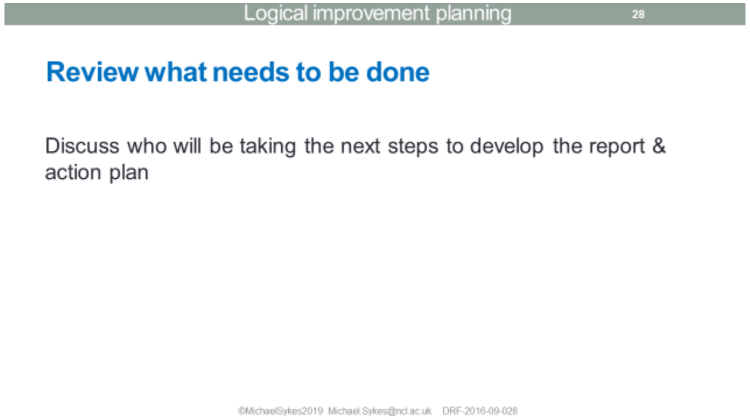
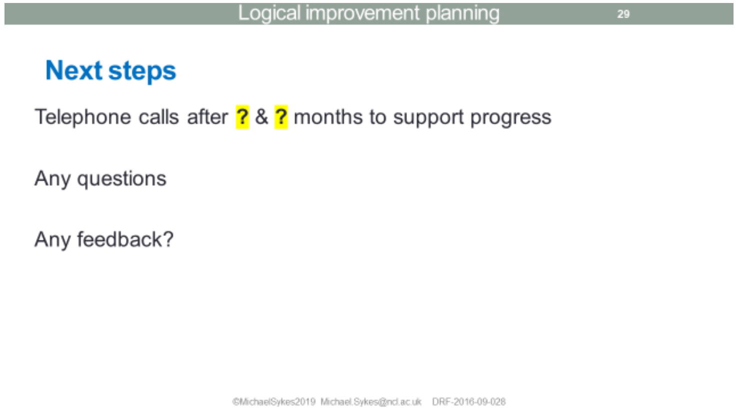
Acknowledge that people often don't like such rehearsal, but others felt unprepared.

If-then planning: Consider
What will say if asked for the one key point
What if can't attend? How to train attendee? How to get feedback (on process / outcome)?

Problem solving

Before move to next section:
- Do you feel you understand how to analyse performance & select target for improvement?
- Do you think it is valuable?

FACILITATOR: Make note of any that lack coherence / cognitive participation.

 Logical improvement planning 28 **Review what needs to be done** Discuss who will be taking the next steps to develop the report & action plan ©MichaelSykes2019 Michael.Sykes@ncl.ac.uk DRF-2016-09-028	Aim: All understand what needs to be done next and accept ownership for steps Ask participants to go through booklet to identify who will be doing what and adding them to the checklist of actions (Worksheet 7). Refer to poster, ask whether actions for each of the 8 drivers have been included Ask what might go wrong and how to respond	Goal setting (behaviour); Action planning; Commitment; Problem solving.
 Logical improvement planning 29 **Next steps** Telephone calls after ? & ? months to support progress Any questions Any feedback? ©MichaelSykes2019 Michael.Sykes@ncl.ac.uk DRF-2016-09-028	Facilitator: Review facilitator notes taken about where workshop participants were not clear how or the value of the behaviour. Refer to the poster with the 8 drivers, using notes as a guide of where to revisit understanding of how and why. Agree when the first follow-up call will be. Specifically consider whether this should be for components where there was a lack of understanding about how and why to undertake the step.	Problem solving.

Thanks to:

Participants

Supervisory team

Co-production group members

Advisory group members

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