UNIVERSITY OF NOTTINGHAM

The development of a communication skills training intervention for healthcare professionals caring for people with dementia in the acute hospital setting: an applied conversation analytic study.

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Abstract

A quarter of acute hospital beds are occupied by people with dementia. Concerns have been raised by government and carers about the quality of communication between staff and those with dementia in hospital in the UK. People with dementia may experience communication impairments such as word finding difficulties, repetitive utterances, lack of coherent speech narratives and difficulties understanding the speech of others. Since much healthcare delivery occurs through 'talk', healthcare professionals and hospital patients with dementia are likely to experience increased communication barriers. Consistent with this, healthcare professionals report stress and reduced job satisfaction associated with difficulty communicating with their patients with dementia.

In other contexts, communication skills training for healthcare professionals and for carers of people with dementia has been found to be effective at improving communication confidence, knowledge and skills. However, no effective training intervention has been found which addresses the specific context of communication between healthcare professionals and acute hospital patients with dementia. In addition, the existing evidence does not clearly indicate what the content of such training should be and is not based on actual interactional evidence.

This thesis presents an applied conversation analytic study which therefore sought to develop an evidence-based, deliverable communication skills training intervention by answering the following questions: what should we train, how should we train and can we train healthcare professionals to communicate more effectively in this context?

In identifying what should be trained, a systematic review of communication skills training in the context of dementia found no high quality studies demonstrating an effective communication skills training intervention for communication partners of people with dementia in the hospital setting. An empirical study was therefore embarked on to uncover what communication practices healthcare professionals could be seen to use which worked to smooth the interactional journey for both them and the person living with dementia. Video recordings were made of 41

naturally occurring interactions between registered healthcare professionals (nurses, doctors and allied health professionals) and inpatients with dementia and analysed using conversation analysis.

The analysis revealed that problems occurred frequently in two phases of the interaction: during the business phase, when patients were asked to carry out important healthcare tasks which they were frequently reluctant to do; and when interactions were difficult for the healthcare professional to close. When a patient displays reluctance or overtly refuses, the healthcare professional faces a dilemma in trying to complete a task in the patient's best interest whilst attempting to respect the autonomy and wishes of the patient before them. The analysis described in this thesis unpacked the different ways in which healthcare professionals made their requests in terms of 'entitlement' and 'contingency' and how these could be seen to impact on the responses of patients.

The communication practices which worked best in the context of refusals and closings were identified as the 'trainables' and were presented along with other evidence to an expert intervention development panel for detailed consideration. The intervention design process allowed for expert considerations to inform the decision making and operationalisation by the relevant participants of 'how we should train'.

The result was the development of 'VOICE for Dementia', a two day, interdisciplinary training course for registered healthcare professionals. The intervention included the use of a combination of experiential teaching methods, including conversation analytic-based video analysis and the use of specially trained simulated patients for practice development. 'Can we train' was tested by piloting the training intervention once with a small group of relevant professionals. Feedback from participants was gathered and used to modify the intervention, ready for testing in a feasibility study.

The findings of the study contribute to what is known about communication for people living with dementia when in hospital, and in particular to studies of patient reluctance, caregiver requesting and person-centred dementia care. The communication skills training intervention developed fits with identified training

needs within the UK health service and contributes to existing knowledge about developing training based on conversation analytic findings. The implications for clinical practice, training policy and future research are discussed.

Acknowledgements

Whilst writing a thesis can be a solitary experience I have been gratefully aware of the support of a cloud of witnesses throughout.

Firstly I would like to thank Rowan Harwood, whose enthusiastic curiosity about communication and unstinting hard work led to this project beginning. Joining him in my exceptional supervisory team have been Sarah Goldberg and Alison Pilnick, who have joined in the cheerleading, bringing their formidable teaching expertise and counselling skills to the mix. Their flexibility has made it possible for me to balance family life, clinical and academic work through some challenging times.

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Thank you to the wider project management team and the intervention development team, whose commitment to the study's aims and senses of humour made our meetings stimulating and enjoyable. In particular I would like to thank Kate Sartain, expert by experience, for her passion for the project and her good company on our international travels; Megan Murray, for her authentic laughter in the midst of simulation; and Siân Rajakaruna for her affirmations along the way.

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Thank you to my amazing parents and sisters, for their commitment to me from the start. Thank you to my dear, hard-working husband Steve- this thesis would not have been written without you and I have no doubt whose job has been harder. Finally, thank you to my precious boy, Mitch, whose insistence on Cluedo and bedtime stories has kept my feet on the ground and a smile on my face.

Preface: Statement of involvement

The PhD study reported here formed a significant part of a National Institute for Health Research (NIHR) Health Services and Delivery Research Programme grant (13/114/93). I was a Co-Applicant on this bid, following a part-time secondment, 2012-2014, in which I worked on preparing the bid under the leadership of Professor Rowan Harwood. As part of this preparation, I completed literature reviews, designed the educational methods and evaluation, and piloted the conversation analytic methods using previously recorded video material. Final agreement to fund the project was issued by the NIHR in March 2015, with the project funding running from June 2015- December 2017.

Developing and testing a new complex intervention is a large piece of work, requiring a range of expertise; therefore the wider project has involved a large multidisciplinary team. However, I have been the senior and full-time clinical researcher for the period of the grant, with responsibility for carrying out the research on a day to day basis.

Throughout the study period, as lead researcher on the project, I have met regularly with the project teams, preparing and presenting updates for weekly team meetings, monthly project management meetings and bi-annual steering committees. I developed (and submitted to Prospero) the systematic review protocol, carried out the database searches and coordinated and carried out the screening of studies, supervising the work of a research assistant working as second reviewer. I analysed and wrote up the systematic review data as it is reported in this thesis.

Prior to the study start up, I assisted with the preparation of ethical approvals for the video data collection, which had to be completed prior to my employment on the grant because of tight timescales. After the study began, data collection processes were further designed and operationalised by myself. I coordinated the acquisition and use of the recording equipment, set up the processes and paperwork for coordinating recruitment, consent and video recording on the wards. I coordinated and carried out the day to day data collection on the hospital wards, including the recruitment of participants, going through the two level consent process, and making the recordings, with practical assistance in recruitment and data collection from the

research assistant. I ensured safe data collection, and carried out all data labelling, back up and editing of recordings for confidentiality.

I carried out some verbatim and conversation analytic transcription of the dataset, but the majority was funded by the study grant, to be carried out by a professional transcription service, in order to expedite the project goals. I was responsible for ensuring robust processes for the transfer of data to this service. All transcripts used in the analysis of requests and refusals and in the training, were reviewed by myself and in many cases were considerably amended. I carried out the analysis of the phases of the interaction and the analysis of requests and refusal in the data, as reported in this thesis, under the supervision of the team's conversation analysts (SB and AP). I prepared and presented the data (video and transcript) for both internal and external data meetings.

I developed the intervention development process and prepared and presented the evidence to the expert panel. Following the intervention design process (described in chapter five of the thesis), I designed and produced all the training schedules, exercises, presentations and resources. This included extensive editing and animation of video extracts and transcripts. I organised recruitment to the pilot and led the delivery of the training.

I also led on many aspects of the feasibility study, but this work was beyond the scope of this thesis and my contribution is not relevant here.

Finally, I have led on many of the dissemination activities of the project findings. These have included giving oral presentations and leading workshops at national and international conferences. A list of presentations and publications are given in Appendix L.

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Glossary of abbreviations

ABID	Agitated Behaviour in Dementia Scale
AES	Activity Engagement Scale
AHP	Allied Health Professional
AP	Alison Pilnick
B-A study	Before-After study
BB	Bryn Baxendale
BW	Becky Whittaker
CA	Conversation Analysis
CARM	Conversation Analytic Role-play Method
CCT	Controlled Clinical Trial
CH	Care Home
CG	Control group
CMAI	Cohen-Mansfield Agitation Inventory
EPOC	Effective Practice and Organisation of Care group
COM-B	Capability, Opportunity, Motivation and Behaviour model
CSC	Communication Skills Checklist
CSDD	Cornell Scale for Depression in Dementia
CST	Communication Skills Training
DEMHOS survey	Dementia Hospital survey
DeTDAT	Dementia Training Design and Delivery Audit Tool
DoH	Department of Health
FIM	Functional Independence Measure

FTD	Fronto-temporal Dementia
HCOP	Healthcare of the Older Person/s
HCP	Healthcare Professional
HELM	Health E-Learning and Media team
ICF	International Classification of Functioning, Disability and Health
IDT	Intervention Development Team
IRR	Interrater Reliability
JS	Justine Schneider
KS	Kate Sartain
LT	Louise Thomson
MCA	Mental Capacity Act
MM	Megan Murray
MRC	Medical Research Council
NHS	National Health Service
NICE	National Institute for Health and Care Excellence
NIHR	National Institute for Health Research
NPI-Q	Neuropsychiatric Inventory Questionnaire
OFGC	Observation Form of General Communication
PC	Patrick Costelloe
PLWD	Person/s Living with Dementia
PMG	Project Management Group
PPI	Patient and Public Involvement
PRISMA	Preferred Reporting Items for Systematic Reviews and Meta-Analyses

QOL-AD	Quality of Life in Alzheimer's Disease
RA	Rebecca Allwood
RAID	Rating Anxiety In Dementia scale
RCP	Royal College of Psychiatrists
RCT	Randomised Controlled Trial
RH	Rowan Harwood
RLO	Rapid Learning Object
RMBPC	Revised Memory and Behavioural Problem Checklist
RO	Rebecca O'Brien
RP	Ruth Parry
SB	Suzanne Beeke
SG	Sarah Goldberg
SLT	Speech and Language Therapist/Therapy
SPPARC	Supporting Partners of People with Aphasia in Relationships and Conversation
SSC	Study Steering Committee
STAR	Staff Training in Assisted living Residences
STAR-VA	Staff Training in Assisted living Residences- Veterans Affairs
TG	Treatment group
TIDieR	Template for Intervention Description and Replication
VOICE	VideOing to Improve Communication Education
WHO	World Health Organisation

Chapter 1. Introduction

1.1 Background

A quarter of people in acute hospital beds in the UK have dementia (Royal College of Psychiatrists, 2013). People living with dementia (PLWD) are at greater risk than those without dementia of requiring hospital admission for physical conditions such as falls, fractures and respiratory and urological crises, including infections (Toot, Devine, Akporobaro et al., 2013). Admission rates for potentially preventable conditions, such as infections, are significantly higher for those with dementia than those without, possibly because of delayed help-seeking behaviours or difficulties with self-care which might increase risks (Todd, Barr, Roberts et al., 2013).

Once in hospital, PLWD have increased lengths of stay, higher rates of institutionalisation on discharge and higher mortality than those without dementia (Fogg, Griffiths, Meredith et al., 2018), as well as being more likely to be re-admitted (CHKS, 2013). Despite a general push for more community-based healthcare in the UK, inpatient admission for treatment of acute conditions in people with dementia will inevitably continue. This is at least in part because of the complex co-morbidities found in this patient group and the size of investment that would be needed in community services to manage such complexities outside the acute hospital (Glover, Bradshaw, Watson et al., 2014). Current estimates suggest that there are 850,000 PLWD in the UK, and this is expected to rise significantly over the coming decades, mainly due to rises in life expectancy (Prince, Knapp, Guerchet et al., 2014).

Acute hospital healthcare for PLWD will therefore continue to be necessary for a large and growing population, and improving their experience and outcomes has been seen as a national priority for some time (Department of Health, 2009). A number of reports have highlighted concerns about the quality of hospital care for frail older people and those with dementia, including the wide-reaching Francis Inquiry (Department of Health, 2013). The Alzheimer's Society in the UK launched its 'Fix Dementia Care- Hospitals' campaign in 2016, calling for a number of changes to

improve care and reduce lengths of stay in hospital for people with dementia (Boaden, 2016). The Dementia Action Alliance launched a Call to Action in 2012 which has led to the 'Dementia Friendly Hospitals' campaign. Reducing lengths of stay for PLWD is also a financial priority for the National Health Service in the UK, given the costs of hospital care and the growing numbers of people involved, a point raised by the Prime Minister David Cameron in his "Prime Minister's Challenge on Dementia 2020" (DoH, 2015).

Uncovering the reasons for poorer outcomes and improving them has been a subject of considerable research interest over recent years, not least because of the call for and commitment to increased resourcing of such research by the UK government (DoH, 2015). This thesis will describe research into one particular aspect of healthcare as it might impact on such outcomes: the communication occurring during acute healthcare between healthcare professionals and people with dementia.

This chapter will set the context for this research, first describing how communication might be an issue for people with dementia and their communication partners, and considering the evidence for how this might be impacting on acute healthcare delivery. An overview of the available evidence for what interventions might improve this situation will follow. Finally, the gaps in that knowledge base will be identified and the structure of the thesis will be briefly outlined.

1.2 Dementia and communication in the acute healthcare setting

1.2.1 What is dementia?

Dementia is an umbrella term used to describe a syndrome comprising a progressive decline in a range of brain functions, including memory and at least one other cognitive impairment, for example in reasoning or language skills. These must occur with sufficient severity to impact on the person's ability to carry out daily activities (DoH, 2009). People with dementia may also have behavioural and psychological symptoms alongside their cognitive impairments, such as depression, psychosis and aggression (Ballard, Waite and Birks, 2006). The most common types and causes of dementia are Alzheimer's Disease (50-75%), vascular dementia (up to 20%) and Lewy

Body Dementia (10-15%), which sometimes co-exist in a 'mixed dementia'. Rarer forms of dementia include the frontotemporal dementias (FTD) (2-5%), which include behavioural variant FTD, non-fluent primary progressive aphasia and semantic dementia (Alzheimer's Research UK, 2018). These rarer forms have different characteristic patterns of symptoms, with language and communication difficulties or personality and behavioural changes being amongst the first symptoms to be noticed in the frontotemporal dementias. In this thesis, the term dementia will be used pragmatically on most occasions to refer to all types of dementia, except where it is specified otherwise.

Although dementia is a progressive, terminal condition, people may live with dementia for many years after diagnosis (Xie, Brayne and Matthews, 2008). Recent policy frameworks have therefore emphasised the need for 'Living well with dementia' (DoH, 2009), moving away from the wholly negative conceptualisation of dementia as a 'living death', where nothing can be done and in which the 'self' is necessarily lost (Peel, 2014). The narrow medical-model focus on dementia diagnosis, categorisation and potential cure has been broadened to embrace more psychosocial perspectives on the social and relational aspects of living with dementia, led by the pioneering work of Tom Kitwood (1990, 1993, 1997).

Kitwood has vividly described the ways in which the person with dementia's sense of personhood and psychological well-being will be strongly impacted by their interactions with those around them, particularly as their cognition deteriorates. He describes how a 'malignant social psychology' amongst caregivers can produce reactions in people with dementia, which might then be interpreted as disease symptoms, rather than as understandable reactions to inappropriate and de-personalising interactions (Kitwood, 1990). The alternative approach is described as 'person-centred' dementia care, in which the primary aim of the caregiver is to maintain the personhood of the person living with dementia (Kitwood, 1997). This is important in defining dementia for this thesis, because Kitwood is recognising that many of the behaviours which are associated with dementia may be the result of our treatment of the PLWD, rather than the direct and necessary result of the disease process. Person-centred dementia care is now regarded as the prevailing model of

care which should underpin all health and social care for people with dementia, wherever that care is delivered (NICE, 2018).

Kitwood's approach followed on from, and was consistent with, the development of the highly influential social model of disability in the 1980s, which raised awareness of the significance of environmental and social factors on a disabled person's experience of their impairments (Oliver, 1983). The way society acted and was organised was seen as either hindering or facilitating the functioning and participation of the individual with a disability, and the case was made by Oliver for 'interventions' which focused on changing society rather than changing the person with the disability (e.g. Oliver, 2004). In fact, it is only relatively recently that dementia has become increasingly recognised as a disability, with the human rights implications which come with that (Shakespeare, Zeilig and Mittler, 2017).

In keeping with the World Health Organisation's 'International Classification of Functioning, Disability and Health' (ICF), dementia in an individual person can therefore be conceptualised simultaneously as an impairment of cognitive functions due to an underlying brain disease, and a pattern of functional abilities and challenges (activity limitations) and social participation, which emerges from the interaction of those underlying brain processes with the personal (internal) and environmental (external) barriers and facilitators experienced by the individual in their particular circumstances (WHO, 2002). The ICF refers to this as a biopsychosocial model of disability.

Within this thesis, dementia will therefore be recognised and conceptualised as both an individual and social phenomenon, as is consistent with the ICF, conceptions of person-centred care and the social model of disability. The ICF framework will now be used to expand on the focus of this thesis: that is, the impact of dementia on language and communication.

1.2.2 How is communication and interaction affected by dementia?

There is a vast body of literature on communication in dementia, and a complete account of this is beyond the scope of this thesis. However, it is relevant to summarise the key elements of what is known about how communication presents when people have dementia, in order to be clear about where this thesis fits within this body of literature and to understand how it will contribute to it. This description will also begin to give an idea of the communication challenges facing the PLWD when admitted to the acute hospital, and for the healthcare professionals caring for them.

1.2.2.1 Impairments of body function and structure: language in dementia

According to Blair and colleagues (2007), language impairments have been part of the characterisation of the dementias since they were first described; for example Blair et al cite the case studies presented by both Alzheimer (1907) and Pick (1892). There is no agreed view on whether such language impairments are the result of discrete damage to the language functions of the brain or whether they are secondary to memory and other cognitive impairments (Hopper, 2007). In order to describe the characteristics of the language impairment as the condition progresses or in different dementia types, researchers have taken standardised batteries of language function and tested various groups of people with a dementia diagnosis (e.g. Appell, Kertesz and Fisman, 1982; Bayles, Tomoeda and Trosset, 1992; Blair, Marczinski, Davis-Faroque et al., 2007; Rousseaux, Sève, Vallet et al., 2010). The formal assessments used are generally aphasia 'batteries', designed to separately consider aspects of both expressive and receptive language function, including speech, writing, understanding of speech and reading. They assess language in very controlled conditions, in interaction with test materials such as pictures and written words, and in controlled interactions with the test examiner, asking, for example, set biographical questions.

Such studies have found consistently that people in the early stages of dementia of the Alzheimer's type mainly show difficulties in word finding tasks, such as describing object pictures or generating as many category items as possible in a minute (Appell et al., 1982; Bayles et al., 1992; Blair et al., 2007). In conversation this is likely to be

characterised by hesitations whilst they search for the word and/or occasional use of the wrong words (Rousseaux et al., 2010). However, their ability to produce grammatical sentences is usually relatively intact (Appell et al., 1982). In the frontotemporal dementia known as Primary Progressive Aphasia, the language deficits are the first presenting feature, and are more severe in the early stages than in people with Alzheimer's disease (Blair et al., 2007).

In the moderate to severe stages of cognitive decline from Alzheimer's disease, the person's language abilities are likely to be affected in every domain on formal testing, with only reading aloud tasks being within the normal range (Bayles et al., 1992). Ability to show understanding tends to be best in response to concrete questions which only require a yes/no answer, rather than in following a series of instructions (Appell et al., 1982) or in abstract language tasks (Hopper 2007). As word finding difficulties increase, fluent output may increasingly lack specific content and be circuitous, making it more difficult for the person to communicate their meaning clearly (Appell et al., 1982). In advanced or late stage dementia, of whichever type, people may have no speech at all and show no verbal understanding in formal testing (Bayles et al., 1992).

However, these types of study take a rather isolationist look at language and communication in dementia, describing the impairment usually without the context of a conversational partner. In their efforts to control the conditions for comparative purposes, they remove conversational context from the assessment of the person's linguistic skills- or rather, they replace everyday conversational contexts with the context of 'the formal language assessment'. Given that language function in everyday life concerns the interaction of two or more people, whether co-present and immediate, or spread over of time, interactional context is highly relevant in describing the impact of language and cognitive deficits in dementia on the individual. In addition, the consideration of the social and relational context of the PLWD is consistent with person-centred approaches to dementia and the social model of disability (Kitwood, 1997; Oliver, 1983). The discussion will therefore now turn to consider what is known about the impact of dementia on the communication abilities of the PLWD, in specified contexts.

1.2.2.2 *Activity limitations and social participation: communicative function and disabilities in dementia*

Communication is listed as one domain of function in the ICF, referring to the producing and receiving of messages, the ability to carry on a conversation and the use of communication techniques and devices (Hopper, 2007). A number of researchers and clinicians have investigated aspects of communication in conversational ability in PLWD through the use of pre-determined codes to examine video or audio recorded interactions. Such methods have been used to identify that initiating and maintaining topic for example, become more challenging as the condition progresses (Mentis, Briggs-Whittaker and Gramigna, 1995) and that difficulties with coherence and relevance of topic make it difficult to develop and shift topics (Garcia and Joanette, 1997).

Rousseaux et al (2010) used their own formal assessment of conversational ability in PLWD, the Lille Communication Test, to quantify the verbal communication, nonverbal communication and participation in communication of PLWD, by coding a series of semi-staged conversations with an unfamiliar communication partner. They compared results for control subjects without dementia, to people with either Alzheimer's or various frontotemporal dementias. They identified that people with Alzheimer's disease showed strengths in their pragmatic abilities in conversation (such as taking turns, using appropriate eye gaze, responding to the rules of interaction, being socially appropriate in their interactions) compared to their use and understanding of words and grammar in conversation, which were affected. People with the frontotemporal dementias showed significantly more difficulties with all conversational aspects, including the pragmatic aspects of interaction, such as poor management of turns and feedback.

An alternative to these quantitative examinations of conversation is to examine naturally occurring conversations between the PLWD and various communication partners using qualitative methods. In particular, methods which rely on recordings rather than field observations of such interactions, have allowed the repeated and detailed examination of communication within these encounters. A recent literature review of studies using such methods has been published, in which 50 studies of the

everyday conversations of PLWD in familiar settings were collated (Kindell, Keady, Sage et al., 2017). Findings present a diverse picture of the interactional skills that PLWD display in their interactions, in the face of deteriorating abilities. PLWD have been shown to use retained or compensatory abilities such as: appropriate turn taking, even in more severe dementia; awareness of and use of repair strategies when communication breaks down; laughter to signal things such as word finding difficulties and completion of successful repair; use of gesture, vocal tone, touch and reported speech to 'perform' story telling during conversations; and the use of formulaic language, agreements (such as 'wonderful') and minimal responses to remain a participant in conversation, even in the face of significant language difficulties (Kindell et al., 2017).

The importance of the conversation partner's communication practices are illustrated across many of the studies and all the studies identified the collaborative nature of the interactions. Communication partners in various settings are shown to use strategies which support the inclusion and participation of the PLWD (often referred to as 'conversational scaffolding'), and in which partners often work to preserve 'face', that is, avoiding actions which might highlight a lack of competence in the PLWD. More longitudinal studies were able to identify the increasing responsibility taken by the communication partner as the condition progresses (Hamilton, 1994). Less successful practices are also described and used to demonstrate the ways in which different communication partners and contexts will influence the conversational engagement and success of the PLWD (e.g. Ramanathan, 1995; Hydén and Örulv, 2009; Hydén, 2011).

The Kindell et al (2017) review found only a small number of studies which addressed naturally occurring conversation in the context of getting an everyday care task done, the exceptions being conversation during personal washing (Jansson and Plejert, 2014; Jansson, 2016) and conversation during shared cooking in a day centre (Hydén, 2014). The vast majority of studies (n=47) analysed encounters in which the purpose of the conversations were not clearly specified or were essentially relational. This suggests there is little empirical evidence available about how dementia affects communication during the completion of joint activities of daily living, even though

increasing dependence on others during such activities is a defining characteristic of the dementias (American Psychiatric Association, 2013).

In addition, many of the included studies analysed conversations with researchers, rather than conversations which would naturally have occurred for the PLWD, without there being a research agenda. Such conversations are likely to have had fewer time constraints and other pressures than every day conversations with family or professional carers. These conversational studies may therefore be less informative than might be hoped about some of the practical communicative challenges which PLWD and their caregivers manage daily.

The review cited above (Kindell et al., 2017) sought to explore the 'everyday familiar' interactions of PLWD and therefore excluded interactions in healthcare settings such as hospitals and clinics, which is the particular focus of this thesis. A review of the qualitative discourse literature which did focus on the healthcare interactions of PLWD has been carried out by Dooley and colleagues (Dooley, Bailey and McCabe, 2015). However, their specific interest was in the literature relevant to the diagnostic clinic context, so their review excluded the hospital settings most relevant to this thesis. From the 23 studies reviewed, Dooley and colleagues identified that PLWDs' language difficulties caused interactional trouble at various points in their conversations: during their own turns, when having word finding difficulties; after they had spoken, when lacking awareness of their errors; and after the conversation partner's turn, when their responses indicated comprehension problems.

However, Dooley and colleagues also reported findings which demonstrated the abilities of PLWD, for example, in doing their own face-saving work, by giving explanations for their difficulties during assessments; and in their use of metaphor, humour and laughter in asserting themselves and maintaining their identity. Included studies highlighted some of the challenges for healthcare providers, for example, in managing sudden topic changes (Bohling, 1991) and managing factually inaccurate talk (e.g. Lindholm, 2013) from PLWD in healthcare interactions. Observed HCP practices such as glossing over errors or highlighting them, returning the topic to the practitioner's own, and using simplified patterns of speech characterised as 'elderspeak' are identified as potentially unhelpful, but as Dooley points out, this will

be dependent on the context in which they occur. For example, attending to the factual accuracy of the person with dementia's talk may be relevant and important in some healthcare contexts, but not in others.

This highlights the relevance of having empirical studies which are specifically based on data from the context of interest. In describing the impact of dementia on communication, the studies presented so far give a general overview of the impairment and its impact on interaction between PLWD and various communication partners, in home, day centre, residential care and clinic contexts. Although a wide variety of specific linguistic practices have been described in various specific settings, these are hard to bring together into a coherent picture. Many of the interactions were with researchers and most did not examine interaction during the carrying out of joint activities of daily living. There is an absence of data about how the impairments described might impact on communication during the provision of healthcare to PLWD specifically when in acute hospital.

No qualitative studies of inpatient interactions between PLWD and the healthcare professionals caring for them, which use recordings as data and analyse in an inductive way, as in the above studies, have been found. It is therefore appropriate to turn now to evidence from research into acute healthcare, in order to identify what the indirect evidence might be that communication difficulties might be significantly impacting on outcomes for PLWD in inpatient care.

1.2.3 Defining the problem: Communication as an issue in acute hospital care for PLWD

1.2.3.1 The acute healthcare setting for PLWD

People with dementia are usually admitted to an acute general hospital (as opposed to a psychiatric hospital) because of urgent medical healthcare needs that cannot be dealt with adequately in community settings. Some people are admitted for management of severe infections, for example of the urinary or respiratory tract,

requiring urgent tests and possibly the administration of intravenous antibiotics. Others are admitted for assessment after a fall, with either an unknown cause which requires investigation, or where the fall resulted in a fracture requiring surgery and preliminary rehabilitation. Presentation at hospital may involve reports of deteriorations in functional abilities, such as immobility, dehydration, frequent falling, incontinence, pain and breathlessness; indeed multiple, complex issues are common and may be further complicated by delirium (Glover et al., 2014). Discussions about end of life care may be appropriate, involving complex and sensitive discussions between healthcare professionals, patients and their proxies.

One of the effects of an acute illness on the PLWD being admitted to hospital is a decline in their usual functional abilities (Goldberg, Whittamore, Harwood et al., 2012). If the acute illness is successfully treated, the PLWD may then need skilled multidisciplinary assessment and rehabilitation to attempt to restore them to their previous levels of function. This may involve, for example, occupational therapists assessing and supporting their ability to look after themselves, physiotherapists working on their mobility and/or speech and language therapists (SLTs) advising on their communication and swallowing difficulties. Behaviours which challenge staff occur commonly in the hospital environment amongst the cognitively impaired, including agitation, aggression, disinhibition, exit seeking behaviours and repetitive activities (Goldberg et al., 2012). Best management for these behaviours is likely to involve a person-centred approach, including mental health nursing and psychiatric expertise, in addition to usual physical care (Goldberg et al., 2012).

One consequence of these multiple interventions is that the hospital environment is busy and frequently changing. PLWD may be expected to go to multiple places for investigations (such as for X-rays and scans). They will be faced with multiple staff members every day, even if they are just on one ward (Eriksson and Saveman, 2002). Systematic reviews of the literature frequently report that noise, excessive stimulation and poorly designed physical layouts make the acute hospital ward an extremely challenging, and possibly unsafe, environment for PLWD (see reviews such as Houghton, Murphy, Brooker et al., 2016; Dewing and Dijk, 2016).

1.2.3.2 *Evidence of communication impairments in dementia impacting on patient outcomes*

Given these challenging contextual factors, along with the possibility of a complicating delirium, it seems likely that PLWD will experience an exacerbation of any pre-existing communication disability on admission to hospital. The healthcare activities described above, including clinical assessments, treatment, rehabilitation, planning and decision making, as well as support with everyday care, emotional and psychological needs, are all likely to require considerable communication between healthcare professionals (HCPs) and PLWD. These HCPs are therefore faced with the challenge of carrying out their usual roles with significantly altered communication between them and their patients with dementia. This raises the question as to whether there is any evidence that the worse outcomes noted for PLWD in hospital (see section 1.1) might in part be due to these communication impairments. If so, there would be considerable justification for seeking to intervene in order to improve this situation.

Evidence to connect communication impairments in dementia to inpatient outcomes is currently only indirect, because communication is not routinely assessed and recorded for all inpatient admissions of PLWD. No studies have been found in which communication in inpatients with dementia has been assessed separately for impact on outcomes. However, evidence does exist for the importance and impact of communication problems in acute healthcare more generally.

For example, the importance of communication between hospital staff and patients has been highlighted in many UK policy and practice guidelines. The Bristol Royal Infirmary Inquiry (DoH, 2001a) into paediatric cardiac surgery care concluded that patients were entitled to expect that healthcare staff would have the communication skills to be able to listen, explain and communicate with them, and would receive training in those skills. The implications for patient safety of poor communication were highlighted by the Department of Health report 'Building a Safer NHS for Patients (DoH, 2001b), which recommended communication skills training as a key means of error reduction.

In addition, the impact of communication impairment in general on patient satisfaction and outcomes has been demonstrated internationally. Patients with communication disabilities in the US receiving Medicare have been found to be significantly more likely to report dissatisfaction with medical services (community and hospital) than those rating themselves without communication impairment (Hoffman, Yorkston, Shumway-Cook et al., 2005). In a retrospective study of 2,355 sets of randomly selected medical notes in Canada, the presence of communication impairment was found to independently relate to a threefold increase in the risk of preventable adverse events in the acute hospital setting (Bartlett, Blais, Tamblyn et al., 2008). Across a number of countries, having a communication impairment after a stroke has been found to independently predict length of stay, functional outcome and institutionalisation (Dickey, Kagan, Lindsay et al., 2010; Wee and Hopman, 2005; Gialanella, 2011).

Studies in residential, rather than hospital, care settings have also found some quantitative evidence suggesting that poor staff communication, such as use of patronising patterns of speech known as 'elderspeak', may precipitate 'problem' behaviours, such as resistance to care (Williams, Herman, Gajewski et al., 2009) and physical and verbal aggression (Talerico, Evans and Strumpf, 2002), both of which increase costs of care (Beeri, Werner, Davidson et al., 2002).

Given this evidence from other communication impaired populations and other contexts, it seems at least feasible that some of the variation in hospital outcomes for people with dementia may be due to the communication difficulties they may be experiencing in the acute hospital setting. Is there evidence then, from the perspectives of patients with dementia, carer and HCP, that communication is indeed problematic in the acute context?

1.2.3.3 *Evidence of communication impairments in dementia impacting on patient and healthcare professional experience: survey, interview and observational studies*

The Dementia Hospital (DEMHOS) survey carried out by the Alzheimer's society and reported in 'Counting the Cost' (Lakey, 2009) analysed data from written questionnaires completed by a large but self-selected sample of 1,291 carers and people with dementia, 657 nursing staff and 479 nursing or ward managers, about their experience of the care of people with dementia in general hospitals in the UK. 54 percent of carers reported that being in hospital had a negative effect on their relative's symptoms of dementia. Communication deteriorations were specifically mentioned, including comments such as 'Stopped talking in sentences' and 'He cannot speak now' reflecting their perception of changed abilities (Lakey, 2009:13). Carer respondents reported many areas of hospital care delivery as unsatisfactory, such as lack of person-centred care, lack of social interaction opportunities, lack of dignity, inadequate involvement in decision making and poor delivery of a number of practical care tasks such as supporting eating and drinking, managing pain and giving medications. These could all be at least in part due to poor communication between HCPs and PLWD. Beardon, Patel, Davies et al (2018) conducted a systematic review of informal caregivers' perspectives on delivery of acute care for PLWD. Further to the DEMHOS survey, their included studies indicated that informal caregivers worried about the care their relative with dementia was receiving specifically because of their communication difficulties; for example, difficulties in reporting their symptoms, recalling facts, making decisions and generally making themselves understood (e.g. Gladman, Griffiths, Clissett et al., 2012).

The importance of communicating well with PLWD in acute care and the challenges that arise from efforts to do this are recognised by staff. A systematic review of HCPs' experiences and perceptions of caring for PLWD in acute care highlighted staff recognition that cultures of acute care do not always optimise person-centred practices in the face of time pressure and patient behaviours that can challenge staff (Houghton et al., 2016). The DEMHOS survey, which represented the views of 1,136

nurses and ward managers, found that when asked an open-ended question about what was most challenging for them in caring for PLWD, 23 percent of nursing staff in the survey spontaneously reported 'communicating' as an issue. 72 percent reported training on communicating with PLWD as 'vital'. These findings suggest that many UK nursing staff perceive a need for their communication skills to be improved and for training opportunities which address this need. Similarly, an interview study of a diverse group of 60 acute hospital doctors, allied health professionals and nurses, identified communication issues with PLWD as 'particularly challenging' for staff (Griffiths, Knight, Harwood et al., 2014; p524). Despite this, most of these acute hospital staff, based in the UK, reported having received little or no dementia-specific communication skills training (Griffiths et al., 2014).

These findings are consistent with other studies where nursing staff report experiencing stress and reduced job satisfaction because of difficulty in communicating with their patients with dementia. In one international study, across the UK, Australia and Sweden, nurses of PLWD described a primary source of their work strain being 'unable to reach' the PLWD because of their communication difficulties (Edberg, Bird, Richards et al., 2008). Nurses have also described the ethical conflicts arising when they deny the PLWD their autonomy because the PLWD cannot communicate their wishes clearly or understand the explanation nurses are offering (Ekman and Norberg, 1988). When nurses have difficulty understanding a patient, they may experience the interaction as onerous, with uncertainty about whether they have responded appropriately and a lack of consequent confirmation of their self-image as a 'good' nurse (Holst, Edberg and Hallberg, 1999). This is consistent with the experience of family caregivers of PLWD where loss of ability to communicate is one of their most commonly identified stressors (e.g. Williamson and Schulz, 1993).

In the care home setting, links have been found between caregivers' ratings of the impact of communication difficulties and the level of caregiver burden they experience (Savundranayagam and Lee, 2017). In the same study, care home staff ratings of the usefulness of communication strategies were positively linked with role satisfaction and feelings of closeness to residents. Findings from quantitative research, using measures of communication problems, problem behaviours, caregiver

burden and cognitive and functional status of the PLWD to model possible causal pathways, suggest that it may be that breakdowns in communication trigger the problem behaviours, which then result in caregiver burden (Savundranayagam, Hummert and Montgomery, 2005).

Given the cognitive and communication difficulties of people with dementia themselves, few studies have used direct interviews with PLWD. A recent review of the literature by Digby and colleagues identified only five studies for the hospital context which included some element of interview with people with dementia (Digby, Lee and Williams, 2016). The small phenomenological study by Edvardsson and Nordvall (2008), included interviews with six people with dementia on an assessment unit. Although results should be treated cautiously given the small sample size, the participants referred very little to any interactions with staff, whilst referring positively to establishing new acquaintances and feelings of togetherness with other patients. Narratives about staff when they occurred were most likely to reflect experiences of being devalued. In a UK-based ethnographic study of acute care for PLWD, patients (both with and without dementia) in informal opportunistic interviews, reported that they were sometimes ignored, with nursing care delivered in a routinised way which did not centre on their personal needs (Cowdell, 2010). One Australian study exploring transitions between acute and sub-acute care interviewed eight PLWD, with three spontaneously reporting being treated patronisingly by staff, including excessive use of terms of endearment (Digby, Moss and Bloomer, 2012).

Observational methods have also been used in a variety of ways to illuminate what can be seen to happen when HCPs and PLWD interact in the acute hospital. In her ethnographic study, Cowdell (2010) used participant observation as well as the opportunistic interviews, to explore the experiences of patients with dementia and cognitive impairment. She observed that most of their interactions with HCPs could be characterised through constructs from Kitwood's 'Malignant Social Psychology' (Kitwood, 1997), such as ignoring, infantilisation, disempowerment, stigmatization, accusation, imposition and disparagement. These occurred despite the HCPs' expressed beliefs that they were being kind (Cowdell, 2007; 2010). Almost all

observed episodes of communication between staff and patients were related purely to physical care. Clissett, Porrock, Harwood et al (2013a) coded their ward observations using the person-centred themes of identity, inclusion, attachment, comfort and occupation. They found HCPs missed opportunities for supporting personhood in every respect, including communication-related behaviours, such as failing to clarify a patient's needs, acknowledge a patient, include patients in ward 'chat', use personal terms of address, incorporate personal belongings into conversations, attempt to uncover causes of distress or provide comfort through nonverbal means.

This is consistent with a number of studies and reports which have found that acute hospital staff focus on caring for patients' physical needs and completing these tasks in accordance with institutional imperatives, rather than responding to individual patient needs and preferences (Digby et al., 2016; Francis, 2010; Tadd, Hillman, Calnan et al., 2011). Staff report acute care priorities as being rapid diagnosis and intervention, achieved during as short a stay as possible (Clissett, Porrock, Harwood et al., 2013b).

The more structured, non-participant observation method of Dementia Care Mapping has been used to compare care delivery for cognitively impaired older adults on a specialist Medical Mental Health Unit, with standard care wards, with 90 patient participants observed over a total of 540 hours (Goldberg, Bradshaw, Kearney et al., 2013; Goldberg, Whittamore, Pollock et al., 2014). The authors noted that HCP communication during routine physical care tasks was frequently brief or absent, with an absence of introductions and courtesies, and even ignoring of the patient. Patient initiated interactions were often deflected by HCPs, with promises of attention later. Person-centred care, when it was observed, was noted to be time consuming, particularly when the PLWD was noted to have a communication problem.

No studies of discourse in the acute hospital context, which analysed the interactional detail between HCPs and PLWD, were found prior to this study commencing. Grainger (2004) provides an overview of research into discourse with

'the institutionalised elderly', but the studies referred to relate to long-term care institutions, such as long-term psychogeriatric wards, and to the general population of older people, rather than focusing specifically on people with dementia. In these longer term settings the contextual factors will be different. Staff and residents/patients will, in most cases, be more familiar with each other, and the institutional pressures to intervene in order to discharge the patient will not be present. Even so, Grainger's themes resonate with the findings already reported for the acute setting from research which is less communication focused: there is an absence of talk between staff and patients, and when the nurses have time to talk, they choose to do so with each other, not with patients (Grainger, 1993); talk between nurses and patients occurs largely during physical care tasks, and is mostly oriented to getting the task done, even when it appears nurturing (Grainger, 1993); talk may induce dependency rather than independence, with patronising speech patterns such as those used with babies being commonly reported, and interpreted as an over-accommodation to an assumed dependency and an under-accommodation to the person's individual needs (Ryan, Hummert and Boich, 1995; Caporael and Culbertson, 1986).

The findings in this section present a picture of the communication challenges experienced by PLWD admitted to acute hospital, and the HCPs who deliver their acute hospital care, with some hints as to the impact these might have on the personhood of the PLWD and the caregiver burden experienced by the HCP. It therefore becomes relevant to ask: how should this problem be addressed?

1.3 Addressing the problem: an overview of the evidence for effective communication practices and effective communication training interventions, in this context

Both Dooley et al (2015) and Kindell et al (2017) noted in their systematic reviews of empirically based, interactional research into dementia communication that not many of their included studies directly addressed the issue of what could improve the

communication between the PLWD and their communication partner. In the following section/s an overview of the evidence will be presented for two approaches to this question: firstly, considering the available knowledge about communication strategies that might improve communication 'in the moment' and be classed as 'good' communication; and secondly, presenting the evidence for communication skills training which might attempt to introduce such practices into the skill set of the communication partners of PLWD. In both cases, the specific context to be considered is that of the acute healthcare setting with the HCP as the communication partner.

1.3.1 What evidence is there for communication practices that might be helpful when communicating with PLWD?

A plethora of 'top tips' and advice for communicating with someone with dementia is available, from the voluntary sector, NHS official sites and private care and training organisations (see for example, Alzheimer's Society, 2018; NHS Choices, 2017; Care UK, 2014). However, these communication strategies, whilst often 'intuitively appealing' may not always be based on robust empirical research (Small, Gutman, Makela, et al., 2003; Wilson, Rochon, Leonard et al., 2012/2013).

Small et al. (2003) reviewed such advice literature and identified the ten most commonly occurring recommended strategies. They then compared family caregivers' reported use and ratings of effectiveness of those ten strategies, with recordings of interactions between those caregivers and their family member with dementia. Caregivers reported they used strategies which were then not seen to be used by them in recordings. Caregivers also rated strategies as effective which were found in the recordings to be ineffective, in that they were associated with higher rates of communication breakdown. In a more recent study, family caregivers rated a number of communication strategies as ineffective which on video evidence of their own interactions during mealtimes, were found to be effective in resolving or avoiding trouble (Savundranayagam and Orange, 2014). This suggests that relying on self-reports, even from highly experienced people, will not necessarily provide us

with reliable information on the effectiveness and use of communication strategies in practice. It may also be that the 'usefulness' or not of the strategies is more subtle and context dependent than the recommendations make clear, and that the research methods utilised cannot identify this.

For example, asking 'yes/no' (closed) questions was found to be a successful and effective strategy in the Small et al (2003) study, which is consistent with other findings (Ripich, Ziol, Fritsch et al., 1999). The suggestion to use closed questions of this type is frequently cited in advice (e.g. Alzheimer's Society, 2018). However, in an analysis of recordings of everyday family conversations closed questions were found to be unsuccessful if the question required the PLWD to access their memory for events (episodic memory), with question formats such as 'Do you remember?' (Small and Perry, 2005). In the same study open questions were found to be more successfully answered provided the appropriate answer instead relied on the person's knowledge of the world (semantic memory), for example 'What would you like for dinner?' Open questions have also been found to be useful for facilitating personal conversations about feelings and concerns in PLWD, and could be answered even when the dementia was relatively advanced (Tappen, Williams-Burgess, Edelstein et al., 1997). In contrast, the popular 'Contented dementia' or 'SPECAL' approach to communicating with someone with dementia promotes not asking any direct questions at all, as one of its 'three golden rules' (Contented Dementia Trust, 2016). The picture around whether and how to use questions with people with dementia is therefore complex and unclear, based on current evidence.

Small and colleagues (2003) found only three of the ten recommended strategies impacted positively on observed communication breakdowns between family caregivers and PLWD, these being: eliminating distractions, simple sentences and yes/no questions. The frequently recommended strategy to use a 'slow speaking rate' resulted in more communication breakdowns in their recorded interactions. This is consistent with a number of other studies in which slowed speech has been found to be unhelpful as a strategy for improving the comprehension of complex sentences for PLWD (Small, Kemper and Lyons, 1997; Tomoeda, Bayles, Boone et al., 1990). Slowed speech is also disliked by older people, being associated with being patronised

(Kemper & Harden, 1999). Despite these findings, a slowed speaking rate is still recommended in a number of current guidelines (Alzheimer's Society, 2018; NHS Choices, 2017).

The use of 'simple sentences' was found to be an effective strategy when tested in the Small et al (2003) study, but this speech pattern has also been frequently criticised as part of the pattern of 'elderspeak' which is perceived as patronising by older people (Kemper and Harden, 1999). Simply shortening sentences was found to be of no benefit to comprehension in one experimental study and was regarded negatively by the older participants, whilst eliminating embedded clauses did help, and was not regarded as demeaning (Kemper and Harden, 1999). Others have found that using one proposition per sentence instead of two improved the sentence comprehension of PLWD, whilst reducing grammatical complexity did not (Rochon, Waters and Caplan, 1994). Again it appears that a recommended strategy, when expressed in its simplest form without information about appropriate and inappropriate interactional contexts, may be ineffectual or even counterproductive.

It seems, then, that whilst there is empirical literature about some interactional strategies that may be of benefit to communication partners of PLWD, these are currently underspecified. In addition, none of the evidence comes directly from the healthcare context; indeed most of it comes from somewhat contrived conversational interactions between researchers or family caregivers and their relatives, in the early to middle stages of Alzheimer's disease (Savundranayagam and Orange, 2014). The confusing picture produced by these studies confirms the view expressed by Watson (1999) that variations will occur in the effectiveness of strategies for each individual with dementia, with different communication partners and dependent on the purpose of the conversation (Watson, 1999). Recommended strategies therefore remain untested in the acute context, in interactions between HCPs and PLWD.

1.3.2 What evidence is there for the efficacy or effectiveness of communication skills training for HCPs caring for PLWD in acute settings?

1.3.2.1 Communication skills training for HCPs in general

There is evidence that the communication skills of physicians do not improve with experience alone (Aspegren and Lønberg-Madsen, 2005). Communication issues are a frequently cited factor in healthcare complaints and litigation, with complainants frequently citing the HCP's inability to communicate a sense of care, rather than issues of their clinical competence (Levinson, 1997). Evidence suggests that patients are significantly more likely to adhere to treatment recommendations if the physician is rated as communicating effectively (Zolnierek and DiMatteo, 2009).
Communication skills training then has become an increasingly important feature in clinical education and as a focus for research. Medical training in the UK and US now requires an element of teaching on communication skills (General Medical Council, 2009; Makoul, 2003). Communication skills are also recognised as a key professional competence for nurses and allied health professionals, such as physiotherapists (Nursing and Midwifery Council, 2015; Health and Care Professions Council, 2013). Communication skills training (CST) interventions for HCPs have been developed and trialled throughout the NHS, with doctor-patient interaction, for example, being studied since the 1950s (Pilnick & Dingwall, 2011).

Systematic reviews of CST interventions for HCPs in a variety of clinical contexts have been published. Primary outcomes of interest tend to include the communication behaviours of the trainees and/or patient level outcomes such as patient satisfaction or patient health outcomes. Other outcomes include the confidence, knowledge and attitudes of the trainees. In cancer care, the most recent Cochrane review, which included meta-analysis of ten randomised controlled trials, identified that there is good evidence for an improvement post-training on some HCP communication behaviours (showing empathy; not just giving facts; and asking open questions) but not on others (eliciting patient concerns; clarifying and/or summarising information; negotiation); but there was no evidence of improved patient health outcomes or reduced HCP burnout (Moore, Rivera, Bravo-Soto et al., 2018). In palliative care,

Selman, Brighton, Hawkins et al. (2017) found again that certain clinicians' communication behaviours showed a positive effect of training. However this effect was only found during simulated encounters, with no such effect found in real patient encounters, although measures were not the same, making direct comparisons difficult. In primary care and rehabilitation settings, evidence from 19 RCTs indicated a statistically significant but small effect after CST on patient satisfaction, patient pain and disability ratings (Oliveira, Ferreira, Pinto et al., 2015). The evidence for the effectiveness of CST for allied health professionals is sparser, with one systematic review reporting finding no randomised controlled trials (Parry, 2008). In considering the applicable evidence from other HCP groups, Parry (2008) points out that the CST interventions with the strongest evidence of effectiveness tend to come from fields where there are well established empirical underpinnings on which to base the content of the training, such as in primary care physician-patient interactions.

1.3.2.2 Communication skills training for dementia in the acute setting

The importance of communication skills training as part of the drive for improved dementia care in the UK is acknowledged in a number of national policies, frameworks and standards. The latest Skills for Health (2018) 'Dementia Training Standards Framework' includes 'Communication, interaction and behaviour in dementia care' as a specific subject for training at all levels, including a statement that "the entire workforce (in health and social care) will be able to communicate effectively and compassionately with individuals with dementia" (Tier One, Skills for Health, 2018; p13). For those who work regularly with PLWD the framework lists communication related knowledge that they should have, such as: be able to gain a person's attention; adapt communication technique to abilities and preferences of PLWD; understand importance of nonverbal communication (Tier Two, Skills for Health, 2018; p31). Experts in dementia care will 'develop services to meet the communication needs of PLWD' and 'promote effective communication' for PLWD (Tier Three, Skills for Health, 2018; p32). The NICE guidelines on supporting people with dementia and their carers includes a recommendation that staff who deliver

care to PLWD should have additional face-to-face training which includes 'adapting communication styles' (NICE, 2018).

A systematic review of communication skills training in dementia care published with data up to January 2010 identified 12 relevant studies, including randomised controlled trials (RCTs), controlled trials and before and after designs (Eggenberger, Heimerl and Bennett, 2013). However, none of the 12 included studies were based in acute care settings. Trainees included family and professional caregivers and nurses, but none involved the training of doctors or allied health professionals.

Four of the interventions were delivered in the patient's own home setting, with a tendency to be delivered one to one, with a focus on individualised training of the carer. These are not therefore easily generalisable to the hospital staff training setting, where clinicians will be communicating with multiple patients with dementia and individualised training of the dyad is not practical.

The other eight interventions were delivered in care home settings, with extremely variable duration, from a total of three hours training (Williams, 2006), up to 15 hours training plus two weeks supervised working (Burgio, Stevens, Burgio et al., 2002). Outcome measures used were inconsistent across studies, making direct comparisons difficult. Most studies used some self-reported measures by trainees, making these outcomes extremely susceptible to response bias in favour of the intervention, given that the participants were rarely blinded to their allocation.

The four highest quality RCTs in residential care settings showed positive effects on a variety of measures, including knowledge tests, observational measures of communication and attitudinal behaviours, and indirect measures of caregiver burden, such as reduced depressive symptoms (McCallion, Toseland, Lacey et al., 1999; Burgio, Allen-Burge, Roth et al., 2001; Burgio et al., 2002; Magai, Cohen and Gomberg, 2002; Kuske, Luck, Hanns et al., 2009). At the patient level, there were mixed results on improving challenging behaviours, with four studies showing improvements such as reductions in agitation and verbal and physical aggression, but three studies showing no effect. One RCT showed an effect on reducing use of antipsychotic medication and restraint (Kuske et al., 2009), but one other RCT

showed no effect (McCallion et al., 1999). The content of the training was summarised thematically in the review by Eggenberger et al, but no attempt was made to evaluate the content of the training for its empirical or theoretical justifications or connect the content to the evidence of effectiveness.

In summary, those care home CST studies which used questionnaire and observational measures showed positive effects on knowledge, skills and attitudes of trained care home staff. However, interventions and recommended communication techniques were not always clearly defined, despite the fact that communication skill training is a 'complex intervention' requiring clear definition (Medical Research Council MRC, 2008). The evidence to justify the communication practices being taught was not always presented by the authors. No single intervention could be identified from this systematic review, with supporting high quality evidence from more than one study, which could then be adapted or trialled directly with a mixed group of HCPs in the acute setting.

1.4 Summary of overview of the literature

In conclusion, people living with dementia are likely to experience significant difficulties with communication, but the interactional practices of their communication partners can act as barriers or facilitators to their functioning. There is evidence to suggest that the communication barriers experienced by PLWD when communicating with HCPs in hospital are having a negative impact on their hospital experience. There is indirect evidence that it may also impact on their health outcomes.

Whilst there are published recommendations for communication practices with PLWD, these are not always based on sound evidence of use in practice. Those skills or practices that do have some empirical support are not based specifically on healthcare interactions, and it is not known if these practices do 'work' in acute healthcare contexts. There is evidence from other healthcare contexts, including care home communications with people with dementia, that communication skills training can improve the knowledge, attitude and skills of healthcare staff. However the

findings in the dementia care context were based on studies with methodological limitations, including poor intervention descriptions, small numbers involved and variable outcome measures, as well as being developed for a different context.

It therefore seems relevant to propose the development of a specific communication skills training intervention, based on sound empirical underpinnings, for use with healthcare professionals caring for people with dementia in the acute setting. It is the contention of this thesis that the communication disability experienced by the person with dementia in hospital can be reduced by improving the communication skills of the healthcare practitioner, which is in keeping with the social model of disability. This thesis will address the challenge of how this might be done: that is, how can we effectively train healthcare professionals in acute hospital settings to communicate well with their patients with dementia?

1.5 Aims, objectives and structure of the thesis

The aim of the study was therefore to develop an evidence-based, deliverable communication skills training intervention for healthcare professionals caring for people with dementia in the acute hospital setting, with the following objectives:

1. To identify **what** should be trained, through
   - identifying existing evidence
   - new empirical work to uncover what HCP communication practices 'work' to facilitate communication with patients with dementia in this context.
2. To identify **how** these practices could best be trained, using a process of evidence synthesis and expert consensus.
3. To produce a training intervention which **can** be delivered and is acceptable to trainees.

Hoddinott (2015) defines an intervention development study as one which reports the rationale, decision-making processes, methods and findings that occur between

the inception of an idea and it being ready for formal feasibility testing. These decisions will include the 'what, why, how and when' by which the intervention is specified (Hoddinott, 2015). The Medical Research Council's Complex Intervention Framework (2008) describes intervention development broadly as involving the three processes of:

1. Identification of the existing evidence on the issue

2. Identification or development of relevant theory to understand the expected changes and

3. Modelling the process and outcomes of the intervention.

This thesis will attempt to describe one such intervention development study, taking the reader from the conception of the problem through to a description of a 'test-ready' intervention.

The problem already identified earlier in this introductory chapter is how healthcare professionals can best communicate with people with dementia who have been admitted to an acute hospital because of their medical needs. The importance of this issue to all involved has been presented, and the potential of an effective communication skills training intervention to improve the situation has been evidenced.

Systematic identification and analysis of the existing evidence will then be presented in Chapter Two, in a systematic review of communication skills training interventions for communication partners of people with dementia. Given that no suitable, high quality intervention for this context was found, a narrative synthesis will draw out those findings most pertinent to the development of a new communication skills training intervention. In Chapter Three, the need for new empirical work will be presented and the justification of a conversation analytic approach to this work will then be made. A detailed analysis of one aspect of the 'problem' of communication between HCPs and PLWD will be presented in Chapter Four, thus specifying further the target behaviours for change (French, Green, O'Connor et al., 2012) and identifying some of the interactional 'mechanisms' contributing to the problem. This

will further clarify the 'what' needing to be changed through the intervention (Hoddinott, 2015). The methods and processes by which the possible solutions to the identified problem were considered and decided upon, what components were identified from those methods and the learning theories postulated to underpin their effectiveness, will be presented as the 'how' of intervention development in Chapter Five. The modelling of the new intervention through a pilot of the training will be presented as the final stage in the intervention development process, with refinements accounted for and the deliverability, acceptability and feasibility described, in order to answer whether this new intervention can be delivered ready for a full feasibility trial. Finally, in Chapter Six, the findings will be summarised and positioned within the existing literature; the strengths and limitations of the study will be considered; and the implications for practice, policy and future research will be presented.

Chapter 2. Systematic Review

2.1 Background

In order to develop an effective communication skills training (CST) intervention for healthcare professionals (HCPs) caring for people living with dementia (PLWD) in the acute setting, it is necessary to identify what the current evidence base is in the field. A systematic review is the established method by which a researcher can "identify, appraise and synthesize all the empirical evidence that meets pre-specified eligibility criteria to answer a specific research question" (Cochrane Library, 2018). By using explicitly stated methods to search for and then evaluate the evidence in relation to a specified question, the researcher uses a replicable and robust method to identify what the best evidence is within a field, to then inform decision making.

At the time of preparation of this study (in 2015), a systematic review of communication skills training in dementia care had already been published by Eggenberger and colleagues (2013), as referred to in Chapter One of this thesis. This paper included data published up to January 2010 and considered communication skills training across any dementia care setting. It provided a narrative synthesis of the quantitative evidence on the effects of training and of the qualitative data on content, teaching methods and organisational features. Of the 12 studies included, none were undertaken in an acute hospital setting and none included doctors as trainees. The training interventions were extremely varied, with insufficient consistency in reporting of outcome measures for any meta-analysis to be possible. All studies were assessed as being at some risk of bias, with no blinding of participants to treatment arm, as well as high attrition rates amongst trainees and participants with dementia. However, four included randomised controlled trials (RCTs) were referred to as being of 'best-quality' rating and two as 'good-quality' (Eggenberger et al., 2013; p10). Using these higher quality studies, the review concluded that there was some evidence to support improvements in trainee knowledge, communication skills and mood. They also found evidence for changes for the PLWD in terms of increases in 'pleasant activities', reduced challenging communication behaviours and increased proxy-reported quality of life. Both

professional and family caregivers tended to be consistently highly satisfied with the training. However, the heterogeneity of the studies' outcomes, as well as the risks of bias inherent in their designs, meant that the authors also cautioned against over interpreting their results and emphasised the need for further high-quality studies.

Given these shortcomings and the intervening five years (2010-2015), in which the drive for dementia research (in the UK at least), had increased, an update of Eggenberger et al's systematic review was deemed necessary. Garner and colleagues (2016) point out that updating a systematic review, rather than starting from scratch, can reduce the considerable time and resources required to complete a new, high quality review (Garner, Hopewell, Chandler et al., 2016). Both Eggenberger et al and this updated review attempted to synthesise the quantitative evidence for effectiveness across a breadth of outcomes, and to provide a narrative synthesis of the qualitative evidence on training content and teaching methods, thus fitting the definition of a systematic review in Grant and Booth's typology of reviews (Grant and Booth, 2009). The methods for the updated review were based on those of the original study, so that comparisons could be made across the data sets, and in future publication. For example, whilst this study's specific interest was in the hospital context, this review continued to include CST for those communicating with PLWD in all settings, thus facilitating comparison with Eggenberger et al.

However, some alterations to methods were needed. To take account of developments in educational practice, it was necessary to expand the review to include non-face to face approaches, such as e-learning. Students and volunteers as trainees were also added to the updated review, given that training them was not known to differ significantly in CST in other related fields (e.g. Simmons-Mackie, Raymer and Cherney, 2016). Database searches for the updated review did not include the German database 'Gerolit' and abstracts could only be considered if in English, although full texts could be translated from any language.

Publication of protocols for systematic reviews has been recommended, to promote consistent conduct across the review team and to support accountability, research integrity and transparency (Moher, Shamser, Clarke et al., 2015). The protocol for this

review was therefore submitted and published on the Prospero register (O'Brien et al., 2015; PROSPERO 2015:CRD42015023437.)

The review aimed to identify and evaluate training interventions designed to improve communication in dementia care, in order to answer the following questions:

Systematic Review Aims/ Questions

1. How effective is CST for the communication partners of PLWD, and on what outcomes is this based?

2. In what contexts have CST interventions been delivered, with what results?

3. What kind of teaching methods are used within effective CST in dementia care?

4. What theoretical models or frameworks underpin CST in dementia care?

5. How was the communication content of the training arrived at and what does it consist of?

2.2 Methods

2.2.1 Search Strategy

Searches were carried out for primary research articles published between January 2010 and August 2015, with an English abstract. The following electronic bibliographic databases were searched: MEDLINE, AMED, EMBASE, PsycINFO, CINAHL, Cochrane Register of Controlled trials, Cochrane database of Systematic reviews, Web of Science, OpenGrey.

Since Eggenberger et al (2013) did not publish details of their search strategy, nor forward them on request, the search strategy was developed by the researcher in conjunction with a research librarian. Search terms were adapted for use across bibliographic databases, including key word and MeSH term searches where appropriate.

As an example, the search strategy for MEDLINE was a key word search of:

word group 1 communicat* OR interaction* OR behaviour* OR behavior* AND

word group 2 train* AND

word group 3 dementia OR Alzheimer* OR "cognitive impairment" OR "behavioural disturbance*" OR "behavioral disturbance*

2.2.2 Inclusion and Exclusion Criteria

In accordance with the PRISMA reporting guidelines for systematic reviews, the inclusion and exclusion criteria for the study were specified in terms of 'PICOS': Participants, Interventions, Comparisons, Outcomes, and Study design (Moher, Liberati, Tetzlaff et al., 2009). The full inclusion and exclusion criteria for the review process, following the PICOS headings and PRISMA guidelines, are reported in Table 1 below.

A breadth of study designs, settings, participants and formats were included. Communication was taken to mean a reciprocal process of sharing and receiving verbal or non-verbal information, through spoken language or non-verbal behaviours. In order to find the studies with most relevance to the research questions, studies with a stated aim of improving communication were included, and those where communication was not reported as an essential element, were excluded.

Interventions which specifically aimed to change the function of the PLWD were excluded, since these were deemed to be therapy for the PLWD rather than training for communication partners. Psychosocial interventions were defined as those whose principal aim was to support caregivers in their caring role, seeking to reduce caregiver burden, improve caregiver well-being or delay admission to formal care (Dickinson, Gibson, Gotts et al., 2017). Their primary focus would be on psychological and social interventions rather than on communication interventions. Specific named approaches to caring for PLWD, such as Validation therapy, Dementia Care Mapping or Reality Orientation were excluded, consistent with Eggenberger et al's criteria, since these were deemed not to be primarily communication training interventions.

Translation into English was available for any full texts which met the review criteria. However the title and abstract had to be available in English for initial screening.

Table 1 Inclusion and Exclusion Criteria for Systematic Review

PICOS item	INCLUSION CRITERIA	EXCLUSION CRITERIA
PARTICIPANTS: TRAINEES	All HCPs Care staff Family caregivers Students Volunteers	PLWD Others
PARTICIPANTS: **PLWD**	People living with a dementia diagnosis, defined by any criteria, living in any setting.	Mixed diagnoses, training not specific to needs of PLWD. Dementia not specified.
INTERVENTION TYPE	Stated aim to improve trainee's communication (verbal or nonverbal) with PLWD. CST could be a group or one-to-one training intervention, face-to-face or not, including online training. In multicomponent training, communication must form an essential and significant part (minimum one sixth).	Communication not stated aim of training. Communication not an essential part of training. Psychosocial interventions aimed at reducing caregiver stress or burden. Cognitive, language or other therapies aimed at changing the PLWD's impairments or functioning. Specific named approaches with primary non-communication goals including: validation, reminiscence, reality

		orientation, cognitive stimulation & dementia care mapping.
COMPARISON	No intervention Waiting list Placebo intervention Within subject	No comparison used, either within or between subjects
OUTCOMES	Any quantitative outcomes, including at the level of patient &/or trainee-caregiver.	Only qualitative outcomes.
LANGUAGE	English title and abstract. Any language for full text review.	Title and abstract not available in English.
STUDY DESIGN	Randomised Controlled Trial (RCT) Controlled Trial (CCT) Before-After Study (B-A)	Qualitative Review Other

2.2.3 Screening Process

The screening process was carried out by three reviewers (RO, RA, SG). The author (RO) led the review, which included: planning and carrying out the database searches; designing the screening process and documentation; and screening all full text papers for inclusion. Second review was carried out by either a research assistant (RA) or a senior reviewer (SG), who was also consulted for all queries. Reviewers documented on standardised forms, designed by the author, the reasons for exclusion/ inclusion of all full text papers.

After removal of duplicates, the selection of studies proceeded using the usual systematic process of review of titles, abstracts, then full text, using review forms

with the inclusion/ exclusion criteria tabulated to support consistency and transparency.

2.2.4 Data Extraction

Data were extracted from all studies by the first reviewer, with additional independent review by either the second or third reviewer, using a data extraction form developed by the author. Methodological quality and risk of bias were assessed using standard criteria, based on the Cochrane EPOC Data Collection checklist and the 'Quality Assessment tool for Before-after studies with no control group' (National Institute of Health, 2014), to allow for evaluation of all included study types.

The primary outcome data collected were the effectiveness of the training intervention, measured quantitatively, either as behavioural changes and/or as changes in knowledge, skills, attitude and well-being. It was not expected that there would be sufficient homogeneity in outcomes for a meta-analysis of data.

In addition, descriptive data were collected on a variety of outcomes of interest including:

- Reliability and validity of outcome measures
- Theory or model underpinning the intervention and method of development;
- Context for training and type of participants;
- Duration and model of delivery;
- Teaching methods.

2.3 Results

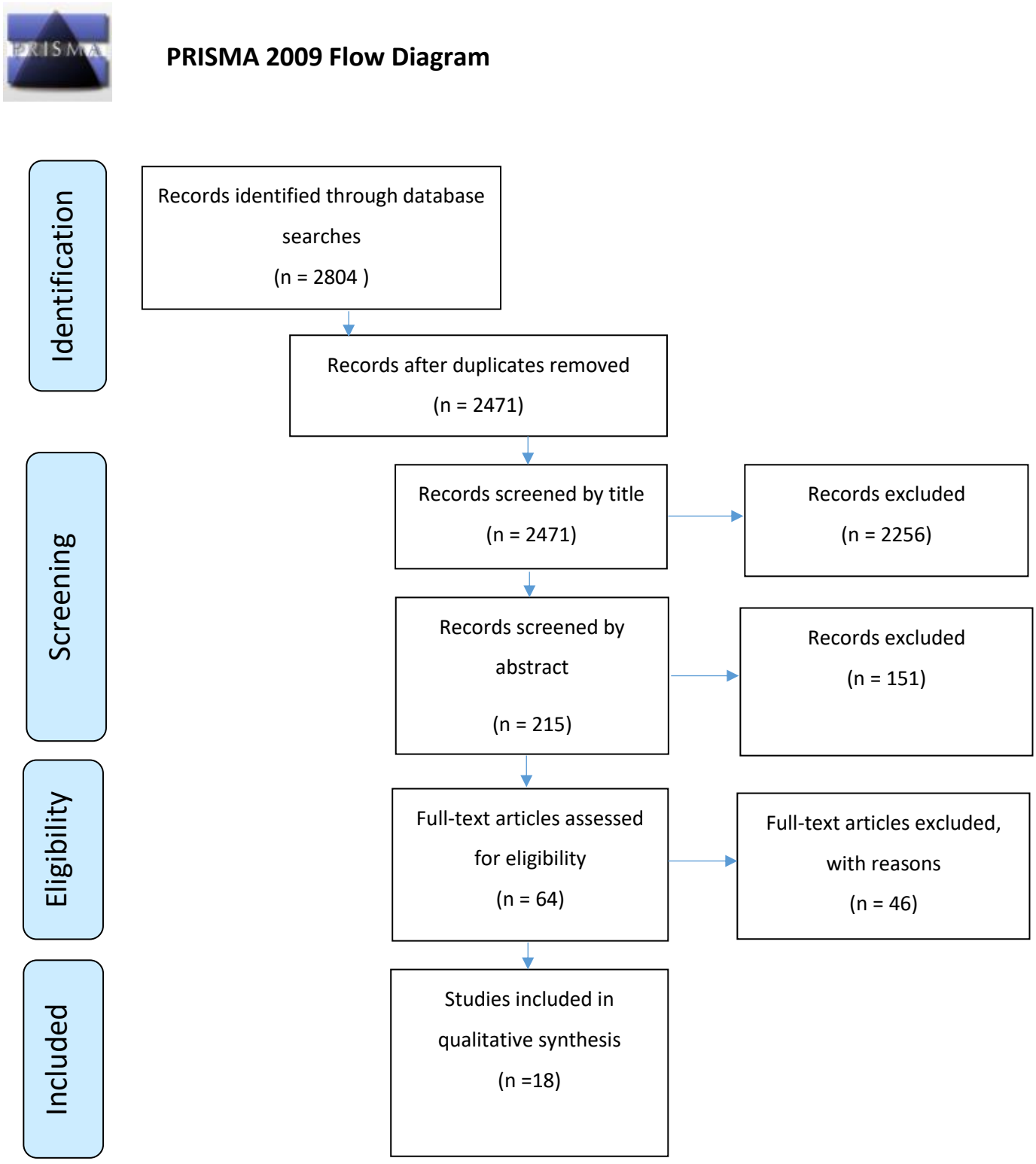
Initial searches retrieved 2804 studies. After removal of duplicates (n=333), titles were reviewed and 215 studies were selected for possible inclusion. Following screening of abstracts, 64 studies were selected for full text review. However, no full text publications were identified or accessible for 13 of these 64 studies. The majority of these (n=11) were conference abstracts, where no subsequent journal paper had yet been published, despite contacting authors. Two were PhD theses from the

United States which could not be obtained, via libraries or authors, and had not been published elsewhere. Of the 51 papers with full text available for review, two papers required translation, one each from French and German.

Following full text review of these 51 studies, 18 papers met the inclusion criteria. Of the excluded papers, twelve had no quantitative evaluation data. Nine had interventions which did not have communication as a sufficiently primary aim, for example, where broader dementia awareness was the focus. Five were not classed as training interventions, four had an out of remit publication date, two were not dementia specific, and one had an included paper reporting the same intervention under different authorship. Two of the papers had identical authorship and publication year, and referred to very similar interventions; however, following careful review of study content and design, they were included as separate studies (Gitlin, Winter, Dennis et al., 2010a; Gitlin, Winter, Dennis et al., 2010b). As expected there was insufficient homogeneity in outcomes for a meta-analysis of results.

For an overview of the search process and results, see the PRISMA diagram below in Figure 1.

Figure 1 PRISMA 2009 Flow Diagram



2.3.1 Characteristics of included studies

Of the 18 included studies, three were RCTs, four were CCTs and 11 were B-A studies, representing a total of 1709 trainee participants. The majority of studies were conducted in the USA (11), with three in the UK, two in Australia and one each in Germany and the Netherlands. A breadth of care settings were reflected in the studies, including seven studies in care homes, four in home contexts, three in acute hospitals, two in higher education, and two in unspecified community settings. Trainee participants included care assistants, family caregivers, healthcare professionals, including doctors, and students of these professional groups. Mode of intervention delivery varied, with eight delivering training in groups, three training individuals, five using just DVD or online resources and two using a mixed group and individual strategy. Whilst all included interventions included a significant proportion of communication content, eight focused purely on communication (see Table).

Of those interventions that clearly stated their duration, the median was four hours and the mean five and a half hours. Duration and delivery of direct face-to-face group training varied from one 45-minute workshop (Beer, Hutchinson and Skala-Cordes, 2012) to five 2.5-hour sessions, totalling 12.5 hours (Haberstroh, Neumeyer, Krause et al., 2011), with a mean of five and a half hours and median six hours. Duration of DVD and online training tended to be shorter, varying between 12 minutes (Weitzel, Robinson, Mercer et al 2011) and two hours (Irvine, Beaty, Seeley et al., 2012), median one and a half hours. Duration of mixed or individual interventions tended to be less well specified (e.g. Goyder, Orrell, Wenborn et al., 2012; Sprangers, Dijkstra and Romijn-Luijten, 2015). Of those that did specify duration, mixed studies, which included both face-to-face training/advice and phone call support, tended to be longer in duration, the longest being 17 hours direct training plus up to 39 hours phone call follow ups (Karlin, Visnic, McGee et al., 2014).

Table 2 provides details of the characteristics of the 18 included studies.

Table 2 Characteristics of Included Studies

STUDY	DESIGN	NUMBER OF PARTICIPANTS	COUNTRY/ SETTING	TYPE OF PARTICIPANTS	DURATION	MODE of DELIVERY	COMMUNICATION ONLY OR MIXED CONTENT
Beer et al 2012	RCT	N=47	USA/ College	Nursing Aide Students	TOTAL=0.75hr workshop	Group	Communication only
Broughton et al 2011	CCT (cluster)	N=52	Australia/ Care Home	Care Home staff-varied	TOTAL=1.5hr session (50min DVD)	DVD	Communication only
Cockbain et al 2015	B-A	N=104	UK/ Med school	Medical students (1st year clinical)	TOTAL=2hr workshop	Group	Communication only
Dizazzo-Miller et al 2014	B-A	N=45	USA/ Community setting	Family Caregivers	3x2hr workshops TOTAL=6hrs	Group	Mixed

Elvish et al 2014	B-A	N=71	UK/ Hospital	Hospital staff- varied, inc doctors.	4x1.5hr flexible TOTAL=6hrs	Group	Mixed
Galvin et al 2010	B-A	N=540	USA/ Hospital	Hospital staff- varied	TOTAL=7hr session	Group	Mixed
Gitlin et al 2010a	RCT	N=272	USA/ Home	Family Caregivers	Up to 9 OT sessions +1 nurse session + 1 nurse phone call Maintenance phase: 4 OT phone reviews TOTAL=10hrs direct +4hr calls	1:1 advice to dyad	Mixed

Gitlin et al 2010b	RCT	N=237	USA/ Home	Family Caregivers	Up to 10 OT sessions +1 nurse session +1 nurse call TOTAL=11hrs direct +1 hr call	1:1 advice to dyad	Mixed
Goyder et al 2012	B-A	N=25	UK/ Care Home	Care Home staff- 'non qualified'	2x unspecified workshops+ total 120mins 1:1 supervisions (via 3 or 4 sessions) TOTAL=unknown	Mixed: group training + 1:1 follow up	Mixed
Haberstroh et al 2011	CCT (+time series)	N=22	Germany/ Home	Family Caregivers	5x2.5hr workshops TOTAL=12.5hrs	Group	Communication only

Hobday et al 2010	B-A	N=40	USA/ Care Home	Care Home staff- 'certified nursing assistants'	Approx. 1x 1 hr online TOTAL=1hr	E-learning	Mixed
Irvine et al 2012	B-A	N=68	USA/ Care Home	Care Home staff- non direct care workers +registered nurses	Approx. 1x 2hrs Online. TOTAL=2hrs	E-learning	Mixed
Karlin et al 2014	B-A	N=21	USA/ Care Home	Care Home staff- 'mental health providers'	2.5x 'day long' workshops +25 x 1.5hr weekly group phone consultation TOTAL=17.5hrs direct +39hrs calls	Mixed: group workshops +1:1 phone support; + trainees offer 1:1 advice to Care Home staff	Mixed

Liddle et al 2012	CCT	N=29	Australia/ Home	Family Caregivers	2x 0.75hr DVD sessions TOTAL=1.5hrs	DVD	Communication only
Mason-Baughman and Lander 2012	B-A	N=14	USA/ Community setting	Various: Family caregivers, friends, professional caregivers, others.	1x workshop unspecified duration TOTAL=unknown	Group	Communication only
Passalacqua & Harwood 2012	B-A	N=18	USA/ Care Home	Care Home staff- care assistants	4x 1hr weekly workshops TOTAL=4hrs	Group	Mixed
Sprangers et al 2015	CCT (Cluster)	N=24	Netherlands/ Care Home	Care Home staff- 'nursing aides'	1x OR 2x 1:1 'session' duration unspecified TOTAL=unknown	1:1 coaching	Communication only

Weitzel et al 2011	B-A	N=80	USA/ Hospital	Hospital staff-varied	TOTAL=0.2hr DVD	DVD	Communication only
TOTALS	**RCT =3** **CCT=4** **B-A=11**	**TOTAL N= 1709**			**Mean=5.5 hrs** **Median=4 hrs**		**Communication only= 8** **Mixed=10**

2.3.2 Methodological Quality Assessment and Risk of Bias

Using the pre-prepared checklists of quality criteria and risks to bias (Cochrane EPOC, 2002; National Institute of Health, 2014), the 18 included studies were found to be mostly at high (n=7) or high-medium (n=8) risk of bias, with none scoring as low risk. The three highest quality studies, rated as at medium risk of bias (Gitlin et al., 2010a; Gitlin et al., 2010b; Sprangers et al., 2015) all involved interventions which used one-to-one coaching approaches to training.

Common methodological issues arose across the studies. Blinding of participants to a training intervention is challenging, since training cannot be 'administered' without the participant being aware. Most of the controlled studies (RCT and CCT) used a 'no intervention' control group which would mean group allocation was obvious to all participants. Only Beer and colleagues attempted to blind participants to treatment group by offering an alternative training of equal duration (on emergency services) as a control.

Many of the training measures were then self-reported by participants (such as ratings of their confidence, attitudes and/or well-being). These measures are open to social desirability bias, with trainee participants in studies of all designs likely to rate themselves more positively following the intervention (King and Bruner, 2000). More objectively scored measures, such as tests of knowledge or measures of observed behaviour, tended to have limited psychometrics reported or no mention of reliability or validity at all. No studies reported attempts to blind raters of observational measures to group allocation, although Broughton et al and the Gitlin et al studies reported blinded scoring of other measures.

2.3.3 Review Questions

Given these severe limitations to quality across the studies it was not possible to make the usual selection of high-quality studies with which to examine the systematic review questions. The questions have therefore been considered for general trends, in the light of numbers of studies and participants, validity of measures and robustness of design.

2.3.3.1 *How effective is CST for the communication partners of PLWD, and on what outcomes is this based?*

The outcome measures used in each study were investigated in order to identify the strength of evidence for the effectiveness of the interventions. Outcomes were categorised as: self-ratings by trainees of their confidence, attitudes and well-being; tests of trainee knowledge; measures of observed trainee behaviours; and measures at the level of the PLWD. Each type will be presented in turn, with tables indicating differences by group only when significant statistically, unless otherwise stated.

2.3.3.1.1 Self Ratings by Trainees of Confidence.

Self-ratings by trainees of confidence were reported by eight studies (see Table 3), all of which reported statistically significant gains following the intervention, although in two cases this was only on one subscale. The four largest studies in the review are represented in this group, supporting the case for a positive effect of CST on trainee confidence.

Three studies specifically rated confidence in communication (Cockbain, Thompson, Salisbury et al., 2015; Elvish, Burrow, Cawley et al. 2014; and Galvin, Kuntemeier, Al-Hammadi et al., 2010), rather than confidence in other aspects of care. Of these, only Elvish et al (2014) reported psychometric properties for their measure. Since Elvish et al found a significant and meaningful difference on their measure pre-post training, this does support the suggestion that training can impact positively on trainees' self confidence in communicating.

Table 3 Self Ratings of Confidence by Trainees

STUDY	SELF RATING MEASURE USED	RESULT REPORTED	VALIDITY
Beer et al 2012 N=47	20 items, 3 confidence subscales: understanding dementia; skills with PLWD; comfortable with PLWD.	**TG>CG for understanding subscale only**	'Adequate' psychometrics reported.

Cockbain et al 2015 N=144	Single question: rate confidence in communicating	**POST > PRE**	No psychometrics reported
Elvish et al 2014 N=71	Confidence in Dementia Scale CODE	**POST > PRE**	'Adequate' psychometrics reported.
Galvin et al 2010 N=540	5 confidence items: [only one communication related]	**POST > PRE** on each item	No psychometrics reported
Gitlin et al 2010a N=272	Caregiver confidence in managing target problem behaviour in last month	**TG>CG**	No psychometrics reported
Gitlin et al 2010b N=237	5 item Caregiver Confidence in using new activities in past month [NB. None specifically communication]	**TG>CG**	'Good' Cronbach's alpha reported[1] α =0.86
Goyder et al 2012 N=25	Sense of Competence in Dementia Scale (SCIDS) (Schepers et al., 2012)	POST=PRE for whole scale; **POST>PRE for 'building relationships' subscale**	Schepers et al (2012): 'Adequate' psychometrics reported.
Irvine et al., 2012	Video situation test (VST) =2 items x 4 scenarios: confidence in knowing what to do next &	**POST > PRE**	VST psychometrics not specifically cited and not found in ref'd article (Irvine,

[1] The acceptability levels given for Cronbach's Alpha are interpreted in the light of the discussion in Streiner (2003) as >0.9 excellent; 0.8>0.9 good; 0.7>0.8 acceptable/satisfactory; 0.6>0.7 questionable; 0.5>0.6 poor; <0.5 unacceptable.

N=68	confidence in being able to alter the behaviour 20 item self-efficacy measure	**Stable on repeated baseline and** **POST > PRE**	Billow, Bourgeois et al 2012). Excellent Cronbach's Alpha reported α = 0.97

KEY: POST= post intervention measure; PRE= pre-intervention measure; TG=treatment group; CG= control group; IRR= Interrater reliability

2.3.3.1.2 Self ratings by trainees of Attitude

Attitude of trainees may be related to their motivation to change behaviours and learn from training. Four included studies reported measures related to attitude (see Table 4). Of these, only two (Irvine et al., 2012 et al; Elvish et al., 2014) found a statistically significant effect for the whole measure, with others showing significance only on particular items.

The 'Controllability of Belief' scale used by Elvish et al (2014), is based on evidence that carer's beliefs about the other person's ability to control their behaviours (e.g. 'They are doing it deliberately' versus 'They don't mean to upset people') will have an influence on the carer's behaviour. It has published psychometric properties when used for carers of older people (Dagnan et al., 2004, cited by Elvish et al) but could be seen as a rather indirect measure of attitude. In addition, the authors suggest that the effect size, though positive, may not be clinically meaningful. Irvine et al. (2012) also report a small, positive effect size for their study-specific measure of attitudes, but unfortunately with only very limited published psychometrics (a good internal consistency of α=0.84). Overall, evidence for an effect of CST on attitude from this review is therefore mixed.

Table 4 Self Ratings of Attitude

STUDY	SELF RATING OF ATTITUDE	RESULTS	VALIDITY
Elvish et al 2014 N= 71	Controllability Belief Scale (Dagnan et al., 2004)	**POST>PRE**	High internal consistency
Goyder et al 2012 (N=25)	Approaches to dementia Q'naire ADQ (Lintern et al 2000)	POST=PRE	Not mentioned
Irvine et al 2012 (N=68)	18 item 'program specific' Attitude measure	Stable on repeated baseline & **POST > PRE (small effect)**	Good α=0.84 cited for this study; no other psychometrics
Passalacqua & Harwood 2012 (N=26)	Interpersonal Reactivity Index – items on empathy and perspective taking (from Davis 1983). Attitude to Aging (from Braithwaite et al 1993). Attitude to Dementia (from Lintern et al 2000), 'Hope' and	POST=PRE (**Empathy approached significance**) POST=PRE Hope item **POST>PRE;**	Empathy items, α=0.64 - 0.69 (questionable); Attitudes to Aging α= 0.85-0.88 (good); Hope α=0.55-0.45 (poor-unacceptable)

	'Person-centredness' subscales	Person-centredness POST=PRE	Person-centredness α=0.66-0.73 (questionable) Items are cut from longer validated measures.

2.3.3.1.3 Self Ratings of Trainee Well-Being

Seven studies included measures related to caregiver well-being (see Table 5). Of these, the three studies which used a one-to-one training approach and were rated as of medium quality, reported significant gains on whole validated measures of aspects of well-being, including reductions in caregiver burden and depression and increases in perception of change (Gitlin et al., 2010a; Gitlin et al., 2010b; Sprangers et al., 2015). Broughton, Smith, Baker et al (2011) reported significant gains for a small subset (n=13) of their participants who were registered nurses, but not for the majority of their care home staff. A number of studies failed to find consistently significant differences across all their measures of trainee well- being. Where training was delivered in groups, trainee well-being was either not measured or showed only weak evidence of change (Haberstroh et al., 2011; Passalacqua & Harwood, 2012).

Given the relatively large participant numbers in the Gitlin et al studies, which found positive effects on a validated measure, there seems to be overall positive evidence of gains in trainee well-being for CST when delivered via a one-to-one intervention.

Table 5 Self Ratings of Well-being

STUDY	TRAINEE WELL-BEING	RESULT	VALIDITY
Broughton et al **2011** **(n=52)**	Positive Aspects of Caregiving PAC (Tarlow et al 2004)	Overall TG=CG; **Only qualified nurses (n=13) showed TG>CG**	PAC: Good psychometrics published
Liddle et al **2012** **(n=29)**	Zarit Caregiver Burden (Zarit et al 1980) Positive Aspects of Caregiving (Tarlow et al 2004) RMBPC -impact on caregiver section (Teri et al., 1992)	ZBI: TG=CG PAC: TG=CG (but approached sig, p=0.039) RMBPC: TG=CG	Full psychometrics available for ZBI, PAC and RMBPC.
Gitlin et al **2010a** **(n= 272)**	Caregiver upset (Gitlin 2003) Zarit Burden Interview ZBI (Bedard et al., 2001) CES-D depression scale (Dagnan et al., 2013) Task Management Strategy Index TMSI (Gitlin et al., 2002)	**Upset: TG>CG** **ZBI: TG>CG** **CES-D: TG>CG (Less depression)** TMSI: Not statistically significant at 16	Caregiver upset-limited psychometrics. Full published psychometrics for ZBI; CES-D; TMSI; PCI.

	Perceived Change Index PCI (Gitlin et al., 2006)	weeks but was at 24 weeks **PCI: TG>CG**	
Gitlin et al 2010b **(n=237)**	Perceived Change Index PCI (Gitlin et al., 2006)	**PCI: TG>CG**	Full published psychometrics for PCI
Haberstroh et al 2011 **(n=22)**	Caregiver Burden 'HPS' (Grapel et al 2001) Caregiver mood, single item, recorded in daily diary	TG=CG **Mood: TG>CG on intervention days**	Published non-English measure, Cronbach's alpha 'good'. Mood: Report good Interrater Reliability on their diary ratings
Passalacqua & Harwood 2012 **(n=18)**	2 items from Short Depression-happiness scale SDHS (Joseph et al 2004) Burnout Inventory-2 subscales: depersonalisation; emotional exhaustion (Maslach & Jackson 1981)	POST=PRE **Depersonalisation item: POST>PRE**; Emotional exhaustion item: POST=PRE	Happiness, α=0.75- 0.77 (acceptable); Depersonalisation α=0.72-0.66 (questionable) Taken items out of longer validated measures.
Sprangers et al 2015 **(n=24)**	Neuropsychiatric Inventory Questionnaire – Dutch	**TG >CG large effect**	Validity and reliability of NPI-Q cited as

	(NPI-Q)- Caregiver distress section (Kaufer et al., 2000) Utrecht Work Engagement Scale UWES (Schaufeli et al., 2004)	UWES: Not significant	'sufficient', with reference. UWES: Published psychometrics 'sufficient'

TG=treatment group; CG= control group

2.3.3.1.4 KNOWLEDGE TESTS

Seven studies reported use of knowledge tests and all seven reported statistically significant gains with training (Table 6). However, in most cases only small gains on actual test scores were made, which may not represent clinically meaningful changes in knowledge. Most knowledge tests were developed by individual studies, with a focus on the specific learning outcomes of their training, making significant results more likely. Of the three studies reporting some psychometrics for their tests, the only one with a major communication component reported a very small actual increase in scores, which may not have represented a meaningful change (Hobday, Savik, Smith et al., 2010).

Overall, the findings were consistent with dementia related CST being effective at improving trainee knowledge. However, no validated and sensitive measure of communication knowledge in dementia was identified in the review.

Table 6 Knowledge Tests

STUDY	KNOWLEDGE TEST	RESULTS	VALIDITY
Broughton et al 2011 (n=52)	17 item, open questions on: 'Strategies to support communication & memory'	TG showed **POST>PRE**; CG did not. But no significant main effect, TG=CG	None reported. Tested with open questions, therefore raters **blind marked** the tests. Used by Liddle et al 2012 also
DiZazzo-Miller et al 2014 (n=45)	18 item MCQs on how to assist with ADLs; [six questions on 'communication and nutrition' module]	**TG >CG** on each of the 3 modules; biggest effect for 'communication and nutrition' module	Content validity checked and reported. No other psychometrics reported.
Elvish et al 2014 (n=71)	16 item KIDE Knowledge in Dementia Scale; [2 items specifically communication]	**POST >PRE** [They state borderline meaningful change from 13 to 15]	Psychometrics reported. Test published.
Galvin et al 2010 (n=540)	9 item 'Knowledge about dementia' ['medical']	**POST > PRE**	None reported.
Hobday et al 2010 (n=40)	15 item multiple choice (MCQ) 'Dementia Knowledge Test'	**POST > PRE** [Actual increase 12.4 to 13.0]	Report excellent Cronbach's Alpha α=0.94

	[Mainly communication related]		No other psychometrics. Test published.
Irvine et al 2012 **(n=68)**	Video situation knowledge test, 4 scenarios: MCQ for each about 'what to do next'	**POST > PRE** [Actual increase in score 1.8 to 2.2] Repeated baselines, no change.	Used previously by same group (e.g.Irvine et al., 2012, 2007) but no psychometrics cited in any of these.
Liddle et al 2012 **(n=29)**	Communication & memory support in dementia test (CMSD)	TG showed **POST>PRE** [Actual increase 7 to 10.5]; CG, POST=PRE. [Main effect not quite significant]	Cites Broughton et al 2011; no psychometrics reported. Blinded markers used.

TG=treatment group; CG= control group

2.3.3.1.5 Measures of Observed Behaviours of Trainees

Despite the focus of CST on skills development, only two included studies attempted to use measures of the actual observed behavioural skills of the trainees, namely Sprangers et al. (2015) and Weitzel et al. (2011) (see Table 7). Both studies used their own checklist of positive and negative communication behaviours for rating during 'live' observations. There was no blinding of raters to group allocation or before/after status. Both studies report some statistically significant improvements, when analysed for each communication practice separately. Sprangers et al report

acceptable interrater reliability on their measure, but Weitzel et al report no psychometrics. The findings from this review are therefore consistent with the effectiveness of CST in changing specific, observable skills, but appropriately validated measures are currently lacking.

Table 7 Measures of Observed Trainee Behaviours

STUDY	BEHAVIOURAL MEASURE	RESULTS	VALIDITY
Sprangers et al 2015 (n=24)	Communication Skills Checklist (CSC): 6 specific behaviours rated for occurrence during each 5 minute observation. Observation form of General Communication (OFGC): Added in Frequency of positive/ neutral/ negative speech	[Analysed each behaviour separately]. **TG>CG** for: Short instructions Positive speech Reduced multiple instructions.	CSC: Bourgeois et al 2004- good interrater reliabilities achieved on each item; no other psychometrics. OFGC: This study only; good interrater reliability reported; no other psychometrics.
Weitzel et al 2011 (n=80)	Observation checklist (8 'positive' and 5 'negative' behaviours); frequency rated 'live' on wards, by covert raters.	Analysed each behaviour for change @ 6months post: POST>PRE on 5 of positive behaviours. All others show none significant trends in expected directions.	No psychometrics reported.

TG=treatment group; CG= control group

2.3.3.1.6 Measures of change at the patient level

Ultimately it would be hoped that CST interventions would impact on the well-being of PLWD, for example, in terms of reductions in symptoms of distress or improvements in quality of life. Eight studies in this review included measures at the level of the PLWD, including measures of their depression, behavioural symptoms and quality of life (see Table 8 below). However, this only occurred where interventions either trained family caregivers of a PLWD or included some element of individualised training to professional caregivers, which focused on the needs of individual PLWD. In all of these cases an individual with dementia could be identified as the focus of the intervention and therefore be expected to show some detectable difference. Where training was more generic, the impact on outcomes at the level of an individual PLWD would be much less likely to be detectable, given the diluting effects of untrained people in the person's environment and the many factors (in addition to communication) potentially influencing their distress, mood and quality of life.

Indeed, even in those studies reporting individual impacts on PLWD, many failed to gain significance on validated measures (see Table 8). Mixed evidence for a positive effect was found on the Cornell Scale for Depression in Dementia, the RAID (Rating Anxiety in Dementia), the QOL-AD and the Revised Memory and Behavioural Problem Checklist (RMBPC). One study, which included advice and support around activities of daily living as well as communication, reported on the Functional Independence Measure, finding a positive effect (Gitlin et al., 2010b). Other measures showing positive effects were not validated and occurred in only one study each.

Overall, the findings are mixed that CST interventions, even when focused on the dyad, are effective at changing the behaviour, mood and quality of life for PLWD.

Table 8 Measures of Change at Patient Level

STUDY	MEASURE at PATIENT LEVEL	RESULTS	Published Psychometrics
DiZazzo (family caregivers)	Use of medical services for PLWD (reported by caregiver)	PLWD and caregivers used services less but non-significant (n=10)	No published psychometrics
Gitlin et al, 2010a (family caregivers)	Frequency of targeted behaviour in last month	**TG>CG**	Reported in Teri et al., 2005
Gitlin et al., 2010b (family caregivers)	Functional Independence Measure (FIM)- adapted QOL-AD (self-rating by PLWD) Agitated Behaviour in Dementia Scale (ABID) Activity Engagement Scale (AES)- (QOL rated by caregiver) Frequency of targeted problem behaviour in last month	**FIM: TG>CG** QOL-AD: Not significant ABID: Not significant AES: Not significant Frequency of targeted behaviour: **TG>CG**	FIM: Reported in Linacre et al., 1994 QOL-AD: Reported in Logsdon et al., 2002 ABID: Reported in Logsdon et al., 1999 AES: Albert et al., 1996 Frequency of targeted behaviour: reported Teri et al., 2005
Goyder (CH staff, group and 1:1)	Cornell Scale for Depression in dementia (CSDD) Rating anxiety in Dementia (RAID)	At 8 weeks post: **CSDD: TG<CG (reduced depression)** RAID: Not significant	CSDD: Alexopoulos et al., 1988 RAID: Shankar et al., 1999 RMBPC: Teri et al., 1992

	Revised memory and behavioural problem checklist (RMBPC) Quality Of Life –AD	**RMPBC: TG<CG (reduced problems)** QOL-AD: Not significant	QOL-AD: Logsdon et al., 2002
Haberstroh (family caregivers)	QOL-AD (proxy version)	**QOL-AD: TG>CG**, maintained over time.	No published psychometrics
Karlin (CH staff, group and 1:1)	Cornell Scale for Depression in Dementia (CSDD) Rating anxiety in Dementia (RAID) Revised memory and behavioural problem checklist (RMBPC) STAR-VA ABC card scales- Likert scale for rating severity and frequency of challenging behaviours	**CSDD: TG<CG (reduced depression)** **RAID: TG<CG (reduced anxiety)** **RMBPC: TG<CG (reduced problems)** **STAR-VA Card: Both frequency and severity ratings reduced TG<CG**	CSDD: Alexopoulos et al., 1988 RAID: Shankar et al., 1999 RMBPC: Teri et al., 1992 STAR-VA Cards: Based on Teri et al., 2005; not validated measure.
Liddle (family caregivers)	Cornell CSDD RMBPC :frequency of challenging behaviours in last week :frequency of depressive symptoms	CSDD: Not significant RMBPC: Most not significant; Depressive symptoms reported more frequently post training- possibly due to improved awareness?	CSDD: Alexopoulos et al., 1988 RMBPC: Teri et al., 1992

	Well-being Faces Scale for PLWD	Faces Scale: Not significant	Faces Scale: Developed for this study and not validated.
Sprangers (CH staff, just 1:1)	Cohen Mansfield Agitation Inventory - Dutch version (CMAI) Neuropsychiatric Inventory Questionnaire –Dutch NPI-Q 'symptoms'	CMAI: Not significant NPI-Q symptoms: Not significant	CMAI-Dutch: Zuidema et al., 2007 NPI-Q: Kaufer et al., 2000

TG=treatment group; CG= control group

2.3.3.2 In particular, what is the evidence for effective CST in the hospital context and with HCP trainees?

Three included studies were carried out in the hospital context, with training delivered to mixed groups of healthcare professional and non-registered staff, usually across whole institutions (see earlier in Table 2). Only one was specifically focused on communication (Weitzel et al., 2011 et al), with the others targeting the need for basic, general dementia care education across hospital staff, with an element of communication included. Benefits to knowledge, confidence and skills were reported across these three studies, although the only one to measure communication skill in trainees used an unvalidated measure (Weitzel et al., 2011 et al).

The majority of studies included in this review addressed the training needs of family caregivers or non-registered caregivers, such as nursing assistants. Five studies trained mixed groups of professionals and non-registered staff. One study trained a specific professional group, in this case, medical students (Cockbain et al., 2015). Of the three hospital-based studies, one specifically stated that doctors were included (Elvish et al., 2014), one did not include doctors (Galvin et al., 2010) and one did not specify (Weitzel et al., 2011).

These findings support the need for further development and testing of CST suited to a variety of HCPs in the hospital context.

2.3.3.3 What kind of teaching methods are used within effective CST in dementia care?

The variety of teaching methods used across studies is reported in Table 9. The evidence of effectiveness could not be formally separated out for individual modes of training, although what can be said about the contributions of the most frequently used approaches will now be discussed.

Of the eight studies reporting group CST, most used some combination of didactic teaching, group discussions, self-reflection, videos and role play, supported by written materials. The exception to this was Mason-Baughman and Lander (2012) who describe only using written materials which they read out and explained to group participants, with no other interaction described. Group exercises and discussions, where specified, included activities such as case studies, problem based learning and guided visualisation. One study reported using homework between sessions (Passalacqua & Harwood, 2012).

The need for practising communication skills and gaining feedback, as recommended in more general reviews of healthcare CST (Moore, Rivera Mercado, Grez Artigues et al., 2013; Berkhof, van Rijssen, Schellart et al., 2011; Pilnick, Trusson, Beeke et al., 2018) is supported by the use of role play, simulation or 'live' skills practice within six included studies. In the only included study to use simulation with professional actors (rather than role play with peers), this was used as the principal training method, with very positive effects on reported confidence for a relatively large group of medical student trainees (Cockbain et al., 2015). Unfortunately their confidence measure was not validated. In another study, trainers observed trainees (care home staff) in real 'live' interactions (with residents with dementia) and gave one-to-one feedback, using a coaching approach to skills development (Sprangers et al., 2015). The remaining four studies used an element of role play within their training, with trainees acting as people with dementia or as themselves, to facilitate skills practice.

Five studies used interventions which were designed to be non-face to face, via either DVD or e-learning/online formats. Authors reported the workforce issues across care homes and hospitals to support the need for this mode of delivery. The DVD only studies (Broughton et al., 2011; Liddle, Smith-Conroy, Baker et al., 2012; Weitzel et al., 2011) had a strong communication focus, whilst the online interventions (Hobday et al., 2010; Irvine et al., 2012) had a more general 'dementia care' focus, with a partial communication element. There was evidence to support effectiveness for gains in knowledge across the four studies which evaluated it and more limited evidence to support gains in caregiver confidence, attitude and positive communication skills, although measures were rarely validated. Both the internet-based studies reported challenges with care staff accessing suitable IT for their intervention.

Both online training interventions used some element of video, combined with some interactive elements, including reading and writing tasks. The DVD-only interventions necessarily involved video, with elements of narration and on-screen text to emphasise learning points. An additional three studies reported using video combined with other teaching methods (Elvish et al., 2014; Goyder et al., 2012; Passalacqua and Harwood, 2012). Most studies reported using scripted scenarios of right way/ wrong way interactions between PLWD and their caregivers, with actors or HCPs playing the roles.

In an attempt to increase the authenticity of their videoed interactions, the MESSAGE intervention, used by Broughton et al. and Liddle et al. used 'authentic examples' of patient talk for their scripts and also trained the actors, using 'documentary clips' of PLWD (Smith, Broughton, Baker et al., 2011). One study, which was delivering a more general dementia care intervention, used 'talking head' interviews with real people, describing their personal experiences of living with dementia and being in hospital (Elvish et al., 2014). Only one study reported using video recordings of real interactions, in this case between the trainers themselves and PLWD, as a means of modelling best communication practice (Beer et al., 2012).

Overall, video was therefore one of the most frequently used approaches within this review (cited by nine studies). Videos were reported as being valuable for modelling

communication skills and behaviour management skills in the dementia care context. However, it is difficult, from the evidence provided, to assess the authenticity of the interactions witnessed in video format by trainees, and to evaluate whether this had any impact on the learning taking place.

Table 9 Teaching methods used in intervention

STUDY	Didactic presentation	Reading/ written materials/ individual plan	Online or DVD materials	Role Play RP/ Simulated Patients SP/ live skills feedback	Homework/ follow up	Group discussion, activity or exercises	Video	Self reflection/ shared experience	Problem based learning (PBL)	Individual advice to dyad
Beer	√					√	√√	√√		
Broughton		√	√ √ DVD				√			
Cockbain		√		√√ SP		√		√		
DiZazzo	√			√ RP		√				
Elvish	√	√	√			√	√			
Galvin	√√	√				√ case studies				
Gitlin a		√								√√
Gitlin b		√								√√

STUDY	Didactic	Reading	Online/ DVD	RP/SP/ Live	Homework	Group	Video	Reflection	PBL	Dyad Advice
Goyder			√				√	√		√
Haberstroh	√	√		√ RP		√ case studies		√	√ group	
Hobday		√	**√√** internet				√			
Irvine		√	**√√** internet				√			
Karlin	√	√√ written		√RP	+weekly phone calls	√				√
Liddle		√	√√ DVD				√			
Mason-Baughman + Lander	√	√								

STUDY	Didactic	Reading	Online/ DVD	RP/SP/ Live	Homework	Group	Video	Reflection	PBL	Dyad Advice
Passalacqua + Harwood	√			√ RP	√	√ guided visualisation	√			
Sprangers				**√√** live skills						√
Weitzel			√√ DVD				√			
TOTALS	**8**	**11**	**7**	**6**	**2**	**8**	**9**	**4**	**1**	**4**

KEY: √√= major or only teaching method; √= method included amongst others; highlighted green= indicates a group delivered training intervention

2.3.3.4 What theoretical models or frameworks underpin CST in dementia care?

Nine studies referenced a theoretical framework, but there was little consistency between them (see Table 10). Four studies supported their training approach using educational theory. Two of these reported using the same 'Knowledge Translation Process', both studies being based on the work of Smith et al. (2011). Two reported developing their intervention around a communication theory, with Haberstroh et al themselves developing the 'TANDEM communication model' and Sprangers and colleagues citing the Communication Enhancement Model of Ryan, Meredith, MacLean et al. (1995). One intervention used Person-centred Care in dementia as a basis, one used a model of caregiver stress and another cited theories of self-efficacy related to managing challenging situations.

No single theory was therefore clearly dominant in this review. It has recently been noted that there is no explicit agreed theory of communication which underpins Speech and Language Therapy practice or research, and this appears to be reflected in the findings of this review (Barnes and Bloch, 2018).

Table 10 Theoretical Frameworks cited

STUDY	EDUCATIONAL THEORY	COMMUNICATION THEORY	OTHER THEORY
Beer	'Learning Centred Classroom'; cite many theories including 'motivational framework' Ginsberg & Wlodowski 2009		
Broughton	'Knowledge translation process' citing Smith et al 2011 who cite Draper et al 2009		

Cockbain	'Seven principles of androgyny' Knowles 1984		
Elvish			Models of self-efficacy/ social cognitive theories Bandura 1977
Gitlin a			'Stress health process model' Schulz et al 2000
Haberstroh		Developed own: 'TANDEM communication model'	
Liddle	'Knowledge translation process' Draper et al 2009		
Passalacqua + Harwood			'VIPS model' Brooker 2007, based on 'Person-centred Care for PLWD' Kitwood 1997
Sprangers		'Communication Enhancement Model' from Ryan, Meredith, MacLean et al., 1995	
TOTAL STUDIES	4	2	3

2.3.3.5 How was the communication content of the training arrived at and what does it consist of?

Many studies described intervention development as involving focus groups or meetings of experts. These included key stakeholders, such as representatives of trainee groups, representatives of PLWD such as voluntary agencies, experts in dementia and experts in education and training. In one case only the expertise of the author-trainers was cited (Beer et al., 2012). Relevant literature was cited to support decisions around content, with occasional reference to systematic reviews (Egan et al., 2010, cited by Mason-Baughman and Lander, 2012; Cross et al., 2008, and Doody et al., 2009, cited by Broughton et al., 2011). A number of studies used previously developed and investigated interventions, such as 'MESSAGE' (Smith et al., 2011, cited by Broughton et al., 2011 and Liddle et al., 2012), 'STAR' (Teri et al., 2005, cited by Goyder et al., 2012) and 'TANDEM' (Haberstroh, 2006, cited in Haberstroh et al., 2011). Importantly, five communication-only studies justified their intervention content using empirical literature that evidenced which communication strategies might be useful for caregivers to use with PLWD (Broughton et al., 2011; Irvine et al., 2012; Liddle et al., 2012; Mason-Baughman and Lander, 2012; Weitzel et al., 2011). The studies which they cited (e.g. Small et al., 1997; Small et al., 2003; Small and Perry, 2005), as described in the introductory chapter of this thesis, have generally used experimental methods to test certain proposed strategies, thus offering some evidence beyond what experts report to be useful.

Identifying what the communication content of the training consisted of was not possible in all cases, because of a lack of published detail in the included studies. Eggenberger and colleague's (2013) review included a cumulative table, listing the content of their included interventions. However their review did not link the suggested contents to evidence of effectiveness, frequency of inclusion nor any rationale for their use. In the current review, there was no agreed content for CST in dementia care and given the above comments on mixed justifications, it was decided a list of contents was not useful or relevant.

2.4 Discussion

2.4.1 Principal Findings

This systematic review aimed to identify and evaluate training interventions designed to improve communication in dementia care. Studies published between January 2010 and August 2015 were evaluated, as an update of the review by Eggenberger et al, which included papers up to 2010. Given the relatively shorter period of data collection in this update, there appears to have been an increase in published research of communication skills training in the dementia context since 2010.[2] Eighteen new studies were identified, spanning different settings and using different theoretical approaches. Included studies delivered face to face training in groups or to individuals, whilst some studies used no face to face contact at all. The majority were before-after designs and were of variable methodological quality. Few studies were based in hospitals and aimed at improving healthcare professionals' communication, limiting their direct applicability to the research questions being addressed in this thesis.

Studies evaluated effectiveness of the training using a wide variety of outcome measures at the level of the caregiver/trainee and PLWD, including: self-ratings of caregiver/trainee confidence, attitude and well-being; caregiver/trainee knowledge tests; the observable behaviours of caregiver/trainees; and in the PLWD, measures of depression, behavioural symptoms and quality of life. Many studies relied on developing their own measures or adapted previously published measures, without full psychometrics being established. Whilst there are acknowledged challenges in developing reliable and valid measures to identify relevant communication change (see for example, Bloch and Barnes, 2018), the lack of published psychometrics in these studies leaves some uncertainty about their reliability and validity. There were very few attempts to directly evaluate changes in the observable communication behaviours of trainees. Whilst there were some statistically significant changes in

[2] In fact, this review has since been further updated, with searches re-run up to August 2017, with a further 9 studies being included (Harwood et al., 2018, in press), making a total of 27 new papers (for 2010-2017) added to the 12 papers of the Eggenberger et al study (up to 2010).

communication behaviours observed, measures had limited psychometrics and were not blinded when rated.

Studies demonstrated different teaching approaches. It was not possible to separate out the contributions of each specific method to effectiveness. However, there was emerging evidence that more traditional approaches such as didactic presentations, reading materials and group discussions, were being combined with active skills practice and feedback (for example, simulation or role play), with video being commonly used to model desirable practices. Training which was delivered without face to face contact, such as via watching a DVD or completing an e-learning package, showed evidence of change in knowledge on study specific measures, but there was only weaker evidence of these being able to change trainee behaviour, confidence or attitude.

Studies varied enormously in terms of duration and pattern of delivery of the intervention, varying from watching a 12-minute DVD to receiving 17 hours of one-to-one training, plus 39 hours of group phone calls. Face-to-face training interventions delivered to groups of trainees averaged around six hours (mean 5.46; median 6; mode 6) with a range from 45 minutes to 12.5 hours total. This variability meant evidence of effectiveness could not be clearly tied to a specific duration of training.

The communication content of training was only occasionally justified in terms of empirical evidence or theoretical models, and these were not consistent. Only the MESSAGE intervention, used by the Broughton et al and Liddle et al studies (and based on the work of Smith et al., 2011) attempted to train only evidence-based strategies. Unfortunately, neither intervention study was assessed as being of good methodological quality.

2.4.2 Strengths and Limitations

The primary strength of this review is its use of systematic and replicable methods for data searching, extraction and evaluation, including the registering of the protocol with PROSPERO. Extensive searching across nine databases was carried out, yielding an increased number of studies compared to the previous review. Considerable

efforts were made to pursue authors for full peer reviewed papers where only abstracts were initially found. However, hand searches of reference lists were not carried out, and there is always the possibility that relevant studies might have been identified if further searches had been carried out. Studies in any language could be included, provided their abstract was published in English for screening purposes. However, whilst the included studies did represent a somewhat global perspective, the vast majority were from English speaking, higher income countries, suggesting that further searches using alternative databases with inclusion of non-English abstracts might be necessary to broaden this perspective.

This review builds on the previously identified evidence base for communication skills training in dementia care by largely replicating the criteria for Eggenberger's previous review, thereby potentially strengthening the findings. Both reviews used broad inclusion criteria for settings and communication partners, allowing for greater generalisability in the findings. However, by including interventions which had communication as the only aim with those which had communication as one aim amongst others (see Table 1, page 49 and Table 2, page 55-60), it could be argued that the review lacked useful specificity. This decision was based on the desire to match the criteria of the prior review where appropriate. Also, the limited number of previously identified papers suggested that broader review criteria would be necessary in order to identify a useful quantity of evidence for this updated review. However, this review identified eight studies which could be described as 'communication only' interventions, suggesting that as the quantity of studies in this field increases, future reviews could be more specific and still gather useful quantities of data.

Detailed data about the prior training, education or experience of the trainees was not specifically extracted (beyond being identified as family or formal caregivers/ healthcare professionals) nor the type or severity of the dementia that the training sought to address. This information might be relevant in identifying whether different training programmes might produce different effects for different populations. These details tended not to be reported, suggesting that at least in these cases, researchers are yet to develop interventions which are this well specified.

2.5 Conclusion

Given the heterogeneity of settings, participant groups and approaches to training, it was difficult to draw definitive conclusions from this systematic review about what would constitute optimal communication skills training. The trend in the evidence suggested that communication skills training in the dementia care context can be effective, with potential to change trainees' confidence, knowledge, attitudes, well-being and behaviours. The relatively low numbers and poor methodological quality of the included studies confirmed the lack of an existing, demonstrably effective, intervention which could be used or adapted for training the communication skills of HCPs in the acute healthcare context. The need for a training intervention with content based on sound empirical grounds relevant to the hospital setting remains, and will be addressed in Chapter 3. The trends in the evidence from the review, if treated tentatively, could be useful to inform and support the development of a new, high quality intervention, as will be described further in Chapter 4.

Chapter 3. Methodology and Methods

3.1 Introduction

In Chapter One we alluded to the proposition that communication skills training interventions are likely to be more effective if based on sound empirical underpinnings (Parry, 2008). Most of the training interventions found in the systematic review (Chapter 2) either fail to justify their choice of communication 'good practice' or use expert opinion only as their guide. Expert opinion on 'best' communication practices need to be treated with caution, as suggested by the work of Small and colleagues (2003) and Savundranayagam and Orange (2014). The notable exceptions to this in the systematic review were Broughton et al (2011) and Liddle et al (2012) who referenced the mainly experimental studies on which their trained practices were based. Whilst these experimental studies may give us indicators of useful practices within controlled conditions, their applicability to naturally occurring, 'uncontrolled' communicative contexts is less clear.

The goal here is to identify 'trainable' communication practices that would improve the real interactional experiences of PLWD in hospital and the HCPs working with them. So how might those practices be identified? The contention to be presented here is that the most appropriate method and methodological viewpoint is that provided by conversation analysis (CA), and in particular an 'applied CA' perspective. In this chapter, an account of the methods and methodological considerations of CA will be presented, as they pertain to this study's objectives in particular. Having established the unique suitability for CA in this case, the methods used to carry out the CA study will be presented.

3.2 Methodological Considerations

3.2.1 Introduction

In considering how to address their research questions most appropriately, researchers need to reflect on the possible methods open to them. Such methodological considerations prompt us to describe the practices and unpick the assumptions underlying the methods chosen (Bryman, 2008).

This section will begin with a consideration of various potential methods for this study, with a consideration of their limitations with regards to meeting the research aims. This will move us towards a justification of the ethnomethodologically-informed approach of conversation analysis, with an applied interventionist perspective (Antaki, 2011).

3.2.2 Alternative methods for consideration

The available evidence on communication between HCPs and PLWD in hospital presented earlier in Chapters 1 and 2, demonstrated how a number of different approaches have been used to explore similar concerns, though with limitations.

Interview studies, whether individual or group, have been used to gather the perspectives of 'experts', such as experienced family and professional carers of people with dementia, on what helps or hinders communication with the PLWD (e.g. Stanyon, Griffiths and Gordon, 2016; Richter, Roberto and Bottenberg, 1995). Such approaches can quickly produce suggestions for communication strategies which have most likely been tried in practice and which might be of benefit. However, such approaches neither demonstrate the use nor the benefit of the suggested strategies, as the previously described study by Small et al (2003) demonstrates. Even if we accepted that some of the suggested strategies would be likely to be useful at some points to some people, such an approach will only be able to uncover practices of which the interviewees are consciously aware and can therefore 'report' on in an interview. Studies of everyday conversations have shown that the minute details of interaction are attended to by the participants in a conversation, in ways that are

sometimes too rapid and subtle for interactants to have conscious awareness of, for example in the timing of silences, overlapping talk and breathing (Maynard and Heritage 2005). Thus an interview study for the purposes of this study would be limited to uncovering the already known, rather than establishing new ground about how to make these challenging encounters easier for all involved.

Observational coding has been frequently used in communication studies as it allows for examination of actual communication, with the researcher observing live or videoed interaction and using checklists or similar systems to record occurrences of particular, pre-specified phenomena. Observational approaches avoid the issue of unreliable self-reported behaviours inherent in interview studies. Coding allows researchers to quantify phenomena in a way which could facilitate a future evaluation of an intervention, such as in Williams et al's series of studies into interventions to address 'elderspeak' amongst carers of PLWD (e.g. Williams et al., 2009; Williams and Herman, 2011; Williams, Perkhounkova, Herman et al., 2017). However, as well as the many challenges of reliably defining and coding such categories in practice, for this study's aims the fundamental flaw of this approach is that the categories have to be pre-determined, based on the researcher's *a priori* theoretical assumptions (Psathas, 2008). It therefore can't identify new and relevant interactional phenomena.

Other observational approaches which involve participant observation, such as ethnography, would allow for an open approach to observing the actual communication practices of HCPs with PLWD, potentially over an extended period of time (e.g. Cowdell, 2010). The researcher's field notes in this case act as the data, potentially allowing for identification of observable practices which, in the eyes of the researcher, appeared helpful or unhelpful to the interactions observed. The researcher could take into account the 'bigger picture' of the encounter, including the institutional and environmental factors which they *believe* were influencing the interaction.

However, the data in this case are subject to the memory limitations and selections made by the researcher (Mondada, 2013). Researchers will need to make decisions about what to include or exclude from their field notes, based on their own

understandings and assumptions, thus potentially missing relevant phenomena. Many details of talk which have turned out to be relevant in interactional research, are not normally perceivable to the 'live' observer, such as the subtleties of variations in rate, pitch and volume and the exact timings of pauses and overlapping talk. Given evidence from studies into the interactions of other communicatively challenged populations, such as those with aphasia, Parkinson's disease and learning disabilities, it is likely that some of these kind of details may turn out to be relevant in the interactions of HCPs and PLWD and may be amenable to intervention (see for example, the work of Wilkinson, 2011; Griffiths, Barnes, Britten et al., 2015; Antaki, 2011).

Experimental studies of communicative interaction, usually within the fields of psychology and cognitive science, test pre-established hypotheses by aiming to control the variables influencing the performance of subject/participants. This approach could be used to compare potentially helpful (or unhelpful) communicative strategies for their effects on a specified, measurable outcome, such as a PLWD's understanding on a test of verbal comprehension (see Small et al., 1997), thus leading to recommendations for practices based on experimental evidence *of/for* cause and effect.

However, in controlling the context of communication so tightly, the researcher potentially wrings the everyday life out of the encounter (Antaki, 2018), leaving us with findings which have questionable applicability in real life encounters. The specific challenges or contingencies that impact on communication on the hospital ward would be missing from these kind of controlled studies. In addition there are well documented challenges in finding or developing reliable and valid measures of interactional consequences, on which such methods rely (Bloch and Barnes, 2018; Parry, 2008). For example, the above study of comprehension strategies might tell us which strategies optimise the scores of PLWD on a formal language comprehension test, but not necessarily inform us of how to improve their understanding in everyday encounters. Even if we accept these limitations, experimental methods would not give us the facility to discover new strategies being used by HCPs, since their purpose would be to test already proposed strategies for their effectiveness.

Linguistic studies of language have traditionally been based on Chomskian assumptions that real talk in interaction is too dis-orderly for direct study, and that language is therefore best understood outside the specific occasions in which it is used (Potter and Wetherell, 1987). On the basis of linguistic theories and the intuitions of the linguist, communication strategies might be proposed, such as reducing the length or grammatical complexity of a HCP utterance in order to improve the PLWD's understanding.

Whilst in theory such 'linguistic imaginings' might sound feasible, they are limited by being made without reference to actual data and the sequential context of the proposed utterances (Mondada, 2013). For example, HCPs using simplified utterances in real life interactions might in some contexts sound abrupt or patronising to the PLWD and result in some kind of negative response as a result. As Heritage and Atkinson (1984) point out "Anyone who is familiar with conversational materials … will be vividly aware of the limitations of ... intuition in generating data by comparison with the richness and diversity of empirically occurring interaction" (p3). Such 'imaginings' then might not prove the most fruitful method for us in generating knowledge about practices which work for HCPs *in situ*.

These alternative approaches could be seen to fall into two groups. They either tend to treat language as rule governed and therefore produce blanket principles which lack specificity; or they recognise interactional context as important but fail to provide sufficient detail from actual interaction to be useful for training purposes. As Harvey Sacks points out, "from close looking at the world we can find things that we could not, by imagination, assert were there" (Sacks, 1984; p25). This brings us to the proposal outlined below, that the 'close looking' of conversation analysis, used in an applied and interventionist way, and based on an ethnomethodological framework, as proposed by Sacks, presents the best fit for the aims of this study.

3.2.3 The case for an ethnomethodologically informed approach

Conversation analysis arose out of and is grounded in the broader framework of ethnomethodological study, as originated by Garfinkel (1967). Ethnomethodology is

defined as “the body of common-sense knowledge and the range of procedures and considerations by which the ordinary members of society make sense of… the circumstances in which they find themselves” (Heritage, 1984, p4).

Heritage (1984) describes how Garfinkel’s influences included the phenomenological work of Schutz (1967) who wanted sociology to move towards a greater concern with how ordinary individuals construct their social world through their everyday routines, challenging the Parsonian ‘top-down’ view of societal structures and roles determining peoples’ lives (Seedhouse, 2004). Garfinkel therefore sought the emic perspective of the participants, by looking for their understandings of their actions, as they reveal them whilst living their everyday lives. These understandings, or ‘methods’, are seen as shared in common (‘common sense knowledge’), demonstrated in practice (‘practical reasoning’) and constructed by the immediate participants (‘locally accomplished’) in a generally collaborative way (Clift, 2016). The methodological constraint of ‘ethnomethodological indifference’ encourages the analyst/researcher to refrain from judging the conduct of the participants, but rather to look for the logic of their activities (Heritage, 1987).

Seedhouse notes that Schutz had observed that this world of ‘lived experience’ seemed to go unnoticed by the actors themselves, and Garfinkel drew this out by suggesting that the constant use of these shared methods had led to them becoming automatized, so that they have become ‘taken-for-granted’ or ‘seen- but-unnoticed’ (Seedhouse, 2004, p5). The goal of Garfinkel’s ethnomethodology then was to reveal (make explicit) the implicit or tacit knowledge of ordinary members about how social actions were produced and recognised. Garfinkel noted that such normative practices are not easy to spot when being followed, and he therefore proposed the carrying out of ‘breaching experiments’ in which the ‘experimenter’ acting in an unexpected way can force ‘subjects’ to bring unspoken rules into the open (Heritage, 1984). For example, in a game of tic tac toe (UK noughts and crosses), the experimenter, without commenting, might erase their opponent’s mark, move it to another cell and then make their own mark as usual. In almost every case (95%) this action provokes a response of some sort, with over 75% of subjects objecting or demanding an explanation, regardless of relationship between them, gender or age (Heritage,

1984). So this demonstrates the ordinary action order to which members orient themselves, and expect that others will orient to.

3.2.4 The case for conversation analysis

Thus ethnomethodology presented a new sociological perspective for research, in which the displayed understandings of interactants, through the actions they achieved in their everyday talk, became a relevant field for study. Seeing the benefits of this approach for the study of everyday communication, Harvey Sacks developed a new "domain of research", known as conversation analysis (Sacks, 1984; p21). Sacks reports that the advent of recording technologies made it possible to create a 'natural observational science' of sociology via conversation, because actors' methods could now be examined in rigorous detail, not only by the researcher but also by their peers (Sacks, 1984). Schegloff went on to emphasize the importance of conversational interaction as the 'sociological bedrock', through which institutions are constituted and much of the work of society gets done (Schegloff, 1996, in Drew and Heritage, 2006). Language is not just how we describe things: it becomes significant because it is through language that social actions get done (Heritage and Stivers, 2013). For example, in the context of healthcare encounters, these 'social actions' might include opening and closing the session; requesting information of another person; or maintaining a shared understanding (and positive relationship) with the other ('intersubjectivity').

Key to Sacks' enterprise and drawn from ethnomethodology, was the central tenet that there is "order at all points" in human interaction and that therefore "whatever humans do can be examined to discover some way they do it, and that way will be stably describable" (Sacks, 1984; p22). This stable order is what interactants, and therefore the analyst, can orient to, and forms the basis for Sacks' empirical study of talk-in-interaction. This order is discoverable through repeated viewing and careful transcription of actual interaction, with attention paid to even the smallest phenomena and no detail dismissed *a priori* as unimportant. By viewing the data in an initially 'unmotivated' way, without pre-established criteria, codes or restrictions,

the analyst hopes to uncover and make explicit the endogenous order within the interaction. The order itself may not be known consciously by the interactants, because of their 'taken for granted' status, but to the extent they are revealed by participants to each other during an interaction, they can be examined and made explicit by the analyst. In this way, interactional practices can be examined for what they accomplish (or don't accomplish) in terms of social action. This gives the analyst a way of unpacking what 'works' (and doesn't work) interactionally, which is based on what can be seen to be happening, rather than on *a priori* assumptions. The examination of 'what doesn't work', often termed interactional 'trouble', may be used like a natural 'breaching experiment', to reveal the underlying rules at play. The essential recording of data for analysis means that this 'seeing' of what works, and doesn't, can also be shared with others for their consideration and critique, in order to build robustness into the method and findings.

For this study then, a CA approach has the potential to reveal those practices of the HCP which can be seen to 'work' interactionally, in the displayed orientations of both participants, without the need for external, *a priori* definitions of 'good communication'. These uncovered practices may not be within the conscious awareness of HCPs and so could not have been reported in an interview study. Given that these revealed practices will have been identified *in situ*, in real, naturally occurring encounters (i.e. they are endogenous practices), they will have the added value of being already 'useable' – that is, they are likely to be feasible for HCPs to try out following training because they are already in use, as opposed to potentially contrived, linguistically or theoretically imagined communication strategies. In addition, by potentially identifying HCP practices which can demonstrably be seen to cause interactional trouble *in situ*, and yet persist in use, a potentially more powerful and convincing case might be built with which to challenge existing HCP practices in a future training intervention.

This brings us to another vital consideration of CA, which is the importance of sequential context in determining the meaning of an utterance for the participants; that is, what comes before and after it will determine what function it accomplishes (Clift, 2016). Since the interactional context in which a given practice is used by a HCP

will determine the action it achieves, establishing the sequential context of a practice will be vital to any 'trainable' recommendations. In other words, a practice which works well in one position in an interaction, doing one thing, is likely to work differently (and not maybe as well) somewhere else. [3] CA works as a method to draw out these sequential considerations in ways which could then be applied in the training intervention.

Additionally, the ways in which such sequences of talk are co-constructed have proved to be vital to CA-based understandings of interaction, and in particular the concept of adjacency and the adjacency pair (Sacks, 1992). For example, many of our everyday interactions are initiated through a simple pair of utterances, such as "A: Hi! – B: Hi!" (Clift, 2016; 68). The first turn at talk, in most contexts, projects a number of relevant responses, which the next speaker normally addresses in the second turn at talk. For example, a request for someone to do something (A: 'Can you pass me the ketchup') is usually met with acceptance (B: 'There you go' + passes ketchup) or rejection (B: You've had enough already' + moves ketchup away). In this way, the recipient of the request shows their understanding of the prior, first turn at talk as a request. If they gave an alternative response (such as, B: 'Yes I expect I can'), they would be displaying an alternative understanding, seeing the prior question as being an inquiry about their physical ability to pass the ketchup, rather than a request to do so. Whichever type of response occurs in this second position displays the second speaker's understanding of the action being accomplished in the first. In the next (third) turn, the original speaker is likely to address the immediately prior turn, either endorsing the speaker's understanding (A: 'Thanks') or repairing that understanding (A: 'Well pass it me then!'). This understanding that certain types of responses become relevant and expectable after certain initiating turns, is known as conditional relevance.

[3] This might explain why simplistic recommendations in dementia care fall short of being helpful, such as to avoid asking any questions (Contented Dementia Trust, 2018), without further specification of sequential context or indeed the actions that those 'questions' might be accomplishing.

The concepts of adjacency and conditional relevance illustrate the importance of a turn by turn analysis of any interaction. If HCP practices are to be properly understood, an utterance cannot be taken out of its locally situated, sequential context, and the data collected needs to reflect the whole naturally occurring encounter between the HCP and the PLWD.

The use of recorded data in CA, which is therefore repeatedly examinable, allows for detailed examination of the ways in which HCPs and PLWD mobilise the verbal, vocal, visual and embodied aspects of talk, to accomplish the fine-tuned organisation of interaction (Mondada, 2013). For example, the organisation of turn taking, which has been the subject of extensive analysis since the earliest days of CA, is achieved through orientation to the precise timing of features which may include syntax, intonation, action completion, gaze and pointing (Clift, 2016). Only a research method which can collect all these details, and allow the analyst the required time and control to examine them fully, has the potential to uncover the details of organisation that HCPs and PLWD are oriented to. This might be particularly vital when considering the potentially 'hard to hear' and atypical talk of PLWD.

In addition, the CA understanding of social actions as co-constructed ensures that the displayed understandings of both HCP and PLWD are included in the analysis. This may be able to offer some protection against the potential dominance, in research methods which rely on participant reports, of the institutional and articulate voice of HCPs over the voice of a communicatively disadvantaged group such as PLWD. CA refrains from speculating about the psychological state and motivations of the participants in an encounter (except when these are displayed within that encounter). This may be particularly valuable when the internal cognitive state of the individuals concerned is not neuro-typical; that is to say, the method saves the researcher from relying on speculations or assumptions about the internal states of someone with dementia.

In striving for 'ethnomethodological indifference' analysts would generally seek to avoid endorsing or undermining a particular practice, but would look for the logic underlying the activity (Parry, 2005). In asking the important analytic question 'why that now?' the analyst seeks to identify the logic or reason ('why') underlying the use

of a particular practice ('that') at that particular sequential position ('now') (Clift, 2016). In seeking to identify trainable HCP practices to reinforce or to avoid, CA requires the analyst to avoid value judgements and to look for the logic of the HCP's actions in every situation, thereby potentially offering a more constructive approach for training.

Finally, CA allows for the generalisation of findings on the basis of the identification of underlying rules or principles, referred to by Schegloff as 'the procedural infrastructure of interaction' (Schegloff, 1992; 1338; cited in ten Have, 1999). The theories built by the analyst from singular instances, can then be 'tested' on a wide range of comparable instances, each instance examined as an individual 'case' and adapted if necessary (ten Have, 1999; Maynard and Heritage, 2005). The concept of 'deviant case analysis' is important in CA in ensuring that such theories can encompass atypical occurrences within the dataset. Provided an adequate dataset can be collected and accounted for, with sufficient breadth to reflect the relevancies of a variety of encounters between a variety of HCPs and PLWD, then a CA approach should be able to produce generalizable findings for a training intervention. However, a CA approach will not provide a universal set of communication guidelines which apply at all times. It rather presents to trainees what happens when alternative ways of approaching the same interactional action are tried, giving them opportunity to consider what might be more or less appropriate in a particular interactional context.

3.2.5 Applied Interventionist CA

Applied CA has emerged as a methodological development of CA, made possible by the now considerable body of knowledge of order within both every day and institutional talk. Whilst Sacks eschewed any agenda setting prior to inspection of the data (e.g. Sacks, 1985) in practice a currently knowledgeable conversation analyst will recognise much in the data as soon as they approach it, making a totally unmotivated looking less feasible than at the time of Sacks' lectures (ten Have, 1999). In addition, the funding environment, access and ethical issues for such research will often require justification of any CA project, in advance, in terms of potential outcomes and

socially beneficial consequences. Applied CA, as Antaki (2011) describes in his collection of papers on the subject, has a variety of meanings, with this study fitting Antaki's definition of an 'applied interventionist CA' endeavour.

An interventionist CA study often takes the view from the start that there is some social action, based in interaction, which would benefit from being changed and that this outcome could be achieved through an intervention developed out of conversation analytic study of the relevant data. In some cases a specific institutional problem is identified in advance of the project, not necessarily in CA terms, such as a dissatisfaction amongst customers, a lack of adherence amongst employees to an institutionally mandated practice or a lack of recruitment to an institutional project. For example, Maynard, Schaeffer and Freese (2011) report on their investigations into why telephone interviewees might agree or not to take part in a survey and how these rates might be improved. In other cases, an initially open CA study uncovers some trouble which looks amenable to and worthy of change, and an interventionist study emerges (see for example, Heritage and Robinson, 2011).

In this study, the general interactional challenge (that is, of communication between HCPs and PLWD in hospital) was identified in advance of the study and used to justify the need for funding and supporting the study. The specific trouble underlying the increased stress and distress in these encounters, as described in Chapter 1, was not specified prior to the analysis, which allowed for a relatively 'unmotivated looking', as will be discussed later. The approach taken in this study is similar to those described for other CA studies of healthcare encounters between HCPs and people with atypical communication abilities, which have been used to develop training intervention for those HCPs. Some of these focus more on training for the individual family dyad, such as in the aphasia therapy approaches of 'SPPARC' (Lock et al., 2001; Wilkinson, 2011) and 'Better Conversation with Aphasia' (Beeke et al., 2013; Best et al., 2016). Other CA based training approaches take a more generic approach, delivering group training to less familiar communication partners, such as HCPs or volunteers, more in keeping with this study. For example, the well-established 'Supported Conversation for Adults with Aphasia' (Kagan, Black, Duchan et al., 2001; Royal College Physicians, 2008) which presents a toolkit of skills to try with anyone with aphasia, was based on

Kagan's earlier conversation analytic work on interactions between volunteers and people with aphasia (Simmons-Mackie & Kagan, 1999). Similarly, the conversation analytic work of McCabe on outpatient consultations between psychiatrists and clients expressing delusional views (e.g. McCabe, Heath, Burns et al., 2002; McCabe and Priebe, 2008) has then been used to develop a training intervention for psychiatrists, 'TEMPO', that has been evaluated to show changes in frequency of desired communication behaviours and increases in both HCP and patient ratings of the therapeutic relationship (McCabe, John, Dooley et al., 2016).

These particular CA studies have developed their effective communication skills training from the evidence supplied by earlier published conversation analytic work, usually by the same authors. In contrast, in this PhD study the conversation analytic work was to be carried out in the knowledge that a training intervention was to be immediately developed from the findings. As a result methodological decisions (such as what kind of data to collect) would be informed by the overall study aim: to develop a training intervention for HCPs, based on evidence from every day healthcare encounters, which could positively impact on their healthcare interactions with PLWD in hospital. Given their complexity, the methods used for the conversation analytic phase of the study will now be described in detail. Consideration of the methods used in developing the training intervention itself will be described later in Chapter 5, following the reporting of the CA results in Chapter 4.

3.3 Methods

A conversation analytic approach was taken to design, data collection and analysis.

3.3.1 Design

The broad study design was developed by the researcher as part of the process of preparing the application for funding from the NIHR. This was begun in 2012-2013 in consultation with/ under the leadership/ guidance of the Chief Investigator (RH) and the co-applicant (SB), with contributions from patient and public involvement (PPI) representatives. The methods were then further specified in developing the full funding bid in 2014 and in preparing the protocol and study paperwork for the ethics

application in 2015, with support from the wider study team (in particular SG and RP).

The project team at this time consisted of clinicians and academics who represented a breadth of medical, nursing and allied health professional (AHP) expertise within the acute hospital and dementia care context, so that external HCP consultation was not felt to be necessary. PPI representation was considered vital in developing the case of support for the bid, and in designing a valid and ethical study, as will be expanded below.

3.3.1.1 Patient and Public Involvement in study design

In keeping with the NIHR's promotion of user consultation and collaboration in research (see for example, INVOLVE, 2012; Gove, Diaz-Ponce, Georges et al., 2018), early in the conception of the project, the proposed study aims were presented by the researcher to a local service user group of people with direct experience of dementia for consultation. Group members were asked whether they felt that communication between hospital staff and inpatients with dementia was an important topic for research and whether they felt developing training for HCPs in this context was needed. A number of carers of people with dementia gave vivid accounts of their experience of poor healthcare communication in the acute hospital and the consequential distress caused to their loved one and themselves. However, there was also an appreciation amongst group members of the stress and fatigue that can arise for professionals, as well as family carers like themselves, when struggling to care for and communicate well with PLWD. There was unanimous support for research which aimed to improve this situation. In order to embed user experience in the project through collaborative involvement (INVOLVE, 2012), one member of the PPI group (KS) was recruited to be a co-applicant on the bid following this meeting.

Later in the bid preparation, the researcher consulted with the same group, presenting the proposed design, with particular focus given to the ethical and practical concerns around the videoing of vulnerable in-patients with dementia in hospital. The group were supportive of the idea that video recording of what HCPs

actually do when communicating with PLWD in their care would be beneficial and appropriate. They agreed that video recording was justified over audio recording, mentioning in particular their experience of the importance of non-verbal interaction with their relatives with dementia. The majority reported they would want to support such research if their relatives were being recruited, and that their relatives with dementia would want to contribute to the project aims. Useful suggestions were made around recruitment, consent and filming procedures. Further members of this group were recruited to be part of the ongoing Project Management Team, the Intervention Development Team and the Steering Committee, to improve oversight of the project from the user perspective and ensure a significant user voice would be present during the analysis of the data and the development of the training intervention.

It should be noted that none of these user representatives had dementia themselves, but were all previous carers for someone with dementia. This was due to the makeup of the already established user groups which were consulted, rather than because of any decision to exclude PLWD. [4]

3.3.2 Ethical considerations

The appropriate governance procedures for research study approval, including ethical approval, need to be followed in order for permission to be granted for a study to be carried out (see the permissions section below.) These research approval decisions will likely have been based on the frequently cited principles of autonomy, beneficence and justice (Orb, Eisenhauer and Wynaden, 2001), from which arise the processes of informed consent, voluntary withdrawal, maintenance of confidentiality and anonymity, minimisation of harm and maximisation of benefits. In this study,

[4] Successful efforts were made in the follow-on feasibility study to recruit several PLWD to collaborate in the research, in rating the before and after videos of the trainees (see O'Brien, Goldberg, Pilnick et al., 2018).

these principles informed the preparation and execution of the study's formal ethical and organisational approvals.

However, the ethical considerations surrounding research involve more than just these formal governance procedures and permissions (Pollock, 2012). Beyond these are the micro- ethical practices of the individual researcher, dealing with the day to day operationalising of those procedures, in the context of wider ethical principles, such as those embodied in the Helsinki declaration (World Medical Association, 2001). In practice the researcher, particularly when using qualitative methods in 'real world' contexts, will experience unexpected situations in which ethical considerations will come into play (Pollock, 2012).

3.3.2.1 Ethical Issues in Dementia Research

In the particular context of dementia research, research bodies have also been criticised for failing to adapt adequately to the circumstances of participants who have cognitive challenges (Dewing, 2002; Dewing, 2007), in order to still honour their right to participate in research, as supported in the UK by the Mental Capacity Act (2005). Until recently, permissions for studies involving PLWD rarely required consideration of the 'in the moment' preferences of the person with dementia; once consultee agreement had been given, no further consideration of the person with dementia needed to be given, even if the PLWD and their proxy showed disagreement (Dewing 2002). In denying the PLWD control over their research participation and not valuing their communicative contributions on the subject, however limited, researchers deny the personhood of the PLWD and potentially prevent them from contributing to society through inclusion in research. This is an opportunity valued by PLWD, who might otherwise experience a reduced sense of purpose and value as their condition progresses (Øksnebjerg et al., 2018).

In response to the need for more person-centred and authentically participatory methods for including PLWD in particularly qualitative research, Dewing (2007) developed a 'Process consent method'. This approach includes:

- Gathering knowledge about the individual's usual means of communicating every day assent/ dissent or contentedness/ malcontent;
- Supporting information giving with appropriate resources and communication techniques;
- Recording and reflecting on responses with familiar others in order to ascertain consent;
- Ensuring consent is revisited on every occasion, with constant monitoring of states of well-being;
- Feeding back relevant concerns about well-being to carers, and supporting participants transitioning back after participation.

These methods go some way towards explicating how the ethical researcher might work to maintain 'micro-ethical' practice (Pollock 2012), respecting the values of autonomy, beneficence and justice as applied in the specific context of consent and inclusion for PLWD. In this study, process consent was seen as complementary to the formal processes of informed written consent and consultee agreement, with both being included in the agreed governance procedures. Process consent allowed the opinions of PLWD to be reflected throughout the recruitment and data collection phases of the study, rather than relying on the one-off agreement of a consultee. The ways in which the principles of process consent were applied in the current study are specified in Table 11 below:

Table 11 Application of Process Consent Steps to Current Study

Step in Process Consent Method	**Definition from Dewing 2007**	**Current Study procedures**
1. Background and preparation	Permission gained for access to PLWD. Find out about person's biography to be able to identify state of well-being or not.	Consulted nurse on bay and request introduction to PLWD. Asked advice from nurse/other staff about when to approach the PLWD.

2. Establishing the basis for capacity	Need for an adapted consent form Establish how the person usually presents and show signs of ill and well being. Identify any triggers for ill-being. Identify how they usually 'consent' to day to day activities.	Checked with nurse the severity of their communication problems and how they communicate their preferences/objections day to day. Checked staff opinions re PLWD's capacity to consent to this study. Assessed cognitive issues or requested scores (if appropriate).
3. Initial consent	Assess PLWD's cognitive ability and preferred ways of taking in information. Adapt written information and/ or support with pictures and physical props. Note adaptations and PLWD's responses as evidence. Reflect on what assent or non-objection looks like every day.	Experienced Speech & Language Therapists (SLTs) only used for recruitment/consent of PLWD. Given staged verbal explanation, assessing comprehension as going along. Used supported methods and props, including showing video camera, how it works and offering opportunity to handle it (ref. Dewing 2007). Shown adapted information sheet, one side of A4, when appropriate. Noted non-verbal and verbal reactions to camera and SLT-researcher gave information and made assessment using checklist from Mental Capacity Act (2005). Went to consultee and/or nurse with any queries about reactions from the

		PLWD, for comment on how this compared to usual presentation.
4. Ongoing consent monitoring	Ensure consent is revisited on every occasion. If not consistent with original consent, then start process again. Keep track of well-being during and after encounters (formally or informally) and act accordingly- stop, if ill being present.	On each possible occasion for filming, PLWD were approached with camera by researcher and asked if OK to be filmed. Non-verbal and less alert patients were shown the camera as far as possible. PLWD given reassurance that consultee had agreed (by name). Set up went ahead if PLWD didn't show signs of distress or concern. Faces and general demeanour watched before and throughout.
5. Feedback and support	Consider feeding back to staff any concerns if not breaking confidence of PLWD. Support PLWD transitioning back (e.g. after interviews). Raise any ethical concerns with study PI.	HCP participants were present for the filmed interaction (unlike in an interview) so HCP able to feedback to clinical team if needed. Researcher supported PLWD before and after recording with cups of tea, reassurance and interaction. Any concerns expressed to us by PLWD before and after filming were shared with clinical staff with patient's permission or in best interest. Any ethical concerns taken to weekly meeting with PI for discussion.

3.3.2.2 Ethical Issues in Video Research

As well as the ethical challenges of including those with reduced capacity to consent for themselves, this study also needed to meet the challenge of video-recording such vulnerable people whilst they are unwell, in hospital. Unedited video recordings automatically make someone visible and audible and therefore recognisable, introducing a number of potential risks. Firstly, participants might be identifiable and this might bring them some harm; the data could potentially be copied and shared with unauthorised persons; and finally there is some risk, in research terms, that the act of recording may influence what people say and do, damaging patient care and study validity (Parry, Pino, Faull et al., 2016). Efforts were made to reduce these risks as far as possible, designing the study to follow best practice from previous studies (Parry et al., 2016) and being advised by PPI representatives and governance bodies along the way. Many of these issues will be specifically referred to as the methods of data collection are described in the following sections, but a summary is provided in Table 12 below:

Table 12 Summary of Ethical Risks of Video Recording and Mitigating Actions taken

RISKS OF VIDEO RECORDING BASED ON PARRY ET AL (2016) REVIEW:	RECOMMENDATION FROM PARRY ET AL (2016) REVIEW	ACTIONS TAKING TO MITIGATE RISKS DURING THIS STUDY
Effects on communication: "If what is recorded is substantially different to what would happen were recording not occurring, then validity will be substantially compromised." (Parry et al., 2016; p.1283)	Make recording safe and as unobtrusive as possible. Consult with user groups about how to minimise disruption. Be present in the field, build familiarity of participants with researcher and equipment.	Recording equipment positioned beforehand and researcher not visible when possible. Consulted with PPI group in planning and with each HCP before filming, each time. Familiarisation built with both HCPs and PLWD e.g. Based self and equipment in ward offices for 3/12 period of data collection. Took time to be present at bedside of each PLWD once consented, building relationship, waiting with them for recording opportunities. Maintain warm, friendly, affirming demeanour with HCPs and PLWD.

Confidentiality: There is a threat to privacy and confidentiality, particularly in publishing and displaying images.	Retain raw data for research team with restricted access, stored securely, encrypted. Ensure consents make clear length of storage. Seek consent to share using original images and voices, if authenticity will be important e.g. in training professionals. Seek consent for all intended uses separately. Pixelate images, silence names, alter voice pitch &/or use audio only, if sharing of raw video data isn't justified educationally or scientifically &/or offer these options in consent.	Data storage plan approved: store on University research team's access controlled drive; back up on external encrypted password protected hard drive. Consent requested for retaining data for training use and for future research beyond usual 5 years. Initial consent requested for use of raw data for analysis. 2nd level consents for sharing, with each intended use consented separately. Names of people and places silenced in audio recording and blurred in images (eg. When name written by bed) when shared outside research team. Educational need for authentic training resources deemed to justify not disguising all recordings of voices or images when consented.

Coercion: There is a risk of coercing vulnerable people to participate particularly if timings are tight.	If need to film on the day, then use process of assent on the day of filming, then seek informed consent after a specified period, eg a 24 hrs, which can then include watching the recording. However informed consent before and after filming, would be ideal where possible.	Used informed consent before and after: 1st level consent to be filmed and for inclusion in research- to be seen by research team only; 2nd level consent for sharing for each intended use. Not always possible or appropriate to follow up for 2nd level consent in which case no sharing possible.

3.3.3 Preparation for data collection

3.3.3.1 Approvals

All research which involves recruitment of patients through the NHS requires a vigorous process of governance, involving applications for approval for the study. These procedures were carefully followed in this case and approval was received from the National Research Ethics Service committee for Yorkshire and The Humber-Bradford and Leeds (reference 15/YH/0184).

Prior to recruitment beginning, further approvals were required from the relevant local 'Research and Innovation' teams, which in this case meant both the grant holding organisation and the organisation hosting the filming itself. An honorary contract with the host organisation was required for the researcher to be able to access the clinical areas in which the filming would be carried out.

3.3.3.2 Preparation for access to study site

During the preparation of the study, meetings of ward managers and divisional leaders were attended to publicise the study, answer their questions and gain their support. Once all approvals had been received, the researcher went to each of the wards and met the ward manager, in order to explain the study and request permission to put up posters about the study on the ward. Some ward managers at this point appeared to be unaware of the study or that permission had been granted at more senior levels, despite the research team's efforts in attending earlier staff meetings. Those ward managers who were already aware of the study expressed more enthusiasm to participate than those who were unaware.

It is acknowledged in CA research that in order to optimise the 'naturalness' of the recorded encounters, researchers need to become familiar to the potential participants and the study site needs to be familiar to the researcher (Parry et al., 2016). In addition it was felt likely that HCP participants who felt at ease with the researcher were more likely to be recruited to the study and/or to support the recruitment of suitable patients. The opportunity to position posters on the ward was

also therefore taken as an opportunity to approach HCP staff informally to tell them about the study and ascertain whether they might be interested in being approached about being filmed for the study or not. The researcher was also able to familiarise herself with the each of the ward environments, identify where and when different professional groups were most accessible for recruitment discussions and where and when filming might be least intrusive.

3.3.4 Data collection

In order to identify trainable interactional practices used by HCPs when delivering healthcare to PLWD in an acute hospital, it was necessary to collect data which was adequate in quantity, quality, depth and breadth to achieve these aims.

3.3.4.1 Quantity:

CA tends to privilege the detail over the quantity of data, with the aim of producing detailed, single case descriptions of 'typical' interactions in the relevant setting (ten Have, 1999), with multiple single cases used to build the analytic case (Schegloff, 1993). Data collection in this study was approached with the specific aim of collecting trainable practices for a range of HCPs, but without *a priori* interactional concerns being specified. In deciding how much data to collect for this study, the researcher therefore had to consider collecting enough data to include a broad sweep of interactional practices used by a range of HCP groups, with a variety of PLWD, within the time constraints of the project. The healthcare activities recorded needed to reflect the variety of activities undertaken across the HCP roles, in order to produce evidence for trainable practices based on and relevant to all HCPs. For example, only recording 'ward rounds' or 'discharge discussions' would have excluded some professional groups, but would have produced a more focused dataset.

A further consideration in specifying the quantity of data, is the requirement of CA to collect 'naturally occurring' interactions. This meant that the duration of the recorded episodes could not be predetermined by the researcher. Given the researcher's knowledge of the multidisciplinary team roles, collectable episodes were expected to

vary between 30 minutes (e.g. for an AHP or cognitive assessment) and a few minutes (e.g. giving medication), with an estimated average of around ten minutes.

Taking these considerations into account, and the time-consuming nature of the consent processes, transcription and analysis, it was decided to aim for 40 recordings of healthcare encounters, which was in keeping with other comparable healthcare CA studies (e.g. Pino, Parry, Land et al., 2016; Peel, 2015; Mikesell, 2009; Jenkins and Reuber, 2014).

3.3.4.2 Quality:

Recording of an encounter is essential for the CA method, but it can only be a 'good enough' record of what happened (Sacks, 1985:26), and the decisions which the researcher makes in selecting and using their equipment will necessarily limit to some extent, what can be uncovered in the analysis. For example, the quality of the recording needs to be sufficient for analysis of the relevant auditory and visual details of talk and embodied action, including the precise timing in the sequence of aspects which are 'hard to perceive' such as 'in breaths', overlaps in talk and eye gaze (Mondada, 2013).

Consequently, all the participants in this study needed to be as visible and audible as was possible. A separate audio recording was therefore made of each encounter, with a small, high quality, digital audio recorder placed next to the patient participant, often on their bed or bedside table, and set at a sensitive level to allow for the recording of the quieter and less clearly articulated speech patterns of some PLWD. A variety of microphone options were used when recording the sound track for the video, depending on whether the interaction was expected to include significant movement, and bearing in mind that optimum sound quality requires being as near the source as possible (ten Have, 1999). A Lavelier microphone attached to the HCP's lapel worked well in picking up both HCP and PLWD's voices when significant movement was involved, but could potentially have caused distraction. A long lead external microphone was used for more static interactions.

The main challenge of recording sound in this environment was the noise extraneous to the recorded interaction, including talk from neighbouring patients, HCPs and visitors, and the noise of equipment, radios and TVs. Since this background noise was also present for, and potentially impacting on the key interactants, efforts were only made to reduce background noise when doing so was not judged to be altering healthcare, and when not reducing the noise would prevent a useful recording. For example, turning off a background radio was deemed appropriate, but asking others to stop a noisy activity was not.

In order to cover the entire interactional space when videoing, there was a need to position and re-position the video recording equipment during the recordings, despite the use of a specialist wide-angled lens. In some cases this was because, despite the pre-planned discussions with HCPs around positioning, they would sometimes choose to sit or stand somewhere different than planned. Occasionally the patient initiated movements, such as standing up. In other cases, the HCP's task involved movement around the patient (such as wound dressing) or movement with the patient (such as transferring them off the bed). Despite the desire to be minimally intrusive, to optimise 'naturalness', in these cases the researcher was present and visible during the recordings, although usually out of the direct line of sight of the participants.

The use of only one video recorder at any one time, due to practical constraints and the desire to be less intrusive, meant that only one visual perspective could be preserved for analysis. As a result, both participants' faces were usually filmed facing each other 'side on', with occasional turns away from the camera, thus making eye gaze, writing and some other embodied practices hard to see at times.

3.3.4.3 Depth:

The establishment of CA as a method has been made possible by the development of recording technology, with recorded data being described by Sacks as 'indefinitely rich in empirical detail' (Sacks, 1992: 419, cited in Mondada, 2013). This richness has been enhanced from the days of audio-only recordings in the earliest CA studies, by

the increasing availability of video recording for data collection. Whilst an audio recording of a phone call appropriately collects for the analyst the same 'depth' of information that is available to the present interactants, an audio-only recording of a face to face encounter denies the analyst the visual data that the interactants could be making use of/ orienting to. As Jordan and Henderson (1995) argue, "video loses less, and loses less seriously than other kinds of data collection" (p53).

In studying people with dementia during the delivery of hospital care, it was assumed highly likely that both visual and auditory data would be made relevant during interactions, given the linguistic limitations of the PLWD and the task-based demands of the HCP role. It was therefore highly appropriate in this study to be recording the same depth of data available to the participants, through video recording. Despite the special ethical concerns raised by using video data, where anonymity is more difficult to secure, the importance of recording the visual aspects of the action as they related to objects, the body and the environment were regarded as vital (ten Have, 1999; Parry, 2002).

3.3.4.4 Breadth:

Previous SLT-CA research has tended to focus on guiding individual therapy, through identifying helpful practices for informing an individual dyad (e.g. Wilkinson, Bryan, Lock et al., 1998; Beeke, Johnson, Beckley et al., 2014). In trying to produce more generally applicable practices, more akin to a toolkit of practices for communication partners to use with a variety of people, this project was more consistent with the approach taken by Kagan and colleagues (2001) in her CA based 'Supported Conversation' approach for conversation partners of people with aphasia. Whilst personalised, specialist communication advice for every PLWD in hospital might be desirable, there are not sufficient SLT resources available currently in the NHS to support this. Even if there were, there would still be a need for HCPs to communicate with new and unknown individuals on admission, and those without significant others to fill out accurate and in-depth personalised information for staff.

Therefore, in order to collect data for practices which HCPs can more generally apply to a number of their patients with dementia, data needed to be collected from PLWD with a variety of communication impairments (see also Participant section 3.3.5), as well as HCPs with a variety of professional roles. CA benefits from a collection of data that is "maximally representative of the diversity of the conversational corpus as a whole", in order to optimise the chances of directly observing a relevant 'specimen', as the naturalist might (ten Have, 1999, p50).

3.3.4.5 Location

Permission was gained to collect data across all eight Healthcare of the Older Persons (HCOP) wards in one large acute teaching hospital. The size of the hospital and number of HCOP wards meant that there were expected to be adequate numbers of HCPs and PLWD from which to recruit, given a target of 40 recorded interactions (see section 3.3.4.1 Quantity). For example, at any one time there would be expected to be approximately 200 patients across these wards, which over the 3 month data collection period might represent 1,200 patients passing through these older persons' wards, with a substantial proportion (approximately 40% according to Sampson, Blanchard, Jones et al., 2009) having dementia. Collecting data from a single, large institution allowed for more time efficient consent processes and data collection than using more than one institution. It is not uncommon for CA studies in healthcare of a similar size to collect data across one setting (Pino et al, 2016; Webb, 2009; Schwabe, Howell and Reuber, 2007). In the end, data were collected from three out of the eight possible wards, because of the need to coordinate a consented PLWD and HCP whilst carrying out a suitable activity, which the researcher was also able to be present for.

3.3.4.6 Summary of data collection

In summary, 41 video recordings were collected of naturally occurring healthcare interactions across three Healthcare of the Older Persons (HCOP) wards in one large teaching hospital. No limit was set on the length of each recording, since the aim was

to record the interaction as it would naturally have occurred. A total of 379 minutes of recordings were made, ranging from 2 minutes to 31 minutes, with a mean of 9.24 minutes. Recordings were made by the researcher and by a research assistant. No intimate procedure was recorded, but otherwise any interaction between HCP and PLWD could be filmed which would have occurred anyway. Recording equipment was positioned to record both interactants, whilst attempting to be minimally disruptive to the interaction.

3.3.5 Participants

3.3.5.1 Healthcare Professionals

A spread of HCPs from medical, nursing and allied health professional (AHP) groups were successfully recruited (n=41) across six of eight HCOP wards. Written informed consent allowed for them to be filmed with their knowledge, carrying out their usual clinical role, when appropriate. Of these 41 HCPs, only 26 were in fact filmed because of the need for them to be recorded working with a consented patient, as shown in Table 13 below. HCPs could be filmed more than once, but none were filmed more than three times, in order to spread the burden across staff and collect a variety of HCP practice.

Table 13 Recruitment and Filming for Healthcare Professional Participants

	Number of HCPs recruited	**Number of HCPs recruited and then filmed**	**Number of films collected**
Nurses	19	11	19
AHPs	11	6	10
Doctors	11	9	12
Total	41	26	41

3.3.5.2 Patient Participants

Patient participants were eligible for the study if they had a documented diagnosis (or 'working diagnosis') of dementia, were reported as having some communication difficulty by ward staff and had an appropriate consultee for consent processes if required. Patients were excluded if they had a diagnosis of Parkinson's disease, because of their likely additional communication impairments. Patients were also excluded if they did not use English in their interactions with HCPs or if medical staff expected them to die within one week.

Twenty seven patient participants were recruited to the study, 17 women and 10 men. Of these recruited participants, 13 were filmed once, 11 were filmed twice, two were filmed three times and one was not recorded at all. In total 26 of the 27 consented patient participants were recorded.

In order to reflect the spread of communication disabilities associated with dementia in the dataset, the SLT researchers described the severity of communication impairment of each patient participant as they were recruited and recorded. For each film, patients were classified by the SLT researchers as mildly, moderately or severely communication impaired[5], using informal definitions agreed between the two SLT researchers. This was deemed to be less burdensome to the PLWD than carrying out a formal cognitive assessment such as the Addenbrookes Cognitive Examination III, and allowed us to gather more appropriate information to the needs of the study. During the three-month period of recruitment, the researcher kept track of the numbers being recruited and filmed from each category of severity to ensure all three categories were adequately reflected in the dataset, so as to support the generalisability of the findings (See Figure 2 below). An emphasis was placed on recruiting people with at least a moderate communication impairment, on the assumption that these interactions would be the most challenging for both participants, and the most in need of a well-suited intervention.

[5] Mild= generally fluent speech with occasional difficulties with e.g. word finding, comprehension difficulties; Moderate= mainly verbal interaction but with frequent difficulties impacting significantly on interaction; Severe= little or no intelligible speech

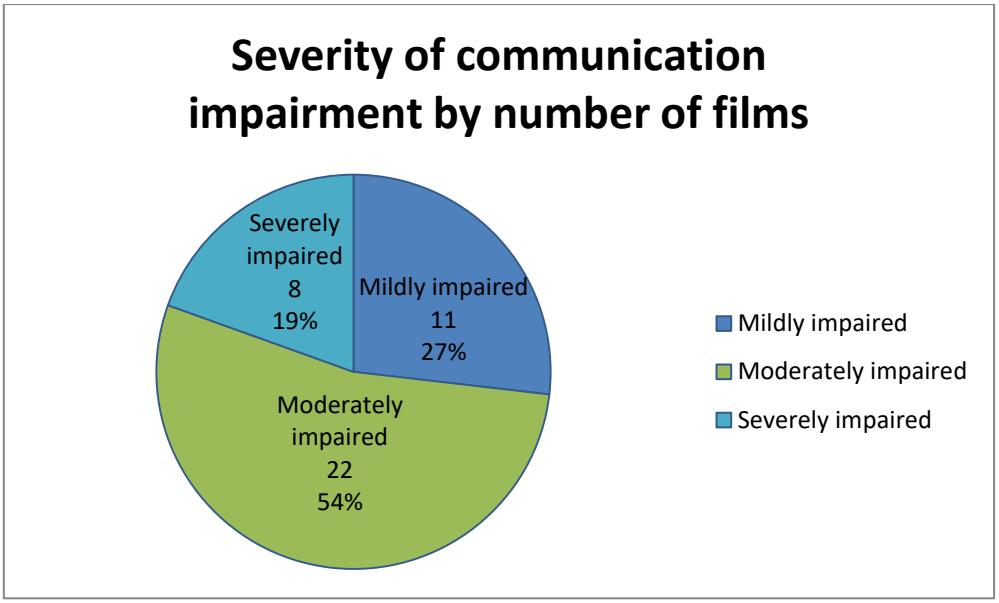


Figure 2 Proportion of films according to severity of communication impairment

3.3.5.3 Other participants

In cases where people other than the two key interactants were present in the recording, including friends or family of the patient, other HCP or student HCPs, they could also be recruited as participants to the study, subject to separate consent. This happened with two relatives (in one film) and six HCPs/students.

3.3.6 Recruitment processes

3.3.6.1 HCP recruitment:

HCPs were approached directly by members of the research team, with ward manager's permissions, to consider taking part in the study, in keeping with ethical permissions. HCPs were not identified because of any particular characteristics, although efforts were made to ensure a breadth of professions and seniorities (for example, consultants as well as junior doctors) were represented in the data collected. All wards were visited over the weeks prior to filming, to recruit HCPs. During the data collection period, HCPs were also approached directly in some cases where a patient, who they were known to be seeing, had been consented to the study.

HCPs were given a verbal explanation of the study aims and methods, and if they were still interested, then they were encouraged to ask questions and read the HCP 'Participant Information Sheet' at their convenience. HCPs were actively reassured that the project's objective was to identify 'what works' in interaction, rather than to identify poor practice in individuals, and that they could withdraw any recording from the study that they were not happy with afterwards without giving a reason.

Previous experience of filming on one of these wards, by documentary film makers, meant a number of staff on this ward had considered the issues involved and were quick to agree or not agree to be filmed when approached. Those who declined usually did so quickly, on being given brief verbal information by the researcher, and without reading the Information Sheets, often accounting for this by saying that they didn't like being filmed. Because of the informality and speed attached to the process of HCP declining to participate in being recorded for the study, no formal records were kept of the number of HCPs who were approached but declined participation.

The researcher made an effort to reassure HCPs who chose not to consent, that their decision was absolutely fine and that it would be less than ideal to record people who were uncomfortable with the process, as the resulting recording would be less 'natural'. HCPs who declined were also reassured that they could still support the study, if they chose to, through identifying suitable patients for us to consider (although in practice it was easy for them to avoid doing this, if they chose not to.) These accounts were given to HCPs in order to make their declining consent to the study as easy and comfortable as possible for them, given concerns that they might feel obliged or coerced into participation because of the insider status of the researcher (and other members of the research team). It was important to maintain ongoing comfortable relationships with all the HCPs on the wards, to facilitate both the recruitment of appropriate patients and the process of recording in their professional space.

3.3.6.2 Patient recruitment:

Ward staff from all professional groups were consulted by the researcher to consider whether any current patients might fit the inclusion criteria for the study. It was noted that staff tended to identify patients they thought more likely to consent, rather than identifying the patients with challenging communication. Discussions therefore often needed to focus on whether staff found communicating with the potential participant difficult, in order to identify people who fitted the study criteria.

Following these discussions, staff were asked to introduce the researcher to any identified patients who met the inclusion criteria. Potential patient participants were then introduced to the study aims by the researcher, using her clinical skills as a speech and language therapist to support the patient's understanding and expression.

3.3.7 Consent processes

Formal consent was in two stages, as is recommended 'best practice' for similar video studies (Parry et al., 2016), with separate forms for each stage (see Appendices A and B). Initial consent was to agree to be video recorded during a naturally occurring healthcare interaction, and for this recording to be seen and analysed by the research team, in its raw form. A detailed information sheet was provided to all participants/consultees at this stage, the study was explained verbally and an opportunity was given to ask questions before written consent was taken and data collection could begin.

Second level consent followed recordings and involved showing participants/ consultees the recordings of them on a portable device, prior to completing a consent/agreement form for various forms of sharing of the data. These included separate options for showing the video data (with names removed but otherwise undisguised) for example, in specialist data sessions, conferences, in face to face and online training. Some HCP participants did not wish to see their recordings and chose to sign second level consents on this basis. When patients were discharged before second level consent had been gained, efforts were made to visit consultees in the

community at their convenience. In three cases no suitable meeting could be made with consultees and therefore no second level consents were possible for these three recordings. Of those given the option of second level consents, only two consultees declined any sharing of the video data, which represented four films of two patient participants[6]. Full consent to share, including online, was given for 14 of the recordings and partial consent to share for the 20 remaining films.

Process consent (Dewing, 2007) allowed for participants, or the researcher, to not begin or to stop any recording which appeared to be causing distress or undue distraction, or which the patient verbally or nonverbally refused at any point. In all cases except one there were no concerns raised by either participant leading to stopping a planned recording. On one occasion a patient participant became confused about who the researchers were, immediately prior to recording. The researcher therefore asked the experienced HCP participant to check with the PLWD whether they were happy for the filming to go ahead. After discussion with the PLWD, the HCP felt it was acceptable to continue and the recording was made. Afterwards, what happened was discussed with the PLWD's consultee, who was happy that the recording should still be included in the study.

These films were still consented to be analysed for the research study but could not be shared outside the core research team.

[6] Recordings with first level consent and no second level consent, were consented to be viewed and analysed by the research team only. These recordings could not be played outside the immediate research team, for example at data sessions, conferences or during the training.

3.3.7.1 Patient and consultee consent/agreement:

Given that all patient participants had a defined 'impairment of the mind or brain' as defined by the Mental Capacity Act (MCA, 2005), an assessment was made of each patient's capacity to consent to the study. Appropriate support was offered by the SLT researchers (RA and RO), and a Mental Capacity checklist was used (MCA, 2005). Assessment of capacity by these recruiting SLTs involved answering the following four questions for each potential patient participant, with the consequential actions

Can the person (free from undue pressure):

Understand information about the study?	Yes •	No •
Retain the information (for long enough to make a decision)?	Yes •	No •
Use it to make a decision?	Yes •	No •
Communicate the decision?	Yes •	No •

(If **yes** to all – patient has capacity. If **no** to any – patient lacks capacity)

Patient has capacity? Yes • No •

If **yes**, ask patient if they are willing to take part, and take formal consent.

If **no,** contact carer, seek consultee agreement.

described below:

As described in the discussion of process consent, patients were given verbal information in a staged way, supported with props such as the video camera, and simplified written information sheets, where appropriate. A small number of patients approached were able to show some understanding of the camera and the overall purpose of the study, but no patients approached for the study were found to have full capacity to consent to study participation (nor did any regain this capacity during the study period.) At this stage, four approached patients showed some reluctance to be filmed for the study and therefore no further action was taken to pursue consultee agreement, consistent with Section 33 of the MCA (2005) which states that nothing must be done to which the participant appears to object.

Where patients showed either a neutral or positive reaction to the proposed project and the camera, a suitable personal consultee was identified and approached. Consultee agreement, as defined by Section 32 of the Mental Capacity Act (2005) and as advised on by the Health Research Authority (2018), involves identifying someone engaged in caring for the person (unpaid) and interested in their welfare, offering them full information about the study and then asking them to offer advice on what they believe the person's wishes and feelings would be, if they could give consent themselves. Identified personal consultees were therefore given the appropriate information sheets, and an opportunity to ask questions, before completing forms advising on what they believed the PLWD would want. Four consultees who were approached declined agreement and 27 gave consultee agreement.

Following any recording, second level consents or agreements were pursued at the convenience of the HCP participants and consultees.

3.3.8 Data management processes

In keeping with ethical consents and University policy, all participants' details were entered into the study database, and assigned a numerical code for anonymization of the data. Participant details and hard copies of the consents were stored in a locked cupboard in a research office, with e-versions kept on the secure University drive, as password protected documents, accessible only to a subset of the research team.

The sensitive nature of video recorded data in which participants are visibly recognisable meant careful handling of all recordings in keeping again with ethical and University permissions. Following recording, video and audio data were transferred from the camera and audio-recorder as soon as possible, to the password protected University drive, with back up on an encrypted, password protected external hard drive. Recordings were labelled by study name, HCP and PLWD participant codes, date and recording type. Once back up was secured, original recordings were deleted from the recording equipment.

Video recordings were reformatted and replayed to participants using a password protected tablet from which videos were deleted once shown. Headphones were

offered for privacy when listening back in public spaces, such as the ward or ward offices.

Videos were reviewed for any unintended recording of unconsented people, such as staff walking past during an interaction. Where possible these people were identified and post hoc consent was sought. Where necessary, recordings were edited using Wondershare Filmora software to blur the faces of any unconsented staff, patients or visitors who had been incidentally recorded.

Other editing was carried out as needed for showing of parts of the recordings and transcripts outside the research team, such as at CA data sessions. Names of people and places were silenced from the sound track and changed in the transcripts before showing outside the immediate research team, in keeping with ethical approvals.

3.4 Data Analysis

Analysis followed the conventions of CA as laid out by Sidnell (2013), involving the three steps of observation, identifying and collecting a phenomenon and describing a practice. The methods of analysis for this study will be described using this broad framework.

3.4.1 Observation of the data

Observation of the data is the starting point of CA, involving a careful and repeated watching and listening to the details of the recorded data, so that the analyst is kept 'honest to the recalcitrant details of talk-in-interaction' (Sidnell, 2013: 87). The analyst ideally approaches these observations of the data with an open mind, without preconceived ideas or theories, to allow for the 'unmotivated examination' of the data which Schegloff (1996) points out is where many CA studies have made their new discoveries. The analyst seeks to be open to spotting some interesting feature of the talk, often referred to as 'a noticing', akin to the naturalist in the field spotting an interesting specimen. However, as the CA literature has grown, it has become increasingly accepted that analysts may also refer to what is already known from CA, when identifying their phenomena of interest (ten Have, 1999). The naturalist's view

of the flora and fauna they see will be influenced by their knowledge of what is known and expectable within their current observational field, without precluding the possibility of their being able (and highly motivated) to spot new discoveries.

In this study therefore, a database of categories of interest was developed for initial screening of the data, using both inductive and deductive approaches. The initial 'unmotivated' observations of the data were made during data collection and through watching the recordings during storage and consent processes. The author-researcher was a clinician and relatively naïve to the literature of CA at this point, but was able to identify a number of possible areas of interest. Unmotivated 'noticings' at this stage included extended closings, resistance, word finding difficulties, repair, alignment, echoing responses, patient requests of HCPs, use of names, non-relevant responses and literal interpretations. These categories were then added to, following screening of the CA-dementia literature and particularly a systematic review of video-based research into communication in dementia (Dooley et al., 2015). Areas identified from the literature were humour, negative emotion, questioning, topic change, lack of topic take up, accounts, conversational frames and talking in metaphor. A final category of 'others of interest' was added to the database to ensure that nothing of interest was missed. A total of 19 phenomena were therefore available to code for each film.

Films were then watched carefully at least once and time codes were noted on the database for every occurrence or sequence of occurrences of any of the phenomena of interest. For each time code, comments were also recorded, with either a verbatim reporting of the relevant utterance or a summary note of what occurred, as shown in the example below, for the category 'questioning':

Videofile Name	Time Code	Comments
132_203_LEG	02:38- 4:01	Series of Test orientation qns: HCP Do you remember where we are at the moment?

This initial exercise in 'observation' allowed the researcher to become immersed in the data. The database allowed the researcher and the analytic team to see at a glance the frequency of the 19 coded phenomena as part of their considerations.

However, in order to proceed into observing what the outcome of practices were (ten Have, 1999) and where phenomena might be looked for (Sidnell, 2013), it was decided that establishing the phases of the interactions would be helpful, with notes on when these phases were felt to be interactionally 'successful' and when 'trouble' occurred (Heritage, 1997). Therefore each recording was watched again, and a proforma for each film was used to record which phases were present, and where interactional trouble and success occurred. These forms were also used to document contextual information from the field notes and editorial notes for each film (see sample form in Appendix C)

The observation step in this study happened mainly through direct watching of the recordings, with only small amounts of transcription for internal data sessions. During this period, recordings were sent for professional transcription using Jeffersonian conventions, as listed in Appendix D (Clift, 2016; Hepburn and Bolden, 2017). These transcriptions were then checked by the researcher and amended, in association with the video recordings, in keeping with the notion that any transcription is provisional and a 'collective endeavour' (Clift, 2016, p53) but that it needs to be 'good enough' to support analysis of the details of interaction (Clift, 2016; ten Have, 1999). The transcriptions were used to support the analysis as it developed, with necessary constant comparison with the video recordings, particularly because embodied actions were only transcribed in a limited way.

3.4.2 Identifying and collecting a phenomenon

Having spotted various potentially interesting phenomena through observation, the conversation analyst, like the naturalist, will need to decide which phenomena to make a collection of for the purposes of further study. The phenomenon will need to be found frequently enough to make a collection achievable within one's timeframe

(Sidnell, 2013) and will need to be relevant to one's overall research aims and questions (ten Have, 1999).

In this study, the researcher considered the evidence from the observations, described above, in the light of the overall aim, which was to identify trainable practices for HCPs which would lead to their improved interactions when caring for PLWD. A number of options for analytic effort were presented to the supervisory analytic team and some key data examples were viewed. Patient behaviours of interest, such as 'humour' and 'assertiveness', were excluded because it was not clear they would lead to trainable HCP practices. 'Openings' were excluded because a significant number of openings had been noted to be 'staged' for the camera (HCPs introduced themselves to the patient and then did it again once the camera was on). The final decision was for two primary areas to be pursued for collection, namely closings, particularly where extended, and HCP requests followed by patient refusal, particularly 'overt refusals'.

Collections were made by going through each recording again and time coding and clipping films and their corresponding transcripts, for every example of the phenomena. A comprehensive and inclusive approach was taken, in order to avoid biasing the selection of samples for analysis (Mehan, 1979, cited in ten Have, 1999). All the closings of the encounters were collected for analysis. Almost 70% of encounters (28 out of 41 films) were found to include some reluctance or refusal. Due to the large number of occurrences of refusal found across the dataset, this collection was further categorised into different types of refusal. Overt verbal refusals, which occurred with no mitigation, were felt to be sufficiently frequent to be prioritised for the next phase of analysis.

3.4.3 Describing a practice

The description of a practice in CA generally requires both the analysis of a single encounter and then a comparison across multiple examples (Sidnell, 2013). This allows the development of an analytic account which can be said to be 'both particularized and generalized' (Hutchby and Wooffitt, 1998). By describing the

individual case in terms of crucial analytic features such as sequential context, turn taking organisation, repair organisation and/or turn construction (ten Have, 1999) the analyst begins to make visible a possible account of what is being 'done', with the recognition that the 'locus of order is always the single case' (Hutchby and Wooffitt, 1998, p123). The analyst will try to formulate some general rules or observations that might tentatively summarise what has been seen (ten Have, 1999).

By then comparing the whole collection of instances in the light of the 'rules' derived from this single instance, the analyst seeks to establish whether their account is robust enough to identify the function of the practice beyond the context of a particular speaker and particular recipient (Sidnell, 2013). The formal account will then be expanded and refined in the light of these comparisons, supporting one's claims with additional data and contrastive examples, known as 'deviant cases', where these can be identified (ten Have, 1999). Comparisons will also be made with what is known and relevant in the CA literature, potentially from other contexts.

In addition, the process of presenting data to a varied group of external researchers at a data session is a well-established part of the CA process in which a collaborative and repeated viewing of a recording, with transcript, helps to 'neutralise preconceived notions' (Jordan and Henderson, 1995, p44) and achieve the CA goal of a 'sharable and shared understanding' in contrast to an individualised interpretation (ten Have, 1999, p123). Ultimately the process of analysis should allow us to arrive at an account which both specifies 'the context-independent, generic feature of the practice' and which shows how the generic function is 'particularised in relation to the details of some specific context' (Sidnell, 2013, p97).

In this study, the single cases of interest identified early in the process (around overt refusal of requests and extended closing encounters) were presented at internal and external data sessions to support a detailed and robust analysis (Jordan and Henderson, 1995). These cases were considered in the light of the relevant CA literature; that is, on patterns of requesting across a variety of contexts; and on closing encounters, especially in healthcare contexts. Research questions which emerged from these single case considerations included:

- For closings, were there HCP and PLWD practices which extended the interaction and/or produced trouble in the closing stages? Were there other practices which helped bring encounters to a mutually satisfactory conclusion?

- For overt refusals, was there a direct relationship between how requests for action were framed and whether PLWD refused? And were there patterns in the way that HCPs dealt with such refusals which influenced the trajectory of the encounter towards or away from subsequent acceptance of the request?

The whole collections were then considered in the light of the emerging accounts and these research questions. For example, all occurrences of overt refusals by PLWD were compared for the preceding HCP requests and the subsequent HCP responses. Then these patterns were considered in the light of the literature on requesting, which highlighted the relevance of entitlement and contingency in requesting (see Chapter 4). Contrastive or 'deviant' cases were carefully included in the analysis, to ensure a robust account was given which avoided selective use of the data (ten Have, 1999).

Finally, a list of potentially trainable practices were presented to the analytic team, with internal PPI and HCP representation, and an agreed list for inclusion in the training was drawn up (see Chapter 5).

3.5 Reflexivity

As qualitative research methods have developed, the impossibility of maintaining an entirely objective stance within any research paradigm has been increasingly acknowledged (Atkinson and Hammersley, 1994). As an 'insider' professional in this clinical setting, the researcher/author could be accused of being too close to the professional participants, introducing a possible bias or imbalance into the data collection and analysis (Kanuha, 2000). By producing a reflexive account, a researcher attempts to make transparent the contribution that their identity may have made to

the research process and findings, helping to improve the rigour of the research (Allen, 2004) and enabling the reader to assess the 'validity', or more appropriately in qualitative research, the 'trustworthiness', of the researcher's claims (Lincoln and Guba, 1985; Noble and Smith, 2015).

The following reflexive account, reported in the first person, supports these considerations by making explicit the possible impacts of the researcher's identity on the processes of gathering and analysis of data in this study. Having given my personal background as this relates to the study methods, consideration will be given to each phase of the CA methods where the issues were felt to be most pertinent.

3.5.1 Background to reflexive account

As a registered Speech and Language Therapist (SLT), I have over 24 years clinical experience of working with adults with acquired communication and swallowing difficulties, including those arising from dementia. I have worked in many settings, including in the acute hospital setting, usually working within multidisciplinary teams of doctors, nurses and AHPs, such as those featured in this study. I worked some years ago within the acute hospital in which the data for this study was collected, although not on the same wards. I was therefore familiar with some of the staff either recruited directly to the study, or who were involved in supporting the recruitment of patient participants to the study.

3.5.2 Reflexivity during Recruitment

Successful recruitment of both PLWD and HCPs required the active cooperation of ward staff. My positive professional connections with a number of staff who had worked with me as a clinician in the past may have allowed for trust to be built more quickly than would have been the case for a completely unknown researcher. Particularly in volunteering to be filmed for the study, HCPs were placing their trust in me and the research team that I represented, to analyse their communication with respect and a non-judgmental stance, looking for 'good practices', rather than poor

practice. In most cases my professional clinical identity was known to potential recruits and I used my clinical experience of their working environment to show empathy for the challenges they face in doing their jobs well. I presented this as the motivation for wanting to film them, emphasizing the gap in my own knowledge about what works well in this context, even as an experienced SLT. The literature acknowledges that access to participants is likely to be improved by some level of insider status (e.g. Kerstetter 2012) and this appeared to be the case in this study, with less successful recruitment on wards where there were fewer personal connections with the research team.

However, it could also be that any professional connections with HCPs, including our shared identity as HCPs, might make it harder for staff to decline participation for themselves or the patients in their care. I was careful therefore to emphasise their choice to decline to be filmed during information giving, and my understanding and support of the choice to decline, when it was exercised.

3.5.3 Reflexivity during Data collection

As a researcher collecting video data in the ward environment, I was to some extent an outsider, without free access to the ward, without all staff knowing my name or role, and with no clear place to belong when on the wards, with my collection of filming equipment and paperwork. The small number of SLTs employed in many settings, including hospitals, means that it is not unusual for an SLT to feel like an outsider on less frequently visited wards, rather than as a permanent team member and true 'insider'.

Unlike other staff on the ward who tend to be constantly busy with activity when 'front of house' (Goffman, 1959), I might be 'hanging around' on the ward bays, waiting for opportunities to film appropriate tasks being performed, or waiting for relatives to arrive to discuss consent. This sense of 'being a spare part' was a relatively unfamiliar experience for me as a clinician. Although there are 'between task' periods of waiting as part for the SLT clinical role, I would normally feel confident at these times in my role as clinician. In 'walking the margins' as a

researcher-clinician (Kanuha, 2000) I tended to use these times as an SLT might, in seeking out opportunities to interact positively with patients (in this case consented patient participants) aiming to improve their quality of life and making them feel comfortable having me around, as a familiar and generally supportive presence, prior to filming. Unlike an ethnographic study, in which such interactions would form part of the study data, in CA only the recordings act as data, thus minimising the influence of such interactions. However, it is possible that these patient participants might have responded more or less positively to the HCP during immediately subsequent filming, or reacted in some other atypical manner.[7]

In contrast, my status as an 'insider', having familiarity with the context from my clinical experience, proved useful in practical ways during data collection. For example, I was able to schedule recordings around ward and professional schedules with a minimum of disruption, and position recording equipment based on my knowledge of the physical requirements of clinical tasks.

3.5.4 Reflexivity during Analysis

Whilst my initial noticings in the data were not 'prejudiced' by preconceptions based on extensive knowledge of the CA literature, they were influenced considerably by my clinical knowledge and role, in assessing and intervening with those with communication 'impairments'. For example, in initial coding of the data, incidents of the PLWD having a 'word finding difficulty' stood out to me as a clinician, and were collected, without them necessarily being indicative of trouble in the interaction or forming part of any relevant social action. Demonstrations of the interactional competence of the PLWD, for example their use of humour, also drew my clinician's eye, but proved less useful for an analysis which aimed to enhance the HCP's practices in the face of interactional trouble.

[7] There was no evidence in the data that this was the case, although there are some episodes where the PLWD briefly looks at, smiles at or speaks to the researcher behind the camera, which may have happened because of the increased familiarity with the clinicians that these interactions imbued.

Having membership of the category of 'HCP' within the acute hospital setting gave me a helpful level of Garfinkel's (2002) ethnomethodological 'vulgar competence' and the weak form of 'unique adequacy', in being familiar with the everyday practices of the practitioners I was observing (Rooke and Rooke, 2015). It was helpful in transcription and as an analyst to have some understanding of the healthcare tasks being carried out, the expected roles of the various professional groups, the acute ward environment and the specific language/terms being used. For example, in some instances where SLTs were persisting with offering food or drink, I was aware that this was because they wanted/needed to conduct a swallowing assessment, rather than because they were simply addressing hunger or thirst. However, as an analyst it was also necessary to 'bracket off' as far as possible any assumptions which were not based on the displayed practices within the interactional data (a form of 'ethnomethodological indifference' as described by Garfinkel and Wieder, 1992) and data sessions, both internal and external, were crucial to support and maintain this analytic integrity.

As a clinician I identified with the HCPs I observed in the data set and the interactional challenges I saw them facing in carrying out their roles. This occurred whether I knew them or not prior to the study. Indeed, my appreciation of the dilemmas my colleagues faced, and my lack of a sound basis on which to advise them, was a major motivator for my wanting to carry out this study in the first place. As a result, I felt uncomfortable with some interpretations of HCP actions which seemed critical of their practice and I tended to want to look for the 'best' interpretation of events. For example, when I knew an SLT and believed her to be a highly competent and compassionate clinician, I wanted to interpret her 're-opening' during a closing interaction as responsive to some sign or utterance from the patient. I wanted to seek a 'positive' reason in the data for her action, believing that she was likely to be responding to something the patient was initiating. Senior analyst (AP) respected my knowledge and checked the data for evidence of what was actually displayed by the HCP-SLT. We were able to agree eventually that there was no evidence in the data that the SLT was responding to any verbal or non-verbal action by the patient and that the analytical point about 're-opening a closing' had to stand. This highlighted

the important process within CA, of sharing data and analytic interpretations with colleagues in data sessions and through publishing data transcripts within papers and thereby reducing the influence of personal preconceptions or 'biases' and increasing the rigour of the method.

3.6 Conclusion

Having established the need for a new CST intervention for this context, in Chapters 1 and 2, the question of *what* should be trained then arises. If the best CST is based on sound empirical foundations about communication in the particular context, then it was proposed that further fundamental research was required relating to how HCPs communicate with PLWD in the acute hospital. This chapter presented the case for using conversation analysis as the most suitable method for identifying the interactional practices of HCPs which work best in this context. The methods used to collect and analyse the data were then presented, with a final consideration of issues of reflexivity.

Chapter 4. Conversation Analytic Findings

4.1 Introduction

In the preceding chapter, conversation analysis (CA) was proposed as the most appropriate method with which to identify effective communication practices already in use amongst HCPs working with PLWD in acute care. The methods used in this study were described in detail to demonstrate rigour and in order to facilitate others entering into research in similarly challenging healthcare environments. This chapter will outline the findings of the CA, focusing briefly on the phased structure of the encounters before unpacking the particular interactional challenge for HCPs of managing reluctance expressed by PLWD in their care.

4.2 Phased structure of the interactions

4.2.1 Why phase structure matters

Whilst the origins of CA lie in the analysis of 'ordinary conversation', the field quickly developed to incorporate institutional interactions, such as healthcare. Institutional talk was recognised as being task focused around the institution's particular goals, with contributions constrained in ways specific to the institution and its frameworks and procedures (Drew and Heritage, 1992). Such institutional interactions were frequently found to be more routinised in their overall structure than much ordinary conversation, and the value of unpicking this in institutional talk was identified by authors such as Zimmerman (1992) and Drew and Heritage (1992). For example, the phases of an interaction were found to be relevant to analysis of how the encounter is progressed by both parties, as the interactants display their orientation to the transitions between phases. The 'overall structural organisation' of one's dataset is one of the six places which Heritage (1997) suggests as a legitimate place to 'probe' data in conversation analysis, and can be seen as helping 'establish the interactional contingencies of encounters' (Pilnick, 2001: 1927). Even though such structures do not occur rigidly in the same order in all encounters, being described as 'vague

orderly' by Jefferson (1988: 419), the attempt to identify a structure is commended by Heritage:

> "while institutional interactions cannot always successfully be described in terms of a phase structure, it is always worth making an attempt to do so." (Heritage, 1997: 227).

4.2.2 What structures have been described for healthcare encounters and are they similar to ours?

There is much CA and related work published on the phase structures of various healthcare encounters (Byrne and Long, 1976; Dingwall and Robinson, 1990; Heritage, 1997; Pilnick, 2001; Robinson and Heritage, 2005; Yi, 2009; Staples, 2015). There is however little published CA work in acute hospital settings, the exceptions being Jones (2003), who analysed nurses' admission interviews with patients, and Gordon, Ellis-Hill and Ashburn (2009) who examined nurse-patient interactions on acute and rehabilitation stroke wards. However, neither of these studies discussed the phases of their encounters. Comparisons were therefore made to other nursing and medical contexts, which begin by describing an opening phase, followed by the presenting of the problem or complaint. This is followed by an information gathering phase, which may take the form of an examination or assessment. In medical encounters this is followed by diagnosis delivery and treatment recommendations (Robinson & Heritage, 2005), whilst in nursing encounters the phases have been described as 'offering counsel' (Staples, 2015) or simply 'intervention' (Yi, 2009). All describe ending with a closing phase.

4.2.3 The identification of a phase structure in this data

As was noted in the discussion of methods, all the recorded interactions in this data set were initiated by the HCP and not the PLWD[8]. This was an artefact of the

[8] For the purposes of readability, in this analysis chapter the term 'patient' will be used to refer to the person living with dementia in these hospital encounters. This should not be taken to imply that the person is a passive recipient of care.

recording and consent processes, which in practice precluded recording of spontaneous interactions initiated by the patient, for example the patient calling over the HCP to help with an urgent concern.

The encounters recorded for this study were necessarily diverse in nature, including as they did, interactions between patients and various healthcare professionals, including nurses, doctors and a variety of allied health professionals (AHPs). As previously noted, the study aimed to gain a breadth of data and seek 'trainable' advice that could be applied across a number of HCP groups working in the acute hospital setting. In addition, the HCPs were recorded carrying out a wide variety of healthcare tasks, including routine ward rounds, giving medications, assessing swallowing, giving food and drink, assessing and supporting someone mobilising, taking observations to measure vital signs and assessing someone's home care needs through making a cup of tea.

Despite this heterogeneity, a broad five phase structure was identified which could fit with Jefferson's description of being 'vague orderly', and form a starting point for analysis of the dataset. This was:

Opening phase

Reason for visit

Information gathering

Business phase

Closing phase

All encounters began with an **opening phase** which included social greetings and personal identifiers, including in many cases the HCP using the patient's name, their own name and their role. Unlike other HCPs, nursing staff tended not to introduce themselves by name or role to the patients, perhaps reflecting that nurses were present to patients in a more ongoing way than other team members.

In the next phase, HCPs introduced their **reason for the visit**, since they were the initiators of these interactions. In most cases, HCPs made the reason for their visit explicit. The exception to this was in routine ward rounds, where doctors tended to go straight into asking a typical physician's opening question such as 'How are you feeling today?', presumably as an invitation to patient troubles-telling (Heritage and Robinson, 2006).

In some cases, a phase of **information gathering** followed. This phase was extremely diverse, including history taking questions about current feelings and symptoms (Do you feel sick? / Any pain anywhere?) and the recent past (Did you sleep well?), as well as attempts at gathering patients' wishes and concerns (What would you like to happen?). In some cases, tasks were carried out without any significant information gathering phase.

Given the diversity of intended purposes for the healthcare encounters in this dataset, the phase in which these various healthcare tasks were attempted was named the **'business' phase**. Tasks in the business phase included physical observations and examinations, assessments and practice of physical, cognitive, swallowing and everyday functioning abilities, and completion of care tasks, such as taking medications, shaving and drinking. All these tasks included some attempts at physical action/s on the part of the HCP and the patient, and were carried out more or less collaboratively. The successful completion of such 'business' tasks became an area of primary analytic interest, which will be unpacked in this chapter.

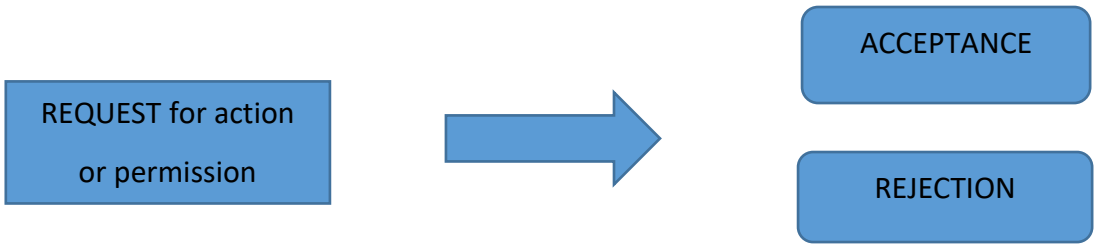
The **closing phase** of the encounter was usually initiated by the HCP. It was identified during data collection that in some cases patients did not align to the HCPs' closing moves, and the interaction could become extended and/or 'troubled' as a result. This has formed the basis of a separately published analysis, which the author of this thesis is a co-author of (Allwood, Pilnick, O'Brien et al., 2017). The findings of this analysis of 'closings' will be summarised in Chapter 5, when considering the decisions around training content in designing the intervention.

4.3 Normative patterns of requesting

As suggested above, in this dataset, the 'business' phase of the interactions frequently included the HCP carrying out healthcare tasks with the PLWD, and these were accomplished, as far as HCPs were able, through multiple request sequences. In order to analyse these HCP requests, and patient responses to them, a discussion of normative patterns of requesting, as they have been described in the CA literature, will now be presented.

4.3.1 Defining requests

Definitions of requests vary, but generally requests are utterances designed by the speaker to ask something of the recipient. In the CA literature, requests most commonly involve the speaker requesting an action from the recipient, but requests can also be for permission, information, agreement or sympathy (Vine, 2009). 'Directives' are sometimes differentiated from requests as 'telling' people to do something, rather than 'asking' (Curl and Drew, 2008; Craven and Potter, 2010). In this thesis the term 'request' will be used for utterances where the speaker tries to get the recipient to carry out a physical action (such as 'Lift your leg'), and also for utterances which request or seek permission for the speaker to carry out an action which relates to the recipient (such as 'Can I lift your leg?). Using the language of adjacency pairs (Schegloff, 2007), the request is issued as the 'first pair part' in the interactional sequence, with the second pair part being the recipient's response of either accepting/ granting/complying with the request or rejecting/ denying/ resisting it. Compliance or acceptance of the request can take the form of an immediately embodied response, with the recipient carrying out the action without comment, or can be a purely verbal response, or a combination of both.



4.3.2 Preference in relation to requesting

Requesting that another person does something (or allows one to do something to them) is generally a delicate matter interactionally, because the person making the request impinges on the autonomy of the other by requesting that they carry out an action of the requester's volition rather than their own (Curl and Drew, 2008; Kent, 2012). Requesting may therefore be done in ways which mitigate this imposition. For example the 'requestor' may attempt to prompt the recipient to volunteer the 'required' action, by verbally suggesting the action as an offer, as in this example from an everyday phone call below:

(11) Levinson (1983 : 343)

```
1 C:  Hullo I was just ringing up to ask if you were going to
2     Bertrand's party
3 R:  Yes I thought you might be
4 C:  Heh heh
5 R:  Yes would you like a lift?
6 C:  Oh I'd love one
```

Here Person 'R' infers that Person 'C' is making a request in Line 1 and so they themselves make an offer in Line 5. This removes any need for a direct request from Person C. The recipient 'R' here volunteers the action, fulfilling the implied request without the initiator being required to explicitly ask the person to do something for them. As Levinson (2013: 115) points out:

> "the action of requesting is actually avoided but the effect otherwise achieved."

In conversation analytic terms, requesting itself has been seen as a 'dispreferred action', which interactants can be shown to be avoiding. They do this by using strategies such as those in Levinson's example above (Schegloff, 2007), by delaying or by mitigating in other ways.

4.3.3 Preference in relation to responses to requests

The concept of preference in CA does not refer, in this context, to a psychological preference for agreeing to a request made of us, but rather an interactional preference, displayed through various aspects of the recipient's response (Schegloff, 2007). Schegloff (2007) describes how alternative response types in the second pair part /response position are not equally valued, or preferred. The preferred response will be the one that favours the accomplishment of the activity, which in the case of a request will be acceptance over rejection. Preferred responses tend to be immediate (often even overlapping with the request) and simple, as in the following example (cited by Heritage, 1984: 273):

(Atkinson and Drew, 1979: 58)

A: Why don't you come up and see me some[time
B: [I would like to

Reluctance to comply with or accept a request is seen as stalling the progression of the activity. Accounts of the dispreferred nature of refusal as a response to a request are well documented in the CA literature (e.g. Pomerantz, 1984; Schegloff, 2007; Pomerantz and Heritage, 2013; Pillet-Shore, 2017). Dispreferred responses are also characterised by typical features, including delayed or non-contiguous responses, mitigation and elaboration (Schegloff, 2007). Mitigation might include a 'palliative', to soften the refusal, such as an apology or compliment, or an 'account' which gives a justification or explanation for why the request must be refused (Kitzinger and Frith, 1999), such as in the following example:

(Potter and Wetherell, 1987: 86)

Mark: We were wondering if you wanted to come over Saturday, f 'r dinner.
(0.4)
Jane: Well (.) .hh it'd be great but we promised Carol already.

To give an immediate or unmitigated refusal of a request is rare and likely to be treated as accountable by the requestor. It may be perceived as rude or hostile (Heritage, 1984, p268), although this is a complex matter and will depend on the

context, for example, whether both parties can be assumed to be interactionally competent (Kitzinger and Frith, 1999).

4.3.4 Entitlement and Contingency in requesting

Over the last decade, the study of requests using conversation analytic methods, across a breadth of datasets, has further clarified that requests can be analysed usefully in terms of the two concepts of 'entitlement' and 'contingency', as initially (and separately) espoused by Lindström (2005), Heinemann (2006) and Curl and Drew (2008). A variety of authors have demonstrated how the requestor displays, through the format of their requests, how entitled they claim to be to ask the recipient to do something (their entitlement). In addition the speaker acknowledges how difficult (or easy) they perceive the task will be for the recipient to carry out and what the relevant barriers are for the recipient (the contingencies).

This brief introduction to the CA literature on requests indicates that refusal of a request is dispreferred and will rarely occur without mitigation. However, the initial analysis of the 41 recordings in the data set did not bear this out, as will now be presented.

4.4 Getting healthcare tasks done: requests and responses to requests in the data

4.4.1 An overview of HCP requests in the dataset

In this dataset everyday healthcare tasks were frequently achieved through HCPs making requests of patient, with such requests occurring in all but two of the recorded encounters. These healthcare tasks included medical examinations, such as listening to the chest; nursing 'observations', such as taking blood pressure; assessment and rehabilitation tasks, including standing, transferring, walking and making a cup of tea; and support with the taking of medications, food and drink. Within each of these healthcare tasks, the HCP may have needed to make a series of requests for action from the patient or requests for permission for the HCP to act. For

example, in listening to a patient's chest sounds, the HCP might have asked for permission to listen to the chest, then asked for the patient to move their clothing, lean forward, breathe in and out deeply, and keep repeating their deep breaths.

4.4.2 Patient responses to the HCP requests in the dataset

Each of these individual requests required some degree of physical action or passive cooperation from the patient to be 'successfully' completed, from the perspective of the HCP. The patient's response to their request was therefore displayed to the HCP through the patient's verbal responses and/or through their embodied response- that is, whether they carried out the action or not.

In these data, the second pair part responses from patients could be categorised in terms of whether they agreed to the request, rejected the request or whether agreement was ambiguous. Ambiguous responses included: mismatches of verbal and nonverbal/embodied action; an unclear verbal intention, for example due to hard to understand speech; and passive non-responses.

The extracts below show verbal examples of each response type:

1. Agreement:

```
Extract 1: 124_211

28    HCP:  can we try and have a stand up then?

29    PAT:  °yeah° (.) yea::h we ca:n
```

2. Reluctance/ refusal:

```
Extract 2: 114_225

12    HCP:  do you ↑want ↑to ↑have ↑a ↑sit ↑down ↑on
13          ↑the:re ↑for ↑me,
14          (1.0)
15    PAT:  no there's no nee:d,
```

3. Ambiguous response:

Extract 3: 122_220

92 HCP: hello:: (0.6) so can you lick your lips cos
93 they look a bit dry::
94 (0.6)
95 PAT: ye↑a::h (no physical response from PAT)
96 HCP: yeah,
97 (0.4) (no physical response from PAT)
98 HCP: they're a bit dry:::,
99 (0.6) (no physical response from PAT)

Patients responded to a HCP request with some form of reluctance or refusal in 28 out of the 41 recordings (68.3%), with many of these 28 encounters containing repeated refusals. Four of these 28 encounters contained purely embodied ('nonverbal') refusals as well as verbal refusals, but only two of the 28 encounters contained only nonverbal responses. These represented two patient participants with severely impaired communication who displayed no verbal expression during data collection.

Refusal (or at least some show of reluctance) was therefore a relatively commonplace response amongst these PLWD interacting with these HCPs, despite the dispreferred nature of refusal to a request in other contexts. This suggested a rich seam of data for analysis. This is perhaps less surprising in this data set than it might be in other contexts, given that recruiting staff were asked to identify patients who were 'challenging to communicate with'. The staff suggesting recruitment of a number of patients who went on to show reluctance suggests that staff were identifying this as a communication challenge. The nature of the patient's refusals and reluctance will now be examined.

4.4.3 Patient reluctance and refusal in the data

The collection of 'refusals' in the data were categorised as overt refusals (verbal and nonverbal), mitigated refusals, passive non-responses and those whose categorisation was unclear.

4.4.3.1 Overt refusals.

In this data set, 13 episodes across nine encounters were found of PLWD responding with verbal refusals, such as 'no', without the usual mitigation. These were termed 'overt refusals'. The example below comes following the HCP's opening greetings:

Extract 4: 133_206

```
5     HCP:                                                I ↑was ↑just
6           ↑wondering if I could help you with (0.4) relieving some
7           ↑↑pressure on ye:r ↑botto:m
8           (1.0)
9     PAT:  °°no::°° hhh
```

In this extract, the patient gives no indication that she intends to carry out the action following her unmitigated verbal 'no', with no reason given for the refusal. As was previously discussed, giving an unmitigated refusal of a request is rare in everyday interactions and likely to be treated as accountable by the requestor, with the potential to be heard as rude or hostile (Heritage, 1984, p268). These overt refusals therefore represent a striking finding and a particular interactional challenge for HCPs.

The patient's 'no' at line 9 response follows a one second delay, consistent with a dispreferred response. Delays in everyday talk amongst the neuro-typical population have been robustly identified as significant indicators of interactional 'trouble' which both parties will orient to. Whilst it is possible that a person with dementia may present delayed responses due to difficulties with language and cognitive processing, it is notable that in the case of this patient, most of her other verbal responses show no such delay, despite similarly complex contributions from the HCP and more

linguistically complex verbal responses from herself. The delay here may well therefore illustrate this patient's orientation to the dispreferred nature of her refusal.

As well as the 13 verbal overt refusals, many purely nonverbal, or 'embodied', overt refusals occurred in the dataset, with no verbal mitigation. These occurred across a further six of the encounters, often repeatedly. Examples included the patient turning their head away from the direction of an approaching spoon, closing their mouth against a cup or pulling their hand away from a blood test needle.

All those living long enough with their dementia will eventually lose their expressive language skills, and with it their ability to give an intelligible, verbal account for their choices. For these people, an overt verbal refusal of 'no' (or a nonverbal refusal) may be all their linguistic abilities will allow. However, only two of the patients who gave an overt verbal refusal did not use a mitigated refusal elsewhere in their interactional sequence. This suggests that for most patients expressing reluctance in this data set, their overt refusal was not the only linguistic option open to them, in the case where they were not immediately going to assent to the request.

4.4.3.2 Mitigated refusals

Mitigated refusals occurred across 14 of the encounters in the data set, with 11 of these containing multiple instances. The accounts given by patients for their refusal revealed three clear reasons: lack of ability; lack of willingness; and lack of perceived need. In some cases refusals were followed by talk from the patient that was hard to interpret, so that a judgement about whether or what kind of mitigation was present was not possible.

4.4.3.2.1 LACK OF ABILITY: 'CAN'T'

Conversation analysis has established that refusal of an invitation in everyday interaction is most commonly accounted for on the basis of an inability to accept the invitation (I'm unable to come) rather than an unwillingness (I don't want to come) (Heritage, 1984; Drew, 1984). This kind of refusal has a 'no blame' quality, in which the negative consequences of refusing (such as suggesting the invitation is unwanted) are avoided (Kitzinger and Frith, 1999). In this dataset, some refusals from patients

with dementia were indeed mitigated with such accounts, which suggested a lack of ability or a lack of confidence in their ability to do the task, or a lack of knowledge of the task. Since people with dementia in hospital are likely to have currently reduced abilities given their acute illness, and varying abilities as they recover from acute illness, it is perhaps unsurprising that some patients account for their refusal or reluctance in these ways. Such accounts avoid the implication that the patient is an unwilling kind of person, but suggest they would be willing if only they were able. One such example is illustrated below:

Extract 5: 124_203

30 HCP: ↑can I have a ↑little ↑look at >these legs first can you

31 just< march them up and do:wn

32 PAT: °how ↑could I?° (.) because I hurt me bo↑ttom when they

33 made me sit in that ↑chai:r this morni:ng,

4.4.3.2.2 LACK OF WILLINGNESS: 'WON'T'

However, in contrast to everyday refusals of invitations, in a number of cases the patients indicated explicitly that they did not *want* to carry out the requested action, as displayed in the following five patient utterances from five different encounters:

133_215 no no::: don't want to

107_203 I don't want to I've had enough

122_220 I don't want any now

114_225 that's it that's it I don't want none a this

115_202 oh no I don't want nenenene

In some cases patients accounted for their reluctance in terms of contingencies that would be expected to legitimately reduce their willingness or ability, for example pain, tiredness or some other contingency as in Extract 6 below:

Extract 6: 107_203

30 HCP: [so margery] (0.6)
31 ↑shall we try, (0.6) just having a little walk with this
32 frame here
33 PAT: ↑↑°no° (1.0) °it catches my ha:nd°

4.4.3.2.3 LACK OF PERCEIVED NEED

In some cases, patients accounted for their refusal by explicitly expressing a lack of perceived need, as in the extract below:

Extract 7: 114_225

33 HCP: do you ↑want ↑to ↑have ↑a ↑sit ↑down ↑on ↑the:re ↑for
34 ↑me,
35 (1.0)
36 PAT: no there's no nee:d,

On occasion patients were able to query the need for the action because their perception of their medical or social needs did not match that of the HCP. In Extract 8 below, the patient is not clear that there is anything wrong with her arm, despite the fact it is in plaster (although not easily visible as it is under her cardigan at the time of this encounter):

Extract 8: 117_227

34 HCP: mary (0.4) can I have a look at your ↑a::rm (0.8)

35 at [thi:s]

36 PAT: [↑(1 syllable)] WHY what's up with i:t (0.4) my arm

37 HCP: you ↑broke i:t

38 PAT: I ↑'aven't broke ↑i:t,

39 HCP: can I have a little [loo**k**,]

40 PAT: [°it's°] (.) ↑normal it's AL↑RI:GHT

41 HCP: u[:::::m]

42 PAT: [I 'AVE]N'T BROKE ↑I::**T**

43 HCP: let's check it's okay

The HCP's initial request is challenged by the patient in Line 36, and then the HCP's subsequent explanations and requests are further challenged by the patient in Lines 38 and 40-42. The HCP is faced with the dilemma of having a healthcare need to address with a patient who doesn't share her perception of that need.

4.4.3.2.4 UNCLEAR TALK

On a number of occasions, the responses of patients in the dataset indicate clear reluctance or refusal, with added verbal content which is harder to interpret, but might be an attempt at mitigation. The linguistic and cognitive impairments of the patients in the dataset would be likely to impact on their ability to give a clear account for their refusal, because of the demands on reasoning and language which such accounts require.

Despite being hard to fully understand, these patient comments can be seen to be treated as mitigated refusals by the HCPs. For example, in Extract 9 the patient's utterances at Lines 13-14 and Line 16 are hard to interpret, but are treated as if they are accounts for refusals by the HCP in Lines 15 and 17-18 below:

Extract 9: 133_206

9 PAT: °°no::°° hhh

10 HCP: no::? (0.6) .hhh (0.4) we- I don't want you to get a numb

11 bu:m

12 (0.6)

13 PAT: °(and our) charlie said °°because er I don't always get

14 the right number I don't know°°

15 HCP: ↑no:::?

16 PAT: cos with me eyesi:ght

17 HCP: yea:h (.) well (.) ↑how ↑about >↑I just< stand you up

18 he:re for a minute or two:. (0.8) just to get you [off

19 your]=

20 PAT: °[(I think there)]°

21 HCP: =bottom (0.8) would that be o↑ka:y?

4.4.3.3 Passive non-responses

Ten of the encounters included HCP requests to which there was no obvious verbal or embodied response. Neither the recipients of these non-responses (the HCPs) nor conversation analysts can determine the meaning of such complete non-responses from the patient. They could represent a deliberate choice to reject the requested action or a total lack of comprehension of the request (or even that a request has been made) or an inability to carry out or initiate the action requested combined with an inability to communicate this. If the patient displays no hint to any of these options in their interactional behaviours, then the hearer (whether the HCP or the analyst) is left with only speculation as to which of these underlying states might be at work. However, the manner in which the HCP deals with such non-responses will display how they have interpreted the non-response, as they attempt to steer the patient towards willing cooperation in the task at hand.

4.5 Characterising HCP requests which precede refusals

Having identified the prevalence of refusal in the dataset, categorised this reluctance and compared it to normative patterns of refusing, the analysis moved to consider the interactional antecedents of these refusal responses. Given that the overall study aim was to identify helpful communication practices which HCP already use, it was relevant to establish whether there was anything in the HCP's patterns of requesting which might have an impact on these patient refusal responses. Consideration was therefore given to examining in detail the requests which preceded the verbal overt refusals and the mitigated refusals. The dataset was then examined to identify alternative request formats, which were not connected to refusal responses.

4.5.1 Requests preceding overt refusals

The HCP requests preceding overt refusals were found to be formatted similarly to those described in other CA literature. The analysis therefore followed this literature in focusing on the entitlement and contingencies displayed in these requests (see section 4.3.4 for definitions of these concepts). In most of these request-response pairs which preceded refusal, HCPs displayed a low to moderate entitlement to ask, which will now be explored.

4.5.1.1 Low entitlement, high contingency requesting

In a number of the overt refusal sequences, HCPs displayed extremely low entitlement to make requests of the PLWD in their care. In the most striking case, shown in Extract 10 below, a nurse uses the 'I was wondering' format described in calls to out of hours GP services by Curl and Drew (2008). The nurse's overall task is to get the patient to stand up in order to relieve pressure on her bottom, which could cause tissue damage. In the extract below, the nurse approaches the patient at the bedside, initiates and completes the opening phase of greetings (lines 1-5), and then issues the initial request to the patient (highlighted in lines 5-7). This initial request for permission to 'help' the patient is met with a considerably delayed but unmitigated 'no' from the patient at Line 9:

Extract 10: 133_206

1 HCP: ↑hello ↑mau↑↑ree::n,

2 PAT °hello°

3 HCP: ↑how are ↑you:?

4 PAT: not too: bad,

5 HCP: not too bad, (0.6) good good (0.4) **I ↑was ↑just**

6 **↑wondering if I could help you with (0.4) relieving some**

7 **↑↑pressure on ye:r ↑botto:m**

8 (1.0)

9 PAT: °°no::°° hhh

10 HCP: no::?

By referring to her own 'just wondering', the HCP has prominently displayed her uncertainty over whether the patient recipient will grant the request. The HCP does not 'know', she can only 'wonder' if the proposed course of action will be regarded as appropriate or allowable by the patient. The HCP's 'wondering' suggests she expects there are contingencies limiting the patient's ability or willingness to grant the request, though she does not 'know' what the contingencies are. Framing her proposal as an offer to help with a task (line 6) displays a consideration by the HCP that the patient might not be able to complete the task alone. It can be argued that through the use of low entitlement and high contingency in her requesting, the HCP makes relevant the option and the possibility of refusal.

In requesting in this way it might be argued that the nurse displays a positive orientation to patient choice, empowerment and autonomy which is consistent with the prevailing 'best practice' philosophy of person-centred dementia care (Kitwood, 1997; Brooker, 2007). This contrasts with the requesting of staff to residents with intellectual impairments described in Antaki and Kent (2012), where there are no occurrences of such low entitlement formats in a collection of approximately 234 care staff requests of residents in their care.

However, this orientation to a low entitlement to ask on the part of the HCP in the current data set, whilst appearing warm and respectful of the patient's autonomy, will also be making a 'no' response interactionally easier for the PLWD to produce and therefore potentially more likely than if other formats were used. If the PLWD is unclear as to why they are in hospital, who this person (the nurse) is or even where they are (all of which are displayed on occasion in this data set), then this lowly entitled request may not communicate an appropriate level of urgency or importance, nor an appropriately expert and confident authority from the person requesting. In other words, the patient may not appreciate the consequences of their choice to refuse. The suggestion from the analysis presented here is that the unintentional consequence of asking in this lowly entitled, apparently 'person-centred' way, is that the nurse may be (mis)communicating to the patient that this matter is not particularly important from her own professional viewpoint, thus making the refusal more likely.

Other overt refusals were also preceded by very lowly entitled ways of requesting, formatted with the permission seeking prefaces 'is it alright if I' or 'Is it okay if I', as in Extract 11 below, in which a junior doctor is wanting to examine a patient's chest during a routine ward round:

Extract 11: 143_227

50	HCP:	°↑all [ri::ght] mary° (.) **is it o↑kay if I have a=**
51	PAT:	[huh huh]
52	HCP:	**=↑↑listen to your che:st**
53	PAT:	↑NO:::: I didn't know th't
54	HCP:	no::,

Here the HCP, following her signalling of the topic shift with 'all right' and her use of the turn initial address term 'mary'[9], issues a request for permission to carry out the

[9] All names have been changed in the transcripts.

task of listening to Mary's chest. The HCP uses a permission seeking question 'is it okay if I have a listen to your chest', which again uses the conditional 'if' (as in 'I was just wondering if', Extract 10 above) and again allows for the possibility that it won't be 'okay' with the patient, who may be unwilling to grant permission. Whilst this yes/no interrogative is formatted to expect a yes/no response (Heritage, 1984), it does provide an interactional slot allowing for either a yes or no response. It can be argued that the framing suggests at least some doubt over whether the request will be 'okay' with the patient. Indeed the optionality of a 'no' response is confirmed by the patient producing the dis-preferred response of 'no' in line 53. This framing of the request suggests the HCP is aware of possible contingencies which might lead to Mary being unwilling, although these aren't specified.

4.5.1.2 'Medium' levels of entitlement and contingencies:

HCPs also requested actions, which were subsequently overtly refused, using questioning, modal verb formats, such as 'Would you' and 'Can you'. In the literature these modal verbs are identified as having higher entitlement than the 'wondering' requests described above. The modal verbs will/would and can/could reference the patient's willingness or ability (respectively) to carry out the request.

4.5.1.2.1 WILLINGNESS

In the following extract the HCP had already spent around ten minutes verbally encouraging and physically supporting the patient 'David' to have his lunch, as he walked continuously around the ward, declining to sit down:

Extract 12: 103_225

398 HCP: **↑↑would ↑↑you ↑↑li:ke a↑↑nother spoon[fu]l da↑vi::d?**

399 PAT: [n-]

400 PAT: no no no (0.4) no don't make me any mo::re

401 HCP: ↑↑that's ↑↑fine

The interrogative format of this request (line 398) opens up the interactional space for either a 'yes' or 'no' (type conforming) response, and in this case the patient chooses to emphatically decline a further spoonful. As well as the question format 'would you like' clearly highlighting the optionality of granting the request, the HCP has also offered 'not liking' as a possibly contingency on which basis the patient might decline. The nurse is inviting David to have some more, with the decision resting entirely on his preferences, which is supported in this case by the nurse's positive acceptance of his refusal at line 401, with 'that's fine'. Previously in this encounter, the nurse has used many similarly formatted requests which David has accepted, taking food on some of these occasions and not others.

A less typical construction which also references the patient's preferences and willingness comes in the following extract. The nurse is putting the patient's cardigan back on after completing the primary healthcare task (checking the patient's skin integrity around her arm plaster). Immediately preceding this extract the patient has been engaged in a hard to follow and distressed-sounding narrative, which referenced her parents, and was not associated with her current circumstances in any obvious way. This culminated around line 95:

Extract 13: 117_227

95	PAT:	[for] ↑god's sake leave me alone [huh]
96	HCP:	[do] you [fan-]
97	PAT:	[alo-]
98		huh [huh]
99	HCP:	**[do]you <u>fan</u>cy going for a ↑<u>wa</u>lk ma[ry]**
100	PAT:	[↑N]O::: ↑NO: huh
101		huh [huh huh] huh
102	HCP:	[no::::,]

At line 96 the nurse interrupts the patient's distressed talk with a partial attempt and then reformulates the full request as a suggestion or invitation at line 99. In using 'do

you fancy' rather than 'would you like', the nurse communicates something about her suggestion being a 'treat', and this could be seen as strongly promoting her suggestion for action to the patient. However, rejection of the request is made relatively easy interactionally, because the potential account is provided for in the request- that the patient doesn't 'fancy' going for the walk- and 'fancying' also requires no accounting for, as it is entirely a personal matter.

4.5.1.2.2 ABILITY

HCPs also used requests formatted with 'Can you' prior to a number of overt refusals, with the modal verb here referencing the patient's ability to grant the request. In Extract 14 below, the doctor is trying to listen to the patient's chest sounds with a stethoscope, when he issues the request at Line 202:

Extract 14: 140_211

202	HCP:	**>can you< [take a] ↑deep breath in and ou:t my dear**
203	PAT:	[u::::h]
204	PAT:	no::
205	HCP:	just try
206	PAT:	no:: I don' think >I c'n<

As is frequently the case in this data set, the HCP's request for a new action by the patient is formatted as a question of ability, 'Can you take a deep breath in and out'.[10] Whilst this would normatively be treated as a request for the patient to begin deep breathing, rather than an enquiry into whether the person is able to do deep breathing, in this case the patient's initial unadorned 'no' response doesn't clearly differentiate. If the patient had said 'no I can't' or 'no I don't want to' this would have made the basis of the refusal clear. The HCP treats the response as if it has been declined on the basis of ability by suggesting at line 205 that the patient 'just try'. The patient's response at line 206 clarifies that her refusal was based on her 'thinking'

[10] Curl and Drew (2008), in their own footnote, assert that it is now generally accepted that the modal interrogative 'can/could you' is used normatively to ask people to do something and will generally not be regarded as an enquiry into whether the recipient is able to do what is requested.

(suggesting some uncertainty) that she might not be able to, possibly because of the back pain which she has been reporting earlier. By using the format 'Can you do X' the HCP has built in the possibility of a yes or no response, and their use of 'can' alludes to the possible contingency that the patient may be unable to carry out the action of breathing deeply.

4.5.1.2.3 ABILITY AND WILLINGNESS

In a further example, the HCP (a physiotherapist) uses a construction which possibly references both capability and willingness, to propose a walk for rehabilitation purposes:

Extract 15: 107_203

18	HCP:	**so ↑margery do you feel up to having >a bit of a<**
19		**↑↑wa::lk today**
20	PAT:	↑no:::,
21	HCP:	no ↑why ↑not?
22	PAT:	°don't feel like walking°

As in Extract 13 above ('do you fancy going for a walk') the HCP's format here offers an inbuilt account for refusing the proposed activity- that Margery won't 'feel up to it', which she then confirms as the reason in Line 22. 'Feeling up to' doing something probably requires us to regard ourselves as both able and willing, and we could decline on the basis of either.

4.5.1.2.4 SUMMARY –MEDIUM LEVELS OF ENTITLEMENT AND CONTINGENCY

The HCPs in all these cases, can be argued to show higher levels of entitlement and less orientation to patient contingencies than in the 'I wonder if' and 'Is it alright if' prefaced requests presented in section 4.5.1.1 , as is argued by Curl and Drew (2008) in their comparative study of these two types of requesting. In the modal requests,

the contingencies of willingness or ability are displayed, but not necessarily presented as problematic.

4.5.1.3 High entitlement and low contingency requesting prior to overt refusal.

The majority of requests prior to an overt refusal in the data set were characterised as either low or medium in entitlement, as described above. However there were a few exceptions to this, all of which occurred during one encounter in which a HCP/ Speech and Language Therapist (SLT) was attempting to assess the swallowing of a patient with dementia whose oral intake for both food and fluids had become dangerously low. In a videoed encounter lasting 12 minutes the patient refuses (both verbally and nonverbally) almost all attempts to give him something to either eat or drink, despite the HCP using multiple physical and therapeutic strategies and multiple interactional approaches. The most overt of these refusals (i.e. issued without mitigation) are issued some time into the encounter, following requests which combine statements of intent with embodied 'requests', i.e. presenting the food or fluid to the patient's mouth, as in Extract 16 below:

Extract 16 122_220

150 HCP: oka:y (0.4) so:::,
151 (0.4) **we ↑do ↑it to↑gether,**
152 (HCP moves glass, with hand over hand, towards PAT)
153 PAT: here none of that
154 (PAT moves glass away from himself) (1.0)
155 HCP: okay (0.6) you tell me when you're ready::

Although the exact wording of the patient's refusal at Line 153 is hard to hear, the accompanying embodied refusal and the HCP's treatment of it as a refusal indicate

that it can be treated as such for the analysis. The HCP's verbal request, 'we do it together', following her indication of topic shift in the prolonged 'so:::', is formatted as an announcement of what will happen, without any projection of an option to refuse or accept, and without any overt reference to contingencies that might make the task difficult for the patient. This issuing of a request as a 'bald imperative' (Antaki and Kent, 2012) presents as a highly entitled way of requesting, with reference to low or no contingencies. In this case the HCP also moves the glass towards the patient and thereby embodies a highly entitled directive which the patient refutes with his emphatic 'here none a that' and his moving of the glass away from him again in response. This sort of patient response to a highly entitled way of asking is consistent with the body of work from Kristine Williams (Williams et al., 2009) which suggests that 'resistance to care' responses in people with dementia are more common in residential care following incidents of highly controlling 'elderspeak'. However, as will be shown later in this analysis, highly entitled requesting is not frequently refused in this data set, and it will be argued there are important differences between Extract 16 and the 'non-refused' examples in the data.

4.5.2 Requests preceding mitigated refusals

In the mitigated refusal responses, the majority of preceding requests were delivered in ways which referenced the patient's ability or willingness to comply. Where HCPs referenced ability in their request, patients tended to use mitigating accounts which were fitted to the request, by referencing inability to comply in their responses, as in Extract 17 below:

Extract 17: 124_203

33 HCP: **↑can I have a ↑little ↑look at >these legs first**

34 (HCP tapping each of PAT's knees twice)

35 HCP: **can you just< <u>mar</u>ch them up and do:wn**

36 (HCP moving his two hands up and down alternating)

37 PAT: °how ↑could I?° (.) 'cause I hurt me bo↑ttom when they

38 made me sit in that ↑chai:r this morni:ng, (0.4) so I

39 can't get ↑that one [up very well]

In Extract 17 the HCP (a physiotherapist) asks two consecutive modal questions- one permission seeking question, with himself as the agent (**Can I** have a little look), followed by a request for action, framed as a question about the patient's ability to act (**Can you** just march them up and down). In this case the patient is able to give an (almost) fitted response in which she explains why this suggestion isn't possible for her (Lines 37-39).

There were no very low entitlement requests preceding any of the mitigated refusals. There were some highly entitled requests, formatted as imperatives, and usually delivered during an ongoing activity when a number of previous refusals had occurred. Most of these were refused by patients on the basis of a lack of willingness, as in Extract 18, taken from further on in the swallowing assessment previously discussed:

Extract 18: 122_220

226 HCP: **↑try a little bi:t** (spoon touches lip as patient speaks)

227 PAT: I don't really want to do ↑tha::t (face turns from spoon)

4.6 Alternative Request formats (not preceding refusals)

This analysis shows that patient refusals were frequently preceded by HCPs using formats for requesting that were making relevant the option of refusal. The hypothesis was formed that since higher entitlement requests would project acceptance responses and not allow for refusal, such higher entitlement requests might be more likely to lead to acceptance responses (all other things being equal). Although there were a small number of refusal responses which followed higher

entitlement requests, as described above, these seemed to occur late on in long sequences of refusal responses, and the verbal requests tended to be accompanied by physically embodied 'requests' which patients physically rejected (see Extract 18: 122_220 above.)

It was therefore decided to search the data for HCP requests which were formatted to display higher entitlement. Given the overall project goal, to identify communication practices which 'work' and might be trainable, it was felt important to identify if there were any such patterns of requesting in the data, and not just identify the possibly negative consequences of asking patients in warm but lowly entitled ways. Four types of request format that display higher entitlement to ask were identified.

4.6.1 Announcements of future action

A number of HCPs were identified as using announcements of future actions through the use of the formats 'I'm/We're going to', or 'I will', such as 'I'm just gonna pop this on for you', 'We're going to sit on this chair here' and 'I'll just pop your cardigan off'. These were often followed with a checking, permission seeking question such as 'is that okay?' or 'alright?' This type of 'announcement as request' was used frequently by one HCP during her swallowing assessment, as in Extract 19 below:

Extract 19: 111_212

266 HCP: o:kay (0.4) **↑I'm ↑↑just ↑↑gonna ↑↑give ↑↑your ↑↑mouth a**

267 **little ↑wipe (0.6) you have some white just around your**

268 **lips is tha o↑ka::y,** (0.4) .hh and then that'll be us all

269 done (2.6) **is that o↑ka:[::y,]**

270 PAT: [↑yea]::h,

271 HCP: yeah?

272 PAT: °yeah°

273 HCP: all right

Following the HCP's 'okay' at Line 266, to indicate the closing of the previous sequence and moving to a new topic (Schegloff and Sacks, 1973; Beach, 1995), the HCP announces the action that she intends to carry out 'to' or 'for' the patient, which is to wipe the patient's mouth. The announcement of her action to the patient displays a high entitlement to ask on the part of the HCP. The HCP is suggesting that the action is going to happen, and not providing an interactional space for the patient to decline the activity.

However the HCP significantly softens this high entitlement request with a number of important practices. Firstly, after a 0.6 second pause in which no patient response is forthcoming (line 267), the HCP explains why this action needs doing with her account of the 'white' round the patient's lips, displaying the HCP's sensitivity to the dispreferred nature of such requests and the potential need to account for it (Schegloff, 2007[11]). The HCP is also orienting to epistemic knowledge that the HCP has which the patient does not appear to have, that there is something on the patient's lips that she has not removed spontaneously herself (Stevanovic and Peräkylä, 2012). Antaki and Kent (2012) speculate that some requests in their data set (residential care interactions with people with intellectual impairments) might have been completed more quickly if a rationale had been given first. Although the explanation in Extract 19 is issued after the request, it appears to come as an immediate response to the pause in the patient's response, suggesting that the HCP was sensitive to the appropriate need for such an account from the patient's perspective.

Secondly, the HCP follows her request and explanation with a permission seeking, or checking, question firstly at Line 268 'is that okay', and then repeated when she pursues a response at Line 269. This checking question does then allow for the patient to report that the proposed activity is 'not okay' with them, and thereby softens the highly entitled announcement 'I'm just gonna wipe your lips' with orientation to the patient's right to allow or not allow the proposed activity (referred to as 'deontic authority' by Stevanovic and Peräkylä, 2012). However, this form of tag

[11] Schegloff (2007:83) suggests requests are regularly accompanied by explanations.

question strongly prefers an affirming response, and this pattern of requesting using an 'announcement + checking question' is only ever followed by assent in this data set.

Thirdly, the HCP references an awareness of contingencies in her downgrading of the task with the indexical items 'just' and 'little' within her announcement at Line 266- 'I'm <u>just</u> gonna give your mouth a <u>little</u> wipe'. These items work to display the task as less intrusive for the patient (or onerous for the patient where within their domain of action) and as such could be seen as a 'lowering of contingencies'. Practices which act in this way are extremely prevalent in the data set. This runs counter to the examples given by Antaki and Kent (2012) of 'bald imperatives', where no account is taken (by the speaker in authority) of the possible challenges in completing the request from the other person's perspective.

In the swallowing assessment extract above, the context was an encounter in which the patient and HCPs goals appeared mostly aligned. However, this mode of requesting was also seen in interactions which involved patients who had previously shown reluctance to comply with the proposed activity. In the following extract, the patient was known to have declined to be shaved in the previous hour, when it had been suggested to him by a member of nursing staff on his bay. The videoed encounter captured a specialist mental health nurse who approached the same patient and after their initial discussion of the shaving task, the following conversation takes place as they walk down the ward:

Extract 20: 114_225

20	HCP:	u:::m, (0.6) okay **we're just gonna ↑use this ↑<u>ba</u>throom**
21		**he:re we'll have a, (0.6) a ↑quick sha:ve (0.6) and get**
22		**you ready for the day is ↑that al↑right?**
23	PAT:	yeah
24	HCP:	↑yeah?
25	PAT:	[<u>ye</u>ah]
26	HCP:	[good] ma:n. (0.6) <u>r</u>i:ght

Here an experienced HCP uses this practice of 'announcement' to present the activity as about to happen, with the downgrades 'just' (line 20) and 'quick' (line 21) and the account for why it might be relevant ('to get you ready for the day'), occurring before his checking/ permission seeking question 'is that alright'. The HCP is displaying an awareness that the task might seem onerous to the patient, but is 'selling' their perspective that it is not. The HCP in this extract therefore appears to have maximised the chances of assent from the patient, and in the context of previous refusal, the patient appears to go along with the activity, accompanying the HCP in walking towards the bathroom, without reluctance being displayed.

4.6.2 Proposals

HCPs also formatted requests as proposals for joint activity (Stivers, Heritage, Barnes et al., 2018), using 'Let's', as in Extract 21 below.

Extract 21: 142_220

95 HCP: **let's have another go ↑shall ↑↑we::?** (0.6) you were going

96 >to have a ↑little< ↑drink for ↑↑me::,

97 PAT: ↑yeah

98 HCP: ↑here ↑we ↑go

This extract is taken from four minutes into an encounter in which the HCP (a doctor) has been trying to get the patient (the same man as in Extracts 3, 16 and 18 above) to drink some water. 'Let's have another go' references the previous repeated attempts at the activity, and frames the activity as shared, one that they will carry out together. As this patient is no longer giving himself food or drink independently, the HCP has been supporting the patient with the activity of drinking, for example, using

a ‘hand over hand’ technique[12] to take the cup to the patient’s mouth. In this sense the activity of drinking has indeed become a joint enterprise for the HCP and patient. The HCP using ‘Let’s’ displays high entitlement to request that the patient join in with the HCP’s activity, and is using a persuasive strategy that we might engage in, in everyday talk, when trying to recruit someone to do a joint activity with us that we are keen to do ourselves. The option to decline the invitation is not projected, and an ‘okay’ type response is strongly preferred. However, the projection of the sharing of the activity gives the ‘Let’s’ format an ‘invitational flavor’, which West (1990; p89) suggests proposes a more symmetrical relationship between interactants. As such it fits the search in this data set for more highly entitled ways of requesting which still maintain a sense of respect for the patient.

Interestingly, proposals starting with ‘Let’s’ in this data set appear to be mainly used in combination with references to a sequence of activity and previous attempts, rather than in proposing a completely new activity, as can be seen in these further examples below:

Extract 22: 111_212

65 HCP: ↑oka::y (0.6) **so let’s have another ↓go::,** (0.4) >so I’m<

66 gonna put my hand he::re, (0.6) o↑ka::y? (0.6) just for a

67 seco::nd, (0.6) >and we’re< gonna take a drink. (0.6)

68 al↑right?

69 PAT: °u::h°

Extract 23: 124_203

114 PAT: ↑A::::H (0.6) I ↑can’t do it (0.6) °it ↑hurts°

115 HCP: too sore,

116 (0.8)

[12] The ‘hand over hand’ technique is recommended by SLTs as a technique for facilitating the trigger of the swallow in those with significant neurological impairments.

117 PAT: °°yea:h°° (0.4) °°(?)°°

118 HCP: **let's ↑try again** (1.8) on three (0.4) ↑o:ne, (0.4) two:,

119 (0.6) three:, (0.6) stand ↑↑up,

120 PAT: ↑A::::H (0.6) ↑o:::h

4.6.3 Statements of need

In some cases, HCPs used an announcement of their own needs or the needs of the patient as a form of request. In Extract 24 below the HCP follows up her multiple statements of need (at Lines 61 and 66) with a permission seeking question, 'is that alright' (Line 68) suggesting that the statement of the HCP's need was functioning as a request for permission to act:

Extract 24: 1_133_215

61 HCP: **I ↑need yea:h I ↑need to put something over tha:t** (0.4)

62 to [stop it]

63 PAT: [there's] (↑it) it's plaster the:re (0.4)

64 [that's] where it is

65 HCP: **[I ↑nee-]**

66 HCP: **I ↑need to wrap it up,**

67 PAT: mm an- [(?)]

68 HCP: **[and] give it a ↑↑clea::n is that ↑alri:ght?**

The HCP giving their own needs as a justification for requesting an action, which is for the patient's benefit, would suggest an extremely high entitlement on the part of the HCP and/or a high level of clinical need (as in the case of treatment recommendations as 'pronouncements' in primary care encounters, Stivers et al., 2018). West (1990) describes (mostly) male GPs frequently telling patients what they

'needed to' (or ought to) do and characterises this as an 'aggravated directive' which in her (rather limited) data set was more likely to be met with an 'aggravated response' (West, 1990: 92). However, in this encounter, the HCP has packaged the entire activity as one which she (the HCP) needs to carry out and requires the patient's permission to do, and which she will not (and does not) pursue until this permission has been given. In this case, the high entitlement is softened by the HCP's deference to the patient's deontic authority, to allow or not allow the activity to proceed, displayed through the checking question 'is that alright?'

4.6.4 Direct instructions

HCPs also used direct instructions or 'bald imperatives' as Antaki and Kent (2012) classify them (or 'explicit commands' in West, 1990) when requesting actions of patients, constructed with no visible subject, as in 'have a little drink' or 'take a step'. These were used most frequently as part of a sequence of instructions, as in the physiotherapy session in Extract 25 below (where these formats are highlighted in bold font):

Extract 25: 124_211

153 HCP: ↑we:ll done

154 PAT: u::↑:::::h hu::::h (0.6) °↑a:::h ha ha°

155 HCP: **nice and steady rou:nd,**

156 PAT: °↑a:::::h ha::::h° (0.4) °°uh huh huh°° (.) °°uh huh huh°°

157 (0.4) °a:::h ha ha°

158 HCP: .hhh **↑keep hold of the fra:me els↑ie:,** (0.4) **turn round**

159 **with the frame** (0.6) that's ↑it,

160 PAT: °u::h° (.) °huh huh° (0.4) °u:::h huh huh°

161 HCP: **use the fra:me turn all the way round**

162 PAT: °a::h ha ha° (0.6) °uh huh huh °

163 HCP: that's it

164 PAT: °uh huh°

165 HCP: **slowly do::wn,**

166 PAT: ↑o:::::h hhh

167 HCP: o::kay

168 PAT: oh go:::d.

169 HCP: ↑well done,

The HCP (a physiotherapist) has supported the patient with walking down the ward and back to her bedside, where she now needs to turn herself round with her frame and lower herself into her chair, with the physiotherapist's guidance and support where necessary. This extract shows a sample from a longer sequence of instructions issued in this way during this walking activity. Such instructions or 'commands' display very high entitlement to ask, with no option to decline being presented to the recipient. In the literature they are typically shown displaying no sensitivity to the recipient's contingencies, and as expressing no doubts about the speaker's entitlement to make the request (Antaki and Kent, 2012).

However, in this data set, the HCPs use these formats in rather specific circumstances and in specific ways, which could be argued to work to 'soften' the high entitlement instruction. In terms of context, many such instructions are issued during an ongoing, 'agreed to' activity, such as walking down the ward and back for therapeutic purposes. It appears that having gained agreement to 'try' walking early on in the encounter (despite some patient reluctance), the physiotherapist is able to give a series of clear and simple instructions to the patient, which she promptly complies with, without the HCP needing to negotiate each instruction with reference to choice.

In addition, many of the imperatives in the data are issued with reference to contingencies within their construction. In Extract 26 below, the same physiotherapist, with a different patient, orients to the effort involved for the patient, by referencing 'trying' in lines 211 and again in 218.

Extract 26: 124_203

211 HCP: shall we try again? (1.2) **just try and go for i:t** (0.6)

212 on three (0.4) ↑o:ne (0.4) two: (0.4) three (0.6) **stand**

213 **↑up**

214 PAT: ↑A:::H

215 HCP: [the]::re (.) [there] you go ↑w[ell] ↑done

216 PAT: [↑oh] [o:h,] [↑oh]

217 PAT: ↑oh ↑oh [↑oh]

218 HCP: **[try] and straighten those ↑knee:s**

219 PAT: ↑oh ↑o:::h

220 HCP: **↑straighten ↑those ↑knee:s,**

221 PAT: ↑huh ↑huh ↑huh ↑huh

Indeed in a number of encounters, the HCP's only use of the imperative format is in the context of encouraging them to 'try' something, following some orientation (by either interactant) to difficulty carrying out the task. For example in the context of trying to get the patient mentioned earlier to drink as much as possible, following a successful sip, the HCP asks:

Extract 27: 142_220

127 HCP: how was that

128 PAT: ↑not ba:d

129 HCP: not ba:d **try a bit more**

And shortly afterwards, again:

136 HCP: >little bit< spilling ou::**t** (1.4) **try ↑one ↑mo:re**

137 PAT: yeah

The only imperative issued in the encounter 122_220 was very similarly formatted with 'try a little bit'. Requesting that the patient 'tries' to do something (rather than baldly 'doing' it), displays the HCP's sensitivity to a potential lack of ability or difficulty carrying out the task for the patient, and orients to the HCP not requiring success from the patient, but rather effort.

HCPs also used 'just' as part of the direct command, orienting to the requested task as one which might not be very demanding in terms of time or effort after all, as in the following examples:

102_221

17 HCP: **just ↑come [↑this ↑way]**

111_212

175 HCP: **↑just try to swallow it,**

122_220

288 HCP: **[just] ↑one dri::nk,**

4.6.5 Overview of HCP requesting

The analysis of requests in this dataset focused first on the requests preceding refusals (section 4.5) which established that orientation to low and medium levels of entitlement tended to precede displays of patient reluctance. The dataset was then examined for the variety of alternative formats used by HCPs in their requesting, with a particular focus on identifying whether HCPs used higher levels of entitlement in some of their requests. These formats were described as they occurred within their sequential contexts, allowing us to illuminate the detailed aspects of HCP requesting, for example the ways in which HCP requests tend to reference the lowering of contingencies in combination with use of high levels of entitlement. A frequency count of request types across this dataset showed that out of 608 requests, just over half could be classed as highly entitled (53%, n=321), with the rest being classed as medium or lowly entitled (see Appendix M, page 326).

However caution should be applied in over interpreting such quantitative data, since the sample was not selected to be representative. In this sample of these particular patients, with these particular HCPs, in these particular healthcare encounters, highly entitled requests were prevalent. It is also plausible that the HCPs choosing to be filmed for the study were particularly skilled at dealing with these challenges, and therefore these frequency counts should not be generalised inappropriately to the general HCP population.

The analysis will now move on to unpack how these HCPs might deal with reluctance once it has occurred.

4.7 Managing reluctance: HCP responses to patient refusal

4.7.1 Introduction

Analytic attention turned finally to consider, in the face of reluctance and refusal from patients to carry out important healthcare tasks, what communication resources do HCPs use to try to achieve the task, in the patient's best interest? Following the initial request, however it is formatted, and a refusal response from the patient (mitigated or not), HCPs are left with the dilemma of how to encourage this person with dementia to do this action (or agree to the HCP doing it), whilst acknowledging and respecting that person's right to choose to accept or decline. Even though HCPs may be highly sensitive to accusations of being controlling and authoritarian, they are anxious to motivate the patient as best they can to achieve these healthcare tasks, in order to produce the best healthcare and wellbeing outcomes for the patient.

This analysis will therefore turn to consider encounters in which the task was mutually achieved, in the face of clear initial reluctance from the patient. Analytic attention was paid to how practices moved the interaction towards 'acceptance' rather than away from it, moving upwards on the 'interactional spiral' as described by Stokoe (2016a) rather than downwards. Analysis sought to identify whether there were practices which appeared to achieve these moves 'upwards' towards achieving the task, whilst still supporting the patient's personhood.

4.7.2 The Pressure Stand

In Extracts 4, 9 and 10, referred to earlier, the patient 'Maureen' is at risk of getting pressure sores if she doesn't stand and move regularly. The HCP (a nurse) approaches the bedside where Maureen is sitting, greets her warmly and then (as we saw before) issues the following request:

Extract 4: 133_206

5 HCP: **I ↑was ↑just**

6 **↑wondering if I could help you with (0.4) relieving some**

7 **↑↑pressure on ye:r ↑botto:m**

8 (1.0)

9 PAT: °°no::°° hhh

10 HCP: no::?

The HCP's request is issued in an extremely lowly entitled way and the patient responds, after a pause indicative of a dispreferred response, with her unmitigated 'no'. The HCP's first, immediate response is an exaggerated and questioning 'no?' at Line 10, a query which displays the HCP's surprise at this overt refusal. This is a common response to any type of patient refusal in this data set, as seen in a number of extracts previously cited (see Extracts 11, 13 and 15).

After an interrupted pause totalling one second, in which the patient does not take up the opportunity to respond, the HCP continues to deal with the refusal with an explanation of what might happen if the task isn't completed (Lines 10-11), i.e. that the patient might get a 'numb bum':

10 HCP: no::? (0.6) .hhh (0.4) we- I don't want you to get a numb

11 bu:m

12 (0.6)

13 PAT: °(and our) charlie said °°because er I don't always get

14 the right number I don't know°°

15 HCP: ↑no:::?

The partial 'well' from the HCP, at line 10, presents the explanatory account which follows as a contrastive response to the patient's refusal. This supports the impression that the HCP has heard and acknowledged the patient's reluctance, and is now going to respond to it. The offering of the explanation itself can then be seen as 'moderating assertiveness' in requesting (Antaki and Kent, 2012: 883), orienting to the possible consequence for the patient of her refusal (the 'numb bum'). This use of very colloquial language, in direct contrast with the initial request which used healthcare terminology ('relieving some pressure on your bottom') may be functioning as a kind of repair, suggesting that the HCP may be orienting to the possibility that the initial request wasn't fully understood by the patient, whose simple 'no' response does not reveal what she has understood of the request.

After a pause, the patient replies with some hard to hear talk in Lines 13-14. In CA, analysts look at how such utterances are treated by the partner in talk, rather than guessing at what the intended meaning of the speaker might be. In this case, the HCP responds with another querying 'no?' at Line 15, which displays the HCP's treatment of the patient's utterance as showing continuing reluctance. The patient further expands on this in her next turn at talk:

16 PAT: cos with me eyesi:ght

17 HCP: **yea:h (.) well (.) ↑how ↑about >↑I just< stand you up**

18 **he:re for a minute or two:. (0.8) just to get you [off**

19 **your]=**

20 PAT: °[(I think there)]°

21 HCP: **=bottom (0.8) would that be o↑ka:y?**

The patient's utterance at Line 16 now sounds more clearly like a mitigating account, beginning as it does with 'cos'. The HCP doesn't respond to the specific content of this hard to interpret account, but uses a 'yeah-well' preface, thus (at least minimally) accepting the patient response ('yeah'), before indicating her readiness to propose an alternative ('well'). This 'alternative' suggestion for action is then announced in an even more explicit way with the phrase 'how about', prior to the specific action being described (standing her up). This explicit marking of the HCP's response as an alternative proposal displays what might be called the HCP's 'negotiating stance', which projects that the HCP's next responses will be responsive to the patient's concerns and contingencies.

In addition, the HCP has now reformatted the request considerably, so that the specific action required of the patient has now been articulated and specified- the patient is required to allow the HCP to 'stand (her) up', rather than 'relieving pressure'. In a number of encounters, HCP's similarly didn't initially specify the physical actions required of the patient, instead tending to present the initial request in terms of the purpose or goal of the interaction. (For example, 'can I take your blood pressure' becomes 'can I borrow your arm'.) Whilst this is an unsurprising interactional sequence, it may lead to the unintended consequence that patients who refuse an initial request are not refusing the specifically required physical task (which may be quite simple, concrete and not onerous or intrusive) but rather a more abstract and/or technical term, which may be harder to fully understand (such as taking blood pressure or relieving pressure).

In terms of entitlement, the reformatted request across Lines 17-21 makes a proposal without the 'wondering' and without the conditional 'if', thus raising the sense of entitlement of the requestor from the initial request. However, proposals still require assent, which the patient fails to give in the potential space (0.8 second pause) at Line 21. The HCP then pursues permission with her checking question 'would that be okay', as discussed earlier, which emphasizes the patient's authority to make the final decision over whether the HCP can stand the patient up, or not, but with a question which strongly prefers an affirming response from the patient.

Finally, the sequence in Lines 17-21 displays that despite requesting in a more highly entitled 'proposal' format, the HCP strongly orients to there being many contingencies for the patient. This is in contrast to highly entitled requests in the literature (e.g. Craven and Potter, 2010; Antaki and Kent, 2012) which are associated with no orientation to contingencies for the recipient. The HCP here uses 'just' twice, which functions to downgrade the task to something less demanding than perhaps originally perceived by the patient. The HCP also specifies the place and duration of the task as 'here for a minute or two' which similarly functions to display the specific limits of the task, which in association with 'just' works to make the task sound less onerous for the patient. It appears that the HCP is explicitly 'lowering the contingencies' for the patient in her talk.

Despite these efforts from the HCP, the patient's next response does not indicate acceptance of the preceding proposal in Line 21 'would that be okay':

22 PAT: [°(if you got we can)° (0.4) put me i:n (0.6) he::re,]
23 [(PAT tapping tissue box with right hand)]
24 (0.4) °>(for) I< can't get, [(see the-)]°
25 HCP: [I ↑don't] think you'd fit in
26 [↑the:re,]
27 [(HCP touches tissue box)]
28 PAT: [°I then u::m,° (0.6) I told well I]
29 [(HCP looks under PAT's table, picks up handbag)]
30 PAT: (0.4) [take] that=
31 HCP: [right]
32 PAT: =an- (0.6) [stuck it (0.6) in the ↑pa:th,]
33 [(HCP put bag behind PAT's chair)]
34 HCP: yeah, (0.4) ↑mauree:n, (0.6) can I ↑just ↑move ↑this
35 ↑table out the way just for a min↑u:te,
36 PAT: °°yeah°°

37 HCP: is that al↑right?

38 PAT: °°this o:ne°°

39 (0.8)

40 HCP: ↑↑↑whoop,[(.)↑let's leave that on the table just for a]=

41 [(HCP touches tissue box, stopping it falling)]

42 =minute,

43 [(2.0)]

44 [(HCP moves PAT's table to side)]

45 HCP: tha::t's ↑it, [(0.8) **s'pull that do:wn** (0.6)]

46 [HCP moves PAT's nightgown to cover knees)]

47 right, [(0.4) **↑am ↑I ↑alright just to ↑stand you up** (.)]

48 [(HCP takes blanket from PAT's hands)]

49 **just for a mo↑me::nt,**

Here, Maureen begins to interact physically with a box of tissues on her table, and simultaneously to make a number of hard to hear utterances (in Lines 22, 24, 28, 30 and 32). The HCP avoids making much specific reference to the content of Maureen's utterances and gestures here, and these references to the box of tissues are never successfully unraveled by the HCP (or the analyst). However during this episode, the HCP embarks on rearranging Maureen's belongings (her handbag and blanket) and furniture (the moveable patient table) in such a way that the task becomes more easily achievable. The HCP is behaving 'as if' the activity is going to happen, which communicates a sense of high entitlement, but simultaneously the HCP is lowering the physical contingencies for the patient, making the task literally easier for her. Interestingly, in Line 45, the HCP uses a highly entitled announcement 's'pull that down' as she pulls Maureen's nightgown over her knees, with no space left for a response from Maureen, displaying the unproblematic nature of such a request for the HCP.

Having physically prepared the scene for the task to proceed, and after indicating a readiness to start a new topic with 'right', the HCP re-issues her request at lines 47-48 with 'am I alright just to stand you up just for a moment'. The extreme downgrading of this task (just to stand you up/ just for a moment) makes this permission seeking proposal hard to refute. The preface 'Am I alright just to' strongly prefers a 'yes' response, in contrast to an 'I was wondering if' preface.

Despite these indicators, Maureen responds to the request with:

```
50    PAT:  all ter depe::nds,
51          (0.6)
52    HCP:  [↑it ↑all de↑pe::nds? (0.4)      ] on ↑wha:t,
53          [HCP puts blanket down off camera]
54    PAT:  ho:w big it i:s, (0.4) how wi:de it i:s
55    HCP:  ↑o::h (0.4) [just standing            ] ri:ght he:re
56                      [HCP points to floor by PAT]
57    PAT:  °e:::r° (0.4)well I don't know til I'd sta::rt do I,
```

Maureen responds to this request with an 'all purpose' mitigated response, treated by the HCP as 'it all depends'. The HCP asks the patient directly to clarify the contingencies (Line 52), which Maureen responds to with her slightly opaque account 'how big it is, how wide it is'. The HCP deals neatly with this by treating it as referring to the size of the task in some way, and then downgrading the task size with 'oh just standing right here', with her gesture to the floor in front of Maureen potentially adding emphasis and clarity. Maureen's trajectory then begins to shift, with her response at Line 57 ('well I don't know til I start') projecting that she will start at some point. However, she still hasn't explicitly agreed to the action nor has she started to stand when the HCP utters her next request:

58 HCP: **↑shall ↑we give it a go:: then,**

59 [(0.4)]

60 [PAT puts hand out to HCP who takes it]

61 PAT: ah yeah but which, (0.8) (↑karvens are here)

62 HCP: it's just gonna be [right] he:re

63 [HCP points to floor]

64 PAT: [right he- yea:h,]

65 [HCP places one hand behind PAT, holding other]

66 HCP: ↑yeah? [(0.6) **are you ↑ready?**]

67 [HCP takes firmer grip on PAT]

68 HCP: [(0.6) **one two three ↑u:p we go,** (0.6)]

69 [HCP and PAT move upwards together into standing]

70 HCP: o:::h lovely,

The HCP seizes on Maureen's projected willingness at Line 57, and uses a higher entitlement, modal request 'Shall we give it a go then'. By collaboratively framing this request (shall we), the HCP reinforces the impression created throughout this encounter, that the activity proposed is a joint one, with the agency for the activity either shared or resting with the HCP. Rather than seeing this as an indication of removing agency and therefore reinforcing the dependency of the patient, the HCP here appears to be constructing the activity as joint and collaborative as part of her efforts to construct the activity as less effortful for the patient.

The HCP's use of 'give it a go' is similar to frequent references elsewhere in the data set to 'trying'. Both of these display that effort on the part of the patient would be sufficient to meet the HCP's requirements, and hint that success is not necessarily required. For the patient who shows reluctance because they believe they lack ability, this invitation to 'try' or 'give it a go' might make the difference between refusing and making an attempt at the task.

In this case at least, this 'shall we give it a go' request precedes an embodied sign of preparedness by Maureen, as she offers her hand out to the HCP at Line 60. Even so,

Maureen shows some mitigated reluctance still in her next utterance at Line 61, which the HCP again skilfully responds to 'as if' it is an enquiry about where the task is to take place. This response appears to satisfy Maureen, who displays her hearing of the explanation and finally gives her verbal assent in Line 64 with 'right here-yeah'. Following a checking 'yeah', for which she does not pursue a response, the HCP treats assent as having been given and she proceeds with gently physically supporting the patient, whilst simultaneously checking Maureen's readiness and counting her in to standing. Finally, at line 70, Maureen is fully standing, with the HCP next to her in a supporting position, and the HCP offers a highly positive assessment 'o:::h lovely'.

4.8 Conclusions

The study reported here set out to identify effective communication practices which HCPs in the acute setting used when interacting with PLWD in hospital. From analysis of over six hours of data, from a breadth of professional groups interacting with PLWD in this context, a flexible phase structure for the encounters was identified. Two areas of interactional 'trouble' were identified for detailed analysis, namely how HCPs got important healthcare tasks done, especially in the face of patient refusal, and how HCPs closed encounters in this context. Given the size of the analytic task, the analysis of refusals and closings were separated, and only the analysis of requesting in the face of reluctance was carried out by this researcher and therefore reported here. The analysis of closings has been published elsewhere (Allwood et al., 2017).

Requests in the data set were found to be usefully interpreted in terms of the framework of entitlement and contingency, as developed by Curl and Drew (2008). Higher entitlement ways of requesting which avoided the projection of a 'no' response in their requesting appeared to support cooperation with HCP's requests. Perhaps by delivering a request in a way which communicated a confident expert authority, HCPs raised the patient's implicit knowledge of the importance of the request. In addition to using higher entitlement, HCPs referenced the contingencies

for the patient, but explicitly lowered them. By doing this the HCP oriented to the challenges which the PLWD faced, displayed their concern to make the task as easy and undemanding as possible, and demonstrated a respectful negotiating stance. Offers to help, framing the action as a joint collaborative activity, minimising the task size/duration/ frequency and suggesting the patient 'try' all achieved this lowering of contingency. HCPs did not communicate an absolute right to demand the actions of patients, but clearly displayed in their referencing of contingencies and their indicators of a negotiating stance, that the patient's needs, abilities and wants were relevant considerations.

'Person-centred' care is often contrasted with 'task centred' care (Grainger, 1993; Cowdell, 2010; Tadd et al., 2011) but it is the contention here that achieving important healthcare tasks should not be presented as mutually exclusive with person-centred dementia care. The project's Patient and Public Representatives confirmed that as former carers of people with dementia they too had regularly faced similar challenges, when trying to encourage their relatives to drink enough or take pain-relieving medications, for example. When an activity is decided (in accordance with legal and ethical practice) to be in the PLWD's best interest, the supporting person will be trying all sorts of strategies to motivate that person to be able to and want to comply with the request. This analysis has sought to make explicit what these strategies might be, and which might be most effective.

No manner of verbal requesting will override a patient's free will and ability to exercise their agency, even if this was ever deemed appropriate. Consequently, no single way of requesting will always lead to an acceptance or agreement, the patient's agency being primary. However, in identifying what requesting practices 'do' in interactions, it is hoped that HCPs can be made aware of such practices in order to better inform their encounters with PLWD. This thesis will now turn to how such practices might be developed into a potentially effective training intervention.

Chapter 5. Intervention design

5.1 Introduction

The previous chapter described a conversation analytic investigation, which identified communication practices that HCPs can be seen to use to effectively negotiate several of the communication challenges faced when caring for people with dementia in hospital. Having uncovered new evidence about what communication practices might usefully be changed, the next phase of the study sought to establish how these communication practices might be changed through a training intervention. The objective of the intervention development phase was to produce, through a transparent and robust process, a well-described complex intervention, which was ready for feasibility testing (Hoddinott, 2015; MRC, 2008). This process and the results of it will be described in this chapter.

In common with other intervention development studies (e.g. French et al., 2012), the process was complex, time consuming and resource intensive. A number of intervention development approaches were used in planning the methods used, but the final process in practice was somewhat emergent, iterative and unique. As Hoddinott points out,

> "Intervention development is seldom a fixed prospective linear process."
>
> (Hoddinott, 2015, p2)

The 'methods' section of this chapter will describe what (*actually*) happened, with clear accounts given for what was done, by whom and why. The 'findings' section will then present the outcome of these processes, using the structure of the TIDieR checklist for intervention description (Hoffman, Glasziou, Boutron et al., 2014). The modelling of the training through a pilot, and the modifications that followed, will be presented. The overall aim of this chapter will be to present a transparent account of decision making around the core components of the intervention, with the evidential, theoretical and practical justifications of each component- thus presenting what was decided, by whom and why.

5.2 Methods

5.2.1 Participants in the process

To develop a potentially effective, robust and implementable intervention, participants with the right expertise and enough available time were brought together. An Intervention Development Team (IDT) was convened as an expert panel, led by the author, to meet four times, for four hours, on a monthly basis, whilst developing the intervention. The IDT was convened to consider the presented evidence, share their relevant views and experience and reach a consensus, where possible, in order to inform the description of the training intervention components.

The objectives for the IDT as outlined by the author (hereafter referred to as the lead researcher) at their first meeting were:

1. To support the production of a well described intervention
2. With learning outcomes based on empirical research
3. Underpinned by relevant theory
4. Feasible within the practical constraints of the project
5. Developed using an explicit process of expert consensus
6. With as robust an evaluation as is practicable.

All members of the Project Management Group, which met monthly for the parent study, were invited to join the IDT, with their combined expertise in relevant academic, teaching and clinical fields, as well as in the lived experience of dementia (RO, RH, AP, SG, SB, RA, KS, JS, BB, LT). One Project Management Group member preferred to remain impartial to the intervention development, because of her involvement in evaluating the later feasibility study (LT). Additional invited members included: an expert in patient simulation, who also had educational expertise; two additional people with lived experience of dementia, one of whom also had experience of teaching in adult education; and one expert from the university's Health Education and E-Learning team.

The expertise of the IDT panel needed to reflect the perspectives of the trainers, the trainees and the patients/carers as potential beneficiaries, in order to support the

construction of an intervention with the potential to address relevant concerns from all stakeholders, in potentially implementable ways. The panel also needed relevant academic expertise in order to ensure the evidence base for the intervention and the planning of any evaluation remained robust.

The IDT therefore contained healthcare professionals, clinical academics, academics, educationalists and carers of people with dementia, with expertise in various combinations of:

- NHS clinical education (medical, nursing, SLT, physiotherapy and interdisciplinary contexts)
- Communication skills training in healthcare
- Dementia and acute healthcare (both delivering and receiving)
- Dementia education for the multidisciplinary team
- Conversation analysis and the use of 'real' video data in healthcare training
- Simulation in healthcare education
- E-learning in healthcare education

Figure 3 below reflects who was involved in the intervention design and their interrelationships. Their full functions will be described further in the following discussion of 'Processes'. Starting at the centre, the author of this thesis, as **lead researcher** on the project, worked full time on the study and designed the processes and convened and led the meetings for all the groups represented. The author's own expertise included: delivery of clinical healthcare for people with dementia in the acute hospital setting; NHS clinical education, including communication skills training for the interdisciplinary team; and conversation analysis, in particular having carried out the data collection and analysis for the project. The **core study team** included the lead researcher (the author) and the project manager (SG) and the chief investigator (RH) for the parent study. This group met weekly for oversight of the lead researcher's work and governance of the parent study. The **Project Management Group** (PMG) and **Intervention Development team** (IDT) have already been described, with much overlap in membership. Attendance at the IDT was extremely high, reflecting the commitment of all involved to the process of intervention design.

The expert simulator and lead researcher met frequently during the development of the simulation aspects of the training, forming the '**Simulation Team'**. This Simulation Team also met directly with the Core Team as necessary and contributed to the PMG and IDT as required. An ad-hoc Conversation Analytic sub-team ('**CA team'**) was formed which included the CA experts (AP, SB) and the researcher, linking to the Core Team when necessary.

Two local experts in communication skills training in healthcare, identified by the PMG, had been unable to join the IDT and were therefore **individually interviewed** by the lead researcher and their input presented by her to the IDT. The **Study Steering Committee** (SSC) which was convened to monitor the study on a six monthly basis, were also consulted at two points during the intervention development phase. The SSC contributed external, independent perspectives, thus supporting the avoidance of 'group think' bias, which was identified by Hoddinott (2015) as a particular risk where processes which explicitly seek consensus are utilised.

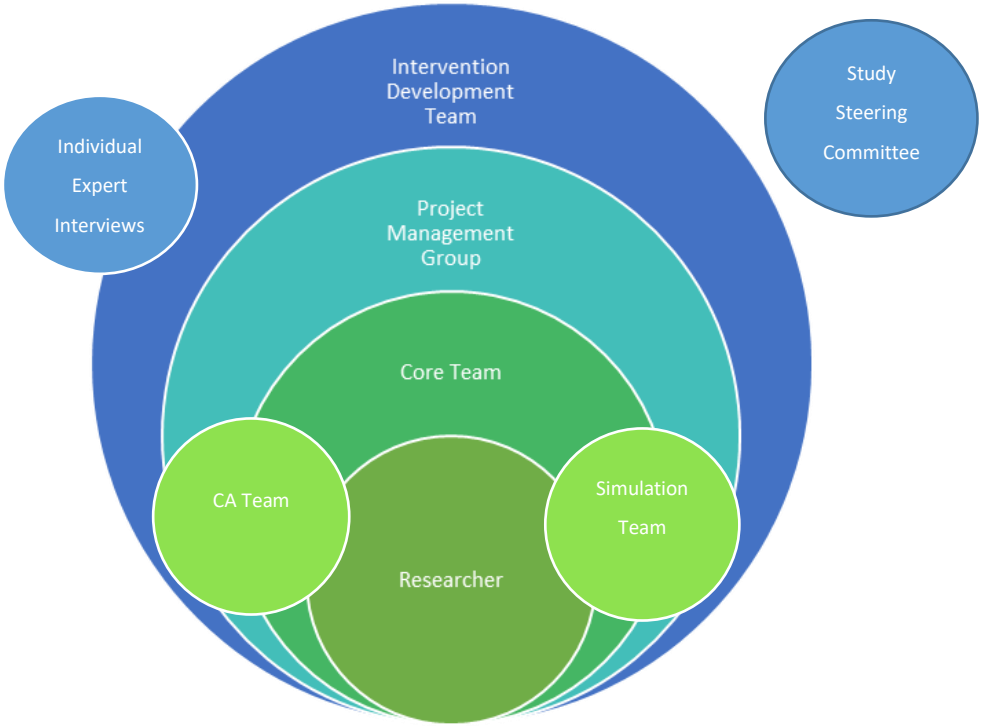


Figure 3 Relationships between participant groups involved in the intervention design.

5.2.2 Processes (How the decisions got made)

In essence, the proposed process for intervention design was intended to involve: synthesis of the relevant evidence; presentation of this evidence to an expert panel (the IDT) for consideration; and the reaching of consensus by those experts to produce an agreed training intervention. However, these processes proved to be more complex than originally envisaged, with the involvement of multiple teams and processes within each of these steps. For example, the decision making around each component of the intervention did not usually occur during the IDT, as initially proposed, but was generally decided by the lead researcher with oversight by the Core research team, informed by the considerations of the IDT.

On reflection, the following four stages better accounted for the design process:

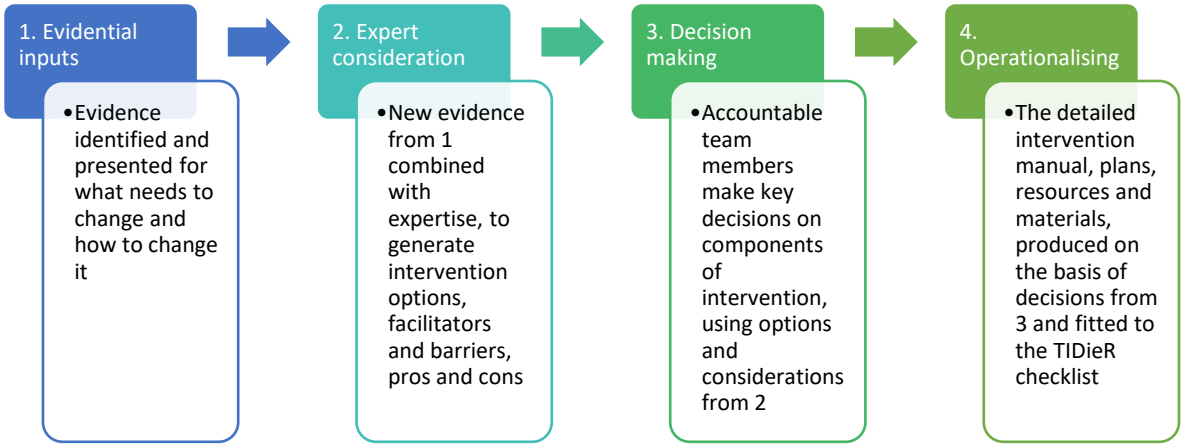


Figure 4 Process of intervention design

Each will now be presented, with consideration of what each stage consisted of and who carried out each function.

5.2.2.1 Evidential Inputs

In order for the intervention to be optimised, the various components of the intervention needed to be based on the best available evidence. The key new inputs to this decision-making process were therefore the systematic review of

communication skills training (CST) in dementia care settings, the conversation analytic findings and the individual interviews with local experts.

The systematic review had identified a variety of candidate components for the new intervention, including content (what needs to change) and theories, teaching methods and modes of delivery (possible mechanisms for change), all in the context of CST in dementia care. However, the quality of the studies was moderate at best and these studies were not in acute care contexts. The findings from the systematic review could not therefore be simply taken at face value and applied to the new intervention, but needed further consideration and interpretation (Lovell et al., 2008). This was facilitated by the lead researcher producing tables of the relevant components (duration of training; theoretical underpinnings; teaching methods and modalities) and presenting these prior to and during the first IDT meeting. The gaps/ ambiguities in the existing knowledge identified by the systematic review, could then be filled as far as was possible, by the expertise of the participants in the IDT and in relation to the other inputs to the process.

The Conversation Analytic findings had identified new empirical knowledge about what effective (and less effective) communication in this context looked like, and what changes might therefore be beneficial to PLWD in hospital and their HCP interactants. However, the list of potentially trainable practices produced from the analysis needed consideration for relevance, acceptability and intelligibility by a non-CA audience. The CA findings on 'Requests and refusals' and 'Closings' were therefore summarised in short written papers for a lay audience and presented to the IDT by the lead researcher. In addition, the IDT drew on published work (Kitzinger, 2011) which gave an engaging account of the application of CA findings in a group training context, to further inform their discussion.

The individual interviews with two local clinicians and experts in CST in healthcare had been carried out in order to complement the knowledge of the team. One interviewee (PC) had considerable experience of running a simulation based, interdisciplinary, communication skills training course (in the context of end of life care); the other interviewee (BW), a nurse educator, had recently carried out an evaluation of the use of a video resource which had been produced using CA findings

and recordings taken from the CA study (also in end of life care). The interviews were essentially networking meetings in which the researcher sought to identify and record the experience and opinions of the 'interviewees' on a number of questions relevant to the intervention design, to enable them to contribute to the IDT discussions despite not being present. The questions asked were based on the individual's circumstances and expertise and included: benefits of simulation/ CA-video methods; practical aspects of simulation/ video methods (setting up; duration; feeding back; making 'safe'; use of video and playback within simulation); training group size and make up; facilitator/ trainer expertise needed; recruiting and administering training courses; methods of evaluation; implementation of techniques/learning. Their advice on any aspect of CST was also welcomed. These meetings were minuted by the researcher and summaries of the meetings were presented to the IDT in written and/or verbal form.

Practical constraints, such as time available, funding available and fundholders' expectations, were presented during IDT and other meetings by the lead researcher and core team, in relation to specific components, as and when they arose. For example, the research grant included funding for simulation as part of the proposed intervention, and simulation as a training method was therefore an expectation of the fundholder. However, the details of how this might be done, how much and so on, were still to be specified and the whole approach could have been challenged and taken back to the funders if required.

In addition to the above, as the design process progressed, each IDT meeting also received 'input' from the work done between meetings by the lead researcher, in collaboration with the Core Team, Simulation Team and CA team. In effect, the 'outputs' following one meeting, with some extra work, could become the 'inputs' for the next. For example, the second IDT generated a list of possible 'learning outcomes' for the training intervention, which the lead researcher refined and re-presented at the third IDT, for further consideration.

5.2.2.2 Expert consideration

Before well-informed decisions could be made, all the relevant considerations needed to be aired, with barriers and facilitators to change considered for each

component of the intervention. Whilst the IDT was convened partly for this purpose, in practice the PMG and even the Study Steering Committee (SSC) became places where this function could be achieved, depending on the timing of the various meetings in relation to decisions pending.

Following written and/or oral presentations of evidence, different opinions, ideas and options were sought from all present. Discussion was then facilitated, usually by the lead researcher, to explore the acceptability and feasibility of the options presented. Where specific expertise or experience was required, particular attention could be given to relevant speakers. For example, one member of the PMG and IDT (SB) had particular experience of developing behavioural checklists as an outcome measure for communication change interventions, and therefore her opinions were carefully drawn out on this issue. Comments were recorded by the researcher, core team and by the administrative minute taker at each meeting. These considerations were then taken forward, for further preparatory work or consideration for decision making, by the lead researcher, supported by others as relevant.

5.2.2.3 Decision Making.

Initially the IDT was expected to be the place where consensus would be sought and intervention decisions made, following presentation of the relevant inputs. The Nominal Group Technique (Jones and Hunter, 1995; Trickey, Harvey, Wilcock, et al., 1998) had been proposed by the lead researcher as an appropriate method for reaching group consensus in the IDT if required. However, in practice, many final decisions were either agreed in the IDT without the need for a nominal process being invoked or they required further deliberations and work following an IDT. This work was generally carried out by the lead researcher in association with the relevant sub-groups (see Figure 3). Final decisions had to be made in a timely fashion, so that they could not always be presented back to the next IDT before being acted on. In practice most decisions were proposed by the lead researcher to the Core Team, who offered oversight and governance of those decisions. Decisions about the CA aspects of the intervention were overseen by the CA team because of their relevant and necessary expertise.

5.2.2.4 Operationalising.

Once major decisions about the components of the intervention had been made, there was still much work to be done in operationalising these decisions into a format ready for delivery of the training. The materials and resources required considerable preparation, usually done by the lead researcher and checked when possible with the Core team. For example, the decision to use a reflective diary as part of the training was initially suggested by a PPI member at the first intervention development team meeting (IDT1) further explored and specified in the third meeting (IDT3), possible resources were gathered from the team and then a new resource was produced by the lead researcher, trialled in the pilot and refined following it. The 'manualising' of the intervention by the lead researcher generally proceeded in this way.

However, in the case of simulation preparation, much of the work of 'operationalising' was done in the six meetings of the Simulation Team (usually MM and the lead researcher, in some cases with the Core team also). The lead simulator (MM) produced provisional scenarios for the simulated patients as part of this process. These were then developed and amended through a number of iterations, in collaboration with the lead researcher and the Core team. Similarly the training course for the simulators could not be operationalised by the lead researcher alone, but required the additional expertise of the lead simulator.

5.2.2.5 Relationships between processes and personnel

Generally, the four processes described above could be mapped onto particular groups of participants (as described in 5.2.1), and can be illustrated as in Figure 5 below:

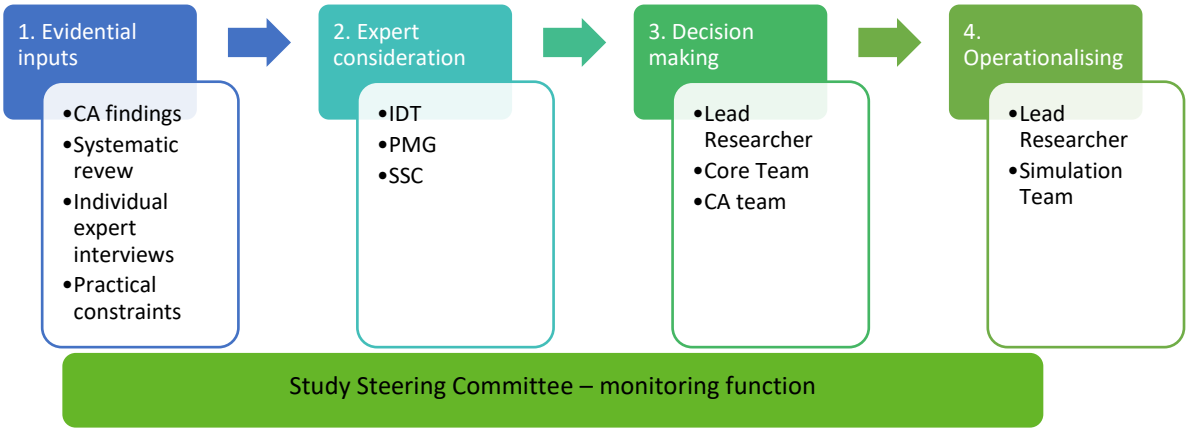


Figure 5 Processes of intervention development mapped onto participants

However this is overly simplistic. Where multiple refinements were needed, the process was often circular rather than linear, with operationalised work being taken back for expert consideration and decision making.

The Study Steering Committee functioned as a monitoring body for all stages of the process, in keeping with its terms of reference, but also functioned as an extra expert panel, adding 'expert considerations' to those produced by the IDT.

Figure 6 below illustrates the flow of inputs between the different groups, and how the inputs and groups mapped onto the processes at each of the four levels of function.

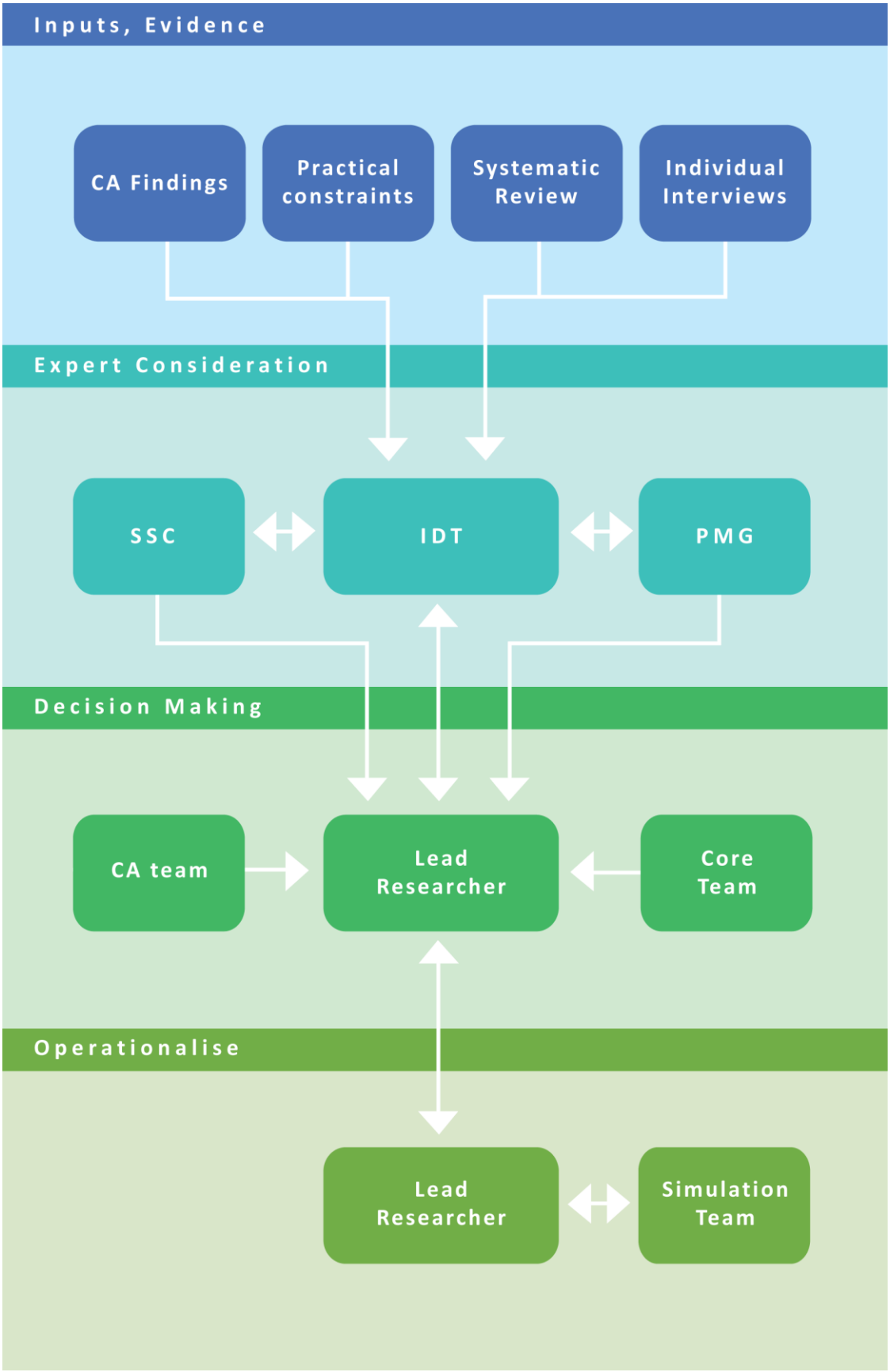


Figure 6 Flowchart of intervention design process

5.3 Findings: what was decided and why

In order to produce a 'well described' intervention, the TIDieR checklist for intervention description will be used to structure the findings presented here (Hoffmann et al., 2014). This checklist encourages clear description of the core components of any intervention, to support implementation and replicability. However, as well as reporting what was decided in the development of this intervention, there will be additional consideration given here to how and why each decision was made, that is, the processes undergone and the evidence and theory utilised to get there. It should also be noted that the structure and ordering of the TIDieR checklist does not reflect the order in which decisions were actually made in this case, nor does it necessarily reflect the interrelatedness of those decisions.

5.3.1 Name of Intervention

An acceptable name for the training intervention was required, not only to support recruitment to the pilot and the future feasibility study, but for future implementation of a potentially marketable training course. Hoffmann et al (2014) point out that a clear intervention name (including explanations of any acronyms) can assist in identifying connected studies, as well as giving an indication of the type of intervention described.

IDT2 (18.10.16) generated several options:

- '**SPEECH'** = **S**trategies for **P**roducing **E**ffective **E**ngagement and/for/in dementia **C**ommunication in **H**ospital;

- '**VOICE for Dementia'**, based on the name of the parent research project ('The VOICE study') = **V**ide**O**ing to **I**mprove **C**ommunication **E**ducation- for Dementia.

At the following Project Management Group (14.11.16) these options were listed. It was agreed that 'VOICE for Dementia' was the preferred option as it would build on the already established identity of 'The VOICE study'. It might also allow for future

developments into other clinical fields, using similar video based methods. The full title used to describe the intervention during the marketing and delivery of training was 'The VOICE for Dementia Healthcare Professional Training Programme'.

5.3.2 Why- the rationale, theory or goal that is essential to the intervention

Hoffmann et al (2014) consider that explicating the rationale, theory or goals of an intervention helps to identify the 'active ingredients' which mediate the anticipated changes, therefore clarifying for the reader which components of the intervention are essential. As the proposed intervention was a communication skills training (CST) intervention for HCPs, educational theories of learning were considered, relevant to CST for professionals, which could underpin the intervention and its design.

The systematic review identified a variety of educational and other theories given as the basis of their interventions. These were presented in table form to the IDT1 and used to help stimulate a discussion around the alternative educational theories worthy of consideration for this intervention. Two papers in the systematic review gave extensive consideration to educational theories in justifying the components of their training interventions (Beer et al., 2012; Cockbain et al, 2015), including the 'learner centred classroom', Knowles' principles of andragogy (Knowles, 1984), reflective practice (Schön, 1987) and Kirkpatrick's intervention levels (Kirkpatrick and Kirkpatrick, 1994). Beer et al. (2012) also supported their description of specific learning activities with references to a variety of educational theorists, including Cranton (2002) (transformative learning theory) and Ginsberg and Wlodkowski (2009) (motivational framework for culturally responsive teaching).

The conversation analytic findings and practical considerations did not generate any educational theory as such, and nor did the individual interviews with experts.

The IDT therefore considered the options from the systematic review and combined this with their own knowledge and experience. The group expressed agreement that the training would be aiming to change HCPs' communication practices not just their knowledge, and therefore an educational approach appropriate to the learning of skills was required. The IDT considered that overall an experiential learning approach

would be appropriate, with an awareness of Kolb's experiential learning cycle and the need to support different learning styles being mentioned (Kolb, 1984). The theories cited in the systematic review (such as andragogy, reflective learning and transformative learning theory) were part of, or derived from, the experiential learning tradition (Yardley, Teunissen and Dornan, 2012), so this became the agreed broad theoretical framework for the educational decisions to be made.

Specific justifications for the decisions around each of the training techniques chosen, including theoretical rationale, will now be presented under the TIDieR component 'What procedures'.

5.3.3 What: Procedures, activities and processes used in the intervention

The TIDieR checklist was drawn up to facilitate the description of complex interventions, with Hoffmann et al (2014)'s supporting paper giving succinct examples of the 'what' of interventions taken from within publications of trials. In the context of this thesis, a more detailed account will be given about the 'what' of the training intervention, including the justifications for the decisions made. In this context, the 'activities' or 'procedures' will be taken to be the training approaches decided on. Both the content of the training and the methods chosen for training will be presented. The aim here is not to publish a description of the intervention which would make the intervention completely replicable, as Hoffmann suggests, because there are intellectual property rights to be considered for this intervention. Instead, the aim will be to make transparent the decision-making processes undergone and to justify the specific educational approaches which were taken, including theoretical considerations.

The decisions around what the training would consist of (both content and teaching methods) required expert consideration of all the available evidential inputs: the systematic review, CA findings, individual interviews, practical constraints and occasional other items, such as relevant literature. The teaching methods and modes of delivery from the systematic review were tabulated by the researcher and presented to the IDT1 (see Chapter 2, Table 9). The CA findings were summarised for

'Phases of the interactions', 'Closings', and 'Requests and refusals' and presented across three IDT meetings. The relevant contributions from the individual interviews were shared with the IDT by the lead researcher, either verbally or in written form. The practical requirements and constraints were discussed where appropriate. Presentations were also made to the IDT by specialists within the team during development, including on the CA, the simulation and on e-learning in healthcare.

The key considerations which were presented to and which emerged from the consideration of these combined sources during group meetings such as the IDT, PMG and SSC, are represented in the matrices below. Table 14 shows the considerations of content (see section 5.3.3.1, pages 193-194) and Table 15 shows the considerations of teaching methods (section 5.3.3.7, pages 210-213).

These considerations were then taken forward by the lead researcher working within the Core Team and Simulation Team, in order for educational approaches and techniques to be operationalised in ways which reflected these described inputs, combined with further consideration of theoretical considerations where relevant. The content and each teaching approach taken will now be presented in turn and accounted for.

5.3.3.1 CONTENT

This study had set out to uncover new empirical knowledge about effective communication practices, using a Conversation Analytic approach, which could be used to train HCPs in this context. As such, the content of the training was always going to be dominated by these new CA findings. The issues for discussion and debate were then: how these potentially complex linguistic findings could be refined and 'translated' for a varied HCP audience; and how much other content there should be about communication and dementia and person-centred care, based on other research or approaches.

The CA findings were confirmed by the clinicians in all the expert group meetings as being clinically relevant. PPI members also identified with both the challenges of trying to get important tasks done themselves when their loved ones were reluctant,

and leaving their loved ones behind at the close of visits, in various contexts. They also identified with these situations being important to their relatives when unwell in hospital and being cared for by HCPs and other staff. Clinicians and PPI panel members felt the findings described communication practices they had not been aware of before and were therefore regarded as highly relevant to form the content of the new training intervention.

There was some discussion about whether the number of potentially identified communication practices could be trained in one intervention, or whether there might be too many ideas for learners to take in and change. Published CA-based training interventions have tended to focus on a handful of practices, depending on the length of training (Heritage and Robinson, 2011; Jenkins and Reuber, 2014; McCabe et al, 2016). The Chair of the Study Steering Committee, Liz Stokoe, who has considerable experience in this field, recommended only one or two 'trainables' per day of training. The VOICE intervention needed to address two quite independent areas of trouble in the interaction- requesting actions and closing encounters- both of which involved presenting a number of communication practices to try out or avoid (between seven and ten each). 'Requesting' in particular would also necessitate introducing some complex concepts to trainees. In addition, the phased structure of the encounters was felt to be a relevant finding for HCPs and there was some desire to present the training in a logical 'openings' to 'closings' structure.

When operationalising, the lead researcher therefore attempted to simplify the content for trainees as far as possible. The phased structure of the encounters was introduced to trainees as the 'map' of the conversational journey, with brief descriptions of each phase given, without recommendations for any particular practices. Short video examples of some typical openings were shown, to begin to orient trainees to the encounters, to the experience of listening and watching 'real' recordings and to starting to reflect on their own interactional practices. Trainees were then oriented to the rest of the training content by identifying the phases in which the key troubles occurred (the business and closing phases), leading into major teaching sessions on each.

Further simplification of the content was achieved by grouping relevant requesting practices together under the three headings 'Try: raising entitlement; lowering contingencies; and making the task explicit'. It was hoped that this would help trainees be better able to identify and recall some of the specific recommended practices, under each heading. The researcher also prioritised from the list of potentially trainable practices those which had the best analytic support and most likely impact, leaving out some more minor points of interest. Additionally, by prioritising the positive framing of the trainable practices, a few further training points were covered. For example, instead of training on both 'avoid mixed messages' and 'try to be consistent in verbal and non-verbal messages' in closing, the content focused on the latter, more positive framing.

These concerns about the volume of the content also impacted on decisions about the nature and duration of the training, since it was agreed that a considerable amount of time and resource would be needed to cover the content adequately, when compared to other CA intervention studies. (This will be discussed further in considering the duration of training in Section 5.3.8.)

These considerations also clarified that the training content would need to focus on the CA findings, with information about other communication and dementia research probably only being used in a minor supporting role. It was agreed that person-centred care in dementia (Kitwood, 1997) should be presented as the underpinning philosophy of the training, but there would not be resources within this intervention to commit to teaching on person-centred care specifically. The lead researcher proposed that three openly available, e-learning resources related to dementia, person-centred care and communication, and previously developed by members of the study team (Goldberg, Harwood, Dowling et al., 2014) should be recommended as pre-training preparation for trainees. Trainees would be encouraged to take responsibility for their own learning needs and use these resources prior to attending training if they felt they might be necessary, thus allowing the training intervention to focus on the new training content.

Table 14 Considerations of Intervention Content

What will the training intervention consist of? ***Part 1: CONTENT***	
Sources of evidence	**Summary of key considerations for intervention design (content)**
CA findings	• The new CA findings, broadly, were: the phased structure of these interactions; how to request in the face of reluctance; and how to close an interaction to everyone's satisfaction. • The new CA findings are essential to the training content. • The CA findings need to be 'translated' into a few trainable practices which are comprehensible to a HCP audience.
Practical considerations	• The project funding specifies that the training will be based on the new empirical findings from the CA, although not restricted to only this. • Given the number of 'trainable practices' from the CA, there may not be time for other desirable content.
Systematic review	• The systematic review showed no consistently agreed content for CST in dementia care, and mixed empirical justifications. • The Australian 'MESSAGE' intervention (used by Broughton et al., 2011; Liddle et al., 2012 and originally reported by Smith et al., 2011) explicitly refers to the empirical evidence for each recommended communication strategy. Mason-Baughman and Lander cite Small et al. (2003) study which identified 10 strategies from advice literature and carers' reports. Weitzel et al reference each strategy separately, with variety of levels and sources of evidence. • One study (Passalacqua and Harwood, 2012) had content based on PCC in dementia.
Expert opinions- from IDT, SSC, PMG and individual interviews	• Training content should include clear learning outcomes. • Teaching on each phase of the interaction would give a good structure- but the analysis may not be adequate for all phases. • Exploring the patient's reasons for reluctance could increase empathy- but is speculative and contrary to empirical CA. • Ethical considerations in dementia care (best interest decision making, coercion vs persuasion) may need including.

	• All levels of communication difficulty from dementia should ideally be included in the training- but the analysis itself focused on those with some remaining verbal ability. • Person-centred dementia care needs to be the underpinning of the training.

5.3.3.2 TEACHING METHODS: SIMULATION.

Simulated patients are professional actors who produce realistic presentations of patients for the purposes of interacting with healthcare staff as part of their training or assessment. This is usually contrasted with 'role play' where trainees are themselves expected to enact roles other than their own. The possibility of professional simulation being used in the new intervention was supported by funding within the original project grant, and by the presence on the PMG and IDT of expertise from the Director of the Trent Simulation and Clinical Skills Centre, Professor Bryn Baxendale. The systematic review highlighted simulation and role play as a key teaching method in nine out of the 22 included studies, including one study (Cockbain et al., 2015) in which simulation was the sole teaching method, with significant gains in confidence of medical trainees. The PMG and IDT were keen to use simulation as an experiential learning method, which would give trainees the opportunity to practice their skills in 'real time' interactions. The decisions to be made in developing the simulation as part of the intervention therefore centred on the nature of the simulation.

The extensive use of simulation within communication skills training (CST) however, has been challenged by a number of authors (Stokoe, 2013; White and Casey, 2016; de la Croix and Skelton, 2013) who have identified ways in which simulated encounters appear to be 'inauthentic' because of their systematic differences from naturally occurring, equivalent interactions. For example, White and Casey (2016) found that CA transcripts of simulated and real surgical consultations differed, in that real patients gave the healthcare context of how they came to be at this appointment, thus justifying their visit to the Consultant, whilst simulators made no references to this. De la Croix and Skelton (2013), using discourse analysis of transcribed interactions between simulators and medical students, found that simulators took more of a lead in the interactions than would be expected of patients in real clinical interactions. For example, simulators were more likely than the trainee doctors to initiate topics, ask direct questions and initiate closing of the encounter, which is not typical of real doctor-patient encounters. De la Croix and Skelton (2013) conclude that whilst authenticity in simulation may be elusive, simulations can be realistic enough to achieve the specified educational goals.

Despite these potential limitations, which the IDT were made aware of, it was agreed by the IDT that simulation was appropriate to be trialled in this new CST. It was viewed as the best method available for 'in the moment' practice of new communication skills, particularly in the context of patients with communication and cognitive impairments from dementia, who could not themselves be easily trained to give feedback. The individual interview with an expert facilitator of simulated training (PC) and contributions from within the IDT gave accounts of how good quality simulation can and should involve the whole of Kolb's experiential learning cycle (see Figure 7 below), thus fitting well with the theoretical perspective identified for the intervention by the IDT.

The simulation itself represents a **concrete experience**, created as an opportunity for learning by the facilitator and from which the trainee can begin to construct their own learning. Opportunities need to then be given for reflection on one's own performance and also to observe and reflect on fellow trainees (**reflective observation**), which can be particularly valuable for trainees who are fearful during their simulation experience. Trainees can then be given opportunity to think about and try to make sense of their experience (**abstract conceptualisation**) through interpreting their previous knowledge and experience of communication, and the input from the study findings, in the light of their new experience. Finally they will be offered further opportunity to **actively experiment**, through re-running the simulation, or through discussion with fellow trainees and facilitators, and also, of course, through trying the practices out in their real clinical contexts. This can then feed into the experiential learning cycle again.

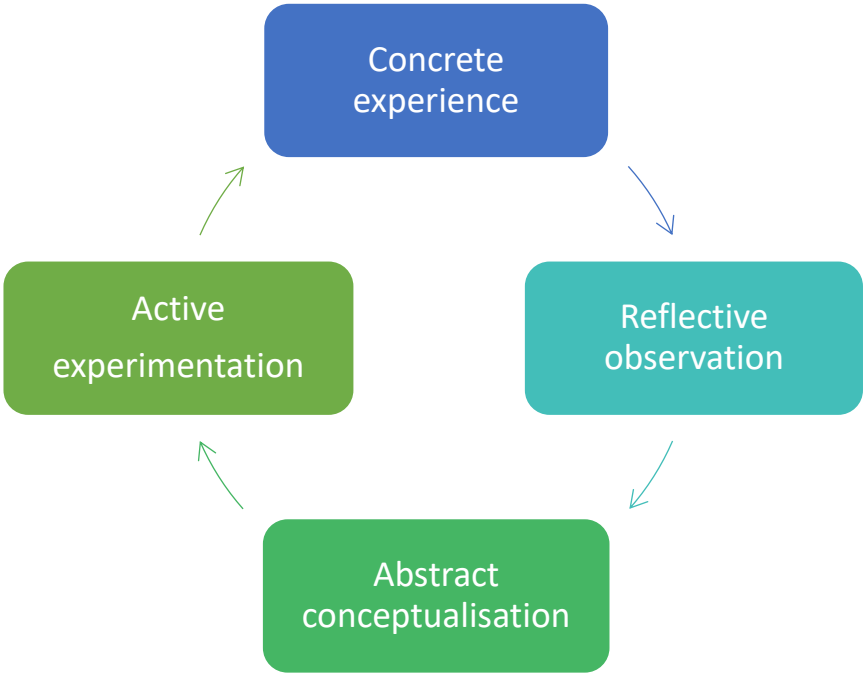


Figure 7 Kolb's Experiential Learning Cycle

In addressing the concerns about authenticity, the expert groups agreed that the simulation would need to be developed in innovative ways, using the CA findings and data, much as suggested by Murtagh (2015). This approach was operationalised by the Simulation Team, in a process involving considerable consultation and development work. The lead researcher selected suitable potential participants with dementia from the original video data, and these videos and transcripts were viewed together by the lead researcher and lead simulator. 'Scenarios' were developed from these viewings, which gave a (fictional) name, clinical and social history to the person, with descriptions of their retained abilities, and their (actual) appearance, demeanour and manner of speech. Less typically for simulations, these scenarios then had added information for the simulator about the person's typical interactional patterns, based on close scrutiny of the videos and transcripts, and in the light of the CA findings and training content. Some examples of these interactional patterns are given below in Figure 8, for the simulation role 'Annie':

You sometimes produce a lot of speech - which doesn't make sense:
"they've normally got...packages in cardboard on end...so they don't break the points off.. it was just bare like that...and it was about that day, Saturday...down there...and bent over...straightened it out...display..."

In response to HCP requests:
You do not agree at first: "Hmmm"
You question requests: "What for?"
You agree eventually if request is clear and direct: "okay"

Figure 8 Part of Simulation Scenario for 'Annie'

After initial review and approval of several scenarios by the IDT, the final six scenarios were agreed as acceptable by the Core Team, and were sent to the simulators for familiarisation.

The simulators were then required to attend a one-day training of their own, prior to the study pilot, which was developed by the Simulation Team. Simulators were asked to view a number of resources before attending the training, including a short documentary film which illustrates some of the experiences of having dementia and caring for those with dementia in the acute hospital setting (Davies and Foster, 2012). The training day itself was led by the Simulation Team and supported by the Core Team along with the lead for PPI on the bid. The training content included information about dementia and the experience of hospital for PLWD with an expert panel to answer any questions. The CA study findings on the phase structure, requesting and closing of encounters, were then presented using multiple video clips. Simulators then watched recordings of each of the people on whom the scenarios were based, before getting opportunities to practice their simulations with the HCP researchers in the team.

The individual interview with the expert PC and the personal experience of the IDT also highlighted the need for simulation to be properly facilitated, with appropriate support for

trainees. Simulation can invoke anxiety for trainees which may inhibit learning. Maslow's hierarchy of needs (Maslow, 1987; Walsh, 2014) suggests that ideally, someone's basic physical needs, and their need to feel safe, a sense of belonging and esteemed, should all be fulfilled before they can 'self-actualise' by learning and thereby reach their potential. In the context of this training intervention, and the simulation in particular, this was operationalised through:

- Ensuring refreshments and breaks were adequate for all trainees' needs
- Building relationships from beginning of training using participatory exercises e.g. in pairs, valuing all members and all contributions
- Building sense of small group identity and safety for simulation work, keeping groups constant with the same facilitator-trainer
- Allowing trainees control over aspects of their simulation, such as choosing what task to carry out with the simulator
- Encouraging all trainees to pause their simulations at some point ('time out'), to give some control, and to allow for advice/ support, mid-simulation, from the group
- Organising trainees' simulation feedback using Pendleton's (1984) model, in which the trainee gives positive feedback on self, then facilitators and observers reinforce with further positives, before trainee, facilitator, then observers make any suggestions for change
- Trainees given chance to re-play simulations, to experience their ability to control and change their communication behaviours.

5.3.3.3 TEACHING METHODS: REAL VIDEO DATA

Given the available collection of video-recorded encounters from the conversation analytic phase of this study, and the crucial relationship between these recordings and the training content, it was decided to include use of the study's 'real' video data in the training. Whilst use of video in CST is not a teaching 'method' in itself, it appears to be a commonly recruited resource, given that it was used in 9 out of the 18 studies in the systematic review. Those studies which explained how the videos were used in teaching referred only to the showing and discussion of 'good' and 'bad' exemplars. These had usually been staged with

actors, with only one study (Beer et al., 2012) reporting use of video clips of real encounters, in this case, of the trainers' own expert practice with PLWD.

In contrast to this, conversation analytic studies have reported the specific ways in which they have used their analysed recordings of real encounters (audio or video) as an educational resource when feeding back study findings (e.g. Kitzinger, 2011) or in evaluations of interventions designed to change institutional practices (Jenkins and Reuber, 2014; McCabe et al., 2016). One formal manifestation of CA methods in training has been made explicit in the training approach known as the 'Conversation Analytic Role-play Method' or 'CARM' by Stokoe (2011; 2014). Other CA-based training interventions may describe similar video stop-start techniques to those used in CARM (e.g. Jenkins and Reuber, 2014; McCabe et al., 2016).

In summary the 'CARM' approach describes pausing previously analysed recordings at a key point in the interaction (for example, in this study, it might be after the patient's refusal of a request) and then asking the trainees to discuss, usually in small groups, options for what they might say next in response. After sharing and discussing their suggestions in plenary, the recording is then started again, to show what happened next in the real encounter and how this then played out. The trainees then discuss and evaluate the real response given, considering in what ways it led in the desired or undesired direction. In this way, it is argued, the trainee is experiencing the unfolding of an authentic interaction, without knowing what is coming next, and is being given opportunity to 'role play' their responses. By using examples which play out in a direction of conversational travel which is not desired, and then contrasting this with more positive examples, the trainee can experience and analyse for themselves what interactional approaches might work best for them, given similar interactional circumstances.

In this way, the 'CARM' training approach, and similar CA-based techniques, can be seen to lead the trainee into constructing their own learning, initially through their experience of the 'disorienting dilemma' in which their existing knowledge is challenged by something new (Mezirow, 2000). Discovering the possible negative impacts of certain interactional practices has been found to act as a motivational change agent for communication partners of people with aphasia (Johnson, Best, Beckley, et al., 2017) and such changes in motivation are thought to be necessary for behaviour to change (see the COM-B model of Michie, van

Stralen and West, 2011). However, the importance of communication partners identifying positive alternative communication practices with which to replace the negative has also been highlighted recently by Johnson et al (2017). This process should naturally follow from the CARM approach, in which participants observe and analyse for themselves the interactional consequences of a variety of practices, selected to meet specific learning objectives by the trainer.

In addition, by analysing authentic encounters, trainees, like the analysts, are finding the expert HCP's 'endogenous practices' (Stokoe, 2014; p261) which can already be seen to 'work' in everyday interactions, rather than imagining what practices might work. When trainees watch and analyse the recordings, the recordings are often modelling expert practice, an approach used in clinical training (Yardley et al., 2012). Whilst CARM trainers wish to distance themselves from judgement (Stokoe, CARM training, 2016b), in practice they are drawing the trainee-participant into making their own evaluations of the practices. The skilled trainer-facilitator will need to lead the trainees into evaluating the practice itself and avoiding criticising the person displaying the practice. This principle was also used to underpin the VOICE training, for example, by selecting extracts for the training which showed the same HCP using practices which worked well and less well. Ground rules for discussion of the interactants in the video extracts were also established early in the training, and the facilitator highlighted throughout the training, the 'good' interactional reasons for HCPs doing what they did (e.g. attempting to complete a task), even when the practice didn't 'work' as well as another.

However, whilst CARM-like techniques are likely to raise awareness of authentic practices which work better than others, this awareness in itself may not be enough to change practice in real spontaneous conversation, without practice (Beckley, Best, Johnson, et al., 2013; Pilnick et al., 2018), and the CARM approach in isolation has not in itself been formally evaluated. It was therefore decided to combine CA based video techniques with the 'VOICE' simulation approach described earlier, to give trainees the awareness of practices which might benefit from change, alongside skills practice and feedback. It has been found that practising communication skills with immediate feedback may work by increasing the ease with which the techniques can be used, thus strengthening the trainee's **capability** to

change, whilst awareness building may be necessary for building motivation to change (Johnson et al., 2017; Michie et al., 2011).

The researcher completed 'CARM' online training, which provided particularly useful technical expertise for preparing training resources. A breadth of video CA based techniques were then developed. For example, very short video extracts were selected to initially illustrate each key interactional practice in relative isolation. The shorter clips were usually animated with the key 'trainable' words or phrases appearing after watching the extract. This allowed the facilitator to involve the trainees in identifying the useful practices from watching the extract, before confirming their findings with the animated words or phrases (see screenshot in Figure 9 below).

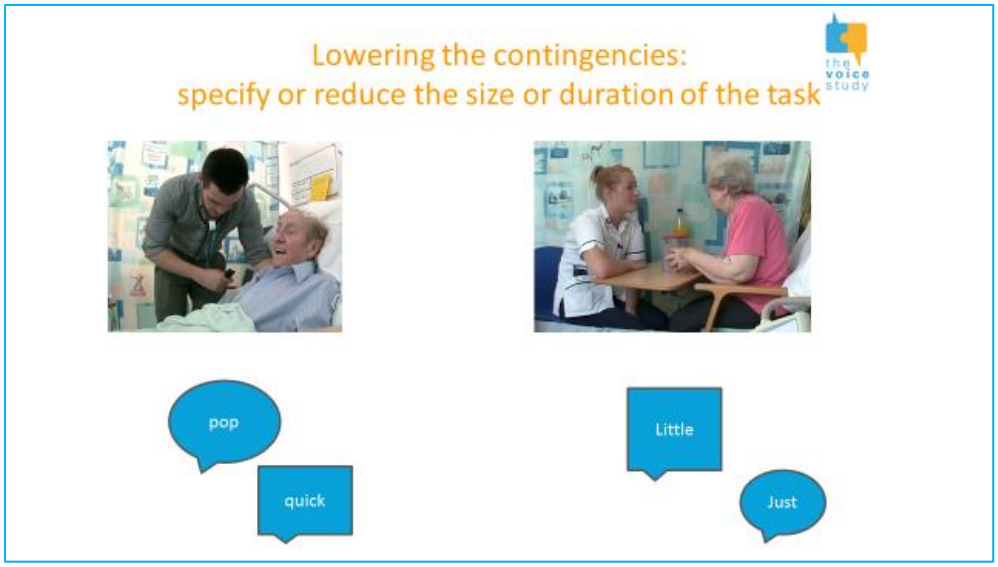


Figure 9 Sample slide showing animation of key words

Three longer sequences (between two and four minutes) were used for video-based workshops. These were planned to allow opportunity for something nearer to line by line analysis by trainees. The transcripts were animated to come up, line by line, as they were spoken by the HCP and patient in the video recording. This allowed for the trainees to follow the unfolding encounter, and enter into discussion about what could happen next and what did happen next. A sample slide is shown in Figure 10 below, stopped at the point for discussion.

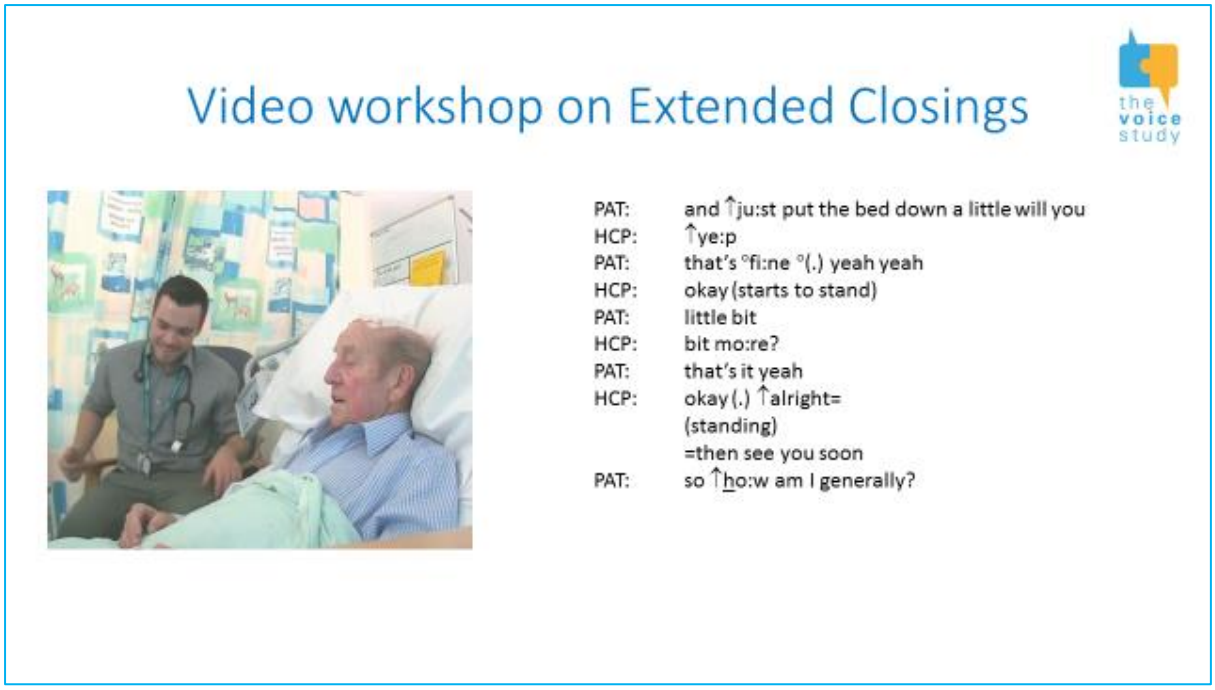


Figure 10 Sample slide from CARM-type video workshop showing CA transcript paused for discussion

5.3.3.4 TEACHING METHODS: REFLECTIVE LEARNING

Reflection and reflective practice, developed from the work of Dewey (1933) and Schön (1983), have become increasingly identified as a professional skill required of HCPs for their professional validation procedures (Mann, Gordon and MacLeod, 2009). As such, HCPs are familiar with the concept. Sandars (2009) defines reflection as

> 'a metacognitive process that creates a greater understanding of both the self and the situation so that future actions can be informed by this understanding' (Sandars, 2009; p685).

Reflection on an experience one has had forms a crucial part of experiential learning, as described earlier in relation to Kolb's learning cycle, since simply experiencing something is not enough to learn from it. The process involves a 'noticing' of an event of interest, the use of a critical reflective stance and the application of new insights to further situations (Sandars, 2009). A systematic review of reflective learning in the education of HCP found that reflection could enable deeper learning, with improved integration of new learning with existing knowledge and skills (Mann et al., 2009).

The training content and approach of VOICE, based on the CA findings, requires HCPs to 'notice' their current communication practices, critically evaluate where their practices and those of colleagues may work well or less well, and then combine these new insights with their existing expertise, in order to develop communication practices which feel comfortably their own. This was considered to fit well within the notions of reflective practice, and consideration was therefore given to what teaching activities might enhance opportunities for reflection and reflective learning, beyond those already discussed (that is, observing other's practice own videos and simulation and reflecting on one's own practice in simulation).

The need for trainees to have an opportunity to reflect on their learning and attempt to apply it in real clinical practice gave support to the notion of splitting the training over two separate occasions, with a significant gap of one month in between. This was seen as another way of bridging the 'inauthenticity' gap of simulation and supporting the implementation of the training into clinical practice post-training. A PPI member of the expert panel at IDT1 suggested a 'reflective diary' of some kind might serve this function. Over subsequent IDT meetings it was agreed that this would take the form of a guided reflection 'diary', in which HCP trainees were asked to reflect on one interaction which had gone well and one which had gone less well. This was felt to be a more realistic request to make of busy HCPs than an open ended 'diary' of events.

Trainees were given two different models of reflection which they could choose to follow. One was based on a classic descriptive reflection model (Gibbs, 1988) including what happened, how it felt, what went well and not so well, what else you could have done, and how you might handle it differently next time. The second approach was a specially prepared 'VOICE' reflection model, developed by the lead researcher and based on a series of questions about the interaction in the light of the VOICE training content. For example, trainees were asked to consider "Did you request any actions of the PLWD? Did you try any of the VOICE techniques for requesting? How did they go?" (See Appendix E for the piloted version of the reflective diary).

Trainees were informed they would be asked to share their reflections when they attended the second day of the course, as an encouragement to complete the task. They were also advised that provided they could speak from memory about their experiences and

reflections, they did not need to present any written work, since perceived easiness of the task has also been found to support motivation for completion of reflective tasks (Sandars, 2009).

Guided reflection has been identified as helpful in optimising reflective exercises, since self-reflection does not offer the same opportunities for the challenge of an outsider's alternative perspective, and the 'disorientating dilemma' which can lead to transformative learning (Mezirow, 2000). The sharing of the reflective diaries on Day 2 of the training was therefore planned to happen in small groups of up to five trainees, with a facilitator whose role was to offer individualised support, encouragement and challenge in a balanced way. Facilitators were also to draw out from trainees' own reflections any learning needs for that individual for the second day of the course, and also any questions, queries or challenges for the whole training group, including the facilitator, to consider.

5.3.3.5 TEACHING METHODS: SMALL GROUP DISCUSSION

Simulation, video approaches and reflection, considered above as suitable teaching methods for this intervention, all incorporate some element of small group discussion. In addition, all of the studies in the systematic review which delivered a group-based training intervention reported using group 'discussion', 'activities' or 'exercises'. Active participation is required for deep learning to take place (Marton and Säljö, 1976). In many cases this will include discussion amongst peers, possibly with a facilitator present. The size of the group may support or inhibit contributions from all members, and in the UK an optimal 'small group' in higher education is often regarded as between six and eight members (Edmunds and Brown, 2010).

Whilst early models of experiential learning tended to emphasise the individual learner (e.g. Kolb 1984), social learning theorists such as Bandura (1977) saw learning as a social process, in which interaction is crucial for new meanings (i.e. learning) to be established. Billett (2002) emphasised that 'supported participation' is needed for learners to develop to their potential and Mezriow (2000) emphasised the need for constructive discourse with others for learning to take place. It has already been pointed out, in this chapter, that theory and evidence suggest that simulation and reflection are both enhanced by feedback from both

peers and 'tutors', which requires a suitably supportive and 'safe' group setting to have been established.

With these arguments in mind, the VOICE training was planned to offer plenty of collaborative learning opportunities for trainees through small group activities. Interactive group tasks were designed throughout the training to encourage the active participation of the trainees, in a non-threatening way, in sharing their perspectives with each other, often through skilled facilitation (Edmunds and Brown, 2010).

Where a facilitator was not deemed necessary or desirable, tasks were designed as 'buzz groups' for pairs of trainees to discuss topics together, as recommended by Edmunds and Brown (2010) for improving the small group learning in medical teaching. Activities in pairs involve every trainee in contributing and tend to facilitate contributions in plenary from across the whole group membership, whilst open questions asked to the whole group will tend to get responses from only a confident few. Such buzz groups also use time efficiently, allowing trainees to enter into more detailed talking and thinking time simultaneously (Edmunds and Brown, 2010).

Given the importance of the social context to learning, membership of the small groups for the first simulation was decided by the facilitators, aiming for a variety of perspectives and based on factors such as professional group, level of seniority or experience and apparent confidence or anxiety. In order to build the relationships and sense of safety within the group (bearing in mind the 'hierarchy of needs' described by Maslow, 1987) groups were intended to be kept the same throughout the intervention, although this could be flexible if an issue was detected.

5.3.3.6 TEACHING METHODS: E-LEARNING

Internet based educational approaches in healthcare have grown in use and breadth over recent years, with increasing ease of access to, and familiarity with, technology (Gordon, Chandratilake and Baker, 2013). A meta-analysis of internet-based education in healthcare has shown that this internet-based training is better than no intervention and may be as effective as conventional teaching methods (Cook, Levinson, Garside, et al., 2010).

The project grant for this study included financial support for the development of an e-learning resource without specifying the use to which this might be put within the intervention. Local expertise in e-learning tended to focus on the development of 'Reusable Learning Objects' (RLOs). An RLO has been defined as:

> 'an interactive, multimedia web-based resource based on a single learning objective which can be used in multiple contexts.' (Bath-Hextall, Wharrad and Leonardi-Bee, 2011; p2)

'Multimedia' refers to the use of audio, text, images and video in combination, and 'interactivity' refers to the involvement of the learner in exercises related to the on-screen content, and in some cases may include interaction with other users or a trainer. Both interactivity and the use of multimedia content (as opposed to a single media presentation) have been found to positively influence the effectiveness of online interventions in continuing medical education (Marinopoulos, Dorman, Ratanawongsa, et al., 2007). Learners have been found to accept e-learning technologies best if they offer a perceived advantage over the alternatives, are easy to use technically and are compatible with their values and norms (Wong, Greenhalgh and Pawson, 2010).

Two of the studies included in the systematic review (Hobday et al., 2010; Irvine et al., 2012) featured online-only training interventions, both of which describe an interactive, multimedia resource. These two online interventions covered a number of learning objectives related to dementia (not just communication issues) and required a considerable time investment on the part of the trainee (between two and four hours of total 'seat time'). They were well received by the care home staff trainees and had positive impacts on pre-post measures of knowledge and confidence. Both studies included use of videos (which trainees evaluated highly) as being helpful in learning new ways to care (Hobday et al., 2010), and as valuable and believable (Irvine et al., 2012). Whilst trainees liked the flexibility of the mode of delivery, in both studies, internet access and IT issues were concerns for trainees. When asked how to improve the training, some of Hobday's participants suggested that the sharing of ideas in a group training session would be beneficial and neither intervention mentioned any access to online forums or trainer feedback.

In considering the above issues, the decision was taken to follow the model of the RLO presented by Bath-Hextall and colleagues above, in which a single learning objective would be focused on to produce around 15 minutes of learning activity. The aim would be to use a blended learning approach in which the RLO would reinforce the learning from the face to face training (Masters and Ellaway, 2008; Shorey, Kowitlawakula, Devia, et al., 2018). This was in keeping with a behaviourist model of learning, in which repetition and immediate positive reinforcement are key to the retention of new knowledge or behaviours (Walsh, 2014). The opportunity for trainees to continue to develop their recognition of the recommended communication practices could be offered through the further presentation of 'real' video encounters, using those which had been consented for online training resources.

Since the training content on 'requesting in the face of reluctance' was felt to present the greatest conceptual challenge to trainees, this was chosen as the focus of the RLO. Relevant information was presented in text, audio and video ('talking head') formats, to maximise accessibility. In this way, trainees were given a summary and reminder of previous teaching, with opportunity for multiple repeats if desired. After each information giving slide, a reinforcing interactive activity was presented, using the videoed encounters and transcripts, as illustrated in the screen image in Figure 11 below.

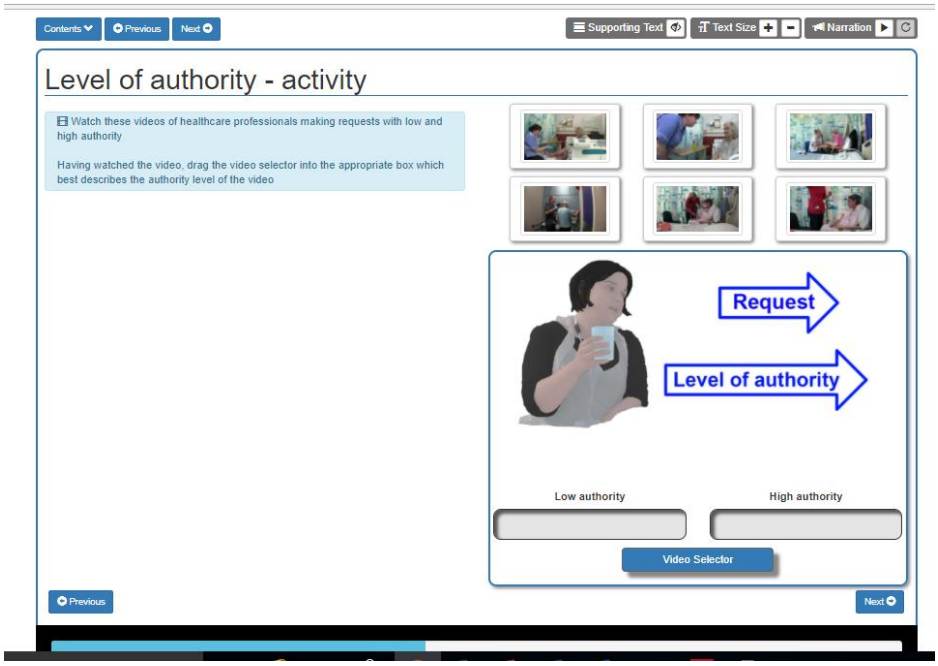


Figure 11 Sample screen view from e-learning resource

Trainees were given immediate feedback on correct or incorrect answers and the chance to self-correct. The 'testing' and feedback were designed to give trainees immediate, non-public, feedback on whether they had understood the key learning points.

The process of developing the RLO was supported by the expertise of the Health E-Learning and Media Team (HELM) at the University of Nottingham. The lead researcher wrote the content and created the exercises in collaboration with the Core Team and a PPI representative (KS), with oversight from the PMG. The RLO was available in time for use in the pilot (O'Brien, Goldberg, Harwood et al., 2017).[13]

5.3.3.7 SUMMARY OF TEACHING METHODS.

Table 15 below shows the considerations from each source of input, for each of the selected and described teaching methods.

[13] The detailed process of this RLO development is beyond the scope of this thesis.

Table 15 Considerations of Intervention Teaching Methods

Potential Teaching Method	Sources of evidence	Summary of key considerations for intervention design (teaching methods)
Simulation	• Systematic review	• 6/18 studies in the systematic review included either simulation, role play or 'live skills' practice. • 1/18 studies (Cockbain et al, 2015) reported significant confidence gains from a simulation only intervention for HCPs (medics).
	• Practical considerations	• Funding for professional simulation is included within the project grant, although not necessarily essential.
	• Individual interviews (PC)	• Simulation is the part of CST that HCPs report remembering positively in the long-term (Interview with PC). • Good simulation requires skilled facilitators, to create a safe learning environment and with expert knowledge and experience of the relevant clinical field, to draw out appropriate learning. • Good simulation is personalised by the learner, to allow them some control and increase safety.
	• Expert panel/s (IDT, SSC, PMG)	• Simulation offers the opportunity for 'real time' practice of communication skills, trying out new skills and making decisions 'in the moment'. • Simulation uniquely allows for reflection, feedback and re-trying in ways that clinical practice experiences can't. • However, simulation has been criticised in the CA literature because of the demonstrable interactional differences between 'real' and 'simulated' encounters (e.g. Stokoe, 2014). Agreed that work needs to be done to increase the authenticity of simulation if used.

		• 'Role play' between trainees or with volunteers would allow for more trainees per course, lowering costs- but lack of authenticity in 'performing' dementia and utilising the CA findings, makes this undesirable.
Real video data	• Systematic review	• A large number of studies (9/18) used video footage of some sort • As such this was the second most consistently used technique in the included papers. • The videos were usually of good & bad practice exemplars. • Videos were mostly filmed with actors not PLWD; only one used real encounters with the expert trainers and PLWD (Beer et al., 2012). • None stated that they used video analysis based on CA nor the video 'stop-start' technique commonly used in CA dissemination events (Kitzinger, 2011; Stokoe, 2014; Jenkins and Reuber, 2014)
	• CA literature, including Kitzinger article and CARM training description	• Using real video data avoids the authenticity challenges of simulation, • and scripted videos by showing what really happened in a real encounter. • Real video data can be stopped and started to allow trainees to reflect together on what was said and what they might say next. • The 'best' examples to use of the trainable practices will be those contained within the video data from which those practices were derived.
	• Individual interviews (BW)	• Video playback of the real encounters used in the CA can be used in training. • Real video data allows trainees to access the <u>process</u> of their interactions (how did we get there) not just the <u>outcome</u> (did we get there). • It helps if the technical bits work well- good play back, able to stop-start at will, subtitling to help with hearability.
	• Expert panel/s	• There is evidence from other CA derived studies, that stopping unwanted communication behaviours may be easier than starting new ones (Best et al., 2016), so video examples of 'trouble' in the interaction may be needed as well as 'positive' examples.

Real video data continued		• Simulation has disadvantages that video techniques might balance. • Reflections on 'real' videos needs to be skilfully facilitated to maintain respect for the interactants and to avoid digressions into negative judgments and unhelpful speculation on motivations etc.
Reflective learning	Systematic review	• 4/18 papers specified using self-reflection of some sort.
	Practical considerations	• Trainees will have to attend over two days, separated by one month (because of proposed research evaluation at 1/12 post training, in grant); gap could be utilised to carry out reflection on clinical practice from Day 1 of training.
	Expert panel/s	• Need to link classroom learning with 'real' clinical experiences to support implementation of the new practices/ skills. • Trainees need to individualise their learning to their differing contexts. • A 'reflective diary' might work to link learning to practice. • Encouraging participation of students in written reflections can be tricky. • Reflecting on one positive and one negative experience over one month could be realistic expectation for each trainee.
Small group discussion	Systematic review	• All the papers which delivering a group training intervention (8/18) reported using group 'discussion', 'activities' or 'exercises'.
	Expert panel/s	• Both simulation and CA-based video techniques will involve group discussions as part of their reflective, learner centred, experiential approach. • Active participation, which small groups facilitate, will be needed in order for deeper learning to take place.
E-learning	Systematic review	• Two online training modules were included (Hobday et al., 2010; Irvine et al., 2012). • Both used video examples extensively.

E-learning continued		• Care home staff needed support with technology. • Technology needs to work well and be easily accessible. • Flexibility of delivery was appreciated by CH staff.
	Practical considerations	• Grant had funding for development of e-learning resource and an academic specialist in this was included as a collaborator in bid. • Only about half of the videos had consent to share online.
	Expert panel/s	• A variety of online tasks helps to maintain interest. • Clear learning outcomes needed. • Better to keep very short and specific e.g. Should separate 'requests' from 'closings'. • May need to avoid using same clips for online resource as for face to face training (to avoid giving 'answers' away.) • E-learning resource should be designed initially to reinforce learning for those who are being trained.

5.3.4 What: Materials

In preparing the training according to the content and teaching methods described above, a number of 'materials' or resources were required. Hoffman et al. (2014) describe these as the 'ingredients' in the recipe of intervention production, and note that they were the most frequently missing items in their analysis of intervention descriptions for 133 randomised trials (Hoffman, Bateman, Bartels, et al., 2013).

All the learning content, including the interactive exercises and presentation of the video materials, was prepared in PowerPoint (see sample slides in Figures 9 and 10 above). This software allows the presenter to have presentation notes as a 'script' visible only to them (not to trainees), thus supporting the consistent presentation of the training over repeated occurrences and across potentially different presenters. In addition, PowerPoint allows video recordings to be animated, with transcript appearing as the words are spoken, thus enabling the 'stop-start' video-training approach already described in CA-based training. 'Youtube' links were also inserted into the Powerpoint presentation, in order to give trainees an opportunity to reflect on relevant communication practices in everyday contexts, before being presented with familiar institutional contexts, as recommended by Stokoe in her 'CARM' training (Stokoe, 2016b).

Paper based resources were also produced where necessary to support learning. (The majority of these were produced following feedback from Day 1 of the pilot, which will be described in section 5.4 of this chapter; they are included here for coherence in describing the material resources which made up the intervention.) These included a 'Summary of Recommendations' card, which summarised all the key training content on a double-sided sheet of A4 and which was intended to form a reference point for trainees throughout the training and potentially afterwards. One side contained the practices to 'try' and to 'avoid' in relation to requesting and closings. The other side showed a diagram of the structure of the encounter, and a summary

of person-centred dementia care, based on and referencing Kitwood (1997). This resource[14] is shown in Figures 12 and 13 below:

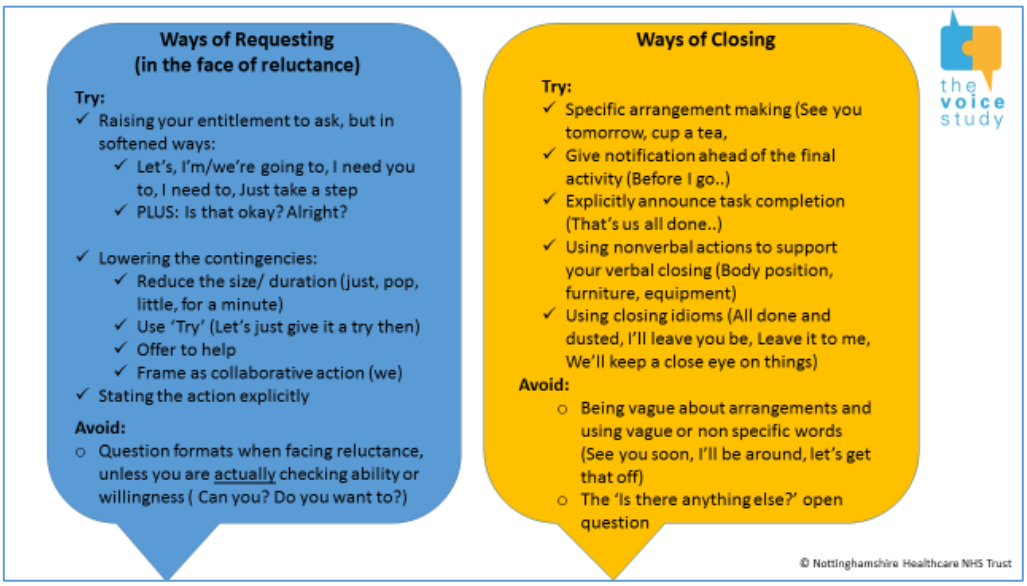


Figure 12 Summary of recommendations on Requesting and Closing

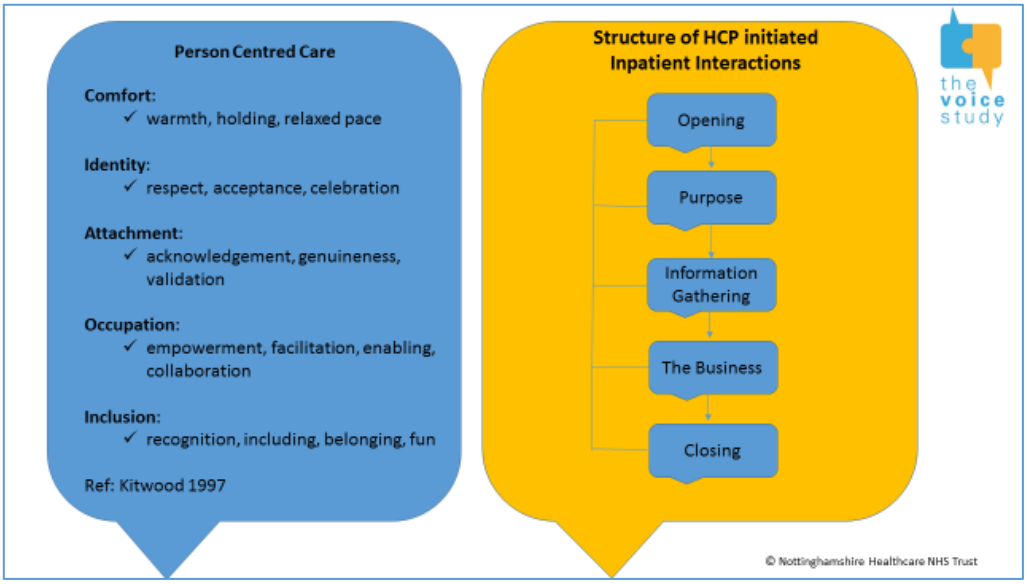


Figure 13 Summary of recommendations on Structure of the encounter and Person-Centred Dementia Care

Trainees were also provided with a paper-based resource to support various exercises, including a VOICE 'reflective diary' proforma (Appendix E), a written

[14] The original work within this resource is subject to the copyright of Nottinghamshire Health Care Foundation NHS Trust.

transcript for one of the video workshops and a sheet of questions to consider during the final small group 'implementation' exercise (see Appendix F).

Additional paper-based resources were needed to support the simulation workshops. These included:

- Handouts of the scenarios, with different versions for the simulators and the trainees (see Appendix G for example of trainee version)
- List of tasks for trainees to choose from (see Appendix H)
- Observation feedback sheets, to guide trainees in their role as observers of simulation and provide a structure for written feedback (see Appendix I)
- Guidance on the simulation process for facilitators

Simulations also required considerable physical resources in the form of 'props' designed to support the authenticity of the encounters, including hospital beds, chairs, bedside tables, blankets and pillows. Other resources were required to support the carrying out of selected tasks, including a choice of drinks and biscuits and the patient's personal wash things, with access to water, cups, bowls and so on. Simulation experts in the team were clear that trainees should not be 'pretending' that something was there that wasn't, since the trainees should not be seen as 'acting' but rather as being themselves in their professional roles.

The RLO described above also forms part of the 'materials' of the course and was made available to trainees following the first full day's training.[15]

5.3.5 Who provided the intervention

The characteristics of the intervention provider may have an impact on how the intervention is delivered (Hoffman et al., 2014) and therefore requires specification. The individual interview with PC, an experienced and trained facilitator of simulation himself, highlighted the importance of this intervention's facilitators being

[15] *This is currently available as O'Brien et al., 2017 at the following url*: https://www.nottingham.ac.uk/helm/dev-test/dementia_and_requests/

adequately trained, for the simulation in particular. Formal and informal training opportunities were therefore sought out for the researcher and the Core Team members, including attending a Masters level training day at the Trent Simulation and Clinical Skills Centre and participating in simulations and receiving feedback from the lead simulator (MM). More general training in educational approaches was received through the University of Nottingham Graduate School training programme and attending lectures for the University of Nottingham MA module 'Teaching and Learning in Healthcare'.

Two trainer-facilitators[16] were required for delivery of the intervention. Given her role in developing the training intervention, the lead researcher was identified to be the principal intervention provider. This trainer-facilitator delivered the majority of the training content and led on most training exercises. Either of the other two members of the Core Team could act as second facilitator, to enable the small group work, including simulation, to take place. All trainer-facilitators were experienced clinicians and clinical educators, with relevant knowledge of and experience of teaching approaches, small group work and simulation. The principal trainer-facilitator also had CA expertise and knowledge of the background circumstances of the recorded encounters. All the training faculty had detailed knowledge of the underpinning research project.

Members of the PMG raised the issue of who would deliver the training and whether there was a need or possibility for an observer from the PMG to attend. For the pilot intervention it was agreed that the three trainer-facilitators, with the lead simulator (MM), should act as observers for each other, as any other observers would introduce an imbalance of too many trainers to trainees. It was agreed that for the purposes of checking fidelity, an observer could be present during the future feasibility testing of the intervention, but to avoid introducing unspecified variation to each course, they should be a non-participant.

[16] Both the terms 'trainer' and 'facilitator' seem relevant in describing the educator's role in this intervention. The term trainer is used here to indicate a more didactic role in presenting new knowledge to trainees, whilst the term facilitator is taken to indicate the facilitation of learning through more experiential methods; they are both combined when referring to the totality of the role.

The intervention was also delivered by an experienced, and specially 'VOICE' trained, Simulation Team, as previously discussed. Two simulators were required per training workshop. Additionally, the lead simulator was present for the pilot to observe and support the simulators, because of the innovative approach of using CA-informed simulation.

5.3.6 How: Modes of delivery

Hoffman et al. (2014) suggest that interventions are specified in terms of face to face or online delivery, in individual or group contexts, and to what size of group, if relevant. The expectation within the project grant was that a face to face, group training intervention for HCPs would be developed, including using some element of video playback and simulation. No other details were specified, such as content, duration or numbers of trainees. Type of trainee was specified as registered HCP, but without specification of unidisciplinary or interdisciplinary delivery. The study proposal was based on evidence from other systematic reviews of CST in healthcare (e.g. Berkhof et al., 2011; Moore et al., 2013; Eggenberger et al., 2013), which showed evidence that HCP skills could be improved through group training interventions. The addition of an e-learning element to accompany the face to face training was conceived of in the project grant as supporting dissemination of the findings of the study. In fact, this function changed during the intervention development so that the RLO became principally an educational resource to reinforce trainee's learning.

How large these training groups should be was considered as part of the intervention design process. CARM training suggests that a one-day course can be run for around 30 trainees, with small groups sitting at tables of up to seven trainees (Stokoe, CARM training accessed 2016). However, the individual interview with one expert (PC) gave clear indications that there was considerably more time required to deliver high quality simulation experiences to trainees. PC reported that in his experience of communication skills training in end of life care, simulations lasted a minimum of 45 minutes per trainee. PC reported that five to six trainees per simulation group was

optimal, meaning that each of their two-day courses could support up to 12 trainees, using two simulators and two facilitators. In his experience, such groups benefited from being interdisciplinary and this was also agreed to be a pragmatic approach for recruitment by the IDT.

In scheduling the VOICE course to include interactive presentations, video workshops and simulation, it was calculated that simulation workshops could only be allocated half day slots, which would only allow for four trainees to have a 45-minute simulation each. It was therefore estimated for the pilot that a maximum of eight trainees could be invited to attend.

In summary, this intervention was delivered as a face to face, group training intervention, for groups of around eight participant-trainees, with some additional optional activities completed independently, including brief online learning activities and a reflective exercise. Whilst the face to face training was delivered in a group setting, there were opportunities within the course activities for individuals to receive personalised feedback.

5.3.7 Where

Since some features of the location of intervention delivery may have significant impacts on the intervention, specifying the location may be important for future replication studies (Hoffman et al., 2014) or in this case, for planning a feasibility trial. For example, if the required venue is so highly specialised that it cannot be replicated, then this will have implications for the feasibility of intervention testing, as well as for future implementation.

The identification of a suitable location for the pilot of the VOICE training needed to take into account the mode of delivery, the numbers of trainees, the combination of teaching methods to be used and the need to make the training intervention as easily accessible as possible to HCPs working in the acute setting. In addition practical considerations such as budget and availability were highly relevant. The video-based teaching methods required that good audio-visual and presentation facilities were available in one room, with online access and ideally with on-site technical support.

This main training room needed to have seating for all trainees, facilitators and observers, with room to have break away groups and buzz group pairs. The planned use of two small simulation groups, meant at least two separate rooms would be needed simultaneously. In creating as authentic a clinical simulation as possible, these rooms would need space and suitable furniture available to set up a hospital bedside-like environment, with additional space for up to five people to sit and observe the simulation and then give feedback. In order to meet the physical needs of trainees whilst keeping to schedule, the location needed to have refreshments available on site.

In the case of this study, the local acute hospital had a suitable simulation training centre on site and available. This centre had a 'suite' of three clinical simulation and training rooms available, with relevant audio-visuals for teaching in one room, and space in the two other rooms for a hospital bed, chairs and other necessary props. This was deemed an 'ideal' training environment and though appropriate for the pilot, it was acknowledged that this could prove hard to replicate if the intervention was delivered from other locations.

5.3.8 When and how much

A clear account of the quantity and pattern of delivery of a non-pharmacological intervention is no less necessary for it not being a drug trial (Hoffman et al., 2014). The debate about the duration of the VOICE training was an active one, with multiple sources of input and competing needs to consider. As with all debates around 'dosage', in the absence of definitive evidence, the decision needed to balance the competing pressures of the cost for future implementation with the desire to produce an intervention with adequate dosage to be effective. Practically, the project grant, without stating it explicitly, contained sufficient funding for a one-day course. This assumption therefore set the tone for the team discussions around duration, and considerations focused on the options of one day, two days or something in between.

In the individual interview with PC, a well-established, two-day course was described in which trainees are given teaching and prepare fully for their simulation on Day 1,

allowing time for a full day of simulations on Day 2. PC reported challenges in trying to re-write this course into one day, for a specific funding request. With the one-day course, they had to require trainees to carry out a considerable amount of online preparation, so that the day's training could mainly be dedicated to their simulations.

The Study Steering Committee Chair, Liz Stokoe, who authored the CARM approach, was consulted for her opinion on this issue. Whilst most CARM training events occur over one day, she commented that generally more training tends to lead to better effects.

Ideally the evidence on effectiveness would be the principal consideration for decisions about 'dosage'. However, in both the systematic review reported here (Chapter 2) and that by Eggenberger et al. (2013), there was huge variability in the duration and distribution of the CST interventions. Of the group training interventions, Eggenberger's included studies varied from three one-hour teaching sessions (Williams, 2006) to two eight-hour training days (Haberstroh et al., 2009). In the updated systematic review reported in Chapter 2, group training interventions varied from a single 45-minute workshop (Beer et al., 2012) to a total of 17 hours of training spread over three sessions (Karlin et al., 2014). Neither systematic review had enough power to consider a meta-analysis of how effectiveness of training in dementia care might relate to duration.

CST reviews from other healthcare contexts were therefore considered. In their systematic review of CST in cancer care, Moore et al (2013) reported that it was still unclear what duration and intensity of CST is most effective, although they did cite Barth (2011) who found a trend towards increased duration being more successful and Fellowes et al (2006) who reported that those CST which were effective appeared to be expensive and labour intensive. Gysels, Richardson, and Higginson (2005) also found that duration and effects were positively associated for CST for HCPs.

Given all these considerations, and the content which the course hoped to cover, it was decided that the training should occur over two days, with a one-month interval in between. This would allow sufficient time to cover the multiple 'trainable'

communication behaviours from the CA findings, allow time for both video workshops and simulation approaches and facilitate independent reflective activity between Day 1 and Day 2. Having two full days would also allow time for evaluation activities to be completed before and after the training without drop off. The e-learning activity could then be offered between training days, as a consolidating activity.

5.3.9 Tailoring

Tailored interventions are delivered in an individualised way, so that not all recipients receive an identical intervention (Hoffman et al., 2014). Whilst the materials, resources and planned activities were intended to be constant across multiple deliveries of this intervention, the experiential learning approach taken meant that for each individual trainee the course would be experienced slightly differently. For example, each trainee would have had different experiences on the ward and in simulation to reflect on, and then would receive individualised feedback on both. Since each course was likely to include a different mix of professional skills and experience, there was also a sense in which each course would represent a different community of learning (Yardley et al., 2012). Taking a constructionist view of learning, each trainee will be building on their unique past knowledge and experience, using their individual experience of the training to construct their new learning and skills (Carver, 1996).

5.3.10 Modification

It is not uncommon for modifications to be made to interventions during delivery, especially in the early stages of a study, and these need to be clearly described and accounted for (Hoffman et al., 2014). In this case, the pilot study of the training was designed specifically to allow for modifications before entering the feasibility testing phase. This process of what why and when modifications were made will be described fully in the final sections of this chapter.

5.3.11 Fidelity: planning and achievement

The extent to which an intervention is delivered as intended is referred to as its 'fidelity' (Hoffman et al., 2014). When a complex intervention is delivered by different people in different contexts, the possibility of unintended variation is introduced. The need for a clear process for checking of fidelity and strengthening it has been increasingly recognised, including the potential impact on outcomes of high or low intervention adherence (Carroll et al., 2007). The pilot study was therefore intended to support the planning of fidelity checking for a future feasibility study. Any actual variations from intended intervention delivery during the pilot will be discussed in the following section.

5.4 Pilot

A pilot of the VOICE for Dementia training programme was run with the primary objective of optimising the intervention prior to feasibility testing, with regards to being deliverable, acceptable and likely to be effective. This aim is consistent with modelling the processes of an intervention as part of the 'Development' phase of the MRC complex intervention framework (Craig, Dieppe, Macintyre, et al., 2008). It has been suggested that thorough piloting can avoid frequently occurring problems in trials such as problems with acceptability, compliance, delivery of the intervention, recruitment and retention, and smaller than expected effect sizes, all of which can lead to the failure of a trial (Craig et al., 2008). Whilst definitions of pilot studies are not without controversy (see Eldridge, Chan, Campbell, et al., 2016), this pilot was designed to be a small version of the feasibility study, to test whether the processes could all work together (Arain, Campbell, Cooper, et al., 2010). This gave opportunities for trainers to practice delivering the intervention, simulators to experience their roles live, and a sample of trainees to experience the intervention and feedback on it, allowing for refinements to be made prior to the feasibility study.

5.4.1 Pilot Method

The pilot consisted of running the training programme once prior to the start of the full feasibility study. It was carried out over two working days, separated by approximately one month, in accordance with the intervention design, in December 2016 and January 2017. Trainees for the pilot were invited by the project team on the basis of the following criteria:

- Considerable experience working with PLWD in the acute setting
- Experience in the education and/or training of HCPs
- Confident enough to work as 'critical friends' to the research team's senior clinical researchers, giving honest, face-to-face feedback at the end of each training day
- Represent a spread of professional groups, including doctors, nurses and therapists.

The training took place at the acute hospital where the trainees were based, in specialist training accommodation with good audio-visual support and appropriate furniture and equipment to support simulation. The intervention was delivered by two members of the core research team (the author and SG), with a third (the NIHR study Chief Investigator, RH) observing, and taking part as a trainee to make up numbers in simulations. The lead simulator (MM) acted in a supporting and observational role. Two simulators supported the evaluation scenarios and two supported the training scenarios.

Pilot trainees were given a brief introduction to the pilot processes before the training intervention 'proper' began. The training was thereafter run as designed. After both training days a group feedback session of 45-60 minutes was facilitated by the lead trainer (the author), with the training team present. The training schedule and selected slides and resources were used to lead trainees through the training experience they had undergone and invite feedback on every stage. In addition, after Day 2, all elements of the TIDieR checklist (Hoffmann et al., 2014) were reviewed by the trainees and several other issues of concern to the intervention development team were raised, such as the question of appropriate terminology (entitlement and

contingency). Informal discussions were then held amongst the training faculty, including the two trainers, the lead simulator and the Chief Investigator, in order to gather their perspectives on the training delivery.

Notes of these discussions were taken by the training faculty on both days. This was supplemented by an audio recording on day two, with trainees' consent, to allow for fuller involvement of the faculty on the day and avoid missing any points made in the discussion. Comments from the live and recorded discussions were tabulated by the lead researcher against headings linked to the schedule of activities and the TIDieR checklist. Potential changes were identified and amendments to the intervention were made accordingly by the lead researcher.

5.4.2 Pilot Findings

5.4.2.1 Trainee recruitment and characteristics

A total of 18 HCPs were invited to attend the pilot over the four months preceding the pilot. It proved particularly challenging to recruit a practising staff nurse at one to two months' notice, because their work schedules are worked out three months in advance. They were also found to be less responsive to work emails than other professional groups. The training pilot dates coincided with new rotations for several specialist medical registrars, who therefore found it difficult to commit in advance. In addition, a hospital directive had been issued that staff should only be attending mandatory training at the time, due to 'winter pressures'.

Given these limitations, on the first day, seven trainees were booked to attend (target was eight). Unfortunately two were unable to attend on the day due to norovirus. Five invited trainees were able to attend, including one each of: a staff nurse (currently academic), a mental health nurse, a speech and language therapist, a physiotherapist and a doctor (currently teaching). In order to support the piloting of appropriate trainee numbers and timings of exercises, one of the researchers who was also a clinician (a doctor) participated as a trainee for group exercises. All trainees who attended Day 1 also attended Day 2.

5.4.2.2 *Intervention deliverability*

The training was delivered as planned. The intervention was complex to set up and deliver from the trainer's perspective, including the use of three training rooms, multiple video recordings embedded in PowerPoint presentations and the running of multiple simulated encounters. Sound levels, synchronicity of IT systems and the use of online video clips all required IT support before the training delivery could commence. Simulators required support in setting up their simulations and were anxious for feedback afterwards. Despite these challenges, the training was delivered to schedule, to an interdisciplinary group of HCPs.

Trainers reflected that the training was challenging to deliver even for experienced educators and clinicians, with in-depth knowledge of the underpinning project and the intervention. This suggested that for a limited feasibility study, it would be more efficient for the same lead-trainer to organise and deliver the training, with several co-facilitators from within the project, to avoid the need for extensive training of trainers.

5.4.2.3 *Intervention acceptability*

At the end of Day 2, trainees evaluated the training extremely positively, commenting that despite their many years of specialist experience, they had greatly valued the new learning from the course. The simulation experience was seen as 'essential'. They felt the two days were necessary for the training, which they agreed was 'advanced'. For those working clinically, the separation by one month reportedly worked as intended, to enable reflection and immediate application of learning to their clinical contexts. Trainees reported the video and simulation exercises were appropriately increased in difficulty from Day 1 to Day 2.

Training faculty recognised the progress trainees made between Day 1 and Day 2, which was revealed in the reflective diary exercise and in the simulations. The trainers placed value on being able to identify misunderstandings on Day 1 and early on Day 2 which could then be addressed on Day 2. The intervention was felt to be acceptable across the training faculty, including by the highly experienced simulators.

5.4.2.4 Intervention refinements

Trainees made a number of suggestions for how to improve the training, including expanding, reducing, simplifying and re-ordering various exercises and producing supporting resources. The full tables of discussion points and changes made are included in the Appendices J and K and summarised in the following description.

Simulation was identified as the priority method for learning and the trainee group recommended that training time for simulation should be maximised. To this end, content on the background research study and conversation analysis as a method, whilst interesting, were not felt to be vital and were removed or reduced. Trainees after Day 1 fed back that they felt they were understanding the key learning points from the training (including the terminology of 'entitlement' and 'contingency') but would benefit from a handout of recommended communication practices as a reference point throughout the course. This was developed into a resource and trialled on Day 2 of the pilot and agreed to be helpful (see Figure 12, section 5.3.4). Trainees found the description of the phases of the interaction illuminating and suggested greater emphasis on this. A teaching slide with video examples was therefore developed (see Figure 14 below). The phases of the interaction were added to the summary of recommended practices (Figure 13, section 5.3.4) and included as part of the observation feedback sheet for the simulations (Appendix I).



Figure 14 Powerpoint slide for Phases of the Interaction- developed following Pilot Day 1

It was also suggested that a reminder of person-centred dementia care could be useful, and this was added to the presentation on Day 1 and to the summary of recommendations handout (see Figure 13, section 5.3.4).

Some language was identified as needing simplification, for example, the aims and objectives were re-written. The reflective exercise was highly valued but more time consuming than expected, so following suggestions the task was re-organised to allow all participants to contribute for a shorter period each, and more time was allocated to this task.

A number of significant changes to the simulations emerged from discussions with the lead simulator, trainees and trainers. These included: asking for specific feedback for each trainee from the simulators, out of role; adding more props to avoid HCPs 'pretending'; increasing the number of simulated tasks to cover HCP roles better; facilitating observer feedback on phases, requests, closings and person-centredness; and encouraging pausing and re-running of simulations.

5.4.3 Discussion of pilot

The VOICE for Dementia training intervention was successfully delivered once as a pilot, with a group of experienced and interdisciplinary clinicians and educators. Trainees and trainers found the intervention acceptable. Extensive, constructive suggestions were made which allowed for considerable refinement of the intervention, despite the small number of trainees able to attend. The pilot identified important factors for improving the running of the feasibility study, including optimising recruitment, identifying suitable sites and using appropriately competent and consistent trainers. It was not possible within the time limits and resources of this project to re-pilot the revised intervention, which could have allowed for further progressive refinements prior to the feasibility study (Craig et al., 2008). Given that the planned feasibility study was still not a full scale evaluation trial, there was still some flexibility to allow modelling and refinement to take place following the feasibility study, should a full scale trial be carried out in the future.

5.5 Summary of Intervention Design

This chapter has presented the detail of the 'who, what, why and when' of the intervention design processes which followed the CA investigation. This complex, non-linear process involved a wide group of informants in developing the 'VOICE for Dementia' training intervention, based on original findings from the CA analysis, modelled in a pilot, and ready for testing beyond this thesis in a feasibility study.

Chapter 6. Discussion

6.1 Introduction

The aim of this thesis was to develop an evidence-based, deliverable communication skills training intervention for healthcare professionals (HCPs) caring for people living with dementia (PLWD) in the acute hospital setting and was guided by three simple questions: **what** should we train, **how** should we train and **can** we train? These questions were expanded into the following study objectives:

1. To identify **what** should be trained, through
    - identifying existing evidence
    - new empirical work to uncover what HCP communication practices 'work' to facilitate communication with PLWD in this context.
2. To identify **how** these practices could best be trained, using a process of evidence synthesis and expert consensus.
3. To produce a training intervention which **can** be delivered and is acceptable to trainees.

In this final chapter, following a reminder of the content of each chapter, a summary of the findings will be presented, considered critically for its strengths and limitations, and presented in the context of current knowledge. The thesis will finish with consideration of the implications of the findings for practice and future research.

6.2 A summary of the thesis by chapter

In Chapter One the problem faced by people living with dementia who become acutely unwell and require hospital admission was presented. The communication difficulties which are an inherent part of dementia were described in terms of both underlying impairments and presenting disabilities, with acknowledgement of the impact that the communication partner and other external factors can have on the success or not of their interactions. An overview of the evidence was presented for the negative impact these difficulties have on the experience and well-being of both

hospital patients with dementia and the healthcare staff who care for them. This led into a consideration of what, if anything, has been identified that might help this situation. Evidence for communication strategies that might support interaction 'in the moment' were presented, but these were found to be somewhat underspecified, with conflicting results about the effectiveness of strategies depending on, for example, their interactional context. Given this contextual sensitivity, it was noted that these strategies were untested in the context of acute hospital healthcare for PLWD. It was noted that communication skills in healthcare in general have become included as a mandatory part of training and competency descriptions for HCPs, in recognition of their contribution to patient satisfaction and patient outcomes. Communication skills training interventions have been developed and tested in response to this across a variety of healthcare contexts, with systematic reviews supporting their effectiveness in changing trainee confidence, some specified communication behaviours and burnout, as well as patient level outcomes such as pain and satisfaction. No high quality, definitive communication skills training for communication partners of PLWD appropriate to the acute setting was found in a systematic review of studies published up to 2010 (Eggenberger et al., 2013).

Chapter Two therefore described the conduction of an updated systematic review of the effectiveness and characteristics of communication skills training interventions for communication partners of PLWD. It was identified that there was some evidence that such training can be effective at changing trainee confidence, knowledge, attitude, well-being and behaviours. However, studies tended to be of low to medium quality and the majority were not based on empirical research about what practices demonstrably 'work' in interaction. It was concluded there was no high quality, demonstrably effective, evidence-based intervention that could be used or adapted for the acute healthcare context.

Given the need for a new training intervention, Chapter Three presented a consideration of methodological approaches which might enable the uncovering of 'what' practices should be trained in the context of acute healthcare for PLWD. It was argued that the most appropriate approach was that of conversation analysis, which could uniquely identify the *in situ* practices of HCPs, in specified sequential contexts,

which could be seen to lead to positive interactional consequences for both parties. The methods by which such practices were in fact uncovered were described in detail, including the ethical and practical challenges of video data collection and analysis in this context.

Chapter Four outlined the findings of the conversation analysis. The overall phased structure of the encounters was described and the two phases where most trouble occurred were identified as: the 'business' phase, when patients frequently expressed reluctance in the face of requests from HCPs; and the closing phase, which could become extended when PLWD and HCPs failed to mutually align to the closing. The analysis of patient refusals and HCP requests was presented in detail.

Chapter Five made transparent the methods and results of a creative process in which the evidence from the systematic review and conversation analysis was used to inform a breadth of experts, who contributed to the design of a new communication skills training intervention. The methods used were to some extent emergent and iterative.

The results of both the conversation analytic and intervention design processes will be presented in the following 'summary of findings'.

6.3 Summary of Findings

Video recordings were made of 41 healthcare encounters in the acute hospital setting between a variety of healthcare professionals and people living with dementia. The recordings provided a rich vein of data of naturally occurring, routine healthcare tasks in action, in the acute hospital, dementia-care context. Tasks included, for example, having blood pressure taken, chest examination, walking practice, swallowing assessment and shaving. Conversation analysis was used to understand where trouble occurred in these encounters and what worked well, and what worked less well, in response.

A recognisable 'vague orderly' phase structure was identified, which consisted of: opening, purpose, information gathering, business and closing. Not all encounters

contained all phases, and not necessarily in the same order. The most striking and consistent examples of interactional trouble occurred in two of the phases. The 'closing' phase of the encounter, in which HCPs initiated drawing things to a close, sometimes became prolonged. The analysis of these extended closings was carried out separately from this thesis, as part of the parent study, and the findings are therefore reported fully elsewhere (Allwood et al., 2017).

In the 'business' phase of the encounter, in which HCPs generally tried to get some practical healthcare task done, patients commonly showed reluctance in the face of the requests made of them by HCPs. Patients refused requests in a variety of ways, including the atypical practice of what was termed an 'overt refusal', in which PLWD generally just said 'no'. In these cases (which could also be communicated nonverbally) patients refused without offering the usual explanations and accounts in mitigation. Overt refusals, and other shows of patient reluctance, were seen to halt the progressivity of the task and appeared to create an interactional dilemma for the HCPs, whose concern to complete the task in the best interests of the patient may conflict with their desire to respect the autonomy and wishes of the patient before them.

Requests preceding overt refusals were found to be frequently (although not exclusively) formatted in ways which displayed a low entitlement to make the request, such as 'I was just wondering if', 'is it okay if' or a medium entitlement to ask, such as 'Do you fancy', 'Do you want to' or 'Can you'. These formats project or offer the option of refusal, and are used in everyday interactions when the requestor is displaying their lack of knowledge or authority on the subject of the request or a lack of urgency in the request (Curl and Drew, 2008). It was argued that HCPs displaying a lack of entitlement to make their requests may mis-communicate to PLWD that the action is not particularly important and/or that the HCP does not have an appropriate level of expert and confident authority in suggesting the action.

Following refusals, skilled HCPs were seen to negotiate the interactional challenge using several devices. In the face of reluctance, HCPs used formats which displayed a higher entitlement to make the request, which avoided the projection of a 'no' response and appeared to support cooperation with requests. These included:

announcements of future action ('We're going to do X', 'I'll do X'); proposals for future action (Let's do X); statements of need ('I need to do X', I need you to do X'); and direct instructions (e.g. 'Keep hold of the frame').

However, simply displaying a high entitlement to ask when requesting actions of another person, without referencing the contingencies that might be imposing on that person's ability or willingness to carry it out, can display high authority in the context of a controlling relationship, having been reported, for example, being used by parents with children (Craven and Potter, 2010) and by institutional caregivers with residents with intellectual impairments (Antaki and Kent, 2012). In contrast, in this dataset the HCPs used multiple devices for 'softening' their higher entitlement requests. These could be characterised as the HCP displaying an explicit lowering of the contingencies which might impede the task being completed- that is the HCPs use interactional practices which made the task sound easier for the patient to complete. These included: reducing the size or duration of the task (using words such as 'just', 'pop', 'little' and 'for a minute'); invoking effort or 'trying' as adequate, rather than success ('let's just give it a try'); offering to help ('can I help'); and framing the action as joint and collaborative ('Let's', 'shall we give it a go then').

These original findings, along with the results of the systematic review, were used as the basis for a new communication skills training course for experienced HCPs. A design process evolved which took these evidential inputs to expert participants in the relevant fields (including hospital care of PLWD; dementia and communication; clinical education, including simulation, e-learning and use of video/CA) for consideration. The specially convened 'Intervention Development Team' was able to use these inputs, along with their shared expertise, to consider the pros and cons of various presented intervention characteristics and also to generate new intervention options. Decision making processes about the intervention design happened across various groups of participants, within the practical constraints of the project. Most final decisions about the design were made by the author/lead researcher, informed by the expertise of other participant groups and with oversight from the Core Team. The intervention was comprehensively described in keeping with the TIDieR checklist

(Hoffman et al., 2014) in order to support fidelity in a future trial and replicability following such a trial.

The 'VOICE for Dementia' training intervention designed through this process was a two-day, interdisciplinary course, grounded in experiential learning theories. It was intended for a multidisciplinary group of registered healthcare professionals currently working with PLWD in the acute hospital setting, including nurses, doctors and allied health professionals. The two days were delivered one month apart to allow for reflections on clinical practice in between. The teaching methods used included simulation, real video recordings and their transcripts, reflective learning, small group discussion and e-learning. The two days of training were delivered by two experienced clinical-academics from the core research team, with the author acting as the lead, as well as two specially trained simulators. The simulators received a day of training prior to the pilot, including teaching on dementia and on the conversation analytic findings, with detailed examination of the real video encounters on which their scenarios were based. The training required facilities to support the simulation of a ward-like environment, in two separate rooms, as well as good enough audio-visuals for stop-start playback of sometimes hard to hear, real life hospital recordings.

The intervention described was piloted with a group of interdisciplinary, dementia-experienced clinicians who had an interest in clinical education. Multiple minor refinements were made, based on the feedback from the pilot trainees and the experiences of the trainers during the pilot. These refinements enabled an evidence-based, well-designed and acceptable complex intervention to be brought to the point of being ready for feasibility testing.

6.4 The feasibility study

At this point it should be noted that following the pilot study described here, the feasibility study was in fact carried out, as part of the parent study of which this thesis forms a part. This feasibility study has now been published (O'Brien, Goldberg, Pilnick, et al., 2018). The feasibility study tested the training through six courses, run

across two hospital sites, between January and May 2017. Trainees came from medical, nursing and allied health professional backgrounds, with 44 out of 45 trainees completing both days of the course. Each course was facilitated by two clinical-academics from the Core Team along with the specially trained simulators. The course was well received by trainees, and measures of communication confidence and knowledge rose significantly post-training. Written feedback suggested that the simulation experience with feedback was the most consistently valued part of the course. One month after the training, HCPs still reported using the learned skills in practice and finding them helpful. Simulated patient encounters were video recorded before and after the training and rated for target behaviours by blinded raters. Despite only moderate interrater agreement, some behaviours showed significant changes in the expected directions following training.

6.5 Strengths and limitations of the study

6.5.1 Study Strengths

The overall aim of this study was achieved in that an evidence-based communication skills training intervention was developed which uniquely addressed some of the communication challenges for healthcare professionals caring for people with dementia in the acute hospital setting. The training was based on new empirical work which for the first time used the rigorous method of conversation analysis (CA) to uncover 'trainable' practices from recordings of naturally occurring interactions between HCPs and PLWD during acute healthcare encounters. By identifying practices already in use and which could be seen to work to avoid or overcome interactional trouble, the analysis avoided the pitfall of relying on what people think or say that they do and instead drew on what they actually did. The practices identified in this way also had the advantage of being demonstrably 'useable' and 'realistic' in everyday healthcare, because that was where they were identified from.

By collecting a breadth of data from across a number of professional roles (nurses, allied health professionals and doctors), from PLWD with a range of difficulties communicating, and from a number of healthcare activities, the analysis was able to

identify trainable practices which were applicable to a wide variety of situations in which PLWD encounter HCPs in hospital. The conversation analytic findings were produced in a robust way, using both internal and external group data sessions, to allow for critical inspection of the data and to support the development of a shared understanding in which the preconceived notions of the analysts could be challenged (ten Have, 1999).

The intervention design process was accounted for with a transparent description of the relationships between groups of participants and processes. The design process included a breadth of interdisciplinary expertise, including input from experts by experience, educators, clinicians, conversation analysts and simulation experts. The process was developed to optimise the consideration of all relevant evidence by all relevant parties, with external oversight to avoid 'group think' bias. Mixed training methods were used, underpinned by specified experiential learning theories and evidence, in order to optimise the skills learning of trainees. Learning outcomes emphasised the need to build on the prior knowledge and experience of trainees, incorporating the new knowledge derived from the CA findings into their everyday practice. In response to the mixed evidence around simulation, diverse experts worked to develop the authenticity of the simulations, using the empirical evidence from the analysis, as well as clinical knowledge, to thoroughly prepare the scenarios and simulators. The training was refined following a pilot with feedback from a relevant interdisciplinary group of clinician-educators, with changes made to the included content, the ordering of activities, the language used, the resources provided and the running of the simulations.

6.5.2 Limitations of the data

The recordings made for the study had some limitations. They were only made in one hospital and therefore may represent a particular way of doing healthcare which differs from that done in other hospitals. However, it seems likely from the national (and international) evidence around acute healthcare for PLWD presented in Chapter One, that similar contingencies (such as time pressures, heavy workloads and the

desire but difficulty of delivering person-centred dementia care) will be impacting on the interactions of HCPs and PLWD across hospitals, at least in the UK. A wide variety of HCPs and PLWD were included in the dataset, carrying out a wide variety of healthcare activities, and it seems likely that patterns found across the dataset will therefore be found elsewhere. However, this remains to be demonstrated.

The recorded encounters were all initiated by HCPs rather than by patients. This was an artefact of the consent and assent procedures, which meant that recording was agreed with the HCP and patient on each occasion before the camera was set up. Recording of patient-initiated interactions with HCPs could provide a valuable and contrasting dataset, but would require cameras to be set up by the patient's bed for prolonged periods of time, on the off chance of catching an occasional, unplanned interaction, which would be resource intensive and potentially more intrusive for patients.

Intimate care such as assisted washing and dressing were not recorded, as per ethical permissions, in order to preserve the privacy and dignity of patients. However, these activities can be particularly challenging for the PLWD (Barrick, Rader, Hoeffer et al., 2008). During data collection, the author overheard responsive behaviours a number of times during intimate care (occurring behind curtains on the bay) such as shouting and swearing at HCPs, with reported hitting out. It would be valuable to be able to advise HCPs on communication in these contexts, along with other episodes of aggressive behaviour, but carrying out such a study using recording methods in an ethical and safe way would be challenging.

None of the recordings occurred early in a patient's hospital admission, due to recruitment procedures which required staff to be somewhat familiar with the PLWD in order to volunteer them as possibly suitable recruits. In addition, consent procedures in most cases took several days to complete because of the need to approach the PLWD first and then to seek consultee agreement prior to filming. This will have affected the kinds of activities that were recorded- for example, patients were not being medically assessed and diagnosed in an acute state, with the HCP pressures and patient distress that this might bring to the interaction.

All HCPs recorded had to be willing to be filmed for research purposes and therefore it may be that less confident, but potentially equally competent, staff may not have been included in the dataset. It is possible that this group may use particular practices which were therefore missed. One such group would be HCPs for whom English was not their primary language. Particular efforts were made to recruit from this group, but only six recorded encounters out of 41 came from this group.

The question of reactivity to the recording of an encounter is a well-rehearsed one (see section 3.3.2 of the methods chapter). Conversation analysts would argue that whilst the camera necessarily affects the phenomena under study, it does not do so in ways which fundamentally affect the validity of the interpretation offered about how micro-practices are constituted (Parry et al., 2016). However, it is possible that HCPs may have performed relevant aspects of their interactions differently because of the presence of the camera and researcher. For example, if HCPs were trying harder than usual to display their 'person-centredness' towards their patients with dementia for the research, they may have asked them to do things in gentler, less entitled ways than usual, or been more reluctant to leave them at the end (and therefore extended the closings). However, this thesis does not seek to make claims about the frequency of low entitlement requesting or practices which extend the closing, but rather presents what happens when such practices do occur and do not occur. There were a wide variety of practices displayed in the dataset from a broad group of 26 clinicians, who could be seen to use a variety of practices within and across their encounters in relation to requesting and closing, suggesting they were not responding in certain ways simply because of the camera. Anecdotally, in presenting the findings to national and international conference audiences, the interactional 'troubles' identified in this research have resonated with clinicians and family caregivers of PLWD, and do not appear to be an artefact of the research process.

The openings of the encounters did prove difficult to capture in an authentically 'naturally occurring' way, with HCPs tending to approach the patient just before or just after cameras were switched on to check their assent to being filmed. HCPs tended to then 'perform' a further introduction for the camera. The openings of the

interactions were not therefore treated to a detailed analysis in this study. Decisions about when to start recording are not straightforward and have been the subject of analytic investigation in their own right (Lomax and Casey, 1998). Changes would be needed to the procedures employed if the opening phases of hospital encounters were identified as a subject for further inquiry.

There were a few occasions on which a small number of patients displayed some minor reactivity to the camera or researcher, with fleeting displays of interest, such as looking at the camera, or brief social greetings to the researcher; but in almost all cases, the PLWD appeared fully absorbed in the interactions with the HCP.

A number of healthcare activities which rely solely on communication were only filmed in single cases, including one full cognitive screening assessment and one discussion to identify someone's capacity to make a decision on their future living arrangements. Identifying how these complex communicative tasks are achieved would require further, more focused data collection.

Triadic interactions between family carers, PLWD and HCPs were not targeted in data collection for this study, despite the concern of carers that they be included more in the hospital care of PLWD (Lakey, 2009). The aim of this analysis was to identify trainable communicative practices which HCPs could use directly with PLWD, and to this end the dataset collected was appropriate. Many hospital interactions occur for the PLWD without a carer present, even when visiting hours are open, as in the hospital in this study. In addition, around one in ten inpatients with dementia may have no carer or significant other (Goldberg et al., 2012), and others may have family and friends who are unable to visit regularly. Inclusion of family members in the recorded encounters would have answered an interesting but different question, especially given the known tendency for HCP-companion interactions to dominate over the HCP-PLWD interactions, in situations such as the dementia memory clinic (Karnieli-Miller, Werner, Neufeld-Kroszynski et al., 2012; Peel, 2015; Xanthopoulou, Dooley, Meo et al., 2018).

Contextual information gathered about the participants with dementia was minimal, as permissions had not been sought to fully examine patients' medical and nursing

records. This meant that details such as the hearing status of the participants was not recorded. Given the high prevalence of hearing impairment in those with dementia (Roth, Hanebuth and Probst, 2011) and the known impact of hearing loss on communication abilities in the hospital environment (Middleton, Girling and Myint, 2010) it may be that the analysis lacked sensitivity to this co-existing communication impairment. However, conversation analysis as a method seeks to identify whatever factors are displayed as relevant within the interaction, and this would include observable occurrences of, for example, mis-hearings and requests for repetition that might signal the relevance of a hearing loss. It may be that further analysis of the data by specialists in hearing loss might identify more significant findings related to hearing loss and relevant trainable practices for HCPs, beyond that which is already recommended.

In addition, in not collecting and analysing data about the broader context of this interaction for this individual with dementia, the conversation analyst cannot account for whether something occurring in the interaction is typical or not for these individuals, or what contextual factors might have influenced their displayed emotional state or topic of talk, for example. Organisational factors such as staffing levels cannot be accounted for using this method, unless directly displayed within the interaction (if referred to by the HCP for example.). However, this limitation is off-set by the value of using a robustly empirical analytic method which looks for the rich explanations which arise within the encounter itself.

6.5.3 Limitations of the analysis

The analysis of the collected data was limited by the time available. CA is a resource intensive method and therefore all the possible themes of interest could not be fully analysed within the time available. The purely embodied requests and refusals were not subject to a separate and multimodal analysis. In order to rationalise resources the themes chosen for the full analysis were verified as: important and new by the conversation analytic team; as relevant in terms of patient care by clinicians and 'experts by experience'; and as potentially trainable by the educationalists and the

whole study team. Funding for further analysis of the dataset has been successfully gained.

6.5.4 Limitations of the intervention

Identifying trainable practices from conversation analysis, means that by definition, the recommended practices are already in use to some extent at least. It may be that training in their use is not therefore required. However, the trainees on the pilot, who were particularly expert in their fields and in some cases formed the basis of the dataset for analysis, fed back that the training had explained to them 'what they did, but didn't know they did'. In other words, they had been made explicitly aware of their implicit knowledge, in keeping with the ethnomethodological roots of CA in making explicit the tacit knowledge of interactants (as described here in Chapter Three). The pilot clinicians reported that being made aware of their practices and given a language with which to describe them would enable them to more effectively pass their skills onto others, as well as to potentially use them more frequently and appropriately.

The training intervention used the analytic understandings and terms of 'entitlement' and 'contingency' to explain to trainees about different formats for requesting and their potential consequences for the interaction. Such terms and concepts are linguistically sophisticated and intellectually demanding, and it may be that this would limit the learning of HCP trainees. It might also limit the usefulness of the training for other healthcare providers with a less academic background, such as healthcare assistants, who similarly face issues around reluctance and closing in encounters with PLWD. The decision to use these terms was carefully considered by the Intervention Development team and no satisfactory alternative could be agreed. It was noted that since the intervention was specified to be for trainees who were registered HCPs, this would mean all trainees were educated to a minimum of degree level. The pilot trainees had mixed reactions to the terms, but the majority felt the terms were acceptable and informative, provided they were adequately reinforced

during the training. A full evaluation of the intervention would be needed to identify if these terms are a help or hindrance in training HCPs about requesting.

The teaching methods and structure of the training were strongly influenced by the experiences of the particular experts involved in applying for funding for the parent project, including the author. In particular, this included local experience of simulation training in end of life communication, e-learning in healthcare and supported conversation training for communication partners of those with aphasia. However, the blended learning approach which emerged from the intervention design process is supported by evidence from a variety of sources, including the systematic review reported here and the thorough review of dementia training for hospital settings recently published by Surr and Gates (2017). Again, a full evaluation could potentially examine the effectiveness of this kind of mixed training approach and the various elements of it.

The training intervention developed was relatively costly, lasting two days and involving the use of professional simulators, who had also received separate training. This cost could limit its implementation. However, Parry (2009) notes that good communication skills training is time consuming and therefore likely to be expensive. The review of dementia training in hospital contexts by Surr and Gates (2017) has recently concluded that at least one day is required for effective changes in attitude and confidence to be identified. A number of healthcare communication skills training reviews have suggested that one day is the effective minimum but that longer durations lead to greater effects (Gysels et al., 2005; Berkhof et al., 2011). The training is pitched at dementia experienced HCPs of an advanced level and therefore would not be appropriate, as it stands, for all HCPs.

The pilot of this intervention was limited to a single run of the training prior to the feasibility trial being carried out. This meant that the changes made following the pilot course were not then re-tested prior to the feasibility study. A second pilot run of the course would have allowed the changes made from the first pilot to be informally evaluated. In addition, only five HCPs were able to attend the pilot, which was run at relatively short notice during 'winter pressures'. A second pilot would have allowed checking with another group of HCP-trainees, allowing for a broader set

of opinions to be represented. For example, all the pilot trainees had English as their primary language and so feedback was lacking on whether the course was accessible and applicable to those with English as a non-primary language.[17]

6.6 Locating the study within the field

The 'VOICE for Dementia' communication skills training intervention addresses the need identified within the most recent 'Dementia Training Standards Framework' (Skills for Health, 2018) for teaching about dementia to include "communication, interaction and behaviour" and the use of specific communication strategies for dementia. The advanced level of the training meets the needs identified for Tier Two and Tier Three practitioners, that is those working regularly with PLWD (Tier Two) and experts in the field (Tier Three). It assumes familiarity with and adoption of person-centred dementia care principles (which should be part of training at Tier One and upwards) and supports HCP trainees in relating this knowledge with the new learning that the course presents.

The systematic review of Surr and Gates (2017) identified through a critical review, the evidence for what works in delivering dementia education and training to hospital staff. This evidence has been used to develop an audit tool, the Dementia Training Design and Delivery Audit Tool (DeTDAT) with which training can be compared to the existing evidence base on effectiveness (Surr et al., 2017). The VOICE training as it has been developed in this thesis, maps onto the audit tool, meeting all its requirements, including for duration, teaching methods, training content, practical issues and facilitator qualities. In addition, specific standards around simulation in training are also all met. Their audit standards for online learning, which formed only a small additional part of the VOICE training, are met, with evidence supporting its use in blended learning, with opportunities for facilitated group learning. This is extremely encouraging in supporting 'VOICE for

[17] Having said this, following the actual feasibility study (O'Brien et al., 2018) only minor modifications were made to the intervention, suggesting that the pilot study reported here was, in fact, effective in refining the intervention to suit most trainees' needs and views.

Dementia' as likely to be an effective dementia training intervention for the acute hospital context.

As a communication skills training intervention based on empirical findings from CA, VOICE for Dementia fits within a small but growing body of applied CA, interventionist studies in healthcare contexts. In particular the VOICE for Dementia intervention shows encouraging similarities to the work of McCabe and colleagues in designing and evaluating the TEMPO intervention for psychiatrists (McCabe et al., 2016). The content of their training was based on well-established conversation analytic work (McCabe, Khanom, Bailey et al., 2013) and also used a combination of teaching methods, including examination of videos of real clinical interactions and the use of simulation using scenarios based on real interactional evidence. One potentially significant difference in their teaching methods was the use of trainee recordings, made between training sessions in their real clinical practice, and brought back to the training course for consideration and feedback. This would be an interesting development for the VOICE for Dementia training, but the ethical and practical considerations around filming this particularly vulnerable group in somewhat 'public', acute healthcare contexts might prove prohibitive.

Whilst the evidence is therefore encouraging for this training intervention to be potentially effective, there is evidence from the context of communication impairment after stroke that transferring newly learned communication skills into acute healthcare contexts can be challenging (Simmons-Mackie, Kagan, Christie et al., 2007; Horton, Lane and Shiggins, 2016). The MRC complex interventions framework recommends that implementation is considered right from the intervention development phase, asking 'would it be possible to use this?' before investing resource in feasibility testing (MRC, 2008; p9). It has been argued that changing communication skills in individual HCPs will only transfer into everyday practice if systems level change is also addressed, through, for example, organisational commitment to study leave, flexibility to change ward routines to better support communication needs and commitment to having on-site, experts or 'champions' who could provide ongoing feedback and opportunities for reflection for staff (Horton et al., 2016). Study of the barriers and facilitators to implementation of the

VOICE intervention have begun to be explored as part of an interview study of VOICE trainees and managers following the feasibility trial (Harwood, O'Brien, Goldberg et al., in press). Trainees have reported that provided they have enough opportunity to use the taught practices in their work (i.e. they work frequently with people with dementia) they are able to use their learned techniques in everyday practice, suggesting implementation at this level is occurring. It seems likely that the cost of the training itself will be the main challenge for implementation across the UK health service. External funding has been secured from Health Education England by the study team for further national pilots of the training, so it remains to be seen whether wider implementation can be achieved without a definitive trial with cost effectiveness evaluated. Cost benefits may be demonstrable in terms of reduced staff turnover, sickness and recruitment costs and potentially from improved patient outcomes, if patient reluctance to accept medical, pharmaceutical and therapeutic interventions could be reduced.

The findings of the conversation analysis have added to the body of knowledge around individual practices which may be beneficial in interactions between PLWD and those who care for them. It remains to be seen whether the practices identified in the hospital context around requesting in the face of reluctance and closing encounters, will prove useful to caregivers pf PLWD in other contexts, such as at home or in residential care settings.

The specific findings around the communication management of patient reluctance by HCPs have specific resonances with the body of work on 'resistance to care', which has been identified as one of the key behaviours labelled as 'challenging' in dementia care (Cohen-Mansfield and Jensen, 2008). 'Resistance to care' by PLWD has been specifically identified as increasing in frequency following episodes of the pattern of speech referred to as 'elderspeak' (Williams et al., 2009) and training for caregivers targeted at reducing elderspeak has been shown to reduce occurrences of resistance to care in a recent randomised cluster trial (Williams et al., 2017). The pattern of elderspeak as defined by Williams and colleagues includes the use of plural pronouns (such as 'we') when the singular form would be grammatically correct, with the suggestion that this implies the older adult cannot act independently, as in 'Are we

ready for our bath?' (Williams et al, 2009; p2). In contrast, in the dataset reported here, the use of collective pronouns such as 'we' and 'let's' were seen as reflecting an impetus for joint, collaborative action by the HCP and a helpful way of lowering the implied contingencies on the patient. It is not clear from the reports of Williams et al whether their coding systems were sensitive to the positioning of such pronouns in their interactional context, and how 'grammatical accuracy' was determined. In the training intervention developed here, a 'continuum of joint action' is presented for trainees to consider to what extent an action might be 'truly' shared, from going for a walk down the ward (where it is entirely possible that this will be achieved jointly), to assisting with a drink (to varying degrees achieved jointly, if the HCP is supporting with taking the drink), to swallowing (which cannot be achieved jointly). HCPs are encouraged to consider the impact of using 'we' inappropriately and inaccurately, but also the positive impact of proposing joint actions where the PLWD may be feeling the demands of the task are too much for them to achieve them confidently and independently.

The use of directives (which tell rather than ask someone to do something) in requesting actions of PLWD has been criticised as infantilising (Joaquin et al., 2010a, cited in Kindell et al., 2017) and yet also promoted as a clear way of giving instructions which may lead to higher rates of compliance (Christenson, Buchanan, Houlihan et al., 2011). The results of the conversation analysis presented here reveal the subtleties and skills employed by HCPs in requesting in more direct and entitled ways which still promote the personhood of the person with dementia.

As mentioned at the outset of this thesis, the need for person-centred dementia care across all health and social care is now acknowledged in UK national dementia policy (NICE, 2018). It is therefore important to position this piece of work within the context of person-centred dementia care. The principle of training HCPs to change their own communication behaviours with PLWD fundamentally supports the notion that the responsibility for the 'problem' of communication with PLWD does not rest with the PLWD. It is the contention here that improving the communication skills of the HCP can improve the experience of healthcare for the PLWD and support their

selfhood, and that this is consistent with models of person-centred care and the biopsychosocial model of disability presented in the WHO ICF model (WHO, 2002).

However, it is important that the practices found to be 'helpful' through this analysis are interpreted within the context of respect for the personhood of the PLWD. A discomfort can arise from the sense that changing one's patterns of requesting in order to increase the chances of compliance might be entering into coercion or manipulation of a vulnerable person into doing something they had chosen not to do; and that learning how to close encounters more quickly might be using one's verbal powers to refute the PLWD's attempts to interact, enabling one to 'close down' the interaction in ways that make oneself feel more comfortable, but do nothing to empower the PLWD. It is for this reason that sensitivity to the immediate interactional context is critical to this (as in any) conversation analytic study and is why sequential analysis of recordings and practice within 'whole' simulated encounters, form critical parts of the developed intervention. The dilemma facing the HCP remains when an action which is important to the patient's best interest is being refused by them, without their having full capacity to appreciate the consequences.

It remains the contention of this thesis that there is nothing 'person-centred' about not giving a vulnerable person the health or personal care they need for their well-being, if this need can be justified in legal and ethical terms. Indeed if a competent adult indicated reluctance to have a medical procedure which had been recommended by a specialist, we would expect the HCP to enter into a respectful discussion or negotiation with that person, and we would not deem this inappropriate manipulation. The concern arises because of the potential lack of competence of the PLWD, and the consequential imbalance in communicative power as a result in any such 'negotiation'. This view however underplays the significance of the PLWD's influence on the final outcome; as we see repeatedly in the dataset, PLWD succeed in completely refusing healthcare despite HCPs' best efforts. For example, even those with the most advanced dementia, and only embodied responses in their interactions, continue to display their agency by 'successfully' refusing medication and drinks. It remains the contention of this thesis that the HCP (and therefore the training intervention) should remain focused on whatever

practices make communication clear and unambiguous to the PLWD, avoiding argument and conflict where possible, but aiming to reach smooth agreement, which leaves the PLWD feeling satisfied and respected in whatever interactions ensue. Respectful negotiation does not lessen one's personhood in the way that ignoring or overriding might.

6.7 Implications for clinical and teaching practice

This study has confirmed that CA can be used to identify new, relevant and trainable interactional practices for HCPs to use when delivering healthcare, doing this for the first time in the context of acute hospital care with PLWD. Despite the practical and ethical challenges of recording interactions in this setting, it proved possible to use CA methods to identify areas of frequent interactional trouble which had not previously been articulated. The specific findings of the CA showed that how HCPs request actions in the face of patient reluctance can influence the patient's compliance with that request. This has implications for all HCPs whose practice includes encouraging PLWD who are reluctant to carry out important healthcare tasks, with the potential to improve health outcomes and the experience of PLWD in hospital settings. In working to smooth out interactional troubles, the recommended strategies could potentially reduce the time taken up in negotiating patient reluctance (or in closing encounters), and should not therefore represent an increasing demand on HCPs' time, which is one reason cited for reducing the implementation of taught skills into clinical practice (Jensen, Løvholt, Sørensen et al., 2015).

The study also demonstrated that such CA-based practices can be used to form the content of training which is acceptable and deliverable to an interdisciplinary group of HCP trainees. In addition, CA findings around the interactions of patients in the face of certain HCP communication practices, can be used to inform 'less in-authentic' simulated patient experiences, thus allowing trainees to practice and receive relevant feedback on their newly learned skills in the relative safety of the classroom. Practices can be taught in a way which is sensitive to the sequential

context of the interaction, so that the HCP is not taught that a given technique should always be used (or not) and will always 'work' (or not), but is presented with alternatives to try when the circumstances fit. By giving HCPs awareness of the natural consequences of certain communication practices in certain contexts, through video-based methods, and experience of those consequences in simulation, it is hoped that trainees can be empowered to employ techniques flexibly and appropriately to fit the needs of each individual with dementia they meet.

6.8 Implications for policy

The need for Tier Two and Tier Three dementia skills training for experienced and expert HCPs has been identified (Skills for Health, 2018), with the potential to improve hospital staff recruitment and retention in the field of healthcare of the older person. The CST intervention developed in this study is relatively resource intensive, involving trainees in two days of training and requiring skilled trainer-facilitators and professional simulated patients. The results of the feasibility study (O'Brien et al., 2018) are consistent with other findings (Surr and Gates, 2017) suggesting that similar quality and quantity of training may be required for complex behaviour change to occur. For training such as this to be made widely available across the UK health service, investment in dementia care training for healthcare professionals, beyond basic awareness levels, will be required.

For the training to be widely accessible nationally a train-the trainers approach may be required (see for example, Sampson, Vickerstaff, Lietz et al., 2017). A train-the-trainers course is currently being developed for the 'VOICE for Dementia' training and piloted on a small scale, but without formal evaluation at present. The Royal College of Speech and Language Therapists' position paper on the provision of speech and language therapy for people with dementia specifies that communication skills training for the communication partners of PLWD is part of the SLT role. It remains to be seen whether SLTs and their managers will be able and willing to support the training of SLTs in delivering a training intervention such as 'VOICE for Dementia'.

6.9 Implications for future research

This training was developed specifically for registered healthcare professionals in the acute setting and requires considerable intellectual effort and ability, including the learning of new concepts and terminology and considerable skills in self-reflection, which are an expected part of the education and training of registered HCPs. However, the communication 'troubles' addressed by the training (how to manage refusal of important requests and tricky closings in respectful ways) have been identified during presentations of the findings, as also highly relevant to non-registered healthcare providers in the acute setting, such as healthcare and therapy assistants and activities coordinators. Further intervention development research would be helpful to identify whether and what appropriate adaptations of the training would be needed for these important groups of staff.

During dissemination activities, the issues of dealing with reluctance and closing encounters with PLWD have also been identified as being relevant to caregivers and PLWD in other care settings, including care homes, professional home care and family caregiving contexts. Given that different contingencies are likely to be at play in these different contexts, further CA data collection and analysis would be needed in these contexts, to identify the relevant caregiver practices and their interactional consequences, for training. In addition, the design of training for these contexts would require different considerations, different expertise and further piloting in order to establish feasibility for these contexts. Further research bids are in process to address these questions.

There were interactional challenges within the dataset, with the potential to lead to trainable practices, which could not be analysed within the study's time constraints; for example, establishing how HCPs deal with talk from the PLWD which is not obviously relevant to what has gone before, or is hard to interpret at all. Further funding has been identified for some further analysis of the dataset, to be undertaken January - March 2019. In addition, some particular types of activity of potential interest and challenge were only recorded once, such as a discussion to inform discharge decision making about future residency. The National Dementia Audit (RCP, 2017) identified the lack of inclusion of PLWD in such decision making as

an issue requiring training and it may be that a future CA study could inform such training.

Possibly uniquely, this study sought to develop a CST intervention based on empirical, CA findings, without those CA findings pre-existing (in contrast to the work of Jenkins and Reuber, 2014, and McCabe et al., 2016). The CA study was embarked on, trusting that the method would uncover relevant practices which would be trainable, within the timescale available. In practice, the applied nature of the study helped to focus the CA on the 'real-world' goal of developing the intervention, avoiding analysis of phenomena which might be of interest to analysts but lack immediate practical application to the practitioner. This was achieved without the analysis being restricted by a top-down approach, since the practices were allowed to arise from the dataset. The practices which emerged from the CA then underpinned the intervention development, forming the content and informing the methods used. Within a single study timescale (of two to three years), it was thereby demonstrated that a new dataset could be collected, a conversation analytic study could be carried out on that dataset and a training intervention based on those findings could be successfully developed and piloted. This offers an encouraging model for future applied conversation analytic research which may be more amenable to funding applications than traditional 'pure' CA study. Whilst the analysis may need to be limited at the time by the search for a small set of potentially trainable practices, with appropriate consents, the dataset then becomes potentially available for further analysis. This study has demonstrated that such work is possible and worthwhile and could expand the potential of CA research into the future.

6.10 Concluding Remarks

This study has established that it is possible to develop a new CST intervention based on new CA findings, to a standard ready for a feasibility study, within a single study timescale. Encouragingly, the findings of the feasibility study suggest effectiveness for the intervention (O'Brien et al., 2018). These findings, along with the awarding of funding for a national pilot of the training by Health Education England (Oct-Dec

2018) and the training being a finalist for the National Dementia Awards 2018, in the training category, all point to these considerable efforts having been worthwhile. The widespread implementation of such practices across acute healthcare in the UK will now depend on the commitment of healthcare funders to improving the training available to healthcare professionals who are working to deliver person-centred dementia care in an optimal way.

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Appendices

Appendix A Sample Consultee Agreement Level One

REC reference: 15/YH/0184

Participant Identification Number:

CONSULTEE DECLARATION FORM

Title of Project: Communication skills for staff caring for patients with dementia.

Name of Researcher:

Please initial all boxes

1. I confirm that I have read and understand the consultee information sheet dated 17th August 2015 (version 1.4) for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily. ☐

2. I believe that……. (the participant) would have no objections to taking part in the research study. ☐

Name of Consultee	Date	Signature

Name of researcher taking declaration	Date	Signature

When completed: 1 for consultee; 1 (original) for research site file; 1 for medical notes.

Appendix B Sample Consultee Agreement Level Two

Communication skills for staff caring for patients with dementia.

REC ref: 15/YH/0184

Name of Researcher:	
Name of Patient:	
Date of recording	
Recording anonymised label	

I am aware that standard procedures will be followed to protect confidentially. Person and place names will be removed from clips and transcripts. Voices and faces will only be shown in closed (non-public) sessions or presentations, unless I specifically agree to the video clips being used in an on-line training resource.

Where I have initialled, I agree to the following use(s) of the recording.

		Please initial if you agree
A.	**Transcripts may be shown to other researchers** I agree that transcripts from this recording may be used in closed sessions with other communication researchers, to help strengthen the research results.	
B.	**Video clips may be played to other researchers** I agree that clips from this recording may be used in closed sessions with other communication researchers, to help strengthen the research results.	
C.	**Transcripts may be used for presentations about the research** I agree transcripts from this recording may be used in talks about this research for professional audiences of researchers, health and social care staff and trainees.	
D.	**Video clips may be played at presentations about the research** I agree clips from this recording may be used in talks about this research for professional audiences of researchers, health and social care staff and trainees.	
E.	**Still images may be used in published reports and presentations about the research**	

	I agree stills from this recording may be used in published reports	
F.	**Transcripts and video clips may be used in communication skills training materials** I agree that clips and transcripts from this recording may be used in face to face communication skills training materials. I understand that names will not be revealed during training sessions but faces may be seen. The training video clips will be stored on password-protected DVDs, kept in the trainers' possession, or on a password-protected web site.	
G.	**Transcripts and video clips may be used in on-line communication skills training resources** I agree that clips and transcripts from this recording may be used in on-line communication skills training resources. I understand that names will not be revealed in these resources, but faces may be seen. I also understand that these resources will be freely available on the internet for anyone who wants to use them.	
H.	I agree to use of the recording for future research aiming to better understand other areas of communication needed for good care	

Signature of Consultee
Name of Consultee
Date

Signature of researcher taking declaration
Name of researcher taking declaration
Date

3 copies: 1 for consultee, 1 for the project files, 1 for the medical notes.

Appendix C Sample form for Phase structure, field and editing notes.

Phase Structure for VOICE_Data : 133_206

Editorial notes: Once pt is standing they walk down bay and then ward, to a bathroom. Other patients and unconsented staff will need editing/blurring out. May see board with hospital name on- check. Some name use will need editing for public showing.

Field notes: 2pm. Some background noise on the ward. Some visitors present in the bay. Pt is not new to the ward. Staff nurse is likely to be her named staff nurse for the day and familiar to/with the pt. Reason for interaction is for nurse to help pt to relieve pressure on her bottom and help her to stand in order to reduce the risk of bed sores. Otherwise pt tends to sit all day.

Pt gives several 'non-relevant' responses which the staff nurse appears to incorporate into the interaction without drawing attention to it. Some use of humour.

Near the end of the interaction, pt indicates that she needs a pin to hold her dressing gown together which HP misunderstands as her needing a 'wee'. Pt goes along with this and agrees for HP to help her to the toilet.

PHASE	TIME RANGE	DESCRIPTIVE NOTES and comments on 'success' of phase (from review of film)
OPENING	00:14	**Successful greeting interaction. Relevant responses. HP repeating pt's response.** HP: "Hello X" Pt: "Hello" HP: "How are you?" Pt: "Not too bad…." HP: "Not too bad. Good. Good."
REASON FOR VISIT	00:22 00:27	**?disaffiliative. Pt responds but declines action. HP repeats 'no' response with a raised intonation and laughter particle and then expands further. This is pursued in the business phase.** HP: "I was just wondering if I could help you with relieving some pressure on your bottom?" PT: "No" HP: "No" (laugh) and then short pause "Well I don't want you to get a numb bum". Pt gives non-relevant response.

INFORMATION GATHERING		
BUSINESS PHASE	00:41 01:05 01:21 01:37 01:51	**HCP continues to pursue reason for visit and attempts to get pt to stand up with various questions and comments. Pt gives some non-relevant responses. HP responds to these, mostly with minimal responses- 'oh' and 'yeh' and appears to align with pt.?disaffiliative. pt stands up at 01:51 with HP's physical help.** HP: "Well how about I just stand you up here for a minute or two (pause) just to get you off your bottom (pause). Would that be ok?" Pt gives non-relevant response "…you can put me in here" (appears to indicate tissue box). HP: "I don't think you'd fit in there". HP: "Pt name (hand on arm) can I just move this table out the way just for a minute. Is that alright?" Pt: "yes.." HP: Right, am I alright just to stand you up just for a moment?" PT: "It all depends HP: It all depends on what?" (repeats and seeks clarification. PT: Oh you know how big it is how wide it is (non-relevant response HP: "oh, just standing right here" PT: "I don't know til I start do I?" HP: "Shall we give it a go then?" Pt gives non-relevant response. HP: "It's just going to be right here" HP: "Are you ready? One two three up we go. Ooh lovely" (stands pt up with her holding hand and supporting back).
CLOSING		**?trouble sequence in which HP misunderstands pt saying 'pin' as 'wee' and asks pt if she needs the toilet. Pt does not return to 'pin' but continues topic of toilet with HP so no repair of initial trouble.** No clear ending. At 02:40, pt says "I need a pin" which HP misunderstands as her needing "a wee". Pt goes along with this and they walk to the toilet together. Filming stops as they enter the bathroom. They interact as they walk to the toilet. HP gives 'positive' remarks "that's it" "wonderful" "one foot in front of the other".

Appendix D : Conversation analysis transcription notation

PAT/PT	patient
HCP/HP	healthcare professional
[look] [it's]	square brackets show where different speakers overlap
(PAT nods)	text in single brackets gives a description of what people are doing
(it)	single brackets indicate a word/phrase that is hard to understand
(2.5)	a number in single brackets denotes a pause in seconds, e.g. 2.5 seconds
oh::	colons indicate a lengthening of the sound or syllable they follow
?	a question mark indicates a rising tone
.	a full stop indicates a falling tone
,	a comma indicates a continuing tone, as if a speaker will say more
=	an equals sign marks indicates no hearable gap between two words
but-	a single dash indicates a word or sound that is abruptly cut off
I ↑need	an upward arrow marks a noticeable upward shift in tone
mouth	underlining indicates emphasis
°°no°°	degree signs indicate quiet speech, two or more indicate very quiet
WHY	capital letters indicate loud speech
>a bit< < a bit >	lesser than/greater than signs indicate sections of speech that are faster Indicating speech section that is slower
hhh	a sigh
.hh	an in-breath

Appendix E: VOICE in Dementia Reflective Diary- Piloted Version

Before the next session, please complete the following two tasks and come ready to share your reflections:

Task 1: Reflect on one clinical interaction with a patient with dementia which you felt went well.

Task 2: Reflect on one clinical interaction with a patient with dementia which you felt did not go well.

Describe: what happened, how it felt, what went well and not so well, what else you could have done, and how you might handle it differently next time.

Based on the VOICE training, you might want to specifically consider:

Who initiated the interaction, and what do you think was the intended purpose?

What was the structure of the interaction in terms of greeting, stating purpose, information gathering, business, closing, other?

Who was the patient, how were they, and how did this influence you?

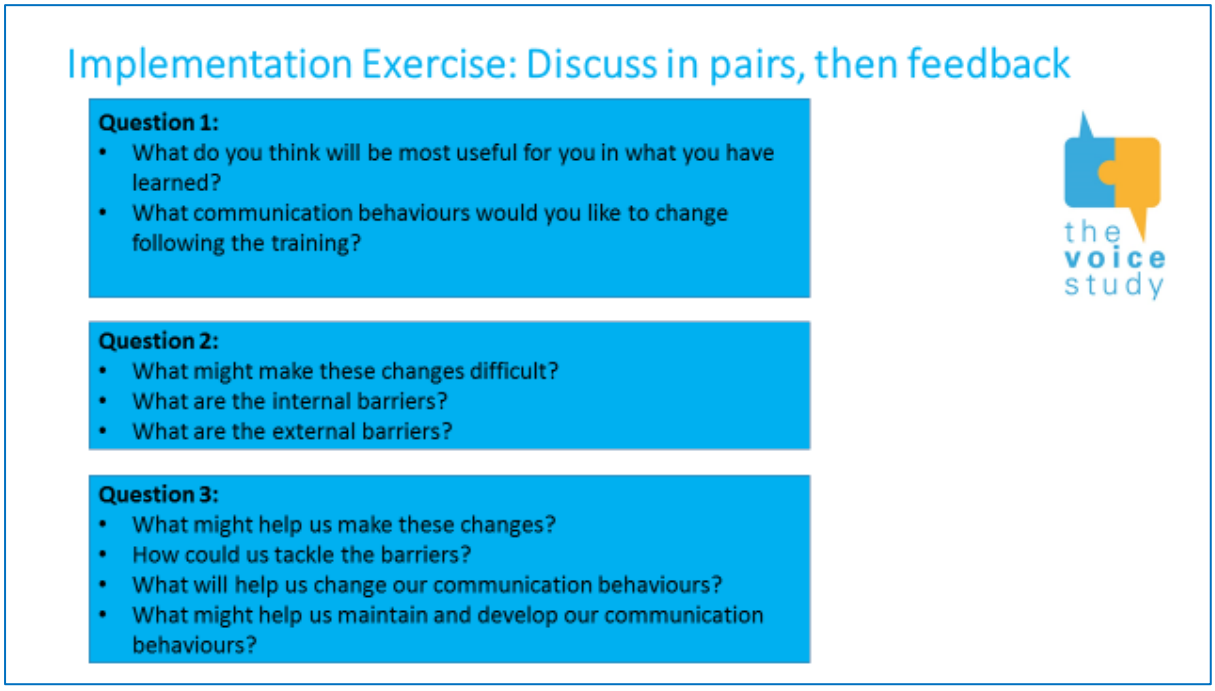
Were there specific challenges which you overcame?

Did you make any requests for action and how did they go? Did you change your requests and reactions based on the training?

How did the closing go?

If things didn't work well, what problems or issues would be helpful to reflect on in Day 2?

Appendix F: Implementation Exercise Handout



Appendix G: Sample Scenario for presentation to HCP trainees

VOICE for Dementia Training Simulations Information for HCP Day 1

Name of Patient: Jack Woscniak Age : 72

Clinical information

Reason for hospital admission:
Jack is diabetic and he passed out as he had stopped eating and drinking. Sylvie, his wife, has been trying to manage his diet and insulin, but lately Jack's refusal to let her take charge of things has meant he's missed meals and medication.

Previous Medical History:
Diabetic
Heart attack and minor stroke 10 years ago. Speech was affected, but recovered well.

Medication:
Insulin

Social History:

Jack lives with his wife, who is showing signs of carer strain when she visits him in hospital. Jack is a retired construction firm boss.

Dementia symptoms:
Jack was diagnosed with dementia 4 years ago. His confusion has increased and he doesn't understand why he's in hospital. He blames his wife.

Communicative ability:
Jack takes things literally, e.g. "Can I borrow your arm for a minute? "Only if you give it back". He challenges, contradicts and corrects. He struggles to find the right word. He repeats himself.

Retained abilities
Jack is able to stand up, but is often unwilling. He can eat and drink independently, but sometimes coughs. He has a sweet tooth and is unreliable in terms of managing his eating.

Appendix H: List of tasks for HCP trainees to select



Simulation Exercise – List of Tasks

Please choose one of the following tasks to complete with the simulated patient (please note, the simulated patient is physically able to do all these tasks):

- Transfer the patient from bed to chair
- Check the patient's gait
- Get the patient to have a drink and/or biscuit
- Examine the arms neurologically
- Listen to the patient's chest (clothes on)
- Inspect the patient's mouth
- Do a swallowing assessment
- Get the patient to wash their face
- Get the patient to take their cardigan off/ put it on
- Get the patient to take off (or put on) their footwear

Appendix I: Simulation observation feedback sheet

Observation of VOICE Simulation: Feedback Sheet by Phase

PHASE	WHAT WORKED WELL?	COULD DO DIFFERENTLY?
OPENING: GREETINGS AND INTRODUCTIONS		
REASON FOR VISIT		
INFORMATION GATHERING		
BUSINESS PHASE: REQUESTS		
CLOSING		

Appendix J: Table of feedback and changes from Pilot Day 1

Training Item or Feature	Day 1 Feedback/ Comment	Changes made
Introduction presentation	Could save time by reducing the study description and the CA background. Although interesting, they only need to know we have based the training on our research.	Removed slides on study and methods- New slide on what 'VOICE' stands for and just speak to number of vids, who was filmed. Mention CA. Add a few comments in about CA later, when looking at videos with transcripts.
Ground rules 'brainstorm' activity	Could save time by just stating the ground rules & just ask for suggestions/additions	Added new slide of ground rules based on pilot's suggestions.
Identifying problems for PWD and HCP in acute setting activity	Good activity, got people engaged. (Needs clean flipchart)	No change.
Assumptions- about learning; communication; and person centred care.	OK	No change.
Aims and Objectives	Could be less wordy.	Re-worded into first person/ the trainees' voice. Bullet pointed. Simplified, more direct.
Phase structure- teaching	Felt to be really helpful by those trainees who give feedback to students/ junior staff. Would give them vocab/ structure to ask others- which bit are you struggling with? Could have more on the phase structure on Day 1.	Added more on phases into presentation on Day 1, using clips as examples (piloted on Day 2). Included on summary of recommendations handout. Included in feedback in simulations (developed observation handout).

Requests- teaching including 'lip salve' analogy	One HCP at first wondered where it was going but eventually helped illustrate complexities of how we ask others and how this depends on familiarity. One HCP wondered if could find more 'gender neutral' example.	Verbally signpost where it is going. Kept same analogy in, as needed authentic example.
Requests teaching- video clips used	Clips worked to illustrate. May need quotes/ transcription. Note from presenter: trainees easily slip into criticising the HCP in videos, eg around the 'anything else?' question and the extended closing. Make sure trainees who are in the original films are prepared in some way.	Add exact quotes to powerpoint notes/comments for trainer or put transcriptions on screen. Add to notes/ comments- explain 'good reasons' for HCPs which work less well, such as desire to be person centred, wanting to hear their concerns, not wanting to leave patient with concerns. Email and/or speak to trainees before they see videos of themselves as 'warning'; make sure videos are presented in positive or understanding way. Use examples of same HCP doing both recommended and 'to be avoided' strategies.
Requests teaching: terminology of entitlement and contingencies	One HCP suggested he changed in his notes to entitlement=authority and contingency=difficulties. Others happy with terms if reinforced throughout, eg. on handout; on walls; use by trainers; use in simulations.	Decided to retain original terms but reinforce ++ as suggested throughout the training. Made summary of recommendations handout, on card, with terms stated.

Youtube comedy clips (to illustrate everyday practices)	One link didn't work on time. Generally trainees liked them.	Iron out technical glitches with playing online clips. Remove Hedges sketch as was part of presenting CA, which is now removed.
Closings teaching	Needed summary to hold onto physically throughout the day, to refer back to (as with requests).	Produce quality handout of all recommended practices, which can be retained throughout day and after training.
Video workshop on requests and closings- transcription on screen	Mixed responses- some HCPs liked or were able to ignore; others thought it could be distracting. Agreed that the most helpful aspects were: timing of pauses and overlap. All felt initial explanation would be helpful. Could simplify.	Add in brief initial explanation of key points in transcriptions: overlap and pauses; mention intonation, laughter, quiet voice. Decided not to simplify transcripts.
Video workshop on requests and closings- order of workshops	Trainees suggested that rather than having 2 video workshops together after morning break, would be better to have requests workshop straight after teaching on requests; and closings workshop after teaching on closings.	As suggested, the requests teaching and requests video workshop immediately followed each other; then closings teaching and closings video workshop. Break in between, depending on timing.
Simulation- ground rules	Worked well. Need to emphasize being in the same boat, trying things out, okay for things to go wrong, no desire to humiliate; 'sell' as an opportunity to make the most of.	Add their comments to presentation slides/ notes for 'introduction to simulation' presentation.
Simulation- timing	Only 3 trainees per group meant had lots of time per trainee.	Facilitators will need to be able to organise timing of simulations around variable trainee numbers, to optimise opportunities for everyone.

Simulation- role of SPs	Could SPs be used more? For example, could they give feedback out of role, for example, on person centred aspects of the interaction?	SPs to be guided by facilitators to give specific (not general) feedback after other feedback complete. For example, 'Did that ending feel abrupt to you?'
Simulation- 'Person centred' communication- facilitator feedback	Facilitators noted this was what was missed in simulations by trainees: in their efforts to get the task done and close interactions, they appeared less person centred.	Present summary of PCC, from Kitwood, and put onto recommendations handout. Reinforce suggestion to trainees to do RLO on PCC before Day 1 of training. Give feedback on these aspects in simulations.
Simulation- Time out- facilitator feedback	HCPs appeared reluctant to take time out or re-run whole simulation, being relieved to have finished their turn! Managing feedback and stop/start/ reruns is challenging therefore, and requires balance between assertiveness and sensitivity by facilitator to learner's needs and anxieties. Assertive trainees may take over from facilitators, so make sure things remain 'on script'. Can only trainees stop their own simulations for time out, or could facilitator?	More encouragement to use time out (pause and rewind) <u>during</u> simulation, to get help/advice. Use pilot trainees different approaches as examples when introducing simulation- eg. One HCP deliberately did whole thing in very soft way and then very authoritarian way. Encouraging re-running the closing was easier to suggest than re-running the whole thing, if reluctant. Simulation experts suggest facilitator should only stop simulation if trainee is in cul de sac and needs help to get out.
Simulation- facilitator feedback- organising simulations	Asking for volunteer to start can be tricky. The first person to go in each scenario has not much idea what the	Better for less confident people and 'reflectors' to go second.

	person will be like but second person to go has seen the patient in action so has additional information. Not a test, so this is OK, but is it fair?	Emphasise that we don't expect perfect performance from person who goes second though! Could alternate across training days who goes first, if people don't volunteer.
Simulation- simulator feedback	Simulators fed back that facilitators and trainees should use term simulator not actor. Also, trainees should not be pretending that equipment is there if it isn't- There should 'only be one simulator in the room'. Only the actor is pretending, the HCP is being themselves.	Add this teaching point to introduction to simulation. Add all relevant equipment and props to room, where possible. eg. To be authentic, drinks and biscuits needed options. No tea making facilities in simulation suite, therefore HCPs were given account to give PLWD if needed, for why couldn't make tea now (kettle wasn't working OR tea trolley would be along shortly.)
Other comments	Abbreviations in presentations not helpful- CARM and RLO.	Both terms replaced.

Appendix K: Table of feedback and changes from Pilot Day 2

Training Item or Feature	Day 2 Feedback/ Comment	Changes made
RLO- e-learning resource	NHS/ work computers may not have sound card. Some buttons for sound and transcription/text weren't obvious. Was there script for talking heads? Positive- encapsulated learning from Day 1, good refresher; nice and short, to the point; here's an issue, here's something you can do about it.	Check talking heads have tab for transcription. Otherwise, no urgent changes needed. Encourage feasibility trainees to use their smart phones etc, if technical hitches with NHS computers. Await further feedback from feasibility study trainees.
Summary of recommendations handout/ card	Good- clear and simple. Needed on Day 1. Advice should be 'when facing reluctance'. Prompted for changes:- Suggested give an example for 'avoid question formats'; and could it be laid out in table?	Slight re-wording of avoid questions. Made sure all statements had supporting examples.
Day 2 opening presentation	Much of this will go to Day 1 eg. Phases, PCC ***(NB. check the differences).***	
Ground rules 'brainstorm' activity	See Day 1 from now on	See Day 1 from now on
Assumptions- about learning; communication; and person centred care.	PCC: Could use VIPS model; or could use kitwood's flower, same headings- but may be copyrighted. Could ask Bradford group? Need teaching/ reminding about Kitwood as not all HCPs on HCOP wards know about this; better	

	synthesising of what's already known with new if get reminded what you knew!	
Phase structure teaching	[This was added in following Day 1 feedback from trainees.] Does it add to road map metaphor? Opening phases have silences and Dr didn't get much from it. Might need transcripts to help. Maybe use fewer examples. Good place to start though, then put to one side for business and closings.	Use in Day 1 to orientate to videos and encounters. Link phases explicitly to road metaphor- knowing what to expect and where the potholes are. Left in greetings- highlight silences and what was in them.
Simulation- overall feedback after Day 2	Preferred whole experience to Day 1- getting more comfortable in front of others. Feel now developing 'conscious competence'. Felt a small change in commn practice could have a big effect and if working on HCOP will be applicable straight away.	
Simulation- role of SPs including simulator feedback	Liked SP feeding back. Felt individualised feedback of their emotions was invaluable as couldn't get articulated directly from a PLWD or from watching vids.	Continue SP feedback to trainees.
Simulation- Time out	Added in rewinding option on Day 2 but not used much- took whole time talking. Useful to rewind- like 'phoning a friend'. Also helped with 'I wouldn't normally have said that'- give them time again.	Promote use of rewind technique as supportive- use egs. From pilot.

	Wondered whether less experienced HCPs will do more stop-starts in simulations?	
Simulation- scheduling/ timing	Asked re usefulness of simulation- essential. What stays with you. Helps you apply in your real practice after practising in simulations. If anything, cut down the rest, have more simulation. Could you get people to do more reading first to cut down teaching on days or reduce teaching in some other way to increase simulation time?	Make sure simulation time is optimised in training.
Simulation- individualised tasks	Task list: MH nurse didn't have many of his specialist tasks- but things like cog assmts don't fit well with requests for action and refusal. Discussed drawing clock face (part of cog assmt) as option. Suggested most MH nurses would assist more with routine care tasks. Would doing blood pressure be too passive- and would SPs want their BP taking?! Checking arm was specific situation on videos- plaster. Perhaps replace with putting cardigan on/off, more common for whole MDT. Not many tasks for doctors- discussed examining chest and clothes removal issue- lead simulator agreed taking top off female SP wouldn't feel acceptable in this setting altho is done is OSCIs.	Make changes to task list. Take equipment for washing face- bowl, SP's toiletries, flannel, towel.

	Ward practice varies- often pragmatic about removing tops. Agreed should state it is over clothing. An OT had suggested taking shoes /socks on/off because quicker and less intrusive than wash and dressing assessment.	
Simulation- identifying learning points and sharing in plenary	'Specific learning points -brought back to plenary? Liked coming back together for 5 minutes to connect everyone. BOB felt it helped share practice across groups (supports fidelity actually).	Consider use walking scenario when training is outside research phase- but for now needs to remain the assessment scenario, which can't be given feedback as would then count as extra training. Continue brief feedback in plenary to share practice between groups.
Simulation- other trainee suggestions and queries	• One person would have liked feedback on the 'walking scenario' as found it trickiest. Discussed observing in 'assessment' and feeding back for 2 mins after: one person didn't want to be watched at this point, liked just doing with only camera. • How could we maximise use of SPs as they are expensive resource? One trainee suggested role play- group said no!	Will add walking scenario in as training scenario following feasibility study. Not feasible and would confound measures to give feedback on research scnerios.

	• Could we do simulation in bits- requests and closing separately? Discussed- Not really practical; and always will have closing. Agreed better to be closer to real life, all in one go.	
Reflective diary exercise Day 2	Liked how we pitched it as non-academic task, one they could do in their heads or on paper, and that it should be something that is happening for them anyway. Consolidated learning 'really well'. People chipped in well during group task. Took longer than expected, everyone didn't get turn. One person alone could take ½ hour. Discussed option of doing in pairs without facilitator: Felt it would be less in depth analysis/ reflection/ less learning than with Fac- could become like icebreaker, too 'surface'. Need time to deal with emotions. Will decide on group size. Options included just going thro' 2 or 3 people from the grp, others just listen- they will still have as evidence of CPD for themselves (if written). Could just ask for one each eg- good or bad, not both. Could allow longer for this task. Some groups may have less to say than this pilot group.	Increased time allotted to this task in schedule. Consider option of each trainee sharing only one of their examples, depending on number of trainees on day. Re-designed diary handout to include space to write their reflections directly on it.

Video workshop and transcript Day 2	Enjoyed this activity. Didn't feel plenary feedback added much, so could avoid this to spend longer in small groups. Didn't want to split goals by group- preferred both groups looked at everything. Felt on first day it helped to have videos in short clips, animated, more guided discussion when learning the concepts. But on 2nd day worked well to have whole clip with written transcript separate. Needed to watch a few times. Liked looking through transcript quietly, then watching first, before trying to watch with transcript. Transcript helped with poor sound/ quiet voices. Discussed using full CA transcript or not. Some felt distracting, others liked- agreed people will vary. Agreed compromise would be to give simple key for transcript.	Don't use plenary at end of this task, allow full time in small groups. Don't split tasks up, allow both groups and all trainees to look for all characteristics. Continue showing full clip twice, with guidance as before. Continue with full CA transcript but give handout with key to most important features.
Action analysis chart	Liked the idea, worth putting some work into it. Chart needed simplifying, bringing up a bit at a time and/or maybe making into flowchart? Not spider diagram. Suggestion could model like 'seedhouse's ethical grid'.	Re-formatted communication analysis of task into table format. Presented at start of Day 2 and handed out. Used prior to simulations for planning task communication.
Implementation exercise	Found it hard (doing it alone, writing down?). Some thought better to have discussion about implementing within your role rather than listing 3 things. They felt PDR type pledges are never	Implementation task to be completed in buzz group pairs, then do feedback in plenary. Compile list of everyone's suggestions on flipchart.

	gone back to eg. '3 months later'. Needs proper follow up- or otherwise just discuss on the day. They discussed students, meetings, other contexts.	
Other comments	Technical issue: would amalgamating ppts help- they had to wait whilst each ppt loaded up especially on Day 2. They felt 2 days spread worked, but people may not turn up for 2nd. Trainees need to be interested, able to apply the learning between Day 1 and 2. Pitched as advanced course- agreed, after 30 year's nursing experience, or 3 years teaching communication, or working as SLT- they had learned new things. Terms used: discussion re entitlement and contingency terms: By Day 2 people got it. But is it a barrier, taking up training time and not necessary? Consensus was that terms were manageable but one dissenting voice (Dr).	Join up Day 2 PPTs. Open all PPTs before trainee arrival and then minimise- will open quickly then.

Appendix L: List of publications from the study

Relevant Conference Presentations (Oral)

O'Brien R, Pilnick A, Allwood R, Goldberg S, Harwood R, Beeke S (2017) When people with dementia say 'no: Healthcare professionals responses to reluctance and refusal of healthcare tasks in the acute hospital setting. Conversation Analysis in Clinical Encounters (CACE), Bristol, July 12-14, 2017.

O'Brien R, Pilnick A, Allwood R, Goldberg S, Harwood R, Beeke S (2017) Just saying 'No': the negotiation of overt patient refusal following low entitlement requests in the acute hospital, dementia-care context. 15th International Pragmatics Association Conference, Belfast, July 19-21, 2017.

O'Brien R, Goldberg S, Pilnick A Beeke S et al (2017) The VOICE Study: Developing and testing an evidence based communication skills training intervention for healthcare professionals caring for people with dementia in the hospital setting. Royal College of Speech and Language Therapists Annual Conference, Glasgow. 27-28 Sept, 2017.

O'Brien R, Goldberg S, Pilnick A Beeke S et al (2017). WORKSHOP: VOICE for dementia: Novel evidence-based training to enhance staff communication in acute healthcare settings. Royal College of Speech and Language Therapists Annual Conference, Glasgow. 27-28 Sept, 2017

O'Brien R, Allwood R, Beeke S, Pilnick A, Goldberg S, Harwood R (2017) What do healthcare professionals do when the patient with dementia says 'no' to a healthcare procedure? Alzheimer's Europe conference Berlin Oct 2-4, 2017.

Invited Speaker at:

17 Oct, 2017: VOICES in Dementia Care, VOICE study dissemination conference, Nottingham. The VOICE Study: Developing and testing a dementia communication skills training course.

11–13 April, 2018: British Geriatric Society Spring Meeting, Nottingham (oral and workshop) ORAL: Communication with people living with dementia: problems and solutions from the VOICE study. WORKSHOP: Communicating better with people living with dementia in the acute hospital setting: a video based workshop.

2 May, 2018: University College London, Language and Cognition Lunchtime Seminar series. The development and testing of a communication skills training intervention for healthcare professionals caring for people with dementia in the acute setting: the VOICE study.

Peer Reviewed Publications

O'Brien R, Goldberg S.E, Pilnick A, Beeke S, Schneider J, Sartain K, et al. (2018) The VOICE study- A before and after study of a dementia communication skills training course. **PLoS ONE** 13(6): e0198567. https://doi.org/10.1371/journal. pone.0198567

Allwood R, Pilnick A, **O'Brien R**, Goldberg S, Harwood R, Beeke S. (2017) Should I stay or should I go? How healthcare professionals close encounters with people with dementia in the acute hospital setting. **Social Science & Medicine** 2017;191:212-25.

Peer Reviewed Publications in press/submitted

Harwood, R.H. **O'Brien, R**. Goldberg, S. Allwood, R. Pilnick, A. Beeke, S. Thomson, L. Murray, M. Parry, R. Kearney, F. Baxendale, B. Sartain, K. and Schneider, J. (in press) A staff training intervention to improve communication between people living with dementia in hospital and health-care practitioners in hospital: the VOICE multi-methods study. **Health Services Delivery Research** 6(XX).

Pilnick, A. Trusson, D. Beeke, S. **O'Brien, R**. Goldberg, S. and Harwood, R.H. (2018) Role Play and Simulated Interaction in Communications Skills Training for Healthcare Professionals: Identifying avenues for further development through a scoping review. **BMC Medical Education** 18:267 https://doi.org/10.1186/s12909-018-1381-1

Online Publications

O'Brien R. Goldberg, S. Harwood, R.H., Sartain, K. Windle, R and Lee, A. (2017) Advanced communication: communicating with a patient with dementia who is refusing care. [Online] Available at: https://www.nottingham.ac.uk/helm/dev-test/dementia_and_requests/ [Accessed 25/10/2018]

Appendix M Overview of requests by category across the dataset

Level of entitlement	Request format	Frequency Count	Frequency count by level of entitlement
LOW	-I was just wondering/ do you mind if/ is it ok if	16	16
MEDIUM	Willingness: -Would you like/ do you want/ shall we/ will we/ will you?	143	271
MEDIUM	Ability: -can you/ could you/are you able to	125	
MEDIUM	Both ability and willingness - do you feel up to/fancy	3	
HIGH	Announcements of future action - I'm/we're going to/gonna / I'll/we'll	51	321
HIGH	Proposals -Let's -Let me	22	
HIGH	Statements of need/pronouncements - I need to do X, I need you to, You need to	24	
HIGH	Direct instructions/ imperatives	224	
TOTALS		608	608