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Abby Foster

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THE UNIVERSITY OF QUEENSLAND  
AUSTRALIA

**“Communication is taking a back seat”:  
An exploration of aphasia management in  
acute hospital settings**

Abby Mae Foster

B.Sp.Path. (Hons)

*A thesis submitted for the degree of Doctor of Philosophy at  
The University of Queensland in 2016*

School of Health and Rehabilitation Sciences

# Abstract

While in the past the focus of speech pathologists working in the acute hospital setting has been service provision to people with communication disorders and their families, their primary role is now in dysphagia. In the limited literature regarding aphasia management in acute hospital settings, there is a lack of consistency regarding the type and amount of intervention being provided to people with aphasia; however, there is consensus that current practice is inconsistent with best-practice recommendations. Given that aphasia intervention has been identified as being central to improved communicative outcomes, an increased capacity to effectively communicate healthcare needs, a decrease in hospital negative events, and an increased sense of satisfaction for people with aphasia, this is of concern. Little is known about the reasons underlying this evidence-practice gap.

The overall aim of this thesis was to provide an understanding of current acute aphasia management practice and the factors that influence it. Specifically, the research aimed to: (a) provide an in-depth understanding of the current aphasia management pathway in the acute hospital setting; (b) explore acute speech-language pathologists' conceptualisation, experiences, and perceptions of post-stroke aphasia management, and provide a greater understanding of the factors that influence their practice; and, (c) understand the factors that influence acute aphasia management from the perspectives of speech pathologists, people with aphasia, and their close others, through a cultural lens.

In order to address the research aims, the empirical aspects of this research were conducted in two Phases. Phase One, an interpretative phenomenological investigation, aimed to provide a deep understanding of aphasia management from the perspective of acute speech pathologists. Semi-structured, in-depth interviews were undertaken with 15 Australian speech pathologists working with people with aphasia (one of which was later excluded resulting in a total  $n=14$ ). Interviews were transcribed verbatim, and data were analysed using a thematic analysis. Key themes identified included: role perception; competing priorities; the de-prioritisation of aphasia; and, the sense of disempowerment experienced by speech pathologists as a result of their relationship with evidence-based practice for acute aphasia management. In addition, a qualitative content analysis was undertaken to describe the current aphasia management pathway. Grounded within the guiding construct, *First contact with the profession*, the findings represented the significant diversity in the

pathways of care for people with aphasia and their families in the acute hospital setting. Overall, analysis revealed the complex, diverse, and multi-faceted nature of the phenomenon.

Phase Two was designed based on the findings of Phase One. It examined the culture of acute aphasia management by speech pathologists in depth, through the use of focused ethnography in a single acute stroke unit. Three participant triads, consisting of a speech pathologist, person with aphasia, and at least one close other, were included as key informants in the research. Using a variety of qualitative research methods, including document analysis, participant reflective diaries, interviews, and observation, data collection occurred across the duration of the acute hospital admission of the person with aphasia. Data were analysed using an inductive thematic approach. Findings suggest that the central theme of *Creating a positive experience* is contributed to by a diverse array of cultural factors that influence acute aphasia management and modify healthcare experiences and outcomes.

The overarching themes provide insight into the centrality that cultural and personal perceptions and influences play on practice. They suggest that re-conceptualisation of the acute speech pathologist's role in aphasia management, at both an individual and cultural level, is likely to be powerful.

Future research will focus on implementing knowledge transfer and exchange interventions to increase the uptake of evidence-based recommendations in clinical settings. Interventions include addressing the psychological and structural empowerment of clinicians, as well as cultural level interventions targeting the creation of a stronger 'communication culture' in acute hospitals.

In conclusion, whilst the experiences of aphasia in the acute hospital setting are unique for people with aphasia, their families, and speech pathologists alike, the narratives and themes contained in the findings of this study offer a positive message for all stakeholders in aphasia management. Speech pathologists strive to provide evidence-based practice that creates a positive experience for people with aphasia, and people with aphasia and their families value the service provided by clinicians in the acute hospital. Despite this, a loud and resonating sense of dissonance regarding current service provision persists. If, societally, value is placed on the management of aphasia in the

acute hospital setting, then change needs to occur. Such change has the potential to not only improve service provision to people with aphasia and their families, but also to decrease the sense of dissonance for speech pathologists working in this setting.

# Declaration by author

This thesis is composed of my original work, and contains no material previously published or written by another person except where due reference has been made in the text. I have clearly stated the contribution by others to jointly-authored works that I have included in my thesis.

I have clearly stated the contribution of others to my thesis as a whole, including statistical assistance, survey design, data analysis, significant technical procedures, professional editorial advice, and any other original research work used or reported in my thesis. The content of my thesis is the result of work I have carried out since the commencement of my research higher degree candidature and does not include a substantial part of work that has been submitted to qualify for the award of any other degree or diploma in any university or other tertiary institution. I have clearly stated which parts of my thesis, if any, have been submitted to qualify for another award.

I acknowledge that an electronic copy of my thesis must be lodged with the University Library and, subject to the policy and procedures of The University of Queensland, the thesis be made available for research and study in accordance with the Copyright Act 1968 unless a period of embargo has been approved by the Dean of the Graduate School.

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# Publications during candidature

## Peer reviewed papers

- Foster, A. M.,** Worrall, L. E., Rose, M. L., & O'Halloran, R. (2013). Turning the tide: Putting acute aphasia management back on the agenda through evidence-based practice. *Aphasiology*, 27(4), 420-443. doi: 10.1080/02687038.2013.770818
- Foster, A.,** Worrall, L., Rose, M., & O'Halloran, R. (2015a). 'I do the best I can': An in-depth exploration of the aphasia management pathway in the acute hospital setting. *Disability and Rehabilitation*, early online. doi: 10.3109/09638288.2015.1107766
- Foster, A.,** Worrall, L., Rose, M., & O'Halloran, R. (2015b). 'That doesn't translate': the role of evidence-based practice in disempowering speech pathologists in acute aphasia management. *International Journal of Language & Communication Disorders*, 50(4), 547-563. doi: 10.1111/1460-6984.12155
- Foster, A.,** O'Halloran, R., Rose, M., & Worrall, L. (2016a). "Communication is taking a back seat": speech pathologists' perceptions of aphasia management in acute hospital settings. *Aphasiology*, 30(5). 585-608. doi: 10.1080/02687038.2014.985185
- Foster, A. M.,** Worrall, L. E., Rose, M. L., & O'Halloran, R. (2016b). "*Making their experience a good one*": A focused ethnography of aphasia management in the acute hospital setting. Manuscript submitted for publication.
- 

## Conference papers

- Foster, A.,** Worrall, L., Rose, M., and O'Halloran, R. (2015, 20 May). "Communication's taking a back seat": A qualitative meta-synthesis examining the factors influencing aphasia management in the acute hospital setting. Paper presented at the *Speech Pathology Australia National Conference*, Canberra, Australia.
- Foster, A.,** Lanyon, L., and Knox, R. (2015, 30 April). "I'm still a person...and I have an opinion": Novice researchers' experiences of engaging with people with communication impairments within a social constructivist paradigm. Paper presented at *Qualitative Methods Conference*, Melbourne, Australia.
- Foster, A.,** O'Halloran, R., Rose, M., and Worrall, L. (2014, 26 November). "That doesn't translate": Evidence-based practice and the disempowerment of speech pathologists in acute aphasia

management. Paper presented at the *School of Health and Rehabilitation Sciences Post-graduate Research Conference*, The University of Queensland, Brisbane, Australia.

**Foster, A.**, Worrall, L., Rose, M., and O'Halloran, R. (2014, 30 September). Speech pathologists' experiences in acute aphasia management and perceptions of the factor that influence their practice. Paper presented at the *Aphasia Symposium of Australia*, Perth, Australia.

**Foster, A.**, Worrall, L., Rose, M., and O'Halloran, R. (2013, 10 September). Acute post-stroke aphasia management: Speech pathologists' perceptions of the factors that influence their practice. Paper presented at the *British Aphasiology Society Biennial International Conference*, Manchester, UK.

**Foster, A.**, Worrall, L., Rose, M., and O'Halloran, R. (2012, 26 June). Speech pathologists' perceptions of evidence-based practice for acute aphasia management. Paper presented at the *Speech Pathology Australia National Conference*, Hobart, Australia.

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## Poster presentations

**Foster, A.**, Worrall, L., Rose, M., and O'Halloran, R. (2015, 2-4 September). "That doesn't translate": Acute aphasia management, evidence-based practice, and the disempowerment of speech pathologists. Poster presented at the *Stroke 2015 Conference*, Melbourne, Australia.

**Foster, A.**, Worrall, L., Rose, M., and O'Halloran, R. (2013, 15 November). "That Doesn't Translate": Speech Pathologists' Perceptions of Evidence-Based Practice for Acute Aphasia Management. Poster presented at the *American Speech and Hearing Association Annual Convention*, Chicago, USA.

**Foster, A.**, Worrall, L., Rose, M., and O'Halloran, R. (2013, 18 October). Acute post-stroke aphasia management: Multiple perspectives on a single patient journey. Poster presented at the *Canadian Stroke Congress*, Montreal, Canada.

**Foster, A.**, Worrall, L., Rose, M., and O'Halloran, R. (2012, 8 October). Speech pathologists' conceptualisation of acute post-stroke aphasia management. Poster presented at the *International Aphasia Rehabilitation Conference*, Melbourne, Australia.

**Foster, A.**, Worrall, L., Rose, M., and O'Halloran, R. (2012, 29-31 August). Speech pathologists' perceptions of the factors that influence decision-making in acute post-stroke aphasia management. e-Poster presented at the *Stroke 2012 Conference*, Sydney.

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# Publications included in this thesis

The following refereed journal publications have originated from the work presented in this thesis:

1. **Foster, A. M.,** Worrall, L. E., Rose, M. L., & O'Halloran, R. (2013). Turning the tide: Putting acute aphasia management back on the agenda through evidence-based practice. *Aphasiology*, 27(4), 420-443. doi: 10.1080/02687038.2013.770818

*This publication is incorporated in its entirety as Chapter 2.*

Contributor	Statement of contribution
Abby M. Foster (Candidate)	Conceived of conceptual structure (70%)
	Undertook literature review (100%)
	Wrote the paper (70%)
Linda E. Worrall	Conceived of conceptual structure (10%)
	Wrote and edited the paper (10%)
Miranda L. Rose	Conceived of conceptual structure (10%)
	Wrote and edited the paper (10%)
Robyn O'Halloran	Conceived of conceptual structure (10%)
	Wrote and edited the paper (10%)

2. **Foster, A.,** Worrall, L., Rose, M., & O'Halloran, R. (2015a). 'I do the best I can': An in-depth exploration of the aphasia management pathway in the acute hospital setting. *Disability and Rehabilitation*, early online. doi: 10.3109/09638288.2015.1107766

*This publication is incorporated in its entirety as Chapter 5.*

Contributor	Statement of contribution
Abby M. Foster (Candidate)	Research concept and design (70%)
	Participant recruitment (100%)
	Data collection, analysis, interpretation, and reporting (100%)
Linda E. Worrall	Research concept and design (10%)
	Review of data analysis, interpretation, and reporting (35%)
Miranda L. Rose	Research concept and design (10%)
	Review of data analysis, interpretation, and reporting (35%)
Robyn O'Halloran	Research concept and design (10%)
	Review of data analysis, interpretation, and reporting (30%)

3. **Foster, A. M.**, O'Halloran, R., Rose, M. L., & Worrall, L. E. (2016a). "Communication is taking a back seat": speech pathologists' perceptions of aphasia management in acute hospital settings. *Aphasiology*, 30(5), 585-608. doi: 10.1080/02687038.2014.985185

*This publication is incorporated in its entirety as Chapter 6.*

Contributor	Statement of contribution
Abby M. Foster (Candidate)	Research concept and design (70%) Participant recruitment (100%) Data collection, analysis, interpretation, and reporting (100%)
Robyn O'Halloran	Research concept and design (10%) Review of data analysis, interpretation, and reporting (40%)
Miranda L. Rose	Research concept and design (10%) Review of data analysis, interpretation, and reporting (40%)
Linda E. Worrall	Research concept and design (10%) Review of data analysis, interpretation, and reporting (20%)

4. **Foster, A. M.**, Worrall, L. E., Rose, M. L., & O'Halloran, R. (2015b). 'That doesn't translate': the role of evidence-based practice in disempowering speech pathologists in acute aphasia management. *International Journal of Language & Communication Disorders*, 50(4), 547-563. doi: 10.1111/1460-6984.12155

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Abby M. Foster (Candidate)	Research concept and design (70%) Participant recruitment (100%) Data collection, analysis, interpretation, and reporting (100%)
Linda E. Worrall	Research concept and design (10%) Review of data analysis, interpretation, and reporting (35%)
Miranda L. Rose	Research concept and design (10%) Review of data analysis, interpretation, and reporting (35%)
Robyn O'Halloran	Research concept and design (10%) Review of data analysis, interpretation, and reporting (30%)

# Contributions by others to the thesis

The PhD candidate was primarily responsible for the conception and design of the project, gaining ethical approval, participant recruitment, data collection, analysis and interpretation of the research data, and manuscript preparation.

The PhD candidate acknowledges the intellectual input of her advisors and publication co-authors. Professor Linda Worrall, Associate Professor Miranda Rose, and Dr Robyn O'Halloran made significant contributions to the research concept and design, review of the data analysis and interpretation, and critical appraisal of written work.

# **Statement of parts of the thesis submitted to qualify for the award of another degree**

None

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# Keywords

aphasia, acute hospital settings, speech pathology, evidence-based practice, clinical decision making

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# Fields of Research (FoR) Classification

FoR code: 1199, Other Medical and Health Sciences, 100%



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# List of abbreviations used in the thesis

<b>ASU</b>	Acute stroke unit
<b>CVA</b>	Cerebrovascular accident
<b>EBP</b>	Evidence-based practice
<b>ED</b>	Emergency department
<b>ICF</b>	International Classification of Functioning, Disability and Health
<b>KTA</b>	Knowledge-to-action
<b>KTE</b>	Knowledge transfer and exchange
<b>MCA</b>	Middle cerebral artery
<b>MDT</b>	Multi-disciplinary team
<b>PCC</b>	Patient-centred care
<b>PWA</b>	People with aphasia
<b>RCT</b>	Randomised controlled trial
<b>SP</b>	Speech pathologist
<b>TIA</b>	Transient ischemic attack

# A note on terminology used in the thesis

The term *patient* is used in this thesis as a descriptor for people admitted to hospital for healthcare. While potentially disempowering to people with aphasia due to its inherent notions of a hierarchical medical model (Byng, Cairns, & Duchan, 2002), its use was conscious. This term was chosen intentionally for its commonality in the parlance of the acute hospital setting (including the participants in this research), and as a means of prompting re-examination of the ways that speech pathologists in this setting interact with their patients.

As an Australian author, I have chosen to use the local term *speech pathologist* throughout the thesis. Chapters which emerge from British or American publications have been modified to use this term within the context of this thesis, allowing for consistency throughout.

Finally, two different terms have been used to describe the people who took part in this research. In Phase One, they are described as *participants*, whereas in Phase Two they are described as *key informants*. The terminology used is consistent with the two different research strategies employed: interpretive (hermeneutic) phenomenology for Phase One, and focused ethnography for Phase Two. In addition, it represents the roles that these individuals played in the knowledge creation process within this research.

# **Chapter 1**

## **Introduction**

## **1.1 Introduction**

This thesis presents a two phased qualitative study, which aimed to understand the speech pathology management of aphasia following stroke in the acute hospital setting. This chapter will introduce the research by providing an overview of the relevant literature. In particular, it explores aphasia following stroke, current aphasia management in the acute hospital setting, the implications of current service delivery, and a discussion as to how this thesis contributes to a greater understanding of aphasia management in the acute hospital setting. In addition, this chapter provides an overview of the social, political, and personal context of the research. It concludes by providing an overview of the structure of the thesis.

## **1.2 Aphasia following stroke**

In Australia, over 420,000 people are living with stroke (Deloitte Access Economics, 2013). The prevalence of stroke is rising, with forecasts suggesting that stroke prevalence will increase by 25% by 2030 (Heidenreich et al., 2011). Aphasia is a common sequelae of stroke, affecting approximately one third of people living with stroke (Dickey et al., 2010).

Aphasia is as an acquired language impairment which can be present in any or all of the language components, across communication modalities, and in the input and output modes (Papathanasiou & Coppens, 2013). Given that communication is essential to most activities of daily living, in addition to linguistic deficits, aphasia has consequences for the communicative and social functioning, and quality of life of the individual with aphasia and those close to them (Le Dorze & Brassard, 1995; Simmons-Mackie & Kagan, 2007). Aphasia is associated with reduced rates of functional stroke recovery, increased rates of clinical depression, and increased mortality (Engelter et al., 2006; Kauhanen et al., 1999). It unsurprisingly has a significant negative impact upon health-related quality of life (Lam & Wodchis, 2010). Given the significant impact aphasia has on quality of life, the value in ensuring the best possible healthcare provision for this population is self-evident.

## 1.3 Aphasia management in the acute hospital setting

### 1.3.1 *Defining acute*

Defining ‘acute’ aphasia management has been a matter of some discussion in the research literature. In her doctoral thesis, Godecke (2009) compared multiple different models in which ‘acute’ – as a phase of neuro-recovery – has been described in the aphasia literature. Within these models, it is reported the labels *hyper-acute phase*, *acute phase*, *subacute phase*, and *chronic phase* are ascribed to temporal phases of language recovery following stroke (Godecke, 2009). While for the purposes of interventional research, temporal models hold significant value for their relationship to cellular neuro-recovery, the purpose of the current qualitative investigation was different.

As a clinician previously working in the acute hospital setting my interest was in the role that the acute context, and the associated culture, had on the management of aphasia. Acute hospitals provide short-term medical or surgical treatment for illness or injury, often where the event leading to hospitalisation has occurred within hours of admission (Duffy, Fossett, & Thomas, 2011). As discussed in Section 2.4.4, ‘context’ has been identified as being of significant importance in the clinical application of evidence (Kitson, Harvey, & McCormack, 1998). Beyond just describing the physical environment, the notion of context serves to encapsulate the historical, social, political, economic, and psychosocial factors that exist within the context (Kitson et al., 1998; McCormack et al., 2002). In recognition of the centrality of the context of clinical practice, the definition of evidence-based practice has been extended to include *characteristics from the practice context* as an additional category of evidence (McCormack et al., 2002; Rycroft-Malone et al., 2004; for further discussion, see Chapter 2.2.1). Given the centrality of context and the aims of the program of research discussed in this thesis, acute was defined in terms of physical location – the acute hospital setting.

The influence of context upon clinical practice in the acute hospital setting has been observed, both in terms of the physical (e.g., O'Halloran, Worrall, & Hickson, 2011; Seneviratne, Mather, & Then, 2009) and the cultural environments (e.g., O'Halloran, Worrall, & Grohn, 2012; Simmons-Mackie et al., 2007). Acute hospital care for stroke is differentiated from sub-acute hospital care in terms of the models of care and goals of intervention (National Stroke Foundation, 2010). Given the importance of context upon clinical practice, and the influences arising from both the physical and cultural environments, context specific exploration of aphasia management is warranted.



### *1.3.2 Setting the scene: The socio-political context of acute aphasia management*

A number of factors combine to create the socio-political climate in which this research was undertaken. Four key contributing elements – the reconceptualisation of health, the increasing costs of healthcare, stroke care in Australia, and the changed role of the acute speech pathologist – are discussed below.

#### *1.3.2.1 Reconceptualising health*

In recent years, there has been, and remains, an increasing necessity for speech pathologists to understand and apply the notion of ‘functional’ health. The World Health Organisation (WHO) (WHO; 1948) defines health in their constitution as “the state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity”. While this definition has been in place for decades, its adaptation into clinical speech pathology practice was first considered with the introduction of the WHO’s International Classification of Impairment, Disability and Handicap (1980), later revised as the International Classification of Functioning, Disability and Health (ICF; 2001). The adoption of this model by speech pathology organisations, such as the Australian peak national body Speech Pathology Australia, has resulted in the need for a reconceptualisation of the profession’s role. Achieving this requires the profession to move away from the previously dominant conceptual paradigm of the medical model, in which primary value is placed on identifying and treating illness and its underlying causes (O’Halloran, 2009). It could be argued that this paradigm shift has been most challenging for speech pathologists in the acute hospital setting, for whom the medical model remains pervasive in the context of their employment.

#### *1.3.2.2 Increasing costs of providing healthcare in acute hospital settings*

In the past decade, healthcare spending in Australia has grown by 74%, well above the rate of gross domestic product growth (Duckett & McGannon, 2013). In a recent review of the budget pressures on Australian governments, the Grattan Institute found that health spending has risen by more than \$40 billion in real terms over the past ten years (Daley & McGannon, 2014). The biggest, fastest growing spending category in health is hospitals (Daley & McGannon, 2014). Despite research demonstrating that Australia has one of the most efficient health systems (Daley, McGannon, & Ginnivan, 2012), successive governments have implemented health rationing measures. Over the last three decades, in a bid to contain healthcare spending, there has been a substantial decline in

public hospital capacity (as measured in the number of hospital beds per capita). Hospital utilisation, however, has experienced a significant gain in efficiency, due largely to a reduction in the length of hospital stay (Duckett & Wilcox, 2011). Without major policy reform, it is projected that government health spending will continue to rise (Duckett & McGannon, 2013). In this context, it is anticipated that discussion regarding the allocation of health care resources will be ongoing, as will the pressure to demonstrate the efficiency of all healthcare services provided in the acute hospital setting.

### *1.3.2.3 Stroke care in Australia*

Since the 1960s, a reduction in mortality rates from stroke has been observed (Pomerleau, Knai, & Nolte, 2008) potentially attributable to advances in stroke care. Despite this, it is reported that there has been no decrease in the severity of stroke (Pomerleau et al., 2008). This suggests that the rates of survival with disability following stroke have been on the rise. As such, movement has occurred away from the conceptualisation of stroke as an acute event towards the perception of stroke survivors as people with a chronic health issue (Pomerleau et al., 2008) living with, in many cases, lifelong disability (AIHW: Senes, 2006).

Perhaps in response to this, Australia has seen increased resources dedicated to raising awareness of stroke and stroke prevention, as well as lobbying for improved treatment and support to improve the quality of life for stroke survivors since the 1980s (National Stroke Foundation, n.d.). This resulted in the Australian Health Ministers naming stroke as a national health priority in 1996 (National Stroke Foundation, n.d.). In response to the literature establishing that the most effective care for stroke patients is provided in stroke units (Stroke Unit Trialists' Collaboration, 2007) and the promotion of best practice guidelines for stroke care (National Stroke Foundation, 2010), access to acute stroke unit care for stroke patients has improved (National Stroke Foundation, 2015). The recognition of speech pathology as an integral part of the multidisciplinary team in acute stroke units is also documented (Stroke Unit Trialists' Collaboration, 2007).

### *1.3.2.4 The changed role of the speech pathologist in the acute hospital setting*

The role of the speech pathologist in acute hospital settings has changed markedly over the last three decades. While caseloads previously consisted primarily of people with communication

disorders, the broadening of the speech pathologist's role to include people with dysphagia has shifted the focus of practise in this setting (Armstrong, 2003; Enderby & Petheram, 2002). The trend of speech pathologists increasing their role in the management of dysphagia was observed as early as the 1990s. Data from the United Kingdom found that in 1987 less than 1% of all referrals to speech pathologists were made for dysphagia management, while by 1995 this had increased to 20.6% (Enderby & Petheram, 2002). Findings in Australia demonstrated an even greater emphasis on the management of dysphagia, with an increase from 25-35% in 1985 to approximately 70% a decade later (Lawrie, 1996). As discussed by Armstrong (2003), in the context of competing demands for their clinical time, speech pathologists may be more willing to prioritise patients with dysphagia who may be perceived to be "more urgent, due to the sometimes life-threatening repercussions if not seen" (p. 138). In addition, Armstrong suggests that the curative intent central to the medical model in the acute hospital setting may be more closely aligned with the management of dysphagia, in which a resumption of 'normal' dietary intake is more achievable comparable to a return to 'normal' communication in a person with aphasia.

### *1.3.3 Approaches to the management of aphasia in acute hospital settings*

Discussion has arisen in the literature with regard to the way limited resources dedicated to aphasia management should be used (Code & Petheram, 2011). Theoretically, three distinct schools of thought, as described by Duffy, Fossett and Thomas (2011), exist with relation to the management of aphasia in acute hospital settings: (1) a traditional, impairment-focused approach (e.g., Godecke, 2009; Peach, 2001); (2) a conversational-counselling approach (e.g., Holland & Fridriksson, 2001; Marshall, 1997); and, (3) a consultative model (e.g., Duffy et al., 2011; Johnson, Valachovic, & George, 1998). These differing opinions – often articulately and persuasively argued – may fuel the uncertainty experienced by clinicians working in this area; especially given that, at present, none have robust, conclusive research evidence to support them.

### *1.3.4 Describing current aphasia management in acute hospital settings*

Despite the presence of theoretical debate relating to the most efficient and effective means for providing intervention to people with aphasia in the acute hospital setting, there is scant literature describing current aphasia management practice in this setting. The current literature base is methodologically diverse, and provides no consensus regarding what current aphasia management in acute hospitals constitutes (e.g., Armstrong, 2003; Code & Petheram, 2011; Enderby & Petheram, 2002; Lalor & Cranfield, 2004; Lawrie, 1996). In addition, in this time of rapidly

changing healthcare service provision, the literature base is outdated. Agreement in the literature, however, is achieved on two points:

- (1) The amount of intervention provided to people with aphasia in acute hospitals is limited;  
and,
- (2) The findings of multiple research studies suggest that aphasia management practice in acute hospitals is sub-optimal in comparison to best practice recommendations.

For further discussion on the literature related to current service provision, see Section 2.2.

### *1.3.5 The factors that influence acute aphasia management*

Despite the aforementioned literature providing a description, albeit limited, of current aphasia management services, little is known about the factors that influence the clinical reasoning and decision making of speech pathologists in their provision of acute aphasia management. Increasing awareness of the importance of understanding this practice, however, has been observed. Since the commencement of this research, two additional research groups have specifically investigated the different drivers of aphasia management: Ciccone, Armstrong and Hersh (2012) in Australia, and Page and Howell (2015) in the United States.

The Australian research (Ciccone et al., 2012) used a combination of diaries and interviews with 16 speech pathologists across the continuum of care to gain an understanding of the differences between projected and actual service delivery to people with aphasia. A diverse range of factors was found to influence their practice. The influences identified were thematically grouped by the authors in a manner which resembled three of the different streams of evidence in the evidence-based practice model (McCormack et al., 2002) – *elements determined by the institution in which they worked* aligns with the notion of context, their *clinical knowledge and reasoning* aligns with clinical expertise, and *factors specific to the person with aphasia* aligns with patient preferences and values. Notably, the findings make limited reference to the influence of research literature on practice.

Page and Howell in the United States (2015) developed a theory to describe: (a) how speech pathologists who work with people with aphasia understood their current practice of developing aphasia assessment and intervention strategies; and, (b) the major processes that their clinical practice undergoes over time. Following interview with ten speech pathologists, analysis identified

similar influencing factors to those found in the study by Ciccone and her colleagues (2012), however placed emphasis on connectedness between the speech pathologist and the person with aphasia in order to meet their communication needs as being central to the process.

In creating their understanding of this phenomenon, both studies described above included speech pathologists from across the continuum of care as participants, restricting the capacity to provide context specific information regarding the factors that influence practice. As such, outside of the body of research presented in this thesis, little is known about the specific factors that influence aphasia management within the context of the acute hospital setting.

### *1.3.6 Personal clinical experience of aphasia management in the acute hospital setting: The genesis of a research question*

The findings highlighted in the limited research evidence on the management of aphasia in acute hospital settings are supported by my personal clinical experience. As a speech pathologist, I have worked clinically in acute hospital settings (in regional and metropolitan Australia, and the United Kingdom) since graduation. My clinical experiences were the genesis of the research question underpinning this research. They can be exemplified in the discussion of a single patient.

Peter was in his mid-50s when he was admitted to the acute stroke unit in which I was employed. He had suffered a large left middle cerebral artery stroke. He presented with a right hemiplegia, visual inattention, cognitive changes, a severe oro-pharyngeal dysphagia, oro-verbal dyspraxia, and global aphasia. His loss of function was sudden, significant, and highly emotional for both Peter and his family.

As a member of the stroke multidisciplinary team, my remit seemed clear: improve his swallowing function to a point where he was able to obtain adequate nutrition and hydration orally in order to facilitate a transfer to rehabilitation. I saw Peter daily, motivated by his relative youth, his previously high level of function, his family's high level of engagement and health literacy, and a personal desire to see improvement. Sometimes, being able to see Peter each day meant staying back late at work. Often, Peter would close his eyes and turn his head away from me as I entered the room.

In an attempt to be patient-centred, I spoke to Peter and his partner about their favourite foods, their favourite places to eat. Each day, I reminded Peter that the aim of my intervention was to, little by little, get him back to drinking a latte in his favourite Melbourne café. Until Peter's partner said to me, "You know what, Abby? As much as Peter would like that latte, what he would really like is to be able to *tell* you he wanted a latte". With this statement, I realised that my focus on Peter's dysphagia had been at the expense of his communication; that the service I was providing was not truly patient-centred.

The reverberations from this event stayed with me. I began to reflect on the influences on my practice. I felt strongly that a lack of time contributed to my inability to provide high quality aphasia management to Peter. I began to wonder if my experience was similar to that of others. And thus, this was the genesis of a research question.

## **1.4 The implications of current aphasia management practice in acute hospitals**

In developing the Australian Aphasia Rehabilitation Pathway (NHMRC Centre for Clinical Research Excellence in Aphasia Rehabilitation, 2014), the NHMRC Centre for Clinical Research Excellence in Aphasia Rehabilitation used a rigorous process to develop a series of 82 best practice statements which described optimal service provision for people with aphasia (Power et al., 2015). The 82 statements are categorised across eight domains: receiving the right referrals; optimising initial contact; setting goals and measuring outcomes; assessing; providing intervention; enhancing the communicative environment; enhancing personal factors; and, planning for transitions. When compared to the best practice statements across these core areas, current management approaches to aphasia in acute hospital settings as described in the literature are considered sub-optimal. This has wide ranging implications, beyond those on the person with aphasia alone. Below, the implications for people with aphasia and their families, the speech pathologist providing the service, and the healthcare system and community are explored.

### *1.4.1 The implications for people with aphasia and their families*

In discussing the implications of sub-optimal service provision for people with aphasia and the families, it is important to first recognise the value of communication. Communication holds its most basic function in facilitating the exchange, or transaction, of information (Simmons-Mackie & Damico, 1995). At a more complex interactional level, communication acts as social currency by contributing to an individual's capacity to form and maintain social relationships, as acknowledged both within and beyond the speech pathology literature (Davidson, Howe, Worrall, Hickson, & Togher, 2008; Douglas & Ney, 1998). In addition, communication can be seen to contribute to the construction (or reconstruction in the case of neurogenic communication disorders) of a self-narrative (Shadden, Hagstrom, & Koski, 2008). As such, communication disabilities, if not addressed, have the potential to have significant impacts upon an individual's life, and the lives of those around them, both within and beyond the communicative act (e.g., Davidson et al., 2008; Holland, 2007; Howe, Worrall, & Hickson, 2008a; Howe, Worrall, & Hickson, 2008b; Le Dorze & Brassard, 1995).

Management of aphasia in the acute hospital setting has been demonstrated to be essential for people with aphasia and their families for a number of key reasons. Acute intervention has, in some studies, been shown to have the potential to result in improved communicative outcomes for people with aphasia (e.g., Godecke, Hird, Lalor, Rai & Phillips, 2012) and potentially prevent language decline as a result of learned non-use (Godecke, Armstrong, Hersh, Ciccone, & Bernhardt, 2013). The provision of communication support also has the potential to increase the capacity of an individual with aphasia to express their healthcare needs, and participate in their own healthcare journey (O'Halloran, Worrall, & Hickson, 2012). For example, the provision of augmentative and alternative communication tools, communicative strategies, and techniques (Kagan, 1998) can facilitate an individual's ability to communicate their healthcare needs, including understanding their medical diagnosis, describing the medical history, asking questions about their care, telling care providers about pain or discomfort, and understanding descriptions of medical procedures (O'Halloran, Worrall, & Hickson, 2012). Communicative support additionally has the potential to decrease the number of negative events within the hospital setting (Hemsley, Werninck, & Worrall, 2013). Management in the acute hospital setting provides the opportunity to build satisfying professional relationships between speech pathologists and people with aphasia (Tomkins, Siyambalapitiya, & Worrall, 2013) and create opportunities for engagement. This can be considered to be of additional value given the chronic nature of aphasia, and the potential these interactions have to shape expectations for the future. Finally, the experience of stroke can be conceptualised in

a bereavement model in which stroke represents a ‘small death’ (Alaszewski, Alaszewski, & Potter, 2004). The sudden experience of loss of function often calls for a period of identity renegotiation, during which communication can be vital (Douglas, 2013). Qualitative investigations of the needs of people with aphasia and their families have identified that each of these factors contribute to an individual’s sense of satisfaction or dissatisfaction with the healthcare services provided to them (Tomkins et al., 2013; Worrall, Sherratt, et al., 2010).

At present, people with aphasia and their families are expressing a sense of dissatisfaction. They are articulating that their goals and needs are not being met (Worrall, Davidson, et al., 2010; Worrall, Sherratt, et al., 2010). In an era in which meeting the needs of patients holds much value, the profession’s current inability to meet the needs of their patients is of concern.

### *1.4.2 The implications for speech pathologists working in the acute hospital setting*

Australian survey data suggest that speech pathologists working in acute hospital settings experience a sense of dissonance in response to the disparity between their current aphasia management practice and best practice recommendations (Rose, Ferguson, Power, Togher, & Worrall, 2013). This is of concern, given that an inability to feel you have helped patients and made a difference have been identified as factors contributing to attrition within the speech pathology profession (McLaughlin, Lincoln, & Adamson, 2008). The potential spiral effect resulting from this has not been explored, however it could be hypothesised that attrition in the profession could result in a predominantly inexperienced workforce and a lack of mentoring, with a potential impact upon the provision of care and restrictions upon the growth of clinical expertise.

### *1.4.3 The implications for the healthcare system and the community*

#### *1.4.3.1 Negative and adverse events in hospital*

Currently, hospital quality measures include determinations of patient experience and satisfaction, and patient safety. Beyond the local level, the World Health Organization (WHO) identified patient safety as a global priority (2009). While we cannot draw a direct link between the reported poor levels of aphasia management in the acute hospital setting and the experience of adverse events, the established relationship between poor communication and adverse events (e.g., Bartlett, Blais,



Tamblyn, Clermont, & MacGibbon, 2008; Hemsley et al., 2013) warrants an awareness of the potential relationship.

#### *1.4.3.2 The cost of stroke and aphasia care to the healthcare system and the community*

The impact of stroke is extremely costly in the community. Recent estimates place the burden of disease cost post-stroke at approximately \$49.3 billion (Deloitte Access Economics, 2013). If we drill down to look more specifically at the direct rehabilitation costs in the year following first ever stroke in Australia, estimates in 2009 placed the cost at \$248 million (Cadilhac, Carter, Thrift, & Dewey, 2009). Given that approximately one third of stroke survivors have aphasia (Dickey et al., 2010), we can estimate from this that at least one third of costs – or \$83 million – would be accredited to people with aphasia; however, given that findings likely indicate that aphasia adds to the cost of stroke-related care, above the cost of stroke alone, this estimate is likely to be conservative (Ellis, Simpson, Bonilha, Mauldin, & Simpson, 2012). Identifying management approaches which aim to effectively and efficiently minimise negative outcomes of aphasia following stroke in order to prevent unwarranted healthcare spending should undoubtedly be a priority. The first step in achieving this is gaining a comprehensive understanding of current practice.

## **1.5 Gaining a greater understanding of aphasia management in acute hospital settings**

### *1.5.1 The research-practice gap*

As described above, little is known about the management of aphasia in acute hospital settings, outside of pure description. This descriptive characterisation identifies gaps between current practice and the recognised ‘gold standard’ of aphasia management (as conveyed, for example, in clinical practice guidelines). In this sense, these descriptive accounts hold significant value. What they do not allow for, however, is an understanding of the reasons underlying the reported clinical behaviours or how to promote change in acute aphasia management.

### *1.5.2 Rationale and purpose of the study*

The origin of this study can be traced to my personal and professional interests, following many years working with people after stroke in acute hospital settings. The identification of a gap between the acute aphasia research literature and clinical practice, as evidenced in the gap between my own practice and the research literature, provided a rationale as to the value of this exploration.

This research aimed to move beyond the description of aphasia management, to gaining an understanding of practice in acute hospital settings. While an understanding of the procedural elements of the management of aphasia provides a foundation for this study, this research is more directly concerned with the clinical reasoning and decision making that underpin aphasia management, and the factors that influence it. While there is some scant literature describing the ‘what’ of aphasia management in acute hospitals, the ‘why’ and ‘how’ elements essential to understanding practice behaviours are less well known.

This study is designed to provide an in-depth understanding of current aphasia management practice in Australian acute hospital settings, and the factors that influence it. This research aims to create an understanding of this phenomenon that is both deep and rich through the inclusion of multiple stakeholders and the use of differing research methods. Specific objectives were to gain an understanding of:

- The culture of aphasia management in the acute hospital setting;
- The current pathway of management for aphasia in the acute hospital setting;
- How speech pathologists conceptualise aphasia management in the acute hospital setting;
- The factors involved in the management decisions of speech pathologists working with people with acute post-stroke aphasia in the acute hospital setting; and,
- The experiences of people with post-stroke aphasia, their close others, and speech pathologists regarding speech pathology management during the acute period.

## **1.6 Thesis overview**

This thesis is organised into ten chapters, a number of which are derived from research publications emerging from this study.

*Chapter 2* provides a narrative literature review, undertaken in 2011, prior to the commencement of data collection. This chapter was published in the journal *Aphasiology* (Foster, Worrall, Rose, & O'Halloran, 2013). Using an evidence-based practice model, this chapter provides a description and evaluation of how the different streams of evidence contribute to the management of aphasia by speech pathologists in the acute hospital setting. In addition, this chapter identifies current gaps in the literature and establishes a research agenda for the rest of the study.

A methodological overview of the study is presented in *Chapter 3*. This chapter discusses the research paradigm and strategy underpinning the methods in this study, and provides a rationale for their selection. A description of the two research strategies, or methodologies, used for each phase of this research – interpretive (hermeneutic) phenomenology and focused ethnography – is provided.

The empirical aspect of this research was undertaken in two phases: the first, Phase One, being a phenomenological exploration of speech pathologists' perceptions of acute aphasia management; the second, Phase Two, being a focused ethnography exploring the factors that influence aphasia management in acute hospitals through a cultural lens.

*Chapters 4, 5, 6, and 7* address Phase One of this research project, an interpretive (hermeneutic) phenomenological examination of aphasia management in the acute hospital setting from the perspective of speech pathologists. *Chapter 4* describes the methods used in Phase One, while *Chapters 5, 6, and 7* present the findings.

- *Chapter 4* outlines the design of Phase One. A description of the participants is provided, along with a justification and account of the sampling, data collection, and analysis methods. Also, it discusses the ethical matters considered in this phase of the research, and the strategies used to enhance rigour throughout the research process.
- A publication emerging from Phase One addressing speech pathologists' perspectives of the procedural elements of the current aphasia management pathway in the acute hospital setting (Foster, Worrall, Rose, & O'Halloran, 2015b) forms *Chapter 5*.
- *Chapter 6*, also derived from a published manuscript, presents findings related to the speech pathologists' conceptualisation, experience, and perception of acute aphasia management and the factors that influence their practice (Foster, O'Halloran, Rose, & Worrall, 2016a).
- An understanding of the role of evidence-based practice in the speech pathology management of aphasia in acute hospitals (Foster, Worrall, Rose, & O'Halloran, 2015b) is contributed in *Chapter 7*.

Phase Two of this body of research is presented in *Chapters 8 and 9*. In order to clearly delineate the two phases, a second methods chapter which describes the methods used in the focused ethnography is represented in *Chapter 8*. *Chapter 9*, meanwhile, details the main findings to emerge from the focused ethnography, and forms the final publication included in this thesis.

*Chapter 10* provides a conclusion for the thesis by reflecting upon the aims of the study.

Additionally, it discusses the research implications and how these may inform clinical practice, the study strengths and limitations, and direction for future research.

## Chapter 2

# Turning the tide: Putting acute aphasia management back on the agenda through evidence-based practice

### *A narrative literature review*

**Foster, A. M.**, Worrall, L. E., Rose, M. L., & O'Halloran, R. (2013). Turning the tide: Putting acute aphasia management back on the agenda through evidence-based practice. *Aphasiology*, 27(4), 420-443.doi: 10.1080/02687038.2013.770818

*This study is inserted as accepted for publication, with the exception of minor terminology and formatting changes to maintain consistency throughout the thesis, and minor additions to the text.*

## 2.1 Abstract

*Background:* The role of speech pathologists working in the acute hospital setting has evolved away from service provision to people with aphasia and their families towards a stronger focus on dysphagia. Evidence-based practice (EBP) can be conceptualised as the integration of four streams of evidence: research-based clinical evidence, clinical expertise, patient preferences and values, and the practice context. EBP is an important tenet in current healthcare. However, it is not clear whether speech pathologists in the acute setting are using EBP to support their aphasia management. Not adopting evidence-based approaches to care has the potential to result in negative impacts for people with aphasia and their families, healthcare services, and speech pathologists who experience a sense of dissonance related to their current service provision. This paper explores acute aphasia management through an EBP lens in an attempt to better understand this dilemma.

*Aims:* This paper applies the conceptual framework of EBP to acute aphasia management. An extensive, systematically conducted review of the international literature relating to health professionals was undertaken. The findings are presented as a narrative literature review.

*Main Contribution:* This paper describes and evaluates how the different streams of research evidence, clinical expertise, patient preferences and values, and the practice context contribute to speech pathologists' management of acute aphasia. Further, the paper identifies current gaps in the literature and suggests a research agenda for the field.

*Conclusions:* Little is known about how speech pathologists integrate and implement the different streams of evidence in EBP, and how these contribute to acute aphasia practice. Speech pathologists report that clinical guidelines containing low level evidence are the main source of research information. Other sources of knowledge include colleagues, professional development events, and websites. Additional challenges to the management of people with aphasia in the acute hospital setting may be posed by the physical environment, the culture of the acute hospital setting, and the provision of leadership to support evidence-based approaches to care. The challenge of using a person-centred approach to care for people with aphasia is acknowledged. Further research exploring speech pathologists' perceptions of their role in acute aphasia management, the clinical decision making process of speech pathologists in relation to acute aphasia management, and the experiences of people with aphasia and their families in the acute setting is required. This will allow for the design of patient-centred approaches to care, and enable the implementation of evidence-based acute aphasia management.

## 2.2 Introduction

The role of the speech pathologist in the acute hospital setting has altered during the last few decades. Speech pathology time and resources are being dedicated to dysphagia in the acute hospital setting at the expense of communication intervention, with studies in many parts of the world suggesting a significant decrease in the services provided to people with aphasia and their families (e.g., Armstrong, 2003; Code & Heron, 2003; Enderby & Petheram, 2002; Lalor & Cranfield, 2004; Lawrie, 1996; Rose et al., 2013).

The shift in acute speech pathologists' focus from communication impairment to dysphagia is reflected in a recent survey of Australian speech pathologists employed in adult neurology in 2010. This study revealed that 79 (approximately 89%) of the 89 responding therapists who worked in acute settings indicated that dysphagia was the dominant component of their caseload while only 6 (approximately 7%) indicated that aphasia was their dominant caseload (Rose et al., 2013).

Concerns have been raised that the perception of speech pathologists as 'swallowing specialists' rather than 'communication specialists' may result in a further reduction in communication related referrals to speech pathologists (Armstrong, 2003). Such a perception may result in a subsequent reduction in the assessment, therapy, and counselling provided to people with communication disorders in the acute hospital setting (Lawrie, 1996). Over time, this may in turn result in a reduction in speech pathologists' clinical expertise in the assessment and management of aphasia in the acute hospital setting.

Potential factors influencing this change in practice include an ageing population, increasing healthcare provision costs, a growing dysphagia knowledge base within the speech pathology profession, and a lack of role clarity for speech pathology aphasia management in the acute hospital (O'Halloran, 2009). In addition, dysphagia has been linked to an increased mortality rate (e.g., Paciaroni et al., 2004; Smithard, Smeeton & Wolfe, 2007), as well as being associated with malnutrition, dehydration, and increased length of stay (Altman, Yu & Schaefer, 2010), influencing clinical guidelines and thus, speech pathology practice. Despite this, a lack of consistency in both the type of therapy implemented and evaluation techniques in the current literature result in equivocal findings regarding the effects of therapy delivered by speech pathologists for oropharyngeal post-stroke dysphagia (Foley, Teasell, Salter, Kruger & Martino, 2008; Speyer, Baijens, Heijnen & Zwijnenberg, 2010). Caseload demands and new roles in dysphagia management have resulted in a reduction of available time to dedicate to patients with aphasia in this setting, creating competition for therapists' time and resources (Code & Heron, 2003; Enderby & Petheram, 2002). This has led to some discussion in the literature regarding how the limited resources dedicated to

acute aphasia management should be used (Code & Petheram, 2011), with some advocating for a conversational-counselling approach (Holland & Fridriksson, 2001), others proposing a consultative model approach (Duffy, Fossett, & Thomas, 2010; Johnson et al., 1998), and others favouring a more traditional impairment-based approach (Peach, 2001). These debates are further complicated by the emergence of recent literature questioning the effectiveness of early aphasia intervention (Bowen et al., 2012), which contrasts with previous evidence lending preliminary support to the provision of acute aphasia services (e.g., Brady, Kelly, Godwin, & Enderby, 2012; Godecke, Hird, Lalor, Rai, & Phillips, 2012). At present, conclusions regarding the efficacy of very early intervention for aphasia are difficult to draw due to a lack of high level evidence. Research is characterised by considerable methodological limitations, variable outcome measurement, and lack of adherence to reporting guidelines. As such, findings related to the clinical effect of very early aphasia therapy are equivocal. It is clear that research questions in this area remain (Brady et al., 2012).

Published research studies provide some insight into how this change has affected the service provided to people with aphasia by speech pathology clinicians in the acute hospital setting. The current literature, however, is limited due to the small number of studies, variable methodologies, limited diversity in country of origin, and equivocal results. An observational study on an acute stroke unit found that speech pathology contact attributable to rehabilitative therapy for both swallowing and communication impairments equated to approximately fifty minutes a week per person (Bernhardt, Chan, Nicola, & Collier, 2007). However, when looking specifically at aphasia, a recent study reported the equivalent of approximately fourteen minutes of aphasia therapy for each patient per week in the acute hospital, which is markedly lower (Godecke et al., 2012). This low average intervention time may be attributable to the fact that the majority of patients received no aphasia intervention. That is, only 15% of patients diagnosed with post-stroke aphasia who were medically appropriate to commence language intervention received any therapy. This is consistent with a previous study on 'usual care' intervention, in which caseload demands were cited as the primary reason why therapy was not provided to all (Lalor & Cranfield, 2004). Whilst not reporting on the duration of therapy session, findings from an American study involving retrospective medical record review of 207 acutely aphasic patients (with an average hospital length of stay of 8.7 days) in a single acute hospital setting, suggested that patients with aphasia received a mean of only 1.2 (SD=1.3) management sessions with speech pathologists during their acute inpatient stay (Duffy et al., 2010). This low amount of therapy is consistent with another recent study on the provision of therapy in the very early recovery phase (Godecke et al., 2012).



Self-report data obtained from speech pathologists through surveys yield results indicative of higher levels of aphasia service delivery compared to those obtained from observation or case auditing. Speech pathologists in a Swedish study report less opportunity to interact with the families of people with aphasia in the acute hospital setting compared to rehabilitation and community settings (Johansson, Carlsson, & Sonnander, 2011). In addition to this, the Verna, Davidson & Rose (2009) survey of aphasia services in Australia, sampled in 2006, found that of the 33 therapists who provided aphasia services in the acute setting, 11 (34%) reported providing less than 3 aphasia sessions per week. Despite this low number of sessions, the 33 therapists reported delivering an average of just over two hours of direct aphasia therapy each week for patients with aphasia ( $m=2.14$  hours,  $SD=1.15$  hours).

The report of family members of people with aphasia acts as another source of data relating to time speech pathologists spend with people with aphasia in the acute setting. One study from Hong Kong found that the family members of people with aphasia report that the frequency at which inpatient sessions were provided by speech pathologists was most commonly only once a week (27.0%) or once every month (16.2%), and most of these sessions were delivered in fewer than 30 minutes (67.7%) (Kong, 2011).

The source of the discrepancy between speech pathologists' self-report, family report, and case auditing or observation of services is unclear. It may represent a sample population more engaged in aphasia service delivery in the acute setting, methodological flaws, a discrepancy of understanding as to what constitutes aphasia therapy, or a misrepresentation of observed versus reported practice. It should be noted, however, that this worldwide decline in service provision to people with aphasia is not attributable to low levels of aphasia, with aphasia estimated to be present in 30-35% of patients with first-ever stroke (Dickey et al., 2010; Engelter et al., 2006). Aphasia, and the negative impact of aphasia on patients and their families, has not diminished.

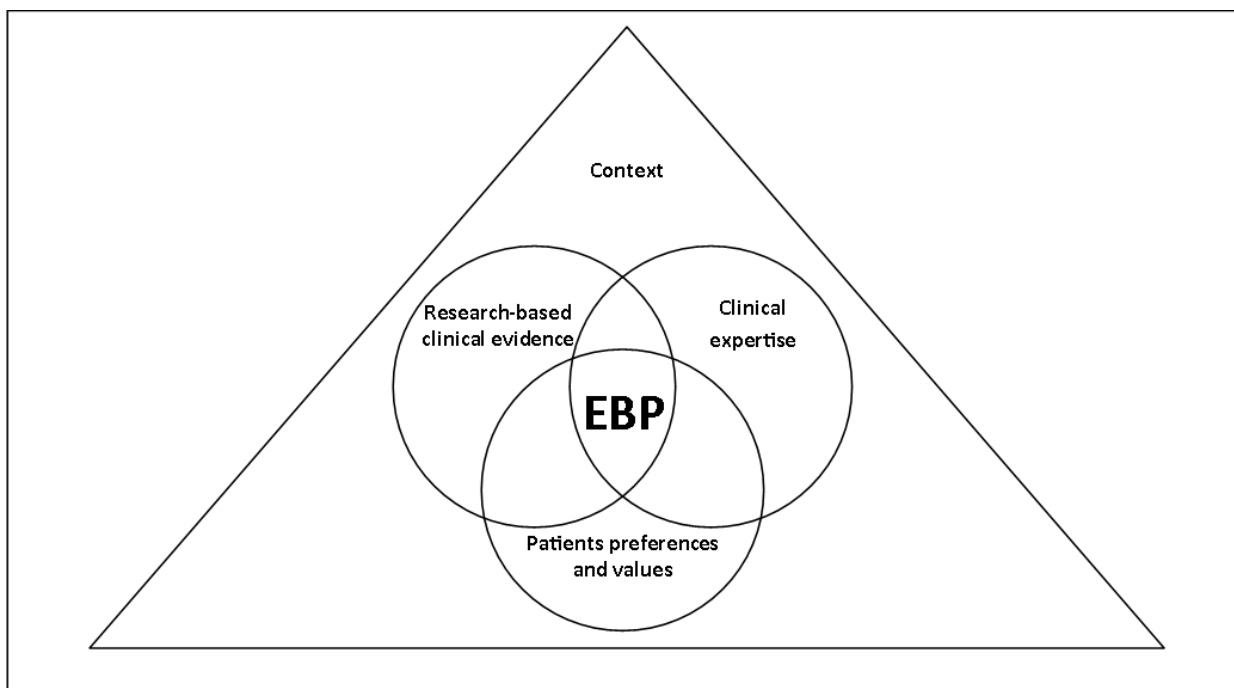
### *2.2.1 Putting evidence into practice: EBP for aphasia management in the acute hospital setting*

EBP is a current and important tenet in healthcare. Since its inception in the field of health sciences, EBP has undergone a conceptual evolution. The definition of EBP has shifted from its beginnings in evidence-based medicine (EBM), with a perceived predominant focus on the research literature, to incorporate the broader elements that contribute to effective clinical decision making. The widely accepted definition of EBM describes it as “the conscientious, explicit, and judicious use of the current best evidence in making decisions about the care of individual patients” (Sackett,

Rosenberg, Gray, Haynes, & Richardson, 1996, p. 71). This definition includes the requirement for integration of three different components: research-based clinical evidence, clinical expertise, and patient preferences and values. The inclusion of an additional category, characteristics from the practice context, has also emerged in response to debate about the interpretation of the original definition (e.g., McCormack et al., 2002; Rycroft-Malone et al., 2004).

**Figure 2-1** The components of EBP

*Research-based clinical evidence, patient preferences and values and clinical expertise are integrated with the consideration of the practice context (based on the work of McCormack et al. (2002) and Rycroft-Malone et al. (2004))*



The momentum toward EBP in allied health professions around the world has built over the last two decades primarily because EBP aims to provide the most effective care that is available, with the goal of improving patient outcomes. Increasing demands from organisational management, policy makers and the public to demonstrate the efficacy and effectiveness of interventions has driven ongoing development of EBP. What remains unclear is how speech pathologists are using the principles of EBP to support their recent role change in the acute hospital setting and to guide acute aphasia management.

### *2.2.2 The service gap: Impacts on people with aphasia and their families, healthcare services and speech pathologists*

In the immediate aftermath of aphasia onset, people with aphasia enter into a period similar to bereavement, requiring them to “negotiate a new understanding of their worlds and others in it” (Müller & Code, 1989, p. 108). Post-stroke aphasia in the acute care setting may be conceived as a ‘crisis’, with emotional ramifications including fear, anxiety, frustration, and depression for both patients and their families (Holland & Fridriksson, 2001). The presence of aphasia has the potential to have a substantial negative impact on the individual, with influence upon mood, relationships, employment, and community participation widely discussed (e.g., Dalemans, De Witte, Beurskens, Van Den Heuvel, & Wade, 2010; Hilari, 2011; Parr, Byng, Gilpin, & Ireland, 1997; Taylor Sarno, 1993). It also has strong prognostic value, and “is the most important predictor of social outcome in patients with stroke with aphasia” (Gialanella, Bertolinelli, Lissi, & Prometti, 2011, p. 122). Yet, as discussed above, speech pathology intervention is minimal, and opportunities to provide optimal patient care in this important early phase are being missed.

In addition to the implications for people with aphasia and their families, healthcare service usage is reported to be notably different for people with aphasia compared to stroke survivors without aphasia. The presence of aphasia is an independent predictor of increased length of hospital stay and increased use of rehabilitation services (Dickey et al., 2010). The presence of aphasia, therefore, has likely associated financial ramifications for the healthcare system (Ellis et al., 2012).

Additionally, the service gap reported in healthcare systems across the world is creating a sense of dissonance for speech pathologists in the acute hospital setting for whom professional tension is created by the evidence-practice gap in aphasia management (Byng et al., 2002; Rose et al., 2013). Notably, in response to open-ended questions, speech pathologists working in the acute hospital setting have discussed the tension between current practice and the implementation of practice recommendations supported by the literature which are difficult to achieve in their setting, including more intensive inpatient therapy (Rose et al., 2013). This tension warrants further exploration of how the concept of EBP in acute aphasia management is perceived by speech pathologists.

In summary, the role of speech pathologists has evolved, resulting in a stronger focus on dysphagia in the acute hospital setting. This has brought about a decrease in service provision to people with aphasia and their families. Valuable intervention opportunities to work with this psychosocially vulnerable group are being missed, creating a sense of unease for speech pathologists working in this area. This is testament to the need to further investigate best practice in aphasia management

across the continuum of care, including the acute care setting (Dickey et al., 2010). Whilst calls for better services for people with aphasia and their families in the acute phase have been largely philosophical to date, the use of an evidence-based practice framework may bring some clarity to the field. Detailed knowledge of current practice and the identification of evidence-practice gaps in acute aphasia management will allow for clearer articulation of research questions which can inform and develop our understanding of the EBP management processes of speech pathologists in the acute hospital setting.

## **2.3 Methodology**

An extensive, systematically conducted review of the literature was undertaken between March 2011 and September 2012, with keyword searches conducted in a range of peer-reviewed English language scientific electronic databases (including CINAHL, Cochrane Library, EMBASE, Medline, PsychINFO, and Scopus) and using internet search engines (including Google Scholar) (see Table 2-1 for search terms and combinations). Search terms were grouped conceptually and defined by the search strategy. These concepts and terms were driven by the desire to explore acute aphasia management within an EBP framework. In addition, seminal texts were reviewed, publications by key authors searched, and ancestry searching of references cited in identified sources was undertaken. There were no search restrictions based on date of publication. Due to the multi-faceted nature of the topic, an extensive and broad search of literature was carried out. It is therefore not logical to report overall yields from these searches. The different search strategies resulted in the inclusion of 130 relevant sources. All relevant results are cited and discussed in this narrative review.

The components of evidence-based practice within acute aphasia management are presented here as a combined narrative literature. The review explores each different stream of evidence as it relates to acute aphasia management. The acute aphasia literature is reviewed, as well as speech pathologists' ability to access it and use it within their clinical reasoning processes. The barriers to including the patient within this process are also reviewed within the context of the demands of the acute hospital setting. Recommendations for clinical practice and research are suggested.

**Table 2-1** Search strategy: Terms and combinations used in the literature search

<b>Concept 1</b>	<b>Concept 2</b>	<b>Concept 3</b>	<b>Concept 4</b>
Aphasi* OR Dysphasi*OR Acute aphasia OR Communication OR Communication impairment OR Communication disability OR Communication disorder OR Language impairment	Stroke OR Acute stroke OR Cerebrovascular accident  Acute hospital OR Acute OR Hospital  Stroke unit OR Acute stroke unit OR Stroke care  Service delivery OR Health services	Speech patholog*OR Speech-language patholog*OR Speech therap* OR Speech-language therap* OR Allied health OR Healthcare professional	Evidence-based practice OR Evidence-based medicine
<b>Concept 5</b>	<b>Concept 6</b>	<b>Concept 7</b>	<b>Concept 8</b>
Early rehabilitation OR Very early rehabilitation	Goals OR Goal setting OR Joint goal setting OR Collaborative goal setting  Decision making OR Shared decision making OR Collaborative decision making OR Medical decision making  Patient-centred care  Autonomy	Patient perceptions OR Patient experience OR Patient perspectives OR Patient values OR Patient views OR Patient preferences	Attitudes  Values OR Personal values OR Organisational values  Culture OR Organisational culture OR Workplace culture OR Professional culture  Ethics  Health personnel attitude OR Attitudes to change OR Attitudes
<b>Concept 9</b>	<b>Concept 10</b>	<b>Concept 11</b>	<b>Concept 12</b>
Research utilisation OR Knowledge translation OR Knowledge transfer OR Knowledge exchange OR Research implementation  Information needs OR Information literacy OR Information sources OR Information use	Clinical competen* OR Competenc*  Clinical expertise OR Expertise OR Experience OR Professional expertise  Professional practice  Clinical reasoning OR Clinical reasoning strategies OR Clinical decision-making OR Problem solving	Leader* OR Transformational leader* OR Mentor*	Context OR Contextual factor OR Environment OR Environmental element OR Environmental factor OR Social environment OR Environmental impact OR Organisational context
<b>Concept 13</b>	<b>Concept 14</b>	<b>Concept 15</b>	<b>Concept 16</b>
Communication partner OR Family	Health information OR Health literacy	Guidelines OR Clinical practice guidelines OR Pathways OR Clinical pathways OR Stroke clinical guidelines OR Best practice guidelines OR Practice guideline	Barriers OR Institutional barriers OR Organisational barriers OR Personal barriers  Facilitators

**Search combinations:**

(Concept 1 OR Concept 2 OR Concept 3) AND Concept 4  
 (Concept 1 OR Concept 2 OR Concept 3) AND (Concept 4 OR Concept 15)  
 (Concept 1 OR Concept 2) AND Concept 5  
 (Concept 1 OR Concept 2 OR Concept 3) AND Concept 6  
 (Concept 1 OR Concept 2 OR Concept 3) AND Concept 7  
 (Concept 1 OR Concept 2 OR Concept 3) AND Concept 8  
 Concept 3 AND Concept 9  
 Concept 3 AND Concept 10  
 (Concept 1 OR Concept 2 OR Concept 3) AND Concept 4 AND Concept 11  
 (Concept 1 OR Concept 2 OR Concept 3) AND Concept 12  
 (Concept 1 OR Concept 2) AND Concept 13  
 (Concept 1 OR Concept 2) AND Concept 14  
 (Concept 1 OR Concept 2 OR Concept 3) AND (Concept 4 OR Concept 15) AND Concept 16

## 2.4 Results

### 2.4.1 *The use of research evidence by speech pathologists*

To ensure an effective realisation of evidence-based practice in speech pathology, the role of research evidence should include the production and dissemination of a strong evidence base, as well as emphasis on clinicians' information literacy (Nail-Chiwetalu & Bernstein Ratner, 2006). Thus, the information literacy of speech pathologists is now reviewed, as well as the current state of the research on acute aphasia management.

#### 2.4.1.1 *Hunting and gathering: How speech pathologists seek research evidence*

It is important to examine speech pathologists' information literacy, as it provides an understanding of the preferred source and methods speech pathologists use to access research evidence.

Knowledge regarding the information literacy of speech pathologists is derived predominantly from three survey questionnaires of American and Australian speech pathologists (Guo, Bain, & Willer, 2008; Nail-Chiwetalu & Bernstein Ratner, 2007; Vallino-Napoli & Reilly, 2004), with each assessing a broad range of speech pathologists across the continuum of care. These data primarily relate to the information seeking behaviours of speech pathologists, as opposed to their information needs or use. No data are available which explore information seeking solely in the population of speech pathologists working in the acute hospital setting, or in relation to the seeking of aphasia-specific information.

Exploration of the information seeking behaviour of speech pathologists has demonstrated a heavy reliance on self and others to meet informational needs for clinically based questions, compared to information seeking involving library or database resources (Guo et al., 2008; Nail-Chiwetalu & Bernstein Ratner, 2007; Vallino-Napoli & Reilly, 2004). Frequent sources of research information include clinical guidelines, colleagues or personal contacts, professional development events, and websites. Nail-Chiwetalu and Bernstein Ratner (2007) suggest that the pattern of reported utilisation of research sources was consistent with the clinician's perceived usefulness of the source of information, suggesting that making information sources user-friendly may increase the profession's access to and ongoing usage of them.

Of concern, one study reported that the percentage of respondents who accessed electronic databases for literature searching was as low as 53% (Vallino-Napoli & Reilly, 2004), citing possible reasons including poor physical access, limited allocation of time, poor literature searching

skills and strategy, or poor ability to evaluate and interpret collected data (Guo et al., 2008; Nail-Chiwetalu & Bernstein Ratner, 2007; Vallino-Napoli & Reilly, 2004).

Speech pathologists do, however, highly value research and its implications for practice (Finch, Cornwell, Ward, & McPhail, 2012; Metcalfe et al., 2001; Vallino-Napoli & Reilly, 2004).

However, 44% report that it is hard to apply research in practice, and 26% report that basing practice on research findings would be costly both financially and in terms of time (Vallino-Napoli & Reilly, 2004).

Little is known about the current information literacy of speech pathologists, with the majority of data arising from surveys which while carrying a strong message for their time, must be interpreted with caution given the rapid technological advance and changing university curricula that have occurred in the interim. It is unclear from the literature if there are differences in the information literacy behaviours of speech pathologists in different specialties or practice contexts. What is evident is that speech pathologists rely heavily on themselves and others in their profession to meet their informational needs. Given the purported reasons for the lack of research utilisation, it may be hypothesised that improved access may be facilitated by resources that collate and synthesise research, such as systematic reviews, clinical guidelines, or other pre-appraised sources. Population specific data exploring speech pathologists' information needs, information seeking, and information use may assist in the improvement of services and products that promote information literacy in speech pathologists (Kloda & Bartlett, 2009).

#### *2.4.1.2 Clinical guidelines for the management of acute aphasia*

In speech pathology, barriers to the implementation of research evidence are more complex than the promotion of information literacy in clinicians alone. In fields comparative to speech pathology, clinicians are concerned by a perception of disengagement between research and clinical practice (Jette, Bacon, et al., 2003). While Nail-Chiwetalu and Bernstein Ratner (2006) suggest that systematic reviews, discipline specific databases, and clinical guidelines may act as potential solutions to such problems, they reiterate the need for caution in the interpretation of synthesised outcome data, suggesting that in a profession with comparatively modest data, "meta-analysis may lead to unsatisfying or even misleading conclusions about best approaches to treatment" (p. 165).

Speech pathologists report that clinical guidelines are the main source of research evidence used to guide their aphasia management (Verna et al., 2009). As such, it is important to explore clinical guidelines for aphasia management, and their contribution as a source of research evidence.

Evidence-based clinical guidelines contain “systematically developed statements to assist practitioner and patient decisions about appropriate health care for specific circumstances” (Institute of Medicine, 1990, p. 38) in specific areas of practice, based on a systematic and critical review of the current literature.

Internationally, there are many clinical guidelines that outline approaches to acute aphasia management. A recent systematic review of the quality of clinical guidelines for aphasia in stroke management reported significant variability in both the scope of coverage of recommendations for aphasia management provided within the guidelines and in the methodological rigour of the guideline development processes (Rohde, Worrall, & Le Dorze, 2013). Examples of clinical guidelines include the Australian *Clinical Guidelines for Stroke Management* (National Stroke Foundation, 2010), the New Zealand *Clinical Guidelines for Stroke Management 2010* (Stroke Foundation of New Zealand and New Zealand Guidelines Group, 2010), the Scottish *Management of Patients with Stroke or TIA: Assessment, Investigation, Immediate Management and Secondary Prevention* (Scottish Intercollegiate Guidelines Network, 2008) and the British *Clinical Guidelines* (The Royal College of Speech & Language Therapists, 2005) and the *National Clinical Guideline for Stroke* (Intercollegiate Stroke Working Party, 2012), developed by or in collaboration with peak national speech pathology professional bodies. Other groups have also synthesised data relating to aphasia therapy, although these findings have not been presented as a guideline (e.g., Academy of Neurologic Communication Disorders and Sciences, n.d.; Salter, Teasell, Bhogal, Zettler, & Foley, 2011). They cover topics including aphasia management, and they reflect the complexity and diversity of speech pathology practice in acute aphasia management and stroke care in general. Given that the recommendations made in these guidelines are intended to be applicable to practice across the continuum of care, practitioners are required to use clinical judgement and knowledge of context, in conjunction with an awareness of the patient’s wishes, to decide on the clinical applicability of these recommendations on an individual basis. The need for interpretation is reflected in the careful selection of terminology in the recommendations, including ‘as appropriate’, ‘can include’ and ‘should be’, which is consistent with other guidelines in the area where the specific evidence base is modest.

At this stage in guideline development for aphasia therapy, the majority of synthesised research evidence results in a low level grading of recommendation. The grading of a recommendation relates to the strength of the evidence on which the recommendation is based, and does not necessarily reflect the clinical importance of the recommendation (Scottish Intercollegiate Guidelines Network, 2008). However, a poor grading of evidence may reduce speech pathologists’



willingness to actively engage in implementing the recommendations, and prevent advocacy for changes to practice.

In addition, some authors have raised concerns regarding the rigid interpretation of guidelines, and the potential for clinicians to implement recommendations without consideration of patient and contextual variables (Yates, Kruger, Coombes, & Hoffmann, 2010). In response to such concerns, the guidelines emphasise their role in the provision of “a general guide to appropriate practice to be followed subject to the clinician’s judgement and the patient’s preference” (National Stroke Foundation, 2010, p. 30). In recognition of the need to integrate these streams of evidence, clinical expertise and patient views and values, as well as the contextual factors, are examined below.

#### *2.4.2 Clinical expertise as a component of evidence-based practice*

Clinical expertise is a cardinal feature of EBP, and is conceptualised as “the proficiency and judgement that individual clinicians acquire through clinical experience and clinical practice” (Sackett et al., 1996, p. 71). It includes a health professional’s reasoning and decision making in a clinical environment, as explored below. It is also important to consider the role that the clinical expertise of others plays in speech pathologists’ decision making in relation to acute aphasia management. While varying definitions of clinical expertise now abound, their commonality is in the acceptance that ‘years of experience’ alone is no longer sufficient to encapsulate the complexity of the notion of expertise (Higgs & Bithell, 2001; Roulstone, 2011; Stathopoulos & Harrison, 2003). Rather, clinical expertise is conceptualised as the development of skills and knowledge, which in the context of EBP can be seen as the integration of streams of evidence to support decision-making (Gillam & Gillam, 2006).

Dollaghan (2007) perceives clinical expertise as the “glue” which holds the other elements of EBP together, and suggests that not only clinical expertise but the opinions of experts should be integrated when making decisions regarding patient care. The weight that these opinions and experiences are given in relation to other streams of evidence requires a developed clinical reasoning skill set, as a means to integrate and interpret these different sources of information.

Research to date from the United States suggests that speech pathologists base the majority of their clinical decisions on knowledge derived from educational programs (both tertiary programs and post-graduate professional development), clinical experience, and the opinions of colleagues (Gillam & Gillam, 2006; Guo et al., 2008; Zipoli & Kennedy, 2005), suggesting a heavy weighting of the clinical expertise stream of evidence within the profession, comparative to other streams of

evidence. The reasoning behind this uneven weighting of one stream of evidence remains unclear in the literature.

#### *2.4.2.1 The transition from novice to expert: Clinical reasoning, clinical decision making, and expertise*

To understand the concept of clinical expertise and its' relationship to evidence-based practice, we must first understand what is meant by expertise and the progression of clinical reasoning and decision making skills. There is agreement in the literature that transition along the continuum from novice to expert is fundamentally concomitant with changes in a clinician's clinical reasoning and decision making processes. The complexity of the process of arriving at a clinical decision is highlighted by Smith, Higgs and Ellis (2008) who describe the requirement for health professionals "to make decisions with multiple foci...in dynamic contexts, using a diverse knowledge base...,with multiple variables and individuals involved" (p. 89).

The concepts of clinical reasoning and problem solving are integral to the speech pathology profession's concept of competence, as evidenced by the references to reasoning, judgement and decision making in the professional behaviour documents of national bodies around the world (American Speech-Language-Hearing Association, 2007; Speech Pathology Association of Australia Limited, 2011; The Royal College of Speech & Language Therapists, 2006). Despite what appears to be a clear recognition of the centrality of clinical reasoning and decision making in the profession (Ferguson, 2006), little evidence is available to describe the process, especially within the acute setting. Much of what is known about clinical expertise is derived from knowledge from other professions, for example, the dialectical model in physical therapy (Edwards, Jones, Carr, Braunack-Mayer, & Jensen, 2004) and the narrative model in occupational therapy (Fleming, 1991). It is possible that clinical reasoning in the acute hospital setting has its own particular challenges, as postulated in the nursing and physiotherapy literature (Bucknall & Thomas, 1997; Hedberg & Sätterlund Larsson, 2004; Smith, Higgs, & Ellis, 2007, 2010). These include time pressures, conflicting personal values, inadequate knowledge base (Bucknall & Thomas, 1997), level of clinical experience and expertise (Smith et al., 2010), and environmental elements, such as interruptions and work procedures (Hedberg & Sätterlund Larsson, 2004). It has further been suggested that the clinical reasoning process is likely to be influenced in the acute setting by the nature of the decision, the context of the decision, and the clinician's personal factors (Smith et al., 2007). While these clinical reasoning models hold intuitive appeal in terms of their applicability to speech pathology, they have not been confirmed as the processes that underlie the clinical reasoning of speech pathologists (McAllister & Rose, 2008).

#### *2.4.2.2 The opinions of experts*

Expert opinion is another source of clinical expertise that may contribute to the practice of clinicians. In hierarchies of evidence, expert opinion is presented as the lowest level of evidence (e.g., Greenhalgh, 2010; Phillips et al., 2009). Commentators on evidence-based practice caution against the heavy weighting of expert opinion, asserting that speech pathologists should seek additional evidence in the face of unsupported opinions and theories (Dollaghan, 2004; Gillam & Gillam, 2006). Despite this, an emphasis is placed on the opinions of others within the speech pathology profession (Gillam & Gillam, 2006; Guo et al., 2008; Zipoli & Kennedy, 2005).

In summary, to better understand the role and weighting of different streams of evidence and knowledge there is a need for further research into clinical reasoning in the speech pathology profession (Justice, 2010; McAllister & Rose, 2008; Records & Tomblin, 1994; Roulstone, 2011). Understanding of clinical reasoning processes may not only help the profession to understand decision-making behaviour, but also inform the implementation of change to support EBP principles in the profession (Sladek, Phillips, & Bond, 2006).

Hence, to effect change and adopt an evidence-based approach to management in acute aphasia practice, research must first establish the speech pathologists' perception of their role in this setting, and an understanding of the processes that drive clinical reasoning. An appreciation of the factors affecting aphasia service delivery and the barriers and facilitators to change will allow for the implementation of strategies to promote and strengthen EBP.

#### *2.4.3 Putting the patient in the picture: The preferences and values of people with aphasia and their families in the acute hospital setting*

Integral to the paradigm of evidence-based practice is the inclusion of patient preferences and values, "a rich source of evidence for practice" (Pearson, 2010, p. 221). One means of facilitating a clinician's ability to listen to the needs of their patients is the adoption of a patient-centred care (PCC) approach.

For people with aphasia, PCC represents a perception of increased respect, inclusion, partnership, and accessibility (Byng et al., 2002) in their relationships with clinicians. While there has been some exploration of the conceptual applicability of PCC in speech pathology, there is limited research demonstrating evidence of its implementation. The benefits of PCC have been demonstrated (e.g., Stewart et al., 2000; Wolf, Lehman, Quinlin, Zullo, & Hoffman, 2008) but not

specifically in interactions with people with communication impairments in the acute care setting. The potential barriers to PCC for people with aphasia in the acute hospital setting are two-fold, as discussed below.

#### *2.4.3.1 The impact of the acute hospital setting on the provision of PCC*

It is possible that the acute hospital itself influences how and if patient-centred approaches to care are delivered. Whilst the majority of the literature on PCC focuses on the management of chronic health conditions, the applicability of the concept to acute conditions was acknowledged early (Stott & Davis, 1979). Despite this, barriers to implementing this approach to care have been identified.

In the acute phase of a chronic condition, such as aphasia, people may experience a sense of intense loss as the personal and social implications of the condition present themselves (Alaszewski et al., 2004). It is perhaps not surprising then that patients have demonstrated a preference for a less active role in healthcare decision-making during the acute phase (Say, Murtagh, & Thomson, 2006). Within this phase, patients are additionally found to have difficulty articulating their goals (e.g., Holliday, Ballinger, & Playford, 2007; Parry, 2004; Wressle, Öberg, & Henriksson, 1999). However, people with aphasia have the ability to discuss their immediate concerns and priorities in the acute setting (Worrall, Sherratt, et al., 2010). Laver et al. (2010) suggest that “the time needed to adjust to a major health event, the lack of knowledge that patients have about typical recovery and the passive role assigned to patients in a hospital setting” (p. e-139) may affect this. Findings also suggest that for those experiencing grief after stroke, healthcare workers are more likely to be perceived as effective if they express to patients that they are “willing and able to communicate, in particular to understand the biographical context which each survivor uses to make sense of their situation and to map and manage their future” (Alaszewski, Alaszewski & Potter, 2004, p. 1077).

The acknowledged difficulties and potential barriers to PCC in the acute setting must be balanced against the knowledge that active participation in goal setting in the context of neurological rehabilitation results in increased satisfaction in the process of rehabilitation (Holliday, Cano, Freeman, & Playford, 2007). Further to this, joint goal setting has implications for motivation, and perceptions of control and freedom in decision making (Conneeley, 2004).

#### *2.4.3.2 The impact of aphasia on the provision of PCC*

In addition to the challenges posed by the acute hospital setting, people with aphasia encounter additional barriers as a result of the inherent language impairments characteristic of aphasia. The articulation of personal healthcare decisions, targets for rehabilitation, and broader aspirations

require the support of a skilled communication partner. The process can be lengthy and challenging. In addition, the notion of aphasia and its ongoing consequences is unfamiliar to most people experiencing aphasia for the first time.

Upon review of the literature on shared decision making and joint goal setting, the presence of aphasia was cited as a potential barrier (e.g., Fleck & Hayes, 2002; Freedman, Stuss, & Gordon, 1991). Aphasia has also been cited as a reason for patients being excluded from providing consent to participate in research studies into acute stroke (e.g., Demarquay et al., 2005; Rosenbaum et al., 2004). Despite the potential for cognitive competence to be masked by linguistic difficulties, people with aphasia remain largely cognitively intact (Kagan, 1995). However, issues in assessing cognitive competence in people with aphasia may be present, particularly in the early stages post-stroke (Worrall, Sherratt, et al., 2010). Worrall et al. (2010) appropriately suggest that “most people with aphasia should be viewed as competent partners in decision making about their needs” (p. 310). Overcoming the challenges inherent in the acute hospital setting and in the context of communication impairment requires the strengthening of communication strategies.

#### *2.4.3.3 Communication is the key to PCC*

In order to facilitate the implementation of elements of PCC in the acute setting for people with aphasia, enrichment of the communicative interaction is required. This may be achieved through the involvement of a patient-selected ‘helper’, or the implementation of communication strategies which facilitate the participation of people with aphasia (Stein & Brady Wagner, 2006).

Communication strategies which may facilitate this include accessible healthcare information (Parr, Pound, & Hewitt, 2006; Rose, Worrall, Hickson, & Hoffmann, 2010), supported conversation techniques (Kagan, 1998), decision aids (Hoffmann & Tooth, 2010; Trevena, Baratt, & McCaffery, 2008), and Talking Mats ® (Bornman & Murphy, 2006).

It is acknowledged, however, that the acute hospital setting poses barriers to communication that are likely to be accentuated in people with aphasia. An observational study and qualitative meta-synthesis exploring the environmental factors that influence communication between patients and their healthcare providers in acute hospital stroke units found barriers including high levels of background noise, busy environments with multiple visual distractors, a lack of communication aids, poor provision of accessible written information, and being in shared rooms (O'Halloran, Worrall, & Grohn, 2012; O'Halloran et al., 2011).

#### 2.4.3.4 *What do people with aphasia want in the acute hospital setting?*

Qualitative research into the goals of people with aphasia (n = 50) has revealed nine broad goal categories (Worrall et al., 2010). While each of these has applicability in the acute phase, those of particular relevance were *return to pre-stroke life*, which was reported as dominating the early period, and *information*, with patients reporting a perceived lack of information for themselves and their families during the early weeks or months (Worrall et al., 2010). This desire for additional information in the acute phase correlates with the premise of Laver et al. (2010) that models of goal setting which include a 'motivational' phase (e.g., Schwarzer, Luszczynska, Ziegelmann, Scholz & Lippke, 2008) may be beneficial for use in acute stroke rehabilitation, allowing time to build knowledge, and develop understanding to facilitate goal creation. The feeling of disempowerment described by people with aphasia in the category of *dignity and respect* may also have significant implications for inclusionary practices in the acute setting.

Importantly, variation has been reported between the goals of people with aphasia and those set for them by their treating speech pathologists. Goals set by therapists, when categorised according to the International Classification of Functioning, Disability and Health (ICF) (World Health Organization, 2001), were predominantly based around the concepts of impairment and activity limitation (Leach, Cornwell, Fleming, & Haines, 2010), whereas the goals of people with aphasia are spread across the spectrum of the ICF, with most goals linked to activities and participation (Worrall et al., 2010). This finding of discrepancy in perspectives is supported by other research from Australia and Scotland, which suggests that while commonality exists, the views of people with aphasia do not necessarily coincide with those of aphasia practitioners in relation to service provision (Law et al., 2010; Rohde, Townley-O'Neill, Trendall, Worrall, & Cornwell, 2012).

The implementation of a patient-centred approach for people with the aphasia in the acute setting is known to have significant challenges. Despite these challenges, it is clear that people with aphasia want a patient-centred approach to care, and that by taking this approach there is the potential for improved outcomes through the maintenance of patient autonomy.

#### 2.4.4 *The context of the acute hospital setting for people with aphasia and speech pathologists*

Evidence from the practice context is the final stream of evidence in the EBP paradigm. At present, there is no available evidence on how speech pathologists perceive the context of practice to influence their clinical reasoning and decision-making, however general EBP literature suggests that this concept is vital to evaluations of the application of EBP. Kitson, Harvey and

McCormack's (1998) conceptual model of the enmeshed nature of the multiple influences which impact upon the implementation of evidence into practice identifies the concept of 'context' as being central to this framework, highlighting the importance of the practice setting in the clinical application of evidence. Building on a previous definition which identified context in concrete terms as the environment or setting in which practice occurs (Kitson et al., 1998), McCormack et al. (2002) assert that the term additionally requires acknowledgement of the economic, social, political, historical, and psychosocial factors. Additionally, it is important to identify factors that operate at the organisational context level. In recognising this, French et al. (2009) proposed a model, derived from related concepts in organisational and management sciences, which aims to assess and improve organisational conditions to foster a decision-making culture informed by research. Three core categories related to organisational context – vision, leadership, and learning culture – are identified. Beyond this, four categories of action are highlighted: knowledge need, acquisition of new knowledge, knowledge sharing, and knowledge use. Within each of these areas, a series of organisational attributes with which to measure and improve the organisational context for EBP in healthcare are provided. There is a distinct need to consider context as being greater than the physical environment in order to better reflect the complexity of the concept (Kitson et al., 1998). Understanding of context may help in the identification of potential barriers and facilitators to achieving EBP.

#### *2.4.4.1 The physical environment of the acute stroke unit*

Physical environments have the potential to dictate how clinical services, including acute aphasia management, are provided. In recent times, the acute management of stroke has undergone significant advances. It is acknowledged that not all stroke survivors have access to acute stroke units, with many being managed by general medicine, neurology, or geriatric medicine units (Stroke Unit Trialists' Collaboration, 2007). However, acute stroke unit care is now acknowledged in the literature as best practice (National Stroke Foundation, 2010, 2011a; Stroke Unit Trialists' Collaboration, 2007), with a systematic literature review reporting improved outcomes both in terms of death and disability for patients treated in an acute stroke unit compared to a general medical ward (Stroke Unit Trialists' Collaboration, 2007). As such, the physical environment of the acute stroke unit is examined, with the suggestion that findings relating to the 'gold standard' in stroke care may be able to be applied to other acute hospital wards to which stroke survivors are admitted. Acute stroke units have been defined as geographically discrete units which provide comprehensive assessments, co-ordinated multidisciplinary care, specialised staff, and an active person-centred approach to care (Langhorne & Pollock, 2002). Yet despite the assertion stroke unit care improves stroke outcomes, with proximity care of stroke patients as a core definitional element

(National Stroke Foundation, 2010, 2011a), little discussion has been undertaken regarding the importance of addressing the environmental factors and work space challenges which may impact upon healthcare providers' ability to provide evidence-based healthcare within stroke units.

Acknowledgement of the physical acute stroke unit environment was especially vital in the context of an evaluation of early intervention in the acute stroke units of large metropolitan teaching hospitals which found that patients were in or beside their beds for 88.5% of observational time, with only 0.2% of observed time in a therapy area (Bernhardt, Dewey, Thrift, & Donnan, 2004). This is consistent with findings of a similar European study (De Wit et al., 2005). This suggests that much of the therapeutic intervention provided occurs at the bedside, with the potential for a restriction in the approaches to management that a clinician can implement.

An investigation of the perceptions of nursing staff working in a Canadian acute stroke unit found that lack of space was a constant challenge to providing care, impacting upon their ability to undertake a range of nursing roles including medication delivery, charting, and patient interactions (Seneviratne et al., 2009). Furthermore, participants indicated that they did not, and potentially could not, ensure that patient autonomy and rehabilitation were priorities in the acute stroke care due to environmental limitations impacting on the provision of appropriate care, privacy and confidentiality (Seneviratne et al., 2009) – an issue with potential ramifications also for speech pathologists and other allied health clinicians working within the acute stroke unit setting.

In the realm of speech pathology, O'Halloran, Worrall and Hickson (2011) highlighted the impact of the acoustic environment, visual environment, assistive communication devices, physical referents, and a communicative support person. While these factors were identified as barriers to communication between healthcare providers and patients, there is the potential that they may also act as barriers to achieving evidence-based management of patients with aphasia in the acute setting, given the centrality of communication in these interactions.

#### *2.4.4.2 The culture of the acute hospital setting*

Culture can be considered to form part of the contextual factors that may influence clinical practice. McCormack et al. (2002) believe that culture can be defined in terms of the prevailing values and beliefs of the organisation. Culture “includes beliefs, values, norms, customs, and behaviours which are shared by a group or society” (Sumsion, 2009, p. 32), and is constructed in the context of relevant social policy (Sumsion, 2009). Exploration of research utilisation by nursing staff in acute



care has indicated the strong influence of unit culture in the clinical application of research findings (Breimaier, Halfens, & Lohrmann, 2011; Pepler et al., 2006; Pepler et al., 2005).

#### *2.4.4.3 Attitudes of staff in the acute setting towards people with aphasia*

A qualitative meta-synthesis completed by O'Halloran et al. (2012) explored the environmental factors that influence communication for patients with a communication disability in acute stroke units. The opinions of healthcare staff and patients, and direct observation of communication interactions, revealed that the attitudes of healthcare professionals were important factors in influencing communication either positively or negatively. Negative attitudes towards people with aphasia may be expressed by health professionals who do not allow uninterrupted expression by people with aphasia, resulting in negative emotional responses by people with aphasia (Parr et al., 1997). Conversely, positive attitudes by health professionals, including patient-centred approaches and the provision of adequate time within communicative interactions to allow the person with aphasia to feel they are a valued conversation partner (Sundin, Jansson, & Norberg, 2000), may facilitate communicative interactions.

Simmons-Mackie et al. (2007) reported on a Canadian intervention study designed to increase communicative access and involvement in decision-making for people with aphasia, through the training of health professionals working in settings with patients with stroke or aphasia across the continuum of care. Following the training, the bulk of barriers to system change were identified by the acute care team. These included issues related to staffing, organisational characteristics specific to the acute setting, lack of motivation due to perceived limited success, and the attitudes of the team. The investigators reported that the attitude of the acute care team was characterised by a lack of 'buy-in' to the approach, although it is unclear if this originates from poor project leadership, poor feedback, or possible resistance to change (Simmons-Mackie et al., 2007). This study is indicative of some of the cultural barriers which may impact upon communication intervention in the acute setting, and have the potential to impact also upon speech pathologists' management of aphasia in the acute setting.

#### *2.4.4.4 Leadership to support evidence-based practice in the speech pathology*

The role of strong leadership in creating a context which supports research implementation in healthcare has been described in the literature (e.g., Crow, 2006; Halm, 2010; Kitson et al., 1998; Marchionni & Ritchie, 2008; McCormack et al., 2002; Newhouse, 2007). In speech pathology, the role of leadership in creating evidence-based services is beginning to gain recognition and support. Davies (2010) reflects on the significance of strong speech pathology leadership in the change

management process in response to the emergence of new evidence. She suggests that the key elements of speech pathology leadership are conveying a vision, learning from the evidence, reflective practice, service evaluation, and enabling contribution to the evidence base. Roddam and Skeat (2010) report further on the embedding of EBP into the culture of speech pathology departments, advocating that leadership need not come from service managers, but through inspirational therapists who can act as ‘champions’ – a role that they argue should be dedicated and defined, and supported at an organisational level by senior management.

#### *2.4.5 Closing the evidence-practice gap for acute aphasia management*

Speech pathology discipline-specific knowledge of the components of EBP and their contribution to acute aphasia management is limited. Further research into current practice and the factors that influence it is required. The successful implementation of EBP in acute aphasia management requires the consideration of each of the different streams of evidence, bridging research and practice.

The above literature review suggests that a gap exists between current acute aphasia management practices, and the research in the field. Research exploring ways to improve the uptake of evidence in clinical practice has gained legitimacy of late, and exists under the guise of various names, including knowledge transfer and exchange, implementation sciences, and evidence-based practice. The key underlying concept common to each of these theories is the exploration of how to promote the utilisation of research in clinical practice to improve the productivity and sustainability of healthcare services, whilst achieving optimal outcomes for patients (Wensing, Grimshaw, & Eccles, 2012). While early models of knowledge transfer and exchange were represented in a linear fashion, recent modelling is characterised by an emphasis on connections and interchange between researchers and research users (Kiefer et al., 2005), with multiple points of contact between patients and their families, clinicians and researchers throughout the research process in order to better promote the clinical uptake of research findings. As an example, the *Knowledge to Action Process* model developed by Graham et al. (2006) demonstrates the interactive relationship between *knowledge creation* and *knowledge action*, providing a scaffold upon which to develop strategies for the introduction of evidence-based techniques into clinical practice. Supporting the need to move away from linear modelling is the proposal that the translation of evidence into knowledge and practice is socially mediated, and that it is therefore crucial to undertake organisational analysis in order to better understand barriers and facilitators to evidence-based practice in local clinical settings (Dopson & Fitzgerald, 2005). Dopson and Fitzgerald (2005) suggest that an alternative social perspective, aiming to understand the perspectives and concerns of clinicians, is

required, and that adopting and utilising evidence-based practice is dependent on a series of supportive social processes operating smoothly within the practice context. The EBP literature in speech pathology has paid limited attention to the implementation of the best practice recommendations that emerge from the literature and the context in which practice occurs, instead focusing on appraisal of research findings.

Evidence-practice gaps, or knowledge-to-action (KTA) gaps, exist when divergence is apparent between what is known to be best practice and what is done in clinical reality. While evidence-practice gaps are usually defined in terms of the divergence between research literature and practice alone (National Institute of Clinical Studies, 2003), this review has taken a broader approach by examining the different EBP elements – the research-based clinical evidence, clinical expertise, patients’ preferences and values, and the context – and their contribution to speech pathologists’ management of acute aphasia. Identification of evidence-practice gaps is an initial step in the process, further research is required to explore why these gaps exist, and how agents for change can facilitate the implementation of EBP. The perspectives of ‘front-line’, clinical speech pathologists and people with aphasia will be vital in driving this process.

The challenge inherent in changing practice in order to bridge these gaps is acknowledged by the National Institute of Clinical Studies (2005), who report that “past beliefs need to be challenged, systems readdressed and conscious steps taken to replace previous actions with new behaviours that are supported with high quality evidence” (p. iv). Such is the challenge that lies ahead for the speech pathology profession in implementing evidence-based acute aphasia management.

## **2.5 Conclusion**

Changes in the role of the speech pathologist in the acute care setting have resulted in a significant decrease in service provision to people with aphasia and their families. This results in professional discord for speech pathologists for whom this gap in service is evident. The personal cost of aphasia to families and the financial cost to the healthcare system suggest that knowledge of how to provide best practice approaches to care for this population is essential. While theoretically-based arguments have previously been made advocating the need to improve speech pathology service to people with aphasia in the acute hospital setting, we argue that speech pathologists must move towards the provision of explicitly evidence-based acute aphasia management in order for our services to be valued within the healthcare system, supported financially, and meet the needs of people with aphasia and their families.

While some evidence exists which evaluates the barriers to achieving EBP across the allied health professions or the broad speech pathology context, little evidence exists to date which examines the speech pathologist in the acute setting's concept of EBP in relation to aphasia management – how do the research evidence, clinical expertise, patient preferences and values, and the context of the acute hospital setting interact to inform acute aphasia practice? A clearer understanding of factors affecting aphasia service delivery in the acute hospital setting will allow for the implementation of strategies to promote and strengthen the implementation of EBP.

Further exploration of the aphasia management processes of speech pathologists working in the acute hospital setting is required. To this end, research which addresses speech pathologists' perceptions of their role in acute aphasia management will provide some understanding of motivational factors and competing interests in this setting. Investigation of the clinical decision making process of speech pathologists in relation to acute aphasia management will create a knowledge base related to the factors which influence aphasia management. Understanding the experiences of people with aphasia and their families in the acute setting will allow the design of patient-centred approaches to care. Elucidation of agents for change will support the creation of accommodating contexts and environments that enable the implementation of evidence-based acute aphasia management.

It is time to turn the tide. There is a clear need to reflect on current acute aphasia management, to undertake research to better understand this practice, so that speech pathologists are able to provide, and patients are able to benefit from, more evidence-based approaches to the management of aphasia in the acute hospital setting.

# **Chapter 3**

## **Methodology**

**Research approach**

## **3.1 Introduction**

This chapter discusses the research approach utilised in this investigation. It outlines and provides a justification for the selected research paradigm and the research strategy. It begins by examining the philosophical assumptions about what constitutes knowledge, and then examines the strategy of enquiry. The research methods employed in each phase of this study are explored in subsequent chapters.

## **3.2 Research paradigm**

Considering the philosophical assumptions that underlie research is an essential step in the research process. These assumptions shaped how I formulated the clinical problem and research question, while also influencing how I sought to answer these questions (Huff, 2009). A paradigm is “a collection of logically connected concepts and propositions that provides a theoretical perspective or orientation that frequently guides research approaches towards a topic” (Morse & Field, 1995, p. 243).

I entered this process quite firmly rooted in a positivist paradigm, having undertaken research in this paradigm previously and having been professionally embedded in the largely positivist medical environment of acute hospital settings for some time. Try as I might, however, I was unable to frame my desired area for exploration and research question in a way consistent with this. As my interest lay in examining the factors that influenced management of aphasia in acute hospital settings deeply and in detail from an insider’s perspective (Richards & Morse, 2013), I selected a qualitative approach. This selection was considered appropriate as, in contrast with quantitative approaches, a qualitative approach: (a) did not impose pre-determined frameworks or understandings; (b) allowed me to make sense of the complexity of aphasia management, rather than forcing a pre-emptive reduction of the data; and, (c) permitted me to reveal and respect the participants’ interpretations of aphasia management (Richards & Morse, 2013). Specifically, driven by my research question, I chose a social constructivist paradigm to underpin this research.

### ***3.2.1 Social constructivist research paradigm***

Social constructivism focuses on seeking an understanding of the world from the point of view of those who live in it (Creswell, 2013). In order to better understand social constructivism, it is important to explore the philosophical beliefs associated with this interpretive framework. That is, the philosophy relating to the nature of reality (ontological beliefs), how reality is known

(epistemological beliefs), the role of values (axiological beliefs), and the approach to inquiry (methodological beliefs).

### *3.2.1.1 Ontology of the social constructivist research paradigm*

Guba and Lincoln (2004) summarise the philosophy underlying social constructivism as *relativist*. The social constructivism ontology assumes that reality is socially constructed by individuals through their lived experience, a process of interaction with their world and others (Creswell, 2013). As such, it is believed that multiple realities exist, in contrast to a single, observable reality (Merriam, 2009).

### *3.2.1.2 Epistemology of the social constructivist research paradigm*

Epistemologically, social constructivism supposes that reality is co-constructed through the dynamic interaction between the researcher and the participants. This reality is shaped by individual experience (Guba & Lincoln, 2005), and the “the historical and cultural norms that operate in individuals’ lives” (Creswell, 2013, p. 25). So in contrast to the positivist paradigm, as a researcher I did not seek to ‘find’ knowledge but rather construct it with an acknowledgement of my influence on the social phenomenon under investigation (Merriam, 2009). In recognition that my own background shaped my interpretation, I clearly identified my background and assumptions (see Section 1.3.6), whilst exercising reflexivity throughout the research process.

### *3.2.1.3 Axiology of the social constructivist research paradigm*

The axiology underlying social constructivism suggests that “individual values are honoured, and are negotiated among individuals” (Creswell, 2013, p. 36). Working within this paradigm, therefore, I took steps to describe and acknowledge my values explicitly, acknowledging that all research is value laden and that my values help to shape the research outcome. This is in contrast to the traditional scientific approach which seeks research that is unbiased and value-free (Klenke, 2008).

### *3.2.1.4 Methodological beliefs of the social constructivist research paradigm*

From a methodological perspective, the social constructivist paradigm adopts a dialectical and hermeneutic approach (Appleton & King, 1997). Hermeneutics offers “a theoretical framework for interpretive understanding, or meaning, with special attention to context and original purpose” (Patton, 2002, p. 114). It examines “the way people develop interpretations of their life in relation to their life experiences” (Liamputtong, 2009, p. 339), and as such aims to delve beyond the purely descriptive to provide an understanding of the meaning underlying constructions (Appleton & King, 1997). Social constructivist methodology is also dialectical; that is, ideas and constructions are

continually compared and contrasted, in recognition of the conflict and contradiction inherent in seeking to understand human experience (Lincoln & Guba, 1985). As such, I sought to interpret the meaning my participants had about the world, a construct forged through interactions between myself and the participants (Creswell, 2013). Data collection often occurred within naturalistic environments in an attempt to understand the historical and cultural settings of the participants, and utilised a variety of naturalistic data collection methods, including interviewing, observing, and document analysis (Creswell, 2013).

### *3.2.2 Rationale for choosing the social constructivist paradigm*

Multiple arguments supported the selection of social constructivism as the most appropriate paradigm to underpin this research. What this research was, and what it was not, was influenced by the selection of the underlying paradigm.

This research aimed to describe and understand current acute aphasia management practice and the factors that influence it. There was no hypothesis being tested, and no attempts were made to manipulate or control the acute aphasia management practices of participants. Further, this research did not aim to directly create change in relation to acute aphasia management. An aim which seeks to understand experience by obtaining the perspectives of individuals within a naturalistic setting, rather than test hypotheses and manipulate variables in an experimental setting, is consistent with a social constructivist approach (Denzin & Lincoln, 2011).

The social constructivist paradigm was also consistent with the exploratory nature of this research. As indicated in the introduction, little was known about acute aphasia management and the factors that influence it. The inductive methods utilised by social constructivism are essential for investigations in which previous research provides an inadequate understanding, and the variables are not yet known (Richards & Morse, 2013).

The complexity of acute aphasia management and the factors that influence it also supported the adoption of a social constructivist paradigm. Social constructivism promotes the use of broad, general questions which allow participants to construct meaning out of a situation (Creswell, 2013), allowing for an understanding of acute aphasia management within context without “the pre-emptive reduction of the data [which may] prevent discovery” (Richards & Morse, 2013, p. 28).

Consistent with the social constructivism focus on valuing individual experience (Guba & Lincoln, 2005), the research aimed to understand acute aphasia management and the factors that influence it



from the perspectives of those within it – the speech pathologists, people with aphasia, and their close others. The research aims spoke to my desire to “learn from the participants in a setting...the way *they* experience it, the meaning they put on it, and how they interpret what they experience” (Richards & Morse, 2013, p. 28). Social constructivism endorses the use of methods and analysis approaches which obtain the ‘insider’s perspective’, and allowed me to reveal and treat with full appreciation the perceptions of participants and the intricacy of their interpretations (Richards & Morse, 2013).

In alignment with social constructivism’s belief in the existence of multiple constructed realities and the assumption that value should be given to all participants’ perspectives, this research gave voice not only to speech pathologists and family members of people with aphasia, but also a group who in the past may have been considered ‘powerless’: people with aphasia. Due to the language impairment inherent to aphasia, people with aphasia have often been excluded from research. Embracing the principles of social constructivism, this research provided this under-represented group the opportunity to speak and be heard (Creswell, 2013; Liamputtong, 2009), an aim which held great personal importance to me.

Finally, the choice of social constructivism as a research paradigm to underpin this research was influenced by my own beliefs and feelings. The paradigm fits well with my personal ontological, epistemological, and axiological beliefs. I believe in the importance of relationships and reciprocities in the construction of reality in life, and in research. I support the concept that multiple realities exist, and the need to acknowledge these when conducting research. I also believe that an individual’s context – their individual experience and value, as well as historical and cultural norms – should be explicitly acknowledged for the role they play in the interpretation of data and the shaping of the research outcome. For these reasons, social constructivism was found to be the most appropriate paradigm for this research.

Having discussed my research paradigm, including my ontological and epistemological assumption, I will now examine the research strategy.

### **3.3 Research strategy**

Research strategy, or methodology, is distinct from research methods, and must be considered as such. By means of analogy, a methodology may be considered a map, with method referring to the steps required to traverse between two places on the map (Jonker & Pennink, 2010). A research

strategy provides a model in which to undertake a research project, within the context of your chosen paradigm.

My decision making process was influenced most significantly by the capacity of the strategy to meet the articulated aims of the project, and additionally by my stated epistemological stance (Richards & Morse, 2013). Phase One used an interpretive phenomenological research strategy. Building on the results of Phase One, Phase Two utilised a focused ethnographic approach. Both of these strategies are described below. Additionally, a rationale for the selection of each, and the combination of strategies, is provided.

### *3.3.1 Research strategy for Phase One: Interpretive (hermeneutic) phenomenology*

In order to understand the broader research aim identified earlier – which is *to describe and understand current acute aphasia management practice and the factors that influence it* – I considered it to be vital to understand the perspective of the clinical group that delivers much of that management. This led to the desire to explore speech pathologists’ perception of the management of aphasia in acute hospitals. Prior to this research being conducted, very little was known about how speech pathologists perceive post-stroke aphasia management in the acute hospital setting, and how they create meaning about this phenomenon. As such, this Phase One of the research was concerned with building a rich description and interpretation of those experiences.

Phenomenology seeks “a deeper and fuller meaning of the participants’ experience of a particular phenomenon” (Morse & Field, 1995, p. 151). It offers a descriptive, reflective, interpretive, and engaged mode of enquiry (Morse & Field, 1995). There are two main branches of phenomenology: Husserl’s descriptive phenomenology, and Heidegger’s interpretive phenomenology. Whilst both descriptive and interpretive phenomenology are interested in the ‘lived experience’, the way in which the exploration of this is undertaken creates the underlying differences between the two phenomenological branches. Bracketing is a key concept in descriptive phenomenology. It is a process of “suspending one’s judgement or bracketing particular beliefs about the phenomena in order to see it clearly” (Lavery, 2003, p. 23). In contrast with descriptive phenomenology, interpretive phenomenology rejects the concept of bracketing, suggesting that “pre-understanding is not something a person can step outside of or put aside...[and] nothing can be encountered without reference to a person’s background understanding” (Lavery, 2003, p. 24). In addition, interpretive phenomenology “goes beyond mere description of core concepts and essences to look for meanings

embedded in common life practices” (Lopez & Willis, 2004, p. 728), and attempts to understand “how these meanings influence the choices people make” (Lopez & Willis, 2004, p. 729).

Phase One of the research utilised an interpretive (hermeneutic) phenomenological approach, and aimed to generate knowledge about how acute speech pathologists experience aphasia management.

### *3.3.1.1 Rationale for selection of interpretive phenomenology*

The selection of interpretive phenomenology as the research strategy for Phase One was supported by two main arguments. Firstly, it served the purpose of the research. Interpretive phenomenology aims to develop a deep understanding from multiple perspectives about a particular phenomenon. The purpose of this research was to provide an insight into speech pathologists’ perspectives regarding acute aphasia management. The selection of interpretive phenomenology allowed me to go beyond description of the perceptions of speech pathologists to understand what might have contributed to shaping them. As such, the posed research aim – *to describe and understand current acute aphasia management practice and the factors that influence it* – lent itself to an interpretive phenomenological approach.

Secondly, interpretive phenomenology was compatible with the underlying research paradigm, social constructivism. Both recognise and acknowledge the co-construction of knowledge, and the influence that personal experiences and socio-cultural factors have on this construction. Within a social constructivism paradigm, researchers “recognise that their own background shapes their interpretation, and they ‘position themselves’ in the research to acknowledge how their interpretation flows from their own personal, cultural, and historical experiences” (Creswell, 2013, p. 25). This is consistent with interpretive phenomenology, in which “meaning is found as we are constructed by the world while at the same time we are constructing this world from our own background and experiences” (Laverly, 2003, p. 24).

Given the congruence with both the aims of the research, and the underlying social constructivist paradigm, interpretive phenomenology was considered an appropriate choice for Phase One of this research.

### *3.3.2 Research strategy for Phase Two: Focused ethnography*

While the research strategy selected for Phase One strove to elucidate the experiences of aphasia management in the acute hospital setting from the perspective of clinicians, a comprehensive

understanding of this phenomenon required an additional phase of research utilising an alternative research strategy. Based on the findings of Phase One, Phase Two also addressed my broader research question – to describe and understand current acute aphasia management practice and the factors that influence it – but did so using a different strategy. By ‘switching lenses’, so to speak, I was able to illuminate the perspectives of people with aphasia, their close others, and speech pathologists with a cultural focus.

Phase Two of the research was conducted within a focused ethnography (Knoblauch, 2005; Morse, 1991; Muecke, 1994). In contrast to classical or anthropological ethnography, focused ethnographies “are time-limited exploratory studies within a fairly discrete community or organization” (Muecke, 1994, p. 199). The term ‘focused’ ethnography has been coined as it best describes their problem-focused and context-specific attributes (Higginbottom, Pillay & Boadu, 2013). It can be applied when research is “investigating specific beliefs and practices of... particular healthcare processes, as held by patients and practitioners” (Higginbottom et al., 2013, p. 2). The discrete community can be conceptualised as consisting of people “with a store of knowledge and experiences relative to the problem or phenomenon of study” (Muecke, 1994, p. 199). Originally conceptualised in the nursing field, this methodology gathers data on a small number of participants with experience relative to the research question through selected episodes of participant observation and/or interviews (Muecke, 1994). Focused ethnographies are characterised by selected and specified, or ‘focused’, aspects of a field. Table 3-1 provides a comparison of classical (anthropological) ethnography and focused ethnography.

**Table 3-1** A comparison of classical (anthropological) ethnography and focused ethnography

Area for contrast	Classical (anthropological) ethnography	Focused ethnography
<i>Purpose</i>	Deepen understanding of a community's social action	Improve cultural appropriateness of professional practice
<i>Topic selection</i>	Emerging from data during collection and analysis	Selected prior to data collection commencing
<i>Conduct of participant observation</i>	Continuous, long-term field visits, with extensive time commitment	Short-term field visits at selected events/times only for a limited period of time
<i>Modality of data collection</i>	Writing	Recording
<i>Aspect of the field being studied</i>	Open	Focused
<i>Role of researcher</i>	Participant role	Field-observer role
<i>Data generated for analysis</i>	Notes	Notes and transcripts
<i>Community being studied</i>	Broad community or organisation	Fairly discrete community or organisation

(Knoblauch, 2005; Morse, 1991; Morse &amp; Field, 1995; Muecke, 1994)

### 3.3.2.1 Rationale for choosing focused ethnography

This stage of the research aimed to explore how a cultural sub-group works through exploration of their beliefs, language, behaviours, and the issues facing the group (Creswell, 2013). Focused ethnography is an appropriate method to study clinical behaviours (Bloor, 2001), given the emphasis on understanding participants' perceptions of their behaviours and their perception of the factors that influence those behaviours (Morse & Field, 1995). It has previously been demonstrated to be appropriate in research exploring the clinical reasoning of occupational therapists in practice (Unsworth, 2005).

Focused ethnographies are considered an appropriate choice for exploratory research, such as this investigation (Muecke, 1994). This research was considered exploratory as there were few studies that have specifically examined the factors that influence the management of acute post-stroke aphasia.

The outcome of focused ethnography was also considered to be congruent with the desired outcome of this research. A successful focused ethnography provides an illumination and explanation of a community's behaviours, beliefs, and local meanings, while aiming to develop knowledge and practice in a specific disciplinary area (Morse, 1991).

Furthermore, focused ethnography can be considered compatible with social constructivism (Whitehead, 2004). Focused ethnography is typified by the focus on gaining an ‘insider’s view’ (Savage, 2006), consistent with social constructivism’s focus on seeking an understanding of the world from the point of view of those who live in it (Creswell, 2013). Both social constructivism and focused ethnography place emphasis on the relationships between the researcher and participants, and the influence of these relationships on the findings of the research (Creswell, 2013; Savage, 2006; Whitehead, 2004). Shared is the assertion that data collection should be undertaken within a naturalistic environment (Creswell, 2013; Savage, 2006). Perhaps most importantly was the common goal of illuminating ‘culture’. A central tenet in ethnographic research, Creswell (2013) clearly states the need to integrate an understanding of an individual’s historical and cultural norms within a social constructivist approach.

### *3.3.3 Rationale for combining research strategies: Interpretive phenomenology and focused ethnography*

Debate currently exists regarding the extent to which different qualitative research methods “can or should be mixed, combined, triangulated or otherwise used concurrently, wholly, or in part” (Johnson, Long, & White, 2001, p. 243). The combination of research strategies has been supported by some advocating for ‘methodological pluralism’ in qualitative research (e.g., Johnson et al., 2001; Kim, 1993; Morgan, 1983), yet criticised by those advocating for methodological purity as ‘method slurring’ (e.g., Morse, 1991).

This study undertook an in-depth exploration of the experience of acute aphasia management and the factors that influence it. Two distinct phases of the research study used different research strategies. Phase One used an interpretive phenomenology to explore in-depth speech pathologists’ experiences of acute aphasia management, and the meaning they ascribe to these experiences. An essential element to the use of interpretive phenomenology within a social constructivist framework is that these perceptions are interpreted within their broader personal and socio-political context (Lavery, 2003; Lopez & Willis, 2004). Shaped by the findings from Phase One, Phase Two utilised a focused ethnographic approach, during which the researcher undertook observation within the community under study as a means to explore local acute aphasia management practices and the meanings underlying these, embedded in the social and cultural life. As suggested by Aamodt (1991), “the context of a culturally constituted environment provides the meaning, and makes ethnographic knowledge different from every other form of knowledge generated” (p. 52) in healthcare research. The combination of interpretive phenomenology and ethnography has

previously been used in stroke research (Doolittle, 1994; Norris, Allotey, & Barrett, 2012) and nursing (Rapport & Maggs, 1997).

I acknowledge the primary challenge inherent in the use of dual research strategies – that it “allows generation of contradictory as well as complementary knowledge according to the different...perspectives taken to study a given phenomenon” (Kim, 1993, p. 797). However, I believe that these two phases of research, supported by different research strategies, were complementary and beneficial in creating a holistic picture of acute aphasia management. Across each phase, data were collected consistent with the philosophy underlying the methodology and the research aims of that phase. As Maggs-Rapport (2000) suggests, the use of dual research strategies in complementary studies provides the opportunity for methodological triangulation, a strategy by which rigour is promoted and a more comprehensive understanding of the phenomenon is gained. In addition, Johnson, Long, and White (2001) have suggested that a combined ethnographic and phenomenological approach may facilitate researcher reflexivity, when compared to a pure phenomenological approach, when undertaking research. They proposed that combined methods, by their very nature, “invite consideration of wider issues than the personal or microcosmic” (p. 248), promoting broader reflection and the opportunity for qualitative researchers to more explicitly describe the influences on their research.

I support the argument that methodological credibility in qualitative research will only be determined if qualitative researchers provide explicit description of their underlying research paradigm, data collection, and analysis procedures – and the thought processes which informed these choices (Baker, Wuest, & Stern, 1992). As such, I have provided a detailed methodology chapter in order to elucidate my methodological choices. I believe that there are benefits derived from my research approach – a combination of research strategies and methods – and that methodological rigour has been upheld through “integrity, clear accounts, reflexivity, and constructive critique” (Johnson et al., 2001, p. 248) and by not compromising the integrity of either research strategy.

Within this research, interpretive phenomenology and focused ethnography were used as different, yet complementary, research strategies in order to provide a comprehensive examination of aphasia management in the acute hospital setting. Within the interpretative phenomenology I was interpreting words used to describe the experience, while the focused ethnographic phase provided me with an opportunity to use different data sets to explain the lived experience. Together, these

research strategies meet the aim of the study by providing an extensive and multi-faceted exploration of the experience of acute aphasia management and the factors that influence it

### **3.4 Research methods**

As a means of comprehensively addressing the research aim, two phases – each distinct studies using different data collection methods – were undertaken. Triangulation, “the most powerful means for strengthening credibility in qualitative research” (Liamputtong, 2009, p. 26), relies on the convergence of multiple data sources as a means of substantiating data and the identified themes. Each data collection method utilised in this study has its own strengths and weaknesses, and as such the use of multiple methods of data collection across the two phases of this research strengthened the credibility of the results through the use of methods triangulation. Contradictory or inconsistent results, rather than being problematic, serve to highlight the complexity of the management of aphasia in acute hospital settings. A description of each of the research methods used in each phase, including a rationale for their use, is provided in the chapters preceding the presentation of results for each phase (see *Chapter 4* and *Chapter 8*).

### **3.5 Summary of research approach**

This chapter has provided an overview of the research approaches used in both Phase One and Phase Two of this research project. A social constructivist paradigm underpinned this research, which aimed to explore acute post-stroke aphasia management and the factors that influence it. Social constructivism seeks to understand the world from the perspectives of those who live in it. In this chapter, the ontology, epistemology, axiology, and methodological beliefs which form the foundation of this paradigm have been discussed. The research comprised two distinct yet interrelated phases of enquiry. Phase One used interpretive phenomenology to explore speech pathologists’ perceptions of acute aphasia management. Interpretive phenomenology is suited to studying the experiences of individuals in significant depth and detail. Phase Two implemented a focused ethnography to examine the cultural influences of professional practice related to acute aphasia management. This chapter has provided a rationale for the selection of each of these study strategies, and for combining them within the project.



## **Chapter 4**

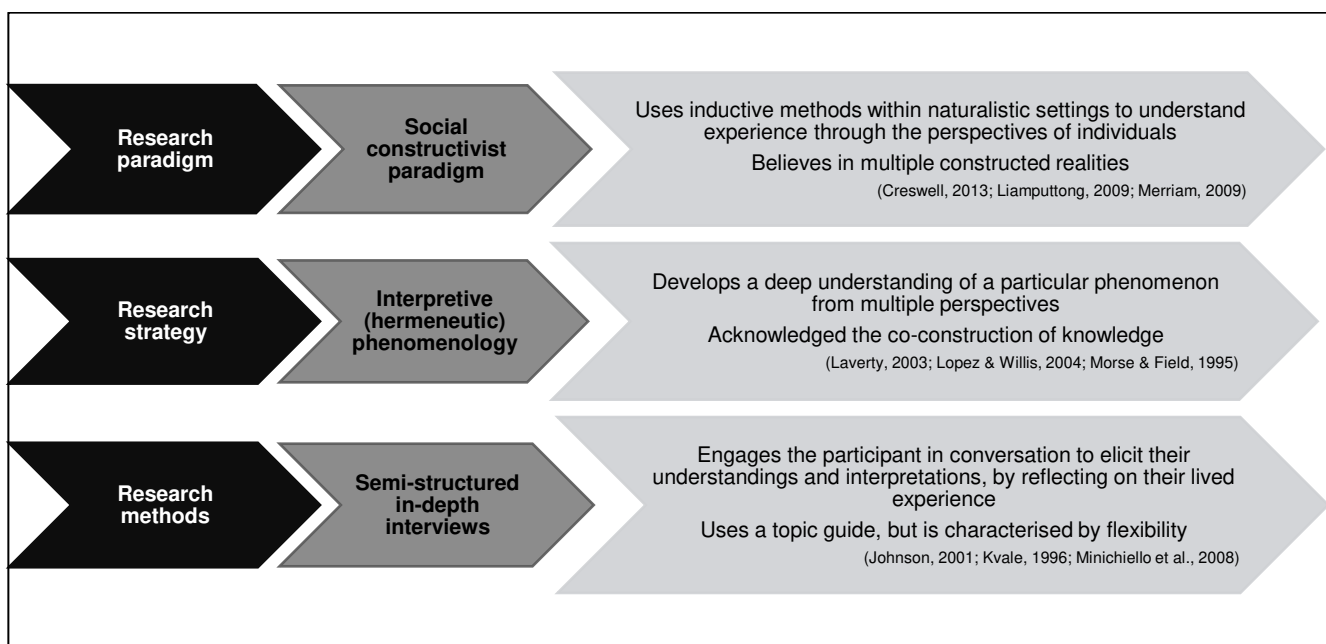
### **Methods: Phase 1**

*An interpretive (hermeneutic)  
phenomenological examination of acute  
aphasia management from the perspective of  
speech pathologists*

## 4.1 Introduction

This section details the design of Phase One of the research study. A diagrammatic representation of the research approach is provided below in Figure 4-1. The research aims, selection of participants, approach to data generation and analysis are described. In addition, the ethical considerations and strategies implemented to demonstrate rigour are examined. While a précis of this information is provided within the following individual published chapters, this chapter aims to provide sufficient detail to permit readers to judge for themselves the suitability of the research design for addressing the research question and the overall quality of the study (Patton, 2002).

**Figure 4-1** Research approach: Phase One



## 4.2 Research aims

The overall aim of this research study was to gain a greater understanding of the factors influencing the management of aphasia in the acute hospital setting. Phase One aimed to explore this objective from the perspectives of speech pathologists working in this setting. Specific objectives were to construct an interpretation of:

- How speech pathologists describe the current pathway of management for aphasia in the acute hospital setting;
- How speech pathologists conceptualise aphasia management in the acute hospital setting;

and,

- The factors speech pathologists perceive as influencing their management of aphasia in acute hospital settings.

## 4.3 Participants

In this phase of the research project, I was interested in examining the experiences and opinions of speech pathologists currently providing clinical services to people with aphasia in acute hospital settings. As such, the recruitment and selection strategy was designed to ensure an adequate sample was obtained.

### 4.3.1 Participant recruitment

Participants were recruited through a range of sources. Expression of interest forms were distributed at professional development events (e.g., conference and forums), through online communities known to include speech pathologists working with adult populations, and via direct mail out to selected speech pathology departments of Australian hospitals reported as have an acute stroke unit and/or more than one hundred stroke admissions per year. After confirming that they met the selection criteria and they consented to participate in the study, an interview was arranged.

Thirty six speech pathologists demonstrated an interest in participating in Phase One of this research, with fifteen (15) purposively selected based on their characteristics (see below). One speech pathologist, however, was excluded from the research when it was revealed during the interview that she did not meet the inclusion criteria. As such, fourteen (14) of these interviews have been included in the analysis.

### 4.3.2 Participant eligibility criteria

The eligibility criteria adopted to guide the selection of study participants were as follows:

- People with a degree in speech pathology recognised by Speech Pathology Australia (self-reported); and,
- Currently working clinically, or having recently (within the last 12 months) worked clinically, in an Australian acute hospital setting; and,
- Whose clinical caseload included people with acute post-stroke aphasia.

Speech pathologists working solely in the rehabilitation or community setting with people with aphasia were excluded from this research.

## 4.4 Sampling

### 4.4.1 Sampling strategy

A purposive maximum variation sampling technique was utilised. This method of sampling is a cardinal feature of phenomenological research. *Purposive sampling* refers to sampling in which the researchers deliberately select participants because of their characteristics (Richards & Morse, 2013), and their capacity to provide crucial information that may not be able to be obtained through alternative sources (Liamputtong, 2009). *Maximum variation sampling* involves selecting a heterogeneous sample, based on the advance identification of criteria that differentiate participants (Creswell, 2013). It “aims at capturing and describing the central themes that cut across a great deal of variation” (Patton, 2002, p. 234). As such, utilising a *purposive maximum variation sampling* represented my desire to seek a range of relevant experiences (Patton, 2002), allowing for diversity based on pre-determined characteristics. The focus of this sampling strategy was to cover all dimensions determined to be pertinent to the phenomenon in question (Liamputtong & Ezzy, 2005).

An essential element when using purposive maximal variation sampling is the recognition and documentation of factors that distinguish the population under investigation prior to recruitment (Creswell, 2013). Documentation of the rationale for the selection of these criteria is also essential.

The following factors for variation were utilised:

- *Duration of clinical experience as a speech pathologist*: Time since graduation had the potential to influence the content of tertiary education programs undertaken by the participants. In addition, while ‘years of experience’ alone does not capture the notion of expertise (Higgs & Bithell, 2001; Roulstone, 2011; Stathopoulos & Harrison, 2003), the development of skills and knowledge is noted to accumulate over time, with associated changes in clinical reasoning and decision making processes (Benner, Tanner, & Chesla, 2009; Edwards, Best, & Rose, 2005).
- *Sector of primary employment (e.g., clinicians employed in the private hospital sector and clinicians employed in the public hospital sector)*: According to the Australian Institute of Health and Welfare (2012), public and private hospitals provide a different mix of services, have different funding models, and have different average lengths of stay for patients. Demographically, hospitalisation rates in private hospitals are also significantly higher in major cities, and for those who are the least socioeconomically disadvantaged (Australian Institute of Health and Welfare, 2012).
- *Workplace setting (e.g., clinicians working in hospitals with acute stroke units and those with no acute stroke unit)*: It is well established that the most effective care for stroke

patients is provided in stroke units (Stroke Unit Trialists' Collaboration, 2007). The criteria related to staffing that define a stroke unit state that a coordinated multidisciplinary team who specialise in the management of stroke, have access to ongoing professional education, and meet regularly to discuss management is essential (National Stroke Foundation, 2011a). Despite this, only 60% of Australian patients with stroke received their care in a stroke unit at some time during their admission (National Stroke Foundation, 2011b).

- *Location of primary clinical practice (e.g., metropolitan clinicians and non-metropolitan clinicians):* Health service delivery to people residing in rural and remote areas of Australia has been reported to be inequitable when compared to those residing in metropolitan areas (O'Callaghan, McCallister, & Wilson, 2005). Different levels of healthcare access have been reported for people living in different geographical areas (Australian Institute of Health and Welfare, 2012). Models of service delivery are also noted to differ (Zabiela, Williams, & Leitão, 2007).
- *Australian state of employment:* Health systems arrangements in Australia involve multiple layers of responsibility and funding, largely shared between the Commonwealth and state and territory governments (Australian Institute of Health and Welfare, 2012). The role of the states and territories in the management and administration of public hospitals means that clinicians' state of practice may influence the service delivery requirements.

The distribution of participants across the sampling variables is illustrated in Table 4-1.

#### 4.4.2 Sample size

Qualitative inquiry typically focuses on relatively small samples (Patton, 2002). Underpinning qualitative research is the concept that meaningful selection of participants is necessary in order to provide adequate data to elucidate the specific phenomenon, rather than attempts to create a representative sample (Patton, 2002) or generalise the information (Creswell, 2013). As such, no set formula was applied to determine sample size in this study (Morse, 1998; Patton, 2002). A flexible approach to sampling was used, without pre-established and rigid knowledge of the number of participants to be recruited (Liamputtong, 2009). A total of 14 interview transcripts were used in analysis.

**Table 4-1** Phase One: Participants details (N=14)

Maximum variation sampling variable	Number of participants
<i>Level of clinical speech pathology experience</i>	
Less experienced (<5 years clinical experience)	6
Experienced (5-15 years clinical experience)	5
Very experienced (>15 years clinical experience)	3
<i>Location of hospital of employment</i>	
Metropolitan (urban areas with a population of $\geq 100,000$ )	10
Non-metropolitan (areas with a population of $\leq 99,999$ ) (Hugo, 2000)	4
<i>Presence of acute stroke unit in hospital of employment</i>	
Acute stroke unit present	11*
Acute stroke unit absent	4*
<i>Sector of employment</i>	
Private	4*
Public	11*
<i>Australian state of employment</i>	
New South Wales	3
Queensland	3
Tasmania	1
Victoria	7

\* A single clinician worked across two clinical settings

#### 4.4.3 Participant demographics

Demographic information pertaining to the factors for variation was collected (see Section 4.4.1). No additional demographic information was collected. All participants were female. Gender was not a factor for variation as females represent the large majority (97.5%) of the speech pathology workforce (Health Workforce Australia, 2014). Participant characteristics are described below in Table 4-2. Each participant was assigned a pseudonym to protect their identity during the reporting of the study.

**Table 4-2** Participant characteristics ( $n = 14$ )

Participant <sup>a</sup>	Duration of clinical experience as a speech-language pathologist	Setting of clinical role	Presence of acute stroke unit in hospital of employment	Sector of employment
Ada	< 5 years	Metropolitan	ASU present	Public
Amy	< 5 years	Metropolitan	ASU present	Public
Beth	< 5 years	Non-metropolitan	ASU present	Public
Celeste	< 5 years	Metropolitan	ASU present	Private
Danielle	>15 years	Metropolitan	ASU present	Public
Josie	< 5 years	Metropolitan	ASU present	Public
Karen	5-15 years	Metropolitan	ASU present	Private
Leah	5-15 years	Metropolitan	ASU present	Public
Mae	>15 years	Metropolitan	ASU present	Private
Monica	5-15 years	Non-metropolitan	No ASU	Public
Rachael	>15 years	Metropolitan	ASU present	Public
Stella	5-15 years	Metropolitan	No ASU	Public
Tess	5-15 years	Non-metropolitan	No ASU	Public
Viv	< 5 years	Non-metropolitan	ASU present <sup>b</sup> No ASU <sup>b</sup>	Public <sup>b</sup> Private <sup>b</sup>

<sup>a</sup> Pseudonyms were used

<sup>b</sup> Clinician worked across two clinical settings

## 4.5 Data generation method

As an interpretive phenomenological exploration of speech pathologists' perceptions of acute aphasia management, Phase One utilised semi-structured in-depth interviews.

### 4.5.1 Semi-structured in-depth interviews

In-depth interviews are a method of qualitative data collection. Traditionally, they involved face-to-face, one-on-one interaction between the participant and the researcher (Johnson, 2001), however this concept has been expanded to be inclusive of different modalities of communication. Within this interaction, the interviewer "aims to engage the interviewee in conversation to elicit their understandings and interpretations" (Liamputtong, 2009, p. 339) in relation to the topic under examination, seeking a deep understanding of the world from the participant's point of view (Kvale, 1996). Interviews can take on either a structured, semi-structured, or unstructured format (Minichiello, Aroni, & Hays, 2008). A semi-structured approach to interviewing was utilised within this study, during which the researcher used the broad topic of interest, acute aphasia management, to flexibly guide the interview. A topic guide, providing a list of topics to discuss without fixed wording or ordering of questions, was utilised (Minichiello et al., 2008).

#### *4.5.1.1 Rationale for selection of semi-structured in-depth interviews*

A basic principle of interpretative phenomenology is the emphasis on making sense of the human experience and engaging with the reflections people make about their lived world. As such, semi-structured interviews are consistent with interpretive phenomenology. Interviews were selected as the method of data collection in this phase due to their ability to yield “detailed, richly textured, person-centred information” (Kaufman, 1994, p. 123), enabling participants to tell *their* story and reflect on their lived experience. This is compatible with the aims of Phase One, which sought to understand speech pathologists’ conceptualisations and perceptions in relation to acute aphasia management.

#### *4.5.2 Interview procedure*

##### *4.5.2.1 Approach to interview*

The establishment of rapport is of critical importance when conducting in-depth interviews. Legard, Keegan, and Ward (2003) remind us that within qualitative research interviews, the researchers are, themselves, research instruments. As such, their relationships with and behaviours towards participants are of critical importance. A pilot interview shaped how I perceived my role as interviewer, and also allowed me a greater awareness of the strategies required to enable a smooth and comfortable interview process.

As a novice researcher performing research within the population of acute speech pathologists of which I am a member, it was vital to me that the experience for participants would be as pleasant as possible. This was especially important given my belief that reflection on clinical practice had the potential to be unsettling for some. Based on my experience in the pilot interview, my exploration of the literature, and guidance from my supervisory team, I implemented key strategies to promote the establishment of rapport. These included the sharing of personal background to put the participant at ease and create trust, demonstrating interest and respect, responding flexibly to the interviewee, and showing empathy and understanding.

##### *4.5.2.2 Development of the topic guide*

An initial interview topic guide was developed (see Appendix 1). Initial topics were generated based on the findings of the literature review and the clinical expertise of the research team, and refined based on a pilot interview undertaken with a speech pathologist with experience in the acute hospital setting. The topic guide contained a series of topics for examination as a means of directing



the interview while allowing for flexibility in both the order and wording in which questions are delivered (Johnson, 2001; Kvale, 1996; Minichiello et al., 2008). Open-ended questions were derived from the interview topic guide in order to elicit data on participants' perspectives and experiences related to the research questions. Due to the iterative process of qualitative research, additional concepts were added as possible probes to the interview topic guide as the research progressed, based on the themes emerging from preliminary analysis of prior interviews. For examples, questions related to regional experiences, experiences working with people with aphasia as a student, and working with people with aphasia from culturally and linguistically diverse backgrounds were introduced as possible probes for relevant participants. This allowed for deeper exploration of themes present in the preliminary analysis.

#### *4.5.2.3 Conducting the interviews*

All interviews took place in the participants' workplace during business hours, as requested by the participants. While telephone or voice over internet protocol (VoIP) interviews were offered should this have been their preference, all interviewees elected to participate in face-to-face interviews. Interviews were conducted between May, 2012 and June, 2013.

Each session was commenced by engaging in conversation with the participant as a means of building rapport, providing an overview of the research project, obtaining written informed consent, and clarifying demographic information (as specified in Section 4.4.3). The participant was then briefed, with the purpose of the interview explained and my interest in the participant's unique experiences and perspectives in relation to the management of aphasia in the acute hospital setting reiterated. Kvale (2007) emphasises the importance of this stage of the interview in terms of 'setting the interview stage' (p.56).

The formal interview began with the asking of a broad question: "Tell me about your experience of working with people with aphasia and their families in the acute hospital setting". This question was purposefully selected for its capacity to allow individual participants to reveal the participant's individual perceptions and understanding without explicit direction. Interview questions are stimuli aimed at eliciting a response from a participant that minimises the imposition of pre-existing ideas and biases (Patton, 2002). With this in mind, open ended questions were used. Participants were also asked to discuss the following topic areas, consistent with the topic guide:

- The typical management pathway for people with acute post-stroke aphasia under their care;

- The factors which influence their decision making in acute post-stroke aphasia management; and,
- The barriers and facilitators to achieving evidence-based acute post-stroke aphasia management.

Probing and follow-up questions were asked to further explore topics raised by the participant that were relevant to the research question.

At the conclusion of the interview, the interview was 'bookended' with a debriefing during which a summary of the key messages derived from the discussion was provided, with the opportunity for further discussion and reflection (Liamputtong, 2009). Participants were then reminded of the aim of the interview and asked if there was anything else they would like to add to the discussion. This gave the participants an additional opportunity to deal with any issues they had been ruminating on or concerned about during the interview (Kvale, 2007).

All interviews were audio recorded using a digital voice recorder with the consent of the participants. Three primary reasons supported my decision to audio record the interviews. Firstly, successful research interactions rely on a conversational dynamic of interaction between the interviewer and interviewee (Kvale, 2007; Liamputtong, 2009). This had the potential to be disrupted had my attention been focused on making extensive notes rather than engaging in a meaningful way with the participants. Secondly, recordings have the potential to capture nuance and awareness of non-verbal parameters which may have been overlooked during the interview. In Kvale's (2007) words, "the words and their tone, pauses and the like are recorded in a permanent form that it is possible to return to again and again for re-listening" (p. 93). Finally, recordings allowed for verbatim transcripts of the participants' responses to be created, crucial for the detailed analysis that is required in qualitative enquiry in order to reduce potential interviewer error and enhance validity (Patton, 2002).

The length of the interviews was dictated by the needs of the participant (many of whom indicated that they would need to return to their busy clinical loads), the amount of information shared by the participants, and the sense I obtained of a natural end to the formal interview process. Total interview time for each participant ranged from 66 and 111 minutes (*mean* = 88.8 min; *SD* = 12.2 min).

#### 4.5.2.4 *Development of interview style*

In order to create an experience of data immersion, I listened back to all of the interview recordings. In addition to allowing for a more intimate knowledge of my data, this provided me an opportunity to reflect upon and improve my interview style. Early interviews betrayed my inexperience, with a lack of cohesiveness and logical flow to interviews, difficulty phrasing probing questions, and a discomfort in allowing naturally occurring silence. Awareness of these areas permitted me to modify my interview technique, allowing for more comprehensive and thorough interviews, with a more naturalistic style.

#### 4.5.2.5 *Field notes*

Prior to, during, and immediately following an interview I made field notes. These observational descriptions were used to augment the transcripts. Consisting of contextual information related to the interview, notes of themes requiring further investigation, as well as a personal account of my feelings and understandings in relation to the interview, these field notes were also subjected to analysis. An example of field notes made immediately following an interview is available in Appendix 2.

#### 4.5.2.6 *Transcription*

The digital recordings of all interviews were orthographically transcribed verbatim. To protect confidentiality, pseudonyms were assigned to each participant (see Section 4.4.3) and details which may reveal the participant's identity (e.g., the name of the hospital of employment) were removed. Transcriptions included non-verbal sounds (e.g., laughter) and utterances (e.g., um, ah, hm), and made note of any prolonged silences or pauses. A page of transcription can be seen in Appendix 3.

The process of transcription can be considered an initial data analysis (Gibbs, 2007; Kvale, 2007). As such, I completed the transcription of the first four interviews myself. This process allowed me the opportunity to reflect upon my interview style, and immerse myself in the data (Gibbs, 2007; Kvale, 2007; Liamputtong, 2009). My process of transcription was supported by the parallel recording of comments and a broad brush, preliminary open coding of the data. Three of the interview transcripts (20% of the total transcripts) transcribed by me were peer checked by a co-author for accuracy, with preliminary coding reviewed and commented upon.

The process of transcription is a lengthy and arduous one (Liamputtong, 2009). In the context of the time constraints imposed by a doctoral program, the decision was taken to outsource the remainder of the transcription for Phase One to a private transcription company. I selected transcription companies based on their experience, their mechanisms for assured confidentiality, and their capacity to provide accurate, high quality transcripts within the desired format and using the transcription technique specified. I was aware that the outsourcing of the transcribing had the potential to create a degree of separation between me and the analysis process (Liamputtong, 2009). In response to this, as a matter of process, I simultaneously read and listened to *all* interviews transcribed by a transcriber. This allowed me to assure the quality and accuracy of the transcripts, making amendments as required, whilst also engaging deeply with the data, an important and integral part of the process.

## 4.6 Analysis

Analysis is the act of giving meaning to data. Describing in depth and adhering to the type of analysis approach used in qualitative research studies is of vital importance. It acts to strengthen the scientific base of any approach (Hsieh & Shannon, 2005) whilst also bringing clarity to the process of data analysis, as a means to enhance rigour (Vaismoradi, Turunen, & Bondas, 2013). Vaismoradi and colleagues (2013) suggest that “it is important for...researchers to delineate and recognise the characteristics of the approach they are going to use in their studies before beginning data analysis” (p. 404).

The nature of the research aims being addressed in this phase meant that the analytic approach had to be tailored to meet the individual aims. As such, two methods of analysis were selected: (1) an *inductive thematic analysis* to address questions in which the aim was interpretation of the research topic with minimal description; and, (2) a *qualitative content analysis* to address the research question for which the primary aim was to describe the phenomenon of aphasia management in conceptual form (Vaismoradi et al., 2013). As such, the data were subjected to two separate analyses. Each of these data analysis methods is described in detail below.

### 4.6.1 Qualitative content analysis

When addressing the research question *What is the typical management pathway for people with acute post-stroke aphasia under their care?* the data were analysed using qualitative content

analysis. As with thematic analysis, content analysis is either inductive or deductive (Elo & Kyngäs, 2008). I utilised an inductive content analysis approach, as former knowledge of acute aphasia management and the factors that influence it is limited. This approach allows for the categories to be derived from the data (Elo & Kyngäs, 2008).

#### 4.6.1.1 Stages of inductive content analysis

The phases of inductive content analysis described by Elo and Kyngäs (2008) formed the basis of the analytic approach I utilised. The phases are summarised in Table 4-4 below.

**Table 4-3** Phases of inductive content analysis (Elo & Kyngäs, 2008)

Phase	Task	Description
<i>Preparation phase</i>	Selecting the unit of analysis	The researcher decides on what to analyse in what detail
	Making sense of the data and whole	Data immersion through repeated readings of the data
<i>Organising phase</i>	Open coding	Notes and headings are written in the margins of the text while reading and re-reading it
	Coding sheets	Headings are collected from the margins on to coding sheets
	Grouping	The lists of categories are grouped under higher order headings
	Categorisation	The number of categories is reduced into broader, higher order categories
	Abstraction	Formulating a general description of the research topic through generating categories. Each category is named using content-characteristic words. Subcategories with similar events and incidents are grouped together as categories, and categories are grouped as main categories
<i>Reporting phase</i>	Reporting the analysing process and the results	Results are presented as a model, conceptual map, conceptual system, or categories

#### 4.6.2 Inductive thematic analysis

Two research questions warranted analysis using a thematic analysis approach. They were: (1) *What are the factors that influence the decision-making of speech pathologists in acute post-stroke aphasia management?* and, (2) *What are the barriers and facilitators to achieving evidence-based acute post-stroke aphasia management?* The data were analysed using thematic analysis, “a method for identifying, analysing, and reporting patterns (themes) within the data” (Braun & Clarke, 2006, p. 79). Thematic analysis is a common interpretive form of analysis in qualitative research (Liamputtong, 2009). Thematic analysis can be considered inductive, where the thematic analysis is

focused on the emergence of patterns, themes and categories from the data, or deductive (also known as theoretical), in which data are analysed within a pre-determined framework (Patton, 2002). For the purposes of this research I utilised an inductive thematic analysis approach, which allowed for the creation of themes that were informed by the data (Braun & Clarke, 2006; Patton, 2002).

#### 4.6.2.1 *Stages of thematic analysis*

The analytic process utilised was based on the six phases of thematic analysis outlined by Braun and Clarke (2006). These phases are summarised in Table 4-3 below. Despite the phases being numbered, Braun and Clarke (2006) emphasise that the process is recursive rather than linear.

**Table 4-4** Phases of thematic analysis (Braun & Clarke, 2006)

Phase	Description of the process
1. Data familiarisation	Transcription of data was undertaken as required The researcher read, and re-read the data Initial thoughts and ideas in relation to the data were noted
2. Initial code generation	The researcher systematically identified and coded interesting features across the entire data set Data relevant to each code was collated
3. Searching for themes	Codes were grouped together into tentative themes All data relevant to a potential theme were gathered
4. Thematic revision	Preliminary themes were revised to ascertain whether themes fit in relation to the coded extracts and the entire data set A thematic 'map' of the analysis was generated
5. Defining and naming themes	The specifics of each theme were refined through ongoing analysis Clear names and definitions for each theme were generated Themes were refined as required
6. Producing the report	Vivid, compelling quotes and extracts from the data were provided as examples Themes arising from the analysis were related back to the research question and the literature A scholarly report of the analysis was produced for publication

#### 4.6.3 *Data management*

All data were stored and managed within the NVivo 9 software package, an electronic data management system (QSR International Pty Ltd, 2010).

### 4.7 Ethical considerations

#### 4.7.1 *Ethical approval*

Prior to the commencement of data collection, ethical approval for this study was obtained from

The University of Queensland's Behavioural and Social Sciences Ethical Review Committee (approval number: 2012000159; see Appendix 4).

#### *4.7.2 Undertaking insider research*

Within the context of Phase One, I was considered an 'insider researcher'; that is, I was undertaking research within a population of which I was also a member (Dwyer & Buckle, 2009). The importance of both being aware of and responsive to the implications of this 'dual role' is clear in the literature (Asselin, 2003; Dwyer & Buckle, 2009; Kanuha, 2000). Following consultation with my advisory team, I came to the decision to be open and transparent in my identity as both a speech pathologist and researcher. This decision arose primarily from my strong sense of professional identity and pride, and my belief that this disclosure would help to create a relationship of openness and trust with participants.

Due to my background as a speech pathologist in acute hospital settings, and the relatively small number of professionals practising in this specific area, many of the participants were known to me through either professional relationships and/or previous student-supervisor relationships. To ensure that this relationship did not impair participants' free and voluntary consent and participation in the project, I did not make any direct requests to potential participants to take part in this research. Only once expressions of interest were received was information regarding participation sent to potential participants.

Through my engagement with the literature related to interviews, I was aware that the responses provided by participants were likely to be influenced by their perception of my role and status (Liamputtong, 2009). As an 'insider researcher', I ran the risk that clinicians would be reticent to reveal the perceived 'negative' elements of their aphasia management to me. Conversely, being a part of a shared community created the potential that some form of understanding of their experience may be present. Some of the participants in Phase One were open with me in their discussion of the challenges they experienced in their workplace within their interview, which reassured me that self-censoring was not problematic and that they were experiencing comfort in our interaction.

#### *4.7.3 Access to data*

Interview transcripts were made available to participants for the purposes of member checking, an activity by which participants validate the transcript as being true and correct. This opportunity also

allowed participants the opportunity to amend the transcript, remove elements of the transcript, or provide additional details.

#### **4.7.4 Data storage and confidentiality**

Participant data was de-identified by assigning a pseudonym with which all data pertaining to that participant was labelled. A list of participants and their ascribed pseudonyms was kept electronically in a separate, password-protected location to the data. Information was potentially identifiable when all of the linked information (de-identified information and list of the participants and their pseudonyms) was present. Audio and visual recordings of participants were transcribed, with the transcripts utilising the ascribed pseudonym throughout, and relevant names and places changed to protect the identity of the participant.

### **4.8 Strategies to enhance rigour**

Rigour is “the means by which we demonstrate integrity and competency, a way of demonstrating the legitimacy of the research process” (Tobin & Begley, 2004, p. 390). It can be used both to describe the quality of and evaluate qualitative research (Liamputtong, 2009). The concepts of validity and reliability, essential to the evaluation of quality in quantitative approaches, are considered to be “incompatible with the ontological, epistemological, and methodological foundations of qualitative research” (Liamputtong, 2009, p. 20). As an alternative to these concepts, Lincoln and Guba (1985) proposed an alternative criteria that qualitative researchers can use to judge quality and establish rigour. The constructs – credibility, transferability, dependability, and confirmability – are described below. Accounts of how each of these constructs were addressed in Phase One of this research can be found in Section 5.3.6, Section 6.3.5, and Section 7.4.3.3.

#### **4.8.1 Credibility**

Credibility scrutinises the matter of ‘fit’ between participants’ views and the researcher’s representation of them (Liamputtong, 2009; Tobin & Begley, 2004). Within the context of this phase of the study, credibility was heightened by the use of *member checking*, *peer checking*, and ensuring that *findings were grounded in the data*.

#### **4.8.2 Transferability**

Transferability refers to the ability to generalise, or transfer, the result to other settings (Liamputtong, 2009; Richards & Morse, 2013; Tobin & Begley, 2004). Liamputtong (2009) importantly states that while parallels can be drawn between transferability and the concept of



generalisability in positivist science, they differ in that transferability “emphasises the theoretical or analytical generalisability of the research findings” (p. 22). Within the realm of Phase One of this research, transferability is achieved through ‘*thick description*’, and the provision of comparison between the findings of this phase of the study and the literature (Richards & Morse, 2013).

### 4.8.3 Dependability

The third research quality criterion proposed by Lincoln and Guba (1985) is dependability, or the degree to which the interpretation of the research findings fit the data from which they have been derived (Liamputtong, 2009). Dependability is achieved through a process of auditing, requiring the researcher to clearly document the process of research and the logic underlying it (Tobin & Begley, 2004). An *audit trail*, *field notes*, *memos*, and a *reflective journal* kept during the research process provided systematic documentation of the reflections on decisions made during the research process to allow for external scrutiny (Liamputtong, 2009; Morse & Field, 1995; Richards & Morse, 2013; Tobin & Begley, 2004).

### 4.8.4 Confirmability

Establishing that interpretations of the findings are strongly linked to the data rather than generated independently by the researcher is the domain of confirmability (Tobin & Begley, 2004). To address this criterion, I used *in vivo coding*, whereby participants’ own words were used to label code during the analytic process, where possible. In addition, to this the *field notes*, *memos*, and *reflective journal* I kept provided an explicit description of the analytical process (Liamputtong, 2009).

## 4.9 Summary

This chapter has described how the study design of Phase One was implemented. Ethical issues have also been considered, as has the combination of strategies implemented during the design phase, whilst conducting the research, and on completion of this phase to promote rigour. The findings emerging from Phase One of this research will be presented in publication format in the following three chapters.

## Chapter 5

# **“I do the best I can”: An in-depth exploration of the aphasia management pathway in the acute hospital setting**

### *Results: Phase One*

Describing speech pathologists' perceptions of the current aphasia management pathway in acute hospitals

**Foster, A., Worrall, L., Rose, M., & O'Halloran, R. (2015a).** 'I do the best I can': An in-depth exploration of the aphasia management pathway in the acute hospital setting. *Disability and Rehabilitation*, early online.

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*This study is inserted as accepted for publication, with the exception of minor terminology and formatting changes to maintain consistency throughout the thesis.*

## 5.1 Abstract

*Purpose:* While research has begun to explore the management of aphasia across the continuum of care, to date there is little in-depth, context specific knowledge relating to the speech pathology aphasia management pathway. This research aimed to provide an in-depth understanding of the current aphasia management pathway in the acute hospital setting, from the perspective of speech pathologists.

*Method:* Underpinned by a social constructivist paradigm, the researcher implemented interpretive phenomenological method when conducting in-depth interviews with 14 Australian speech pathologists working in the acute hospital setting. Interview transcripts and interviewer field notes were subjected to a qualitative content analysis.

*Results:* Analysis identified a single guiding construct and five main categories were identified to describe the management of aphasia in the acute hospital setting. The guiding construct, *First contact with the profession*, informed the entire management pathway. Five additional main categories were identified: *Referral processes*; *Screening and assessment*; *Therapeutic intervention*; *Educational and affective counselling*; and, *Advocacy*.

*Conclusions:* Findings suggest significant diversity in the pathways of care for people with aphasia and their families in the acute hospital setting. Additional support mechanisms are required in order to support speech pathologists to minimise the evidence-practice gap.

## 5.2 Introduction

The provision of speech pathology intervention for people with aphasia in the acute hospital setting has the potential to result in improved longer-term communicative outcomes (Godecke et al., 2013), an increased sense of satisfaction for people with aphasia with regards to their healthcare (Tomkins et al., 2013), an improved ability to have healthcare needs met, and a reduction in hospital-based adverse events (Hemsley et al., 2013). These strong rationales, in combination with advances in the awareness of potential clinical applications of neuroplasticity principles (Raymer et al., 2008) and a growing organisational focus on the implementation of evidence-based practice (EBP), have resulted in an increased interest in the management of aphasia in the acute phases of recovery.

Exploring the literature in relation to the management of aphasia in the acute hospital setting is, however, not without its challenges. Within the aphasia literature terminology such as ‘acute phase’ or ‘early stage’ tends to be indicative of time post onset (i.e., 1-3 months post onset), and as such does not take into account the location of services being provided (i.e., the acute hospital setting or the rehabilitation ward) (Duffy et al., 2011). This acts as a hindrance to understanding practice as barriers to the provision of aphasia management that may not occur in other settings may exist in the acute care hospital.

Clinically, two distinct treatment paradigms exist in relation to the management of aphasia. These paradigms are informed by the International Classification of Functioning, Disability and Health (ICF) (World Health Organization, 2001). *Impairment-based approaches* refer to intervention targeting the Body Functions and Structures section of the ICF. Approaches to intervention addressing the Activity and Participation components of the ICF are most often described by speech pathologists as *functional approaches*. Within the available literature, two distinct schools of thought regarding the management of aphasia in the acute hospital setting can be identified: those who advocate for the provision of information, support, and counselling by ‘consultant’ speech pathologists (Duffy et al., 2011; Holland & Fridriksson, 2001; Johnson et al., 1998; Marshall, 1997), and those who advocate for very early, impairment-based intervention (Godecke et al., 2012; Godecke et al., 2013; Peach, 2001). Those advocating for a consultative role for speech pathologists believe that ‘education, counselling, and compensatory efforts to maximise communication are primary goals’ (Duffy et al., 2011, p. 56) in the acute hospital setting. They use the anticipated positive effects of spontaneous recovery, and a lack of feasibility of impairment-based intervention in the majority of cases, as a rationale for this approach. Conversely, those supporting very early impairment-based interventions cite the potential for therapy-induced recovery in line with the application of the neuroplasticity principles of ‘use it or lose it’ and ‘use it and improve it’ to

aphasia rehabilitation (Raymer et al., 2008). Much of the research literature in this area to date is based upon expert opinion, and reflects the ‘different beliefs about what the goals of assessment and care should be’ (Duffy et al., 2011, p. 51). It is clear that research questions in this area remain (Brady et al., 2012).

### *5.2.1 Recommendations for best practice in the management of aphasia in the acute hospital setting*

Speech pathologists report that clinical guidelines are the main source of research evidence used to guide their aphasia management (Verna et al., 2009). Derived from a critical, systematic evaluation of all relevant literature, clinical guidelines provide a series of ‘best-practice’ statements to facilitate collaborative clinical decision making within specific areas of healthcare practice (Institute of Medicine, 1990). Rather than stipulating the timing of specific interventions, clinical experience and reasoning must be utilised to ascertain the relevance of a specific recommendation at any given time, based on the clinicians’ understanding of the practice context and the patient’s wishes. Despite this, some concerns have been raised in relation to the rigid implementation of guidelines without consideration of the broader patient and contextual factors (Yates et al., 2010).

Internationally, a range of clinical guidelines which describe the management of aphasia exist (e.g., Intercollegiate Stroke Working Party, 2012; National Stroke Foundation, 2010; Scottish Intercollegiate Guidelines Network, 2008; Stroke Foundation of New Zealand and New Zealand Guidelines Group, 2010; The Royal College of Speech & Language Therapists, 2005). In Australia, the Australian Aphasia Rehabilitation Pathway (AARP) (NHMRC Centre for Clinical Research Excellence in Aphasia Rehabilitation, 2014) was also recently made available. These guidelines represent the breadth of speech pathologists’ practice in the management of aphasia in the acute hospital setting, and across the continuum of care. A systematic evaluation of the quality of guidelines exploring aphasia management available at the time has suggested significant variability in the guideline development process, and also in the scope of the recommendations provided within the guidelines (Rohde et al., 2013). While the majority of synthesised research included in current guidelines garners only a low-level grading for the aphasia-related recommendations, it is important to acknowledge that the strength of this grading is not necessarily reflective of the clinical importance of the recommendation, but rather a reflection of research design and the stage of research development in the area (Scottish Intercollegiate Guidelines Network, 2008).

A number of factors, however, have been reported to influence the implementation of clinical guidelines. In the first in-depth qualitative study exploring stroke guideline implementation by

speech pathologists, Miao, Power and O'Halloran (2015) indicated that speech pathologists considered the perceived relevance of the guidelines to their workplace, the degree of change required compared to the available resources, and their personal motivation to make change in their clinical practice when attempting to integrate recommendations into practice.

### *5.2.2 Explorations of current practice in acute aphasia management*

Despite the number of guidelines available, little is known about current aphasia management practices in the acute hospital setting (i.e., what specific services and intervention are provided by speech pathologists), or the clinical decision making that underpins the management pathway. A number of issues make understanding current practice in aphasia management difficult. These include:

- (a) Some of the existing literature focuses on a single practice domain, such as assessment (Vogel, Maruff, & Morgan, 2010), and as such does not provide a comprehensive overview of current practice;
- (b) The rapidly changing healthcare climate means that existing literature is likely to become rapidly outdated (e.g., Code & Heron, 2003; Verna et al., 2009);
- (c) Data about aphasia practices collected from clinicians across the continuum of care (e.g., Code & Heron, 2003; Rose et al., 2013; Verna et al., 2009) may not represent the service provided by clinicians working in the acute care setting; and,
- (d) Survey data alone is insufficient to allow for a comprehensive understanding of the reasons underlying the clinical decisions which underpin the current management pathway.

Current data about aphasia practice in the acute hospital setting is, however, in agreement that the amount of time devoted to people with aphasia is incongruent with best practice recommendations (e.g., Armstrong, 2003; Code & Heron, 2003; Enderby, 2004; Lalor & Cranfield, 2004; Lawrie, 1996).

Despite these limitations, the national survey by Rose et al. (2013) does provide some data regarding current aphasia practice across the continuum of care. The researchers sought to explore current aphasia rehabilitation practices in Australia, and did include data collected from speech pathologists working in the acute hospital setting. The findings reported that dysphagia was the main caseload for 89% of clinicians working in the acute hospital setting. Cognitive neuro-psychological, social, and group approaches to the management of people with aphasia were considered less appropriate in the acute phase of care. Time restrictions, perceived limitations on scope of practice, and the expectations of family members were also reported to shape the service

provided to people with aphasia in acute care settings. Pertinently, responses to open-ended questions by clinicians in the acute hospital setting indicated the dissonance experienced by some clinicians in relation to the de-prioritisation of aphasia services.

While this provides us with some preliminary data regarding current practice, a greater understanding of current practice is required in order to support speech pathologists working in this field, within this context. The need for current data is especially important in the context of an evolving healthcare system, in which greater demands are placed on clinicians' time within the acute hospital setting and clinicians' time is therefore prioritised. In order for clinicians to be able to provide effective and efficient interventions which meet the economic needs of the healthcare organisation and the needs of people with aphasia and their families, whilst also providing professional satisfaction for the speech pathologists, a cohesive picture of current management approaches which explores the underlying decision making is essential. Hence the aim of this study is to understand current aphasia management practices by speech pathologists who work in the acute hospital setting.

## **5.3 Method**

### *5.3.1 Research purpose*

This research forms part of a larger qualitative study exploring the experience of aphasia management in the acute hospital setting from multiple perspectives. The aim of this particular study was to understand the current acute aphasia management pathway from the perspective of speech pathologists.

### *5.3.2 Research paradigm and strategy*

A qualitative research approach is essential when a deep and detailed understanding of a complex phenomenon is sought (Richards & Morse, 2013). In addition, this approach is supported when little is known about the topic under investigation (Liamputtong, 2009). As such, within this study qualitative research methods were utilised as a means to document and describe the lived experience of acute aphasia management from the speech pathologists' perspective. A social constructivist paradigm provided the foundation for this study. Social constructivism relies on the use of inductive methods within naturalistic settings to understand experience through the perspectives of individuals (Creswell, 2013; Liamputtong, 2009; Merriam, 2009). An interpretive, or hermeneutic, phenomenological research strategy was implemented. This choice is supported by two main arguments. Firstly, it is consistent with the aims of the research in that it allows for the

development of a deep understanding of a particular phenomenon from multiple perspectives (Morse & Field, 1995). As the purpose of this research is to understand the aphasia management pathway in the acute hospital setting from the perspective of speech pathologists, the selection of a research strategy that allowed the researcher to move beyond description in an attempt to understand underlying perceptions was considered appropriate. Secondly, interpretive phenomenology is consistent with the underlying paradigm, with both acknowledging the role of the participant, researcher, and their personal experiences in the co-construction of knowledge (Creswell, 2013; Laverly, 2003; Lopez & Willis, 2004). Ethical approval was granted by The University of Queensland's Behavioural and Social Sciences Research Ethics Committee prior to the commencement of this research.

### *5.3.3 Participants*

Speech pathologists currently working with (or having recently worked with) people with post-stroke aphasia in acute hospitals across Australia were invited to participate in this study. Participants were recruited through a range of sources in order to appropriately sample the target population. Recruitment was initiated through the distribution of expression of interest forms: (a) at meetings, forums, and conferences; (b) through listservs targeting speech pathologists practising or interested in the management of adult clients; and, (c) to the speech pathology departments of hospitals reported as having a stroke care unit or greater than one hundred stroke admissions a year. A total of 36 speech pathologists expressed interest in participating in this research. Those who expressed interest in the research were solely from the eastern states of Australia: Queensland, New South Wales, Victoria, and Tasmania. A purposive, maximum variation sampling (Patton, 2002) technique was utilised in order to achieve variation in participants across: (a) duration of clinical experience; (b) regional and metropolitan workplace settings; (c) private and public sector workplace settings; and, (d) the presence or absence of an acute stroke unit (ASU) in the participant's workplace setting. Meaningful selection of participants in order to provide adequate data to elucidate the phenomenon of aphasia management was central to the selection of participants, rather than attempts to create a representative sample (Patton, 2002) or generalise the information (Creswell, 2013). As such, no set formula was applied to determine sample size in this study (Morse, 1998; Patton, 2002). A flexible approach to sampling was used, without pre-established and rigid knowledge of the number of participants to be recruited (Liamputtong, 2009). The sample size was influenced by our desire to interview speech pathologists across different variation criteria, and to approach a sense of saturation. Fifteen speech pathologists were selected to take part in this research; however one speech pathologist's interview data was excluded when it became known that she was not currently practising (and had not recently practised) in an acute



hospital setting. Interview data from 14 speech pathologists was included in the final analysis. Participant characteristics are illustrated in Table 5-1. Diversity in state of clinical practice was also achieved, with the sample including clinicians from New South Wales ( $n=3$ ), Queensland ( $n=3$ ), Tasmania ( $n=1$ ), and Victoria ( $n=7$ ). All participants were allocated a pseudonym for the purposes of the research and all subsequent reporting.

**Table 5-1** Participant characteristics ( $n = 14$ )

Participant <sup>a</sup>	Duration of clinical experience as a speech pathologist	Setting of clinical role	Presence of acute stroke unit in hospital of employment	Sector of employment
Ada	< 5 years	Metropolitan	ASU present	Public
Amy	< 5 years	Metropolitan	ASU present	Public
Beth	< 5 years	Non-metropolitan	ASU present	Public
Celeste	< 5 years	Metropolitan	ASU present	Private
Danielle	>15 years	Metropolitan	ASU present	Public
Josie	< 5 years	Metropolitan	ASU present	Public
Karen	5-15 years	Metropolitan	ASU present	Private
Leah	5-15 years	Metropolitan	ASU present	Public
Mae	>15 years	Metropolitan	ASU present	Private
Monica	5-15 years	Non-metropolitan	No ASU	Public
Rachael	>15 years	Metropolitan	ASU present	Public
Stella	5-15 years	Metropolitan	No ASU	Public
Tess	5-15 years	Non-metropolitan	No ASU	Public
Viv	< 5 years	Non-metropolitan	ASU present <sup>b</sup> No ASU <sup>b</sup>	Public <sup>b</sup> Private <sup>b</sup>

<sup>a</sup> Pseudonyms were used

<sup>b</sup> Clinician worked across two clinical settings

### 5.3.4 Research method

Methodological congruence was achieved through the selection of a research method which philosophically aligned with the underlying research paradigm and strategy. Semi-structured, in-depth interviews engage the participant in conversation to elicit their understanding and interpretations, by reflecting on their lived experience (Johnson, 2001; Kvale, 1996; Minichiello et al., 2008). In order to generate discussion about the speech pathologists' experience of working in acute aphasia management, speech pathologists were instructed to *'Tell me about your experiences of working with people with aphasia and their families in the acute hospital setting'*. Additional topics probed include: the standard speech pathologist management pathway for people with acute

post-stroke aphasia; the influences on decision making in acute post stroke aphasia management; and, the barriers and facilitators to achieving evidence-based practice in acute post stroke aphasia management. A broad topic guide was used, however the interviews were characterised by flexibility in the order and the wording of questions, allowing the researcher to follow the participant's lead. The interviews were recorded on a digital audio recorder, and were later transcribed verbatim by the primary researcher or an independent transcription professional.

### *5.3.5 Data analysis*

All data were stored and managed within NVivo 9 (QSR International Pty Ltd, 2010). The data were analysed using qualitative content analysis (Elo & Kyngäs, 2008). This allowed for systematic analysis of the data (Miles & Huberman, 1994), during which the categories and their content were derived inductively from the data (Elo & Kyngäs, 2008). Consistent with phases of inductive content analysis described by Elo and Kyngäs (2008), following a period of open coding, categories were grouped together under higher order headings. These were then reduced into broader, higher order categories, at which point each category was named using content-characteristic words.

### *5.3.6 Rigour*

Within qualitative research, the rigour of the methodology can be established by the degree to which the study demonstrates credibility, transferability, dependability and confirmability throughout the research process (Lincoln & Guba, 1985). Within the current study, a process of *peer checking and debriefing* was used. This allowed for the discussion of transcripts and possible categories between all authors to ensure interpretations being made were reasonable and were strongly linked to the source data. Debriefing sessions were also an opportunity for the research team to employ reflexivity, acknowledging the potential influence of their prior clinical and research experiences on the process of data generation and analysis and identifying any sources of potential bias. In addition to this, an *audit trail*, containing documentation of theoretical, methodological and analytic choices, was kept by the primary researcher. A record of evidence consisting of the raw data, products of data analysis, and products of data synthesis form the audit trail in this study. Additional strategies included *member checking* of transcript accuracy, whereby interview transcripts were sent to participants and amendments to or clarifications of content and/or meaning could be provided prior to analysis. Moreover, the *presentation of preliminary findings* at international conferences was used to ascertain the resonance and value of the findings to researchers and clinicians. Finally, rigour is supported in the reporting process (demonstrated in this manuscript) through the use of thick description (Liamputtong, 2009), illustrative quotations from

the interview transcripts, and a comparison of the findings with the existing research literature (Richards & Morse, 2013).

## 5.4 Results

A single guiding construct and five main categories were identified to describe the management of aphasia in the acute hospital setting. The guiding construct, *First contact with the profession*, was identified as it informed the entire management pathway. Five additional main categories, related more specifically to the tasks undertaken as a part of acute aphasia management, were identified: *Referral processes*; *Screening and assessment*; *Therapeutic intervention*; *Educational and affective counselling*; and, *Advocacy*. Each of these categories is discussed below.

### 5.4.1 Guiding construct

#### 5.4.1.1 'What [are they] gonna think of me in a year?': *First contact with the profession*

A number of speech pathologists who participated in this research indicated that they were acutely aware that, as they worked in the acute hospital setting, they may be the first contact that people with aphasia and their families had with the profession.

*'I always kind of have in the back of my mind I am the first person that's gonna talk to them, that is going to talk to them about it. And I always wonder what, what they're gonna think of me in a year when they're actually, they've improved'* (Josie)

This responsibility was weighty, as it had the potential to establish the long-term perception that patients held of the profession. Perhaps in response to this, the speech pathologists in this study felt the need to build strong relationships and provide hope, but also temper expectations.

##### 5.4.1.1.1 Relationship building is important

Possibly as a result of the desire to create a positive impression of the profession, the participants in this study placed emphasis on relationship building with people with aphasia and their families. Notably, equal if not greater emphasis was placed on building relationships with the family members. Ada reports '*...taking those initial few sessions to really spend time with the family, really try as, as much as you can to, to build rapport and relationship with that patient'* .

#### 5.4.1.1.2 Giving hope

Instilling hope in people with aphasia and their families was articulated as an explicit goal of acute speech pathologists by a number of participants in this study. Beth articulated the importance of this, suggesting that using the acute hospital stay as a time to build motivation and hope was an essential element to prepare people with aphasia for the *'hard work'* essential to moving towards living successfully with aphasia.

*'In the acute phase you spend just that time building rapport for that little bit before you push them to do too much hard stuff. Um, and more of that recognition of what's happened with their communication before you actually start. And just saying to them, "You know, we can do some work around this," and that sort of thing. There's hope.'* (Beth)

Participants described that clinically, this manifested in discussions regarding the potential for linguistic recovery, but also in discussions of the nature of communication. Rachael reported that *'one of the first messages I usually try and give to the families...is that, you know, "You will still communicate. You know, there will still be communication"'*, alluding to the multimodal nature of communication. The importance of instilling hope in people with aphasia and their families is illustrated in Rachael's words: *'Hope, I think, is the key'*.

#### 5.4.1.1.3 Tempering expectations

Some speech pathologists saw it as important to balance the provision of hope with the provision of realistic expectations regarding linguistic recovery post-stroke. One less experienced speech pathologist in particular found this a difficult challenge, saying, *'I think there's always those, um, patients who, unfortunately, might have too much hope. And it's always, you know, so distressing to kind of, bring them back down...just acknowledging that, might not get much better but it could get a bit better'* (Josie).

In addition to tempering the expectations of recovery, the need to moderate the expectations of service delivery was also considered to be an important role. As the first point of contact with the profession, these speech pathologists also felt that it was their responsibility to set up realistic expectations for the person with aphasia and their family. Firstly, it was perceived as being important that the acute speech pathologists provided a clear idea of their capacity to provide service to people with aphasia in the acute hospital setting. This was especially important for speech pathologists who did not feel their service was consistent with best practice recommendations, who felt it important to *'just mak[e] patients and families aware that, you know, research would say that I should be seeing you every day or thereabouts and I would like to, but we're short staffed and so*

*that's not gonna happen*' (Leah). In addition to this, one speech pathologist reported that she tried to avoid *'setting the bar too high*' in terms of the service that would be provided in the rehabilitation setting, suggesting that this would be *'unfair to the rehab therapists*' (Josie). This was in stark contrast to a number of other speech pathologist participants who reported that people with aphasia were much more likely to get a service which approximated the recommended intensity in the rehabilitation setting.

#### 5.4.2 Main categories

Primarily, it is important to note that there was no 'standard' pathway for the management of aphasia across the participants in this research project. Even clinicians practising in the same Australian state did not share common management practices. Each participant described a unique pathway, with emphasis placed on different roles played by the speech pathologist in this setting. The lack of consensus regarding the 'correct' management approach was highlighted by one participant, who reported, *'I guess I've been, um, it's been tossed around a little bit to try and come up with the best pathway for acute management. Um, personally tossing up, "Oh, it is more important to do the education or the assessment, or is the assessment even relevant?" Um, so it has been a bit tricky, actually. And I...I don't think that I have an answer'* (Celeste). Despite these differences, some commonality was evident, and the following categories were derived from these common elements.

##### 5.4.2.1 Referral processes

The referral processes for people with aphasia in acute hospital settings varied greatly between settings. A continuum of referral mechanisms was observed. At one end of the continuum, a blanket referral for speech pathology assessment of communication was made in order to ensure that *'every patient who comes in with a TIA or CVA gets screened for communication problems'* (Amy). This method of referral was most common in hospitals in which an acute stroke unit was present. At the other end of the spectrum, people with aphasia were at times not referred to speech pathology until the point of discharge, at which time speech pathologists were told, *"Oh, this patient's going home but they're still having some word finding difficulties, can you see them?"* (Leah). Delayed or inefficient referral mechanisms were more commonly described in the private sector, or in hospitals without acute stroke units.

Most speech pathologists who participated in this study indicated that referrals to speech pathology in the acute hospital setting are often generated in response to dysphagia, rather than communication impairments. Leah reported that this was due to the perceived urgency of dysphagia

management, suggesting that *'the referral will usually happen because their swallowing needs assessing. You know, urgently'* (Leah). For referrals to be generated for aphasia, a marked aphasia – easily recognised by staff less familiar with communication impairments – needed to be present in some settings. *'It would depend on their severity of their, um, aphasia as to whether we'd get called down or not'* (Tess). It was suggested, however, that regardless of the reason for referral, receiving timely referrals was important and allowed early access to people with communication impairments. In Stella's words, *'we are very lucky here that our nursing staff...refer all the strokes to us, but from a swallow point of view, from a swallowing perspective. But at least that's a referral, so that means that we can then see them, and we still will screen them and if need be they'll get the input for their aphasia that they need. So – we are lucky in that way'* (Stella).

One speech pathologist's experience of different referral mechanisms led to her reflecting on the potential influence that these have on the timeliness and amount of speech pathology intervention able to be offered to people with aphasia in the acute hospital setting.

*'At [metropolitan public hospital] they have an alert, so we all know that a stroke patient has come into the hospital into ED and I can go down as soon as I get that page. Whereas, um, at [outer metropolitan public hospital] or at [metropolitan private hospital], um, I won't know that there's a stroke patient here until the consultant refers me. So I'm, in terms of getting acute aphasia management, I might miss that really important first couple of days and maybe only get referred later down the track.'* (Celeste)

While some expressed frustration at their current referral mechanisms, implicit in their responses was a perceived inability to directly affect change in this area and an acceptance of current practice.

#### 5.4.2.2 *'We need to know what's wrong with you so we can help you': Focus on screening and assessment of aphasia in the acute hospital setting*

The accurate assessment of aphasia was seen by these speech pathologists to be the cardinal component of speech pathology intervention in this setting, with every participant describing a mechanism for identifying the presence and severity of aphasia. Rachael reported that *'obviously'* she needed to do an assessment with the patient, and Viv characterised assessment by saying *'the main thing that we want to do is assess our patients right, you know correctly'*. Screening and assessment was considered by the participants to be of importance for a number of reasons, including: (a) to provide diagnostic information; (b) to provide a structure in which to discuss the patient's function with their families; and (c) to determine suitability for rehabilitation planning and facilitate discharge planning.

Throughout the interviews there was little, if any, differentiation between the terms *screening* and *assessment*, with many of the participants using the terms interchangeably. Participants were, however, keen to distinguish their assessment from assessments or screenings undertaken by other professions, such as the medical team, in terms of content, depth, and the rationale for undertaking the assessment.

The method for assessing language in the acute hospital varied significantly across clinicians. By far the most widely described means of screening or assessing communication in people with aphasia within the acute hospital setting was an ‘informal communication screener’. This terminology, although not consistent across participants, was used to describe a tool which had not been validated or standardised, and – for the most part – had been designed ‘in house’ as a conglomeration of sub-tests from existing, formalised language assessment tools. Informal screening tools were described as being able to be modified without concern, and also allowed clinicians ‘*to assess what’s happening across modalities*’ (Rachael). This informal approach was strongly advocated for by some, who suggested there would be ‘*certainly no formal assessment with the patient at that stage*’ (Tess). Rather, their preference was to ‘*get that overall feel for [the person with aphasia’s] language*’ (Amy), while simultaneously protecting the person with aphasia from the experience of failure which may accompany formalised assessment and conserving precious time. The ability to use a less structured, more informal approach to assessment was described as a skill which evolved with clinical experience. Viv suggested her capacity to use informal conversation to provide an assessment had grown, and contrasted this to her previous reliance upon structured, written tools. This notion was supported by Josie, a newer clinician, who described her process of making the change from structured to informal methods.

*‘Maybe we’ll just try to have a chat about their garden or something. I think going about the assessment in a different way. I think – I’ve started trying a lot more of that’* (Josie)

A preference for formalised screening tools was expressed by some participants who felt that the standardised nature of the screening homogenised the process, provided a structure upon which to provide education, and was a baseline measure to which outcomes can be compared.

*‘I always like to do a standardised assessment with everybody, and whether that’s a screening - um, the Frenchay or the Sheffield - I feel like I like to have a formalised assessment for everybody rather than, um, an informal questions type thing. So I do one for everybody and then I have something that I can tell the family or that I can do a baseline for, so I know that I’ve got – that information’* (Celeste)

A complete, formalised language assessment in the acute setting was considered essential for some clinicians, like Karen who recounted, *'I'll do a formal language assessment, even before they get down to rehab, just so I know where I'm going. I don't wait for them to go to rehab to do that stuff'*. Josie described the potential to undertake a formalised language assessment, but her language was littered with conditional terminology: *'...if it was the right patient, um...and if there was not that many people on the caseload, I could definitely start one'* (researchers' emphasis). In contrast to this, Tess reported that there would never be a circumstance in which she would administer a formalised language assessment in the acute setting as *'the time to do a full assessment on [people with aphasia] doesn't exist'*. In addition to this, rapid changes in communication presentation of the person with aphasia, short length of stay, environmental design and the patient's linguistic background were cited as reasons for not undertaking formalised language assessment.

The assessment tasks described were mostly focused on the identification of deficit in the individual with aphasia. The tasks described by participants, including object naming, single word comprehension, and repetition, had an impairment-based focus. Some described a preference for impairment-based assessment as *'it's nice to have something that's a bit more concrete'* (Rachael). Functional assessment of communication was considered by most to be secondary, something that *'goes alongside'* (Rachael) the impairment-based assessment. While the value of functional assessment was recognised by some, such as Ada who asked, *'What can we put in place to make this person um, able to get their needs and wants across to the nurses and their family the best they can?'* there was little discussion of how these evaluations were undertaken.

Speech pathologists indicated the importance of communicating the assessment findings and recommendations, and placed emphasis on the transmission of this information to nursing staff. Participants depicted a range of different explicit communication strategies, including bedside signage, documentation in the medical record, and direct interaction with nursing staff. Leah contrasted the way in which the findings of a swallowing assessment were communicated with the way communication recommendations were communicated, saying:

*'[Following a dysphagia assessment] we put up a sign about the beds, saying 'This is what diet they're on'. But we don't put a sign saying, "This is how they communicate with this person. Please put my hearing aid in, please speak Russian to me, please write down key words". You know. From a total communication point of view, I don't think we're doing that well.'*



In addition to this, speech pathologists discussed the implication of assessment findings not being understood or adhered to. This experience, it was suggested, was deeply frustrating for the speech pathologist.

*'It's frustrating when...you're with someone else but you can see your stroke patient over there and the nurse doing an awful interaction with them, and you just, it is – it's really frustrating'* (Stella)

#### 5.4.2.3 *'I do the best I can': Approaches to aphasia intervention*

##### 5.4.2.3.1 Goal setting for therapy

Notable in the transcripts of these interviews was a paucity of discussion surrounding goal setting. Little emphasis was placed on the process goal setting in the acute hospital setting, and the difference in goal setting in the acute and the sub-acute sectors was accentuated by the participants. Amy suggested that in the acute setting, *'goals are - sometimes I feel like they're not quite so individual for the patient but just sort of general goals'*. Clinical experience across the continuum of care was reported to influence goal setting in the acute hospital setting, with Stella suggesting that as a result of that experience she could *'see where that line is of "what they need to be doing on an acute ward", and "what they need to be doing once they get to rehab and they, they're trying to get back to their old way of life"'*. The language used in the discussion of goal setting with people with aphasia tended to lack inclusive terminology, suggesting that the process was clinician- rather than patient-driven. For example, Josie reported that *'I suppose I try to set them what I think could be attainable goals'* (researchers' emphasis). Of the few participants who discussed goal setting, the setting of small, achievable goals was described as being important in the acute hospital setting, as was preparing the person with aphasia for the sort of goals which may be addressed in the rehabilitation setting.

##### 5.4.2.3.2 Provision of therapy

Variation between participants was observed in relation to the provision of therapy in the acute hospital setting. Very few participants reported providing daily intervention to people with aphasia in the acute hospital setting. Clinicians who did provide intensive therapy tended to be more experienced, and employed in clearly delineated roles where their expertise in communication disorders was recognised by both the speech pathology and multidisciplinary teams. One such clinician provided insight into her personal motivation to provide therapy in the acute hospital setting, suggesting that she didn't want to focus on assessment alone and was thus driven to provide therapeutic intervention. The more dominant narrative, however, was one of not being able to achieve this in the context of competing priorities, as described by Tess:

*'If they're straight aphasic with nothing else, because of prioritisation and, um, because of just your time limitation...the time to be seeing them for daily therapy doesn't exist and it's a huge gap. And, it frustrates me because I like [laughs] working with aphasia and I think there's so much potential for things to be done on the acute ward'* (Tess)

Participants also suggested some alternatives to providing direct therapy to people with aphasia in the acute hospital. The first of these was 'being available'. Josie indicated that *'being available is my key thing...even if I can't do anything for them, at least I can talk to them about it, or, and be honest'* (Josie). The other alternative was a 'communication check', which was characterised by participants as a brief contact in which an informal review of the person with aphasia's language was undertaken.

Viv recognised that not providing direct therapy represented an evidence-practice gap in her clinical work, and expressed concern that *'the evidence is saying, you know, a couple of hours [of therapy] a day, well...I really can't get that done on the acute site...So I do the best I can'*. A dissonance created by the inability to provide intervention at a level consistent with best-practice recommendations was reported by many of the speech pathologists participating in this research.

#### 5.4.2.3.3 Underlying therapeutic paradigms

While a difference in underlying perspective was noted in the responses of the participants, the paradigms underpinning their practice were not discussed explicitly by the participants in this research. Participants touched on intervention across the ICF (World Health Organization, 2001) domains, however discussion of the integration of these components was limited.

These speech pathologists, for the most part, described taking an impairment based approach: *'I feel, um [pause] it's very impairment based. I don't do a lot of functional... it just doesn't seem as relevant in that acute stage'* (Karen). A variety of interventional modalities – including tablet applications and worksheets– were described as targeting the language impairment of the person with aphasia. The use of impairment-based worksheets was the most widely described approach to intervention, although the limitations of this were discussed. Worksheets were generally required to be completed independently, or with the support of family if they were present. Stella suggested that the intensity of rehabilitation could be increased if *'it's exercises that are easy to grab, and easy to give to someone else to do'*. Of concern, one less experienced clinician suggested a lack of critical thinking in the provision of impairment-based therapeutic activities, reporting *'I'll choose*

*something or maybe one or two things, just from a folder that's been upstairs for probably a long time'* (Josie).

Approaches to intervention addressing the activity and participation components of the ICF, most often described by speech pathologists as 'functional approaches', were recognised by these participants as being of value and importance to people with aphasia. Rachael, an experienced clinician, described it as being important to *'try and encourage those people with aphasia to be as independent as possible and to be as, um, empowered I suppose as possible and not reliant on a, a relationship, um, that can't necessarily, um, extend, you know, out into the community and you know'* (Rachael). Another experienced clinician, Tess, also favoured a functional approach which demonstrated *'what [people with aphasia] can do and not just seeing what they can't do'* (Tess). Some of the implications of people with aphasia not being included in communicative interactions in the acute hospital setting described by the participants included low mood, increased risk of adverse events, an inability to express their needs, and a reduction in participation in healthcare decision making. One speech pathologist described communication groups being run in the acute hospital setting to meet the needs of people with aphasia in a functional way. Others described including people with aphasia in conversation, although did not explicitly characterise this as an intervention. Primarily, the functional interventions that were described as being used in the acute hospital setting were limited to the use of personally relevant vocabulary.

*'We might work on naming people in the photos...but not much work on taking them into an environmental setting or conversing with other people...not really much on training them with a conversational partner'* (Amy)

It was also acknowledged by the participants that the goals of speech pathology practice may differ between the acute and sub-acute settings, with acute focusing on health from a medical perspective and sub-acute adopting a biopsychosocial perspective. These differences in perspectives, which underpin clinical practice, may go some way to explaining the reported practice in the acute care setting.

#### **5.4.2.4 'Very blurred line': Educational and affective counselling by speech pathologists for people with aphasia and their families in the acute hospital setting**

Speech pathologists who participated in this study discussed their roles in the provision of both educational and affective counselling to people with aphasia and their families in the immediate

aftermath of stroke. All saw educational counselling as a central role of the profession; however, divergence in opinion existed regarding the role of the speech pathologist in the provision of affective counselling. Of interest, many reported a lack of distinction between the two counselling domains, suggesting that the boundaries between educational and affective counselling were not clearly delineated in the management of aphasia.

*'I think the process of educational counselling often has a very blurry line into some emotional support. Um, because it, it just brings up all the things that they can't do, or all the things that they're having a little bit of trouble with that they used to be able to do very well, and so you then...yeah it's, it's a very blurred line I think between education and yeah, emotional counselling' (Ada)*

#### 5.4.2.4.1 Provision of information

Information provision was described by all participating speech pathologists as being carried out as part of their standard management pathway for people with aphasia. Despite this, no consistent process was identified. Information provision took two primary forms: provision of written information, and provision of verbal information. Written information was generally reported as taking the form of standardised, in house produced documents, handouts produced by the National Stroke Foundation, or – on occasion – guides published by the Australian Aphasia Association. The content of verbally provided information was not explicitly discussed by participants. What was evident, however, was that the majority of information regarding stroke and aphasia was provided to the families of people with aphasia rather than the people with aphasia themselves in the acute hospital setting. This is of concern as communication professionals, through their behaviour, may be perceived as endorsing a model of care in which people with aphasia are unable to understand, to be included, or to participate in their own healthcare.

*'Generally I find with somebody who is clearly going to be aphasic long term, the initial time is spent very much with supporting the family - um, educating the family, giving them lots of information, reassuring them about communication and the broader kind of, um, aspects of communication and describing what I think might be happening with their, their loved one. Um, so a lot of that acute time is spent with family rather than the patient'*

Josie extended this thought, reporting that she *'think[s] it's funny what things we as a team keep from – not just as speech pathologists – not keep from patients but we don't always discuss everything that we know is probably going to happen'*.

The content of education provided to the families of people with aphasia was reported to be *'very*

*dependent as well on the family's acceptance and the family's ability to take that on board'* (Stella). Additional characteristics that promoted the provision of education to the families of people with aphasia are described by Leah, who suggested that *'a family who's, who's concerned and present and interested, I will be putting more of a focus on educating them'*. Leah went on to characterise this as a manifestation of her family-centred practice, suggesting that *'every patient's different, and every family's different. And I think that tends to drive, in a way, the way that you work'*.

Despite their focus in clinical practice being on the provision of education to the families of people with aphasia, some participants in this study also acknowledged an awareness of people with aphasia reporting limited access to education in the acute hospital setting.

#### 5.4.2.4.2 'That counselling role can be quite tricky': Affective counselling

Participants acknowledged the emotional experience that people with aphasia and their families experience in the immediate post-stroke period, with the associated feelings of loss and grief. Ada felt that part of the reason speech pathologists may be asked to take the role of affective counselling is because *'we're the ones that understand that communication better out of all of the team members, and so the families tend to look to you and unload a little bit on you'*. However, in contrast to the congruence of opinion on the provision of informational counselling, substantial inconsistency was noted between participants when they described their involvement in the provision of affective counselling. Three distinct groups of speech pathologist participants were evident: (1) those who perceived counselling to be very much a part of their role; (2) those who put boundaries around the extent to which they would engage in counselling; and, (3) those who did not participate in the provision of counselling.

Leah suggested that *'[counselling people with aphasia is] our role more than anyone's. So, I can't shirk that'*. Agreeing with this statement, Rachael identified the significant role she played in counselling the families of people with aphasia, but also finished her statement with a concession that this may not be true for all speech pathologists.

*'Certainly a lot of my role is a counselling role, um, especially I think...with families in that traumatic kind of – devastating acute setting, our role is, it definitely crosses over into pure counselling, um, without question - or certainly my role does'* (Rachael)

In contrast, a large group of participants felt that *'it's a very important part of our role to counsel about aphasia'* (Stella; researchers' emphasis). They were eager to point out, however, that there were boundaries around their counselling service provision, and identified that *'there's definitely*

*been times where I have to put my hand up and say, “You know what, I don’t think I’m the right person for you to talk to”*” (Ada).

Finally, there were those who felt that counselling was definitely not the role of the speech pathologist, and created clear role distinction between themselves and other members of the multidisciplinary team more suited to the role (i.e., clinical psychologists, social workers). They suggested that, *‘when [people with aphasia] start talking about that emotional loss, not just about communication...things are no longer in my expertise to talk about’* (Karen). Amy discussed feeling that *‘it’s hard because we’re not quite trained in counselling’*. She went on to describe her lack of confidence and perceived skill in the provision of counselling:

*‘I think the informational type of counselling, I have the knowledge to be able to answer most of the questions, and so that’s a lot easier than if it’s to do with their emotions. Being able to, I guess, be supportive of them and knowing what to say is more difficult’* (Amy)

The provision of affective counselling by participants in this study to people with aphasia and their families in the acute hospital setting was noted to relate not with their level of clinical experience, as may be anticipated, but rather with their perception of their role and their confidence in undertaking this task. For example, while the moderately experienced Karen and Stella did not see affective counselling as part of their role, the less experienced Celeste was more willing to take on the role.

#### **5.4.2.5 *‘We’re their voice when they don’t have one’: The advocacy role of speech pathologists in acute aphasia management***

Advocating for people with aphasia was described by these participants as one of the roles they placed great emphasis on in the acute hospital setting, with some characterising advocacy as *‘my number one [thing I can do for people with aphasia]’* (Tess). The significance of this role was considered to be greater in the context of language impairment of people with aphasia, and their perceived inability to act as advocates for themselves as a result. In the words of Viv, *‘I think we do take on [the role of advocate], um, and because we can be their voice often, we’re their voice when they don’t have one’* (Viv). The advocacy role taken on by these speech pathologists took two main roles: (1) advocacy for greater awareness of aphasia within the acute hospital setting; and (2) advocacy for access to intervention for people with aphasia.

#### 5.4.2.5.1 Advocacy for greater awareness of aphasia within the acute hospital setting

Raising the profile of aphasia, and other communication-related impairments, was considered by the participants in this study to be important as a means of advocating for people with aphasia. The inevitable comparison with the awareness of and focus on dysphagia management was drawn by many. One relatively inexperienced clinician commented that:

*'I suppose the sad thing is, is that everybody really focuses on, "Can they eat?" and – which is very important – but um...you know, the more I'm working in stroke the more I'm, I'm starting to realise that we, I just need to advocate more for communication impairments'*  
(Josie)

The perceived response to this is that *'aphasia gets left behind a little bit on the ward'* (Tess). However, while this was reported to be important by these speech pathologists, few discussed explicit strategies that they used to raise the profile of aphasia.

It was suggested by the participants that awareness of aphasia was greater in acute stroke units, *'where everybody, um, knows about communication impairments and knows they exist'* (Josie), than on general acute wards. Despite this increased awareness, Josie reported that staff in acute stroke units *'will often say the patient is confused when they're actually aphasic, and I suppose, um, advocating for a patient is, can be a bit tricky, especially when, when um, you know it's a, it's a pure aphasia and they're not confused. Um, and just constantly reminding people about that'* (Josie).

#### 5.4.2.5.2 Advocacy for access to intervention for people with aphasia

The primary role of speech pathologists in advocating for access to intervention for people with aphasia was to promote the necessity of their access to rehabilitation service post-discharge. However, one participant working in the private healthcare sector additionally described the need to advocate for her patients in order to access an increased length of stay for people with aphasia. *'I mean, um, if the doctors want to push someone to be discharged because they're able to walk, they're able to eat and drink, but they're not able to communicate, um, I definitely do say that I want more time'* (Karen). An increased length of stay was considered essential in this setting, as private patients may not have access to intensive rehabilitation services in the community.

A greater proportion of participants, however, spoke about their role in fighting for access to rehabilitation services for people with aphasia outside of their ward. Some reported arguing to have

people with aphasia transferred to rehabilitation as soon as possible *'especially because you know that they're not getting the time that they, um, really should be getting while they're here in the acute setting'* (Stella). Others suggested that their advocacy was required in order to have the need for rehabilitation acknowledged at all, *'I guess advocating for the potential for change. Let's advocate for them to be able to go to rehab and have a go. Um, it doesn't mean instant nursing home, it doesn't mean instant care'* (Tess). This advocacy role was described by some as *'a battle'* (Josie), but one considered worth fighting in order to allow people with aphasia access to *'that intensive input that they deserve and that they need to improve'* (Stella).

## 5.5 Discussion

The most striking finding of this research is the implication that there is no standardisation in the management of people with aphasia in the acute hospital setting, with significant diversity described between participants. This is perhaps not surprising given speech pathologists' documented reliance on clinical expertise as a primary source of evidence (Guo et al., 2008; Zipoli & Kennedy, 2005). Duffy and his colleagues (2011) account for some of this variability by discussing the need to situate a hospital within a broader healthcare journey for people with aphasia with a variety of entrance and exit points, which may have a *'major influence on the nature and extent of hospital care'* (p. 49). However, the practice inconsistencies raise some questions regarding the equity of service being provided to people with aphasia and their families. While the authors do not advocate for rigid, formulaic practice – an oft cited concern of those in opposition to evidence-based practice (Yates et al., 2010) – we do support the need for clinicians working in aphasia intervention in the acute hospital setting to be supported to approximate best-practice recommendations. True evidence-based practice (EBP) requires the integration of the research evidence, clinical expertise, the views and values of the client, and consideration of the practice context (McCormack et al., 2002; Rycroft-Malone et al., 2004; Sackett et al., 1996).

The variability in the acute aphasia management pathway may in part be attributable to variable levels of confidence (Foster et al., 2016a) and self-efficacy (Foster, Worrall, Rose, & O'Halloran, 2015b) in the speech pathologists interviewed. This may, in part, reflect limited exposure to people with aphasia. As discussed in the introduction, dysphagia is considered to be the primary caseload for the vast majority of clinicians working in the acute hospital setting (Rose et al., 2013). This imbalance of services was reiterated by the participants in this study, many of whom report a high representation of people with swallowing disorders on their caseload. Variation in levels of confidence and self-efficacy are strikingly overt in the participants' discussion of the provision of



affective counselling, where discussion of their lack of confidence was explicit, consistent with the findings of another recent Australian study (Sekhon, Rose, & Douglas, 2015). Insecurity regarding their role in communication management may be inferred by the emphasis these clinicians place on advocating for rather than providing direct therapeutic intervention to people with aphasia. The focus of energy on advocating for access to rehabilitation rather than *providing* rehabilitation may be considered conciliatory. The extent to which variability in other areas of practice may also be attributable to this a lack of confidence is worthy of further consideration, and may account for some of the unease expressed by the participants.

The speech pathologists who participated in this study reported a clear awareness of the current best-practice recommendations for the management of aphasia. Findings suggest an inherent awareness of the underlying neuroplasticity principles that apply in the acute phases of stroke recovery. In addition, acute speech pathologists are acting as advocates for the profession and the value of intervention for people with aphasia. However, they also demonstrated a perception of little capacity to enact management consistent with these evidence-based recommendations, and articulated recognition of an evidence-practice gap. The dissonance arising from this evidence-practice gap is clearly articulated in this research, and is reinforced by similar findings in the literature (Byng et al., 2002; Rose et al., 2013).

Also evident in this study was a lack of consistent terminology across the country in relation to the management of aphasia. This was most notable in the interchangeable use of the terms ‘screening’ and ‘assessment’. In these times of healthcare rationalisation, clarity of terminology in this area may facilitate clearer role delineation, and the potential for acceptance of alternative service delivery models. For example, communication screening may be undertaken by a trained nurse or allied health assistant, freeing up speech pathologists for formalised assessment and/or therapeutic intervention.

Speech pathologists working in the acute hospital setting work within the medical model imposed by the setting. Consistent with the medical model, the terminology used across the interview suggested a focus on the communication impairment being experienced by the person with aphasia. This is evident in the title of some of the main categories, including ‘*we need to know what’s wrong with you so we can fix you*’ (researchers’ emphasis), and ‘*we’re their voice when they don’t have one*’ (researchers’ emphasis). While this perspective was not shared by all participants, the concern in relation to this narrative is that the focus on impairment and diagnosis has the potential to *disable* rather than *enable* people with aphasia. An alternative narrative could, for example, adopt a

therapeutic assessment approach (Hersh et al., 2013) in order to identify the strengths of people with aphasia, and supporting people with aphasia to actively participate in their own healthcare by interviewing them to understand their communication needs in this setting (O'Halloran, Worrall, Toffolo, Code, & Hickson, 2004) and through the creation of a supportive communicative environment in the acute hospital.

The findings of this research support survey data exploring aphasia rehabilitation practices within Australia (Rose et al., 2013), fleshing out the data by providing in-depth, personal accounts of current practice within the specific context of the acute hospital setting. Additionally, since the completion of data collection in this research project, the Australian Aphasia Rehabilitation Pathway (AARP) (NHMRC Centre for Clinical Research Excellence in Aphasia Rehabilitation, 2014) was released. The AARP provides a series of best practice statements, supporting references, and useful resources, and aims to enhance clinicians' access to research evidence as a means of improving the patient experience for people with aphasia and their close others across the continuum of care. Of interest, many of the Core Areas identified in the AARP correlate with the categories emerging from the participants' discussion of their current management pathways (see Table 5-2).

**Table 5-2** A comparison of Core Areas from the Australian Aphasia Rehabilitation Pathway (2014) and the categories emerging from the current research

AARP Core Areas	Categories emerging from the current research
Receiving the right referrals	Referral processes
Optimising initial contact	'What [are they] gonna think of me in a year?': First contact with the profession
Setting goals and measuring outcomes	-
Assessing	'We need to know what's wrong with you so we can help you': Focus on screening and assessment of aphasia in the acute hospital setting
Providing intervention	'I do the best I can': Approaches to intervention
Enhancing the communicative environment	-
Enhancing personal factors	-
Planning for transitions	'We're their voice when they don't have one': The advocacy role of speech pathologists in acute aphasia management

Comparison also reveals a number of 'gaps' present in the speech pathologists' descriptions of their practice. It must, however, be noted that the AARP represents the entire rehabilitation process, rather than the acute hospital setting particularly, and as such some divergence is to be anticipated. Some gaps, however, are worth commenting on. Goal setting, for example, was discussed in a limited capacity by a small number of participants only within the category of '*I do the best I can*':

*Approaches to aphasia intervention*, however did not present as an independent category. Explicit description of a process of collaborative goal setting was not provided. This could, in part, be accounted for by the passive role sometimes assigned to people with aphasia in the acute hospital setting. Alternatively, consistent with the findings of Laver et al. (2010) that the acute post-stroke period is more likely to be used as a ‘motivational’ phase for goal setting (Schwarzer et al., 2008), in which patients build knowledge and develop understanding to facilitate goal creation later in their rehabilitation journey. Perhaps of greater concern is the limited discussion regarding enhancing the communicative environment. Communication access has been identified as being an issue in the acute hospital setting (O’Halloran, Worrall, & Grohn, 2012). The potential influence that poor communicative access may have on people with aphasia’s satisfaction with their healthcare experience (Tomkins et al., 2013), risk of inappropriate or inadequate service provision (Hemsley et al., 2013), and likelihood of occurrence of adverse events (Bartlett et al., 2008) suggests that this should be a priority in this setting. In addition to this, enhancing personal factors was not evident as a category within the interviews. While some individual speech pathologists discussed the need to accommodate people from culturally and linguistically diverse backgrounds, as a group the participants did not place emphasis on this area of practice. This is surprising within a culture that purports to be focused on patient-centred care.

### ***5.5.1 Strengths and limitations***

The strength within this study is derived from its rigorous qualitative design, with strategies to strengthen rigour implemented in the design, data collection, and data analysis phases. In addition, the context-specific nature of the research – focused on participants from the acute hospital setting alone – limit the breadth but maximise the depth of data collected.

One potential limitation of this research is the possibility that clinicians with an interest in aphasia management were more likely to self-select as participants. While this possibility is present, the participants’ reported experiences with aphasia management suggest variability in their level of interest in this practice area, as represented by statements such as, “*I acknowledge all biases; dysphagia – I love working in the area*” (Monica). An additional potential limitation of this research is that the findings may represent the aspirational rather than actual aphasia management practice of the participants. While this poses some challenges, it should be noted that the aim of this research was to represent the *participants’ understanding* of their current practice. The meeting of this aim was supported by the selection of an interpretive phenomenological research strategy. It is also possible that, unlike survey methodology, the relational element created by the interview process – particularly given the perception of ‘sameness’ achieved as a result of the research and

participants' common professional background – facilitated a more open reflection of practice. Future research could supplement the interviews with observational data and/or ethnographic methods.

## **5.6 Conclusion**

The findings suggest that there is significant diversity in the pathways of care for people with aphasia and their families in the acute hospital setting. Additional support mechanisms are required in order to support speech pathologists to minimise the evidence-practice gap, with the additional aim of reducing their sense of professional dissonance.

The understanding of the current pathway for aphasia management that this research provides allows us to better understand current practice, and acts as a benchmark for comparison in the future. This, in combination with recently published knowledge regarding speech pathologists' perceptions of the factors that influence their practice (Foster et al., 2016a) and their relationship with EBP in this context (Foster et al., 2015b), creates a foundation of understanding from which speech pathology has the capacity to shape and modify the current pathway, allowing for greater integration of evidence-based practice guideline recommendations. Future research exploring the knowledge translation strategies which could promote a reduction in the evidence-practice gap in this area is required. A demonstrable increase in evidence utilisation within aphasia management in the acute hospital setting is paramount as evidence-based practice becomes progressively more important for effective healthcare delivery.

## Chapter 6

# **“Communication is taking a back seat”: Speech pathologists’ perceptions of aphasia management in acute hospital settings**

### *Results: Phase One*

Explaining speech pathologists’ perceptions of the factors that influence their current aphasia management practice in acute hospitals

**Foster, A. M., O’Halloran, R., Rose, M. L., & Worrall, L. E. (2014).** “Communication is taking a back seat”: speech pathologists’ perceptions of aphasia management in acute hospital settings. *Aphasiology, 30*(5). 585-608. doi: 10.1080/02687038.2014.985185

*This study is inserted as accepted for publication, with the exception of minor terminology and formatting changes to maintain consistency throughout the thesis.*

## 6.1 Abstract

*Background:* Current service provision to people with aphasia (PWA) in the acute hospital setting is reported to be inconsistent with best-practice recommendations. While speech pathologists have been noted to express dissatisfaction with this, the underlying reasons for this evidence-practice gap are unclear. Change is required in order to move towards the provision of gold-standard aphasia management in acute hospitals. The voices of speech pathologists working in this setting, and knowledge of their perceptions of the factors that influence their current practice, are essential in order to facilitate their capacity to act as agents for change.

*Aims:* This research explored acute speech pathologists' conceptualisation, experiences, and perceptions of post-stroke aphasia management, and provided a greater understanding of the factors that influence their practice.

*Methods & Procedures:* A purposive, maximal variation technique was used to sample speech pathologists. Semi-structured in-depth interviews conducted with fourteen speech pathologist participants who work with people with acute post-stroke aphasia were included in the analysis. Inductive thematic analysis was used to analyse the results.

*Outcomes & Results:* Analysis yielded five key themes. As a result of undertaking this research, insight was gained into (1) acute speech pathologists' perception of their role in relation to acute aphasia management; (2) the professional tension created by competing priorities; (3) the de-prioritisation of aphasia in relation to dysphagia management; (4) speech pathologists' beliefs about aphasia and their current aphasia management; and (5) their understanding of facilitators for acute aphasia management.

*Conclusions:* This study elucidated the complex and multifaceted nature of the factors influencing speech pathologists' management of aphasia in the acute healthcare setting. Findings included the identification of modifiable factors – such as supportive practice environments, locus of control, and reflective practice – which facilitate evidence-based approaches to aphasia management in that acute hospital setting.

## 6.2 Introduction

Current service provision by speech pathologists to people with aphasia (PWA) in the acute hospital setting does not consistently meet best-practice recommendations. Studies in many parts of the world suggest low levels of service provision to people with aphasia and their families (e.g., Armstrong, 2003; Code & Heron, 2003; Enderby & Petheram, 2002; Lalor & Cranfield, 2004; Lawrie, 1996; Rose et al., 2013). The dominant caseload for acute speech pathologists in Australian hospitals is reported to be dysphagia (Rose et al., 2013). While the specifics surrounding the frequency, intensity, and amount of current speech pathology intervention provided for people with aphasia in the acute setting varies across studies utilising different methodologies (e.g., Duffy et al., 2011; Godecke et al., 2012; Johansson et al., 2011; Kong, 2011; Verna et al., 2009), it is generally accepted as being sub-optimal. Emerging research has highlighted the importance of early intervention in aphasia management, with predictive modelling suggesting that the amount of very early therapy provided to people with aphasia could significantly affect communication outcomes at 4 to 5 weeks post-stroke (Godecke et al., 2013) but this practice is not commonly implemented (Rose et al., 2014). The reasons underlying this evidence-practice gap are unclear.

The rationale for improved management of aphasia in the acute hospital setting extends beyond impairment-based arguments. Of equal importance is the speech pathologist's role in supporting people with aphasia to be able to communicate their healthcare needs and actively participate in their care. A sense of control and independence holds value for people with aphasia, and positively influences their experiences of satisfaction with healthcare services (Tomkins et al., 2013). Integration of patient needs and values is central to the paradigm of evidence-based practice (EBP) (Pearson, 2010). People with aphasia who are restricted in their capacity to communicate their healthcare needs are therefore at risk of not receiving evidence-based healthcare, and may experience inappropriate or inadequate services within the hospital (Hemsley et al., 2013). People with communication difficulties are six times more likely to experience an adverse event in hospital (Bartlett et al., 2008). Adequate support of the functional communication needs of people with aphasia is crucial to improving the healthcare experience for people with aphasia and facilitating the provision of patient-centred intervention to this population.

Given the importance of communication in the acute hospital setting, it is of value to explore the literature regarding factors influencing the clinical decision-making of speech pathologists for aphasia management in this setting. At present little is known about the topic, and as such further investigation of best practice in aphasia management across the continuum of care, including the

acute care setting, is required (Dickey et al., 2010). A summary of the current literature is provided below.

A systematically conducted review of the international literature applying the conceptual framework of EBP to acute aphasia management was recently conducted (Foster et al., 2013). The authors concluded that little is known about how speech pathologists integrate and implement the different streams of evidence in EBP in the management of acute aphasia. A pilot study by Ciccone, Armstrong and Hersh (2012) explored speech pathologists clinical decisions in the provision of services to people with aphasia across the continuum of care. Of the sixteen participants included in the study by Ciccone and her colleagues, eight worked in the acute hospital setting. Participants reported an inability to provide the 'ideal' level of service to people with aphasia on their caseload, and suggested their aphasia service provision was influenced by institutional factors, clinician factors, and factors specific to the people with aphasia. Qualitative exploration within the acute setting, further exploring the complexities of clinical decision making in this context, is required.

Speech pathologists have expressed dissonance regarding the disparity between current clinical practice and the research evidence in aphasia management (Byng et al., 2002; Rose et al., 2013). Notably, in response to open-ended survey questions, acute speech pathologists expressed professional tension arising from the dominance of dysphagia (Rose et al., 2013) and reported that much more could be done for people with aphasia and their families in the acute setting. Further to this, they believed that a shift in the way communication disorders are perceived and prioritised was required.

The process of supporting the implementation of the research literature into the clinical setting is referred to as knowledge transfer and exchange (KTE). Systematic reviews of KTE strategies in allied health have been undertaken (Hakkennes & Dodd, 2008; Menon, Korner-Bitensky, Kastner, McKibbin, & Straus, 2009; Scott et al., 2012), with the most recent of these identifying methodological flaws and equivocal results in the literature (Scott et al., 2012). Research related to implementation in healthcare in general have identified the influence of environmental factors, characteristics of the health professional, as well as factors associated with the client in the enactment of change. However, discipline-specific nuances have also been acknowledged (Scott et al., 2012). Miao, Power and O'Halloran (2015) undertook interviews with eight Australian speech pathologists, including five working in the acute hospital setting, regarding the implementation of the clinical guidelines for stroke, including those relevant to aphasia. Themes highlighted that when implementing recommendations there is the need to consider: the perceived relevance of the



guidelines to the context of the workplace; the change required compared to the available resources; and, the influence of personal motivation to make change in their clinical practice.

Change is required in order to move towards the provision of gold-standard acute aphasia management in acute hospitals. The necessity of this change is reinforced by the growing body of literature applying neural plasticity principles to the area of post-stroke aphasia intervention. This includes the potential for language improvement even in the acute stages, given sufficient intensity and opportunity for practice (Bhogal, Teasell, & Speechley, 2003; Bhogal, Teasell, Foley, & Speechley, 2003; Godecke, 2009; Godecke et al., 2012; Godecke et al., 2013). Knowledge of speech pathologists' perceptions of the factors that influence their current practice is essential to facilitate their capacity to act as agents for change.

This study is part of a larger research project that aims to develop an in-depth understanding of the experience of acute aphasia management from multiple perspectives. This study aimed to explore SPs' perspectives about the management of post-stroke aphasia in the acute hospital setting, and the factors that influence their practice.

## **6.3 Methods**

### *6.3.1 Research paradigm and strategy*

This study was undertaken within a social constructivist paradigm, and used interpretive phenomenology as the research strategy. Table 6-1 provides an overview of the research approach used in this study.

**Table 6-1** Research approach

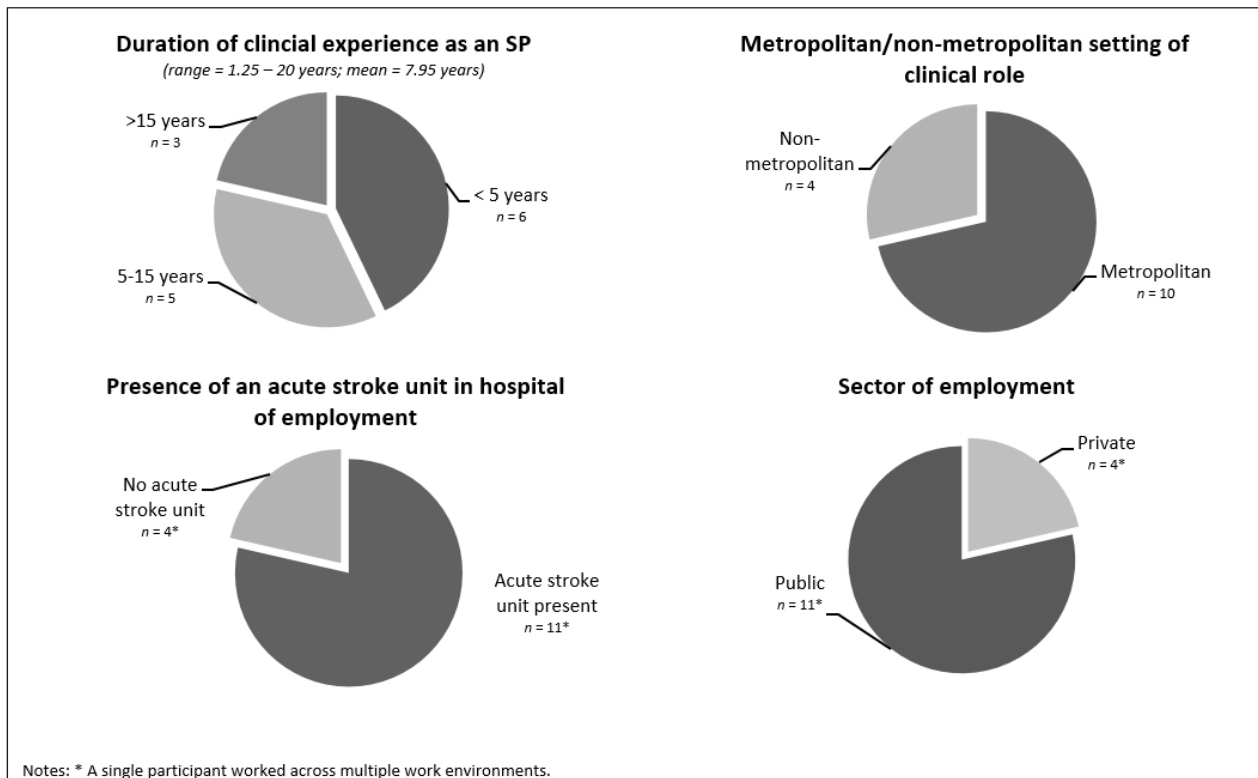
Research approach	Characteristics
<i>Research paradigm</i> Social constructivist paradigm	Aims to understand experience by obtaining the perspectives of individuals within a naturalistic setting Uses inductive methods Values individual experience Believes in multiple constructed realities <small>(Creswell, 2013; Liamputtong, 2009; Merriam, 2009)</small>
<i>Research strategy</i> Interpretive (hermeneutic) phenomenology	Aims to develop a deep understanding from multiple perspectives about a particular phenomenon Rejects the concept of bracketing by acknowledging the co-construction of knowledge <small>(Lavery, 2003; Lopez &amp; Willis, 2004; Morse &amp; Field, 1995)</small>
<i>Research methods</i> Semi-structured in-depth interviews	Aim to engage the interviewee in conversation to elicit their understandings and interpretations Use a topic guide, but are characterised by flexibility Enable participants to tell <i>their</i> story and reflect on their lived experience <small>(Johnson, 2001; Kvale, 1996; Minichiello et al., 2008)</small>
<i>Data analysis</i> Thematic analysis	Aims to focus on the emergence of patterns, themes and categories from the data Analyses the verbatim transcripts of interviews Interpretive and inductive Analytic process uses six phases <small>(Braun &amp; Clarke, 2006; Patton, 2002)</small>

### 6.3.2 Participants

Ethical approval was obtained from the Behavioural and Social Sciences Ethical Review Committee at The University of Queensland. Expression of interest forms were distributed to potential participants at conferences, via special interest groups, and a direct mail out. Eligibility required speech pathologists to be working, or recently having worked, with people with post-stroke aphasia in an acute hospital setting. After expressing interest, eligible speech pathologists were sent participant information and consent forms.

Thirty-six speech pathologists expressed an interest in the research but, in all, fifteen speech pathologists (all female) were selected for interview using a purposive maximum variation sampling technique (Creswell, 2013), however one was later excluded resulting in a total of fourteen being included in the analysis. Pseudonyms are used to refer to participants within the publication. Figure 6-1 shows participant details.

**Figure 6-1** Participant Characteristics



### 6.3.3 Research method

Single semi-structured in-depth interviews were conducted with each participant between May 2012 and June 2013 in order to elicit “detailed, richly textured, person-centred information” (Kaufman, 1994, p. 123). All interviews were face-to-face, conducted in a private room at the participants’ workplaces. Total interview time for each participant ranged from 66 to 111 minutes (mean = 88.8 mins; SD = 12.2 mins). A topic guide, was utilised (see Table 6-2). Interviews were audio-recorded, and transcribed verbatim. The primary researcher also kept field notes and a reflective journal to augment the transcripts.

**Table 6-2** Topic guide

Topic	Example questions
<i>Experience working in acute aphasia management</i>	"Tell me about your experience working with people with aphasia and their families in the acute hospital setting"
<i>Management pathway for people with acute post-stroke aphasia</i>	"Can you describe your experience of the typical management of people with acute post-stroke aphasia and their families in your workplace?"
<i>Influences on decision making in acute post-stroke aphasia</i>	"In your experience, is the management of people with aphasia pretty much the same for everyone or is it different for some people with aphasia compared with others?" <ul style="list-style-type: none"><li>▪ "Can you give me an example?"</li><li>▪ "In your experience, what factors might influence your decision making?"</li></ul>
<i>Barriers and facilitators to evidence-based acute post-stroke aphasia management</i>	"In recent times, there has been discussion regarding evidence-based practice in speech pathology. Has this influenced your acute aphasia management at all? If so, how?"

*Note:* This guide provided a list of topics to discuss, however no fixed wording or ordering of questions was used (Minichiello et al., 2008). The topic guide was not provided to the participants prior to the interview.

### 6.3.4 Data analysis

All data were stored and managed within the NVivo 9 (QSR International Pty Ltd, 2010). The data were analysed using inductive thematic analysis, based on the six phases of thematic analysis outlined by Braun and Clarke (2006).

### 6.3.5 Rigour

A range of strategies were implemented in order to ensure the credibility, transferability, dependability and confirmability of the results (Lincoln & Guba, 1985). Participants were allowed to review and amend their transcripts as desired for the purpose of member checking. One participant amended her transcript to exclude data she felt would make her or her organisation identifiable. Approximately 20% (3) of the interview transcripts were checked by a co-author for accuracy, with preliminary coding reviewed and commented on. Joint coding and additional scrutiny of the analytic processes was undertaken to ensure that interpretations made were appropriate. An audit trail was created through the use of field notes, memos, and a reflective journal in order to provide systematic documentation of decisions made (Liamputtong, 2009; Morse & Field, 1995; Richards & Morse, 2013; Tobin & Begley, 2004). "Thick description" (Liamputtong, 2009), the use of illustrative verbatim quotations, and comparison of the findings with the literature (Richards & Morse, 2013) within this article further bolster rigour.

## 6.4 Results

Analysis of the interview transcripts generated five key themes in relation to the research aim. The themes speak to the complexity and multi-faceted nature of the factors that influence practice. The themes, their sub-themes, and illustrative quotes are represented in Table 6-3, and discussed below. Figure 6-2 provides a representation of the interrelationships between themes.

**Table 6-3**

Identified themes, sub-themes, and supporting quotes

Theme	Sub-themes	Supporting quotes
<b>Role concept</b>	<i>Perceptions of the speech pathology profession</i>	<p>“Historically, we did have more time as speech pathologists before we thought we knew what we were doing with swallowing...I don’t think we, as a profession saw what that would do to aphasia therapy, and our roles” [Leah]</p> <p>“...You must be able to fix these things, you must be able to do something that assists these patients, and, and it’s got to be language focused” [Rachael]</p>
	<i>Perceptions of the role of the acute speech pathologist</i>	<p>“Speechies who like swallowing go into acute, and speechies who like language go into rehab” [Tess]</p> <p>“...[there’s] not anything that’s acute aphasia management, it’s just aphasia management and just implementing as quick as possible, really” [Beth]</p> <p>“Oh, thank goodness! It’s not just me, I’m not a shit clinician. I actually, you know, I’m like everybody else and everybody else has the same issues as I have, and that’s okay” [Viv]</p> <p>“[Working in the acute hospital allows me] to play a fairly structured role and, um, not get too connected and, um, maintain a little bit of, um...separation I suppose from what’s a pretty distressing, um, impairment” [Rachael]</p> <p>“...if you gave me an aphasic patient and said, ‘Okay, rehab them,’ I’d still have conniptions, I’d still feel nervous about it and I think it’s just the confidence thing” [Viv]</p> <p>“I don’t think [the prioritisation of dysphagia over aphasia has] got anything to do with prioritising, it’s got to do with the level of skill and expertise in communication. And it’s because they’re not doing it anymore that they’ve become deskilled and they don’t know what to do, and they’ve got nobody that can mentor them and help them” [Danielle]</p>
<b>Competing priorities</b>	<i>Meeting the needs of the organisation within the medical model</i>	<p>“...[It’s] almost socially inappropriate to be telling the consultant...that you think their decision’s wrong” [Leah]</p>
	<i>Meeting the needs of the PWA</i>	<p>“If you’ve got the patient’s best interest at heart, then who cares?” [Leah]</p> <p>“It is hard because, you know, you want to feel like, you know, ‘We need to know what’s wrong with you so we can help you’, but at the same time, they’re a person who’s completely different to how they were three days ago, and they need time to get through that, work through that” [Josie]</p>
	<i>Meeting the needs of the families of PWA</i>	<p>“You feel pressured [when the families of PWA are present] because there’s someone with a voice telling you all those things a person with aphasia wouldn’t be able to. Definitely you feel that responsibility much more” [Karen]</p> <p>“If you’ve got [a family who] are really motivated and really wanting to be a part of it and are willing to try anything, then you’re going to be drawn to go back and spend a bit more time with them I suppose” [Ada]</p>
<b>De-prioritisation of aphasia</b>		<p>“...Definitely swallowing is always prioritised over communication” [Amy]</p> <p>“Actually I use swallowing to my advantage [laughs]...in fact I find swallowing is actually a really good way of accessing, um, more time with a patient ...I try and make [dysphagia management] work in... alongside the communication and make it work for, for us” [Rachael]</p>

	<p><i>The role of prioritisation systems</i></p>	<p>"If you're really getting into a busy day and you have to make some priority calls, then your straight communication patients unfortunately are usually the ones that miss out. To be really honest" [Ada]</p> <p>"Our...dysphagic patients are up here, and our...dysphasic patients are lower down. Because we go, 'They're not gonna die, there's no risk, um, you know, we'll get to them later on'" [Viv]</p> <p>"It's difficult [to adhere to the prioritisation system], especially because we know that early intervention [for aphasia] produces the best outcomes and they're really meant to be getting - the Stroke Guidelines say that they're meant to be getting therapy as early as possible. So it is difficult from that perspective" [Amy]</p>
<p><b>Beliefs about current practice</b></p>	<p><i>Providing high quality service to PWA, but extra resources would be of value</i></p> <p><i>Meeting the requirements of the perceived role of the acute speech pathologist in aphasia management</i></p> <p><i>Lack of time versus the desire to provide best practice interventions for PWA</i></p>	<p>"I think I do a really good job with the communication patients" [Danielle]</p> <p>"Rewarding is a very good word because it certainly can be. To, to be able to get that little bit more communication out of somebody, to be the person that can set that on the road is incredibly rewarding" [Mae]</p> <p>"I probably, um, consistently stay back half an hour late and occasionally I'll have to do a bit of catch up... Often I don't have my lunch break" [Danielle]</p> <p>" 'Cause when you're in acute everything's always fast, fast, fast, so, you can't really dedicate two hours a day to that patient...So you're trying to do as much as you possibly can in a very, very short amount of time and let everyone know and then keep going and see someone else" [Stella]</p> <p>"I don't feel like...I don't want to sounds like I think I'm great, but I don't feel like I'm getting bad outcomes with what I'm doing. It's not like I'm getting these patients who are not getting...any input or anything" [Stella]</p> <p>"I'm not Superwoman!" [Leah]</p> <p>"It would be... great to have a few more hours up your sleeve" [Josie]</p> <p>"I can't do everything...I'm doing the best I can...At this point in time with the funding and, you know, my time pressures...I can't do much more than I'm doing" [Viv]</p> <p>"I was saying, you know, 'I'm really busy, sorry, I'll try and see your mum tomorrow.' And then, I think they would direct their frustration at me, rather than at the system. So, I'm learning that that's not a good way to put it and, you know, to blame the system for want of a better excuse...Well, I'm actually, um...sort of relieved to, to have that [perspective] now" [Leah]</p>
<p><b>Facilitating acute aphasia management</b></p>	<p><i>Supportive environments for acute aphasia management</i></p>	<p><u>Organisational factors:</u>          "The consultant, the head of the stroke unit...is very pro-speech pathology. So, [the culture of respect] probably stems a bit from that...He always asks about patients' swallowing, not their communication...that's why he's very pro-speech - because he doesn't want his aspiration and pneumonia rates to skyrocket [laughs]" [Leah]</p> <p><u>Departmental factors:</u>          "I'd call [my mentor] every now and then to say, 'Is this what - am I doing this right?'... Getting that reassurance from someone else and saying... 'I would still recommend doing that.' That - yeah, you feel empowered and then no longer, yeah, feeling like you're just doing it because that's all you know" [Karen]</p>

*Clinician factors  
influencing acute aphasia  
management*

Locus of control:

"They do need to be seen, like I don't...I don't discount that, but the intensity of the input is not gonna be great on an acute ward, and...I don't think that that's gonna change" *[Stella]*

"...Because I guess it's just an individual thing I didn't find it very hard to make change because it was all things that I knew, so it was really just making sure I was doing them" *[Celeste]*

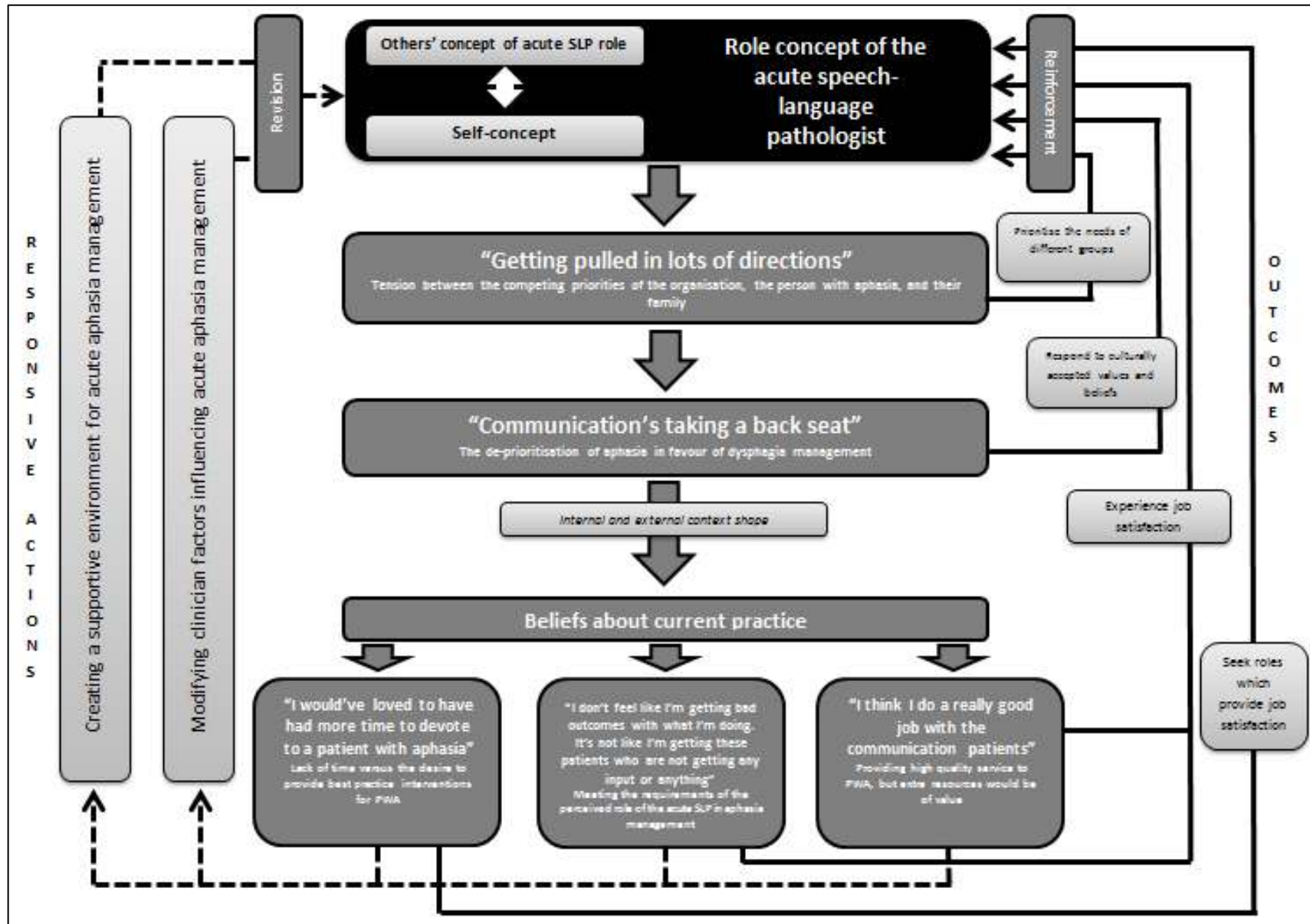
Reflective practice:

"I'm not sure! I think [balancing time management and desire to be present for PWA] just happens. It just gets managed, I'm not even sure how [laughs]" *[Josie]*

"...the patients that you've had previously shape how you take, and it, you know, how you work with your new patients, either in a positive or a negative way" *[Viv]*



**Figure 6-2** Acute speech pathologists' perception of the factors that influence their aphasia management practice



### ***6.4.1 Role concept: Speech pathologists' understanding of their role in aphasia management***

Speech pathologists' role perception is central to understanding the services they provided to people with aphasia. Role perception can be conceptualised as the responsibilities that the speech pathologists perceive to be a part of their job, and the beliefs that they hold about their position. For these speech pathologists, role concept is complex, dynamic, and individual. Role concept was informed by two key areas: (1) the speech pathologists' perceptions of the speech pathology profession; and (2) their perception of the role of the acute speech pathologist.

#### ***6.4.1.1 Perceptions of the speech pathology profession***

The notion of speech pathology as a helping profession was strongly held by these speech pathologists. They spoke about a desire to see improvement in the patients with whom they are working. Some, however, felt ill-equipped to enable this change for people with aphasia in the acute hospital setting.

Some speech pathologists felt that the evolution of the role of the speech pathologist to include dysphagia management may contribute to the uncertainty that surrounds the speech pathologists' current role in aphasia management. Clinicians who had experienced the transition were also likely to have a strong stance against the profession losing focus on the management of communication impairment, reporting they were *"determined not to let that happen"* [Rachael].

#### ***6.4.1.2 Perceptions of the role of the acute speech pathologist***

Within the profession, acute speech pathology was seen by many to be a distinct entity. These speech pathologists described working in the acute hospital setting as exciting and dynamic, and enjoyed the diagnostic element of their role, *"the assessing of communication and working out what it is that they've got, rather than trying to fix it"* [Beth]. Participants described the multifaceted nature of the role of the acute SP and the delicacy required to manage this, using metaphors such as *"balance"* [Leah] and *"juggle"* [Ada]. For some speech pathologists, the acute setting enabled them to play a clearly defined role in the management of people with aphasia. Being part of the medical model was of value to these speech pathologists, and created a sense of professional worth in which speech pathologists *"feel like...a doctor in ED"* [Karen], which was considered to be a worthy role – *"it just feels important"* [Karen].

For many, the role of the acute speech pathologist was clearly delineated from the sub-acute clinician. Differences in skill set and approaches to care were described. Acute speech pathologists reported at times deferring to sub-acute speech pathologists regarding the management of people with aphasia. However, some felt this differentiation was artificial, reporting that it was “*easier and lazier*” [Karen] for speech pathologists to forego tasks they perceived to be more suitable for the rehabilitation setting.

Most of the speech pathologists who participated in this study articulated a strong sense of solidarity with other members of the acute speech pathology sorority. Role identity was reinforced through interactions with other clinicians, with whom comparisons could be made and validation sought. This perspective was strongest amongst less experienced clinicians, however even more senior speech pathologists reported feeling reassured by contact with other clinicians.

All of the speech pathologists interviewed reported that their perception of the role of the acute speech pathologist changed over time, with the role concept formulated during university being challenged and revised in the workplace. This resulted in alteration of the emphasis placed on particular roles, and variations in self-confidence in the provision of services to people with aphasia. Many speech pathologists felt that experience in the sub-acute sector had helped improve their knowledge of aphasia management “*out of sight*” [Stella], allowing them to situate their service in the continuum of care and better understand the needs of people with aphasia.

Variation in self-perception of the aphasia management skills of these acute speech pathologists was noted, which influenced the roles they emphasised. Speech pathologists were reticent to explicitly disclose a perception of poor skills in acute aphasia management. Rather, they contrasted their confidence level with high levels of self-assurance in dysphagia management, or tempered the strength of their assertions of confidence. Emphasis was often shifted from their skills to the context in which they worked. Capacity for mastery of skills was perceived to be more easily achieved in dysphagia management, as it is more concrete and procedural. Concern regarding the overall de-skilling of acute speech pathologists in the management of aphasia was expressed passionately by two clinicians, and indirectly by a few others.

One key factor that reinforced these clinicians, and shaped their clinical behaviours and role perception, was identified. Speech pathologists articulated that being perceived in a positive light by others helped them to achieve professional satisfaction, and implied that their role may be modified in order to seek this. Professional satisfaction, for some, contributed to an overall sense of personal

satisfaction. Given this, it is not surprising that tensions between the needs of different stakeholders in the acute aphasia management process were strongly felt, as discussed in the following theme.

#### ***6.4.2 Getting “pulled in all these directions”: Tension between the competing priorities of the organisation, the person with aphasia, and their family***

The participants reported a sense of being “*pulled in all these directions*” [Stella] by the needs, values, and priorities of different stakeholders in their clinical work. Speech pathologists’ self-perception of their capacity to meet the needs of the organisation, the people with aphasia, and their families was discussed. The way that these tensions manifested and were responded to differed significantly from clinician to clinician.

##### ***6.4.2.1 “The doctors are at the top...we're somewhere in the middle there...and the patient can be at the bottom”: Meeting the needs of the organisation within the medical model***

Organisational priorities and pressures were significant in shaping the aphasia management of these SPs. The medical model, with its inherent hierarchy, is integral to the acute hospital setting and something to which they felt they must conform to in order to be held in high esteem. An interesting disparity was noted in how this manifested in clinical practice. Within some settings, it resulted in SPs feeling obligated to provide intervention to people with aphasia in order to report back to the multi-disciplinary team (MDT). For others, it was felt that the provision of intervention to people with aphasia would be considered abnormal by colleagues in the acute hospital setting. The focus on patients’ physical well-being in this setting was reported to shape the comparative value that the medical team place on swallowing over communication, which in turn significantly influenced speech pathology practice – “*if [the medical team] want the swallowing information, we’ll definitely prioritise that and then feedback to them*” [Amy].

Speech pathologists reported feeling a pressure to focus on the rapid assessment and discharge of all patients, resulting in the patient’s views and values often being “*lost in bureaucracy, in terms of, ‘Well, you’ve got to see this many people...it costs this much for them to be in for this long’*” [Tess]. Participants working within the private sector placed greater emphasis on the organisational influence on practice, describing a more explicit medical model and a greater emphasis on funding models, rapid discharge, and service provision within the common acute care certificate timeframe (whereby private health funds mandate the maximum length of stay for patients in the acute hospital setting).

#### 6.4.2.2 *“If you’ve got the patient’s best interest at heart, then who cares?”: Meeting the needs of the people with aphasia*

The desire that these SPs had to meet the needs of people with aphasia in the acute hospital setting was clear even amongst those who were critical of the degree of person-centredness in their own practice. Some speech pathologists felt the responsibility of setting up expectations and establishing perceptions of the profession. Some speech pathologists also felt a sense of obligation towards people with aphasia and their families, based on the underlying belief that “[speech pathologists] are the ones to deal with [aphasia]... nobody else is going to pick that up” [Rachael]. It was not clear how these speech pathologists went about establishing the values and goals of people with aphasia, however the participants spoke about “interpreting” the needs and wants of people with aphasia, identifying that this skill is “something that you develop and sometimes it’s a little bit [of] intuition going on there as well” [Ada]. A lack of time and the nature of the communication impairment were cited as challenges which made it “a bit more difficult to be completely patient-centred [in the acute hospital setting]” [Amy]. This manifested variably in the participants’ capacity to establish individual goals, deal with emotional reaction to stroke and aphasia, use personally relevant therapy materials, and provide intervention at the capacity desired by individual people with aphasia. One speech pathologist reported creating a “continuum of person-centredness” [Ada] in order to appease her dissatisfaction at not fully attending to the views and values of people with aphasia.

Despite a belief that person-centred approaches to care are time consuming, some also described that “putting in a little bit of extra time at the beginning to be person-centred can buy you time as you go through” [Ada]. Some speech pathologists reported making the needs of the patient central to their practice, however most reported that during periods of increased caseload this was the first thing to drop away. For many, patient-centred care represented an aspirational goal rather than a reflection of current practice.

#### 6.4.2.3 *Meeting the needs of the families of people with aphasia*

The value that these clinicians placed on meeting the needs of the family was significant. Aphasia was considered by these clinicians to be a family problem. The presence of families also meant that speech pathologists felt a greater sense of accountability as families of people with aphasia may vocally express their needs, “jumping up and down and making a fuss” [Ada] or being “demanding” [Josie] in contrast to people with aphasia. Where a family interest and motivation was demonstrated, they were noted to be drivers of increased service provision. “A family who’s...concerned and present and interested, I will be putting more of a focus on” [Leah]. This is

not something that sat well with some who felt this was “*horrible, but I think it happens a lot in health*” [Josie]. The desire to spend time with families was true for most, “*unless you have a very, um, antagonistic family. That's when you dread seeing them*” [Karen].

Some speech pathologists made clear that the needs of the people with aphasia and the needs of the family need to be seen as distinct. As such, it was reported that it cannot be assumed that a family member will always accurately represent the needs of the people with aphasia.

In order to respond to these competing demands, some form of prioritisation of tasks and responsibilities was felt to be necessary by these speech pathologists.

#### ***6.4.3 “Communication’s taking a back seat”: The de-prioritisation of aphasia in favour of dysphagia management***

The sense of an adversarial relationship between swallowing and communication management was articulated, either explicitly or implicitly, in all interviews. This dichotomy, however, was not felt by all participants, with some suggesting they integrated communication intervention with swallowing intervention.

Speech pathologists felt that the profession may not have been aware of the implications that taking on swallowing management may have on their management of communication disorders. One clinician reported the beneficial impact of taking on a clinical role in dysphagia, helping to build the professional profile of speech pathologists in the hospital, saying, “*once you get acknowledgement in one area, then it’s easier to...transfer that interest to another areas as well*” [Monica]. Speech pathologists suggested that the efficient management of swallowing deficits also created an improved capacity to work with people with aphasia in the acute hospital setting, because “*if someone isn’t well managed from a dysphagia perspective, they’re going to be useless to you from a language perspective anyway because they’re going to get really sick*” [Monica].

Evident in the interviews was a clear notion that most of these speech pathologists had a clear preference for either communication or swallowing management. These preferences, it was felt by some, drove the selection of the positions they worked in. “*...You work acute medical...because you’re interested in dysphagia. You don’t work acute medical because you want to do aphasia therapy*” [Stella]. In addition to influencing their role selection, this preference influenced their reported clinical behaviours.

#### 6.4.3.1 *“Dysphagia is your big number one”: The role of prioritisation systems*

This dichotomous view is often represented formally in prioritisation systems. These prioritisation systems often render dysphagia as the *“big number one, [with] communication impairments com[ing] in after that” [Ada]*, and were either formally written or communicated through the behaviours of senior clinicians.

Speech pathologists felt prioritisation systems were necessary, reporting that they needed to be able *“to draw a line, because there’s no way I could see all of these people in my day” [Ada]*.

Prioritisation systems were most valuable during busy periods, and it was during this time that the likelihood of de-prioritising people with aphasia grew. However, it was reported that prioritisation *“can be very therapist dependant on what they prioritise, and what they believe is...most important” [Stella]*. This ability to interpret prioritisation systems means that *“sometimes you might just have to bump [a person with aphasia] up on a particular day to see them” [Amy]*. Some speech pathologists perceived prioritisation systems as *“more safety guidelines...so, therefore, they focus on the swallowing” [Amy]*. However, speech pathologists also spoke of the under-recognised implications of aphasia on patients’ safety and well-being in the hospital setting.

Less experienced clinicians reported a tendency to adhere to the departmental guidelines regardless of their personal beliefs. They described an inner debate in which *“you flip...as to which side of the fence you sit on in terms of whether [the de-prioritisation of people with aphasia] is right and you can do it, or whether it’s wrong. But you, you need to do it, so...yeah” [Ada]*. More experienced clinicians more often reported manipulating the system to work for them, however at times this needed to be hidden from management: *“Secretly I kind of do - um, don’t tell my manager this [laughs] - I do kind of prioritise people with aphasia...If I really strictly followed our departmental prioritisation...I wouldn’t, shouldn’t be seeing them” [Rachael]*. There was also an expressed concern that prioritisation systems may not align with best practice recommendations for aphasia.

#### 6.4.4 *Beliefs about current practice*

Despite their differing understandings of their role, a genuine desire to ensure a good service for people with aphasia was evident. Speech pathologists’ expressed beliefs about aphasia were relatively consistent across interviews. A striking feature was the passion with which many of these speech pathologists spoke about their desire to provide the best service possible to people with aphasia and their families in the acute setting. As a group, these speech pathologists strongly felt that that speech pathology intervention is something that people with aphasia *“deserve and that they need to improve” [Stella]*. They also felt that people with aphasia *“should still be included in*

*communication experiences*” [Amy]. Aphasia was, however, described as “*a pretty distressing...impairment*” [Rachael] which at times can be “*really quite confronting*” [Viv] for speech pathologists. People with aphasia were characterised as “*vulnerable, and they can become fairly dependent*” [Rachael]. However, most speech pathologists also sought to acknowledge the person behind the impairment, discussing the value of identity for people with aphasia.

These speech pathologists’ beliefs about their current aphasia management practice were a significant factor in shaping their service provision to this population. For the most part, these beliefs reflect the contribution of both the communication culture of the organisation and the personal values of the speech pathologist, against which current practice can be evaluated. Three groups, with shared beliefs about their practice, were noted and each is described below.

#### *6.4.4.1 “I think I do a really good job with the communication patients”: Providing high quality service to people with aphasia, but extra resources would be of value*

A small group of participants who worked in ASUs and had moderate to high levels of clinical experience, felt very confident in their current service provision to people with aphasia and their families. While some reported an occasional desire for additional time and support, they reported feeling that they “*do a really good job with the communication patients*” [Danielle]. Some asserting that the service they provide is optimal in comparison to other clinicians. These clinicians described the experience of working with people with aphasia and their families as rewarding, and reported a high level of professional and personal satisfaction.

These speech pathologists often reported that optimising their service delivery to people with aphasia compromised other tasks and time management, with clinicians often foregoing lunch and not leaving work on time. Those who reported this sort of behaviour were the most experienced clinicians interviewed.

#### *6.4.4.2 “I don’t feel like I’m getting bad outcomes with what I’m doing. It’s not like I’m getting these patients who are not getting any input or anything”: Meeting the requirements of the perceived role of the acute speech pathologist in aphasia management*

One moderately experienced speech pathologist, working in a metropolitan hospital without an ASU, articulated that whilst she was not providing services consistent with best-practice recommendations to people with aphasia, this was acceptable as it was not her role and represented an unrealistic goal in the acute hospital setting. While this clinician was able to identify barriers to



achieving best practice, she also felt that she was doing the best that she could within those constraints.

For this speech pathologist, there was little desire to create change in her acute aphasia management. The provision of any service to people with aphasia in the acute setting, even if it was not ideal, was seen as adequate.

#### 6.4.4.3 *“I would’ve loved to have had more time to devote to a patient with aphasia”: Lack of time versus the desire to provide best practice interventions for people with aphasia*

Another group of speech pathologists – the largest group, comprising participants across the factors of variation – felt, and asserted, that they were ‘doing the best that they could’ for people with aphasia and their families. Repetition of this phrase was evident throughout the interview transcripts. A resignation to performing at that level, rather than striving for change, was also noted. These speech pathologists reported that this desire to provide evidence-based approaches to care was not achievable in this setting. A range of factors influenced the service that they provided, but the most cited was that of time.

These speech pathologists identify that a gap exists between the service that they *want* to provide and the service they *do* provide. Some dealt with this tension by reassuring themselves that they were doing the best they can, whilst others, particularly those who were less experienced, felt emotional implications including “*frustration*” [Stella], and feeling “*really bad and guilty*” [Ada]. One speech pathologist reported that in response to the feelings of guilt at not providing the service she would have liked to people with aphasia and their families, she learnt to deny the “*little voice inside my head that says, ‘Oh you’re walking past their room, just check in and say hello’*” [Ada], and saw this denial of her inner voice as being “*a big part of my development in terms of time management*” [Ada].

These clinicians reported feeling stressed, and having “*been at risk of [burnout]*” [Leah]. Strategies for dealing with stress that were discussed included formalised supervision sessions with a senior colleague, and attributing lack of service to departmental rather than personal shortfalls.

A perceived lack of time was reported as the primary barrier accounting for a number of shortfalls in the provision of aphasia services in the acute hospital setting: “*Everyone’s under such time pressure, there’s lots of, you know, “Quick! Get this patient in, out, seen, done, sorted!”*” [Viv].

There was a strong perception amongst this group of speech pathologists that managing aphasia was time consuming comparative to managing dysphagia. These time challenges were reported to be exacerbated for people with aphasia from culturally and linguistically diverse backgrounds, especially for speech pathologists in regional areas.

Speech pathologists proposed that more time would be the key element in improving services to people with aphasia. However, the participants acknowledged that using ‘lack of time’ as a rationale for not providing service to people with aphasia and their families was not always adequate: “*You just don’t have time. And it, it sounds like a really crappy excuse...but it is reality as well*” [Ada]. The guilt these speech pathologists reported as being associated with the inability to provide adequate service in the allocated time was assuaged by belief that people with aphasia receive better service in rehabilitation.

#### ***6.4.5 Facilitating acute aphasia management: Creating a supportive environment and modifying clinician factors***

Both internal and external context were noted to shape speech pathologists’ provision of acute aphasia management. Through this, the characteristics that support the provision of high quality aphasia services were identified.

##### ***6.4.5.1 Supportive environments for acute aphasia management: The role of the multidisciplinary team and the speech pathology department***

Creating a supportive environment for acute aphasia management was reported to rely upon an interplay of organisational and departmental factors.

###### **6.4.5.1.1 The role of the organisation in creating support for acute aphasia management**

The participants conceptualised their aphasia management within the greater context of stroke services, acknowledging that stroke is “*much broader than our little siloed part of...their journey*” [Ada]. As a prelude to explaining their speech pathology services, many of these speech pathologists described their workplace settings, including ASUs and MDTs.

While speech pathologists reported that their clinical practice in the management of aphasia did not change in response to the presence or absence of a strong MDT *per se*, they did report a change in their perceived level of support and team functioning, allowing for the provision of “*a much richer*

*environment for the person with aphasia and also the family members” [Rachael].* Speech pathologists situated within supportive MDTs felt that they could boost their profile and the value of communication. Within such teams, creating a culture of respect for speech pathologists was facilitated by the clinician’s skills, historical relationships with speech pathologists, and the attitudes of consultants and nurses towards speech pathologists. Respect was demonstrated by a perceived valuing of the management decisions of the speech pathologist. However, it was reported that respect was most often obtained through speech pathologists’ role in swallowing, rather than communication management. Multi-disciplinary teamwork was considered to be at its strongest within ASUs. In addition to promoting communication through proximity, the processes within ASUs were reported to be standardised and streamlined, creating equity of service which may not exist outside of ASUs.

#### 6.4.5.1.2 The role of the speech pathology department in creating support for acute aphasia management

The structure, beliefs, attitudes and expectations of the speech pathologist department also has a significant impact on how speech pathologists provide services to people with aphasia. This influence was most strongly felt by more junior clinicians, for whom the example set by senior clinicians and the priorities articulated by departmental management were considered very important.

Other speech pathologists held significant influence over the practice of acute aphasia management for these clinicians. These speech pathologists were motivated to learn from the clinical experiences of others through both formal and informal mentoring and supervision. It was preferable if this was provided by an experienced clinician, however some also reported the benefits of having peer support opportunities. Those who perceived their mentor as holding aphasia management in high esteem reported that their enthusiasm was “*very contagious*” [Celeste], and had the capacity to “*instil that [passion] into you again*” [Karen]. Present, onsite supervisors, were reported to be optimal, facilitating both incidental and formalised learning. Speech pathologists sought reassurance from colleagues that their management approach was appropriate, and this reinforcement was perceived as being empowering. It was reported, however, that this may result in culturally held beliefs and values being difficult to challenge, and the status quo being maintained.

Within the speech pathology department, role delineation helped speech pathologists to feel responsibility toward their caseloads. A role specifically dedicated to the management of stroke survivors was reported to be beneficial in supporting acute aphasia management services: “...If

*you're the stroke speech pathologist...I would spend more time there because...I'm in charge of that caseload" [Celeste].* Clear role delineation meant speech pathologists experienced a higher level of professional autonomy, and helped clinicians to build their skills, manage their caseload, and achieve satisfaction in their work.

#### 6.4.5.2 *Clinician factors influencing acute aphasia management: Locus of control and reflective practice*

Individual clinician factors tended not to be discussed during these interviews, but were implicit in participants' statements, and noted to significantly shape both the interviews and their reported practice in acute aphasia management.

##### 6.4.5.2.1 Locus of control

The extent to which these individual speech pathologists believe that they are in control professionally was noted to influence their acute aphasia management practice. Some speech pathologists felt disempowered to enact change in their acute aphasia management and externalised the locus of control for change: *"I don't feel like it's, it's the best practice that we should be doing, um...and I think we're all aware of it but there's, you know, told nothing we can do about it"* [Josie]. For more junior clinicians, attitudes to change were noted to have been shaped by the reaction they received from their colleagues when attempting to enact change, and also the strength of the perceived hierarchy at the departmental level: *"...I've spoken a lot about it with, with the other clinicians, um, in the department...and everyone says, 'That's great Josie ...we all would love to do that, but it just isn't the reality'"* [Josie].

Those who reported feeling a sense of self-efficacy, mastery, and confidence in their workplace were more empowered to make change in their own practice. These changes included greater advocacy for people with aphasia, increased therapeutic intervention, or the provision of additional informational and affective counselling for people with aphasia and their families. Their locus of control was internalised. This appeared to be linked to the speech pathologist's duration of clinical experience, the role in which they were working, and level of perceived professional autonomy.

##### 6.4.5.2.2 The reflective practice process

Within these interviews, the way in which these clinicians discussed the factors that influence their practice differed greatly. Some spoke predominantly about patient demographic factors – an

important part of forming a holistic picture that correlates with what we already know regarding the management of aphasia – however fuller, critical reflection gave way to less concrete responses.

Those who demonstrated deeper reflection were better equipped to situate and evaluate their practice. However, the majority of these speech pathologists required prompting and support to engage in deeper reflection of the factors that influence their practice. This was achieved through the use of additional probes within the interview (such as “*Other people have said XXX. Is that something you identify with, or not?*” and “*It seems to me that you are saying XXX? Is that right? Can you tell me some more about that?*”) designed to prompt the sharing of additional information. At times, the nature of the responses provided by these speech pathologists suggested that reflection upon their practice was something with which they had limited prior engagement. Few made explicit references to experiences of formally reflecting on their aphasia management practice. Interestingly, reduced reflection within the interviews did not correlate with years of clinical experience, but rather with the level of perceived mentoring and support reported by the clinician. One experienced speech pathologist without significant workplace support mechanisms corresponded with the primary researcher following her interview to describe the meaningfulness of reflecting on the thinking behind her clinical decisions.

## **6.5 Discussion and conclusion**

The aim of this research was to gain a greater understanding of speech pathologists’ conceptualisation, experiences, and perceptions of acute post-stroke aphasia management. As a result of undertaking this research, insight was gained into acute speech pathologists’ perception of their role in aphasia management, the tension created by competing priorities, the de-prioritisation of aphasia, their beliefs about their current aphasia management, and their understanding of facilitators for acute aphasia management. Factors influencing acute aphasia management are complex and multi-faceted, and relationships between different themes are evident. This finding is consistent with the limited prior research in this area (Ciccone et al., 2012).

Role concept was powerful in shaping the aphasia management practices of these speech pathologists. Each speech pathologist expressed opinions about how people ‘should’ behave in the role of an acute speech pathologist. Role perception was noted to be personally and social mediated, influenced both by the participant’s personal clinical experiences and the cultural expectations of the speech pathologist. Consistent with previous research in the health professions (Webb, Fawns, & Harré, 2009), role perception for the participants in this study is reported to be dynamic rather

than static (Schein, 1978), beginning to form during entry-level professional education and evolving over time.

Culture, the medium through which people's understanding of work practices, attitudes and behaviour are learned and shaped (Wolcott, 1988), was noted to play a significant role in the formation of role identity. The construct of "being an acute speech pathologist" was strong, as was a desire to "fit" with others bearing the same title. This sense of solidarity has the potential to act as an inspiration for speech pathologists to implement alternative service delivery models. While there is some merit in this, there is also the concern that poor practice may be perpetuated and the scope for improved practice limited by placing restrictions on speech pathologists' beliefs about their role in aphasia management. This concern is supported by Ratner's (2000) belief that an individualistic view of cultural agency may serve to restrict the expression of views contrary to the dominant culture, and has been illustrated in the allied health literature (Richardson, 1999). A clear distinction was drawn between the roles of acute and sub-acute speech pathologists. This role distinction is deeply embedded and shapes clinical behaviour, although its genesis was not determined. Whether this differentiation is necessary or a cultural by-product is unclear, although it is likely that improved collaboration between speech pathologists in the acute and sub-acute sectors could facilitate improved management for people with aphasia. This role differentiation may in part reflect acute clinicians' confidence in their own aphasia management skills. Given that the majority of these speech pathologists were undertaking multiple roles and aphasia management was de-prioritised, acute aphasia management skill attrition is a distinct possibility. However, most speech pathologists did not acknowledge a reduced skill level. This may be the result of skill level not being perceived as an issue by these participants. Alternatively, one may consider that this protects the speech pathologist from placing herself in a professionally vulnerable position. It may also be suggested that if shortfalls are noted in ones' own performance, the onus to make change lies with that person, whereas if the deficit is environmental there may be less personal responsibility taken for creating change.

There was a sense that the role of the acute speech pathologist had been shaken by the profession taking on the management of dysphagia. While this change occurred some three decades ago, there was a belief that the implications of this change were greater than had been anticipated. Some articulated a need to protect their role in communication management, while others suggested a significantly reduced scope of aphasia practice in the acute hospital setting was acceptable. This suggests that a challenge to the role of the acute speech pathologist in aphasia management still

exists. It may be that the profession's perceived power within the acute hospital setting was enhanced through its role in dysphagia management, and this power is, in itself, reinforcing.

The participants asserted that swallowing management is prioritised over communication management. Emphasis is placed on dysphagia by acute clinicians. Prioritisation systems formalise this behaviour, and restrict clinicians' capacity to provide aphasia services aligned with best-practice recommendations. These systems were used to justify service provision patterns, including the de-prioritisation of people with aphasia, in a way that was not only supported but mandated by the departments in which they work. There was little reflection, however, on why there is a perceived dichotomy in which communication and swallowing management are in competition for a clinician's time. It may be argued that speech pathologists' role in dysphagia provides higher esteem within the medical model, in part because it is seen as a medical priority.

Within the medical model, the perception that there are no serious medical implications of communication impairment is prevalent. However, given the known implications of communication impairments upon sense of control and involvement in decision making (Parr, 2007; Tomkins et al., 2013), and the potential for medical errors, negative health outcomes, increased healthcare costs, reduced compliance with recommendations, and increased falls risk (Michaels et al., 2010; Simmons-Mackie, 2013; Sinanovic et al., 2012; Sze, Wong, Leung, & Woo, 2001; Tsur & Segal, 2010), this position that communication impairment carries no risk needs to be challenged.

Lack of time to employ evidence-based approaches to care was a recurrent theme raised by speech pathologists during the interviews consistent with other studies of health professionals within the acute care setting (e.g., Heiwe et al., 2011; Hemsley, Balandin, & Togher, 2008; Hummelvoll & Severinsson, 2001; Jette, Grover, & Keck, 2003). While the concept of time initially presented as a straightforward concept, when it was unpacked it became clear that time is not simply about hours in the day. Rather, "time" is a complex interplay between allocation of staffing, prioritisation of patients, caseload size, length of stay, competing demands for the people with aphasia's time, balancing clinical and non-clinical tasks, and the perceived intensity required to provide adequate service to people with aphasia and their families. One study found that the relegation of another marginalised group in the acute care setting – the elderly – by nurses was attributed by practitioners to "lack of time", however this was problematic in that it did not recognise the negative attitudes and knowledge deficits which contributed to service provision deficits (Higgins, Van Der Riet, Slater, & Peek, 2007). There was a sense in the interviews that being busy was worn as a badge of honour by acute speech pathologists, and that importance and value as a professional correlated

with having a lot to do. The concept of “busyness” seemed, also, to be measured in terms of the number of patients and the number of additional roles the speech pathologist had taken on, rather than patient complexity or service adequacy. Of those participants who felt they were providing adequate service to people with aphasia and their families, many reported sacrificing other tasks or personal time in order to do so. Given this, one may suggest the need to consider if unrealistic expectations, unable to be achieved by many or sustained by most, are being created. In addition, this reinforces the notion that services to people with aphasia are in some way additional, requiring extra time rather than forming part of regular working hours. While it is acknowledged that speech pathologists in the acute hospital setting deal with burgeoning caseloads and multiple roles, citing a lack of time alone as the primary barrier to aphasia management suggests relatively superficial reflection. Time may, in fact, be “a proxy for other, more complex barriers” (Heiwe et al., 2011, p. 203), and that by attributing their actions to inadequate resources speech pathologists marginal care of people with aphasia may be vindicated (Higgins et al., 2007).

The sense of dissonance reported by Rose and colleagues (2013) is strongly reinforced by the finding from these interviews. While not universal, this feeling of a mismatch between current service and best practice is important to acknowledge as negative experiences may reinforce a lack of engagement with aphasia management, with the possible outcome of professional disillusionment and attrition. Conversely, identification of this gap is an important first step in supporting change.

### *6.5.1 Clinical implications*

If, as a profession, value is placed on the management of aphasia in the acute hospital setting, then change needs to occur. While these speech pathologists, for the most part, reported that more time would be the primary facilitator to achieving evidence-based approaches to aphasia management, the data suggest that more time is not the only issue in making a change in practice. Given the power of role concept in shaping acute aphasia management, re-conceptualisation of the acute speech pathologist’s role in aphasia management, at both an individual and cultural level, is likely to be more powerful.

Regarding re-conceptualisation at an individual level, an internalised locus of control is central to any health professionals’ capacity to enact change. Interestingly of the clinicians who portrayed an internalised locus of control, most worked in demarcated roles providing services particularly to stroke and/or neurology patients. Role delineation was strongly felt to improve aphasia management processes, creating a sense of ownership, accountability, and professional autonomy. This can be



fostered by a supportive manager, and revision of current service delivery models. There was also a sense that less reflection on practice may result in less concern regarding the quality of their current practice. What is not clear, however, is whether this is a coping strategy to avoid negative feelings about current practice, or is the result of a lack of reflective capacity. Effective reflective practice requires time, something that these speech pathologists feel that they have little of. This may be exacerbated by the lack of departmental support for protected time and space to reflect on practice. Reflection may be perceived by these clinicians as just another ball to add to their juggling act. The challenge with not deeply reflecting on practice is that an element of the clinical reasoning cycle is missing (Christensen, Jones, Higgs, & Edwards, 2008; Schön, 1987). In order to create change, one must first see the need for change in their practice (Kolb, 1984). As such, it is important to find ways to facilitate the process of reflection within the clinical setting.

At a cultural level, it is important that as a profession speech pathologists reflect on how to best create a stronger “communication culture” in the acute hospital setting. The use of local opinion leaders may facilitate speech pathologists’ re-examination of their assumptions about the value and implications of communication intervention during this phase (Flodgren et al., 2011). Strength in communication practice can also be built through supportive, aphasia-specific supervision and mentoring. The psychosocial implications of aphasia need to be recognised even at this early time, as does the risk associated with having communication impairment in hospital. Consideration needs to be given to how speech pathology prioritisation systems can be modified to allow for the prioritisation of aphasia to be more closely aligned with current best practice recommendations. Easily accessible, user-friendly guidelines, such as the Australian Aphasia Rehabilitation Pathway (NHMRC Centre for Clinical Research Excellence in Aphasia Rehabilitation, 2014), have the potential to facilitate this (Giguere et al., 2012). This may also create the opportunity to utilise audit and feedback cycles, a strategy known to improve practice (Jamtvedt, Young, Kristoffersen, Thomson O'Brien, & Oxman, 2003). Given the significant emphasis these speech pathologists place on their lack of time to provide services to people with aphasia, time-effective packaged aphasia interventions may be of benefit. These packaged interventions may target areas derived from the best practice guidelines, such as communication partner training, education provision to people with aphasia and their families, and enhancing the communicative environment (NHMRC Centre for Clinical Research Excellence in Aphasia Rehabilitation, 2014). These changes may have the effect of not only improving services to people with aphasia and their families, but also decreasing the sense of dissonance for speech pathologists working in this setting.

While the discussion above differentiates changes required at an individual level with those required at a cultural level, this separation is somewhat contrived. At some level, these two concepts are interwoven in that a change in culture will make a change in the individual more likely, and a change in the individual will have an impact on culture. The reciprocal relationship organisational attitude has with both the individual and cultural factors is also acknowledged.

Whilst this research was conducted within Australia, preliminary findings presented at international conferences have resonated with clinicians practicing in other regions (e.g., Canada, Europe, USA, and UK), despite differing models of healthcare. This study is the first to provide in-depth, context specific insights into speech pathologists' perspectives of the factors that influence their aphasia management. This evidence helps to create a greater understanding of the barriers and facilitators to acute aphasia management, and the factors motivating these speech pathologists' behaviour. It also identifies beliefs that need to be challenged. This knowledge is essential in order to develop targeted KTE strategies and enable acute speech pathologists to act as agents for change in the promotion of evidence-based approaches to acute aphasia management.

## Chapter 7

# **“That doesn’t translate”: The role of evidence-based practice in disempowering speech pathologists in acute aphasia management**

### *Results: Phase One*

Understanding acute speech pathologists’ perceptions of the role of evidence-based practice in their aphasia management

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*This study is inserted as accepted for publication, with the exception of minor terminology and formatting changes to maintain consistency throughout the thesis.*

## 7.1 Abstract

*Background:* An evidence-practice gap has been identified in current acute aphasia management practice, with the provision of services to people with aphasia in the acute hospital widely considered in the literature to be inconsistent with best-practice recommendations. The reasons for this evidence-practice gap are unclear; however, speech pathologists practising in this setting have articulated a sense of dissonance regarding their limited service provision to this population. A clearer understanding of why this evidence-practice gap exists is essential in order to support and promote evidence-based approaches to the care of people with aphasia in acute care settings.

*Aims:* This study aimed to provide an understanding of speech pathologists' conceptualisation of evidence-based practice for acute post-stroke aphasia, and its implementation.

*Methods & Procedures:* This study adopted a phenomenological approach, underpinned by a social constructivist paradigm. In-depth interviews conducted with fourteen Australian speech pathologists recruited using a purposive sampling technique were included in the analysis. An inductive thematic analysis of the data was undertaken.

*Outcomes & Results:* A single, overarching theme was identified in the data. Speech pathologists demonstrated a sense of disempowerment as a result of their relationship with evidence-based practice for acute aphasia management. Three sub-themes contributed to this theme. The first described a restricted conceptualisation of evidence-based practice. The second revealed speech pathologists' strained relationships with the research literature. The third elucidated a sense of professional unease over their perceived inability to enact evidence-based clinical recommendations, despite their desire to do so.

*Conclusions & Implications:*

Speech pathologists identified a current knowledge-practice gap in their management of aphasia in acute hospital settings. Speech pathologists place significant emphasis on the research evidence; however, their engagement with the research is limited, in part because it is perceived to lack clinical utility. A sense of professional dissonance arises from the conflict between a desire to provide best-practice and the perceived barriers to implementing evidence-based recommendations clinically, resulting in evidence-based practice becoming a disempowering concept for some.

## 7.2 What this paper adds

### *What is already known on this subject?*

Evidence-based practice is reported in the literature to be an empowering construct for clinicians in the healthcare, however little research exploring speech pathologists' understanding of evidence-based practice and its implementation in specific contexts exists.

### *What this study adds*

This study provides in-depth information about speech pathologists' conceptualisation of evidence-based practice and its application to acute post-stroke aphasia. It identifies that disempowerment has arisen from a restricted conceptualisation of evidence-based practice that focuses on the research literature, clinicians' poor relationship with the research literature, and a conflict between the desire to provide evidence-based services to people with aphasia and the overwhelming perceived barriers to achieving this. Recommendations include revising how evidence-based practice is taught at a tertiary level, strengthening the relationships between researchers and clinicians, and empowering clinicians through organisational change in order to promote evidence-based approaches to acute aphasia management.

## 7.3 Introduction

Evidence-based practice (EBP) is a powerful principle in healthcare. In recent decades, a demand that interventions be evidence-based has emerged within the healthcare professions in response to calls from healthcare organisations, policy makers, and the public to demonstrate effectiveness and efficacy in clinical practice. The impetus for this move is the belief that EBP improves patients' outcomes by providing the most effective care available.

From the beginning, EBP has garnered criticism from some regarding the potential for an overwhelming focus on experimental evidence. Opponents were concerned about a lack of clinical utility in the research findings, and the potential devaluing of clinical expertise (Bhogal, Teasell, Foley, et al., 2003). Conversely, proponents of the paradigm advocated for EBP's capacity to 'accommodate basic scientific principles, the subtleties of clinical judgement, and the patient's clinical and personal idiosyncrasies' (Greenhalgh, Howick, & Maskrey, 2014, p. 1). A return to the original definition of EBP highlights the importance of clinical decision making, defining EBP as 'the conscientious, explicit, and judicious use of the current best evidence in making decisions about the care of individual patients' (Sackett et al., 1996, p. 71). This definition clearly stipulates the need to incorporate research-based clinical evidence, clinical expertise, and patient preferences and values when making clinical decisions. Since then an additional stream of evidence – the practice context – has also been proposed given that the context of healthcare practice may have an important influence on the implementation of evidence (McCormack et al., 2002).

Recent research by Greenhalgh, Howick and Maskrey (2014) explored constraints to the uptake of EBP in the wider medical realm. They describe some of the unintended – and undesirable – consequences of this paradigm shift. These include the distortion of the evidence-based 'brand', an unmanageable volume of research evidence, a lack of clinical significance in research, and rule-based application of the research evidence. They advocate for a return to 'real' evidence-based care, in which clinicians exercise clinical judgement in order to deliver care which is individualised to the patient, suggesting a number of actions required in order for this to occur. These actions include: empowering and improving the health literacy of our patients; the honing of clinical reasoning and shared decision making in clinical training programs; the production of synthesised evidence which takes into account patient views and values and the contexts to which the evidence applies; and a broadening of the research agenda to encompass patient experiences, the process of evidence implementation, and the role of patients and healthcare workers in decision making. How, and indeed if, these challenges play out in the speech pathology profession is unknown.

Previous research into factors affecting the uptake of EBP in speech pathology has taken a profession-wide approach, irrespective of the client groups they serviced or workplace setting (O'Connor & Pettigrew, 2009; Vallino-Napoli & Reilly, 2004). The importance of examining the context specific influence of EBP on clinical practice in speech pathology has, however, been identified (Cheung, Trembath, Arciuli, & Togher, 2013). The specific context under focus here is the acute hospital setting. It is a focus because of an increased emphasis on dysphagia assessment and management (Rose et al., 2013) means that service provision to people with aphasia and their families in the acute hospital setting is now limited (Duffy et al., 2011).

The value of providing evidence-based services to people with aphasia in the acute hospital setting is becoming clearer. Emerging research suggests that the amount of very early therapy provided to people with aphasia could significantly affect communication outcomes at 4 to 5 weeks post-stroke (Godecke et al., 2013). In addition, supporting people with aphasia to be able to communicate their healthcare needs and actively participate in their care increases their level of satisfaction with healthcare services (Tomkins et al., 2013) while also potentially decreasing their risk of experiencing inappropriate or inadequate services within the hospital (Hemsley et al., 2013). These arguments provide a strong rationale for the provision of evidence-based interventions.

Current therapeutic service provision to people with aphasia in the acute hospital setting is generally accepted to be inconsistent with best practice recommendations (Duffy et al., 2011; Godecke et al., 2012; Verna et al., 2009). In addition to this, people with aphasia report being unable to consistently communicate their healthcare needs and actively participate in their care (Tomkins et al., 2013), and a lack of information regarding aphasia, stroke, and available services (Worrall, Sherratt, et al., 2010). The reasons underlying this evidence-practice gap are unclear. What is clear, however, is the feeling of unease experienced by clinicians for whom the gap between current practice and literature recommendations is evident (Rose et al., 2013).

EBP is reported in the literature to be an empowering construct for clinicians in the healthcare realm (Belden, Leafman, Nehrenz, & Miller, 2012; Matter, 2006; Patel et al., 2011). In addition, it has been reported that empowered clinicians are better able to implement evidence-based approaches to care (Melnik & Fineout-Overholt, 2011). Larkin and colleagues (2004) suggest that 'empowerment is evidenced by organizational members who are inspired and motivated to make meaningful contributions and who have the confidence that their contributions will be recognized and valued' (p.1). The notion of empowerment has been an important tenet in healthcare, with findings suggesting it is linked to job satisfaction, organisational commitment, a greater sense of autonomy,

higher perceived quality of patient care, and the promotion of critical thinking (Bonias, Bartram, Leggat, & Stanton, 2010; DeVivo, Quinn Griffin, Donahue, & Fitzpatrick, 2013; Sabiston & Spence Laschinger, 1995; Spence Laschinger, 2008). Two important theories of empowerment are noted in the healthcare literature:

- (a) *Psychological empowerment* (Spreitzer, 1996) emerges from social psychology models and focuses on the degree to which a worker experiences a sense of impact, competence, meaningfulness and choice in their work (Thomas & Velthouse, 1990).
- (b) *Structural empowerment* (Kanter, 1977), derived from management/organisational theory, explores the degree to which staff have access to resources, information, support, and learning opportunities in the work setting.

The majority of literature exploring empowerment in the healthcare setting has been conducted with nurses, with most studies focusing on the organisational rather than individual or social precursors of empowerment. While the selective definitional shaping of the construct has enabled healthcare disciplines to operationalise the concept, it has also been criticised for inadequately exploring the complex interactions that shape empowerment for professionals in the healthcare setting (Rao, 2012). The exploration of workplace power for speech pathologists has been limited. While Beecham (2004) has described her perception of the inequity that exists in the power dynamic between speech pathologists and their clients created by EBP, this stance is not supported by others who feel this inequity is not present (Reilly, 2004).

Some evidence has emerged relating to the implementation of EBP within the speech pathology profession. This research, which often favours questionnaire or survey methods of data collection, suggests that speech pathologists hold research and EBP in high regard and place value on its clinical importance (O'Connor & Pettigrew, 2009; Vallino-Napoli & Reilly, 2004). However, it has been noted by Skeat and Roddam (2010) that within the allied health professions, survey methodologies often yield 'positive perceptions of the principles of EBP' (p. 17), while 'studies that use more in-depth evaluation of...perceptions about EBP...have reported that staff expressed considerable uncertainties and reservations about how they were expected to be implementing these principles' (p. 17). The literature emerging from the field of speech pathology places an emphasis on the research literature, rather than adopting a holistic understanding of EBP as the integration of different streams of evidence (e.g. Metcalfe et al., 2001; O'Connor & Pettigrew, 2009; Vallino-Napoli & Reilly, 2004), although exceptions to this rule are also noted (e.g. Cheung et al., 2013). In addition, this research often samples across the profession rather than targeting specific clinical



settings or specialties. One concern with this is that it is based on the premise that speech pathologists hold a common understanding of EBP.

A relatively small amount of the published literature explores EBP within the context of speech pathologists' management of aphasia. De Stefanis and Tomolo (2010) provide a case study of their experiences implementing evidence-based services to people with aphasia in the acute hospital setting, reporting on the challenges they experienced including: competing priorities, inaccessible therapy resources, and varying degrees of clinical expertise and experience in aphasia management. This is supported by a review of the literature which concluded that little is known about how speech pathologists understand, integrate, and implement the different streams of evidence in EBP in the management of acute aphasia (Foster et al., 2013). In addition, we have little knowledge of the barriers and facilitators to achieving EBP in specific clinical contexts.

## **7.4 Methods**

### *7.4.1 Research purpose*

This study is part of a larger project, in which the perspectives of speech pathologists, people with aphasia and the close others of people with aphasia have been explored in relation to acute aphasia care. This paper aims to provide an understanding of speech pathologists' conceptualisation and implementation of EBP for acute post-stroke aphasia. Ethical approval for the study was obtained from the Behavioural and Social Sciences Ethical Review Committee at The University of Queensland.

### *7.4.2 Research paradigm and strategy*

Within a social constructivist paradigm, this study used interpretive phenomenology in order to obtain a deep and full understanding of acute aphasia management from multiple perspectives (Morse & Field, 1995). Consistent with this approach, this study aimed to move beyond pure description in order to seek meaning embedded in the provision of acute aphasia services and to understand how these meanings influence the choices speech pathologists make (Lopez & Willis, 2004).

Multiple arguments supported the selection of social constructivism as the most appropriate paradigm to underpin this research. A social constructivist paradigm was consistent with this research in that the research aimed to describe and understand current acute aphasia management practice by obtaining the perspectives of individuals within a naturalistic setting, rather than testing

hypotheses and manipulating variables in an experimental setting (Denzin & Lincoln, 2011). In addition, the complexity of acute aphasia management and the factors that influence it and the exploratory nature of the research supported the adoption of a social constructivist paradigm (Creswell, 2013; Richards & Morse, 2013).

### *7.4.3 Research method*

Interpretive phenomenology stems from an underlying belief that reality is co-constructed through dynamic interaction between researcher and participants (Laverly, 2003). The selection of interpretive phenomenology as the research strategy served the purpose of the research, in that it aims to develop a deep understanding from multiple perspectives about a particular phenomenon and allowed the researchers to go beyond description of the perceptions of speech pathologists to understand what might have contributed to shaping them. Secondly, interpretive phenomenology is compatible with the underlying research paradigm, social constructivism, with both recognising and acknowledging the co-construction of knowledge and the influence that personal experiences and socio-cultural factors have on this construction. Given the congruence with both the aims of the research, and the underlying social constructivist paradigm, interpretive phenomenology was considered an appropriate choice for this research. A basic principle of interpretive phenomenology is the emphasis on making sense of the human experience and engaging with the reflections people make about their lived world (Benner, 1994). Consistent with this perspective, the research endeavoured to illuminate the participants' experiences through the interaction inherent in single, semi-structured in-depth interviews. Interviews were selected as the method of data collection in this phase due to their ability to yield 'detailed, richly textured, person-centred information' (Kaufman, 1994, p. 123), which is compatible with the aim of seeking to understand speech pathologists' conceptualisations and perceptions in relation to acute aphasia management.

A topic guide was utilised (see Table 7-1). Semi-structured, in-depth qualitative interviews were conducted by the primary researcher, herself an acute speech pathologist, in a quiet room at the participants' workplaces over a thirteen month period from May 2012. Within the interviews, a variety of question forms were utilised, with a focus on the dynamics of interaction and a critical attention paid to both what was, and was not, said (Kvale, 1996). All interviews lasted between 66 and 111 minutes, and were audio-recorded and transcribed verbatim for analysis by either the primary researcher or outsourced to a transcription company. Assessment of the transcript accuracy was undertaken by the second author for ten percent of the transcripts. In addition, the transcripts were sent to participants for checking of accuracy and amendment as required. Minor amendments

were requested by one participant only, who expressed concerns that her views may identify her. Member checking of analysis was not undertaken, as the researchers contended that member checking can lead to confusion rather than confirmation, as it relies on the assumption of a ‘fixed truth’ (Liamputtong, 2009; Sandelowski, 1993). The verbatim transcripts were augmented by field notes and notes from a reflective journal kept by the primary researcher.

**Table 7-1** Topic guide

<b>Topic</b>	<b>Example questions</b>
<b>Experience working in acute aphasia management</b>	‘Tell me about your experience working with people with aphasia and their families in the acute hospital setting’
<b>Management pathway for people with acute post-stroke aphasia</b>	‘Can you describe your experience of the typical management of people with acute post-stroke aphasia and their families in your workplace?’
<b>Influences on decision making in acute post-stroke aphasia</b>	‘In your experience, is the management of people with aphasia pretty much the same for everyone or is it different for some people with aphasia compared with others?’ <ul style="list-style-type: none"> <li>▪ ‘Can you give me an example?’</li> <li>▪ ‘In your experience, what factors might influence your decision making?’</li> </ul>
<b>Barriers and facilitators to evidence-based acute post-stroke aphasia management</b>	‘In recent times, there has been discussion regarding evidence-based practice in speech pathology. Has this influenced your acute aphasia management at all? If so, how?’

*Note:* The topic guide provides a list of topics to discuss, with example questions. No fixed wording or ordering of questions was utilised. The topic guide was not provided to the participants prior to the interview.

### 7.4.3.1 Participants

Expression of interest forms were distributed through professional development events, online speech pathology forums, special interest groups, and a direct mail out to the speech pathology departments of hospitals listed by the National Stroke Foundation as having a stroke care unit or  $\geq 100$  stroke admissions a year. Expressions of interest were sought from speech pathologists who were working, or had within the last 12 months worked, in an Australian acute hospital setting with a caseload including people with acute post-stroke aphasia. Participants were restricted to those working in the Australian acute hospital setting for two reasons. Firstly, because a review of the literature found that context – represented in both the country and the clinical setting in this research – is an important variable in the implementation of EBP (see *Background* section). Secondly, because research has revealed an evidence-practice gap in the provision of aphasia services in the acute hospital setting (Foster et al., 2013). In addition, participants with recent clinical experience were required given the nature of enquiry which required reflection upon and analysis of personal experiences. Together, these reasons provide a strong rationale for the inclusion criteria, which allow for a context-specific understanding of the factors that influence speech pathology practice.

Of the thirty-six speech pathologists who expressed interest in participating in this research, fifteen speech pathologists were selected using a purposive maximum variation sampling technique (Creswell, 2013). This sampling technique allowed for the selection of speech pathologists with varying levels of clinical experience, from metropolitan and non-metropolitan clinical settings, public and private sector hospitals, with and without acute stroke units. Participant characteristics are summarised in Table 7-2. One participant was excluded after recruitment as although she was based at a hospital site, her work was not in the immediate acute post-stroke phase.

**Table 7-2** Participant characteristics

<b>Variable</b>	<b>Number of participants (n=14)</b>
<b>Duration of clinical experience as a speech pathologist</b> (Range = 1.25 – 20 years; mean = 7.95 years)	
> 5 years	6
5 – 15 years	5
< 15 years	3
<b>Setting of clinical role</b>	
Metropolitan	10
Non-metropolitan	4
<b>Presence of acute stroke unit in hospital of employment</b>	
Acute stroke unit present	11*
No acute stroke unit	4*
<b>Sector of employment</b>	
Private sector	4*
Public sector	11*

\* A single participant worked across multiple work environments

#### 7.4.3.2 Data analysis

Transcript data were entered into NVivo 9 (QSR International Pty Ltd, 2010). In a process consistent with the phases of thematic analysis outlined by Braun and Clarke (2006), a process of data familiarisation was undertaken, with the primary researcher keeping a record of her initial thoughts and ideas in relation to the data. Initial codes were generated, as the researcher systematically identified and collated interesting features across the entire data set. Codes were then grouped together into tentative themes. Regular meetings between members of the research team – all speech pathologists and clinical researchers – were held to discuss themes emerging from the data analysis. Where differences in interpretation occurred, interview transcripts, memos and field notes were re-examined, and the theme under review was discussed until a point where agreement about the interpretation was reached. Modifications were made to the topic guide in order to further explore emerging themes, consistent with the iterative nature of qualitative research. These themes were then revised to ascertain fit with the data extracts, after which these preliminary themes were refined, labelled and defined.

### 7.4.3.3 *Rigour*

Throughout the research process, a range of strategies were implemented in order to ensure the credibility, transferability, dependability and confirmability of the results (Lincoln & Guba, 1985). Strategies used to establish rigour, included: (1) member checking of transcript accuracy; (2) peer checking through joint coding and regular research team discussions (all authors); (3) the use of field notes, memos, and a reflective journal to establish an audit trail of analysis; and (4) seeking feedback regarding the resonance and usefulness of the findings from researchers and clinicians following the presentation of preliminary findings at international conferences. Furthermore, the researchers employed reflexivity by actively and regularly engaging in discourse regarding their expectations and experiences, with careful attention paid to ensure that these did not unduly influence the processes of data generation and analysis. A number of additional strategies for rigour are used as part of the reporting process, including the use of illustrative verbatim quotations, comparison of the findings with existing literature (Richards & Morse, 2013), and thick description (Liamputtong, 2009).

## 7.5 Results

It is important to state that an analysis of the participants' understanding of and relationship to EBP in relation to acute aphasia management was not pre-determined by the research team, but rather was produced from the data. Overall, the interviews took a relaxed, conversational manner, supported by the primary researcher's shared clinical background with the participants. However, a noticeable shift in the dynamic of the interviews was observed when questions pertaining to EBP were raised. The primary researcher's reflective journals are littered with references to changes in pragmatics and syntax associated with this line of enquiry, including altered tone of voice, closed body language, defensive posture, reduction in the use of personal pronouns, and 'clipped' responses requiring additional probing. It was felt that this warranted further exploration.

Consistent with the underlying research strategy and paradigm, themes were derived through a process of co-construction in which the experiences and socio-cultural backgrounds of the researcher and the participants are valued. Themes were identified based on perceptions of the relative strength of the theme across the data set, rather than the frequency of information. It should be noted that where alternate perspectives were expressed by participants, these have been explored within the theme.

Analysis of the interview transcripts, with a focus on EBP, resulted in the identification of three sub-themes:

- (1) *'To me EBP means...': Speech pathologists' restricted conceptualisation of EBP;*
- (2) *'That doesn't translate': Speech pathologists' relationship with the research literature and other streams of evidence; and,*
- (3) *'[EBP] is in the back of your mind but there's nothing I can do about it': Conflict between a desire to provide optimal service to people with aphasia and the perceived barriers to implementing EBP recommendations clinically.*

Each of these sub-themes contributes to the single overarching theme: *The disempowering influence of EBP on acute aphasia management*. The theme, its sub-themes, and supportive quotes to illustrate these themes are presented in Table 7-3. Throughout the results sections, the participant's pseudonym and the letter 's' followed by a number in parentheses following a quotation provides information regarding the section, or turn, from the transcript from which this quotation is taken.

**Table 7-3**

Identified theme and sub-themes

Theme	Illustrative quotes	Sub-themes	Illustrative quotes
<b>The disempowering influence of EBP on acute aphasia management</b>	<p>'...Everyone's jumping up and down saying..."You better make sure you're applying evidence base!"' [Stella]</p> <p>'How are we supposed to help our patients if we know this is what we really should be doing and we can't get there? ...I have a very love-hate relationship [laughs] with evidence-base because of that' [Viv]</p> <p>'We all know what needs to happen, it's just can we get it done? And I think that was a really hard thing, um, first rotating into...this role...I know what all the evidence says and I, you know...but does it happen?' [Josie]</p>	<p><i>'To me EBP means...': Speech pathologists' restricted conceptualisation of EBP</i></p>	<p>'When I think of evidence-based, I do think of that...double blinded, controlled thing, and I think of the literature. That's what I think of and I automatically think evidence based, but it is, probably is a lot wider than that' [Viv]</p> <p>'I think it means...giving your patients the best opportunity for success, um, based on...things that have been proven or therapies that have been proven.' [Amy]</p> <p>'Okay, it means using the best evidence that's available in the literature to guide your practice.' [Leah]</p> <p>'...I see evidence as a really broad thing...but I think you're probably talking more about evidence that is research, um, evidence, you know, with, with s...um...you know, good, strong, ah robust, um research' [Rachael]</p> <p>'[My manager] said, "I think that people forget that they are doing it all the time". You know, it's not like you're going up to see someone with aphasia and doing, like, star jumps. She said, "You're all, you know, everything you're doing is on some kind of evidence. It may not be the evidence in the book, but it's the evidence that you've learnt over time that works for that patient". So I think that that was a really nice way to do it, to talk about it' [Stella]</p>
		<p><i>'That doesn't translate': Speech pathologists' relationship with the research literature and other streams of evidence</i></p>	<p>'I haven't been a researcher, that's not really my nature. I've never been one that's super, super, you know, loves reading journal articles and picking out bits and pieces. That's not in my nature. Um, I'd rather just be told [laughs]. So in terms of getting new evidence all the time, that's probably why I prefer to go to PDs and get that knowledge and information from others' [Viv]</p> <p>'It can be really hard to find the evidence. So whether that be actually trawling through everything to find what you're looking for, versus it's not actually there, those two are both obviously completely different things but, but still fall under that...sometimes you're looking for something in particular and you just, you just can't find it' [Ada]</p> <p>'I think evidence-base is great ...but...they don't have the patient in front of them' [Josie]</p>
		<p><i>'[EBP] is in the back of your mind but there's nothing I can do about it': Conflict between a desire to provide optimal service to people with aphasia and the perceived barriers to implementing EBP recommendations clinically</i></p>	<p>'I think, um...I've spoken a lot about it with, with the other clinicians, um, in the department and, you know, "I think this needs to happen," or, "I'd love to do this," and everyone says, "That's great Josie, you know, that you...we all would love to do that, but it just isn't the reality"' [Josie]</p> <p>'...I guess it's just an individual thing...I didn't find it very hard to make change because it was all things that I knew, so it was really just making sure I was doing them' [Celeste]</p> <p>'...So I do think there is a big gap, and I think that that gap will probably always be there. I think we can minimise it, but I think that in reality there probably will always be a gap because we can never be perfect. I don't think we can ever be perfect and I don't think that any one service can ever be perfect because of funding, and skills' [Viv]</p>

Note: Pseudonyms are used in the above table in order to preserve the confidentiality of participants.

### 7.5.1 *The disempowering influence of EBP on acute aphasia management*

Speech pathologists in this study showed a clear awareness of EBP and in some sense an attraction or desire to practise in this manner. For example, Josie said, *'it's the best practice that we should be doing'* (s42; researchers' emphasis) and Viv said, *'I know that I need to think about what's evidence-based'* (s100; researchers' emphasis). These participants, and others, suggest that EBP is an aspirational goal rather than a reality in their practice.

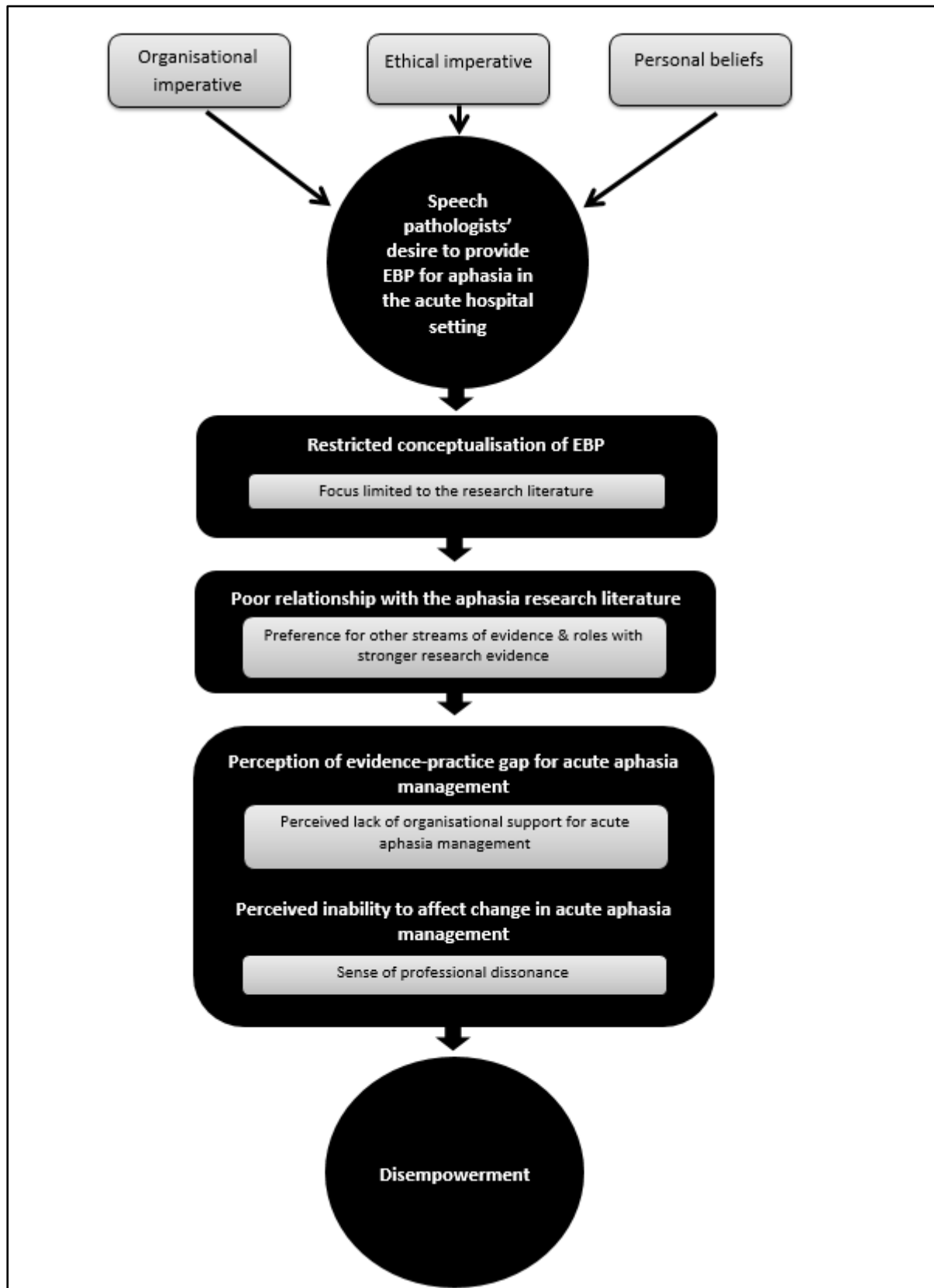
Despite identifying a motivation to provide EBP for people with aphasia, many of the participants expressed a sense of disempowerment in relation to their acute aphasia management. This disempowerment resulted from a perceived inability to meet the requirements of EBP, and therefore the perceived personal, organisational, and professional expectations of them. The sense of a lack of power is palpable in the following illustrative quotation:

*'We all know what needs to happen; it's just can we get it done? And I think that was a really hard thing ...I know what all the evidence says and I, you know...but does it happen?' [Josie, s132]*

While this sense of disempowerment was not experienced by all participants and was experienced by each clinician in differing degrees, for those who did experience it the notion of disempowerment carried significant weight. Disempowerment was most strongly felt by clinicians with a restricted concept of EBP, poor relationships with the research literature, and a perceived inability to act as an agent for change in their own acute aphasia management practice. Demographically, disempowerment was more strongly felt by less experienced clinicians, and those working either in private hospitals and/or outside of acute stroke units. Each of these sub-themes, and their contribution to the key theme, are discussed below. Figure 7-1 provides a diagrammatic representation of the interrelationships between the overarching key theme, and the sub-themes.



**Figure 7-1** EBP as a disempowering construct in acute aphasia management



### 7.5.1.1 Subtheme 1 – ‘To me EBP means...’: Speech pathologists’ restricted conceptualisation of EBP

Throughout the interviews, a broad notion of the factors underpinning their acute aphasia management practice was conveyed by the participants. It is clearly evident from the interviews that the speech pathologists who participated in this study sought evidence from a range of sources – including clinical expertise, patient views and values, and the clinical context – but they do not, for the most part, perceive them as constituting EBP due to their conceptual restriction. When the notion of EBP was introduced by the interviewer, a noticeable shift in focus away from these broader sources of evidence and honing in on the research literature was observed.

*‘When I think of evidence-based, I do think of that...double blinded, controlled thing, and I think of the literature. That’s what I think of and I automatically think evidence based, but it is, probably is a lot wider than that’ [Viv, s112].*

This illustrates a limitation in the way that the notion of EBP is represented and understood conceptually by these speech pathologists, characterised by an emphasis on the research literature rather than a broader definition which includes other streams of evidence.

One clinician identified the potential negative implications of a demarcated characterisation of EBP, saying that *‘it’s a little bit easy for us to think, well, unless we’ve read ...a clinical practice guideline or a RCT study on something, then we’re not confident that what we’re doing is correct’ [Rachael, s96]*. This was the driver of a more inclusive definition of ‘evidence’ for this participant.

This definitional restriction did not exist for all of the speech pathologists interviewed. Some reported a broader interpretation of the evidence, although there was a sense that they felt the need to defend this choice. *‘I see evidence as a really broad thing...but I think you’re probably talking more about evidence that is research, um, evidence, you know, with, with s...um...you know, good, strong, ah robust, um research’ [Rachael, s94]*. These extended constructs by participants were reported to be in response to the expressed views of managers or respected colleagues.

Given the centrality of the research literature to these speech pathologists' perception of EBP for acute aphasia management, it is important to explore in-depth their relationships with the research literature, and other streams of evidence.

#### 7.5.1.2 *Subtheme 2 – 'That doesn't translate': Speech pathologists' relationship with the research literature*

For many of the speech pathologists interviewed, an evidence-practice gap in relation to their acute aphasia management was reported. This theme emerges from the perception of some speech pathologists that research into acute aphasia management lacks utility, is not practical, and is not grounded in the reality of clinical practice. Even for those participants who perceived the concept of EBP to be central to their practice, there was hesitancy in investing too heavily in the research literature as demonstrated in one speech pathologist's statement that she *'take[s] some of [the research literature] with a grain of salt. I know that sometimes research is done for research purposes and the results cannot always be translated into clinical practice'* [Danielle, s95].

The speech pathologists who spoke about the evidence-practice gap reported a number of different reasons for the breakdown. These included: (a) a perceived paucity of literature on acute aphasia management; (b) challenges seeking, appraising and implementing recommendations from the research literature; (c) a perceived lack of clinical utility within the acute aphasia research; and, (d) personal and departmental attitudes to seeking the research literature.

##### *(a) Perceived paucity of relevant literature*

Participants reported a perceived relative paucity of research literature related to acute aphasia management. Amy reports that *'we found it really hard to find papers [laughs] um, talking about acute aphasia management'* [Amy, 160]. The perception of the equivocal nature of the research findings into acute aphasia management meant that speech pathologists lacked confidence that the research alone was sufficient to drive their practice.

*'Even now there, you know, is not enough strong evidence to say either way whether our intervention in that acute setting, um, is...you know, can, can guide our practice, um, with any real certainty'* [Rachael, s96].

*(b) Challenges seeking, appraising and implementing recommendations from the research literature*

Poor information literacy stood in the way of some participants accessing the research literature. Some of the participants felt they lacked the required research seeking skills, and once research literature was identified, comprehending the recommendations of the research literature was also considered to be difficult by some, as *'sometimes I find the actual written literature stuff confusing'* [Ada, s122].

Perhaps in response to this, many clinicians reported a preference for collated, pre-appraised sources of research evidence, with much weight given to the Australian National Stroke Foundation guidelines (National Stroke Foundation, 2010) and Cochrane reviews (Brady et al., 2012; Kelly, Brady, & Enderby, 2010).

*(c) Perceived lack of clinical utility within the research*

A striking feature of the interviews was the participants' perception that the research literature appeared to lack clinical relevance and utility. The assumption that research evidence should always be directly applicable and useful to clinical practice clearly underpinned this belief. A clear distinction was drawn by the participants between those in the research world and those in the clinical realm, and a sense that research was ineffective in capturing the 'real world' components of clinical practice in the acute hospital setting was conveyed.

*'Sometimes my view on evidence-base is...that's okay for you in a research way, where you've got all the time in the world to spend with your patient, but that's not how it, like that doesn't translate'* [Viv, s108]

*(d) Personal and departmental attitudes to seeking the research literature*

Speech pathologist's motivation to seek the literature was also noted to be variable. While some reported that they *'like to read the evidence, I like to read the literature and I like, I certainly seek it out and I, I look for it'* [Rachael, s96], others did not feel the same imperative. For some this is because they feel that their current practice does not require modification: *'We do, we do what works and what we can do in the time, but it's not as if I've - I read something - I seek it out to read and then want to apply that'* [Karen, s176]. For others, the expectation that any consultation of the literature be undertaken outside of work

hours results in this not being pursued. This variability lacks a clear explanation, but may be attributable to individuals' perceptions of utility of the research literature.

Interestingly, some clinicians sought to create a distinction between their relationship with aphasia research literature and dysphagia research literature. The research literature for dysphagia was reported to be more concrete and prescriptive, *'because...it's neuromuscular or it's physiology. It's, it's straightforward. Whereas aphasia is, has so many variables for so many, for each individual...maybe that's why there's no...good [evidence based] case for, um, aphasia...or why I can't quote it'* [Karen, s194].

### 7.5.1.3 Subtheme 3 – *'[EBP] is in the back of your mind, but there's nothing I can do about it': Conflict between a desire to provide optimal service to people with aphasia and the perceived barriers to implementing EBP recommendations clinically*

The participants each articulated a desire to provide optimal service to the people with aphasia under their care. They suggested that the obligation to provide evidence-based approaches to care was (a) personal; (b) organisational; and (c) ethical.

#### *(a) Personal imperative*

The speech pathologists who participated in this study all presented as passionate clinicians, committed to their roles and optimising service provision to their patients. For many, it was important for them to re-iterate that they were doing the best that they could clinically, with repetitive use of statements such as *'I'm doing...the best that I possibly can do with those patients'* [Stella], *'we tried to do our best'* [Rachael], and *'we all do the best we can'* [Josie] throughout the interview transcripts.

#### *(b) Organisational imperative*

EBP was presented by the participants as being an organisational construct, a *'buzz word'* lacking relevance to the *'worker bee[s]'* [Ada, s114]. An organisational pressure to demonstrate evidence-based clinical practice was noted, with a perception that *'everyone's jumping up and down saying... "You better make sure you're applying evidence base"'* [Stella, s162]. As such, there was a sense of this concept being imposed, rather than being of direct value to clinicians, patients and their families. The lack of a sense of ownership may be

a contributing factor in the disconnection that speech pathologists feel with the notion of EBP.

*(c) Ethical imperative*

In addition to this, one clinician identified an ethical imperative to provide evidence-based approaches to her clients.

*'...All of us want to be evidence-based practice...practitioners... We've all got that, um, ethical sort of background, um, and, you know, we know that that's what we should be doing.'* [Rachael, s98]

Despite this multifaceted motivation to provide EBP, speech pathologists identified a gap in their current aphasia practice and barriers which they perceived as preventing them from achieving this goal.

*'I don't feel like it's...best practice' – Perception of an evidence-practice gap in acute aphasia management and the associated dissonance for clinicians:* Many of the clinicians identified the presence of an evidence-practice gap in their acute aphasia management practice.

Identification of an evidence-practice gap may be considered to be an essential step in improving acute aphasia management services. However, for those speech pathologists experiencing a sense of not being able to meet their perception of the requirements of EBP, a professional tension is evident.

*'How are we supposed to help our patients if we know this is what we really should be doing and we can't get there? We need to sort of find a...a middle ground. So, um, I have a very love-hate relationship [laughs] with evidence-base because of that.'* [Viv, s108]

This sense of dissonance is loud and powerful, especially when considering the potential implications on workplace satisfaction, the potential for burnout, and attrition for acute speech pathologists.

*Perceived barriers to achieving evidence-based acute aphasia management:* A number of barriers were perceived to be preventing clinicians from being able to attain evidence-based practice. The majority of these were organisational barriers, related to the resources, staffing, and time these speech pathologists perceived to be required to achieve EBP when working with people with aphasia in the acute hospital setting.

*'I think it, it means if we had the resources, if we had the staff and if we had the time, we could provide evidence-based. I think we aim to, um...we, we aim to, but I don't think we always get there.'* [Josie, s122]

In addition, the application of EBP for people with aphasia was reported to at times be hampered by the organisational requirement to prioritise other patients, including new admissions and those with dysphagia, meaning that *'[people with aphasia] are pretty much always de-prioritised'* [Amy, s50].

One less experienced clinician also suggested that she would feel more able to implement EBP if she had easier access to clinical supervision and mentoring, *'...even just, um, somebody that you can, um, talk to about it...discussing a, a patient, um, you know. [But] it's just me'* [Josie, s126]. This desire is consistent with speech pathologists expressed focus on the clinical expertise stream of evidence, and their preference for social learning environments.

#### 7.5.1.3.1 Perceived facilitators to achieving evidence-based acute aphasia management

Despite reported difficulties enacting change, speech pathologists were able to identify potential facilitators to achieving EBP. Potential facilitators fell into the categories of: organisational support for EBP; strengthening relationships between researchers and clinicians; standardising the pathway for aphasia management in the acute care setting; and, methods of evaluating performance.

##### *(a) Organisational support for EBP*

The speech pathologists interviewed suggested that a number of these barriers could be overcome through the provision of organisational support for EBP. There was a strong sense amongst the speech pathologists interviewed that EBP is time consuming, both in its planning and implementation. As such, a lack of time was perceived to have the potential to act as a significant barrier to EBP implementation. This links to both the limited length of stay of the acute hospital setting, competing demands for the speech pathologists' time, and the lack of protected time to seek and appraise the literature.

Speech pathologists spoke about organisational support for EBP through education. Support for speech pathologists to attend groups, either internal or external to the organisation, which provide support for and promotion of the notion of EBP were reported to be beneficial. They provided attendees with *'a lot of experience in collecting the evidence, and then trying to interpret it and implement it'* [Leah, s139]. One speech pathologist reported that an *'evidence-based champion for the department'* [Stella, s158] was appointed within their local practice environment, but the importance of this role was downplayed by this participant as *'just a fancy title really'* and *'a pretty cruisy job'*.

The responsibility for driving EBP within the department was attributed to the manager (*'I think 'cause she's heavily involved then [EBP]'s driven by her'* [Stella, s162]). In addition, speech pathologists who perceived their managers to be supportive and trusting of the management felt empowered to make changes towards EBP within their own practice.

*(b) Strengthening relationships between research organisations and clinicians*

One participant reported that aphasia-specific research organisations were important to refocus the profession on aphasia management, raising awareness of aphasia management within the profession by *'bringing [acute aphasia management] back to the fore'* [Leah, s157]. Research organisations also provided the opportunity for clinicians *'to be guided on what we should be doing'* [Karen, s196], as they were perceived to be *'doing the reading for us, um, and passing it on, communicating with us, letting us know what's going on - so that we're not reinventing the wheel as clinicians on the coalface'* [Rachael, s98]. An implicit trust in these organisations and their recommendations was evident. This trust was reported to be strengthened when specific measures were taken by the research organisation to strengthen the mutual relationship, such as regular email communication, site visits, and involving the speech pathologists in research activities.

*(c) Standardising the pathway for aphasia management in the acute care setting*

Given speech pathologists lack of direct interaction with the source research literature, as discussed above, it is perhaps not surprising that they expressed within these interviews a preference for compiled sources of literature, and the provision of clear, concise recommendations. Some participants spoke of their belief that as a result of being so time-poor, a standardised pathway would be beneficial in making speech pathologists use of time more efficient.



*'Because we are so time-poor – and that's not gonna improve much in the current climate – we do need something that's structured and helps us guide through managing the patient optimally. Because we're trying to do that anyway, but with all these competing demands on our time, it's difficult.'* [Leah, s167]

(d) *'[Auditing] is a good way to check what people have been doing and work out what we could do better'* –Auditing as a tool for change in acute stroke and aphasia management  
Speech pathologists recognised the need to evaluate performance as a means to improving the service provided to people with aphasia and their families in the acute hospital setting. A familiarity with the National Stroke Foundation (NSF) audit program was reported, and as such the concept of audit and feedback as a mechanism for service improvement in stroke care was not novel. Auditing was reported to be a successful facilitator of change management when it was interactive (*'[Staff member from the NSF] came in, um, and talked to us about our, um, recent, our last stroke audit, um, results here at the [name of hospital]'* [Stella, s54]), and identified specific goals regarding the improvement of service delivery by allowing organisations to *'check what people have been doing and work out what we could do better'* [Amy, s154]. In addition to creating service delivery goals, other potential outcomes of an audit-feedback cycle in acute aphasia management were identified by these participants as influencing the content of local guidelines for management and minimum documentation standards, while also improving the consistency, and therefore equity, of service provided to people with aphasia.

Challenges relating to the process of auditing were identified, however. These included that speech pathologists may change their clinical behaviours during an audit period in order to demonstrate the requirements of the guideline (*'I guess when people know that there's an audit...people might change the way they're doing things to meet the guidelines'* [Amy, s174]). In addition, it was recognised that for long-term, sustainable change in clinical behaviours to be achieved, the aims of the audit need to be compatible with the speech pathologist's perceived worthiness of the clinical activity. A sense of separation between the clinicians and the auditing body, and the alignment of their goals, may also limit the effectiveness of auditing as a mechanism to promote clinical change.

*'I guess it depends on, yeah, what you think of what they're trying to get out of it. So, um, if you don't care too much about it, then people will just change it for the audit period...you'll just change it for a short amount of time then go back to what you*

*prefer to do.'* [Amy, s176-178]

#### 7.5.1.3.2 'There's nothing I can do about it' - Attitudes to change in aphasia service provision

In order to enact change in response to the premise of EBP, an understanding of acute speech pathologists' attitudes to change in aphasia service provision requires exploration. Within this study, a range of attitudes to change were reported. Some speech pathologists felt disempowered to enact change on behalf of people with aphasia, and externalised the locus of control for change. *'I don't feel like it's, it's the best practice that we should be doing, um...and I think we're all aware of it but there's, you know, told nothing we can do about it'* [Josie, s42].

In order for a change in practice to be deemed appropriate, the goal of the change had to be consistent with the priorities of the acute hospital setting. When discussing the intensity of aphasia intervention in the acute hospital setting, Stella suggested that *'practicality, in that the hospital's always talking about risk and, you know, how to reduce the risks, and it's the way the hospital works – that's not, I don't think that that's gonna change'* [Stella, s136].

For more junior clinicians, attitudes to change may have been shaped by the reaction they received from their colleagues when a desire to create change was voiced. Josie reported disengaging with the notion of creating change when she was told by senior staff *'...we all would love to do that, but it just isn't the reality'* [Josie, s92], which she reported has *'been a bit hard, 'cause you know, we wanna help people. It's why we do the job! [laughs]'* [Josie, s132].

Those who felt a sense of mastery, control and confidence in their workplace, however, were more able to seek opportunities and avenues for change towards evidence-based approaches. This sense of control appears to be linked to the speech pathologist's years of clinical experience, and also the role in which they were working.

*'...Because I guess it's just an individual thing I didn't find it very hard to make change because it was all things that I knew, so it was really just making sure I was doing them.'* [Celeste, s56]

## 7.6 Discussion

### 7.6.1 *Why is the experience of disempowerment important in relation to EBP for acute aphasia management?*

The findings from this research do not support the notion of EBP as an empowering concept for speech pathologists working in acute aphasia management. The use of a qualitative methodology and context-specific exploration lend strength to this finding. The notion of disempowerment is a powerful one for speech pathologists working with people with aphasia, and it is perhaps not drawing too long a bow to note the parallels between the experiences of people with aphasia as being voiceless in the acute hospital setting and some speech pathologists' experience in being powerless in their capacity to effect change for this population.

Understanding the relationship between EBP and empowerment for clinicians working in acute aphasia management is important. This is particularly true in a healthcare environment which ostensibly values staff health and well-being, and is focused on the provision of patient-centred services. The notion of EBP as a disempowering concept with speech pathology is one that, while raised theoretically in the literature (Beecham, 2004), has to date had no evidentiary support. Staff empowerment has been linked to job satisfaction, organisational commitment, and a greater sense of autonomy for healthcare workers (Sabiston & Spence Laschinger, 1995; Spence Laschinger, 2008; Spence Laschinger, Almost, & Tuer-Hodes, 2003), and has been correlated with both a higher perceived quality of patient care (Bonias et al., 2010; Spence Laschinger, 2008) and a facilitation of empowerment (Kuokkanen & Leino-Kilpi, 2000; Spence Laschinger, Gilbert, Smith, & Leslie, 2010) for patients. The potential implications that these influences have on professional identity, staff well-being, and workplace recruitment and retention cannot be ignored. Additionally, the importance of this when working with people with aphasia may be considered to be heightened given this is a patient population who may already feel disengaged and excluded from their own healthcare decision making (Worrall, Sherratt, et al., 2010). But rather than simply making the assumption that EBP is by its very nature disempowering, it is important to further explore why this concept is perceived to have a potentially disempowering effect for some speech pathologists in this context.

### *7.6.2 Why do speech pathologists feel disempowered in relation to EBP for acute aphasia management?*

Much of the previous speech pathology research into EBP assumes an underlying and consistent knowledge of what constitutes EBP among the participants. It is evident in this research, however, that many of the speech pathology participants have a narrow understanding of EBP with a strong focus on the research literature. Additionally, they appear to give little, if any, weight to other streams of evidence. This definitional dilemma is not new, with debates surrounding the definition of EBP occurring since its inception as a concept in healthcare. However, the definitional dilemma carries a powerful message as participants' relationships with and reactions to EBP are likely to be based on this restricted conceptualisation. It is, therefore, not surprising that speech pathologists feel disengaged with EBP for acute aphasia management if their belief is that in order to be considered an evidence-based practitioner, they must replicate the research literature in the clinical setting.

The participants in this study suggested some possible interventions across both psychological and structural domains which may promote speech pathologists' empowerment in the management of acute aphasia. These suggested solutions warrant further investigation. Through this exploration, the profession has the potential to enhance acute speech pathologists' perceptions of their self-efficacy and self-determination in relation to aphasia management, while also boosting the perceived meaningfulness and impact of their role in acute aphasia management for people with aphasia, their families, and the healthcare system alike.

### *7.6.3 How can the empowerment of speech pathologists for EBP in acute aphasia management be supported?*

The clinicians in this study who experienced disempowerment in response to EBP for acute aphasia management experienced this at both a psychological and a structural empowerment level. As such, suggested interventions to promote empowerment are across both domains.

The participants in this study most readily identified the influence that increased resources – time and staffing – would have on their capacity to implement evidence-based approaches to aphasia management. However, it remains unclear to what extent these additional resources

would be of benefit. As it is unlikely that intervention targeting this area alone is likely to be successful, a range of additional potential interventions are required.

Firstly, the cultures of the hospital and of the profession need to be considered. While healthcare settings promote the uptake of EBP, some practitioners regard EBP as a regulatory mandate, rather than an opportunity to advance clinical practice (Belden et al., 2012; Olade, 2004). This belief was supported by the opinions of some participants in this research project. Any interventions to improve acute aphasia management must, therefore, be undertaken with the determination to support speech pathologists in addressing service challenges rather than imposing solutions on them (Ham, 2014). This may be achieved by leaders actively devolving decision-making and accountability to frontline clinicians (Ham, 2014), lending credence to the notion that strong leadership plays a significant role in creating a context which supports EBP in healthcare.

A greater cultural understanding of the value of communication needs to be established. The current role diffusion for speech pathologists results in the majority of time and resources being allocated to dysphagia management (Lawrie, 1996; Rose et al., 2013). With a growing body of literature suggesting the potential importance of speech pathology intervention for people with communication impairments in terms of impairment (Godecke et al., 2013), patient satisfaction and involvement in healthcare decision-making (Tomkins et al., 2013), and risk management (Hemsley et al., 2013), an opportunity presents itself for the profession to reassert itself as the communication experts.

In order for the profession to regain this notion of expertise, however, self-efficacy must first be established. It may be argued that the focus on swallowing has resulted in de-skilling of some speech pathologists in aphasia management. The cyclic nature of low self-efficacy (Thomas & Velthouse, 1990) may be reinforced in this context by organisational guidelines which promote the de-prioritisation of aphasia management. Encouraging a building of competence in acute aphasia management through clinical exposure, mentoring and supervision, reflective practice, and ongoing professional development all have the potential to improve self-efficacy. This may result in speech pathologists initiating behaviours, increasing effort, and demonstrating persistence in the face of obstacles to acute aphasia management (Thomas & Velthouse, 1990).

A clinician's perception of both the impact and meaningfulness of acute aphasia management may be supported by a greater awareness of the perspectives and experiences of people with aphasia and their families. Integration of patient needs and values is central to the notion of EBP (Pearson, 2010). While research is beginning to explore the experiences of people with aphasia (e.g., Tomkins et al., 2013; Worrall, Sherratt, et al., 2010), this may be supported by encouraging experience with people with aphasia across the continuum of care or by strengthening relationships between clinicians in the acute, sub-acute and community sectors.

Finally, the mechanisms for knowledge transfer and exchange require revision. The speech pathologists in this study clearly articulated a preference for social, interactive learning styles. Where written research literature was sought, it was most often in the form of compiled literature sources, such as systematic reviews or, more commonly, clinical practice guidelines. This is consistent with previous research exploring relationships with the research literature for speech pathologists (Guo et al., 2008; Nail-Chiwetalu & Bernstein Ratner, 2007; Vallino-Napoli & Reilly, 2004). Participants in this study keenly supported the notion of a standardised, evidence-supported care pathway for acute aphasia management. Consistent with knowledge transfer and exchange models (Graham et al., 2006), each stage of the knowledge creation process - design, implementation, and evaluation – should be tailored to the needs of the potential users (Hadely, Power, & O'Halloran, 2014; Miao et al., 2015). Consistent with previous studies, participants in this study also expressed that any pathway designed should include the capacity to audit performance (Hadely et al., 2014; Miao et al., 2015), however given the desire to devolve accountability to clinicians it is perhaps prudent to ensure that ownership of the audit-feedback cycle lies with clinicians.

Further research examining the relative importance of structural and psychological empowerment in influencing speech pathologists' uptake of evidence-based acute aphasia management would be beneficial. In addition, context-specific intervention studies may strengthen the profession's understanding of the relative benefit of different strategies to increase empowerment and EBP uptake within this setting.

By providing interventions such as those discussed above, the profession has the potential to enhance acute speech pathologists' perceptions of their self-efficacy and self-determination in relation to aphasia management, while also boosting the perceived meaningfulness and

impact of their role in acute aphasia management for people with aphasia, their families, and the healthcare system alike.

#### *7.6.4 Study strengths and limitations*

The strength of this study lies in its context-specific, qualitative design. The use of an interpretive phenomenological research strategy granted the researchers an opportunity to develop an in-depth understanding of these speech pathologists' perceptions of evidence-based practice and its influence on acute aphasia management. Methodologically, strategies were implemented during data collection, analysis, and reporting which enhanced the rigour of the research. The transferability of results was supported by the use of a maximum variation sampling across multiple parameters.

One potential limitation of this research is that it was undertaken exclusively with Australian speech pathologists. While the preliminary findings presented at international conferences have resonated with clinicians practicing in other regions (e.g. Canada, USA, and UK), differing models of tertiary education and healthcare are likely to influence the specific experiences of clinicians. Further research examining the relative importance of structural and psychological empowerment in influencing speech pathologists' uptake of evidence-based acute aphasia management would be beneficial. In addition, context-specific intervention studies may strengthen the profession's understanding of the relative benefit of different strategies to increase empowerment and EBP uptake within this setting.

In contrast to traditional scientific methods which seek research that is 'unbiased' and value-free (Klenke, 2008), the axiology underlying social constructivism requires that individual values are honoured (Creswell, 2013). Putting aside pre-understandings (or 'bracketing') is not consistent with the chosen research paradigm and strategy, which rely on a co-construction of meaning (Laverty, 2003). As such, it is entirely conceivable that other researchers may have generated alternative findings in response to the data. Specifically, the authors' backgrounds as both clinical and research speech pathologists – and in particular the primary researcher's experience as an acute clinician – engendered certain expectations regarding the experiences of acute aphasia management and the influence of EBP on practice. In recognition of this, the researchers explicitly identified their background and assumptions within the research team, engaging in the reflexive process of self-questioning and self-

understanding and remaining cognisant of the ‘cultural, political, social, linguistic, and ideological origins of one’s own perspective and voice as well as the perspective and voices of those one interviews’ (Patton, 2002, p. 65). As a means of offsetting the expectations held by the research team, a thorough review of the literature from multiple perspectives – including those from outside the profession of speech pathology – was undertaken. In addition, the researchers ensured that findings were grounded in the data through the use of verbatim quotations and *in vivo* coding. Of note, while the research team held the expectation that the influence of EBP on aphasia management in the hospital setting would be somewhat restricted, the extent to which the participants felt disengaged from EBP surpassed assumptions. It is possible that, rather than being a bias, the primary researcher’s professional background may be perceived to hold value in terms of trust and relationship building, achieved through a perception of ‘sameness’, within the interview process.

## **7.7 Conclusion**

The findings of this study demonstrate that speech pathologists hold a restricted conceptualisation of EBP, with a strong focus on the research literature and a lack of emphasis on other streams of evidence. This focus is made more concerning by their disengagement with the acute aphasia management research literature. Given the current knowledge-practice gap perceived by these clinicians in acute aphasia management combined with the experience of organisational emphasis on EBP, EBP has become a disempowering notion for some speech pathologists.

However, structural and psychological empowerment for speech pathologists both have the potential to be increased by interventions targeting the pressing challenges in acute aphasia management. Through this, the profession has the opportunity to meet the aims of decreasing the sense of dissonance experienced by speech pathologists, improving the experience for people with aphasia, and improving patient outcomes through evidence-based acute aphasia management.



## **Chapter 8**

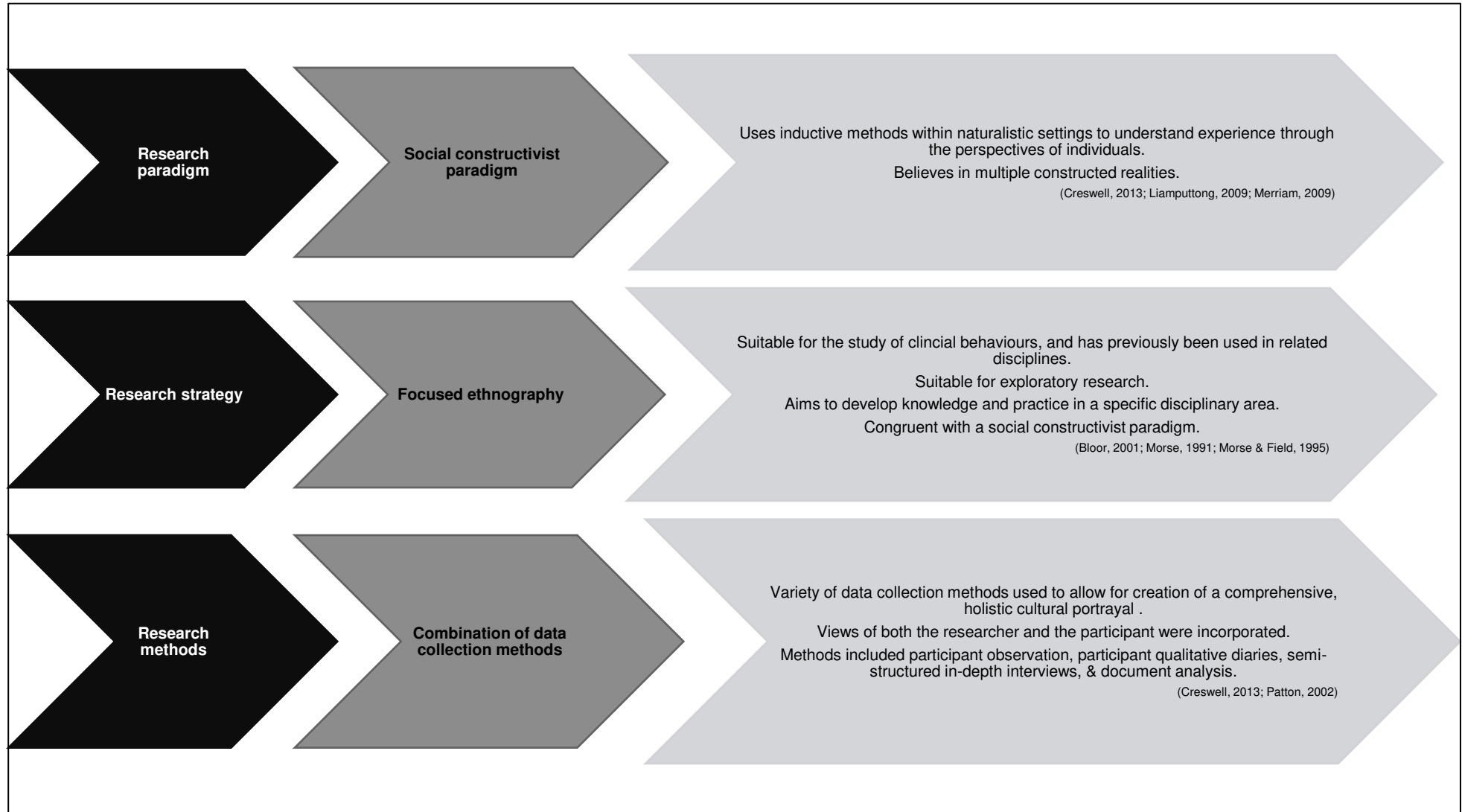
### **Methods: Phase 2**

*A focused ethnography of the speech pathology management of aphasia in an acute hospital setting, including a speech pathologist, people with aphasia, and their close others as key informants*

## 8.1 Introduction

The method for Phase Two is outlined in this section. Figure 8-1 (below) provides an overview of the approach. In addition to providing an in-depth description of the methods—including a statement of aims, description of key informants, and an account of the data collection and analysis approach – this chapter provides a discussion of the strategies employed to enhance the methodological rigour of the study. An ethical reflection is also included. As with Phase One, while summaries of this information are included in each of the individual published chapters, this chapter is intended to deliver sufficient detail to allow for an appraisal of the quality and rigour of the study by detailing the underlying decision making processes (Patton, 2002).

**Figure 8-1** Research approach: Phase Two



## 8.2 Research aims

Within the overall aim of gaining a greater understanding of the factors influencing the management of aphasia in the acute hospital setting, Phase Two aimed to create a cultural picture of the speech pathology management of aphasia in a single acute hospital, in which the views of the researcher and key informants were integrated. Specifically, Phase Two aimed to build understanding of:

- The culture of speech pathology management of aphasia management in a single acute hospital setting;
- The current pathway of speech pathology management for aphasia in a single acute hospital setting;
- The factors involved in the management decisions of a speech pathologist working with people with acute post-stroke aphasia in a single acute hospital setting; and,
- The experiences of people with post-stroke aphasia, their close others, and speech pathologists regarding speech pathology management in a single acute hospital setting.

## 8.3 Context and key informants

As discussed in Chapter 3, focused ethnographies differ from classical ethnographies (see Table 3-1). In contrast to classical (or anthropological) ethnography, key informants within a focused ethnography “may not be connected by the same culture (in its broadest sense), but share behavioural norms and a common language” (Morse & Field, 1995, p. 154) as a result of shared healthcare experiences, either as professional or a user of healthcare services.

Given that limited previous research aimed at understanding the speech pathology management of aphasia the acute hospital setting exists, combined with the limited capacity and resources of this project, the decision was taken to focus on the understanding the characteristics of the speech pathology management (the *focus*) of aphasia in a single acute hospital setting (the *discrete population*). Key informants, therefore, were: (1) a single speech pathologist, (2) three people with aphasia, and (3) three close others of the key informants

with aphasia. All key informants had with lived experience of aphasia management in a single acute stroke unit. This narrow focus provided the benefit of an exploration of a single particular environment in depth; however, the limitations of this approach are discussed in Section 10.3.

Ethnographies sample contexts and people. As such, both the context in which this research was undertaken and the key informants are described below.

### *8.3.1 Research context: the acute stroke unit*

In order to create a comprehensive cultural portrait, observation of contextual details was required. I undertook site, or context, selection based on the following criteria, driven by the scope and aims of the project:

- a) the presence of a speech pathologist willing to participate in the research who *did not* participate in Phase One of this research project to prevent the priming of responses and behaviours;
- b) the presence of an acute stroke unit due to the national recommendation that people be cared for in acute stroke units following hospital admission with stroke;
- c) greater than 100 acute stroke admissions per year to ensure the likelihood of admissions of people with aphasia during the data collection phase; and,
- d) within a 100km radius of the primary researcher's residence.

An expression of interest process was used to facilitate site selection. Expression of interest forms for both Phases One and Two were distributed via a range of communication avenues known to reach Australian speech pathologists working in acute hospital settings. Twenty one speech pathologists across 18 different health services expressed interest in participating in Phase Two of this research project. Of those speech pathologists, fifteen took part in interviews for Phase One (although one was later excluded) precluding them from involvement in Phase Two due to the potential for their involvement in the first phase to 'prime' their behaviour in the second phase. Given the relative time commitment required for participation in Phase Two, following submission of an expression of interest form, a meeting was organised with the potential speech pathologist key informants and their managers and/or senior speech pathologists to discuss the project in detail and outline the commitment to

participation in this phase. It was highlighted during this meeting that this research aimed to observe regular clinical practice, with no changes to clinical services required or desired in response to the researcher being present.

Three acute stroke units were ultimately selected as sites for participation in Phase Two. However, due to the extended review times experienced following submissions to the Human Research Ethics Committees of two of these sites and the limited capacity and resources of this project, a single site was recruited. As my aim was to provide a cultural portrait of aphasia management in the acute hospital setting, the decision to use a single acute stroke unit – consistent with Muecke’s (1994) requirement for a “fairly discrete community” (p. 199) within focused ethnographies – was deemed appropriate.

As such, Phase Two was conducted in the neurology division of a single, outer metropolitan Australian hospital. The public hospital is a major provider of acute secondary (e.g., health services, including acute care, provided by health professionals who do not have first contact with patients) and tertiary (e.g., highly specialised health care, often including particularly complex medical or surgical procedures) hospital services within its geographical region. The hospital hosts an eight bed Acute Stroke Unit, staffed by a dedicated multidisciplinary care team. I was a former staff member within this unit (some years prior to data collection) which facilitated the process of ‘gaining entry’ to the site.

### ***8.3.2 Sampling key informants: Identifying triads***

Originally conceptualised in the nursing field, focused ethnographies gather data on a small number of key informants with experience relative to the research question through selected episodes of data collection. In order to inform a comprehensive cultural portrait, three separate key informant groups were recruited for Phase Two. Three ‘triads’ acted as key informants for this research. Each triad consisted of: one speech pathologist; one person with aphasia; and one/two family members of the person with aphasia. Each key informant group required variances in the recruitment approach, inclusion and exclusion criteria, and sampling

strategy. These are outlined below. A summary of the characteristics of each of the key informants in each triad is provided in Table 8-1. Each key informant was assigned a pseudonym to protect their identity during the reporting of the study.

**Table 8-1** Key informants: Phase Two

Triad and period of data generation	Role	Pseudonym	Description
<b>TRIAD 1</b>  05/02/2013 – 13/02/2013  <i>Total observation period:</i> 234min across 1 day  <i>Total interview period:</i> 117min; 3 interviews	<i>Speech pathologist</i>	Caroline	<ul style="list-style-type: none"> <li>▪ Grade 1 (junior grading) speech pathologist in outer metropolitan acute hospital</li> <li>▪ Approximately three years clinical experience at the time of data collection</li> <li>▪ Provides services primarily to neurology caseload</li> <li>▪ Works within an acute stroke unit multidisciplinary team</li> </ul>
	<i>Person with aphasia</i>	Pauline	<ul style="list-style-type: none"> <li>▪ 82 year old female</li> <li>▪ Lived independently (alone)</li> <li>▪ Local to the area</li> <li>▪ Slight-mild expressive aphasia</li> <li>▪ Left middle cerebral artery (MCA) cerebrovascular accident (CVA)</li> </ul>
	<i>Close other of person with aphasia</i>	Tania	Daughter of Pauline
<b>TRIAD 2</b>  18/02/2013 – 11/03/2013  <i>Total observation period:</i> 783min across 6 days  <i>Total interview period:</i> 117min; 3 interviews	<i>Speech pathologist</i>	Caroline	See above
	<i>Person with aphasia</i>	Dimitra	<ul style="list-style-type: none"> <li>▪ 76 year old female</li> <li>▪ Bilingual (Greek and English)</li> <li>▪ Lived independently (with husband)</li> <li>▪ Not local to the area; was visiting on holidays</li> <li>▪ Moderate expressive and receptive aphasia</li> <li>▪ Left MCA CVA; small left sub-arachnoid haemorrhage following thrombolysis</li> </ul>
	<i>Close other of person with aphasia</i>	Teresa	Daughter of Dimitra
<b>TRIAD 3</b>  25/06/2013 – 24/07/2013  <i>Total observation period:</i> 645min across 4 days  <i>Total interview period:</i> 198min; 4 interviews (Nick interviewed twice)	<i>Speech pathologist</i>	Caroline	See above
	<i>Person with aphasia</i>	Nick	<ul style="list-style-type: none"> <li>▪ 90 year old male</li> <li>▪ Lived independently (with wife)</li> <li>▪ Local to the area</li> <li>▪ Severe expressive and receptive aphasia</li> <li>▪ Left MCA CVA</li> </ul>
	<i>Close others of person with aphasia</i>	Isabel and Maggie	Wife (Isabel) and daughter (Maggie) to Nick



### *8.3.2.1 Speech pathologist key informant: Caroline*

As described above, speech pathologists currently working in an Australian acute hospital setting were invited to participate in this research (see Section 8.3.1 for a discussion of the recruitment process). Due to the nature of the research and the necessity to have a willing speech pathologist key informant, the research context and the speech pathology key informant were concurrently identified.

A sole speech pathologist, Caroline, acted as a key informant across each of the key informant triads. A brief description of Caroline can be found in Table 8-1.

### *8.3.2.2 Key informants with aphasia: Pauline, Dimitra, and Nick*

Consecutive sampling, in which all individuals who meet the pre-established criteria and agree to participate are recruited (Maxwell & Satake, 2006), was employed to identify key informants with aphasia. Key informants were required to have:

- a) been admitted as an inpatient to the research site; and,
- b) been diagnosed with acute onset post-stroke aphasia by the treating clinical speech pathologist (the speech pathologist key informant); and,
- c) adequate cognition, hearing, vision, and pre-stroke English language to participate in a semi-structured interview with the primary researcher (a speech pathologist trained in Supported Conversation for Adults with Aphasia™ (Kagan, 1998)).

Four people with aphasia were recruited to participate in Phase Two of the study. However, one key informant was excluded after consenting but prior to commencement of data collection when additional investigations by the medical team resulted in an updated differential diagnosis of primary progressive aphasia. Three key informants with aphasia were therefore recruited between February and June 2013 and included in the analysis. Demographic information (e.g., age, gender, cultural/linguistic background, severity of

aphasia) was collected for all key informants. This was gathered through informal interview, or via review of the patient's medical record as required, and is provided in summary form in Table 8-1 above.

### *8.3.2.3 Key informants who are 'close others' of people with aphasia: Tania, Teresa, Isabel, and Maggie*

Using snowball sampling (Maxwell & Satake, 2006), each key informant with aphasia was also asked to nominate a 'close other' who may be willing to participate in this research. For the purposes of this research, a close other was defined as a person who maintains both a close personal relationship with the person with aphasia through frequent personal contact and has a personal interest in the other person's welfare (e.g., a relative or friend) (Parliament of New South Wales, 2000). Each key informant with aphasia nominated one family member (with the exception of Nick, who nominated both his wife and daughter), and each family member (three of whom were daughters of people with aphasia, and one of whom was a spouse of a person with aphasia) provided informed consent to participate in the research.

The inclusion criteria for the key informant of 'close others' were that they must:

- a) be a close friend or relative of the key informant with aphasia; and,
- b) maintain both a close personal relationship with the key informant with aphasia through frequent personal contact and a personal interest in the other person's welfare; and,
- c) have known the key informant with aphasia for a period of at least one year.

In addition, key informants who were 'close others' were to be excluded should they have a cognitive, communication, or sensory deficit precluding them from participating in semi-structured interviews in English. This was determined by the primary researcher through

informal discussion with the proposed key informant.

## **8.4 Data generation method and procedure**

Focused ethnographic research may use multiple methods of data collection to allow for the creation of a holistic cultural portrait in which the emic (views of the key informants) and etic (views of the researcher) are incorporated (Creswell, 2013). The bringing together of multiple sources of information and multiple perspectives permit a more comprehensive perspective (Patton, 2002). As described above, consistent with a focused ethnographic methodology, in this study multiple methods of data collection were used to create a holistic data set (Creswell, 2013; Patton, 2002). Data generation/collection took place during and immediately following the hospitalisation of each of the key informants with aphasia, as contemporaneous data generation was believed to be vital in facilitating the recall of relevant information. Three distinct periods of data generation/collection arose – one for each of the informants with aphasia, corresponding with their acute hospital admission. An overview of the data generation methods, their rationale, and their utilisation within this study is provided below.

### ***8.4.1 Observation***

Observation is considered the cardinal method of data collection within ethnographic studies and their derivatives (Liamputtong, 2009). Observation can be considered “the act of noting a phenomenon in the field setting through the five senses of the observer” (Creswell, 2013, p. 166). It emphasises the importance of the researcher collecting data within the key informants’ natural setting, with the aim of understanding how the culture being studied functions, that is, “to grasp what the world looks like to the people who live in the...community” (Delamont, 2004, p. 218) central to the enquiry. Patton (2002) emphasises that no hard and fast rules apply to the collection of observational data, but that rather “what you do depends on the situation, the nature of the inquiry, the characteristics of the setting, and the skills, interests, need and point of view that you, as observer, bring to your engagement” (p. 330). Within a focused ethnography, observation is conducted “at specific events/times only and for a limited period of time” (Muecke, 1994, p. 200).

A range of different observational strategies exist. The primary factor which guides the selection of observational strategies relates to the role of the observer in the setting being studied. The extent of researcher participation and observation can range from complete participation to complete observer, with much variation in between (Creswell, 2013; Morse & Field, 1995; Patton, 2002). Within this investigation, the researcher assumed an ‘observer as key informant’ role, acting primarily as an observer without extensive direct interaction with other people.

#### *8.4.1.1 Rationale for selection of observation*

Observation was selected as a data collection method in Phase Two for its compatibility with the research methodology, focused ethnography (Knoblauch, 2005; Morse, 1991; Morse & Field, 1995; Muecke, 1994). In addition, observation enables the researcher to access cultural assumptions, beliefs and behaviours embedded within a cultural group, which may be less likely to be explicitly reported in an interview (Richards & Morse, 2013).

#### *8.4.1.2 Observation procedure*

The speech pathologist who acted as a key informant was observed by the primary researcher taking part in their regular clinical practice during a period of time when a key informant with aphasia was on their caseload. For each key informant with aphasia, direct interactions between the speech pathologist key informant and the key informant with aphasia and/or their close-other were observed by the researcher, who made field notes on these interactions and also audio-visually recorded and photographed some of these. Decisions regarding when to collect audio-visual data were driven by the degree to which this could be achieved without interruption to the clinical process. Any audio-visually recorded data was transcribed verbatim. A combination of both time and event observation sampling methods was utilised. Field notes (see Appendices 7 & 8) were made by the researcher during this time, focussing on the aphasia management activities that the speech pathologists key informant partook in, and the cultural factors influencing their management approach. A total of 27 hours, 42 minutes of key informant observation was undertaken, over 11 non-consecutive days.

#### 8.4.1.2.1 Observation sampling

Within focused ethnographies, key informant observation is limited to particular events or times (Morse & Field, 1995). Time sampling involves sampling period or units of time, treating units of time as the unit of observation (Patton, 2002). Event sampling involves sampling events which are likely to be data rich. Patton (2002) suggests that the use of time or event sampling may be beneficial, in that the researcher may experience less fatigue, and a greater depth of information may be collected at each time interval comparative to continuous observation.

During this study, each of the three observational periods began with a period of time sampling, consisting of a minimum of one full clinical morning of observation. This allowed for contextual elements to be noted, and included observation during indirect clinical tasks (e.g., medical record reviews and entries) and non-clinical tasks (e.g., morning tea). Following this, event sampling was implemented. The selection of events was based on data arising from Phase One of the research, and data arising from the time sampled observations. A summary of events sampled can be found in Table 8-2. Events were never observed in isolation, but rather in the context of the surrounding time period.

**Table 8-2** Summary of events observed

Type of event observed	Event observed
Direct contact between speech pathologist and person with aphasia	<ul style="list-style-type: none"> <li>▪ Ward round (multidisciplinary)</li> <li>▪ Informal assessment of language function</li> <li>▪ 'Review' of language function</li> <li>▪ 'Review' of swallowing function</li> <li>▪ Language therapy session</li> <li>▪ Language therapy session (with interpreter)</li> <li>▪ Aphasia education provision (person with aphasia and/or family)</li> <li>▪ Discharge planning discussion</li> <li>▪ Multidisciplinary team / family meeting</li> </ul>
Non-direct management tasks performed by the speech pathologist during observational period	<ul style="list-style-type: none"> <li>▪ Speech pathology team daily planning and caseload discussion (informal)</li> <li>▪ Multidisciplinary team 'rapid round' (team meeting)</li> <li>▪ Morning tea</li> <li>▪ Medical record reviews and entries</li> <li>▪ Informal liaison with multidisciplinary team, including patient advocacy</li> <li>▪ Informal staff mentoring /supervision</li> </ul>

### 8.4.2 Key informant qualitative diaries

A diary can be defined as “a document created by an individual who has maintained a regular, personal and contemporaneous record” (Alaszewski, 2006, p. 1). Qualitative diaries are considered “a fruitful method of indirectly obtaining additional information” (Liamputtong, 2009, p. 232). Diary records allow for the development of realistic and sensitive descriptions of a key informant’s daily life (Nicholl, 2010), and help provide access to one’s own interpretation of their world (Alaszewski, 2006).

A range of different kind of diaries can be used in research. The salient differences between these relate to whether the diary is solicited or unsolicited, and the level or structure imposed by the researcher (Jones, 2000). The format of the diary is also a consideration. For the purpose of this research, solicited diaries (i.e., those kept at the request of the researcher) were used. Whilst a strict structure was not imposed, consistent with the recommendation that it may be “prudent to consider providing a simple reflective model as a guide” (Bedwell, McGowan, & Lavender, 2012, p. 155), broad questions derived from Johns’ (1994) model of structured reflection for nurses were provided as prompts for the key informants. Key informants were given the option of using a diary in an electronic or paper form.

#### *8.4.2.1 Rationale for selection of key informant qualitative diaries*

The popularity of diaries as a data collection method has grown in healthcare research in recent years (Jones, 2000), however this method has predominantly been used to explore the perspectives of those who are ill and chart the progression of disease (Bedwell et al., 2012). While their use with health professionals has been much less frequent, examination of qualitative diaries used in research with healthcare professionals can be a rich source of data, allowing for a written descriptive record of events, as well as allowing documentation of the emotional responses of key informants (Bedwell et al., 2012). In addition, Ross et al. (1994) concluded that the use of diaries by nurses was an effective and trustworthy method of data collection. Their feasibility as a method of data collection within the healthcare worker population has been established (Bedwell et al., 2012; Ross et al., 1994), and they have been reported as being well received by these professionals (Bedwell et al., 2012).

Diaries were chosen as a data collection method for their ability to provide accurate contextual and time situated data (Verbrugge, 1980). Bedwell et al. (2012) suggest that extra illumination of the data can be gained by what the key informants self-select to include in the diary. In addition, they highlight data that may not be revealed through the use of other data collection methods in isolation, and have been known to promote engagement in a reflective process by healthcare professional key informants (Bedwell et al., 2012). Within this study, diaries were used to capture data outside of the focused observational periods, and to provide a useful means of identifying areas for further exploration within the interviews.

#### *8.4.2.2 Key informant qualitative diaries procedure*

The speech pathologist key informant, Caroline, was asked to keep a diary of her acute aphasia management activities and experiences across the duration of the acute hospital admission of each of the key informants with aphasia. Daily recording was encouraged to facilitate adequate recall of events and processes related to decision-making. The diary was written in daily regardless of whether or not the speech pathologist had direct contact with the

key informant with aphasia and/or their family, as a means of gaining insight into the reasons behind decisions not to see a patient on a particular day.

A cover sheet in the diary described the aims of the diary as being for the speech pathologist to: (a) describe her speech pathology activities in the management of a person with aphasia and their family in the acute hospital setting; (b) reflect on her decision making in relation to the management of the patient and their family; and, (c) reflect on the factors she felt influenced her decision making. The diary provided a free text space for writing, and provided a series of prompt questions which, while not requiring them to answer directly, could be used to prompt reflection during diary completion (see Appendix 9). The prompts were derived from Johns' (1994) model of structured reflection for nurses, and included the following questions as prompts:

- *What did I do for the person with aphasia and their family (indirectly or directly) today?*
- *Why did I do that?*
- *What were the consequences of my actions?*
- *What factors influenced my decision making?*
- *What sources of knowledge influenced my decision making?*
- *What other choices did I have?*
- *If I had my time over, would I do the same thing or something different?*
- *How do I now feel about this experience?*

### **8.4.3 Document analysis**

Document analysis involves the study of existing documents, “either to understand their substantive content or to illuminate deeper meanings which may be revealed by their style and coverage” (Ritchie, 2003, p. 35). Documents also provide researchers with information regarding the historical context of a setting (Richards & Morse, 2013). Naturally occurring data, such as documents, are especially valuable when one’s aim is to understand behaviours and interactions in a real-world context (Ritchie, 2003). Documentary sources such as patient



file entries, clinical pathways, patient handover documentation, and reports relevant to the research question were collected during this phase of research.

#### *8.4.3.1 Rationale for selection of document analysis*

Documentary sources collected during this research project were used to give background detail and provide context (Richards & Morse, 2013). They are a particularly rich source of information in research within organisations (Patton, 2002), such as hospitals. The documentary sources used in this research were able to add value both in terms of their direct content contribution to the data set, and as stimulus for paths of inquiry which may be pursued through observation and interviewing (Patton, 2002).

#### *8.4.3.2 Document analysis procedure*

Relevant departmental prioritisation guidelines, local stroke care pathways, speech pathology key informants' 'handover sheets' and medical record file entries relating to the management of aphasia were collected and reviewed.

### *8.4.4 Semi-structured in-depth interviews*

Semi-structured in-depth interviews are also used in Phase Two of the research. A description of semi-structured in-depth interviews can be found above in Section 4.5, which provides a description of the data collection methods for Phase One.

#### *8.4.4.1 Rationale for selection of semi-structured in-depth interviews*

In this phase of the research, the use of semi-structured in-depth interviews provided a direct interactional component to the data collection, and an opportunity for the researcher to probe for further explanation (Bedwell et al., 2012). Within a study utilising multiple data collection methods, the semi-structured interviews allow for the exploration of incidences that occur less frequently (Flick, 2009). They also allow for an emic perspective, or one which reflects

the views of the key informant (Creswell, 2013), which may be less accessible using observation methods.

#### *8.4.4.2 Semi-structured, in-depth interview procedure*

Following the observational period, the speech pathologist, person with aphasia, and ‘close other’ key informants were invited to participate in a semi-structured, in-depth interview. Information regarding the use of semi-structured, in-depth interviews can be found in Section 4.5.

The interviews with Caroline, the speech pathologist key informant, were designed to better understand her perception of the acute aphasia management process and the factors that influence this. They were conducted soon after the cessation of the observed episode of care. The interviews with key informants with aphasia and their close others were designed to better understand the key informants’ experience of the acute aphasia management process, and their preferences regarding this. A topic guide was utilised as a means of directing the interviews, with open-ended questions derived from this. As previously stated, due to the iterative process of qualitative research, additional concepts derived from analysis of prior interviews were added to the topic guide as the research progressed. Interviews were conducted as soon after the observed episode of care as practicable, in a time and place convenient to the key informant. See Appendix 10 for an example of a transcribed interview from Phase Two.

#### *8.4.4.3 Special considerations when conducting in-depth interviews with people with aphasia*

Aphasia is a disorder characterised by impairment in the language domain. Despite this, research suggests that people with aphasia can participate in in-depth interviews (e.g., Dalemans, Wade, van den Heuvel, & de Witte, 2009; Luck & Rose, 2007; Parr et al., 1997). The language deficits inherent in aphasia mean that a supportive communication partner is

required, and special consideration needs to be given to allow the person with aphasia the opportunity to participate in an in-depth interview.

Timing was particularly important when considering interviewing people with acute aphasia and their close others. The researchers acknowledged that the acuity of the condition had the potential to influence readiness to participate in an interview, demonstrating an awareness of the sudden onset of disability and experience of grief and loss for stroke survivors (Alaszewski et al., 2004; Laver et al., 2010), including those with post-stroke aphasia. As such, a flexible approach to timing was implemented. Interviews with key informants with aphasia and their close others were conducted at a time when the key informant felt willing and able to reflect on their experiences (e.g., at the end of their acute stay, during their stay in a rehabilitation facility, or following discharge).

People with aphasia use a variety of non-verbal communication strategies, such as gesture, facial expression, drawing, writing, and the use of objects or communication books/boards to augment their spoken output. Such strategies are often termed ‘total communication strategies’, emphasising the importance of communication beyond the verbal modality. These non-verbal communication strategies are as meaning laden as words in the communicative interactions of people with aphasia. All interviews with people with aphasia were conducted by the primary researcher, a speech pathologist with clinical experience working with people with aphasia. The primary researcher had also undertaken additional training in Supported Conversation for Adults with Aphasia™ (Kagan, 1998), a multi-modality communication method to support conversation with people experiencing expressive and receptive communication difficulties. Strategies from this program include ensuring comprehension by using different communication modalities to make the topic of conversation clear; using a variety of question types (e.g., open- versus closed-ended questions); supporting multi-modality responses from the person with aphasia, including the use of gesture, written key-words, drawing, or pointing; allowing adequate response time; and verifying responses. These strategies were used, as required, during the interviews with people with aphasia to facilitate communication. In addition to the use of these techniques, additional items, such as

pre-prepared timelines and photographs taken during the observational phase, were provided for use as stimulus material during the interviews.

As a result of the implementation of these communication strategies and the ‘total communication’ approach often used by people with aphasia, interviews with this population often look and sound different to a ‘standard’ semi-structured in-depth interview. Given this, research has suggested that audio-recording alone is insufficient to adequately capture the nuances provided during qualitative research with people with aphasia (Luck & Rose, 2007). Luck and Rose (2007) reported that in their qualitative research with people with aphasia, videotaping interviews and subsequent detailed transcription of both verbal and non-verbal communication was vital as a means of achieving explicit reporting of communication, as well as a means of improving methodological rigour. Video recording of qualitative research with people with aphasia been used successfully in a range of research projects (e.g., Brown, Worrall, Davidson, & Howe, 2010; Ferguson et al., 2010; Simmons-Mackie & Damico, 1999; Worrall, Sherratt, et al., 2010). Therefore, interviews with people with aphasia were videotaped where it was deemed necessary by the primary researcher.

## **8.5 Analysis: An inductive thematic approach**

The data for Phase Two were analysed based on the six phases of Braun and Clarke’s (2006) inductive thematic analysis: data familiarisation, initial code generation, searching for themes, thematic revision, defining and naming themes, and producing the report. The stages of thematic analysis are presented in Section 4.6.1.1.

## **8.6 Data management**

The NVivo 9 software package (QSR International Pty Ltd, 2010) was used for data storage and management during data analysis.

## 8.7 Ethical considerations

### *8.7.1 Ethical approval*

Ethical approval for this study was obtained from The University of Queensland's Behavioural and Social Sciences Ethical Review Committee (Approval number: 2012000159; see Appendix 4). Ethical approval was also granted by the Phase Two health service Human Research Ethics Committee (Approval number: HREC/12/\*\*/64; see Appendix 5), representing the healthcare network participating in Phase Two of the research.

### *8.7.2 Informed consent procedure for people with cognitive and/or linguistic deficits*

Informed consent was gained by or on behalf of all key informants prior to participation in this study. Some key informants with aphasia had the capacity to consent to participate in this research, while others did not, in the context of their impaired cognitive and/or linguistic capacity secondary to their stroke.

While no pre-existing relationships existed between myself and the key informants with aphasia or their close others, the nature of the acute hospital setting resulted in the potential that some patients may have perceived me as an authority figure. As such, the speech pathology key informant – a member of the person with aphasia's treating team – approached them to provide preliminary information regarding the project prior to me becoming involved. I was not provided with the name or contact details of any potential key informants with aphasia or their close others who declined to participate in the research.

To begin the consent process, the research project was explained to all potential key informants with aphasia in a communicatively accessible way, including the provision of 'aphasia-friendly' information and consent forms (see Appendix 6). Key informants were then asked a series of six simple yes/no questions, aimed at assessing the person's

understanding of the information presented to them. These questions and their responses were:

- (1) Is this research part of my PhD? (Yes)
- (2) Will I watch you during your sessions with the speech pathologist? (Yes)
- (3) Will I take a blood sample? (No)
- (4) Will you be asked to take part in an interview at a later time? (Yes)
- (5) Will I take photographs, voice recordings, and video recordings? (Yes)
- (6) Will I tell other people about your personal details? (No)

Those key informants who answered all questions accurately (in any modality) were considered to have an appropriate level of understanding to provide informed consent to this research. However, given that the person has a documented communicative impairment, the person responsible for the key informant (e.g., next of kin or power of attorney) was also asked if they agree to the person participating in the research.

Key informants with aphasia who did *not* demonstrate an appropriate level of understanding of the research to provide informed consent required an alternative consent procedure. The researcher explained the project to them in an accessible way in order to promote comprehension as much as possible, allowing them the opportunity to provide assent. For the one key informant who required this alternative process, assent was measured in an ongoing manner by his continuing willingness to participate. The person responsible for the key informant, in this instance the key informant's wife, was provided with the written key informant information sheet and was requested to sign a consent form on the person's behalf if they deemed inclusion of the key informant in the research project to be appropriate. Consistent with the Office of the Public Advocate Victoria (n.d.), the person responsible can be, in order of priority:

- A person appointed by the Victorian Civil and Administrative Tribunal (VCAT) to make decisions about the proposed treatment
- A guardian appointed by VCAT to make medical treatment decisions
- An enduring guardian with appropriate powers appointed by the patient
- A person appointed by the patient in writing to make decisions about medical and dental treatment including the proposed treatment

- The patient's spouse or domestic partner
- The patient's primary carer, including carers in receipt of a Centrelink Carer's payment but excluding paid carers or service providers
- The patient's nearest relative over the age of 18

There were no provisions for formally assessing the capacity of the person responsible; however if any concerns had been raised about the third party's capacity, consultation with the ethics board would have been undertaken. The alternative consent process was deemed to be appropriate to ensure the voices and experiences of people often excluded from research (i.e., those with severe communication disabilities) could be included. Ethics approval for this project was granted based on this process.

### *8.7.3 Undertaking insider research*

As the value of appreciating the researcher's context as part of the narrative of interpretation has been acknowledged, researchers are more often explicitly stating their membership identity in the communities they are studying (Dwyer & Buckle, 2009). As discussed earlier (see Section 4.7.2), Phase One of this research resulted in the need to reflect on my role as an 'insider researcher'. In Phase Two, this role was additionally pronounced as the research was undertaken in an Acute Stroke Unit in which I had formerly been employed.

While this position carried with it a number of advantages (Asselin, 2003; Field, 1991) – the most obvious being the ease with which I was able to gain entry into the field – a number of challenges which had the potential to threaten the rigour of Phase Two also needed significant consideration (Asselin, 2003; Dwyer & Buckle, 2009; Field, 1991; Kanuha, 2000).

In the field, it was important that I strive to minimise the influence of any potential cultural assumptions I carried and the effect that these may have on the collection and interpretation of data. In response, a process of active reflexivity and peer checking was undertaken, as described below. In order to reduce confusion in both myself and key informants, my current role as researcher was clearly and explicitly delineated from my previous role as a speech pathologist. I actively declined to participate in discussion regarding the clinical management

of key informants, and wore a name badge which clearly identified me as a researcher rather than a clinician.

#### *8.7.4 Data storage and confidentiality*

De-identified key informant data was stored consistent with legislation and the process for data storage and confidentiality in Phase One (see Section 4.7.4).

### **8.8 Strategies to establish rigour**

The constructs of credibility, transferability, dependability, and confirmability – the means by which we can judge quality and establish the rigour of qualitative enquiry (Lincoln & Guba, 1985) – are described in Section 4.8. Accounts of the multifaceted nature by which each of these constructs was addressed in Phase Two of this research can be found in Section 9.3.5, and summarised below in Table 8-3.



**Table 8-3** Strategies for enhancing rigour: Phase Two

Construct of rigour	Definition	Strategies employed in Phase Two
Credibility	The 'fit' between key informants' views and the researcher's representation of them (Liamputtong, 2009; Tobin & Begley, 2004)	<ul style="list-style-type: none"> <li>▪ Peer checking and debriefing</li> <li>▪ Field notes</li> <li>▪ Findings grounded in the data (e.g., use of quotations from primary data sources)</li> <li>▪ Triangulation of data sources</li> </ul>
Transferability	The ability to generalise the result to other settings  (Liamputtong, 2009; Richards & Morse, 2013; Tobin & Begley, 2004)	<ul style="list-style-type: none"> <li>▪ Thick description</li> <li>▪ Comparisons with the literature</li> </ul>
Dependability	The degree to which the interpretation of the research findings fit the data from which they have been derived  (Liamputtong, 2009)	<ul style="list-style-type: none"> <li>▪ Audit trail</li> <li>▪ Field notes</li> <li>▪ Triangulation of data sources</li> </ul>
Confirmability	Establishing that interpretations of the findings are strongly linked to the data rather than generated independently by the researcher is the domain of confirmability (Tobin & Begley, 2004)	<ul style="list-style-type: none"> <li>▪ Field notes</li> <li>▪ Audit trail</li> </ul>

## 8.9 Summary

This chapter has provided a description of how the study design of Phase Two was conducted. In addition, ethical issues and the strategies to enhance rigour have been described. In the following chapter, the findings emerging from this phase of the research will be presented in their published format.

## Chapter 9

# **“Making their experience a good one”: A focused ethnography of the speech pathology management of aphasia in an acute hospital setting**

### Results: Phase Two

A cultural examination of acute aphasia management,  
presented as a focused ethnography

**Foster, A. M.**, Worrall, L. E., Rose, M. L., & O'Halloran, R. (2016b). *“Making their experience a good one”: A focused ethnography of aphasia management in the acute hospital setting.*  
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*This study is inserted as submitted for publication, with the exception of minor terminology and formatting changes to maintain consistency throughout the thesis.*

## 9.1 Abstract

*Purpose:* Having knowledge of current practice behaviours in aphasia management in the acute hospital setting means little without an understanding of the factors that influence their practice. Research in this area to date has used restricted methodology, and focused on the perspectives of speech pathologists alone. In response to previous studies identifying the important influence of context on practice, this study aimed to understand the factors that influence acute aphasia management through a cultural lens, using multiple sources of data and to capture multiple perspectives.

*Method:* Underpinned by a social constructivist paradigm, this research was conducted within a focused ethnography. Observation, semi-structured interviews, key informant reflective diaries, and document reviews were used to generate data pertaining to aphasia management during the acute hospital admissions of three people with aphasia. A speech pathologist, three people with aphasia, and four close others of the people with aphasia acted as key informants. Data were subjected to an inductive thematic analysis.

*Results:* Analysis identified a single key theme, and two sub-themes to facilitate understanding of the management of aphasia in the acute hospital setting. The key theme, *Creating a positive experience*, informed the management of aphasia within the setting of the research. The first sub-theme, *Creating a positive environment for people with aphasia and their families*, was influenced by the notions of *Family involvement* and *Interaction*. The second sub-theme, *Creating a positive environment for the speech pathologist*, was influenced by the speech pathologist's desire to meet the expectations of different stakeholders.

*Conclusions:* Within this sub-story of the management of aphasia in an acute hospital setting, the centrality of relationship through interaction was observed. Interaction and relationships were found to be critical to the creation of a positive experience for each of the key informants. The cultural context of service-bound requirements and medically-driven clinical guidelines – with a focus on tasks and activities – means that the relationship-centred practice

advocated for in the literature remains largely aspirational, creating tension for clinicians. Awareness of the emphasis and value placed on genuine relationships between all stakeholders in the acute hospital setting and the constraints which act to limit its realisation provides an opportunity to rethink aphasia practice knowledge and the notion of relationships in the acute clinical setting.

## 9.2 Background

Evidence-based practice (EBP) calls for the amalgamation of research-based clinical evidence, clinical expertise, and patient preferences and values when making clinical decisions. The quintessential definition of EBP highlights the importance of clinical decision making, defining EBP as “the conscientious, explicit, and judicious use of the current best evidence in making decisions about the care of individual patients” (Sackett et al., 1996, p. 71). As a profession, speech pathologists place value on EBP for its perceived capacity to improve outcomes for patients (Vallino-Napoli & Reilly, 2004). The notion, however, also has the capacity to be disempowering for clinicians who perceive themselves as unable to attain ‘best practice’ (Foster et al., 2015b). Implementation of EBP is taxing and complicated in practice.

Since the inception of evidence-based practice, calls to revise the definition to include the notion of ‘context’ have been voiced in the literature (McCormack et al., 2002; Rycroft-Malone et al., 2004). Kitson and colleagues (1998) suggest that successful implementation can be facilitated by a combination of robust evidence, a context receptive to change, and a well-facilitated change management process. Culture – an essential component of context – has been described by some as “the dominant factor in clinical effectiveness, practice development and successful outcome achievement” (p.97) in healthcare settings (McCormack et al., 2002). Importantly, it has been suggested that culture in acute hospitals has the potential to influence service efficiency, equity considerations within organisational strategy, the overall economic and social objectives of the organisation, and co-operation and partnerships internal and external to the organisation (Manley, 2000). Research has also found that organisational culture may be a relevant factor in healthcare performance (Davies, Mannion, Jacobs, Powell, & Marshall, 2007; Manley, 2000; Page & Howell, 2015). It has been argued that culture at the individual, team, and organisational level creates the context for clinical practice (Manley, 2000). Within an organisation, however, several different (and sometimes conflicting) cultures with their own attitudes, beliefs, customs, values, and practices may exist, with the potential of suboptimal working relationships stemming from ‘cultural clashes’ (McCormack et al., 2002). McCormack et al. (2002) argue that while an understanding of processes, systems, and structures is beneficial in its capacity to describe

context, it “does little to articulate the practice setting” (p. 97). For this, an understanding of culture is required. Culture in the context of clinical practice has the potential to either inhibit or enable change; thus, a cultural understanding of clinical settings holds significant value.

Recently, there has been an increasing research focus on the factors that inform the clinical practice of speech pathologists in order to better understand the process of implementing evidence into practice. Aphasia management has been identified as a key area for investigation, given the identification of evidence-practice gaps (e.g., Duffy et al., 2011; Godecke et al., 2012; Verna et al., 2009), and the sense of professional dissonance experienced by speech pathologists as a result of this (Rose et al., 2013). In addition to this, people with aphasia report dissatisfaction in relation to their care in the acute hospital setting as a result of their perceived inability to be active participants in their healthcare through the expression of their needs (Tomkins et al., 2013), and lack of informational counselling (Worrall et al., 2010). Recognising the importance of understanding the clinical decision making process for educational and knowledge translation purposes, a small number of studies have specifically investigated the influences on aphasia management (Ciccone et al., 2012; Foster et al., 2016a; Page & Howell, 2015). Ciccone and her colleagues (2012) found that speech pathologists’ clinical decisions regarding aphasia service delivery were influenced by a range of factors, including elements determined by the institution in which they worked, their clinical knowledge and reasoning, and factors specific to the person with aphasia. While Page and Howell (2015) identified influencing factors across the same domains, their findings emphasised the process speech pathologists undertake to connect with patients in order to meet their communication needs. Both of the studies described included key informants from across the continuum of care. While this approach has the benefit of conceptualising aphasia management as a care continuum, it does not allow for a context-specific analysis. When examining influences on clinical practice, an approach which acknowledges context-specific nuance is important as it recognises the significant influence the context of healthcare practice plays on clinical decision making (McCormack et al., 2002).

In recognition of the contextually dependent process of decision making (Smith et al., 2008), prior research undertaken by this research team (Foster et al., 2016a) investigated speech pathologists' perspectives of influences on their aphasia management exclusively within the acute hospital setting. Analysis within this study generated results that underscored the role that cultural influences play in influencing clinical practice in the acute hospital setting, a finding well supported by existing research in both speech pathology and other disciplines (e.g., Armstrong, 2003; Muntlin, Carlsson, & Gunningberg, 2010; Pepler et al., 2005).

Across all studies, consensus regarding the complex and multi-faceted nature of factors influencing speech pathologists' management of aphasia was reached. The identified studies are, however, not without their limitations. The primary qualitative method of data collection for these studies was semi-structured interviews with speech pathologists. Two primary limitations were identified: (a) the exclusive use of semi-structured, in-depth interviews as a qualitative methodology; and (b) the restriction created from seeking the perspectives of speech pathologists only.

In-depth interviews hold incredible value in their capacity to investigate the subjective perceptions of people and how they give meaning to their experiences (Liamputtong, 2009). A number of limitations may arise, however, as a result of using in-depth interviewing in isolation to explore a phenomenon. Creswell (2013), Liamputtong (2009), and Patton (2002) identify that interviews capture only individual reconstructions of events, which may be subject to recall error, reporting bias, and a poor awareness of or ability to articulate cultural influence. While interviews permit researchers to go beyond external behaviour in order to interrogate thoughts and feelings, mechanisms that provide a 'check' of what is reported in interview and demonstrate how clinical behaviours are actually performed add value when a comprehensive understanding of practice is sought.

In addition to the limitations as a result of methodological choices, the research to date has explored a single perspective only. Understanding the processes and lived experiences of aphasia management in the acute setting from the perspective of speech pathologists is

essential. Frontline clinicians are able to identify barriers and facilitators to best practice, and also act as powerful agents for change when knowledge-practice gaps are identified.

However, a deeper investigation of practice in this setting requires the input of other key stakeholders in the aphasia management process: people with aphasia, and their close others. Including people with aphasia and their close others as key informants could be considered essential in a process which places the clinical relationship at its centre (Worrall, Davidson, et al., 2010), and in which the views and values of the patient are considered of value (Worrall, Sherratt, et al., 2010). Qualitative research is well-suited to exploring the opinions and experiences of marginalised and disenfranchised groups, and identifies as one of its strengths the capacity to ‘give voice’ to those who are traditionally excluded from research (Liamputtong, 2009) – an apt description of people with aphasia.

The utilisation of multiple sources of information and multiple perspectives permits a more comprehensive perspective (Patton, 2002). This research aimed to build on previous research by addressing the limitations addressed above. Research in this vein allows for the formation of a broad cultural representation of management of aphasia in acute hospital settings, in which both the emic and etic are explicitly incorporated (Creswell, 2013). This research forms the second phase in a larger program of qualitative research exploring aphasia management in acute hospital settings. The aim of this particular study was to understand the factors that influence acute aphasia management through a cultural lens.

## **9.3 Methods**

### *9.3.1 Research paradigm and strategy*

When seeking to reveal an extensive, meaningful understanding of a complex phenomenon, a qualitative research approach is imperative (Richards & Morse, 2013). For that reason, qualitative research methods were employed as a means to better understand the factors that influence the management of aphasia in acute hospital settings. This study was grounded within a social constructivist paradigm, in which knowledge of experience through the



perspectives of individuals is created through the utilisation of inductive methods within naturalistic settings (Creswell, 2013; Liamputtong, 2009; Merriam, 2009). A focused ethnographic research strategy (Knoblauch, 2005; Morse, 1991; Muecke, 1994) was applied. Focused ethnography was initially conceptualised in the nursing field, and provides a framework in which researchers can undertake “time-limited exploratory studies within a fairly discrete community or organisation” (Muecke, 1994, p. 199). Focused ethnographies deviate from classical (or anthropological) ethnographies in a number of key ways, as illustrated in Table 9-1.

Four key points support the choice of this research strategy. Focused ethnography:

- (1) is suitable for the study of clinical behaviours (Bloor, 2001), and has previously been used in related disciplines (e.g., Unsworth, 2005);
- (2) is suitable for exploratory research (Morse, 1991);
- (3) aims to develop knowledge and practice in a specific disciplinary area, congruent with the desired aim of this research; and
- (4) is congruent with a social constructivist paradigm (Whitehead, 2004).

**Table 9-1** A comparison of classical and focused ethnography

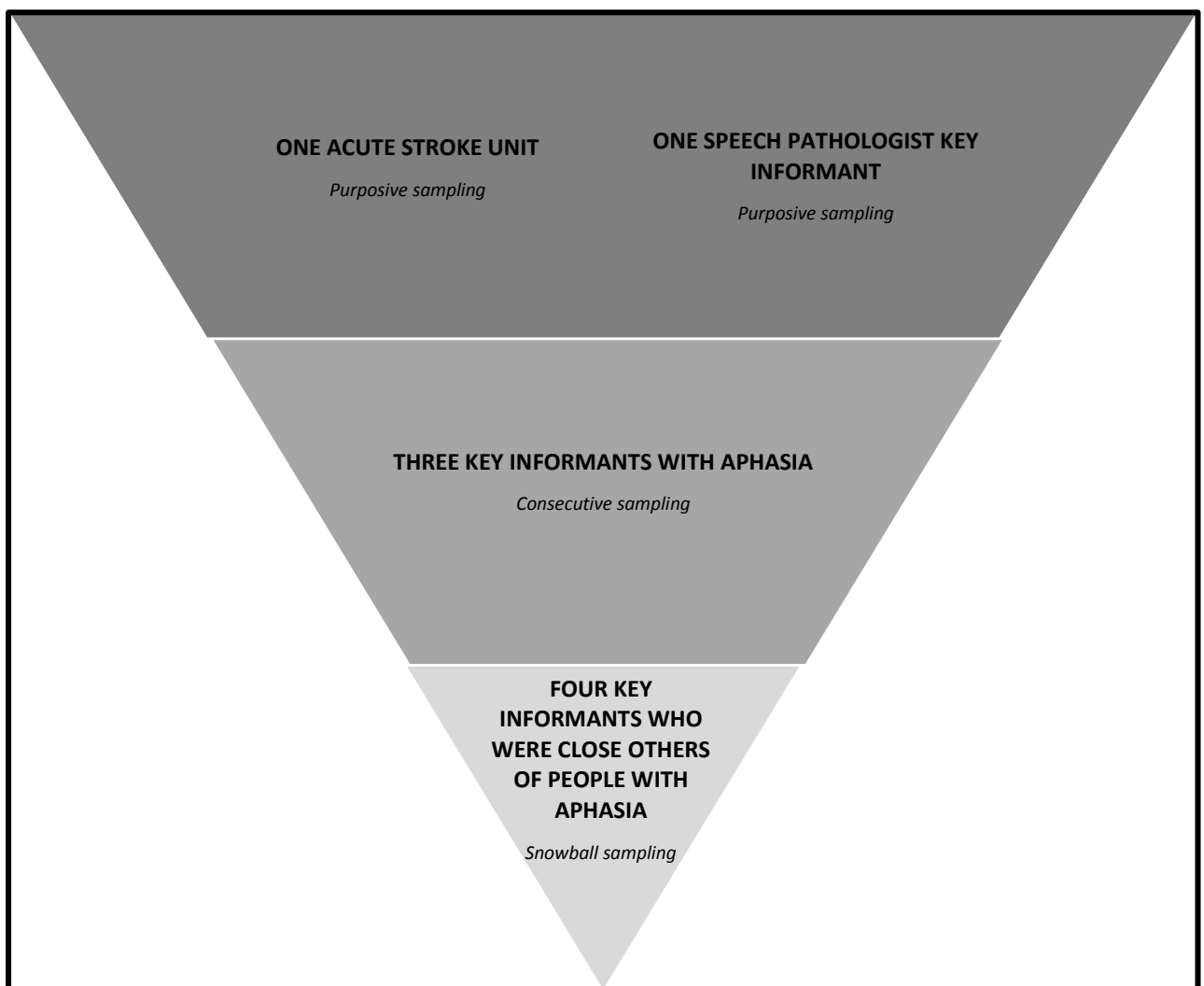
<b>Area of contrast</b>	<b>Classical ethnography</b>	<b>Focused ethnography</b>
<i>Topic selection</i>	Deepen understanding of a community's social action	Improve cultural appropriateness of professional practice
<i>Conduct of participant observation</i>	Continuous, long-term field visits, with extensive time commitment	Short-term field visits at selected events/times only for a limited period of time
<i>Aspect of the field being studied</i>	Open	Focused
<i>Role of researcher</i>	Participant role	Field-observer role
<i>Community being studied</i>	Broad community or organisation	Fairly discrete community or organisation

(Knoblauch, 2005; Morse, 1991; Morse & Field, 1995; Muecke, 1994)

### 9.3.2 Sample and sampling strategy

Focused ethnographies sample contexts and behaviours, not just people. As such, the context in which this research was undertaken and the key informants are both described below. A ‘funnel’ approach to recruitment of sites and key informants was undertaken, and is represented in Figure 9-1 below.

**Figure 9-1** Recruitment strategy



### *9.3.2.1 Sampling sites: The acute stroke unit*

Twenty-one speech pathologists across 18 different Australian health services expressed interest in their unit participating in this research project. One site was purposively selected based on: (a) the presence of a speech pathologist willing to participate in the research; (b) the presence of an acute stroke unit; and, (c) the ease with which the site could be accessed by the primary researcher. These criteria were driven by the scope of the project, and the associated need to complete data collection within a specified timeframe.

This study was conducted in the neurology division of a single, outer metropolitan Australian hospital. This public hospital is a major provider of acute secondary and tertiary hospital service within its geographical region. The hospital hosts an eight bed Acute Stroke Unit, staffed by a dedicated multidisciplinary care team. It should be noted, additionally, that the primary researcher was a former staff member within this unit, which facilitated the process of ‘gaining entry’ to the field. Due to the nature of the research and the necessity to have a willing speech pathologist key informant, the research context and the speech pathology key informant were concurrently identified.

### *9.2.3.2 Sampling key informants: Identifying triads*

Three ‘triads’ acted as key informants for this research. Each triad consisted of: one speech pathologist; one person with aphasia; and one/two family members of the person with aphasia. A single speech pathology key informant, Caroline, participated in each of the triads. A summary of basic information on each of the key informants in each triad is provided in Table 9-2. Each key informant was assigned a culturally appropriate pseudonym to protect their identity during the reporting of the study.

**Table 9-2** Key informants

Triad and period of data generation	Role	Pseudonym	Description
<b>TRIAD 1</b>  05/02/2013 – 13/02/2013  <i>Total observation period:</i> 234min across 1 day  <i>Total interview period:</i> 117min; 3 interviews	<i>Speech pathologist</i>	Caroline	<ul style="list-style-type: none"> <li>▪ Grade 1 (junior grading) speech pathologist in outer metropolitan acute hospital</li> <li>▪ Approximately three years clinical experience at the time of data collection</li> <li>▪ Provides services primarily to neurology caseload</li> <li>▪ Works within an acute stroke unit multidisciplinary team</li> </ul>
	<i>Person with aphasia</i>	Pauline	<ul style="list-style-type: none"> <li>▪ 82 year old female</li> <li>▪ Lived independently (alone)</li> <li>▪ Local to the area</li> <li>▪ Slight-mild expressive aphasia</li> <li>▪ Left middle cerebral artery (MCA) cerebrovascular accident (CVA)</li> </ul>
	<i>Close other of person with aphasia</i>	Tania	Daughter of Pauline
<b>TRIAD 2</b>  18/02/2013 – 11/03/2013  <i>Total observation period:</i> 783min across 6 days  <i>Total interview period:</i> 117min; 3 interviews	<i>Speech pathologist</i>	Caroline	See above
	<i>Person with aphasia</i>	Dimitra	<ul style="list-style-type: none"> <li>▪ 76 year old female</li> <li>▪ Bilingual (Greek and English)</li> <li>▪ Lived independently (with husband)</li> <li>▪ Not local to the area; was visiting on holidays</li> <li>▪ Moderate expressive and receptive aphasia</li> <li>▪ Left MCA CVA; small left sub-arachnoid haemorrhage following thrombolysis</li> </ul>
	<i>Close other of person with aphasia</i>	Teresa	Daughter of Dimitra
<b>TRIAD 3</b>  25/06/2013 – 24/07/2013  <i>Total observation period:</i> 645min across 4 days  <i>Total interview period:</i> 198min; 4 interviews (Nick interviewed twice)	<i>Speech pathologist</i>	Caroline	See above
	<i>Person with aphasia</i>	Nick	<ul style="list-style-type: none"> <li>▪ 90 year old male</li> <li>▪ Lived independently (with wife)</li> <li>▪ Local to the area</li> <li>▪ Severe expressive and receptive aphasia</li> <li>▪ Left MCA CVA</li> </ul>
	<i>Close others of person with aphasia</i>	Isabel and Maggie	Wife (Isabel) and daughter (Maggie) to Nick

#### 9.2.3.2.1 Speech pathology key informant: Caroline

Speech pathologists who were currently working in an Australian acute hospital setting were invited to participate in this research. Expression of interest forms were widely distributed through a range of approaches. Exclusion was based on participation in other research projects undertaken by the research team (Foster et al., 2016a; Foster et al., 2015a; Foster, Worrall, Rose, & O'Halloran, 2015b), due to the potential for priming of responses and behaviour. A single speech pathologist key informant, Caroline, participated in this research study.

#### 9.2.3.2.2 Key informants with aphasia (Pauline, Dimitra, and Nick), and key informants who were their close others (Tania, Teresa, Isabel, and Maggie)

Consecutive sampling was used to identify people admitted to the research site with new onset aphasia following an acute stroke, as diagnosed by the speech pathologist key informant. Key informants with aphasia were required to have adequate cognition, hearing, vision, and pre-stroke English language to participate in a semi-structured interview with the primary researcher, a speech pathologist. Four people with aphasia were recruited to act as key informants in the trial; however, one was excluded when additional medical investigations revealed the progressive nature of his aphasia, leaving a total of three key informants with aphasia.

Each key informant with aphasia was asked to nominate a 'close other' who may be willing to participate in this research. 'Close others' was defined as a person who maintains both a close personal relationship with the person with aphasia through frequent personal contact and has a personal interest in the other person's welfare (Parliament of New South Wales, 2000). Each key informant with aphasia nominated a family member (with the exception of Nick, who nominated two – his wife and daughter), and each family member (two daughters, and two wives) willingly provided informed consent to participate in the research.

### *9.3.3 Research methods*

Consistent with focused ethnography, this study used a variety of data collection methods to allow for the creation of a comprehensive, holistic cultural portrayal in which the views of both the researchers and the key informants were incorporated (Creswell, 2013; Patton, 2002). These methods included observation, key informant qualitative diaries, semi-structured in-depth interviews, and document analysis, as illustrated in Table 9-3.

Observational data generation took place during three separate data collection periods, during and immediately after the distinct acute hospital admission of each of the three key informants with aphasia. Interviews with all key informants were conducted following the acute admission of the key informant with aphasia (day of discharge to eleven days post-discharge), allowing for reflection upon the total experience. Data generation periods are presented in Table 9-2. A total of 27 hours and 42 minutes observation was undertaken over a period of 11 non-consecutive days in which a key informant with aphasia was a hospital inpatient. A total of 10 semi-structured, in-depth interviews were conducted with a mean length of 43 minutes each.

**Table 9-3** Data collection methods

Data collection method	Description	Rationale	Utilisation within this study
<i>Observation</i>	Observation can be considered “the act of noting a phenomenon in the field setting through the five senses of the observer” (Creswell, 2013, p. 166)	<p>Considered the cardinal method of data collection within ethnographic studies and their derivatives (Liamputtong, 2009)</p> <p>Emphasises collecting data within the key informants’ natural setting, with the aim of understanding how the culture being studied functions (Delamont, 2004)</p> <p>Enables the researcher to access cultural assumptions, beliefs and behaviours less likely to be explicitly reported in an interview (Richards &amp; Morse, 2013)</p>	<p>Time and event observational sampling (Muecke, 1994) based on knowledge derived from previous studies into this phenomenon (Foster et al., 2016a; Foster et al., 2015a; Foster et al., 2015b)</p> <p>The primary researcher assumed an ‘observer as participant’ role, acting primarily as an observer without extensive direct interaction with other people</p> <p>Field notes made based on observations by primary researcher</p> <p><b>Total observation time: 27 hours, 42 minutes over 11 days</b></p>
<i>Key informant qualitative diaries</i>	A diary can be defined as “a document created by an individual who has maintained a regular, personal and contemporaneous record” (Alaszewski, 2006, p. 1)	<p>In research with healthcare professionals, can allow for a descriptive record of events and of the emotional responses of key informants (Bedwell et al., 2012)</p> <p>Established as an effective and trustworthy method of data collection (Ross et al., 1994)</p>	<p>Solicited diaries were used, with daily entries from the speech pathology key informant over the duration of each speech pathologist key informant’s acute hospital inpatient admission</p> <p>Broad questions derived from a simple reflective model (Johns, 1994) were provided as a guide for the key informant</p> <p>Used to capture data outside of the focused observational periods, and to provide a useful means of identifying areas for further exploration within the interviews.</p> <p><b>Key informant qualitative diary kept by the speech pathologist key informant each day of the admissions of each person with aphasia</b></p>
<i>Semi-structured in-depth interviews</i>	Face-to-face, one-on-one interaction between the key informant and the researcher (Johnson, 2001), aiming to elicit the key informants’ understandings and interpretations of the topic under examination (Liamputtong, 2009)	<p>Within a study utilising multiple data collection methods, semi-structured interviews allow for: (a) exploration of incidences that occur less frequently (Flick, 2009); (b) an emic perspective (Creswell, 2013), and; (c) the opportunity to probe for further explanation (Bedwell et al., 2012)</p>	<p>A semi-structured approach to interviewing was utilised, during which the researcher used a topic guide (Minichiello et al., 2008) to flexibly guide interviews with key informants</p> <p><b>Total interviews: Ten Mean length of interview: 43 minutes</b></p>
<i>Document analysis</i>	The study of existing documents to “illuminate deeper meanings which may be revealed by their style and coverage” (Ritchie, 2003, p. 35)	<p>Used to give background detail and provide context (Richards &amp; Morse, 2013)</p> <p>A particularly rich source of information in research within organisations, such as hospitals (Patton, 2002)</p>	<p>Documentary sources such as patient file entries, clinical pathways, patient handover documentation, and reports relevant to the research question were collected during this study</p>

### *9.3.3.1 Special considerations when conducting in-depth interviews with people with aphasia*

Despite the language deficits inherent to aphasia, research suggests that people with aphasia can participate in in-depth interviews (e.g., Dalemans et al., 2009; Luck & Rose, 2007; Parr et al., 1997). A supportive communication partner is, however, required to facilitate this process. In this process, the researcher acted as the supportive communication partner for key informants with aphasia, and support for people with aphasia was achieved through: (a) flexible approaches to the timing of interviews; and, (b) allowing the interviewer to alter question style, offer ideas to key informants, and use supportive conversation techniques (Luck & Rose, 2007). Participation in qualitative interviews proved of significant difficulty to key informant Nick, whose aphasia severity and concomitant cognitive deficits limited his capacity to participate despite significant conversation partner support across two separate interview sessions.

### *9.3.4 Data analysis*

All data sources were transcribed. All data were stored and managed within NVivo 9 (QSR International Pty Ltd, 2010). Data sources were treated equally in the analysis. The data were analysed based on the six phases of thematic analysis outlined by Braun and Clarke (2006), using inductive thematic analysis. This process involves the stages of: (1) data familiarisation; (2) initial code generation; (3) searching for themes; (4) thematic revision; (5) defining and naming themes; and, (6) producing the report. Themes were identified based on their relative strength in the data, rather than frequency of occurrence. In addition, themes were often present across data sources, rather than being identified in a single data source.

### *9.3.5 Rigour*

The rigour of the methodology is established by the degree to which a research study is able to demonstrate credibility, transferability, dependability and confirmability during the research process (Lincoln & Guba, 1985). Within the current study, throughout the research design, data collection, and data analysis phases, an *audit trail* documenting theoretical,



methodological and analytic choices was kept by the primary researcher. Rigour was embedded in the design of the project through the strategy of *triangulation of sources*, in which multiple data sources are compared and contrasted. In addition to this, *peer checking and debriefing* was used, whereby discussion between authors was used to ensure interpretations being made were data driven and appeared reasonable. Due to the nature of this research, debriefing sessions also provided an essential opportunity for the research team to employ reflexivity by acknowledging the potential influence of their prior experience on the research process. Finally, rigour is supported in the reporting process (demonstrated in this manuscript), in which *quotations from primary data sources* are provided to illustrate key points (Richards & Morse, 2013).

### **9.3.6 Ethical considerations**

A range of ethical considerations were taken into account during the design and data collection phases of this research. While some ethical considerations are universal, some are specific to the population being investigated.

#### **9.3.6.1 Informed consent processes**

Informed consent was gained for all key informants prior to participation in this study.

##### **9.3.6.1.1 Informed consent from key informants with aphasia**

While some key informants with aphasia had the capacity to consent to participate in this research, others did not in the context of their impaired cognitive and/or linguistic capacity secondary to their stroke. The researcher both explained the project to all key informants with aphasia in a communicatively accessible manner, and provided “aphasia-friendly” information and consent forms. Key informants with aphasia who demonstrated capacity to consent (as gauged through their responses to a series of yes/no questions) were able to do so, with support sought from their next of kin. Key informants with aphasia who did not demonstrate the capacity to provide informed consent had the project explained to them in an

accessible way to promote comprehension, following which the next of kin was provided with the written participant information sheet and was required to sign on the person's behalf.

#### 9.3.6.1.2 Informed consent from others

By its very nature, observation brought the primary researcher into direct contact with patients, family, friends, and departmental colleagues present on the ward during periods of observation. However due to the focused nature of the enquiry – interested solely in the speech pathology management of aphasia – it was considered that consent from individuals other than informants was not required. Staff, patients, and visitors to the ward were, however, made aware of the presence of a researcher and the nature of the research project by posters located on the ward. Permission was also sought from the ward's nurse unit manager.

#### 9.3.6.2 Ethical approval

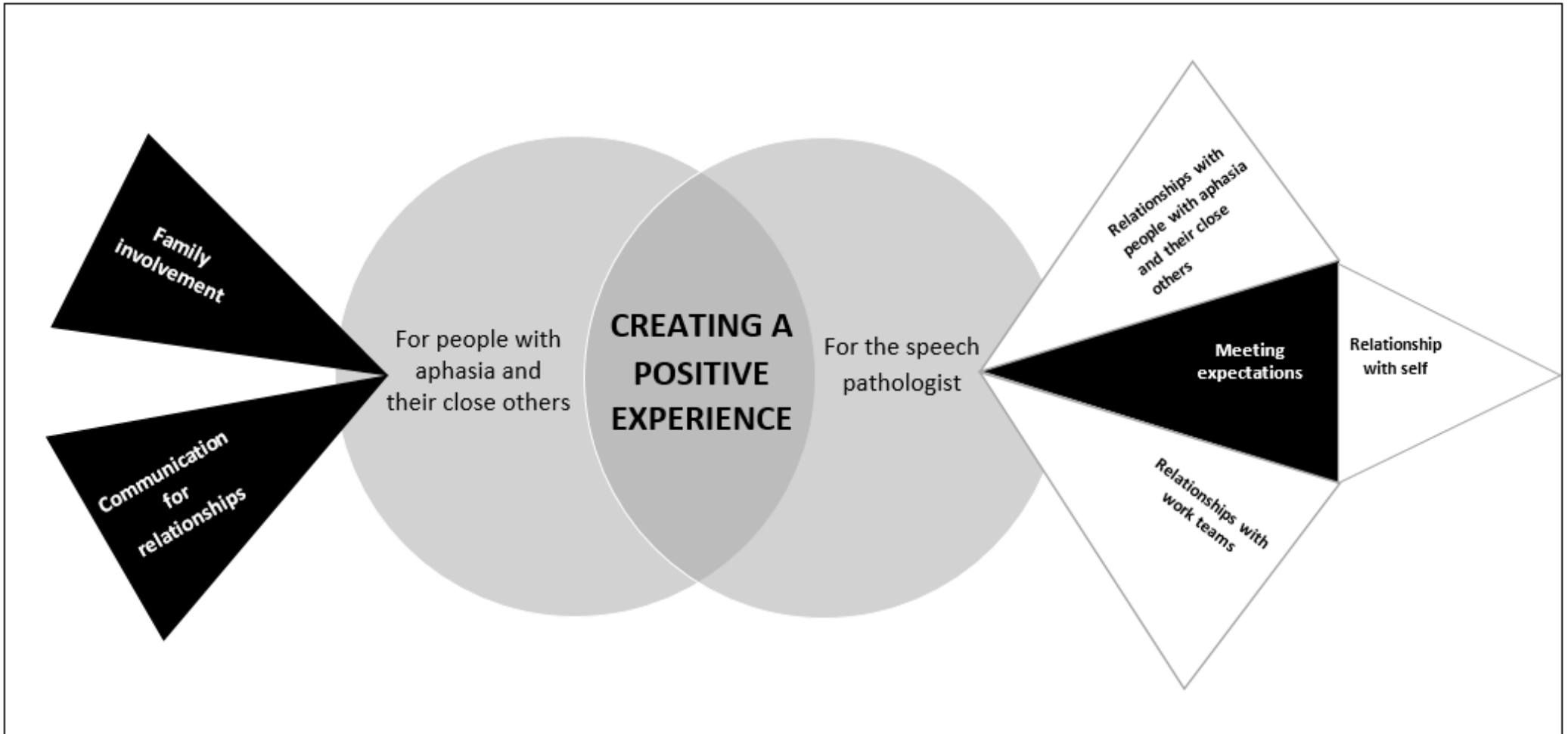
Ethical approval was granted by The University of Queensland's Behavioural and Social Sciences Research Ethics Committee and the participating health network's Human Research Ethics Committee prior to the commencement of this research.

## 9.4 Results

Findings draw upon the data generated from the diverse range of data collection methods employed. Themes were derived through a process of co-construction in which the experiences and backgrounds of both the researcher and the key informants were valued, aligning with the stated research paradigm and strategy. Based on analysis of the data, a single theme was identified: *Creating a positive experience*. Two contributing sub-themes were identified: (1) *“Making their experience a good one”*: *Creating a positive experience for the person with aphasia and their family*; and, (2) *“This makes me feel like I'm doing a good job”*: *Creating a positive experience for the speech pathologist*. The themes serve to exemplify the dynamic nature of aphasia management in acute hospitals, and the complex nature of the factors that influence practice as clinicians strive to facilitate affirming

encounters. Figure 9-2 outlines a conceptual framework, as suggested by the identified themes.

Figure 9-2 Representation of themes



### 9.4.1 Overarching theme – *Creating a positive experience*

The theme *Creating a positive experience* was derived from a distinct cultural element central to shaping the management of aphasia within this setting: a desire to make the experience of aphasia management in the acute hospital setting a positive one. The desire for the experience to be positive was articulated across each of the key informant groups.

The speech pathologist, and individual people with aphasia and their family members placed emphasis on different factors which contributed to a positive experience for them. No one set of tasks or behaviours could ensure that a positive experience would be attained: “*that's why you could never systemise or standardise working with people [with aphasia], especially in this context. Because it's not- it's more than that*” (Caroline). As such, the selection of the term ‘creating’ in the naming of this theme was intentionally chosen for its representation of a creative act of bringing a positive experience into existence, as opposed to a formulaic process. The overarching theme of *Creating a positive experience* has at its centre the notion of relationships. The centrality of relationships is clearly articulated in the following quote from Teresa who, when asked about the helpful things that the speech pathologists did for her and her mother during her mother’s acute hospital admissions, reported that “[*Caroline*] was supportive. She built positive relationships. She made my mum feel happy. Okay? Very important. Um, and she gave my mum, and us – family – hope”.

The emphasis on relationships and interaction when describing what created a positive experience was also expressed by Teresa’s mother, Dimitra. Evident in the interaction below, also, is the centrality of communication in the establishment of relationships for a person with aphasia.

**Dimitra:** *She’s good.*

**Researcher:** *She’s good. Okay. Did you feel you had a good relationship with Caroline?* [Dimitra nods] *Yeah? What made it good?*

**Dimitra:** [Pause] *Oh, that there [unintelligible], if she’s a good friend.*

**Researcher:** *If she’s a good and friendly. Okay, okay.*

**Dimitra:** *And if she’s um, if she’s somebody you can speak with.*

**Researcher:** *And she's somebody you can speak with. So those two things were important?*

**Dimitra:** *Yeah*

Caroline, the speech pathologist, explicitly stated that she “*wanted [her patients] to have a good experience*”. When further expanding on this, it became clear that achieving a positive experience for her patients was important in shaping her personal perception of professional worth, stating that “*if I didn't do that I would have felt like I didn't do my job. We have a big role in terms of making their experience a good one, and a supported one. So, I would have felt pretty lousy if I didn't meet their needs, I suppose*”. While Caroline reported her management “*just depends on the individual and their family really. What they need at that time*”, it was evident through observation of Caroline's interactions with her patients, colleagues, and her environment and interviews that a number of additional factors beyond the needs of the patient and their families influenced her practice. For example, whereas the theme of positive experiences through relationships was dominant for people with aphasia and their families, for the speech pathologist positive experiences weighed patient-clinician relationships against her desire to be perceived in a positive light by her colleagues, meet the requirements of the organisation in which she worked, and provide a service which aligned with her personal values. In order to achieve the goal of a positive experience, a series of clinical decisions – some conscious and others subconscious – were made by the speech pathologist throughout the observational period. With these judgements came change in the degree of weighting that different key influences had in the shaping of the dynamic nature of the aphasia management pathway.

The concept of a ‘positive experience’ was found to be complex, multifaceted, and individualised. It was contributed to by the two sub-themes discussed below: (1) “*Making their experience a good one*”: *Creating a positive experience for people with aphasia and their families*; and, (2) “*This makes me feel like I'm doing a good job*”: *Creating a positive experience for the speech pathologist*.

#### 9.4.1.1 Sub-theme One – “Making their experience a good one”: Creating a positive experience for people with aphasia and their families

Before discussing this sub-theme in detail, it is important to note that for the most part people with aphasia and their families were conceptualised within this setting as a single entity, and thus it is appropriate to thematically group them. This perception was likely to be driven by Caroline’s ‘family centred’ beliefs about care, but may also be an artefact of the particular people with aphasia and families observed within the study. The language used by family members suggested that this belief was also held by them, as illustrated in Teresa’s quote: *“It’s been a long journey. It’s something new because we’ve never had anyone in our family suffer from a stroke before so I don’t know where we’re going to be in a years’ time”* (researchers’ emphasis).

A number of elements combined to create a positive experience for people with aphasia and their families. Between these different factors, a complex interplay was noted, based on personal and familial emphasis and values. These complexities required the speech pathologists to be flexible and dynamic in her service provision. Two key factors were identified in contributing to the creation of a positive experience for people with aphasia and their families: (1) Family involvement, and (2) communication as the facilitator of relationships. Both of these key elements are discussed below.

##### 9.4.1.1.1 “Family have a huge impact on the whole experience”: Family involvement

The participation of the families of people with aphasia who were observed in this study existed on a continuum. At one end, families took on a passive role, seeking guidance and direction from the speech pathologist. At the other end of the spectrum, families took a much more active and assertive role, explicating their needs, making decisions regarding discharge destination, and delivering therapy. Despite the differing levels of family involvement and the roles they took on, the inclusion of families presented as central to the creation of a positive experience for these people with aphasia and their families.

As discussed above, the speech pathologist conceptualised the family as part of the construct of ‘patient’. While this was observed for the most part to be beneficial, on occasion the needs of the family became more dominant than those of the person with aphasia, resulting in the needs of the person with aphasia not being met. As an example, Caroline described the emphasis placed on supporting Dimitra’s family, resulting in less weight being given to supporting Dimitra directly: “*A lot of what I did was to support [Dimitra’s family]. I felt like they needed a lot of support and obviously I did support Dimitra as well, but I felt like the majority of that was for quite... for, for them. That’s what they needed*” (researchers’ emphasis).

Evident in the above quotation is repetition of the word ‘felt’ in relation to the notion of family involvement. The use of this terminology indicates that the speech pathologist relied on her own subjective interpretation of the characteristics and behaviours of the family to drive her level of involvement and her interactions with the family. This is additionally illustrated in the following example taken from Caroline’s qualitative diary:

*I booked in a time tomorrow to meet with her son & daughter. With this family I felt a more formal approach would be more appropriate for them. They are both professional people so an organised and timely education session was a *must* (researchers’ emphasis).*

The different roles and degrees of involvement available to family members were not explicitly presented by the speech pathologist to allow for individual informed decision making. Rather, attribution of need was ascribed to families based on the speech pathologist’s assessment of the characteristics of the family. In Caroline’s words, “*I’m guided by the patient and the family. It’s very subjective, isn’t it? It’s...there’s no formalised process. It, it’s more just based on my interactions with the patient and my interactions with the family, whether I get the feeling or they demonstrate to me...that they’re interested*”. Two characteristics which evidently informed the level of involvement supported by the speech pathologist were family dynamics and the assertiveness of the family.



The degree of family involvement was influenced by the complex realisation of family dynamics in the context of an acute medical condition. Pauline recognised a familial dynamic shift, illustrating the more protective role her daughter had taken on in the short time since her stroke: “*She said to me, ‘Leave the whole shower open’, you know. And I say, ‘Why? [unintelligible] I’m not leaving it open!’ And she said, ‘I’ve got to make sure you’re alright’*”. Dimitra, characterised by her family as the matriarch prior to her stroke, discussed the deference of decision making to her children following her stroke:

**Dimitra:** *Oh, well, ‘cause...they look to the children. They care, and want...If they’re like [the speech pathologist], ah, I like her.*

**Researcher:** *Okay. So, let me just check that I’ve understood. Because they’re your children, and they care about you, if they like [the speech pathologist], you’ll like her too? Yeah?*

**Dimitra:** *I like them, they like them.*

In addition to family dynamics, the assertiveness of families also drove the model of intervention provided to them. Higher levels of understanding of and/or experience in the healthcare setting were associated with higher levels of assertiveness within the hospital setting. Caroline identified the role this played in shaping Teresa’s experience, stating that “*because her personal role, her personal job, you know, is involved in caring for people, she didn’t quite... she didn’t feel as out of her depth*” and was therefore able to have a high level of involvement in both advocacy and the provision of therapy to her mother. This can be contrasted with Maggie, who felt “*it was a void, what was happening. It was something that we had no experience of*” and therefore took a more passive role in the management of her father, instead placing her trust in the decision making of the healthcare professions.

The active involvement of families was supported by the speech pathologist when it was perceived that this is what the family desired. Family involvement was seen as especially valuable to the speech pathologist when the family were perceived by her to be willing and able to provide therapy for the person with aphasia. On one occasion, Caroline reported that when unable to see a person with aphasia due to busy caseloads, she “*didn’t worry too much*

*as I knew her daughter was continuing on with the therapy program religiously. Pheww! [sic]”.*

Support to undertake active roles was empowering for family members. Teresa reported that “[Caroline] gave me the tools and the means to help her. She was very supportive of myself helping Mum”. This gave Teresa the capacity to feel that she was an agent for change in her mother’s linguistic recovery: “working together closely with um Caroline...just gave me that feeling of um helping Mum...I really felt that I played an active role in helping her progress to where she is now”.

#### 9.4.1.1.2 “To care, also the most important”: Communication as the facilitator of relationships

The acute loss in communication experienced by all people with aphasia is central to the value they place on engagement with the speech pathologist.

**Maggie:** *We're out of our depth...I've worked with speech therapists at school with kids, but that's remarkably different to my Dad suddenly changing from one day to the next. And I think that was why it was such an important relationship [with the speech pathologist]. Because here's someone who can make us understand a little better what the hell has happened.*

The findings of this study suggest that the interaction with the speech pathologist is a vital way that people with aphasia and their family members feel a sense of value and worth within the busy acute hospital setting. For this sub-group, the speech pathologist was perceived to be the primary communication partner outside of the family, a role which carries significant value. The communication behaviours that demonstrated the emphasis placed on interaction by the speech pathologist were noted in the primary researcher’s field notes:

*Caroline nods to Dimitra, and her facial expression conveys empathy.  
Caroline reassures the patient that the occupational therapist and  
physiotherapist will continue to work with her to improve her function.*

*Caroline uses a slightly slower rate of speech, and emphasises key words. At times, she uses gesture to indicate what she is talking about (predominantly pointing). She touches Dimitra's hand as she speaks to her, and crouches beside the bed so she is face-to-face with Dimitra. Dimitra looks Caroline in the eye.*

For many of the key informants interviewed soon after the discharge of the person with aphasia from the acute hospital, there was little recall of the specific activities undertaken with the speech pathologist. Rather, recall focused heavily on the way interactions with the speech pathologist made them feel. Maggie identified that for her “*it was the personal, it was the relationship [the speech pathologist] had established...I felt confident that [Dad] was in good hands*”. The key informants in this study identified a range of both personal attributes – such as positivity and attentiveness – and communication behaviours – such as active listening, eye contact, and modification of communication to meet the needs of the person with aphasia – that increased the perceived value of communicative interaction. In Tania's words, “*[the speech pathologist] made it look like there was nothing else she had to do for the rest of the day except chat to Mum*”. This sense was strongly felt by the people with aphasia as well, with Dimitra describing Caroline as “*somebody you can speak with*”, suggestive of positive communication experiences.

The strength in rapport and therapeutic relationships that emerged from the significance people with aphasia and their families placed on their interactions with the speech pathologist additionally had the consequence of making transitions beyond the acute hospital setting difficult. Of the rehabilitation centre she was being transferred to, Dimitra expressed concern regarding who would be managing her aphasia: “*But who, who the...? [Caroline] cannot come there*”. Her daughter expressed the same hesitancy: “*if we could have taken Caroline with us, we would have*” (Teresa). Tania identified that one of the reasons Pauline would not be pursuing outpatient rehabilitation services was “*I don't think Caroline would be [providing the outpatient speech pathology services]. It'd be someone else anyway*”.

Relationships, which held such significant value in creating a positive experience for people with aphasia and their families, were also central to the creation of a positive experience for the speech pathologist, as discussed in sub-theme two below.

#### *9.4.1.2 Sub-theme Two – “This makes me feel like I’m doing a good job”: Creating a positive experience for the speech pathologist*

Creating a positive experience for the speech pathologist was found to be central to shaping aphasia management practice within the context of this study. The speech pathologist, Caroline, was noted to seek roles and undertake behaviours which sought to create this positive experience. This included modifying her aphasia management practices. Central to the notion of creating a positive experience for the speech pathologists was the notion of maintaining positive relationships through the meeting of expectations. Creating a positive experience for the speech pathologist was, therefore, shaped by three key factors, as discussed below: (1) *Meeting – and shaping – the expectations of people with aphasia and their families*; (2) *Relationships with work teams*; and, (3) *Relationship with self: Aligning with personal values*.

##### *9.4.1.2.1 “If you’re not meeting those expectations...it reflects on you as a clinician and as a person”: Meeting – and shaping – the expectations of people with aphasia and their families*

It was important professionally for the speech pathologist to feel that she was creating a positive experience for the person with aphasia and their family. In order to achieve this desire, the speech pathologist – as a member of the multidisciplinary team – made efforts to shape the expectations of people with aphasia and their families; to make their expectations ‘realistic’. Deliberate choices were made regarding the sources of information provided to people with aphasia and their families, in order to maintain expectations which were consistent with the perceived limitations of the practice context. As an example of this, early in one person with aphasia’s inpatient stay the speech pathologist established that the patient would not be seen daily due to resource restrictions. This allowed the speech pathologist to feel “*I didn’t not meet their expectations, because I’d already set that up in the first place*”.

It also allowed the dissatisfaction of the family to be directed at an organisational level, rather than a personal level, with the patient's daughter reporting: *"Could we have had Caroline more often? Of course, it would have been great. But there's no funding for all of that to happen"*.

The desire to shape and control the expectations of the person with aphasia and their family members was influenced by a recent negative experience amongst the multidisciplinary team. A complaint had been made against the team by the family of a patient who felt their needs had not been met during their inpatient stay. As a result, the members of the multidisciplinary team identified risk in conducting a truly open dialogue with families. This was especially true for families who were perceived by the team as being potential complainants. In the below quotation, Caroline describes the reaction of the multidisciplinary team when a family member was vocally expressing his expectations, which were considered to be beyond the capability of the team:

*"The consultant is a, um, very experienced consultant, and he guarded the team and kept the team together, I think. Um, we were advised by the registrar about ways, um, ways of dealing with this type of a family. And, I really felt it was a team based approach which was positive I think"* (researchers' emphasis)

There is evidence of a persisting paternalism in this statement, with families needing to be *"dealt with"* and multidisciplinary teams needing to be *"guarded"*. Additionally, negativity was evident in the discourse related to families who were explicit in expressing their needs. Members of this family, for example, were at times referred to as *"demanding"*, *"full-on"*, *"abrupt"*, *"intimidating"*, and *"forceful"*.

Within the confines of these shaped expectations, significant value was placed on meeting the needs of people with aphasia and their families. The speech pathologist identified creating a positive experience for this group as her central driver of practice, and something which shaped her professional self-perception. As documented in her qualitative diary, when unable

to meet the needs of her patients with aphasia, Caroline felt *“like shit to be honest! I felt inadequate! I felt like I had let them down!”*.

#### 9.4.1.2.2 “It’s important to be recognised by your colleagues as someone who cares about what they do”: Relationships with work teams

In addition to a desire to feel valued by her patients, the speech pathologist placed significant value upon being perceived as a valued and important member of the two work teams she identified herself as a part of: the acute stroke unit multidisciplinary team, and the acute speech pathology team.

##### 9.4.1.2.2.1 Relationships with the multidisciplinary team

During the period of data collection, the multidisciplinary team was observed to be cohesive and structured. They met daily for team meetings, and had strong, embedded mechanisms for communication with one another. The co-location of patients on the one ward was observed to facilitate incidental communication between members of the multidisciplinary team. Professional, and personal, relationships within the team were noted to be strong, and this likely contributed to Caroline’s sense that *“it’s important to be recognised by your colleagues as someone who cares about what they do. And, someone who’s good at what they do”*. The value Caroline placed on her role within the multidisciplinary team was noted in her discourse, with regular use of the pronoun ‘we’ and references to ‘the team’ observed.

The values central to the multidisciplinary team were not explicitly discussed. Document analysis of the Acute Stroke Unit Clinical Pathway revealed alignment with the National Stroke Foundation’s Clinical Guidelines for Stroke Management (2011a), suggestive of a desire to meet the expectations of external, auditing bodies. In addition, the significant influence of organisational imperatives – especially the promotion of a short length of stay – was strongly felt by the team. This translated into stress, as reported by Caroline in her qualitative diary: *“There was also a big push to get people out of the hospital and on their way adding to the pressure of getting things done and getting them done NOW! Arghh! [sic] At one point with one patient I would’ve loved to have screamed actually”*.

Within the multidisciplinary team, the hierarchical medical model was observed to be intact. The consultant neurologist was considered to be in a position of leadership, *“because they are, in the end, the person responsible for the patient, and the buck stops with them”* (Caroline). During the period of data collection, two different consultant neurologists took on the role of ‘team leader’ due to the rotational nature of the position. The clinical behaviours and interactions within the team were noted to significantly differ depending upon which consultant was present. While Caroline remained adamant that her clinical aphasia management did not change as a result of the consultant rostered on – an assertion supported by observation – team dynamics were noted to alter. Multidisciplinary ward rounds ceased, discharge decisions were made unilaterally, and the opinions of the multidisciplinary team regarding patient management were not sought. Conversely, Caroline identified the characteristics of a strong consultant as being one who was consultative, respectful, experienced, and valued the opinions and expertise within the team.

#### 9.4.1.2.2.2 Relationships with the speech pathology team

The speech pathology team spent little time in direct interaction across the day, largely as a result of the clear delineation in their roles and caseloads. As a result of this role delineation, Caroline asserted a sense of agency and self-determination within her role: *“I’m the neuro speechie. So I can implement [aphasia management] and I can make the change, you know, for all the patients that I see”*.

Challenges arose, however, when caseloads became busier and the cultural values of the speech pathology department came into conflict with the personal values of the speech pathologist. Within the speech pathology team, the management of swallowing was prioritised over the management of communication. Document review revealed that this belief was embedded in the procedures of the department. Additionally, the role of aphasia management was seen as a role for sub-acute speech pathologists. This finding was articulated by Caroline who reported that when seeking reassurance from her colleagues regarding her aphasia management during a period with a particularly busy caseload, her

colleagues suggested that comparative to other service she was “*doing something in acute so that’s better than what most other people would be getting*”.

In the context of these departmental prioritisation requirements, observational data supported the notion of increased stress when caseloads are busy and a person with aphasia is also on the caseload. At times like this, the services provided to people with aphasia and their families became focused on habituated clinical tasks, rather than on relationships. Additionally, the vignette below (taken from the primary researcher’s field notes) illustrates the conflict experienced when Caroline is unable to provide the service she wishes to the person with aphasia.

*1331hrs: Caroline and I leave for ward, making our way back to the acute speech pathology office. She walks rapidly, with long strides. There is a sense that she wants to get away from the ward. She is silent as she walks for some time. My impression is that she is stressed and anxious. There is also a sense of feeling overwhelmed. As we move further away from the ward, and outside the main hospital building, her pace slows a little.*

*Caroline: ‘This is one of those days. You never know what you’re going to walk in to, how long it’s going to take. I barely have time to check if Dimitra is tolerating her diet, let alone aphasia!...You feel guilty, you know.’*

#### 9.4.1.2.2.3 Relationships with self: Aligning with personal values

Caroline did not spend a great deal of time articulating her personal values. Rather, her values were demonstrated in her behaviours. Of primary importance to Caroline was the belief that people with aphasia deserve ‘gold standard’ service – something which she did not feel she was achieving at times: “*it’s frustrating and I feel inadequate... that my patients aren’t getting the best they could be getting*”.

In order to ensure that her service delivery aligned with her personal values, Caroline at times provided service to people with aphasia outside of business hours. For her, this represented her commitment to her patient. In the following quote taken from an interview, she reflects



upon a time she stayed late to work with one of the key informants with aphasia: “*Oh, it was funny because Teresa said to her mum, ‘You say thank you to Caroline. She stayed for a long time’.* [laughs] *Um, I think they... it... it gave them an insight into the fact that, you know, I’m not just here between, you know, I’m not just doing this just to pay the bills, you know? That I’m here for another reason”.*

Additionally, Caroline demonstrated practice that aligned with her personal values by acting as an advocate for people with aphasia within the acute hospital setting. This was illustrative of her recognition of the inherent power differential between patients and medical professionals in the healthcare setting, and is illustrated in the following quote taken from an interview with Caroline: “*I kind of felt like I needed to, to push the issue, and I didn’t mind whether that was convenient for everyone involved. Um, because it’s not, it’s never convenient for everyone involved.* [laughter] *I just feel like that is part of our role as well. An important part, yeah, to advocate for people who either can’t who, um, you know, don’t have the knowledge or the s- or the sway, I guess”.*

One motivating factor for this behaviour may have been the intrinsic link that existed between Caroline’s strong professional identity and her overall self-identity. She felt that clinical behaviour “*reflects on you as a clinician – and as a person, really”.*

## **9.5 Discussion**

The key finding of this research is the value of positive experiences in the management of aphasia in an acute hospital. When examining the factors that influence a speech pathologist in her practice of aphasia management in the acute setting, the overriding goal is to create a positive experience. Striving to create positive experiences – for the speech pathologist, the person with aphasia, and their family – results in management dictated by a complex process of social and cultural manoeuvring. At the centre of this process lies relationships.

### *9.5.1 The valuing of relationships in acute aphasia management*

According to Hughes, Bamford, and May (2008), relationship-centred care asserts the criticality of the relationship between patient and clinician in modern health care. Aphasia, however, has the potential to pose challenges to the realisation of relationship-centred care. As discussed by Worrall and colleagues (2010), the nature of aphasia as a communication disability places relationships at risk. Despite, or perhaps because of the risk to relationships inherent in aphasia, relationship-centred care in the management of aphasia has previously been advocated for in the literature (Worrall et al., 2010). The findings of Page and Howell (2015) identify the centrality of relationships in the management of aphasia, but make little comment on the complexity of these relationships and their implementation. The application, relevance, and worth of relationship-centred care for aphasia management in the acute setting specifically have not been previously identified or discussed in the literature. A focus on the relationship between the patient and the therapist, with a common value placed on relationships held across the speech pathologists, the people with aphasia, and their close others, has been strongly identified in our data. Inherent in this desire to practise and receive intervention in a relationship-centred model is also an unspoken acknowledgement that this relationship sets up the future – likely longstanding – relationships that these people with aphasia will have with the speech pathology profession. The value placed on relationships suggests that the process of transitions and discharge needs to be considered. While the work of Hersh and her colleagues (2008; 2010; 2010) has highlighted the importance of authentic relationships in preparing for discharge from speech pathology services, placing value on relationships in the acute setting calls for consideration of the experience of ending the relationship during transitions between phases of care.

The findings of this research indicate that the speech pathologist conceptualised the person with aphasia and their families as a unit, in a construct reminiscent of family-centred practice (Hughes et al., 2008). It was found that achieving strong relationships in the acute hospital setting – and thus supporting positive experiences – requires buy in from the families of people with aphasia. To some extent, this may place a burden on families who are grappling to navigate their role in a new environment, with strong cultural concepts regarding the role of ‘patient’ and ‘healthcare provider’. The degree to which families were engaged and involved in the process of aphasia management was dictated by the speech pathologist’s

interpretation of the motivation of the family. This is consistent with the findings of Bright and her colleagues (2015), who identified the co-constructed nature of engagement in healthcare. Awareness of this is essential, given that the process of engaging in relationship negotiation within a clinical setting, mediated by the individual speech pathologist's interpretation of the family's skills, needs, and expectations, is a potential source of inequity.

Within the construct of relationships, it is evident from the findings of this research that the value ascribed to the service provided by acute speech pathologists by people with aphasia and their families is derived from experiences of communicative success. This may create an opportunity for speech pathologists working in this setting to re-evaluate the value they place on supporting people with aphasia to achieve communicative success, rather than exclusively focusing on the tasks seen as essential in this setting, such as assessment. While Caroline supports her clients to achieve communicative success through her interactional style, measures such as the Inpatient Functional Communication Interview (O'Halloran et al., 2004) were developed to help clinicians find strategies so that patients can experience communicative success in the acute setting. Establishing a person with aphasia's capacity to achieve communicative success holds value in that it has the potential to prevent learned communicative non-use (Godecke et al., 2013), give people with aphasia hope (Bays, 2001), and allows them an opportunity for expression during this complex period of change in identity and self-concept (Ellis-Hill & Horn, 2000).

Consistent with previous findings, however, the service-bound requirements that exist created a tension for clinicians (Ciccone et al., 2012) and placed limitations on the capacity to establish and develop relationships (Worrall et al., 2010).

### *9.5.2 The tension between relationship and tasks in aphasia management in acute hospital settings*

These findings – highlighting the value placed on relationships – are especially important in the context of the acute hospital. The medical model inherent in the acute hospital setting,

increasingly shorter lengths of stay in the acute hospital, and the competing demands experienced by the speech pathologist (Foster et al., 2016a) make focusing on relationships challenging. Evident in the findings of this study is a tension between *tasks* and *relationships*, symbolic of the cultural differences existing within this acute hospital setting. This tension is intensely experienced by the speech pathologist. Despite relationships being valued at an individual level, within the organisational culture of the acute hospital setting, tasks are habituated as the setting invites routine clinical behaviours.

The term evidence-based practice – perhaps through the inclusion of the word ‘practice’ – engenders a notion of ‘action’. Indeed, much of the research literature related to the management of aphasia in acute hospital settings focuses on actions, such as methods of assessment or therapies for intervention. However, within the acute hospital setting – often coupled with notions of process, procedure, and standardisation – it is evident, consistent with previous research, that there is no single pathway of aphasia management (Foster, et al., 2015a). Clinical guidelines – used by many speech pathologists as a source of evidence to support their acute aphasia management practice (Foster et al., 2015b) – remain largely medically driven. Of note, the Australian Aphasia Rehabilitation Pathway (NHMRC Centre for Clinical Research Excellence in Aphasia Rehabilitation, 2014) attempted to address the need for a relational element to be included in early practice by explicitly placing the task of *Goal Setting* ahead of *Assessment*. Recognising this herself, Laver and her colleagues (2010) advocated for a ‘motivational’ goal setting phase in the early post-stroke period, a task both possible and valuable in the acute setting.

By focusing discussions of the acute management of aphasia only on the research literature of impairment, academia and the medically modelled research literature do the profession of speech pathology a disservice. The findings of this research suggest that people with aphasia and their families are seeking feelings of positivity through relationships rather than direct actions, and that it is this which the speech pathologist intuitively connects with. Despite this, the importance of authentic relationships in aphasia management are not discussed in best practice statements or clinical practice guidelines. These findings hold significant implications for researchers in this area. The design of aphasia management pathways (such

as the Australian Aphasia Rehabilitation Pathway; NHMRC Centre for Clinical Research Excellence in Aphasia Rehabilitation, 2014) is not enough. Further research grounded in implementation science exploring the mechanisms for evidence uptake in the context of valued relationships, while simultaneously ensuring that speech pathologists and people with aphasia feel valued and empowered, is essential. In order to create a positive experience, it is important that as a profession speech pathology looks beyond the condition, which is but a small part of the experience of receiving care. Findings such as these support the notion of a broader conceptualisation of the research literature in which value is placed on the recognition of both the impairment *and* the consequences of aphasia, rather than solely the impairment itself.

While improving the patient experience through authentic relationships may be considered an end in itself, it is also important to note that positive patient experience has been proven to enhance patient outcomes, in relation to both clinical effectiveness and patient safety (Doyle, Lennox & Bell, 2013). As argued by Doyle and colleagues, rather than undervaluing patient experience, clinicians should recognise the centrality of relationship and positive experience in the provision of evidence-based, quality healthcare.

Including relational elements in clinical practice is not without its challenges. In a healthcare environment increasingly focused on demonstrating efficacy numerically, the value of relationships is difficult to measure, quantify, and document. Bernstein Ratner (2006) cautioned of the need to ensure speech pathology practice verifies the active therapeutic ingredient, conceptualises outcomes broadly, and is informed rather than dictated by science. We would do well to remember these principles when implementing aphasia management in the acute hospital setting.

Finding a way to address these competing cultural demands of relationships and tasks is important for clinicians, who may otherwise experience a sense of disempowerment in relation to their capacity to enact high quality aphasia management (Foster et al., 2015b). Clinicians are likely to seek roles in which they feel a sense of positivity and self-efficacy.

Management of aphasia, it is evident, requires a biopsychosocial model of care which, while not necessarily consistent with the acute hospital setting, is consistent with the socially oriented people often attracted to the speech pathology profession. Evident in this study was the speech pathologist's desire to create a positive experience for people with aphasia and their families, and the sense of professional and personal reassurance and affirmation associated with this. The frustration experienced by the speech pathologist when barriers are perceived to stand in the way of this positive experience was also evident. These findings are consistent with previous studies exploring workplace satisfaction for speech pathologists (McLaughlin et al., 2008). This suggests a risk of burnout for speech pathologists in this setting unless a sense of self-efficacy and agency can be facilitated for acute speech pathologists. Particularly as the ideological clash between an impairment focused medical model and a truly biopsychosocial condition, such as aphasia, is never more apparent than in the acute hospital setting.

### *9.5.3 Strengths and limitations*

The strength of this study lies in its deep, context specific examination of the phenomenon of aphasia management in the acute hospital setting. While previous research on this topic has used methods (primarily interviews) in which individual experiences and reconstructions are gathered, the focused ethnographic method utilised by this study facilitated an understanding of the reality of clinical practice behaviours in context, from multiple perspectives (Taylor, 2005). Importantly, strategies to enhance rigour were employed during the design, data collection, data analysis, and reporting phases.

One potential limitation of this study is that it examines acute aphasia management in a single context, through a single speech pathologist. This, in combination with the consecutive sampling of people with aphasia, has the potential to raise concerns regarding the transferability of this research. It should be noted, however, that the fundamental purpose of qualitative research is a desire to illuminate a specific phenomenon, rather than create a representative sample or generalise the findings to other populations (Creswell, 2013; Patton, 2002). This study exists as a single, yet powerful, sub-study of aphasia management more broadly. In order to address this concern, the authors used 'thick description' in the reporting

of this study. This is a strategy in which ample detail and background information about the research setting, the participants, and the methods employed is provided to allow readers to make decisions about the relevance to their own context (Liamputtong, 2009; Richards & Morse, 2013). This is consistent with the aim of qualitative research – to achieve depth rather than breadth. Future research using both qualitative and quantitative methods – potentially through larger ethnographic studies and the use of longitudinal design – to better understand the role of culture in influencing the practice of speech pathologists, and in the uptake and implementation of evidence would be beneficial. This will allow for a greater understanding of whether policies, strategies, and interventions to promote cultural change are appropriate, and how they could be better designed to enhance the management of aphasia in acute hospitals.

## 9.6 Conclusion

In summary, previous qualitative research into aphasia management in acute hospitals has predominantly used interview methods to explore the phenomenon from the perspective of the speech pathologist. In recognition of the significant role that culture plays in shaping clinical practice, this research used the cultural lens engendered by focused ethnography to explore acute aphasia management from the perspective of the key stakeholders – speech pathologists, people with aphasia, and their close others. The findings of this research suggest the centrality of relationships in creating a positive experience for all stakeholders in aphasia management. This suggests there is significant value in speech pathologists undertaking relational work, and responding in a meaningful way to patients with aphasia in the acute hospital setting. Despite this, tensions exist between the constructs of *relationships* and *tasks*, indicative of the multiple, competing cultures existing within the setting. Investing in the patient-clinician relationship holds value in its potential to meet the needs of the patient and their family, and feed the sense of professional success in clinicians.

# **Chapter 10**

## **Conclusion**



## 10.1 Summary of findings

The role of the speech pathologist in the acute hospital setting is known to be influenced by a diverse range of socio-political factors, as described in *Chapter 1*. Attempts to understand the impacts of these influences on the management of aphasia in this setting have until now largely been limited to descriptions of current practice, with methodological heterogeneity making it difficult to conclusively describe current practice. This body of research aimed to move beyond pure description to provide an in-depth understanding of current aphasia management practice in Australian acute hospital settings, and the factors that influence it.

A narrative literature review exploring the current state of the literature related to aphasia management in acute hospital settings was undertaken within an evidence-based practice (EBP) framework, and formed *Chapter 2* of this thesis. The use of this framework was supported by its currency and value in healthcare settings, and for its attempt to capture the diversity of evidence sources that contribute to clinical practice. Findings suggested that little was known about how speech pathologists integrate and implement the different streams of evidence in EBP, or how these notions may contribute to the management of aphasia in acute hospital settings. An agenda for the remaining research undertaken as part of this suite of research, and represented in this thesis, was generated as an outcome of this literature review.

Given the nature of the research questions, a qualitative approach to the research was decided upon. In order to enhance the rigour of this study, an in depth-discussion of the methodology was provided in *Chapter 3*. A social constructivist paradigm was selected for its alignment with the researcher's underlying values and beliefs, and the research question. In addition, a description of and rationale for the chosen research strategy was provided.

This research was undertaken in two phases. Phase One was undertaken within an interpretive phenomenological framework. It used in-depth interviews to gain an understanding of a broad range of speech pathologists' experiences of working with people with aphasia in the acute hospital setting, and their understanding of the factors that influenced their clinical decision making. The methods for Phase One are described in

*Chapter 4* of this thesis. The findings of Phase One are presented over three chapters: *Chapters 5, 6, and 7*.

The data arising from the Phase One interviews with fourteen Australian speech pathologists, were initially subjected to a qualitative content analysis (Foster et al., 2015a), as presented in *Chapter 5*. The aim of this analysis was to provide an in-depth understanding of what the current aphasia management pathway in the acute hospital setting looks like, from the perspective of speech pathologists. Findings revealed the existence of significant diversity in the pathways of care for people with aphasia and their families in the acute hospital setting. The key construct and main categories were compared to the core areas presented in the Australian Aphasia Rehabilitation Pathway (NHMRC Centre for Clinical Research Excellence in Aphasia Rehabilitation, 2014), a set of person-centred, evidence-based care standards for aphasia management. Findings suggested gaps between the ideal practice identified in the pathway and the practice of the speech pathologists interviewed in the study. This understanding of the current aphasia management pathway provided a platform from which a greater understanding of the factors that influenced practice could be built.

In *Chapters 6 and 7*, an inductive thematic analysis was performed on the same data set in order to gain a deeper understanding of speech pathologists' understanding of the factors that influenced their practice. *Chapter 6* explored acute speech pathologists' conceptualisation, experiences, and perceptions of post-stroke aphasia management, and provided a greater understanding of the factors that influence their practice (Foster et al., 2016a). The findings identified the complex and multifaceted nature of the factors influencing aphasia management practice, including role perception, competing priorities, the de-prioritisation of aphasia, and the individual clinicians' beliefs about aphasia and their current management practices.

*Chapter 7* explicitly explored the participant's understanding of and relationship to EBP in relation to acute aphasia management (Foster et al., 2015b). This analysis was not pre-determined by the research team, but rather was produced from the data due to the notable shift in responses from participants when the topic of EBP was raised. Of concern, it was identified that for some speech pathologists, the notion of EBP was disempowering in their aphasia management practice. These speech pathologists reported a conceptualisation of EBP

that was focused on replicating the research literature in practice, which created a strained relationship with this stream of evidence. In response to this, speech pathologists reported feeling a sense of professional dissonance at their perceived inability to make EBP a clinical reality, despite their strong desire to do so.

The combined findings of Phase One, as presented in *Chapters 5, 6, and 7* identified significant influence which culture had in determining aphasia management practice in this setting. As such, Phase Two implemented a focused ethnographic approach specifically designed to provide a cultural picture of aphasia management in the acute hospital setting. The methods underpinning the focused ethnography are described in *Chapter 8*.

The findings of the focused ethnography (Foster et al., 2016b), presented in *Chapter 9*, identify the value placed in creating positive experiences for all stakeholders. When viewed through a cultural lens, relationships were found to be emphasised and valued in the experience of aphasia management in the acute hospital. Additionally, the importance of interaction in mediating genuine relationships was observed. This cultural awareness allows opportunity for a critical appraisal of the constraints which limit the enactment of relationship-centred aphasia management in acute hospitals.

This research has enhanced the current knowledge base on the elements that shape aphasia practice in the acute hospital setting by researching the lived experiences of speech pathologists and gaining a cultural understanding of the process. The final chapter in this thesis explores the implications these findings have for practice, discusses the strengths and limitations of the study, and makes recommendations for future research.

## **10.2 Implications for policy, education, and practice**

In Chapter 2, a narrative review of the literature related to aphasia management in acute hospital settings was undertaken within an evidence-based practice (EBP) framework. Mirroring this, the implications of the research which are presented in this chapter are represented within the same EBP framework. Findings and the associated principles and

recommendations for policy, education, and/or practice have been divided into the four streams of evidence represented in the EBP model: research-based clinical evidence, patient preferences and values, clinical expertise, and the practice context. This allows for an explicit discussion of recommendations within each of the different streams of evidence, and builds on and adds weight to existing recommendations to support EBP within the profession (e.g., McCurtain & Roddam, 2012) by making context and caseload specific recommendations. The findings of both Phase One and Phase Two of this research have been considered as a whole when describing the implications of this research and generating the associated recommendations described below. The presentation of findings in this manner provides an opportunity to reflect on the initial review of the literature, and consider what the findings presented in this thesis add to the literature base. In addition, a critique of the current application of this model in acute aphasia management is provided, in response to findings suggesting the notion of EBP is disempowering for some clinicians.

### *10.2.1 Implications related to research-based clinical evidence*

The findings of this research suggest that speech pathologists working in acute hospital settings focus on the research literature as the key element of EBP within their aphasia management practice. Given this, their relationship with the research literature – and researchers – is of additional importance. Previous explorations of information literacy for speech pathologists have focused on large, cross-sectional speech pathologist populations rather than utilising context-specific approaches, and have related largely to the information-seeking behaviours of speech pathologists rather than their information needs or use (Guo et al., 2008; Nail-Chiwetalu & Bernstein Ratner, 2007; Vallino-Napoli & Reilly, 2004). Of the participants in this research who reported poor relationships with the research literature, a complex interaction between a perception of poor information literacy, paucity of relevant research literature, lack of clinical utility, and both personal and departmental attitudes to the research literature was identified as underlying this. Recommendations to address this finding are presented in Table 10-1.

**Table 10-1** Recommendations related to the ‘research-based clinical evidence’ construct

Finding	Evidence	Principle	Recommendations
<p><b>Speech pathologists have a poor relationship with the aphasia research literature</b></p>	<p>Foster et al. (2015b)</p>	<p>Generation of high quality, clinically relevant research evidence on the management of aphasia in acute hospital settings is a priority</p>	<ul style="list-style-type: none"> <li>▪ The continuing proliferation of high quality aphasia research is required in order to support the effective and efficient use of the limited resources available in the acute hospital setting</li> <li>▪ The clinical utility of research could be supported by embedding researchers within the clinical setting</li> <li>▪ The clinical uptake of research could be enhanced by including a knowledge translation and exchange plan in aphasia research grant applications</li> </ul>
	<p><i>Supporting evidence:</i> Guo, Bain &amp; Willer (2008)</p>	<p>Speech pathologists require ongoing support in the seeking, appraisal, and implementation of recommendations from the research literature</p>	<ul style="list-style-type: none"> <li>▪ The provision of practical and theoretical education and support in the seeking, appraisal, and implementation of research literature recommendations in both tertiary education programs and in occupational settings may facilitate improved relationships with the research literature</li> <li>▪ Educational programs may benefit from supporting an understanding of the need for diverse research methods to examine diverse research questions</li> <li>▪ Protected time in the workplace for speech pathologists to engage with the emerging literature may enhance the uptake of new evidence</li> </ul>
	<p>Nail-Chiwetalu &amp; Berstien Ratner (2007)</p> <p>Vallino-Napoli &amp; Reilly (2004)</p>	<p>Mechanisms for knowledge transfer and exchange require revision</p>	<ul style="list-style-type: none"> <li>▪ Social and interactive methods of knowledge transfer and exchange should be considered to facilitate engagement between clinicians and researchers</li> <li>▪ Compiled, evidence-supported literature sources provided in an accessible manner may facilitate clinician engagement. For example, a standardised, evidence-supported care pathway for acute aphasia management, designed in collaboration with clinical speech pathologists with the provision of support for implementation and auditing</li> <li>▪ At each stage of the knowledge creation process, consideration may be given to tailoring research to the needs of the potential users</li> </ul>
		<p>The voice of clinicians, people with aphasia, their families, and researchers should be represented in the research</p>	<ul style="list-style-type: none"> <li>▪ Aphasia research should employ the principles of co-construction</li> </ul>

One challenge associated with poor relationships between clinicians and the research literature is the potential for consultation of the literature to be sporadic and motivated by a desire to confirm current beliefs and practices (Kunda, 1990) rather than to critically appraise or reflect on current practice.

Also evident in the findings of this research was a narrow conceptualisation of what constitutes 'research'. While holding value in the educational setting, evidence hierarchies have the potential to be limiting when interpreted in a narrow way. As evidenced in the findings of this research, a concrete reading of evidence hierarchies may result in significant emphasis placed on compiled or synthesised sources of evidence (e.g., clinical guidelines or systematic reviews) and randomised controlled trials due to their placement in hierarchies, regardless of the clinical or research question being asked. It is important that, as a profession, credence is given to a diverse range of research methodologies, which are required to respond to the diverse range of questions that emerge from the clinical setting.

Finally, the mechanisms for knowledge transfer and exchange require revision. The speech pathologists in this study clearly articulated a preference for social, interactive learning styles. Where written research literature was sought, it was most often in the form of compiled or synthesised literature sources, such as systematic reviews or, more commonly, clinical practice guidelines. This is consistent with previous research exploring relationships with the research literature for speech pathologists (Guo et al., 2008; Nail-Chiwetalu & Bernstein Ratner, 2007; Vallino-Napoli & Reilly, 2004). Participants in this study keenly supported the notion of a standardised, evidence-supported care pathway for acute aphasia management. Findings from recent research into guideline implementation by speech pathologists suggest that in order to enhance the uptake of such pathways, a number of strategies may need to be utilised at the design, implementation, and evaluation stages of development (Hadely et al., 2014; Miao et al., 2015). Consistent with knowledge transfer and exchange models (Graham et al., 2006), each stage of the knowledge creation process should be tailored to the needs of the potential users. This may be supported by globally requiring the inclusion of a knowledge transfer and exchange plan in all research grant applications, consistent with the prerequisites of a number of international funding bodies and the Australian Research Council's impact pathway requirement (Australian Research Council, 2015).

At a development level, clinicians, as well as people with aphasia and their families, should be consulted during the design process, different streams of evidence should be recognised (especially clinical expertise), and the direct relevance of the pathway to the clinical context should be established. Implementation of the pathway may be supported by in-person educational sessions and outreach meetings, the provision of relevant resources, and support from senior colleagues (Hadely et al., 2014), as well as a locally designed implementation plan (Miao et al., 2015). Consistent with previous studies, participants in this study also expressed that any pathway designed should include the capacity to audit performance (Hadely et al., 2014; Miao et al., 2015), however given the desire to devolve accountability to clinicians it is perhaps prudent to ensure that ownership of the audit-feedback cycle lies with clinicians.

In addition to this, the speech pathologists in this study clearly identified a preference for social, interactive learning styles. Researchers and clinicians alike, therefore, need to seek and create opportunities for the dissemination of research literature in a meaningful way that makes use of this articulated preference. When describing current relationships with aphasia researchers, the participants expressed the idea that researchers' interaction with the practice environment is important for clinicians, and that the method which researchers use to communicate with clinicians was also considered to be important. Speech pathologists were more engaged by researchers who they perceived as taking time to communicate regularly with them, and who provided their research findings in an accessible way that addressed the implications for clinical practice. Consideration needs to be given to understanding how to harness clinicians' desire for interpersonal relationships with aphasia researchers, including clinically-based collaborative research opportunities, increased clinician-researcher interaction during the design of research agendas, and regular communication of research findings in an accessible manner as a means to bridge the clinician-researcher divide.

## *10.2.2 Implications related to clinical expertise*

### *10.2.2.1 Building confidence, self-efficacy, and agency in acute aphasia management*

The findings of this body of work lend support to previous research findings which suggest that an increasing amount of time and resources are being attributed to dysphagia management over the management of communication disorders in the acute hospital setting

(Lawrie, 1996; Rose et al., 2013). However, with a growing body of literature suggesting the potential importance of speech pathology intervention for people with communication disability in terms of reducing the impairment (Godecke et al., 2013), improving patient satisfaction and greater involvement in healthcare decision-making (Tomkins et al., 2013), and better risk management (Hemsley et al., 2013), an opportunity presents itself for the profession to reassert itself as the communication experts.

In order for the profession to regain this notion of expertise, however, self-efficacy must first be established. It may be argued that the focus on swallowing has resulted in de-skilling of some acute speech pathologists in aphasia management. The cyclic nature of low self-efficacy (Thomas & Velthouse, 1990)– whereby low-self efficacy results in avoidance of situations that require relevant skills, which in turn leads to an inability to build competency and perceived self-efficacy – may be reinforced in the case of acute aphasia management by organisational prioritisation guidelines which promote the de-prioritisation of aphasia management. Encouraging a building of competence, and thus self-efficacy, in acute aphasia management is essential for clinicians. This may be achieved through exposure to people with aphasia in both educational and workplace settings, which provides opportunities for increased clinical expertise and confidence. This may be achieved through observational opportunities or rotational positions. It has the potential to build both a body of knowledge for practice and an increased understanding of patients and their carers, both characteristics of experienced and expert practice in allied health (Smith et al., 2010). In addition, opportunities for structured reflection of practice and relationship building with knowledgeable colleagues through aphasia-specific mentoring and supervision may be of benefit (Smith et al., 2010). Finally, fostering a lifelong learning approach through ongoing professional development may be of benefit. This may result in speech pathologists initiating behaviours, increasing effort, and demonstrating persistence in the face of obstacles to acute aphasia management (Thomas & Velthouse, 1990).

#### *10.2.2.2 Learning from the clinical expertise of others*

Speech pathologists' preference for knowledge obtained through the clinical expertise of self and others with locally relevant experience was articulated with clarity in this research. This finding may present an opportunity to utilise a local 'champion' model to promote the uptake of evidence-based approaches to care. This method has been supported in the literature (e.g.,



Roddam & Skeat, 2010), and has the potential of overcoming the researcher-clinician divide, while also clarifying the important contribution that context plays in clinical decision making.

**Table 10-2** Recommendations related to the 'clinical expertise' construct

Finding	Evidence	Principle	Recommendations
<b>Speech pathologists lack confidence, self-efficacy, and agency with regards to their practice of aphasia management in acute hospital settings</b>	Foster et al. (2015a, 2015b, 2016a)  <i>Supporting evidence:</i> Rose et al. (2013)	Strategies to support the psychological and structural empowerment of speech pathologists in their aphasia management practice may hold value	Speech pathologists' competence in acute aphasia management may be facilitated through: <ul style="list-style-type: none"> <li>▪ Exposure to people with aphasia in both educational and workplace settings</li> <li>▪ Aphasia-specific mentoring and supervision with a focus on reflective practice, and</li> <li>▪ Fostering a lifelong learning approach through ongoing professional development</li> </ul>
<b>Speech pathologists have a preference for knowledge obtained through the clinical expertise of self and others with locally relevant experience</b>	Foster et al. (2013; 2015b)  <i>Supporting evidence:</i> Gillam & Gillam (2006)  Guo et al. (2008)  Zipoli & Kennedy (2005)	Clinical experts in aphasia management have the potential to influence the clinical practice of others	<ul style="list-style-type: none"> <li>▪ Utilisation of local 'champion' models may promote the uptake of evidence-based approaches to aphasia management</li> </ul>

### *10.2.3 Implications related to patient preferences and values*

Within the EBP literature, the concept of patient preferences and values is often narrowly conceived as patients being given the opportunity to choose an intervention from a selection provided by clinicians (e.g., Pearson, 2010). The findings of this program of research did not reveal any additional information regarding the preferences of people with aphasia with regard to preferences for specific interventions, as has been explored previously in the literature (e.g., Worrall et al., 2010). Rather, this research took a broader view of the notion of patient preferences and values by looking beyond intervention decision making to the involvement of people with aphasia in their own healthcare decision making more broadly. The findings revealed that no formal mechanisms were reported to be in place to establish the needs and wants of people with aphasia in the acute hospital setting and goal setting processes were found to lack inclusive language, suggestive of a clinician-centric rather than inclusive process (Foster et al., 2015a). Review of the models and mechanisms for including people with aphasia in goal setting is essential.

A clinician's perception of both the impact and meaningfulness of acute aphasia management may be supported by a greater awareness of the perspectives and experiences of people with aphasia and their families. Integration of patient needs and values is central to the notion of EBP (Pearson, 2010). While research is beginning to explore the experiences of people with aphasia (e.g., Tomkins et al., 2013; Worrall et al., 2010), this may be supported by: (a) encouraging clinical experience with people with aphasia across the continuum of care; (b) strengthening relationships and communication between clinicians in the acute, sub-acute and community sectors; or, (c) engaging patients with aphasia who have been discharged in evaluating services to guide quality improvement activities and/or to provide peer support for people with new onset aphasia.

What was revealed by the findings of the research, however, was the significant emphasis that people with aphasia and their families place on interaction and relationships (Foster et al., 2016b). The value of establishing relationships with their patients with aphasia was also noted by speech pathologists (Foster et al., 2015a). Recommendations related to the patient preferences and values construct are presented in Table 10-3.

**Table 10-3** Recommendations related to the ‘patient preferences and values’ construct

Finding	Evidence	Principle	Recommendations
Interaction and relationships are critical to the creation of a positive experience for people with aphasia, their families, and speech pathologists in the acute hospital setting	<p>Foster et al. (2015a; 2016a)</p> <p><i>Supporting evidence:</i> Worrall et al. (2010)</p> <p>Beach et al. (2006)</p>	<p>Adoption of a relationship-centred model of care in acute hospital settings may enrich the experience of aphasia management for all key stakeholders (i.e., people with aphasia, their families, and speech pathologists)</p>	<ul style="list-style-type: none"> <li>▪ Healthcare services need to recognise the value of relationships, and the influence of relationships on experiences of care</li> <li>▪ Aphasia clinical guidelines may be enhanced by explicitly recognising the value of relationships in the care of people with aphasia</li> <li>▪ Supported conversation techniques (e.g., Kagan, 1995) may be used to support relationship building through communicative interaction and transaction in the acute hospital setting</li> <li>▪ A greater awareness of the perspectives and experiences of people with aphasia may be supported by encouraging speech pathologists to:               <ul style="list-style-type: none"> <li>○ Gain clinical experience across the continuum of care, and/or</li> <li>○ Strengthen relationships and communication between clinicians in the acute, sub-acute, and community sectors</li> </ul> </li> </ul>
People with aphasia are often not active participants in goal setting in the acute hospital setting	<p>Foster et al. (2015a)</p> <p><i>Supporting evidence:</i> Laver et al. (2010)</p> <p>Worrall et al. (2010)</p>	<p>Models and mechanisms are required to support the inclusion of people with aphasia in goal setting and decision making</p>	<ul style="list-style-type: none"> <li>▪ Models of goal setting which include a ‘motivational’ phase (e.g., Schwarzer et al., 2008) may support the inclusion of people with aphasia by allowing them time to build knowledge and develop understanding to facilitate goal creation</li> <li>▪ People with aphasia should be involved in the development of new models of goal setting</li> </ul>

#### 10.2.4 *Implications related to context*

Elements of context were noted to be of significant value in building an understanding of the factors that influenced aphasia management practice in the acute hospital setting. Participants in both Phase One and Phase Two of this study most readily identified the influence that increased resources – in particular, time and staffing – would have on the capacity to implement evidence-based approaches to acute aphasia management. However, it remains unclear to what extent these additional resources would influence the uptake of evidence-based approaches.

A single theme relating to context permeated the findings of both phases of this body of research. From the perspective of this research, the notion of ‘cultural confines’ can be considered to be central to our understanding of what influences aphasia management practice. Culture can be conceptualised as a series of shared norms and values which shape and influence our behaviours and decision making, and can act in both a conscious and an unconscious manner (Sumsion, 2009). Culture can work to enrich our lives and create a sense of belonging, it can also act to create boundaries. This was explicated in the narratives of speech pathologists, people with aphasia and their families. Recommendations are made in Table 10-4.

##### 10.2.4.1 *Cultural confines for speech pathologists*

The major cultural influences acting on speech pathologists can be divided into two: *the culture of acute hospitals*, and *the culture of acute speech pathology*. Each of these is discussed below.

The organisational culture of the acute hospital setting was significant in shaping the acute aphasia management of the participants in this research. The medical model, with its inherent hierarchy, is integral to the acute hospital setting and something to which speech pathologists felt they must conform in order to be held in high esteem (Foster et al., 2016a; Foster et al., 2016b; Foster, et al., 2015a). In clinical practice, this manifested in different ways for different clinicians. Some clinicians felt obligated to provide intervention to people with

aphasia in order to report back to the multidisciplinary team, whilst others felt provision of intervention to people with aphasia would be considered abnormal by colleagues in the acute hospital setting (Foster et al., 2016a). The medical model was also reported to focus on patients' physical well-being, which shaped the comparative value that the medical team place on swallowing over communication, which in turn significantly influenced speech pathology practice (Foster et al., 2016a). In addition, the culture of this setting resulted in a pressure to focus on the rapid assessment and discharge of all patients, resulting in the patient's views and values often being lost in bureaucracy (Foster et al., 2016a; Foster et al., 2015a). The influence of organisational culture on practice was reported to be felt more strongly by participants working within the private sector, who described a more explicit medical model with a greater emphasis on funding models, rapid discharge, and service provision within the constraints of private health insurance funded days (Foster et al., 2016a). Consistent with the work of Gale and her colleagues (2014) further, nuanced exploration of culture exploring the different levels of culture – artefacts, values and habits, and basic assumptions in the works setting – across the three domains in which culture is enacted (patients, people, and place) would be of value.

The culture of acute speech pathology can be conceptualised both in terms of the responsibilities that acute speech pathologists perceive to be a part of their job, and the shared beliefs they hold about their position. The findings of this research identified that this notion is both complex and dynamic (Foster et al., 2016a). The culture of acute speech pathology was observed to be influenced by two key elements: perceptions of the profession, and perceptions of acute speech pathology. Speech pathology was seen as a helping profession, with participants reporting a desire to see improvement in the patients with whom they are working, despite sometimes feeling ill-equipped to enable this change (Foster et al., 2016a; Foster et al., 2016b). Acute speech pathology, however, was considered in terms of three key factors: (1) that it was *delineated* from the role of sub-acute clinicians; (2) that there was a sense of *solidarity* amongst acute speech pathologists, who use comparison with others as an evaluation of practice; and, (3) that it was *dynamic*, with the capacity to challenge cultural norms, changing in response to clinical experience, with variable emphasis on roles and changes in self-confidence over time (Foster et al., 2016a; Foster et al., 2015a).

For these speech pathologists, being perceived by others (e.g., the multidisciplinary team, the speech pathology department, and their patients) in a positive light was achieved through cultural adherence, which brought with it a sense of professional satisfaction and success (Foster et al., 2016a; Foster et al., 2016b). It is perhaps not surprising, therefore, that these speech pathologists described modifying their role in order to seek cultural adherence, largely through the prioritisation of dysphagia to the detriment of aphasia, and that these roles became self-reinforcing (Foster et al., 2016a; Foster et al., 2016b; Foster et al., 2015a).

#### *10.2.4.2 Cultural confines for people with aphasia and their families*

The ‘cultural confines’ for people with aphasia and their families can be thought of as the prescribed cultural norms to which people adhere. For people with aphasia and their families these cultural influences arose from two primary sources within the context of this body of research: the family culture (i.e., expectations about how one should behave within their role in the family), and the culture of the acute hospital (i.e., expectations about how one should behave as a patient or the close other of a patient in a hospital).

Culture within families and the individual perceptions of their role in the rehabilitation process had a significant influence on aphasia management practices. Within Phase Two, individual families were noted to have different familial cultures (Foster et al., 2016b). Individual family culture was demonstrated in two ways: the role families took on during the rehabilitation process, and the speech pathologist’s responsive model of service provision (Foster et al., 2016b). While not observed during Phase Two, speech pathologists in Phase One expressed concerns regarding the inequity of service provision which may occur for people with aphasia who do not have family present to advocate for services (Foster et al., 2015a; Foster et al., 2015b), and the potential of further disempowering an already disenfranchised patient group.

Within the acute hospital context, the cultural role of the ‘patient’ within the hierarchy of the medical model also permeated the beliefs and behaviours of the people with aphasia and their close others who participated in this study. Most patients demonstrated an implicit trust in

their treating speech pathologists, a trust that existed even in the presence of unmet needs. One participant with aphasia who articulated both unmet educational and therapeutic needs, continued to reiterate her belief that her treating speech pathologist did what she could for her during her inpatient stay. In part, this may be attributed to the value that these people placed on the relational elements of their interaction with the clinician. This focus on relational elements in evaluations of satisfaction with health practitioners is a common theme in the literature exploring healthcare relationships, however, it is perhaps even more pronounced in the context of communication disability where people require additional support from those with specialist communication training.

People with aphasia and their families who stepped out of the cultural confines of being passive recipients of healthcare were perceived as antagonistic and demanding by speech pathologists and members of the multidisciplinary team (Foster et al., 2016a; Foster et al., 2016b). However, despite this negative perception of those who asked for what they wanted, these outspoken/more assertive patients and their families accessed services more closely aligned to best practice recommendations.

#### *10.2.4.3 Creating cultural change to improve the management of aphasia in acute hospitals*

The findings of this research describe the powerful ways in which cultural elements of the practice context can act to facilitate or create barriers to the provision of aphasia management in the acute hospital setting. Understanding and harnessing these cultural factors, therefore, can help us to better understand how we can optimise the services provided to people with aphasia in the acute hospital setting.

If, as a profession, value is placed on the management of aphasia in the acute hospital setting, then change needs to occur. While lack of time is often cited as the primary factor influencing the management of aphasia in acute hospitals, the findings of this research lead us to ask: is time enough? Re-conceptualisation of the acute speech pathologist's role in aphasia



management at a cultural level, and empowerment of people with aphasia and their families, is likely to be more effective.

Empowering people with aphasia and their families to be active in decision making and advocacy regarding their own healthcare is likely to influence aphasia management positively. As evidenced in the findings of this research, this can be fostered by supporting communication access, and engaging people with aphasia and their families in relationship-centred approaches to practice (Foster et al., 2016b).

For speech pathologists, it is important that as a profession we reflect on how to best create a stronger “communication culture” in the acute hospital setting. Ideas generated by participants within the context of this research include:

- Local opinion leaders;
- Aphasia-specific supervision and mentoring;
- Acknowledgement of the risk associated with having communication impairment in the acute hospital setting;
- Revision of prioritisation systems to reflect best practice recommendations; and,
- Accessible, user-friendly guidelines – such as the Australian Aphasia Rehabilitation Pathway – which also create the opportunity to utilise audit and feedback cycles.

Changes such as those discussed have the potential to not only improve services to people with aphasia and their families, but also to decrease the sense of dissonance for speech pathologists working in this setting.

**Table 10-4** Recommendations related to the 'context' construct

Finding	Evidence	Principle	Recommendations
The culture of the acute hospital setting does not facilitate aphasia management	<p>Foster et al. (2015a; 2015b; 2016a; 2016b)</p> <p><i>Supporting evidence:</i> Ham (2014)</p> <p>West &amp; Dawson (2012)</p> <p>The King's Fund (2012)</p>	<p>Building a stronger 'communication culture' in which the speech pathologists' role in communication management is valued may act to facilitate aphasia management in the acute hospital setting</p>	<ul style="list-style-type: none"> <li>▪ Interventions to improve acute aphasia management undertaken with the determination to support speech pathologists in addressing service challenges rather than imposing solutions on them may result in greater uptake</li> <li>▪ The uptake of evidence-based approaches to aphasia management in the acute setting may be supported by leaders who actively devolve decision-making and accountability to frontline clinicians, giving staff a strong voice and empowering them to improve care</li> <li>▪ Healthcare leaders can support acute aphasia management by creating roles that are rewarding, give clinicians autonomy, and provide staff with support, encouragement, and recognition</li> <li>▪ Team leaders can set cultural expectations of attitudes, values, and behaviours which may support the delivery of high-quality services to people with aphasia in clinical settings</li> </ul>

### 10.2.5 *Challenges to the implementation of EBP*

While the above discussion highlights the contributions made by this body of research to the literature related to each of the individual streams of evidence which contribute to evidence-based acute aphasia management, the research findings further suggest that strengthening the evidence alone will not be sufficient to improve current practice. A restriction in the theoretical interpretation of evidence-based practice is clear from the findings, with significant emphasis being placed on the research-based clinical evidence stream, resulting in a sense of disempowerment for some speech pathologists. Overcoming this sense of disempowerment is perhaps the most urgent step in improving aphasia management.

The source of this restricted perception of EBP is unknown. It has been argued that this may be the result of distortion of the evidence based brand; an oversupply of evidence; a lack of clinical significance in statistically significant findings; an overemphasis on ‘rule-based’ practice; and, evidence-based guideline being a poor fit for multimorbidity (Greenhalgh et al., 2014). This argument, however, was focused specifically on medicine and its application to allied health disciplines is not well understood. Within the speech pathology profession, it remains unclear if the conceptual narrowing of EBP arises at educational, organisational, or personal levels, or a combination of the three. While tertiary education programs and seminal texts on EBP for health professionals (e.g., Higgs, Jones, Loftus, & Christensen, 2008; Melnyk & Fineout-Overholt, 2011) provide holistic definitions of EBP in introductions, the majority of content is dedicated to the appraisal of research literature, rather than integrating all streams of evidence. As a profession, speech pathology needs to ensure that education and support in relation to EBP returns to the original definition of EBP as articulated by Sackett and his colleagues (1996) in their original and most widely used definition of EBP, and is unambiguous about the goal of EBP being the integration of multiple streams of evidence. The profession needs to encourage a perception of EBP as a life-long learning approach to clinical decision making, by extending the focus of our discourse in relation to EBP beyond appraisal and direct replication of the research literature.

In addition, it is essential that the discussions of EBP place value and emphasis on authentic relationships as being central to the EBP process. The findings of this research have demonstrated the significant value that is placed on relationships by both people with aphasia and speech pathologist in the acute hospital setting (Foster et al., 2016b; Foster et al., 2015a). Speech pathologists, however, expressed concern that their emphasis on this element of their practice

detracted from their capacity to provide evidence-based management of aphasia (Foster et al., 2015b), resulting in both despondency and negative relationships with EBP. Such clinical tensions were identified in the nursing literature over a decade ago, at which point Kitson (2002) contended that the evidence-based practice movement was being perceived to be in conflict with other major ideological movements which place relationships front and centre in clinical care. It was identified that nursing was affected by this tension due to the profession's focus on relationships with patients to achieve outcomes (Kitson, 2002). It could be argued that speech pathology, especially when dealing with people with communication disability, similarly places relationships at the centre of practice. In response to this, strong advocacy movements which supported the inclusion of a fourth stream of evidence, characteristics from the practice context, were mounted (McCormack et al., 2002; Rycroft-Malone et al., 2004). Context includes in its definition notions of relationships between professionals and patients (Rycroft-Malone et al., 2004). It has been argued that by embracing this broader, more inclusive definition of what counts as evidence, the unresolved and mounting sense of dissonance experienced by healthcare professionals could be resolved (Kitson, 2002).

The lack of focus on relationships as being a part of discourse surrounding EBP is potentially exacerbated by the exclusion of recommendations related to authentic relationships in guidelines such as the Australian Clinical Guidelines for Stroke Management (National Stroke Foundation, 2010). Guidelines such as these often act as principal sources of evidence for speech pathologists working in acute stroke units (Foster et al., 2015b). However, their mandate to include only higher level of evidence (e.g., randomised control trials and systematic reviews) creates guidelines which have high levels of evidentiary support, but exclude key findings which emphasise the need to focus on relationship-centred care in aphasiology (e.g., Worrall, Davidson, et al., 2010).

The findings of the current research challenge the speech pathology profession to take on a broader understanding of evidence-based practice. In doing so, it requires the profession to broaden the research agenda, research methodologies, and research practices; broaden the skills set for clinicians; and broaden the outcome measures that are used in the acute hospital setting and beyond. Authentic relationships need to be seen as a key component of – rather than in direct competition with – notions of evidence-based practice for acute aphasia management.

## 10.3 Strengths and limitations

Measures have been implemented during the design, data collection, analysis, and reporting phases of the research to promote the rigour of each phase. A clear statement of the aims of the project is provided, as is a strong rationale for the methodological choice. Importantly, a clearly articulated epistemological position is included, with which the conduct of this research can be compared. The strategies for rigour have been described in detail in the relevant chapters of the thesis.

This research was undertaken in an Australian context only. Given the understanding of disability and health as being bound by contextual factors, these findings may not apply to vastly different social, economic, cultural, and/or healthcare environments. The clear description of participants and contexts, however, allows judgement to be made regarding the application of findings to individual settings.

Qualitative research is often criticised for its small sample sizes. It is important to remain aware, however, that the intention of qualitative enquiry is to provide depth rather than breadth in its understanding of a specific phenomenon. Phase One included fourteen speech pathologists as participants (following the exclusion of one participant). In order to support the depth of understanding gleaned from this phase, a purposive sampling method was utilised. The findings of this phase shaped the design of Phase Two, which was undertaken as an in-depth exploration of the speech pathology management of aphasia on a single acute stroke unit. This research is one of only a handful of studies to use observational methods to explore aphasia management in clinical settings (e.g., Horton, Lane & Shiggins, 2015; O'Halloran et al., 2011; Hersh, Godecke, Armstrong, Ciccone, & Bernhardt, 2014), a method which has been identified as being valuable in the exploration of clinical decision making.

In Phase Two of this research, a conscious decision was taken to explore in depth the speech pathology management of aphasia in a single acute hospital setting. This decision was made in the context of limited previous research in this area, whilst also being mindful of the limited capacity of and resources available to the research project. While this allowed for a comprehensive portrayal of a specific element of practice, the limited sample (i.e., the focus on speech pathology and the exclusion of other valuable sources of information such as nurses, medical staff, and managers) is a

limitation. The limitation is particularly pertinent given the strong thematic indications that broader exploration of the peopled context of practice may be of value, such as: (a) evidence of the influence of referral sources and processes to the overall management of people with aphasia by speech pathologists (see Section 5.4.2.1); (b) the influence of the medical model and its inherent hierarchy on speech pathology management (see Section 6.4.2.1); and, (c) evidence of the influence of prioritisation systems on aphasia management by speech pathologists (see Section 6.4.3.1). These clear cultural findings suggest the need for a broader investigation in the future. In addition to the inclusion of a broader sample of key informants, including those from other healthcare disciplines, acknowledgement of the broader aspects of culture may have been facilitated by the application of a framework for researching organisational culture in the design, data collection, and reporting phases of the research (see Section 10.4 for a discussion of future directions). This approach would more consistently align with the social constructivist paradigm within which this research was conducted, in which emphasis and value are placed on interaction, co-construction, and an explicit awareness of the cultural and historical influences that are present in individuals' lives.

The dual phases of this research, each with their own methods and aims, allowed for a deeper understanding of the phenomenon. This allowed for methods triangulation, in which information was gathered based on inherently subjective, retrospective recall (Phase One), and observation of reality in practice (Phase Two). In addition, the dual phases allowed for the inclusion of multiple perspectives: the speech pathologist, the person with aphasia, the close other, and the researcher. The emphasis in the findings of the research, however, is on the speech pathologist in recognition of the original research aim of understanding the factors that influence practice. This was done not with the intention of undervaluing the perspective of others, but in recognition of the focus on the speech pathologists' practice.

This research could be considered 'insider research' given that I consider myself a part of the community under investigation. Being a member of the community allowed for a relational element to exist within the data collection, facilitating the participants' sharing and sense of sameness with the research. As an acute speech pathologist there was, however, the possibility that my prior experiences and beliefs could shape and influence the research process. Conversely, it was found that the findings challenged my preconceived notions. While I previously believed that lack of time

was central to aphasia management in acute settings, the findings revealed the significance of cultural influences and relationships on practice.

## **10.4 Future directions**

The research presented in this thesis revealed numerous relevant findings from which potential directions for future research can be derived. These future directions can be used as a means to gaining a deeper and more nuanced understanding of aphasia management in acute hospital settings, or to apply the research methodology and methods used in this research in another area of practice.

A longitudinal prospective qualitative investigation has the potential to reveal when, how, and why the factors that influence aphasia management in the acute hospital setting change over time. Research such as this could track the changes in individual clinicians as they gain more experience.

The research approach utilised in this study also has the potential to be applied to different settings (e.g., the subacute or community settings), a different range of practice areas (e.g., dysphagia, speech, etc.), or different populations (e.g., paediatrics) as a means of comparison.

A more comprehensive, inclusive exploration of the culture of the acute hospital setting and the influence on the clinical reasoning and decision making of speech pathologist would be of value. This could overcome the limitations of the current study by including the perspectives of other health professionals and managers within the acute hospital setting, and/or extending the exploration to multiple acute hospital settings in order to understand the cultural commonalities and differences. A study such as this could be supported through the application of a framework for researching organisational culture, such as the Patients-People-Place framework proposed by Gale, Shapiro, McLeod, Redwood and Hewison (2014), during the planning, conducting, and analysis phases of the research. This would facilitate the inclusion of three domains and three levels that are important to understanding hospital culture in future healthcare research.

In addition, knowledge transfer and exchange (KTE) projects, in which individualised and tailored strategies to support improved acute aphasia management in the acute hospital setting are implemented, may be a mechanism for fostering stronger relationships between speech pathology clinicians and researchers. The relational element of KTE allows for the generation of clinically relevant research agendas, and has the potential to increase the uptake of evidence in both clinical and policy level decision making (Kagan, Simmons-Mackie, Gibson, Conklin, & Elman, 2010). While the literature has described the applicability of this approach in clinical aphasiology (Kagan et al., 2010), to date there has been limited exploration of its application in closing the evidence-practice gap for acute aphasia management.

## **10.5 Conclusion**

This research provides an in-depth understanding of the factors that influence current aphasia management practice in the acute hospital setting. Importantly, the use of multiple methods allows for a deeper understanding of this phenomenon from different perspectives. This understanding provides us with an understanding of the foundations on which we can build stronger and more robust aphasia management services in the future.

The findings contain a strong, positive message. Speech pathologists strive to provide evidence-based aphasia management in the acute hospital setting, and they value relationships with their patients. Dissonance is experienced, however, due to the perception that current practice is not consistent with the literature recommendations.

Implementing the recommendations of this research by recognising the value of interaction and relationships in the experience of aphasia management holds significant value. The findings demonstrate that a creating a positive experience for speech pathologists in aphasia management may facilitate the creation of a positive experience for people with aphasia, and vice-versa. If we place value on improving the experience of aphasia management for people with aphasia, their close others, and speech pathologists alike, change in current aphasia management practice needs to occur.



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# Appendices

## Appendix 1: Topic guide: Phase One

# Interview Topic Guide

## Phase 1 (Interviews with speech pathologists)

**Research aim: To understand speech pathologists' conceptualisation of acute post-stroke aphasia practice and its implementation**

### Briefing

**Aims:** To explain the purpose of the research; to introduce the researcher; to describe the interview process

- Thank participant for taking part in research
- Introduce researcher
- Explain the purpose of the research:
  - I would like to talk to you about your experience of working with people with aphasia and their families as an acute speech pathologist
  - This interview is an opportunity for you to discuss your personal experiences, and to discuss how you feel about things at present
- Explain interview process:
  - Interview usually goes for about an hour, but may be shorter or longer than this depending on how much discussion arises
  - If at any point you would like to take a break, just let me know
  - Interview will be recorded
  - Researcher will take some notes during the interview to keep track of the main points
  - Explain importance of wanting to understand the experiences and perspectives of practicing SPs
- Any questions?

### Demographic information

**Aim:** To be able to provide detailed and accurate descriptions of participants

- Age
- Years of clinical practice as a speech pathologist
- Years of clinical practice as a speech pathologist in the acute hospital setting
- Stroke unit in current workplace?
- Estimated percentage of time spent working with stroke patients/on stroke ward
- Estimated percentage of time spent working in the acute hospital setting
- University

### Research topics

**Aim:** To understand speech pathologists' conceptualisation of acute post-stroke aphasia practice and its implementation, through an exploration of their lived experiences and the meaning they make of that experience

#### Experience of working in acute post-stroke aphasia management

- Description of participant's experience working in acute post-stroke aphasia management
  - **Tell me about your experience working with people with aphasia and their families in the acute setting**

#### PROBES:

- Time pressures: How do you balance your time throughout the day?
- Multiple roles: What sort of roles do you have as a speech pathologist and on the acute stroke unit?
- Job satisfaction: Tell me a bit more about how you feel about your current role
- Emotional impact: How do you feel about your work in acute aphasia management?
- Prioritisation: How do you prioritise the patients on your caseload?
- Time pressures: How do you allocate time between tasks?
- Clinician preference: What do you enjoy about working in the acute setting? How does aphasia management fit in with this?

### Management pathway for people with acute post-stroke aphasia

- Description of typical management pathway for people with acute post-stroke aphasia management
  - **Can you describe your experience of the typical management of people with acute post-stroke aphasia and their families in your workplace?**

#### PROBES:

- Assessment: How do you assess someone with suspected aphasia in the acute phase?
- Education: Can you describe further the education that you provide during the acute phase?
- Counselling: What do you see as a speech pathologist's role in relation to counselling for people with acute aphasia and their families?
- Therapy: What sort of therapy do you implement in the acute phase?
- Real vs. ideal: Is it a reality for you that there is a gap between what you do and what you'd like to do for PWA and their families?
- Professional values: In your experience, what is the most important thing you do for PWA and their families in the acute setting?

### Influences on decision-making in acute post-stroke aphasia

- Description of the factors which influence decision making in acute post-stroke aphasia management
  - **In your experience, is the management of people with aphasia pretty much the same for everyone or is it different for some people with aphasia compared with others?**
    - **Can you give me an example?**
    - **In your experience, what factors might influence your decision making?**

#### PROBES:

- Research evidence: How does research evidence contribute to your decision-making in the acute phase?
- Patient preferences: How do you take into account the preferences of PWA and their families when planning management?
- Clinical expertise: What role does previous experience play in what you do clinically?
- Context: Can you describe what the acute stroke unit is like physically?  
Does your acute stroke unit have any policies in place which affect the way you practice? Can you tell me about them?
- Main factor: What is the main factor that influence your decision making in you management of PWA? **or** What are the major things that influence your practice?

### Barriers and facilitators to evidence-based acute post-stroke aphasia management

- Description of the barriers and facilitators for evidence-based acute post-stroke aphasia management
  - **In recent times, there has been lots of discussion regarding evidence-based practice, which is a relatively new concept to speech pathology.**
    - **Has there been any change in you acute aphasia management in response to this?**
      - **If negative reactions:**
        - **It seems like there has been a bit of a change in the response to that question compared to the rest of our discussion. Is that something you feel too? Can you tell me more about that?**
        - **Interviews I have conducted so far and the literature say that implementing EBP is challenging in the acute setting. Is that the case for you?**
    - **So what does EBP mean to you working in this context?**
    - **Can you think of anything that helps or would help you to use evidence-based approaches in aphasia management?**
    - **Can you think of any challenges or barriers to making you acute aphasia management evidence based?**

### De-briefing

**Aims:** To conclude the interview; to allow a forum for any questions

- Our aim is to understand your experiences related to acute aphasia management, and your perspective on the barriers and facilitators to its implementation in the acute hospital setting. Is there anything else we should have asked to help us better understand this?
- [Provide summary of interview and allow the participant to amend responses or provide further explanation as necessary]
- What do you feel have been the most important things that we have spoken about?
- Is there anything else you would like to discuss?
- Any questions?

## Appendix 2: Example field notes: Phase One

08/05/2012

### Immediate reflections from researcher on interview 1 (Stella)

Initially, I got the feeling that this could be a quite a difficult interview, and that I was a burden on the participant's time. I was greeted by her saying "I had forgotten you were coming today, and I was thinking 'Who is it sitting out there?', but then I looked in my diary".

The hospital is an inner metropolitan hospital, and I have the sense that it is very important from a professional perspective for this participant to work in this setting – a sense of having 'made it'. I didn't get the chance to walk by any wards, or do much 'people watching', but I did spend a bit of time in the café there, which had quite a community feel to it which I have not found to be common in metropolitan hospitals.

I can't put my finger on my response to this participant exactly, but I felt as though she had to establish her standing with me, by including things like: I've worked overseas, my husband is a health professional, I'm on the EBP committee. I can't help but think that whilst it didn't sit well with me for some reason, I would probably do the same if I were in her situation.

Concerned re: asking potentially leading questions – will need to review this in the transcript

Took more time to focus on the questions that I was asking, and the way in which they were asked

Participant appeared to handle the questions much better than the pilot participant - ? due to more recent acute aphasia management work or slightly different wording of questions/revision of the topic guide

Some difficulties with bringing the participant back to topic – will need to review strategies for this in the transcript

Participant keen to discuss broader stroke services - ? whether this will continue with other participants too. Thinking about aphasia services in the broader context of acute stroke services – is this something we should specifically be looking at, or will it emerge naturally?

Less requirement for fillers and responses, as participant was generating a lot of output

Felt more comfortable with relationship without feeling the need to use my own clinical examples

Feels like there may potentially be areas that I have missed, but will look at this following the transcription

There were some different themes emerging comparative to the pilot interview, for example a strong focus on acute stroke units versus health services without these

No practice examples were provided, which I find very interesting. Does this imply a level of abstraction in the questions, or reflect a "real versus ideal" divide in the description, or something else altogether?

Interesting that participant's personal experiences with stroke (grandmother) has been identified as a factor which influences practice

Need to review how to word question re: gap. Think I made a blunder when I said "doing the best you can", which had the potential to get the participant off side

Little responsiveness by the participant in the "recap" at the end by the researcher - ?reason for this; ?if this is a relevant strategy for everyone

### Appendix 3: Example transcribed interview: Phase One

		Um, <u>when</u> I go in to see someone obviously I <i>will</i> assess their dysphagia first, but while I'm doing that I'm obviously paying a lot of attention [Abby: Mm hm] to how they're communicating and, and um, as soon as I'm able to I follow up on their communication. Um, and I found obviously in acute you've got less time [Abby: Mm hm] um, and you're not always able to follow up on everything but we're very fortunate that our rehab unit is about 20 metres down the corridor, [Abby: <i>[laughs]</i> ] um, so I know that, with confidence, that anything that I don't get to do [Abby: Mm hm] will be followed up on. But my, um, my goal for every stroke patient that comes through the door is that if they require any kind of language, um, assessment that they'll at least get a screener [Abby: Mm hm, mm hm] as a minimum on acute. Um, and...yeah that will get done as soon as the swallowing side of things is, is under control [Abby: Mm hm, mm hm] and as soon as they're medically able to participate [Abby: Mm hm] in any kind of formal assessment. [Abby: Mm] But definitely from the word go, from that initial assessment, there's comments made in their file about their communication [Abby: Mm hm] status from day one, [Abby: Mm hm, mm hm] yep.
0:16:31.7	Abby	Um, so you said a lot of the referrals that are being generated are dysphagia driven.
0:16:36.3	Monica	Mm, oh <u>yeah</u> definitely.
0:16:36.9	Abby	<u>Why do you think that is?</u>
0:16:39.6	Monica	Um, <u>because</u> they know that there's clinical risk there [ <i>laughs</i> ]. [Abby: Mm] Um, it's definitely – at least they're starting to recognise that it is an issue that they need to get on top of, [Abby: Mm] it doesn't mean that they always do it but it's definitely something that they're recognising can cause problems in terms of their overall medical status so they tend to be onto that a little bit quicker. [Abby: Yep] I think, as well, there's always less understanding about language, [Abby: Mm] it's less obvious. "Oh, <u>they're</u> tired, [Abby: Mm] they're confused, they've had a bad night", all of those other excuses come up as well. [Abby: Mm] Um, s, you...It's very, um, variable as to what you get in terms of, um, the referrals. [Abby: Mm hm] I mean one gentleman turned out to be incredibly <u>dyspraxic</u> , he wasn't aphasic at all. [Abby: Mm] Um, <u>but</u> they kept on writing in his file that he had dysarthria, [Abby: Right] or dysphasia and like there was, there's a lot of confusion I think [Abby: Mm, mm hm] about the terminology that we use. But if there's something obvious they will write in the file and the med team aren't <i>too</i> bad, [Abby: Mm hm] um, but they often don't understand the full extent. [Abby: Mm] Yep, it has to be pretty obvious for them to pick up on it. [Abby: Mm] Mm. [Abby: Mm hm]
0:17:55.8	Abby	Um, <u>you</u> also talked about there being less time in acute.
0:17:58.4	Monica	Yeah that's it.

## Appendix 4: Ethics approval (The University of Queensland Human Research Ethics Committee)



THE UNIVERSITY OF QUEENSLAND  
Institutional Approval Form For Experiments On Humans  
Including Behavioural Research

**Chief Investigator:** Ms Abby Foster

**Project Title:** Acute Post-Stroke Aphasia Management And The Factors That Influence It

**Supervisor:** Prof Linda Worrall, Dr Miranda Rose, Dr Robyn O'Halloran

**Co-Investigator(s)** None

**Department(s):** School of Health and Rehabilitation Sciences; School of Human Communication Sciences, La Trobe University

**Project Number:** 2012000159

**Granting Agency/Degree:** 2011 Australian Postgraduate Award

**Duration:** 28th February 2015

**Comments:**

**Name of responsible Committee:-**

**Behavioural & Social Sciences Ethical Review Committee**

This project complies with the provisions contained in the *National Statement on Ethical Conduct in Human Research* and complies with the regulations governing experimentation on humans.

**Name of Ethics Committee representative:-**

**Associate Professor John McLean**

**Chairperson**

**Behavioural & Social Sciences Ethical Review Committee**

Date

7/3/2012

Signature



### **Additional Notes to Ethics Approval**

1. The clearance number should be quoted on the protocol coversheet when applying to a granting agency and in any correspondence relating to ethical clearance.
2. Clearance will normally be for the duration of the project unless otherwise stated in the institutional clearance form.
3. Adverse reaction to treatment by subjects, injury, or any other incidents affecting the welfare and/or health of subjects attributable to the research should be promptly reported to the Head of School, the Occupational Health & Safety Unit, and the Ethics Committee.
4. Amendments to any part of the approved protocol (including change of Investigator/s), documents, or questionnaires attached to the clearance must be submitted to the Ethics Committee for approval.
5. Unforeseen events that might affect continued ethical acceptability of the project must be immediately reported to the Ethics Committee.
6. Discontinuation of the project before the expected date of completion must be reported to the Ethics Committee, giving reasons.
7. The Chief/Principal Investigator/s are responsible and accountable for full compliance of the protocol by all investigators.
8. The Committee reserves the right to visit the research site and view materials at any time, and to conduct a full audit of the project.
9. It is the Committee's expectation, whenever possible, that work should result in publication. The Committee would require details to be submitted for our records.
10. Staff and students are encouraged to contact either the Ethics Officer (3365 3924), or Chairperson on other issues concerning the conduct of experimentation/research (e.g., involvement of children, informed consent) prior to commencement of the project and throughout the course of the study.

## Appendix 5: Ethics approval (Phase Two health network Human Research Ethics Committee)



HUMAN RESEARCH ETHICS COMMITTEE

### Full Approval

12 December 2012

Miss Abby Foster  
3/21 Illawarra Road  
HAWTHORN VIC 3122

Dear Miss Foster

PROJECT: HREC/12/ [redacted] /64  
TITLE: Acute aphasia management and factors that influence it

Thank you for submitting the above project which was first considered by the [redacted] Human Research Ethics Committee (HREC) on Wednesday 5 December 2012 in accordance with the National Statement on Ethical Conduct in Human Research (2007). The Committee granted unconditional approval of this project and would like to commend you on the high quality of your application.

The documents reviewed and approved include:

NEAF:	13 November 2012
SSA:	29 October 2012
Victorian Specific Module:	25 October 2012
Protocol:	Version 1: 24 October 2012
Letter of Invitation (EOI):	Submitted 26 October 2012
Participant Information and Consent Forms:	
Participants with Aphasia:	Version 1: 23 October 2012
Close Others of Participants with Aphasia:	Version 1: 23 October 2012
Speech Pathologist Participants:	Version 1: 23 October 2012
Interview Topic Guides:	
Participants with Aphasia:	Version 1: 23 October 2012
Close Others of Participants with Aphasia:	Version 1: 23 October 2012
Speech Pathologist Participants:	Version 1: 23 October 2012

Please note the following requirements of the [redacted] HREC:

1. The principal investigator will immediately report anything which might warrant review of ethical approval of the project in the specified format, including:
  - any serious or unexpected adverse events
  - unforeseen events that might affect continued acceptability of the project.
2. Proposed changes to the research protocol, conduct of the research, or research completion date will be provided to the HREC for review in the specified format.

*At Peninsula Health we value:  
Service Integrity Compassion Respect Excellence*

3. The HREC will be notified, giving reasons, if the project is discontinued at a site before the expected date of completion.

4. The principal investigator will provide an annual report to the HREC and at completion of the study a final report, in the specified format.

Should you have any queries about the HREC's consideration of your project please contact [redacted] Manager, Research Program. Details of review processes and guidelines are available on the [redacted] website

Please quote the [redacted] Project Number in all correspondence.

The Committee wishes you every success in your research

Yours sincerely

[redacted signature]

Executive Director - Medical Services

Executive Sponsor  
Research

## Appendix 6: Example pages from aphasia-friendly consent form: Phase Two



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### Information Sheet for Participants with Aphasia

**TITLE:** Acute Aphasia Management Project

**RESEARCHERS:**



**Miss Abby Foster**  
School of Health and Rehabilitation Sciences  
The University of Queensland



**Professor Linda Worrall**  
Centre of Clinical Research Excellence in Aphasia Rehabilitation  
School of Health and Rehabilitation Sciences  
The University of Queensland



**Dr Miranda Rose**  
Centre of Clinical Research Excellence in Aphasia Rehabilitation  
Department of Human Communication Sciences  
La Trobe University



**Dr Robyn O'Halloran**  
Centre of Clinical Research Excellence in Aphasia Rehabilitation  
Department of Human Communication Sciences  
La Trobe University

**Ms Anna Ryan**  
Senior Speech Pathologist  
Frankston Hospital

**You are invited to take part in aphasia research**

Page 1 of 12

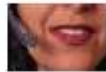
**Aphasia** is a **language disorder**.



**Aphasia** sometimes happens after a **stroke**.

It can be **hard** for people with **aphasia** to:

- Talk



- Read



- Listen



- Write



People with aphasia are **intelligent** and **competent**.

### **What is this project about?**

- I want to learn about the **experiences of people with aphasia** in the **health system**.
- **There are no right or wrong answers**. I want to hear your story about your experiences.

# Appendix 7: Example field notes (raw): Phase Two

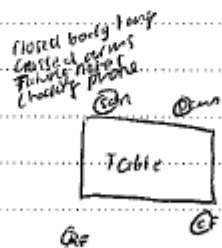
SUBJECT: FHOLCF (2) DATE: 21/02/2013  
 → on way to hotel: CF: Trying to figure out why I spend so much time in this pt, mother it's because you're here, but it's not... it's because of the family!

**150911** **SGS NURSES' STATION**

Arrived on Ward. E. CF for education session. E family put by 1/3 ago.  
 : JANS nurse on Ward. CF approached. Indicated family's wish for RFT to hospital closer to home.  
 Indicated wish to initiate this sooner rather than later. JANS nurse suggested acute hospital easier than GEM direct admit.  
 - SF: Halted. I. of res. by results. suggested majority of log screening was significantly HUSB. Dotted, and : may not be a true representation of log function.

**1519113**

Interaction - N. in Eng. & Greek  
 Presenting i. a language problem - that's called aphasia  
 Anomic aphasia - main problem i naming things.  
 Receptive -  
 Expressive - mainly the problem  
 In. Look - doing quite well  
 Eng. map specifically effected - would you agree.  
 DIALOG: Repeated in Greek mainly word, putting distances together. Shows awareness  
 Common to want to go to language  
 Main probs - code switch b/w Eng. & Greek. Not controlled  
 Switching around in words; nonsense words here & there  
 → what do we do? With an Eng. & Greek separately  
 Goal of hers to work on Eng  
 Central similarity by mixing in non separately



Focus - naming things - chance to rebuild  
 DIALOG: Names? CF: mainly objects/nouns.  
 CF: provided demonstration of picture hierarchy and coding hierarchy - demonstrated to family.  
 DIALOG: Done in Greek?  
 CF: Doing well in Greek. focus on coding built in Eng & higher level conversation in Greek  
 Look in picture description in Greek & Eng (as per pt.)  
 DIALOG: if she has problems describing in Greek, do we correct her?  
 CF: Prompt her first.

DIALOG: will she be here tomorrow?  
**kikki.K** CF: That's a must next week  
 Teach you to write in Greek & I'll do in Eng. practice reminder.

NO

## Appendix 8: Example field notes (transcribed): Phase Two

FH (Patient 1) Triad: Caroline (SP), Pauline (PAULINE), Tania (Close other)

06/02/2013

0815hrs Acute Speech Pathology Office



Arrived at the acute speech pathology office, [REDACTED]. I note that the speech pathology office is in a community health building, separate from the main hospital building. The office is in a corridor with the paediatric speech pathologists and podiatrists.

The office is small, but houses only three speech pathologists (all acute). Each has their own desk and computer. There is also a cupboard and a couple of filing cabinets. A wall planner marks periods of leave. There are also other small posters on the wall, including login details for the Dysphagia Interest Group, and a referral pathway for outpatient services. Displayed on the door of the cupboard are many years' worth of certificates for the Dysphagia Quality Assurance Project. I take a seat next to the filing cabinet.

Caroline and James, her Grade 2 colleague, are already present. Both are sitting at their individual desks, at their own computer. Their stream leader, Alex, with whom they also share an office, is not yet present. Caroline and James chat about James' search for a new home whilst typing on the computer. They seem to chat easily with one another, relaxed and conversational.

Caroline reports that she is "revising my caseload for the day". This is being done electronically. She is typing a list of her current patients, their diagnosis, and when they are next scheduled for review (including what she plans to do with them). The list also includes other tasks for the day, including a rapid round and a ward round.

Caroline reports that it is important to check for new referrals. She uses electronic ward to identify potential new patients. On these lists, she notes that one patient is listed as a 'sub-acute cerebellar stroke. For speech pathology review'.

Caroline: "Good one guys! We haven't even received a referral!"

Both Caroline and James have a giggle.

Caroline reports she has a rapid round at 0830hrs. She describes this as a team meeting with a one minute review of each patient, which is documented in the medical record. She says this is being used across wards.

Caroline: "But [ward with acute stroke unit] is a bit resistant to change, so it's still more like a discharge planning meeting [laughs]".

Caroline: "Our ~~regs~~ have just swapped over, and we've has the same ~~regs~~ in neuro for months, so that might be a problem".

Caroline reviews her electronic list for the day. She notes that a PWA seen 1/7 ago in ED is still in ED.

## Appendix 9: Example key informant diary entry: Phase Two

Please circle: Tuesday

Date: 2.07.2013

Day 9 since admission

### DIARY AIMS:

Describe your activities in the management of a person with aphasia → Reflect on your decision making → Reflect on the factors you feel influenced your decision making

### Prompts for reflection:

*What did I do for the person with aphasia and their family (indirectly or directly) today? Why did I do that? What were the consequences of my actions? What factors influenced my decision making? What sources of knowledge influenced my decision making? What other choices did I have? If I had my time over, would I do the same thing or something different? How do I now feel about this experience?*

I completed a swallow r/v and upgraded LC's diet. He really didn't like the thickened fluids so I guess this provided him with some improvement in his QOL.

I also trialled some communication therapy today (picture-object matching). I chose this as receptively it's one of the most basic things you can do. I knew that functionally it would have little impact but I really didn't think he would be able to successfully participate in any task that was functional. Probably at this stage a big functional gain communicatively would have been a reliable (or any sort of reliable) Yes/No response. At least with a reliable yes/no we could gauge his needs and wants with effective communication strategies. This was just too high level for him. He didn't have any success with the picture-object matching task either which meant that AAC was out too for now.

Today he was really trying hard to get a message across and I felt really bad as I just couldn't get what he was trying to say. I didn't feel great about this to be honest and I was nervous and unsettled with the video camera running too. All in all, it wasn't a great session. I felt out of my depth today, like I didn't know what I was doing. I'm not sure if other clinicians would have tried something different, was it me? Possibly!



## Appendix 10: Example transcribed interview (key informant with aphasia): Phase Two

		getting better here in hospital?
0:05:24	Dimitra	What, what is the...?
0:05:25	Abby	What was most important for you?
0:05:30	Dimitra	Oh, my...it's [unintelligible] [gestures to arm]
0:05:32	Abby	Are you talking about your arm? [Dimitra: [gestures to arm]] Yeah? [Dimitra: Yeah] So your arm was more important than your speaking? Okay
0:05:38	Dimitra	Yeah. Must be. Must be my spa, my [unintelligible]. Ah 'fore, I didn't never this problem.
0:05:47	Abby	Before, you didn't have this problem. Yeah.
0:05:51	Dimitra	Yes, to go out and...I wasn't speak like I am perfect.
0:05:58	Abby	You wouldn't speak perfectly?
0:06:00	Dimitra	No, but I can speak enough for...everybody to understand.
0:06:04	Abby	But you could speak enough for everybody to understand.
0:06:05	Dimitra	Yeah, yeah. Speaking it all...maybe a little bits of the less sometimes, but I never would taking notice. I always...talk, you know.
0:06:20	Abby	You were always able to talk? [Dimitra: Yeah] Yeah. So things are a bit different now, are they?
0:06:26	Dimitra	Yeah. Well it...yeah. [Abby: Yeah, yeah] I talk about...[unintelligible utterance - Greek]
0:06:39	Abby	Oh, Dimitra. I'm having trouble understanding you again. Let's stop and we'll try again. So, you're having some trouble with your talking now. [Dimitra: Mm, mm] Yeah. And that's different to how it was before. [Dimitra: [nods]] Mm hm.
0:06:51	Dimitra	Was it come, well come back, I don't understand.
0:06:56	Abby	You don't understand. [Dimitra: No] Is, is what you're telling me that you don't understand what happened, or...?
0:07:03	Dimitra	What happened, yeah.
0:07:05	Abby	Okay.
0:07:06	Dimitra	What happened, off top. People are can't speak.
0:07:09	Abby	People can't speak. [Dimitra: Yeah] Yeah.
0:07:12	Dimitra	Why, ah, of, if you tell me before, I don't know!
0:07:17	Abby	Mm. So you didn't know that people lost their ability to speak?
0:07:20	Dimitra	No!
0:07:21	Abby	And now you do know.
0:07:23	Dimitra	Yeah, yeah. I don't really know this. I think maybe I was lost, I <del>cou</del> couldn't have feeling.
0:07:33	Abby	The feeling...you, you knew that you could lose the feeling [Dimitra: Yeah] but not your speech?
0:07:38	Dimitra	But and then now. But right.
0:07:40	Abby	Mm. So it was a bit of a shock then? Yeah.
0:07:43	Dimitra	[Unintelligible – Greek]
0:07:48	Abby	Dimitra. Sorry.
0:07:50	Dimitra	[Unintelligible – Greek]
0:07:57	Abby	Dimitra. Sorry, you're speaking in Greek.
0:08:01	Dimitra	Yeah. S-second day, [unintelligible], nothing.
0:08:06	Abby	The second day there was nothing? [Dimitra: No] Yeah. So, is what you're telling me that you've seen some improvement in your

## Appendix 11: Example from researcher's reflective journal: Phase Two

13/02/2013

### Reflections following interview (Speech pathologist – PH participant 1)

*Written reflections on the evening following interview this PM*

This interview was really interesting to me. I felt that it was a lot more conversational, a lot more relaxed than some on the interviews from phase 1. I think that perhaps having the common ground of having observed the patient allowed for it to be more of a discussion than an interview. The result was that the interview was a lot less structured, and whilst I covered the topics that I wanted too, I also allowed for the interview to take paths that I had perhaps not anticipated as much. Despite this, the world did not fall apart! I think that this shows that my confidence in interviewing has grown, but also reflects the relationship between myself and the participant, and the shared experience of having seen the patient at the same time.

I had anticipated coming in to this interview that there would not be a whole lot to discuss, as the case was relatively straightforward, and the length of stay very short. But I found that we still had a lot of ground to cover, and that this provided a good foundation and overview for future interviews. At times, though, I had to remind myself to redirect the interview to make specific comment on the management of this patient, rather than speaking in more general terms as I had in the first phase. This was difficult for me, as I have an interest in all of the 'bigger picture' information as well. I think that some of that discussion is really important, as it provides context for the management in this particular case, but I also think it's important to bring the participant back to his particular case and the specific management there.

There were also challenges for me in that I had previously worked in this health network, and have some understanding as a result of that of the factors that have influenced stroke service to date. Not being aware of that historical element, Caroline was at times unable to provide information that I have. I think that I need to be very transparent in how my prior knowledge is influencing my role as a researcher in this environment, and the context that I bring. Having said that, I think that I am largely being effective in not allowing my history to bias my interviews, or to steer responses in a certain direction.

I was surprised by the depth of reflection that Caroline was able to demonstrate, perhaps because of her relatively little amount of experience. I guess I was anticipating a more superficial analysis of the factors that influenced her practice, but there seemed to be some awareness of team based influences, etc. Her knowledge of organisational factors was not really discussed, and this may be something that I want to probe for in the future.

I found a couple of her points very interesting:

- The concept that the perception and relationship with the consultant neurologist is important
- The feeling of a lack of support to implement change
- The desire to implement change, and provide more services to PWA
- The perception that her experience in sub-acute has shaped her perception of her role in acute

Although I had anticipated it a little, I am not sure that I handled as well as I could have questions about the responses provided by the PWA and her close other during their interviews. I could see that Caroline was craving some feedback from her interactions with this family, and it was difficult for me not to be able to provide that, especially as I had the sense it would be so meaningful to her.

In future interviews, I hope to further explore:

- The role and relationship with the Stroke Liaison Nurse
- The role and relationship with the multidisciplinary team
- The perceived importance of adhering to the Stroke Care Pathway