Clinical Decision Making and the Role of Paramedics Filling their Legislative Powers under the Mental Health Act 2007 (NSW)

A Qualitative Study

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A thesis submitted for the degree of Doctor of Philosophy
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March 2014
STATEMENT OF ORIGINALITY

The thesis contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text. I give consent to this copy of my thesis, when deposited in the University Library**, being made available for loan and photocopying subject to the provisions of the Copyright Act 1968.

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ACKNOWLEDGEMENTS

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Peer reviewed articles published in journals


Peer reviewed conference presentation by the candidate

Constructing a Social Narrative on the Foundation of Shared Experiences: A Common Bond between Mental Health Nurses and Paramedics in Pre-Hospital Mental Health Care. *Australian College of Mental Health Nurses 38th International Mental Health Nursing Conference 2012. Darwin, Australia.*
Authors: Parsons, V., O’Brien, L., James, C., & Loxton, D

Authors: Parsons, V., O’Brien, L., James, C., & Loxton, D

Authors: Parsons, V., & O’Brien, L

Providing Mental Health Care in Difficult Terrains. A Legislative Framework for Enhancing the Delivery of Pre-hospital Mental Health Care by Paramedics. *Australian College of Mental Health Nurses 37th International Mental Health Nursing Conference 2011. Gold Coast, Australia.*
Authors: Parsons, V., & O’Brien, L

Authors: Parsons, V., O’Brien, L., & O’Meara, P
### ABBREVIATIONS/DEFINITIONS

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<th>Definition</th>
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<tr>
<td>ATS</td>
<td>Australasian Triage Scale</td>
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<tr>
<td>CDM</td>
<td>Clinical Decision making</td>
</tr>
<tr>
<td>CPR</td>
<td>Cardiac Pulmonary Resuscitation</td>
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<tr>
<td>DSM 5</td>
<td>Diagnostic and Statistical Manual of Mental Disorders</td>
</tr>
<tr>
<td>ED</td>
<td>Emergency Department</td>
</tr>
<tr>
<td>ECG</td>
<td>Electrocardiogram</td>
</tr>
<tr>
<td>EMS</td>
<td>Emergency Medical Service</td>
</tr>
<tr>
<td>ICD10</td>
<td>International Statistical Classification of Diseases and Related Health Problems</td>
</tr>
<tr>
<td>NSW</td>
<td>New South Wales</td>
</tr>
<tr>
<td>PCI</td>
<td>Percutaneous Coronary Intervention</td>
</tr>
<tr>
<td>The Act</td>
<td>Mental Health Act 2007 (NSW)</td>
</tr>
<tr>
<td>UK</td>
<td>United Kingdom</td>
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<tr>
<td>USA</td>
<td>United States of America</td>
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<tr>
<td>VET</td>
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ABSTRACT

The existing literature has consistently revealed that paramedics feel uneasy when it comes to managing the mentally ill in the community. At the heart of this are genuine concerns that they are simply not skilled and knowledgeable enough to engage in confident and competent decision making in this evolving area of clinical practice. They describe a lack of sufficient mental health knowledge and training, inadequate organisational decision tools, poor interagency collaboration, particularly with respect to the continuum of care between the pre-hospital and emergency department setting. They have concerns that mentally ill patients pose a significant risk to the safety of paramedics and expose them to future litigation.

Notwithstanding these challenges, the introduction of legislative powers for fully qualified paramedics under the New South Wales Government, Mental Health Act (‘the Act’) heralded a new era in clinical practice with respect to pre-hospital mental health care. However, research and the subsequent development of theory to account for this phenomenon in this area of clinical practice have remained scant.

A qualitative interpretative study that employed a hermeneutic phenomenology methodology was used to examine the lived experience of paramedics engaging in clinical decision making in the context of pre-hospital mental health care. The philosophical principles of hermeneutic phenomenology were adopted for this study as they were considered to be a suitable and innovative approach for exploring how paramedics made sense of their experience of providing emergency mental health care; how they perceived their role within the clinician-patient relationship; and the particular circumstances in which they decided to exercise their legislative responsibilities under mental health legislation. This philosophical approach captured the personal and reflective experiences of paramedics as they engaged in this aspect of clinical practice, with a particular focus on how paramedics made sense of the
experience and the language they used to describe it. With this in mind, the key research questions identified in this study were:

1. **What is the experience of paramedics making clinical decisions in the context of pre-hospital mental health care and in particular, when making use of their legislative powers under the Act in clinical practice?**

2. **What meanings do paramedics give to their experience of undertaking the Ambulance mental health training and has this experience impacted their subsequent approaches to decision making in the context pre-hospital mental health care?**

3. **What is the experience of paramedics making use of existing Ambulance decision tools that relate to emergency mental health care?**

4. **What is the experience of paramedics as they negotiate the interplay between their professional experience of dealing with behaviourally disturbed patients, their individual beliefs and attitudes regarding behaviourally disturbed patients, and their legal powers under the mental health legislation?**

Only fully qualified paramedics who had completed mandatory pre-hospital emergency mental health training and were in receipt of a written authority to exercise the functions granted to paramedics under the Act, were invited to participate in this study. Data collection methods included, semi structured interviews, observations and a demographic questionnaire. Subsequent data analysis and interpretation was guided by the thematic analysis approach proposed by van-Manen (1990) and in keeping with the hermeneutic phenomenological techniques developed by Gadamer (1976a). This process of analysis and interpretation was further enhanced by the researcher’s own professional knowledge, understanding and experience of this area of clinical practice. (See: Position as Researcher in this Study: A Personal Statement)
Findings of this study revealed that clinical decision making in relation to paramedics exercising their legislative powers under the Act is a complex, varied and multi-dimensional phenomenon. In particular, the study highlighted a range of situational and contextual factors that were found to impact heavily on decision making in this context. These included, i) Interpersonal and Individual factors; ii) Organisational and System factors; iii) Environmental factors; iv) Socio-professional factors and; v) Patient factors. Engaging in clinical decision making in the context of pre-hospital mental health care was often described by paramedics as stressful, with uncertainty and confusion in relation to their legal and professional accountabilities commonplace. The results indicated that actual or perceived risk of harm to self or others and patient non-compliance were key factors that influenced the decision by paramedics to detain patients under the involuntary provisions of the Act. Moreover, paramedics often lacked confidence in the emergency department environment of hospitals having the resources to provide ongoing supervision to mental health patients upon their arrival. Paramedics also expressed a desire for enhanced mental health training as well as organisational protocols to better support them in taking on these new legislative powers.

In conclusion, the significance of the findings of this study has been found to be particularly relevant in relation to a number of specific areas of paramedic practice, namely, education and training, professional development and clinical governance.
CHAPTER ONE: INTRODUCTION AND BACKGROUND

1.1 The Research Objective

The aim of this research was to examine two key aspects of paramedic practice namely, clinical decision making approaches adopted by qualified paramedics in the context of pre-hospital mental health care and the use of the Mental Health Act NSW (2007) as it relates to clinical practice. Importantly, this research aimed to contribute to a deeper and more informed understanding of the nature of engaging in clinical decision making in relation to pre-hospital mental health care. To accomplish this, the way in which paramedics make use of their legislative powers under the Act and the factors that influence their decision making in this context were explored. In addition, this research sought to examine the utility and efficacy of organisational strategies aimed at preparing and supporting paramedics to take on these legislative powers.

1.2 Context of this Research

There are a number of terms used to denote ambulance affiliated health professionals who are responsible for the provision of emergency medical health care in the pre-hospital setting and often these terms are used interchangeably. These terms include paramedics, ambulance officers or emergency medical technicians. For the purpose of this research, the term paramedic has been adopted as this is in keeping with the term used by Paramedics Australia (2013) (a peak professional body representing paramedics in Australia). However, it should be noted that the Mental Health Act 2007 (NSW) refers to ‘ambulance officers’ and this is taken to refer to ‘qualified paramedics’ within the NSW jurisdiction. The term paramedic practice is also used to define the scope of work performed by paramedics in the pre-hospital setting. These core duties include performing medical assessments, administering treatments or interventions.
providing transportation for patients from the community to hospital as well as inter-hospital transfers.

The term *pre-hospital setting* is used in this study to refer to the out-of-hospital environment in which paramedics perform their clinical duties. The Act acknowledges the environment in which paramedics perform their clinical duties by prescribing specific legislative powers for paramedics to account for this context. This is in contrast to the in-hospital setting which often denoted hospital wards, emergency departments and inpatient clinics. The term *continuum of care* is used to describe the continuous and seamless provision of health care from the pre-hospital environment to the hospital-based environment.

It is important to recognise that this research was undertaken in the context of paramedics working as an integral part of the broader public health system in New South Wales, Australia and as such, are an essential link between the delivery of care and treatment to patients in the pre-hospital and in-hospital setting.

The terms *mental health patients, mentally ill* and *behaviourally disturbed patients* are used interchangeably in this research. This reflects the nature of pre-hospital mental health care, where it may often be difficult for paramedics to determine the exact cause of a patient’s presentation. Behavioural disturbance may be caused by deterioration in a patient’s pre-existing mental illness, in which case this refers to mental health patients, or in response to organic complications that are unrelated to mental illness (Caroline, 2008; NSW Health, 2009; Sanders, 2005; World Health Organisation, 2000). Regardless of the circumstances, patients who present as behaviourally disturbed are generally dealt with under the protocols and clinical guidelines that relate to ‘Psychiatric / Mental Health Emergencies’ (Ambulance Service of NSW, 2009, 2012a).

The focus on the lived experience and perception of paramedics as they engage in or reflect upon clinical practice was considered key to gaining a meaningful understanding
of clinical decision making in paramedic practice. Collectively, these personal insights enabled this research to construct and produce a comprehensive account of the phenomena of clinical decision making in relation to paramedics exercising their legislative powers under the Act. As the act of clinical decision making occurs in naturalistic settings, it was important that I was exposed to the settings in which this experience occurs: the pre-hospital setting. Exposure to the pre-hospital setting enabled me to better understand the settings in which paramedics operate and the settings on which they were reflecting.

1.3 The Evolution and Professionalisation of Paramedics

The existing literature reveals that historically, ambulance services in Australia were embedded in the traditions of volunteerism, where men from working class trade backgrounds were recruited to join the ranks (Howie-Willis, 1985). This backdrop of ambulance work was also deeply rooted in military history. Reynolds (2009) claims that “the role of women in Australian ambulance services was relegated to the sick room” (p. 35). This distinct gender divide in the health system was further emphasised by Reynolds (2009) when citing the work of Howie-Willies (1985) who suggested that “this role [in the sick room] could never be undertaken by men because the patience and gentleness of a women was necessary for the recovery of a patient” (p. 35).

During these pioneering days, the focus of ambulance services was on teaching the practical skills that were required to deliver first aid in the community and on the battle field during military operations. On-the-job teaching and training was structured around an apprenticeship-like framework whereby trainee paramedics were taught basic clinical skills in the classroom setting which were then applied, observed and refined in
the field under the guidance of an experienced paramedic (O'Donnell, 1998; Reynolds, 2009).

The work undertaken by ambulance personnel has long been perceived as being “heroic and masculine” with the core belief and assumption that much of their time is devoted to responding to patients with life-threatening conditions and injuries (Reynolds, 2009, p. 31). Modern-day paramedics are often regarded as ‘street wise’, ‘trauma junkies’ who thrive on the ‘adrenaline rush’ that is thought to be associated with their work (Palmer, 1983). Other researchers have described attributes such as a desire to maintain a strong and loyal work ethic, the capacity to deliver a high standard of work and performance at all times, and a preference for being in control (Becknell, 1988; Nicholson, 2010; Reynolds, 2009; Spitzer & Neely, 1992). However, these images of paramedic work and culture often give rise to a distorted view of the realities of their role and function. Becknell (1988) points out, “they often have wild notions of what our art is about-until suddenly our help is needed. The call is placed and we come trooping through the door and swing into action, bringing an unfamiliar and sometimes intrusive kind of care” (p. 40). This portrait of paramedic practice reflects the authoritarian manner in which paramedics often approach their work.

The existing literature also highlights a range of stressors that all too often impacts on the physical, emotional and cognitive capacity of paramedics. These include, the physical nature of working on-road, exposure to death, dying and traumatised individuals, increased risk to their own safety, poor remuneration and career development opportunities, lack of foundation education and training, working long shifts and lack of good sleep hygiene, extended periods of waiting around for jobs, exhaustion, fatigue and burnout, and the increased burden of mental illness (Boyle, 1997; Hawks & Hammond, 1990; Nicholson, 2010; Reynolds, 2009; Spitzer & Neely, 1992).
In addition, the existing literature acknowledges that the socio-professional context in which paramedics operate has often meant that even skilled and experienced paramedics can find themselves at the “bottom of the medical ladder” (Hawks & Hammond, 1990, p. 52). According to Reynolds, this is best illustrated by the way in which doctors scrutinise the care and treatment that is delivered to patients by paramedics when reviewing the clinical documentations provided to them during the handover of patients in the emergency department. A situation that is often made worse, according to Reynolds (2009), by the ambiguous nature of paramedic work and “the blurring of professional boundaries between that of hospital care, medicine and nursing” (p. 36). Moreover, Reynolds (2009) along with other researchers (Gonsoulin & Palmer, 1998) has argued that inter-professional issues can often play out between paramedics, physicians and nurses creating “turf wars, distorted communications and professional jealousy” (p. 35).

A study conducted by Pajonk et al., (2010) in Germany sought to examine the personality traits of emergency physicians and paramedics (emergency medical personnel) compared with non ED-based medical physicians and medical students. Using a shortened version of the Hamburg Personality Inventory tool (questionnaire), the study found four personality clusters in emergency physicians and paramedics that were independent from demographic and job-related variables. In particular, the study found that the personality characteristics of emergency physicians and paramedics were not homogenous and did not vary significantly from those of non-ED physicians or medical students. Interestingly, this study reported that most paramedics and emergency physicians displayed resilient-like characteristics that were considered suitable for emergency medical work. However, paramedics were more likely to exhibit anxious and insecure personality traits when compared with emergency physicians. The study also found that those who had personal experience of mental illness or loss were at increased risk of experiencing feelings of anxiety and insecurity when faced
with emergency situations. From the results of this study, the researchers proposed the need to further examine how personality traits of paramedics and emergency medical personnel may predict decision making behaviours in emergency situations.

In recent times, the continual expansion of paramedic practice has also seen paramedics represented as a dynamic component of the public health system and comparable with other health professionals (Cooper et al., 2004; O'Meara, 2012; Sheather, 2009). This was highlighted in a mixed methods clinical case study that examined inter-professional collaboration with respect to unscheduled out-of-hospital emergency care across a large ambulance region in the UK (Cooper, O’Carroll, Jenkin, & Badger, 2007) and in a UK study that examined the emerging role of emergency care practitioners and the benefits to patient care (Cooper, et al., 2004). As highlighted by Sheather (2009), the continuing emergence of the paramedic profession in Australia is evident by the increasing level of development and activity across a number of important domains. These include, i) increased complexity of paramedic practice; ii) transitioning to university-based education; iii) defining a delineated role of paramedics within the broader health sector; iv) increasing discipline specific evidence-based research that relates to paramedic practice; v) a peak body and professional organisation that promotes and represents the interests of paramedics; vi) regulation of practice, in particular the recognition of the need for a national registration of paramedics that is similar to other health professionals; and vii) the requirement to gain community and political acceptance of the professional status of paramedics. Shaban and Considine (2011) have also asserted that the notion of professionalism in paramedic practice, as in other health professions, is represented in the delivery of high-quality and safe health care. Moreover, they claim that “essential to the delivery of high-quality and safe pre-hospital emergency care are, among others things i) the sciences of critical thinking and clinical reasoning, ii) the application of these sciences
to paramedic practice by way of protocols for problem solving and triage, and iii) the communication of these within the broader healthcare setting (p. 168)."

In modern health care, the importance of support for health professionals to engage in effective, competent and measured decision making is embedded in the principles and promotion of evidence-based practice. (Australian Commission on Safety and Quality in Health Care, 2012; Berglund, 2001; Standing, 2011a). At present however, lack of sustained research into paramedic clinical practice has impacted on the development of discipline specific evidence-based practice for pre-hospital care (Shaban & Considine, 2011). Moreover, the Fourth National Mental Health Plan, coupled with recent recommendations from the Hospital Reform Commission have consistently reinforced the need to focus on translational research practice with respect to the provision of mental health services in Australia in order to drive quality improvement and innovation in clinical care (Commonwealth Department of Health and Ageing, 2009; National Health and Hospital Commission, 2009). Two key priority areas for research and evaluation identified in the current National Mental Health Plan relate to ‘service coordination models’ and ‘effectiveness of treatment’. Further, the NSW Mental Health Research Framework also promotes ‘emergency psychiatric care’ and ‘models of care’ as key areas for further research (NSW Health, 2012b). This study is ideally positioned to contribute to these research priorities as it seeks to examine the provision of pre-hospital mental health care in NSW following the introduction of new legislative powers for paramedics under the Mental Health Act 2007 (NSW). Importantly, it will also make an internationally relevant contribution to research aimed at promoting quality improvement and safety in the provision of pre-hospital mental health care.
1.4 The Purpose of this Study

The purpose of this research was to examine the application of the mental health legislation specific to the New South Wales jurisdiction in paramedic clinical practice. In particular, this research focused on examining the lived experiences of paramedics engaging in clinical decision making when they exercise their legislative powers as prescribed under Mental Health Act 2007 (NSW). In summary, mental health legislation is used to provide a legislative framework with respect to the care and treatment of mentally ill and mentally disordered persons. In relation to paramedic practice, the Act grants legislative powers to authorised paramedics with respect to the involuntary treatment, control and transportation of patients who meet the legal criteria for involuntary detention. A full description of these powers is provided in Chapter 2 under section 2.11 ‘Mental Health Legislation.

While the literature has identified a range of contextual and situational factors that influence the clinical decision making behaviours of paramedics in pre-hospital mental health care in other Australian jurisdictions (Shaban, 2009, 2011; Shaban, Wyatt-Smith, & Cumming, 2012; Townsend & Luck, 2009), previous studies have not examined the lived experiences of paramedics making clinical decisions to exercise their legislative powers under mental health legislation in the NSW jurisdiction. The continuing expansion in the roles and responsibilities of paramedics in relation to emergency mental health care has now made it necessary to generate a research base that can substantiate claims that such reforms have resulted in improved mental health services for patients in the community setting. Furthermore, claims that paramedics have received adequate training and skill development to take on additional responsibilities in this area of clinical practice remain unsubstantiated and lack suitable scientific rigour. Importantly, it is also vital that further research is undertaken into pre-hospital mental health care in order to build a scientific evidenced-based approach that
underpins and supports quality and safety in paramedic decision making and clinical judgment.

A qualitative interpretative research design was adopted, using participant demographic questionnaires, observations and semi-structured interviews for data collection purposes. Data was sourced using a purposive sampling method to identify and invite qualified paramedics who were known to have experience in exercising their legislative powers under the Act, to participate.

It is the author's view that because subjective interpretations and socio-cultural factors can play a fundamental role in the way people experience the world around them, an interpretative approach was vital if the impacts of such factors are to be understood in relation to clinical decision making in pre-hospital mental health care. An interpretative approach enabled an exploration of the personal perspectives of individual paramedics, and allowed the research to focus on the unique situations and settings in which the experience of clinical decision making had taken place, namely the pre-hospital setting. This research also sought to examine how paramedics navigate the interplay between their personal beliefs and attitudes, organisational protocols and clinical guidelines, their clinical knowledge and skills and their understanding of their legislative powers under the Act. Hermeneutic phenomenology was considered to be well suited to the examination of paramedic clinical decision making in relation to pre-hospital mental health care.

The key research questions identified in this research were:

1. What is the experience of paramedics making clinical decisions in the context of pre-hospital mental health care, in particular, when making use of their legislative powers under the Act in clinical practice?

2. What meanings do paramedics give to their experience of undertaking the Ambulance mental health training and has this experience impacted their
subsequent approaches to decision making in the context pre-hospital mental health care?

3. What is the experience of paramedics making use of existing Ambulance decision tools that relate to emergency mental health care?

4. What is the experience of paramedics as they negotiate the interplay between their professional experience of dealing with behaviourally disturbed patients, their individual beliefs and attitudes regarding behaviourally disturbed patients, and their legal powers under the mental health legislation?

1.5 Outline of the Thesis

The outline of this thesis is as follows. Chapter 2 presents a review of the literature related to clinical decision making in paramedic practice. This Chapter reviews a range of models and frameworks proposed to account for clinical decision making in paramedic practice and factors that have been found to influence this process are presented. This Chapter explores the concept of triage in pre-hospital care; decision making with respect to the conveyance and non-conveyance of patients to hospital; the provision of emergency mental health care; ethical decision making and; the impact of personal beliefs and attitudes on decision making and clinical judgment. This Chapter reviews the provision of pre-hospital mental health care and the implication for clinical practice with respect to key aspects of mental health legislation. Limitations of current research and gaps in the literature in this area of clinical practice are discussed and explored along with a justification for the research inquiry. Chapter 3 describes the methodology of qualitative interpretative research and the philosophical framework that supports the approach adopted for this study: hermeneutic phenomenology. Justification for adopting this philosophical framework is discussed in detail. Chapter 4 provides a detailed review of the research design and process adopted in this
research, including a description of the data analysis approach taken and the process of identifying key themes and sub-themes. Chapter 5 presents the findings of the study: a comprehensive analysis and interpretation of perceptions of clinical decision making in the context of pre-hospital mental health care provided by paramedics. In Chapter 6, significant findings of this research are interpreted and discussed in relation to the existing literature and new knowledge gained. Chapter 7 evaluates the research process adopted for this study, including its limitations. In addition, Chapter 7 considers major findings identified in this research and their implications and significance for paramedic clinical practice, education and training. Recommendations for further research are proposed along with the research conclusions.
CHAPTER TWO: EXISTING LITERATURE AND THEORETICAL FRAMEWORKS RELEVANT TO THIS STUDY

2.1 Defining Clinical Decision making in Paramedic Practice

Many definitions have been proposed to describe clinical judgement and clinical decision making (Benner & Tanner, 1987; Dowie, 1993; Luker & Kenrick, 1992). The following description put forward by Standing (2011a) provides a contemporary account that captures the multi-dimensional aspect of this phenomenon.

"Clinical decision making is a complex process involving observation, information processing, critical thinking, evaluating evidence, applying relevant knowledge, problem solving skills, reflection and clinical judgement to select the best course of action which optimises a patient’s health and minimises any potential harm. The role of the clinical decision maker is therefore, to be professionally accountable for accurately assessing patients’ needs using appropriate sources of information, and planning interventions that address problems and which they are competent to perform" (p. 7).

In the pre-hospital setting, clinical decision making is a necessary and important part of paramedic practice (Jensen, Croskerry, & Travers, 2009) and is focused on problem-solving (Shaban & Considine, 2011). Typically, the following questions are considered by clinicians: ‘What is wrong with the patient?’ ‘How should I treat this patient?’ ‘What type of treatment should I initiate?’ and ‘To what degree can I be certain that I am making the correct clinical decisions in relation to this patient?’ Standing (2011a) argues that “sound clinical judgement and decision making skills are vital to perform this complex role effectively in a wide range of challenging healthcare contexts” (p. xvii).
In the context of paramedic practice, this process often takes place in settings that are chaotic, unpredictable and time-limited (Shaban, 2005b; Shaban & Considine, 2011; Shaban, et al., 2012). In some cases, it is predominantly focused on addressing social problems rather than the health or medical problems that patients encounter (Shaban, 2011). Moreover, the delivery of high-quality evidence-based health care can be significantly impacted by the context in which some health professionals perform their duties. Smith, Higgs and Ellis (2012) argue that the decision making and clinical judgements that are made by health professionals are influenced by a range of contextual dimensions, notably those that relate to social, professional, organisational, and physical and environmental factors. In the context of paramedic practice, this is most evident in relation to the uncontrolled and chaotic environments in which paramedics can routinely find themselves (Shaban & Considine, 2011).

Lord (2003) argues that unlike most controlled clinical settings (such as emergency departments and inpatient units) where health professionals generally have access to expert opinion, medical records and advanced diagnostic tests, the assessment and management of patients in the pre-hospital setting is quite different. It is usually characterised by independent and time critical factors with access to support systems and medical technology similar to those in hospitals, being unavailable. In this context, the role of a paramedic is a complex one, centred on performing a range of assessments aimed at gathering, evaluating and synthesising information that relates to a patient’s presentation before deciding upon appropriate treatment and transport decisions (Caroline, 2008; Sanders, 2005). Shaban (2011) coined the term ‘field actions’ to describe this phenomenon.
Throughout this decision making process, paramedics must continuously evaluate their clinical decisions and decide the degree to which they are making the correct decisions in relation to a particular patient. This is a fundamental part of health professionals being accountable for their actions and behaviours during clinical practice (Shaban & Considine, 2011).

While the concepts of clinical decision making and clinical judgement are closely related, they generate separate cognitive demands on health professionals. Dowie (1993) theorises that *judgements* are essentially “an assessment between alternatives” whereas *decisions* can be viewed as “a choice between alternatives” (p. 8). Consequently, they present unique challenges for researchers seeking to describe and evaluate them (Dowding & Thompson, 2003).

In clinical encounters, the distinction between these two concepts is evident. For instance, a paramedic may make an accurate clinical judgement (*e.g.* ‘This patient is behaving in a delusional manner and acting irrationally’) but then make an ‘incorrect’ decision (*e.g.* ‘We can manage this patient and transport him/her to hospital without the need for sedation’). Conversely, they may make a poor clinical judgement, for example, that a patient’s aggressive behaviour is attributed to an acute psychotic episode and initiate treatment as per the relevant Mental Health Emergency Protocol when their aggressive presentation is due to hypoglycaemia and therefore primary treatment should be initiated as per the hypoglycaemia protocol. Certainly, paramedics strive for a state of equilibrium where both clinical judgements and clinical decisions are congruent. In most instances, the individual’s presentation would be assessed and the most clinically appropriate action would be taken on the basis of that assessment.
For the purpose of this research, the term clinical decision making was used to denote the cognitive and affective process of making an informed clinical decision over the treatment (or intervention) deemed necessary for a particular patient. In particular, the focus of this research was on examining the experience of paramedics engaging in clinical decision making when exercising their legislative powers under the Act as well as the broader nature of the provision of pre-hospital emergency mental health care from a descriptive theoretical perspective.

2.2 Models of Clinical Decision making in Paramedic Practice

Snooks, Kearsley, Dale, Halter, Redhead, & Foster (2005) purported that:

"Little is known about how paramedics make decisions on whether to take patients to hospital or to leave them at home, how they feel about adopting guidelines or protocols to leave patients at scene or about the potential impact of introducing such protocols on crews (p. 251)".

Much of paramedic practice can be described as problem solving in nature (Shaban & Considine, 2011). While a broad range of models of clinical decision making are well documented across healthcare, most are discipline specific. In brief, the following cognitive models of clinical decision making have been proposed by Bendall and Morrison (2009) as suitable to account for contemporary paramedic practice.

### 2.2.1 Hypothetico-Deductive Model

The *Hypothetico-Deductive* approach to clinical decision making falls within a systematic-positivist perspective (Baker, 2001; Thompson, 1999). Most frequently referred to in the nursing literature, this approach proposes that, i) decisions occur as a result of rational and logical thought processes; ii) the processes by which decisions
are made can be transferred to all situations; iii) it is possible to break clinical decisions down into discreet parts; iv) it is possible to articulate and describe the knowledge that is used to arrive at a particular decision, and v) being able to justify the thought processes and knowledge used in clinical decision making will always improve the quality of the decision (Carnevali & Thomas, 1993; Tanner, Padrick, Westfall, & Gordon, 1987).

The Hypothetico-Deductive Model suggests that decision making commences with clinicians formulating possible explanations, or hypotheses, to explain and understand the patient’s presentations. This initial phase of decision making enables clinicians to begin planning what treatment and interventions will most likely be required to manage the patient’s conditions. This process can commence once information obtained during the initial triple zero call has been provided to the crew from the control centre. For example:

*A paramedic crew attending to a patient with acute behavioural disturbance might be hypothesising en-route that they are attending to a) a patient with an established mental illness, b) a patient who is under the influence of an illicit substance, c) a patient with an underlying organic complication or d) who has sustained a recent head injury. These initial hypotheses are based on only on the information obtained during the Triple Zero call and which has been electronically forwarded to the crew.*

Once arriving on-scene and initiating a patient assessment (including where possible, taking a medical history, obtaining collaborative information or identifying any environmental cues), these hypotheses can be verified or refuted (Carnevali & Thomas, 1993). For example:
During the patient assessment, the patient discloses that they have recently ceased anti-psychotic medication and have not had contact with their mental health case manager for some time.

Research examining the Hypothetico-Deductive Model suggests that knowledge and prior experience can greatly influence the process of assimilating new pieces of information (Corcoran, 1986; Tanner, et al., 1987). The more knowledge and experience acquired, the more complex the hypotheses generated are likely to be (Corcoran, 1986), all of which are highly dependent upon memory stores (Newell & Simon, 1972).

The advantage of the Hypothetico-Deductive Model is that by using information obtained from the patient or other parties, in conjunction with a physical examination, clinicians are given the flexibility to work through and evaluate all possible hypotheses to explain a patient’s presentation. As Bendall and Morrison (2009) point out, “the need to re-evaluate and consider alternatives (especially if treatment is not working or the patient is deteriorating) are a necessary requirement of a modern paramedic” (p. 101).

There are, however, well-known shortcomings with this approach. First, clinicians with limited practical experience or prior knowledge are not likely to have acquired the requisite knowledge base and skills needed to effectively generate all possible hypotheses. Consequently, they might even prematurely refute hypotheses that are in fact accurate or correct (Sandhu, Carpenter, Freeman, Nabors, & Olson, 2006).

2.2.2 Algorithmic Model

The Algorithmic approach to clinical decision making promotes the use of specific decision aids, such as protocols, flowcharts or clinical guidelines to direct the management of common clinical conditions or presentations seen in clinical practice,
especially within the context of emergency care (Sandhu, et al., 2006; Thompson & Dowding, 2002). Frequently used across health disciplines, including in paramedic practice, decision tools such as algorithms are intended to provide a useful step-by-step procedure designed to standardise and to a certain extent, simplify the decision making process (Bendall & Morrison, 2009; Caroline, 2008; Jensen, 2011; Sanders, 2005). For example,

*The patient has disclosed suicidal thoughts and also had a long history of major depression. Based on this information, the paramedic then decides to refer to the ‘Psychiatric’ Protocol since it is most relevant in this context. This protocol then outlines the procedures and actions that are necessary to guide and inform the decision making process.*

An important component of the use of protocols is the requirement for clinicians to use all the available information obtained from the variety of assessments performed to inform and guide their decision making. From this perspective, it may be extrapolated that algorithms remove the need for clinicians to engage in independent clinical thinking and decision making.

Sandhu and Carpenter (2006) have found that the way in which protocols are used varies considerably among clinicians. While novice clinicians will use them as a tool to aid in the decision making process particularly during their formative years of professional development, expert clinicians often report that they find them too restrictive and rigid. In fact, experienced clinicians may have constructed their own unique algorithms which are more meaningful to their own style of clinical practice. These findings go some way to suggesting that expert clinicians who have a depth of knowledge and prior experience may have their own personal algorithms which may consist of richer, more comprehensive, relevant and meaningful information than the formal algorithms supplied by an organisation. This dichotomy is likely to present a
challenging choice for experienced clinicians between adhering to organisational policy requirements and exercising professional and personal judgement when making clinical decisions. It also poses a significant clinical and legal risk for organisations if adverse events occur when clinicians are not adhering to approved standards of care.

The Algorithmic Model also assumes that clinicians either readily refer to protocols before initiating treatment, or that they have retained a detailed knowledge of each individual protocol, or they are able to accurately recall them for any given clinical situation. In practice however, it is likely that paramedics might only be able to recall the features of the protocols which they personally deem relevant or important rather than being able to recall all aspects of the broad spectrum of formal protocols that they have at their disposal. It is also possible that they only recall aspects contained in an algorithm for which they possess strongly held views that are either consistent with or against their own beliefs.

A variety of studies has also attempted to examine the effectiveness and usefulness of protocols and clinical guidelines for paramedics with mixed results. While Grimshaw and Russell (1993) found that there were significant improvements in the quality of care being delivered to patients with common clinical presentations after protocols or clinical guidelines were introduced into clinical practice, a notable shortcoming with this approach became apparent. Such guidelines may not be easily applied to individual patients whose signs or symptoms fall outside the scope of specific guidelines and should therefore not be used in a prescriptive manner.

2.2.3 Pattern Recognition Model

Pattern recognition has been found to be a particularly useful approach when accounting for decision making within clinical practice (Benner & Tanner, 1987; Boyle, Smith, & Acher, 2008; Kalas, 2010). As the name implies, this approach to decision making works when a clinician compares a patient’s presenting signs and symptoms
with patterns recognised from their memory stores; thereby allowing for the quick identification and assessment of obvious diagnostic cues, through to the swift formulation of a relevant treatment plan. For example:

*This patient is exhibiting clear behaviours and signs which appear to indicate that he is thought disordered and paranoid. The patient's behaviour resembles those of many other patients I have attended to in the past who were also found to be experiencing an acute psychotic illness, therefore this patient must be experiencing an acute psychotic illness.*

Several studies have found that the ability of clinicians to engage in pattern recognition increases as knowledge gained from their clinical experience increases (Benner & Tanner, 1987; Cioffi & Markham, 1997) and in particular, as they develop specific knowledge in a sub-speciality of health care (Reichman & Yarandi, 2002).

A particular limitation with this approach is the cognitive bias from memory that can influence the decision making process. These include ‘anchoring’, where a clinician relies or focuses too heavily on one piece of information (Bendall & Morrison, 2009) or ‘confirmation bias’ whereby a clinician ignores subsequent pieces of information if that piece of information is likely to refute their initial diagnosis (Chapman & Sonnenberg, 2000; Klayman, 1995). If ‘anchoring’ and ‘confirmation biases’ are combined, the consequences can be fatal in the emergency context (Sandhu, et al., 2006).

### 2.2.4 Rule-Out Worst Case Scenario Model

Another model to account for clinical decision making adopted in the field of paramedic practice relies upon the ‘Rule-Out Worst Case Scenario’ method (Jensen, 2011). As the term suggests, paramedics must quickly satisfy themselves that a pre-determined list of ‘most probable’ diagnoses are excluded from the patient’s presentation (Bendall & Morrison, 2009; Sandhu, et al., 2006). For example:
When assessing a patient who presents as confused and not orientated to time, place or person, the paramedic might seek to first rule out serious physiological causes such as organic or neurological complications which might explain the patient’s mental state before considering probable causes which are less serious.

While this popular approach in healthcare is aimed at ensuring potentially life-threatening conditions are not missed by clinicians, a limitation with this approach mirrors that found with the Hypothetico-Deductive and Pattern Recognition models. That is, less experienced clinicians may not be familiar with the broad spectrum of potential diagnoses - a phenomenon known as availability heuristic (Sandhu, et al., 2006). Furthermore, Bendall and Morrison (2009) argue that given the limited pharmacologies and interventions that are available to paramedics, this scenario is generally unlikely to cause significant harm to the patient.

2.2.5 Event-Driven Model

Like the Rule-Out Worst Case Scenario approach, the Event Driven approach to clinical decision making is a particularly common approach in emergency care (Sandhu, et al., 2006). Rather than attempting to determine all likely diagnostic possibilities to account for a patient’s presentation, this approach proposes that clinicians engage in a continuous process of re-evaluating an event [patient’s condition] as care is initiated. For example:

A paramedic crew are called to respond to an aggressive and combative patient who is threatening self-harm. Police are on-scene to provide assistance. The paramedics decide that chemical sedation is necessary for patient management. The patient is administered a minimum dose of Midazolam in the first instance. The paramedics’ wait and re-evaluates the patient’s combative nature in response to chemical sedation. The patient continues in a combative
manner, the chemical sedation has not had the desired therapeutic response. The patient continues to resist all physical interventions to contain him. Following evaluation of the patient’s presentation, the paramedic then decides that a further dose of Midazolam is required, again, re-evaluating the patient’s response following further sedation.

Often the Event-Driven approach is used in combination with the Rule-Out Worst Case Scenario approach where the primary aim involves stabilising the patient’s condition and transporting them to hospital for further treatment (Sandhu, et al., 2006). The challenge for clinicians when operating in this domain is ensuring they have the required clinical knowledge, skills and resources (clinical guidelines and protocols) to allow them to effectively and competently deal with clinical situations and presentations when they arise. Consistent with limitations identified in other models, lack of clinical experience and knowledge is thought to impact the ability of clinicians to engage in confident and/or independent decision making when adopting this approach (Crook, 2001; Higgs, Jones, Loftus, & Christensen, 2008). For instance, novice clinicians may be able to recognise and interpret signs and symptoms that are present in a patient’s presentation but lack the necessary knowledge, skills or even authority to be able to effectively respond.

2.3 Sequence of Clinical Decision making in Paramedic Practice

Croskerry (2006) offers an important conceptual view of clinical decision making and problem solving claiming that:

“System 1 is fast, intuitive, inductive, heuristic, recognition primed and acquired largely through experience whereby experienced clinicians make a decision in an instant about the most likely diagnosis. System 2 in contrast, describes a mode that is slower, rational, deductive, rule-based, and analytic. It can be seen as the superego of decision making, fighting off the primary impulsivity of
system 1 in favour of reality testing, analytic judgement, meta-cognition, and affect tolerance. It is the ‘conscience’ of decision making. Not surprisingly, more errors are associated with system 1 than system 2” (p. 720).

In addition to the range of models that has been proposed to account for clinical decision making and problem solving in paramedic clinical practice, several discipline specific paramedic texts have been developed to provide a useful introductory basis for informing the understanding of clinical decision making and problem solving by paramedics in the pre-hospital setting (Caroline, 2008; Sanders, 2005). These models and sequential frameworks reflect the basic elements outlined in the Emergency Medical Technician Paramedic National Standards Curriculum designed to address the educational requirements of paramedics (US Department of Transportation, 1998).

From these key texts, it is proposed that clinical decision making and problem solving by paramedics follows a sequential pathway. The first phase refers to concept formation whereby relevant information regarding a patient’s presentation is gathered and forms the basis of the paramedic’s initial assessment. During the second phase, (data interpretation) information is evaluated and synthesized in order to form an impression of the clinical presentation and to aid in formulating a working diagnosis. This process is dependent upon the ability of paramedics to recognise a range of conditions, signs and symptoms and has been found to be heavily influenced by prior knowledge and clinical experience (Wyatt, 2003). Once a conceptual understanding of the clinical presentation has been formed, paramedics are able to develop an appropriate care plan [deciding upon appropriate treatments and interventions] and implementing that plan [initiating treatments and interventions]. Paramedics must then evaluate the degree to which patients respond to on-going care and treatment interventions by reassessing the patient’s status, determining the effectiveness of interventions and if necessary, revising the working provisional diagnosis (Caroline, 2008; Sanders, 2005). Finally, according to Shaban and Considine (2011) paramedics
should attempt to minimise, as much as possible, the occurrence of error in their judgement practices.

Jensen, Croskerry and Travers (2009) conducted a cross sectional study that used the Delphi technique to establish consensus among experts in the field of emergency health care (paramedics and medical directors) about the most important decisions that paramedics make during high acuity responses. In particular, those that relate to patient safety and clinical outcomes. This technique identified 42 clinical decisions that were considered to be the most important in relation to high acuity responses. They were incorporated into a process map that was used to provide a clear diagrammatical overview of an emergency response. These were grouped into six main categories, i) airway management; ii) assessment; iii) cardiac management; iv) drug administration; v) general treatment and vi) scene management. While airway management and cardiac management categories yielded the highest scores, the on-scene treatment phase had the highest decision density on the process map (number of decisions that must be made simultaneously or over a short period). In addition, scene management was considered a critical part of the role of a paramedic and was thought to heavily influence the decision making process. Interestingly, the study found that other than the need to assess level of distress during the initial assessment or deciding if patients had the capacity to refuse or consent to treatment, participants in this study did not indicate clinical decisions that related specifically to psychiatric emergencies. For example, in high acuity presentations, how to protect individuals from harm to self/others or how to manage non-compliant patients, was not seen as being of importance.

Nevertheless, the researchers acknowledged the process map was not meant to describe how or why decisions are made by paramedics or even the cognitive thinking processes paramedics engage in during emergency care. Instead, the process map was intended to highlight the main events that typically occur during most emergency calls as well as the key points where clinical decisions will need to be made by
paramedics. For the purpose of this study, experts were recruited to provide consensus on important clinical decisions made by paramedics in high acuity responses. While this reflects the basic premise of the Delphi technique, it is likely that different responses may have been generated from less experienced clinicians who may have more rudimentary styles when approaching decision making and problem solving in clinical practice.

An exploratory qualitative study conducted by Alexander (2010) in the USA sought to examine the problem solving and reasoning processes used by paramedics to solve clinical problems. The theoretical framework for the study was based on the information processing theory of problem solving, the academic and research literature on problem solving processes of emergency medicine physicians, and information contained in the Emergency Medical Technician Paramedic National Standard Curriculum (1998).

The study required 10 participants to think out aloud as they reviewed and solved current and retrospective clinical problems that were presented in two sets of vignettes. A verbal protocol analysis tool was used to examine the participants thinking out aloud responses. The study found that participants had a preference for solving clinical problems using a pattern recognition approach in the absence of sufficient hypothesis testing. Participants were also found to generate pseudo information in order to support their clinical reasoning processes and relied on cognitive biases when solving clinical problems. Furthermore, the study found that patient assessment and illness scripts generated by participants were “inadequately developed, disorganised and faulty”, and that treatment was either prematurely initiated or given unnecessarily (Alexander, 2010, p. 2). Based on these findings, Alexander advocated the need for further research that explores the cognitive assessment and reasoning processes that are used by paramedics.
While the models put forward by Bendall and Morrison (2009) and the sequential frameworks that are outlined in paramedic textbooks provide a revealing insight into the practice of clinical decision making and problem solving in paramedic practice, their main limitation is that their validity and reliability has not been substantiated by a solid evidence or research base. While the aim of this study was not to explicitly evaluate the extent to which these models and frameworks are applicable when paramedics make clinical decisions to exercise their legislative powers under mental health legislation, they nevertheless provide an important theoretical foundation on which to consider this area of clinical practice.

The following section explores the routine practice of triage in clinical practice and how this practice is underpinned by a clinician’s ability to recognise, interpret and evaluate clinical presentations encountered.

2.4 The Concept of Triage and Understanding Clinical Presentations

Triage practices are routinely used by clinicians across the healthcare spectrum, (including paediatric care, primary care, cardiac care, psychiatry and obstetrics), to categorise and prioritise patients according to clinical need (Crocco, Sayre, & Aufderheide, 2002; Manning, 2012; Sands, 2009; Thompson, Stanford, Dick, & Graham, 2010). Triage is a dynamic process (Eaton, 2003) and plays a particularly important role in the context of emergency pre-hospital care where there may be a limited amount of resources available to meet patient demand, such as in the case of major or mass-casualty incidents (O'Meara, Porter, & Greaves, 2007; Shaban & Considine, 2011).

In modern pre-hospital care, the triage process usually occurs when emergency calls are first received by the ambulance service. During this process, ambulance telephone
operators (usually non-medically trained) enter mandatory information from the caller into a computer dispatch system. In NSW, this system is referred to as the Computer Aided Dispatch system and is used to track the journey of patients during the ambulance intervention. Generally speaking, the computer systems work by prompting the ambulance telephone operator to request specific information from the caller that relates to the patient’s presentation. As additional information is entered into the computer system, the call can be triaged according to clinical urgency. For instance, life-threatening conditions would be triaged as requiring an urgent response by the ambulance crew whereas less serious cases may be triaged as a lower priority therefore requiring a less urgent response by the ambulance crew. O’Meara, Porter and Greaves (2007) claim that most ambulance computer dispatch systems have a high over-triage default to ensure safety.

On arrival at the scene, paramedics are then responsible for conducting a physical assessment of the patient’s presentation. This process enables paramedics to re-triage patients according to their clinical presentations and clinical need for subsequent treatment. In the case of multi-casualty incidents, the triage process works by paramedics undertaking a rapid and initial primary survey of the physiological indicators of all patients on-scene. This initial assessment allows paramedics to categorise patients according to their clinical urgency so that care and treatment is first provided to the most seriously ill. Shaban and Considine (2011) claim that “many factors influence this priority, including not only the clinical urgency of the patients but also the capacity of care and the practical ability to maximise the extraction of patients” (p. 175).

In some cases, initiating treatment may impact on a patient’s later triage category. The recent establishment of specialist health services for specific conditions such as
trauma, cardiac and stoke care means that paramedics are often required to triage patients according to their needs for specialist care services (Shaban & Considine, 2011). When arriving at hospital, all patients are then re-triaged by emergency department clinicians in accordance to the Australasian Triage Scale (Commonwealth Department of Health and Family Services, 1997). This process is underpinned by the exchange of clinically relevant information from paramedics to the emergency department clinical team, a process commonly referred to as clinical handover (O’Meara, et al., 2007; Shaban & Considine, 2011). It also represents the transferring of responsibility and accountability for patient care from one clinician to another.

However, the literature suggests that the time critical nature of emergency care can impact on the quality of clinical information that is exchanged between clinicians (O’Meara, et al., 2007; Rowlands, 2003). For example, Evan, Murray, Patrick, Fitzgerald, Smith and Cameron (2010) undertook a qualitative study in Australia that sought to identify the key aspects of the clinical handover process between paramedics and ED clinicians and where further enhancement could be made. The study which involved ten paramedics and 17 trauma team members found the clinical handover process could be optimised if paramedics provided only vital clinical information that is necessary to support ED clinicians’ capacity to administer safe, timely and clinically appropriate care in a succinct and structured manner. It was also generally recognised by the participants in this study that a mandatory time out opportunity would significantly improve the exchange of clinical information between clinicians. In this scenario, all clinicians would pause while paramedics communicate clinical information using a checklist guide format. However, the study did not specify the exact type of clinical information that ED clinicians required during this discourse. An earlier study conducted by Yong, Dent and Weiland (2008) found that emergency department physicians were not typically involved in handover discussions with paramedics in the context of low acuity presentations. When they were involved in handover discussions,
it was usually in response to high acuity presentations where the focus was on communicating specific clinical information.

The capacity of paramedics to deliver high quality care to patients is largely dependent upon their ability to identify, assess, predict and treat a broad range of clinical presentations. The existing research into paramedic triage practices has predominately focused on aspects of quality, safety, assessment and management in the context of trauma and cardiac care (Baxt, Jones, & Fortlage, 1990; Fries, McCalla, Levitt, & Cordova, 1994; Menegazzi, Davis, Sucov, Mancone, & Paris, 1993; Mulholland et al., 2008; Newgard et al., 2011; Simmons, Hedges, Inwin, Maassberg, & Kirkwood, 1995).

A study conducted by van’t Hof et al., (2006) in the Netherlands focused on an evaluation of the feasibility and benefit of early pre-hospital infarct diagnosis and triage by paramedics (without the input of a physician) compared with the outcomes from triage and treatment initiated at a non-PCI health facility. The study recruited 209 patients following pre-hospital infarct diagnosis and triage by paramedics and focused on the accuracy of infarct diagnosis, time taken to treatment, left ventricular function and clinical outcome, and compared these with patients (n=258) who were triaged and diagnosed by emergency department clinicians at a referral non-PCI health facility. The study found that the ability of paramedics to accurately diagnose acute myocardial infarction occurred in 95% of cases, whereas ED clinicians (at a non-PCI health facility) were able to make an accurate diagnosis for 99% of cases. In addition, 59% of patients under the care of paramedics were administered pre-treatment pharmacology agents within 90 minutes of onset of symptoms compared to only 43% of patients under the care of ED clinicians. The study also found that early triage, diagnosis and treatment by paramedics was associated with better physiological response (left ventricular function) and long-term patient outcomes compared with triage and conveyance from a non-PCI health facility. These findings suggest that
specially trained paramedics have the capacity to engage in advanced decision making in relation to the triage, diagnosis and treatment of patients suffering an acute myocardial infarction that can directly impact on long-term patient outcomes. The study acknowledged that the decision making capacity of paramedics was guided by their reliance on 12-lead ECG diagnostic computer equipment which enabled them to determine whether patients required transportation to a non-PCI facility first or direct referral to a PCI facility. In addition, the study recruited highly trained paramedics who had undertaken an extensive clinical placement at an intensive care unit that enhanced their clinical skill set and knowledge. It is therefore likely that different results may have been observed in relation to the decision making capacity of less experienced paramedics to triage, diagnose and treat patients with acute myocardial infarction.

Some research suggests paramedics may have the clinical judgement skills necessary to perform a global assessment of the severity of illness but have a reduced capacity to identify and assess localised conditions. For example, in a prospective study, Mulholland et al., (2008) examined the ability of specialist paramedics (helicopter paramedics) in Victoria, Australia to identify the severity of anatomic injuries to specific body regions (head, thoracic and abdomen areas) in patients and whether patients required treatment from a major trauma service. To evaluate their clinical judgements regarding the overall severity of injury for major trauma services, paramedics also reported whether the patient’s status was minor, moderate or severe. Paramedics were required to complete a data collection form when completing the patient card record. Responses were then compared with patient outcome data using a range of statistical calculations. From the 207 patient presentations in this study, the results found that while paramedics were able to accurately categorise patients who required admission to intensive care, required urgent surgery or had later died in hospital, they were unable to make accurate clinical judgements regarding the severity of injury to specific anatomic regions.
While Mulholland and his colleagues (2008) claimed that “estimating the severity of injury to individual body regions does not seem to be a useful method for improving accuracy of pre-hospital triage of trauma patients”, they did not provide any further explanation for this view (p. 757). That said, the researchers did acknowledge the inherent difficulties that clinicians can experience when attempting to identify injuries by anatomic region in an out-of-hospital environment. The study did not provide any information or description of how or on what basis clinical judgements and decisions were made by paramedics in the context. This information may have provided a meaningful insight into how specialist paramedics approach decision making and problem solving in clinical care. Nevertheless, the researchers did acknowledge a number of limitations with this study which included the likely lack of generalisability to other non-specialist paramedics.

A retrospective study conducted in the USA by Ackerman and Waldron (2006) examined the diagnostic accuracy of paramedics when treating patients experiencing breathing difficulties over a one year period. The study of 244 patient records compared the diagnosis made by paramedics when attending patients with a dispatch complaint of ‘difficulty breathing’ with the diagnosis made by the ED physician following the patients subsequent arrival at hospital. Diagnosis made by paramedics and ED physicians were categorised as cardiac, respiratory and other. The results found a high interrater agreement (81.1% using the kappa coefficient) between paramedics and ED physicians across all three diagnostic categories: cardiac condition-paramedics 46% and ED physicians 45%, respiratory condition-paramedics 21% and ED physicians 23%, and other conditions-paramedics 32% and ED physicians 32%. For the purpose of this study, the diagnosis of the ED physician was taken as being the correct diagnosis yet there was no consideration of the reliability of this. Similarly, the study did not examine whether misdiagnoses were made by paramedics or of its consequence.
In addition, the sample size for this study was relatively small so the results are unlikely to be generalizable across other populations.

Newgard et al., (2011) conducted a large scale mixed methods study to describe the cognitive processes used by emergency medical services personnel when making triage and hospital selection decisions. This information was then used to generate a model of pre-hospital decision making in trauma triage. The study recruited 10 EMS agencies across four regions in the USA. This captured three trauma centres and 13 non-trauma hospitals. The results of this study had shown that decision making in the context of trauma responses was complex and dynamic and not adequately accounted for by existing assumptions that it is guided by “algorithmic, risk-based process for identifying patients with serious injuries” (p. 1350). In fact, the researchers found that EMS personnel made clinical judgements when triaging trauma patients in the pre-hospital setting that were based largely on independent and higher cognitive processes that enabled decisions to be formulated rapidly, with some describing a ‘gut feeling’ when identifying seriously injured patients.

In a doctoral study aimed at exploring clinician decision making in mental health triage practices, Sands (2009) found that the clinical decision making of mental health nurses in relation to mental health triage, was predominately informed by their own clinical experiences rather than by any defined decision making theoretical framework. It was also interesting to note that several of the participants reported they had received no formal training in mental health triage decision making and that they were entirely reliant upon their previous clinical experience to guide them in their clinical decision making. A general lack of educational preparedness and knowledge to underpin their clinical decision making was reported by participants in Sand’s study.

Other studies examining clinical judgement and decision making in paramedic practice have included, paediatric care (Williams, Rindal, Cushman, & Shah, 2012); palliative
care (Taghavi, Simon, Kappos, Meyer, & Wiese, 2012); major incidents (Zoraster, Chidester, & Koenig, 2007); obstetrics care (Wollard, Simpson, Hinshaw, & Wieteska, 2008); substance abuse (Weimeling, 2013); falls (Snooks et al., 2012); conveyance versus non-conveyance cases (Porter et al., 2007); spinal care (Dixon, O’Halloron, & Cummins, 2013), and pain management (Hennes, Kim, & Pirrallo, 2005).

While triage practices represent a critical aspect of problem solving in pre-hospital mental health care, the existing literature has not examined the lived experiences of paramedic clinical judgement and decision making with respect to their use of legislative powers available to them under mental health legislation in the NSW jurisdiction. With this in mind, the purpose of this study was to examine the lived experience of paramedics in the context of pre-hospital mental health care with a particular focus on gaining an understanding of the factors that influence their decision making with respect to the use of their legislative powers under mental health legislation. In this regard, this study was not intended to overtly focus on the standard, accuracy or otherwise of their decision outcomes in this context.

In the following section, the use of decision tools to support and guide decision making by clinicians is examined.
2.5 Organisational Protocols and Clinical Guidelines

Ambulance protocols and clinical practice guidelines are normative and prescriptive decision tools that often make use of decision trees to ensure paramedics provide a standardised level of clinical care (Berg, 1997; Jensen, 2011; Raming, 2009; Shaban, et al., 2012).

In the case of pre-hospital mental health care, decision tools such as protocols and clinical guidelines aim to ensure paramedics address important ‘not-to-miss’ areas related to mental health care. They focus on conducting a pre-hospital mental health and suicide risk assessment, patient management, and scene safety. For patients not presenting with actual or threatened self-harm, existing decision tools in NSW do not provide guidance to paramedics about leaving a patient at the scene, or options for referring patients to more appropriate follow up services such as the local community mental health services. Furthermore, the guidelines provide little or no alternative options other than to transport behaviourally disturbed patients to hospital for further assessment (Shaban, 2011). This issue was also raised in a discussion paper by Townsend and Luck (2009). Moreover, in its present form, existing protocol and clinical guidelines that relate to mental health care provide limited guidance to paramedics on decision making in relation to application of mental health legislation in clinical practice.

Furthermore, unlike traditional mental state examinations (MSEs) that are commonly used within the field of psychiatry or community mental health and provide a more thorough and detailed clinical examination of the patient’s mental state (Crook, 2001; Davies, 2000; NSW Health, 2009), ambulance specific protocols are often only designed to assist paramedics to identify potential signs and symptoms which may indicate the presence of a mental health problem (Ambulance Service of NSW, 2010). They guide in the assessment of key areas that include, scene safety, cognitive, perceptual and affective disturbances, and suicide risk (Ambulance Service of NSW,
Furthermore, they are not intended to provide paramedics with a diagnostic instrument for making a formal diagnosis but rather, to identify the presence of disturbed behaviour or other risk issues. Protocols and clinical guidelines around the management of behaviourally disturbed patients are also supported by other, non-mental health specific, protocols and clinical guidelines (Ambulance Service of NSW, 2012b).

While the use of protocols and clinical guidelines is aimed at providing decision support and clinical guidance to paramedics thereby promoting a standardised level of care, limitations have been identified. First, clinical guidelines and protocols give the impression that complex clinical problems (or presentations) can be adequately dealt with by a single solution (Berg, 1997; Thompson & Dowding, 2002). Second, they rely on the availability and synthesis on best available evidence and third, they lack consideration that clinical decision making often takes place in complex environments that require clinicians to weigh up competing information and priorities when deciding on the best course of action (Thompson & Dowding, 2002). Schon (1991) further adds that it is unrealistic to expect that clinical guidelines can address the diverse range of decisions that clinicians need to make in clinical practice. The EMT-Paramedic National Standard Curriculum also acknowledges the limitations associated with protocol driven decision making and problem solving in paramedic practice arguing that while student paramedics are often competent at memorising treatment protocols to satisfy assessment requirements, they generally lack a sufficient understanding of the underlying pathophysiology of clinical presentations. This lack of theoretical knowledge, according to the authors, manifests itself in poor decision making and problem solving capabilities (US Department of Transportation, 1998). Shaban and Considine (2011) also argue that “clinical guidelines that are not evidence-based, uncomprehensive, without context or applied incorrectly or inconsistently can have detrimental effects on the quality and safety of care” (p. 44).
In the context of pre-hospital mental health care, Shaban (2005c) claims that mental health related protocols are often poorly constructed and not reflective of the broad spectrum of mental illnesses prevalent in the community. Instead, he claims, they are heavily biased towards a small percentage of psychotic disorders. Moreover, the use of protocols to guide the management of mental health patients in the pre-hospital environment is limited to the observations by paramedics of the patient’s behaviour and their subjective interpretation of this observation. Shaban also asserts that protocols fail to account for the unique situations that paramedics can find themselves in and as such, they have significant limitations in view of the context and challenges presented to paramedics in the emergency care setting.

Yellowlees (1996) has made a significant contribution to the area of community-based mental health interventions by examining the core aspects of mental health care that are performed by clinicians in community settings. Foreshadowing the commentary of other researchers and policy makers in this field (Crook, 2001; Davies, 2000; Roberts, 2007; Shaban, 2004; Shaban, Wyatt, & Cummings, 2004; Spoorn, Buylaet, Jannes, Henderick, & Heeringen, 1996; World Health Organisation, 2000), Yellowlees’s contributions have emphasised the often challenging and stressful nature of managing mental illness in the community setting, particularly for those clinicians working in isolation or with limited back-up assistance.

Yellowlees (1996) has also proposed several useful tools that can assist clinicians when they are called upon to manage behaviourally disturbed patients in community settings. These include a simplified Mental Health Assessment Decision Tree for four broad groups of behavioural presentations as outlined in Table 1 and also an Individual Mental Health Assessment Guide. The latter guide was adapted by Shaban specifically for the purpose of supporting decision making by paramedics in the context of pre-hospital mental health care (Shaban, 2009).
Table 1: Psychiatric assessment in community practice. (Yellowlees, 1996)

Decision tree for brief emergency assessments.

<table>
<thead>
<tr>
<th>Step 1: Does the patient appear to have an altered level of consciousness or cognitive impairment? E.g. evidence of alcohol or drug use</th>
<th>If yes, suspect possible physical illness or substance related disorder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 2: Does the patient appear thought disordered or have perceptual abnormalities? E.g. Is the patient experiencing hallucinations or delusions?</td>
<td>If yes, suspect possible psychotic disorder.</td>
</tr>
<tr>
<td>Step 3: Does the patient have disturbed mood or behaviour? E.g. Is the patient depressed or manic</td>
<td>If yes, suspect possible mood or affective disorder</td>
</tr>
<tr>
<td>Step 4: Are other symptoms or evidence of concern? E.g. psychiatric medication or bizarre behaviour.</td>
<td>If yes, suspect other mental illness or no psychiatric diagnosis</td>
</tr>
</tbody>
</table>

While Shaban’s commentary provides an important foundation for this study, his study focused solely on the utility of specific mental health decision tools (organisational protocols and clinical guidelines) that were used by paramedics employed by the Queensland Ambulance Service and not those that applied in the NSW jurisdiction which was the focus of this study. That is, the utility of decision tools that relate to the provision of mental health care in paramedic practice in the NSW context.

In the following section, the literature relating to decision making by paramedics with respect to the conveyance and non-conveyance of patients to hospital for further assessment is examined.
2.6 Conveyance versus Non-conveyance

Generally speaking, the primary role of paramedics is to provide initial care and treatment to patients in the pre-hospital environment. In most cases, this is supported by the subsequent conveyance of patients to hospital for further assessment and definitive care. In recent years, researchers have sought to examine the quality and safety of clinical decisions that are made by paramedics when deciding whether or not patients require conveyance to hospital for follow up care (Gray & Walker, 2008; Gray & Wardrope, 2007; Haines, Lutes, Blaser, & Christopher, 2006; Hoyle, Swain, Fake, & Larsen, 2012; Mason, Knowles, & Colwell, 2007; Mason, Knowles, Freeman, & Snooks, 2008). This area of research has also been linked to broader considerations of the factors that are thought to contribute to the high proportion of patients who are unnecessarily conveyed to hospital by paramedics (Camasso-Richardson, Wilde, & Petrack, 1997; Neely, 1997) and also the reasons for some paramedics failing to complete clinical documentation for patients who are not conveyed (Porter et al., 2008).

A qualitative study by Burrell, Noble and Ridsdale (2013) that examined the decision making of ambulance clinicians when managing patients with epilepsy, found that most participants expressed a lack of confidence when making transport decisions in this area of clinical practice. Some of the participants in this study attributed this to a lack of direct clinical experience managing patients with epilepsy and reported that, at times, they found exposure to these situations distressing. On the other hand, those who perceived themselves as confident in this context attributed this confidence to direct clinical experience and not to the training. In fact, some of the participants in this study considered their training had not provided them with the necessary skills and knowledge to operate confidently in this context, particularly in relation to the non-conveyance of patients to hospital.
Only half of the participants in this study who expressed confidence in managing patients with epilepsy also felt confident enough when making decisions to convey these patients to hospital for further assessment. Conversely, those who lacked confidence managing patients with epilepsy were also found to lack confidence when making decisions regarding the need for conveyance to hospital, even when a patient’s seizure had resolved. An interesting finding of this study was that participants who perceived themselves as confident when managing patients with epilepsy post seizure were often guided by the expressed views of patients regarding their need for further assessment. In this regard, paramedics had a preference for engaging in shared decision making when patients were perceived as having the capacity to participate.

Fear of litigation, lack of alternative referral pathways other than the emergency department, lack of access to patient medical history and restrictions on authority to administer appropriate pharmacology were other key factors found to impact heavily on the decision by paramedics to convey patients to hospital, irrespective of whether or not decision outcomes were deemed clinically necessary. Interestingly, the authors concluded that decision making by paramedics in this context was greatly influenced and supported by their level of clinical experience rather than their reliance on formal training and decision aids. A notable limitation of this study was that it did not ascertain whether paramedics had accessed the additional clinical support and guidance available to them and what influence this may have had on their decision making processes or outcomes.

An earlier study by Snooks, Halter, Close, Cheung, Moore and Roberts (2006) examined the quality and safety of paramedic practice in relation to the non-conveyance of older people who fall. The study identified cases over a one month period where paramedics had attended patients who had fallen and were not conveyed to hospital for further assessment. Data linkage was undertaken using healthcare and mortality data. The study found that of the 534 patients who were aged 65 and over
who had contacted ambulance for assistance following a fall during the study period, 194 patients were assessed by paramedics and left at home. In the two-week follow up period, 86 patients were found to have made subsequent contact with a health professional and 83 patients had initiated further ambulance assistance. Furthermore, the high proportion of patients who initiated further assistance from health professionals suggests that paramedics may not have sufficient clinical knowledge and skills to make clinically justifiable decisions with respect to the non-conveyance to hospital of older patients who have fallen. While the study did not seek to examine whether the decisions made by paramedics with respect to the non-conveyance of patients to hospital for further assessment were clinical justified, the results did support the view that paramedics may lack the skills and knowledge required to adequately deal with the care needs of older patients who have fallen and that alternative models of care need to be further explored.

In a later systematic review and meta-analysis, Brown, Hubble, Cone, Millin, Schwartz, Patterson, Greenberg and Richards (2009) found considerable variability among paramedics with respect to the determination of whether conveyance of patients to hospital was medically necessary. While the findings of this study were based on a limited amount of available data, the authors concluded that paramedics appear to lack the capacity to make appropriate clinical decisions about whether patients need to be conveyed to hospital. However, there were a number of shortcomings identified in this study that should be acknowledged. For example, the results were based on limited and in some cases incorrect data; there was a lack of a consistent reliable reference standard and standardised definition of what constituted a ‘medical necessity’ and no consideration of the impact on patient care or the actions taken by paramedics following the determination of whether ambulance conveyance was necessary or not.
In another study in the USA, Hauswald (2002) conducted a prospective survey and linked medical record review study, to determine the extent to which paramedics were able to accurately and safely determine those patients who did not require ambulance conveyance to an emergency department for follow up care. This was achieved by comparing the clinical judgements of paramedics and ED physicians regarding the need for ambulance conveyance and follow up treatment for different clinical presentations. Hauswald concluded that the frequent lack of agreement observed between the clinical judgements of paramedics and ED physicians, suggests that paramedics are unable to make accurate and safe decisions with respect to the medical necessity for ambulance conveyance or follow up hospital care. Hauswald cited a lack of sufficient education, training and skills development among paramedics as the chief reasons for differences in clinical judgements made by paramedics and ED physicians.

Porter, et al. (2007) conducted a study in the United Kingdom which examined the issue of paramedic decision making in relation to non-conveyance of non-urgent patients to hospital. The researchers found that for patients who were judged as incapable of making informed decisions about their situation, ambulance organisational protocols mandated that paramedics could only leave a patient in the care of another appropriate professional. This mirrors similar practices that exist in the Australian context. For paramedics in these circumstances, the availability of an appropriate person was often found to be a difficulty due to the limited availability of social workers or GPs. This study reinforced the notion that the decision making processes involved in relation to the non-conveyance of patients to hospital by paramedics was considerably more complex than accounted for by existing ambulance protocols.

Shaban (2011) cautions that a major limitation of previous studies that have examined paramedic clinical judgement with respect to the conveyance versus non-conveyance of patients to hospital is that they tend to omit any consideration of the contextual and
situational influences that are likely to impact on the decision making process. In particular, the inherent differences between the pre-hospital and in-hospital clinical environment. Furthermore, these studies often assume a commonality exists in relation to how clinicians from different health disciplines approach and manage clinical presentations, and the constructs that are used to inform this process.

In the following section, the influence of clinical experience on clinical decision making and clinical judgement in paramedic practice is examined.

2.7 Intuition and Clinical Decision making

The relationship between clinical decision making and clinical experience has long been debated in the field of health care, particularly within the discipline of nursing and other allied health professions (Benner, 2001; Corcoran, 1986; Hammond, McCandall, & Mumpower, 1980; Sands, 2009; Smith, et al., 2012) and to a lesser extent within paramedic clinical practice (Shaban, 2005c; Wyatt, 2003).

Wyatt (2003) has been credited with furthering this research area by examining this relationship in paramedic practice from a novice-expert theoretical framework. Wyatt's research focused on exploring the subtle ways in which paramedics draw upon and use tacit knowledge often referred to as professional judgement, when dealing with unique clinical situations. Wyatt used an ethnographic case study to investigate the means by which paramedics draw upon their knowledge base and experience when responding to unfamiliar clinical situations and to explore and chart the transition that paramedics undergo as they move from being novice paramedics to expert paramedics.
Wyatt purported that because the constructs of paramedic judgement and decision making are found to be heavily grounded in the social and contextual nuances of the clinical setting (pre-hospital environment), ethnographic techniques provide an ideal means of collecting dense “descriptions that are sensitive to the socio-cultural patterns of interactions within the social order being investigated” (p. 2). For example, Wyatt used participant observations as a means of observing paramedics as they perform clinical duties in their natural clinical environment. This was in keeping with traditional ethnographic case study techniques and also emulated those used in other studies that have examined the role of tacit knowledge in clinical settings (Daley, 2001). To enable deeper exploration of the specific behaviours and judgements paramedics had made during these observations, Wyatt invited paramedics to also take part in semi-structured interviews. To maximise the opportunity to source rich descriptions from paramedics, a purposeful sampling strategy was used to ensure only highly skilled paramedics were recruited to take part in the interviews.

Findings from Wyatt’s (2003) study revealed that for novice paramedics, clinical decisions were heavily influenced by established organisational protocols and guidelines. As paramedics became more experienced and familiar with clinical duties and the context in which they operate, they were found to rely much less on established protocols and clinical guidelines and instead developed an increasing degree of independence and confidence when managing clinical presentations. This, according to Wyatt (2003), was illustrated by the participants' preference for relying on well-rehearsed and established strategies that were generally based on “the reversion to basics…and the capacity to play a hunch and trust your judgement” (p. 8). Moreover, the participants described a range of characteristics that were considered inherent in ‘expert’ paramedics. These included, their capacity to identify important clinical indicators from a variety of sources and an ability to make decisions rapidly; a preference for maintaining an open and reflective approach to decision making and
problem solving (rather than making decisions in haste); an ability to multi-task and foresee possible future outcomes and consequences, and a willingness to learn from past experiences. While this suggested prior clinical experience enables paramedics to engage in skilled, confident and independent clinical decision making even in situations that are unfamiliar to them, the researcher also acknowledged the contribution of strong generalised knowledge as well as lessons learnt from life experiences beyond the workplace. Shaban’s work (2005c, 2006) has also revealed similar findings to those derived from the field of nursing (Benner & Tanner, 1987; Gerrity, 1987; Hammond, et al., 1980; Rew, 2000) which indicate that intuition and prior experience were typically the only effective strategies paramedics could draw upon when managing behaviourally disturbed patients.

While previous studies have gone some way to improving the understanding of the clinical decision making constructs used by paramedics, the existing literature has not focused on the influence of experience in relation to paramedics exercising their legislative powers under mental health legislation in the NSW jurisdiction or the associated factors that influence their decision making in this context.

In the following section, this influence of education on clinical decision making and clinical judgement is examined.

2.8 Mental Health Education and Clinical Decision making

It is generally agreed that effective clinical decision making in clinical practice is supported and underpinned by clinical knowledge. The assumption being made is that the more in-depth clinical knowledge health professionals have, the more effective their clinical decision making will be (Carnevali & Thomas, 1993; Christensen, 2007; Orme & Maggs, 1993; US Department of Transportation, 1998). Theoretical knowledge gained from academic study coupled with clinical knowledge has also been found to be relied
upon by health professionals when engaging in clinical practice. This can assist health professionals in making more confident decisions about patient care (Del Bueno, 1983; Pardue, 1987; Schon, 1991). The EMT-Paramedic National Standard Curriculum underscores the importance of paramedic educational preparedness arguing that “continuing education is an integral component of any professional education process and the paramedic must be committed to life-long learning. The Paramedic curriculum must fit within the context of a continuing educational system. This is necessary due to the continually changing dynamics and evolution of medical knowledge” (US Department of Transportation, 1998, p. 19).

In response to the inclusion of emergency powers for paramedics as part of the overhauling of mental health legislation, several ambulance services in Australia have introduced specific mental health training programs for their workforce (Roberts & Henderson, 2009; Shaban, 2004). These programs were intended to equip paramedics with the necessary clinical knowledge and technical skills to better manage mentally ill or mentally disordered patients while at the same time preparing them to fulfil their legislative responsibilities under mental health legislation.

In 2007, the Ambulance Service of NSW introduced a similar one-day pre-hospital emergency mental health care training program designed to enhance the theoretical knowledge of paramedics with respect to the delivery of mental health care. This training program covers issues relating to the basic aetiology, causes and treatment of mental illness, the impact of stigma relating to mental illness and appropriate brief interventions to assist in the management of patients in the pre-hospital environment. These include communication and de-escalation skills training, assessing state of mental health and risk of suicidal behaviour. In addition, this training incorporates key aspects of mental health legislation as it applies to paramedic practice and the procedure for fulfilling their legislative responsibilities. During the training, case
vignettes are used to facilitate classroom discussion around appropriate clinical
decision making responses to a range of real-life scenarios relating to the management
of mental health emergencies in the community. A mental health consumer participates
as guest speaker during this training and provides a personal account of their
experience living with and managing mental illness. Importantly, the guest speaker can
give an insight into their experience of accessing healthcare services and of their
contact with emergency services during acute periods of illness. A discussion paper
which provided the results from a program evaluation coupled with a recent follow-up
systematic review has found the active participation of mental health consumers in the
design and delivery of educational programs for health professionals can have a direct
impact on promoting positive attitudinal change and in enhancing clinicians
understanding of a patient’s lived experience (Happell et al., 2014; Happell & Roper,
2003). At the completion of training, a multiple choice assessment exercise is
administered to assess participant competency and following successful completion of
this assessment, paramedics are then granted authority to exercise legislative powers
under mental health legislation.

It was assumed that the delivery of specific ambulance mental health training for
paramedics would correspond with enhanced decision making capabilities in relation to
the provision of emergency mental health care. However, Shaban, (2004) argues that
the degree of knowledge, training and skills required by paramedics to manage
mentally ill or mentally disordered patients remains a contentious issue and a
paramedic training courses have traditionally taken place within a competency-based
training (CBT) framework that restricts the ability of paramedics to undertake complex
clinical decision making in real-life settings.
In an earlier study, Shaban (2004) conducted an analysis of educational and training material produced by the Queensland Ambulance Service as well as operational clinical protocols and policies relating to the provision of mental health care. His document analysis found that paramedics were not explicitly trained in performing comprehensive mental health assessments and that there appeared to be a lack of specific training for paramedics in relation to how to engage in effective clinical decision making when providing pre-hospital mental health care. A document review of similar mental health resources in other ambulance services in Australia found that while paramedics are generally provided with a list of signs and symptoms to look for when providing emergency mental health care, resources provide limited instructional guidance on the circumstances in which paramedics should or should not exercise their legislative powers under mental health legislation. Furthermore, other studies have continued to reveal that even after undertaking specific clinical mental health training, many paramedics believe that they still lack the necessary attributes required to assess and respond appropriately to individuals with a mental illness (Roberts & Henderson, 2009; Shaban, 2005c; Townsend & Luck, 2009). While these findings are clearly pertinent to this study, this literature was not focused on the mental health training program that was developed and delivered to paramedics in NSW, as is the focus on this study.

In a research paper, Shaban (2005b) found that paramedics have reported a perceived gap in their knowledge and skills in relation to mental health care, by expressing a need for further skills development in this area. Participants also felt that they would benefit if they had access to a specific tool, for instance an algorithm or organisational system support, to guide them in the better management of mental health patients. These views have also been reported across other health disciplines. For example, later studies in Australia have also found that emergency department clinicians, including both doctors and nurses, perceive a gap in their clinical knowledge, skills and
confidence with respect to the effective management and care of mental health patients, with many expressing a desire for more educational and training (Happell & Platania-Phung, 2005; Jelinek, Weiland, Mackinlay, Gerdtz, & Hill, 2013; Sands, 2009).

Similar findings were reported in a later study undertaken in South Australia by Roberts (2007). This study found that paramedics had reported a critical lack of appropriate mental health assessment skills and competencies to effectively respond to behaviourally disturbed patients, in particular, the lack of effective de-escalation training that would assist them in managing potentially aggressive or violent situations. Participants in this study had further expressed a sense of continuing frustration at working within a health system that they perceived was poorly equipped to meet the needs of mental health patients.

In a similar descriptive study, in South Australia, Roberts and Henderson (2009) used a mixed method design to explore the perceptions of paramedics with respect to their role, work practices and preparedness when providing pre-hospital mental health care. In this study, a quantitative measure was used to identify the percentage of mental health cases paramedics were called to attend. Overall, the measure revealed that the annual percentage of mental health cases had remained relatively stable across a six year period. A self-report survey was then administered to explore the perceptions of paramedics in relation to a range of themes that relate to mental health care. For example, their work practices, the involvement of other services (such as police and mental health crisis teams), organisational culture and management support and how their mental health training and clinical skills were applied in the clinical field.

The survey results revealed a disparity when comparing the perception of paramedics in relation to mental health caseload with the actual mental health caseload data derived from the clinical data set. For example, 50% of participants believed that mental health cases represented 10-20% of their caseload whereas the clinical data
set identified mental health cases as representing only 3% of all cases. The survey results also identified a significant difference in the perceived time on-scene and the actual time on-scene for mental health cases. For example, in the survey, participants perceived that on average 20-40 minutes was spent on-scene whereas the clinical data set indicates that time on-scene for mental health cases was only 1-10 minutes.

Focus groups were then used to explore a range of themes relating to ambulance mental health care. These ranged from education and training, increased prevalence of acute psychiatric presentations in the community and the availability of resources, and organisational systems to support the delivery of pre-hospital mental health care. Lack of suitable education and training featured predominately throughout the focus group discussions, with participants reporting a greater need for better theoretical knowledge of mental health presentations as well as access to suitable assessment tools that are applicable across the spectrum of mental health conditions. Similar to Shaban’s study, participants in this study felt that their role when providing mental health care was focused primarily on the transportation of patients to hospital rather than on providing direct clinical care, and that the physical status of patients was viewed as being of greater importance than the emotional wellbeing of patients.

While the findings from these studies have significance to this thesis, they did not explore the provision of mental health training provided to paramedics in the NSW context or how mental health training impacts on subsequent decision making when paramedics exercise their legislative responsibilities under mental health legislation in NSW.

In the following section, the influence of other persons on clinical decision and clinical judgement is examined, with particular attention paid to collegial relationships.
2.9 Role of Others in Clinical Decision making

The literature suggests that interpersonal relationships occurring between clinicians and other persons in the clinical environment (colleagues, patients, carers and bystanders) can influence clinical judgements and decision making outcomes (Charles, Gani, & Whelan, 1999; Cioffi, 2000; Drake, Cimpean, & Torrey, 2009; Joseph, Maltronne, & Osborne, 1988; Ladyshewsky & Jones, 2012; Porter, et al., 2007; Prescott, Dennis, & Jacox, 1987; Shaban, 2011). Moreover, the concept of ‘shared decision making’ promotes a person-centred approach to healthcare that encourages patients to be knowledgeable about their illnesses and creates a positive experience of care for patients. It can also significantly enhance the quality of decisions that are made by clinicians (Carpenter, Gold, & Lahti, 2000; Deegan & Drake, 2006; Drake, et al., 2009). While adopting a shared decision making strategy is often relied upon by paramedics when managing clinical situations (Caroline, 2008; Sanders, 2005; Shaban, 2011), in crisis situations involving patients who lack insight in their mental state and/or who are combative or non-compliant, adopting this approach may not be possible or practicable. This aspect of pre-hospital mental health care, that is, the response to and management and conveyance of behaviourally disturbed and/or non-compliant patients, was a key focus of this research.

A case study examining the source of knowledge used by paramedics when making clinical judgements found that paramedics valued the opportunity to observe other paramedics as they engage in clinical practice. This enabled them to incorporate knowledge gained into their own clinical practice (Wyatt, 2003). According to Wyatt, this concept of a ‘community of practice’ facilitated the development and acquisition of new knowledge by paramedics through their active participation (direct practice and observation) in the “cultural and social boundaries of the community” in which they operate (p.4). Shaban (2011) also claimed that paramedic decision making and clinical judgement could be significantly influenced by their interactions and encounters with
others, particularly with patients, relatives, other clinicians and those in authority. Moreover, Shaban argues “the roles they ascribed to those individuals, are critical to clinical judgement and decision making of mental health” (p. 274). As previously mentioned, the study by Porter et al (2007) that examined the non-conveyance of patients by paramedics, also recognised the role that patients, family members and carers can play in the decision making process, a term referred to as shared decision making.

The opinion and perceived judgement of colleagues in the workplace has been found to negatively influence clinical decision making in relation to emergency mental health care. In a study conducted by Shaban (2005c) in Australia, not transporting patients to hospital was viewed negatively among paramedics. The act of transporting a patient to hospital for assessment was viewed as providing care and treatment, whereas not transporting a patient to hospital was viewed by paramedics in this study as a failure to provide adequate care and treatment. In contrast, mental health nurses in Australia who participated in Sands (2009) study, described feeling significantly concerned about what other mental health nurses would say if a patient who was not considered psychiatrically “unwell enough” was referred for admission (p. 306). Whereas the practice of transporting all patients to hospital is viewed positively among paramedics, mental health nurses, who took this action risked being judged by other colleagues (or gate-keepers) to be making ‘soft decisions’ and were often perceived as being unable to competently manage the risks associated with the triage role. For mental health triage nurses in Sands study, the decision not to admit low acuity patients (such as those patients with known personality disorders or in situational crisis) was often viewed more favourably among other mental health nurses.

In a study in the United Kingdom by Orme and Magge (1993) that examined the processes at play when experienced nurses, midwives and health visitors make clinical decisions, the authors found that effective clinical decision making was dependent
upon a range of contributing factors that extended beyond receipt of clinical knowledge. More specifically, this study found that collegial approval and encouragement as well as permission to take risks during the decision making process, were important factors that help to create a supportive clinical environment where effective clinical decision making can take place. In addition, this study demonstrated that a clinical environment where clinicians perceived there to be positive managerial support that created opportunities for clinicians to engage in reflection, created an ideal opportunity for clinicians to develop their decision making competencies.

In a similar study in Sweden, Hedberg and Larsson (2003) examined the clinical decision making behaviours of experienced nurses and found that verification and approval from more experienced colleagues was regularly sought by less experienced clinicians while engaging in clinical decision making during clinical practice. This was found to be particularly useful where peers are viewed as possessing specific clinical knowledge or expertise.

In another study in the United Kingdom that used a qualitative cross-case analysis study design, Thompson, McCaughan, Cullum, Sheldon, Mulhall and Thompson (2001) found that less experienced clinicians would seek reassurance from more experienced colleagues with respect to the appropriateness of their clinical decisions when they lacked confidence in their own clinical decision making capabilities.

While these studies provide a revealing insight into the influence that others can have on paramedic decision making as well as the broader provision of mental health care, what is unclear, is the extent to which the role of other persons may impact or influence decision making outcomes paramedics arrive at when exercising their legislative powers under mental health legislation in NSW.
In the following section, the literature examining key aspects of pre-hospital mental health care is discussed. This information relates to key findings from studies that have examined clinical decision making in the context of pre-hospital mental health care and the role and adaption of mental health legislation in the area of clinical practice.

2.10 Pre-hospital Mental Health Care and Clinical Decision making

The literature relating to mental health and clinical decision making in healthcare is vast and much of what is known is confined to the fields of medicine, nursing and psychology. Until recently, little research attention has been given to understanding and conceptualising paramedic clinical decision making, with only a scarce amount focused on the role of paramedics in the provision of emergency mental health care (Roberts & Henderson, 2009; Shaban, 2005c, 2009; Shaban & Considine, 2011; Shaban, et al., 2012; Wyatt, 2003).

“Psychiatric emergencies call for an approach that is different from those used for emergency medical or trauma calls. The paramedic has no scientific tools to use in assessing the situation. Also, no firm protocols to guarantee a positive outcome. Fortunately, most psychiatric emergencies require only strong communication skills and supportive measures. These measures can prevent the crisis from escalating. The paramedic’s chief role then is to provide understanding, compassion and direction for people who are temporarily in turmoil. Emergency medical personnel must focus on helping and protecting these patients. They do so until the patient is able to gain control or other therapeutic skills can be applied” (Sanders, 2005, p. 1029).

As Sander’s extract above illustrates, the response to psychiatric emergencies in the community can present unique and complex challenges for paramedics that require advanced and confident communication and interpersonal skills. This is often a result of the ambiguous nature of presentations, the lack of background information and back
up assistance (Chan & Noone, 2006; Doyle & Vissers, 1999; Roberts & Henderson, 2009; Shaban, 2006; Shaban, et al., 2012; Townsend & Luck, 2009). Psychiatric emergencies often occur in the context of aggression, substance misuse, acute psychosis, odd behaviour, medication problems, or situational crisis and can be coupled with concerns over an individual’s risk of harm to self or others. Whatever the circumstances, a coordinated and seamless response by frontline community and hospital clinicians can have immediate and long-term benefits for patients and can assist in establishing a supportive foundation for recovery (Chan & Noone, 2006).

Yellowlees (1996) claims that unlike hospital based settings, where the focus is often on examining the psychopathology of the patient, in community settings, the emphasis is often on clarifying what the patient’s major concerns are before attending to any physiological variables. In crisis situations, it is not always possible to ascertain what the patient’s concerns are, as the goal is often centred on identifying and responding to any immediate risk issues. In addition, the use of comprehensive mental status examinations often is not appropriate for use in the pre-hospital environment (Crook, 2001). According to Yellowlees (1996), the key to successfully managing behaviourally disturbed patients in the community, is the ability to engage with patients in a therapeutic manner in order to establish trust and rapport and to create a protective and safe environment for all parties involved. However, Yellowlees’s commentary remains salient on how clinicians can create a therapeutic relationship with patients when decisions need to be made by clinicians to detain involuntary patients under mental health legislation. Doyle and Vissers (1999) touched on this issue, claiming that paramedics should do what is in the best interest of patient care and safety and this may include the use of restraint. In the often chaotic and unpredictable pre-hospital environment, establishing this type of positive therapeutic relationship with patients who are non-compliant or combative would appear contradictory and potentially inappropriate, particularly when decisions need to be made by paramedics to
temporarily deprive a person’s civil liberty for the purpose of safely transporting them to hospital for further assessment.

When paramedics provide pre-hospital mental health care, a number of areas must be explored. These key areas relate to the medical, psychiatric, environmental and legal aspects of a patient’s presentation. To achieve this, paramedics perform a number of specific assessments including a primary survey of the patient’s basic physiological status, a brief mental health assessment, suicide risk assessment and scene safety assessment (Caroline, 2008; Sanders, 2005; Shaban, 2009; Shaban, et al., 2012). The combined outcomes of these assessments enable paramedics to determine the most appropriate management, treatment and transport options. The process is often guided by organisational algorithms, such as protocols and clinical guidelines that mandate a particular clinical pathway to be taken (Doyle & Vissers, 1999; Shaban, 2006). A rich amount of sociocultural information can also be obtained when assessing a behaviourally disturbed person in their home environment. Environmental cues such as a failure to attend to activities of daily living can be important factors that impact and influence the decision making process (Shaban, 2009; Shaban, et al., 2012; Yellowlees, 1996). After assessing a patient’s state of mental health, paramedics must be able to identify what, if any, are the legal issues regarding the patient’s situation (Shaban, et al., 2012). For example, ‘does this patient agree to come to hospital voluntarily and if not, do they meet the legal criteria for being dealt with as an involuntary patient under relevant mental health legislation by refusing to come to hospital’? This represents the main thrust of this research. That is, an exploration the nature of emergency mental health care as it is experienced by paramedics and the factors that influence their decisions to exercise their legislative powers under mental health legislation.
In the context of pre-hospital mental health care, a study conducted by Cheney, Haddock, Sanchez, Ernst and Weiss (2008) in the USA used an unblinded prospective observational study to examine safety issues relating to the introduction of a triage protocol for use by paramedics when responding to mental health presentations. The triage protocol was designed to enable paramedics to screen mental health patients for other medical conditions before transporting them directly to a mental health facility. The intention of the triage protocol was to reduce the number of mental health patients who would otherwise be transported directly to the emergency department. The study found that introducing such a triage protocol was an effective screening tool for paramedics to use and provided a standardised framework to facilitate effective clinical decision making in this context. The study however could not identify the extent to which the triage protocol could be successfully used on patients who arrived at the emergency department by other means. Further, the overall effectiveness of the triage protocol was determined by the subjective evaluations made by psychiatric physicians once patients arrived at the mental health facility, that is, whether psychiatric physicians felt that patients should have been transported directly to the emergency department or to the mental health facility.

Shaban’s contribution (2011) has revealed some of the factors that account for the way in which paramedics are expected to and actually do make clinical decisions, and have highlighted that paramedics often work under increasing stress and uncertainty when providing mental health care. His contributions have also emulated those of traditional decision making theorists (Benner & Tanner, 1987; Gerrity, 1987; Hammond, et al., 1980; Wyatt, 2003) who have found that intuition and prior experience were typically the only effective strategies paramedics draw upon when managing mentally ill or mentally disordered patients.
In the initial stages of his naturalistic case study, Shaban (2005) used ethnographic and discourse analytic techniques in the context of a discourse-historical case study design to analyse different sources of data that related to ambulance mental health care in Queensland, Australia. These included organisational documents such as ambulance specific protocols, clinical guidelines and policies as well as qualitative data obtained from concepts maps, clinical records and in-depth semi-structured interviews involving three paramedics. An analysis of the data identified a range of official accounts and constructs that paramedics used to describe the manner in which they accounted for their judgements and clinical decisions when providing mental health care. These included, ‘Categories of the Mentally ill’, ‘Role of the Paramedics’, ‘Needs for Additional Training’ and ‘Legislative, Policy and Clinical Practice Conflict’. The analysis also found that paramedics perceived a disparity between their knowledge and training in relation to mental health care and their overall preparedness [in terms of skills and competencies] to provide high quality pre-hospital mental health care. Organisational protocols and clinical guidelines around the management of mental health patients were also found to influence the decisions paramedics made and the clinical pathways they followed (Shaban, 2005c).

Interestingly, Shaban claimed that paramedic clinical judgement and decision making in relation to mental health care were often guided by the physical status of the patient rather than the patient’s state of mental health, as described above by Roberts (2007). Shaban also found that the ambiguous nature of acute mental health presentations in the community often had a negative impact on the clinical decision making process of paramedics, whereby the decision to transport mental health patients to hospital for further assessment was often more commonplace.

A cross-case analysis of the three participants’ accounts of clinical judgement and decision making of mental illness was also undertaken for the purpose of identifying unique and shared approaches across the cases. Reported in his later doctoral thesis
which is most relevant to this study, Shaban (2011) claimed that clinical judgement and
decision making of mental illness is comprised of three fundamental elements. The first
element is the Contextual Element that is associated with historical, cultural,
educational, political and regulatory dimensions of pre-hospital emergency care.
Second is the Practice Element that consists of field actions for problem solving. This
includes gathering and synthesizing relevant information that enables paramedics to
assess the nature and severity of the problem, formulate a provisional diagnosis, and
implement an action plan that is likely to achieve a favourable outcome. According to
Shaban (2011), the Practice Element is heavily influenced by individual factors relating
to experience, knowledge, interpersonal skills and personal traits that “augmented the
paramedics field actions for problem solving in differing measure according to the
individual jobs and patients they encountered” (p. iv). In particular, Shaban found that
prior experience and exposure to similar clinical encounters (mental health
presentations) enable paramedics to develop enhanced “field knowledge” of mental
illness that can be incorporated into their future clinical judgement and decision making
(p.285).

In the third element, the Mediating Element, effective clinical judgement and decision
making by paramedics in pre-hospital mental health care was considered to be
influenced by interpersonal dynamics, relationships and interactions with others at the
scene. These include patients, bystanders, relatives and those in authority. Overall,
Shaban (2011) claimed that paramedic clinical judgement and decision making in
relation to pre-hospital mental health care was focused on concepts of protection,
safety and transportation. Further, it is not simply a technical task that paramedics
perform as ascribed in formal regulatory expectations of practice but one that is highly
individualised and sophisticated.
While Shaban’s study has made a major contribution to enhancing our understanding of pre-hospital mental health care in paramedic practice including the factors and dynamics that influence this task, his study focused on paramedic practice in the Queensland jurisdiction, as opposed to the New South Wales jurisdiction which is the central focus of this study, nor did it seek to examine the lived experience of paramedics making clinical decisions to exercise their legislative responsibilities under mental health legislation.

Nevertheless, what these studies have in common is that they continue to document that paramedics work in a climate of constant uncertainty, ambiguity and stress when managing mentally ill and mentally disordered patients. Further, the studies described above provide an insightful view into the delivery of ambulance mental health care across Australia, U.K and U.S.A and have highlighted a variety of research methods that have been used to examine the decision making behaviours and actions of paramedics in the context of pre-hospital mental health care.

In the next section, key aspects of mental health legislation in Australia as it relates to paramedic practice is examined. In addition, findings from previous studies that have examined decision making by a range of health professionals in relation to use their powers under mental health legislation is presented.
2.11 Mental Health Legislation and Clinical Decision making

The scheduling event is a complex experience. Clinicians practice in an ad hoc fashion, not based on any evidence other than how it is always done, how they are taught on the job, and what they believe needs doing. The relatives of people who are scheduled see the event as both distressing and relieving; a way to bring an end to pain and distress, and a way of achieving either treatment or respite for their loved one. Those who are scheduled [commonly] see the benefit of this ‘final action’ and accept its results, albeit not its means. (Fiorillo, 2001)

2.11.1 Mental Health Legislation

The changes in mental health services in Australia during the early 1980s, which included the resettlement of long-term residential mental health patients into the community, had a significant impact on the roles and powers of different frontline services (Australian Institute of Health and Welfare, 2004; Shaban, et al., 2012). These reforms significantly altered the means by which mentally ill and mentally disordered patients come to access and receive ambulatory and emergency mental health care. The consequence of these changes has been the marked increase in mental health related presentations that paramedics are required to manage and treat (Roberts & Henderson, 2009; Shaban, 2004; Shaban, et al., 2012; Townsend & Luck, 2009). For example, in New South Wales, Australia, the Ambulance Service of NSW reported that in July 2012 there had been a 26.0% variance where paramedics had indicated ‘Psychiatric / Abnormal Behaviour / Suicide Attempt’ as the chief complaint for patient presentations when compared with activity figures for July 2011 (Ambulance Service of NSW, 2011). Similarly, there had also been a marked increase (25% over the five
years 2007-08 to 2011-12) in the number of incidences where police officers in New South Wales, Australia had to rely on their own mental health legislative powers (that is, Section 22 of the Act: Detention by the police) when responding to behaviourally disturbed individuals in the community (National Mental Health Commission, 2012). In the broader context, figures also reveal approximately 30% of all psychiatric hospital admissions relate to patients who have been involuntarily detained under mental health legislation (Institute of Health and Welfare, 2012).

In Australia, mental health legislation varies from each state and territory (Shaban, et al., 2012). While these laws promote the same fundamental principles with respect to the delivery of care and treatment to mental health patients, differences do exist in relation to the persons authorised to involuntarily detain a person under the provision of mental health legislation on the grounds that a person is mentally ill or mentally disordered and transport them to hospital against their will. The extension of emergency provisions to paramedics in some Australian states and territories (New South Wales, Queensland, Northern Territory and Victoria) has meant that authorised ambulance officers (paramedics) are now being called to fulfil a role previously restricted to police officers or other accredited persons (Townsend & Luck, 2009). The granting of mental health legislative powers to paramedics has heralded a new era in the delivery of pre-hospital mental health care and how paramedics perceive their role and responsibility within this context (Shaban, et al., 2012; Townsend & Luck, 2009).

The main function of mental health legislation in Australia is to establish a legal framework in which involuntary and to a lesser extent voluntary care, control and treatment should be provided for individuals with a mental illness (Mental Health Act 2007, NSW). In paramedic practice, this is supported by the requirement that paramedics operate within the provisions of ambulance-specific legislation of their respective jurisdictions, such as the Health Services Act in New South Wales, Australia that governs the provision of health services and health support services by
statutory health organisations (NSW Government, 1997; Shaban, et al., 2012). The overriding philosophy of mental health legislation is for an individual to receive the best possible care and treatment in the least restrictive environment. In relation to the involuntary detention of individuals, mental health legislation requires that an individual must meet the criteria of being either mentally ill or mentally disordered as defined by either the Diagnostic and Statistical Manual of Mental Disorders, 5th Edition (DSM-V) (American Psychiatric Association, 2013) or the International Statistical Classification of Diseases and Related Health Problems (IDC-10) (World Health Organisation, 1992). For the purpose of providing involuntary care and treatment, the two most critical areas of concern for health professionals typically relate to the serious likelihood of imminent danger to self or others, and the need for treatment.

The removal or restriction of a patient’s civil liberty has serious consequences and as such, those exercising this function must be satisfied that their decisions are appropriate and justifiable in each circumstance (Townsend & Luck, 2009). For this to occur, those exercising these functions under the mental health legislation need to possess a high level of clinical experience in the field of emergency mental health care as well as a thorough understanding of the legal requirements that regulate their role in this domain (Bazzana & Shaw, 2009; Shaban, et al., 2012).

The impetus behind extending these functions to paramedics appears to serve two distinct purposes. First, from a patient safety and clinical quality perspective, authorising paramedics with legislative powers to deal with patients under the involuntary provisions of mental health legislation, may significantly reduce police involvement in the transportation of mentally ill or mentally disordered patients to hospital. Relevant state and territory mental health legislation however continues to uphold the recognition that police assistance is still necessary in situations that are deemed too high risk for paramedics to manage alone, thereby acknowledging that in some circumstances an inter-agency response is necessary in order to safely manage
crisis situations. Second, it could be argued that granting paramedics the legislative responsibilities under mental health legislation by virtue promotes the idea that paramedics are an active part of the broader mental health discipline, and that mentally ill or mentally disordered patients should, where practicable, receive care and treatment by health professionals and paramedics and not by a law enforcement agency.

### Table 2. Sections of the Mental Health Act 2007 as it relates to ambulance officers in the Ambulance Service of NSW

As outlined in Table 2, the Act allows paramedics to use reasonable force to involuntarily detain, restrain or sedate those who are assessed as being mentally ill or mentally disordered, and who are assessed as posing a significant and immediate risk of serious harm to themselves or others. In the context of clinical practice, reasonable force is described as the reliance by health professionals on physical force that is deemed necessary and appropriate for the purpose of containing and safeguarding the physical wellbeing of behaviourally disturbed individuals.
According to the Act,

_Mentally ill persons- A person is a mentally ill person if the person is suffering from mental illness and owing to that illness there are reasonable grounds for believing that care, treatment or control is necessary to protect the person or others from serious harm. (p9)_

The most common illnesses for which patients are detained as mentally ill are psychosis, severe depression or mania. On the other hand, mentally disordered persons are defined by the Act as:

_Mentally disordered person- A person is a mentally disordered person if the person’s behaviour for the time being is so irrational as to justify a conclusion on reasonable grounds that temporary care, treatment, or control of the person is necessary to protect the individual or others from serious harm and as such is assumed to be a temporary condition. (p10)_

The most common conditions for which patients are detained as mentally disordered are deliberate self-harm, acute distress, confusion or aggressive behaviour. The diagnoses typically underlying these include delirium, personality disorder or substance abuse.

To be detained under the Act, paramedics must be satisfied that a patient exhibits the signs to indicate they are mentally ill or mentally disordered, and that appropriate care, treatment and control is deemed necessary to protect the person or others, from serious physical harm. Once this decision has been made, a Section 20 form which records details of the patient assessment and a description of the circumstances leading up to the detention, is completed. A copy of this form is attached to the patient’s health care record and handed over to the triage staff on arrival at the emergency department.
To assist in this process, a Memorandum of Understanding (MOU) – Mental Health Emergency Response document has been developed in New South Wales, to outline the roles between NSW Health, Ambulance Service of NSW and NSW Police in providing coordinated response and management of people experiencing a mental health emergency (NSW Health, 2007). It encourages teamwork, interagency support and cooperation among agencies involved.

While theoretically these frameworks have been instrumental in clarifying the roles and responsibilities of frontline services, concerns have been raised that operationally, there is still an overuse of police for the purposes of transporting behaviourally disturbed individuals to hospital (Silva, 2005). While a number of factors have been proposed to account for this, it is generally recognised that further work needs to be done to strengthen inter-agency collaboration and participation in this context.

As previously mentioned, paramedic practice is governed by ambulance-specific legislation that applies to each jurisdiction. Shaban, Wyatt and Cumming (2012) have discussed some of the inherent challenges and competing demands that are faced by paramedics when operating under the remit of multiple legislative instruments that guide their clinical judgement and decision making. For example, when managing individuals who are experiencing a mental illness, paramedics in the New South Wales jurisdiction are required to adhere to both ambulance-specific legislation, namely the Health Service Act 1997 (NSW) and state-based mental health legislation, namely the Mental Health Act 2007 (NSW). In this regard, ambulance-specific legislation in New South Wales states that paramedics must take reasonable action that protects and safeguards persons from injury and death whether or not those persons are sick or injured. In practical terms and in reality, this is achieved in the context of paramedic practice by transporting all patients to hospital for further assessment. As a consequence, according to Shaban., et al (2012) “the way in which paramedics are
expected to manage individuals with a mental illness appears to be predetermined” (p. 235).

In relation to the transportation of mentally ill or mentally disordered patients, activity data relating to the transportation of ‘psychiatric’ patients in New South Wales indicates that the majority are brought voluntarily to the emergency department by paramedics; that is, patients willingly agree to be transported to hospital. In some circumstances however, it is necessary to transport patients to hospital against their will. This is particularly so for patients whose behaviours and actions pose such a significant or immediate level of risk to their own safety or that of others and where they lack the capacity to make an informed decision about their immediate welfare (Townsend & Luck, 2009). In these circumstances, police and authorised paramedics in some Australian states and territories, may make the decision to temporarily remove a patient's civil liberty and detain them under the involuntary provisions of mental health legislation. As previously mentioned, this is likely to occur in response to a range of clinical presentations including but not limited to, patients with deterioration in their mental state; patients who are expressing self-harm or suicidal ideation or intent; those in acute distress; or those under the influence of alcohol or other drugs.

The challenge for paramedics when providing pre-hospital mental health care is to ensure they possess the necessary clinical skills and competencies to not only deliver safe and effective emergency mental health care but also that they are skilled at making clinically appropriate and justifiable decisions that protect and promote the legal and human rights of each patient. This means ensuring the clinical decisions made by paramedics adhere to the fundamental principles articulated in mental health legislation which promotes the need for mental health care and treatment to be delivered in the least restrictive means as possible (Townsend & Luck, 2009; Wand, 2004). In this regard, patients should only be detained as an involuntary patient when other less restrictive methods have failed.
While mental health legislation is designed to provide guidance and a framework for the provision of mental health care, it has also come under considerable criticism. Eastman (1994) suggests that society should be sceptical about the protections provided to individuals under mental health legislation. For instance, magistrate hearings, which consider the appropriateness of treatment decisions with respect of involuntary mental health patients, can be little more than legalised case conferences that have a tendency to validate the view expressed by psychiatrists. Goonan, Healy and Moynihan (2000) have later argued that the vague and open nature of legislative criteria has permitted mental illness to become a global signifier of danger and incompetency. Wand and Chiarella (2006) extend this view, claiming that the danger of any law based on assumptions about the qualities and characteristics of a category of people, has been revealed in the prejudicial and discriminatory nature of historical examples of ‘control’ that have been applied to other populations such as indigenous people, homosexuals, women and the mentally ill.

Furthermore, there is a growing body of evidence indicating that clinical judgement is inaccurate as a predictor of future violence, suicide or deliberate self-harm, and is therefore lacking in the required certainty to justify the deprivation of liberty (Goonan, et al., 2000; Kapur et al., 2005; Maden, 1996). This also raises serious concerns about the validity of mental health legislation as it permits the detention of an individual in advance of actual violence. Rosenman (1994) argues that the common law principles that are in place to protect ‘normal people’ from being detained for potential violence, appear to have been dispensed with for individuals who experience a mental illness.

In a discussion paper by Townsend and Luck (2009), concerns were raised in relation to the apparent confusion and misunderstanding in relation to the legal impediments that surround decision making by paramedics when providing mental health care. The paper claimed that the expanding roles and powers of paramedics and the associated legal and ethical challenges they face when providing pre-hospital care, appear to add
further confusion around the issue of duty of care and where their professional responsibility actually rested. A lack of formal training in the application of mental health legislation in clinical care has also been cited as a major concern of emergency department clinicians across a number of Australian jurisdictions (Jelinek, et al., 2013). Paramedics’ who took part in Shaban’s (2006) study also touched on this issue, claiming that the fear of persecution from patients who are not transported to hospital was found to prejudice their clinical decision making.

Shaban (2005b) also raised the possibility that, in exercising their mental health legislative powers, paramedics may make a clinically inappropriate decision to enact these functions rather than face the potential of exposing themselves to future litigation. While mental health legislation provides protection to paramedics in such instances, the mere possibility (whether actual or perceived) of being liable to persecution may have a negative influence on paramedics decision making process, whereby clinical decisions are taken from a more cautionary standpoint when managing behaviourally disturbed patients. Sands (2009) who investigated mental health triage practices among mental health clinicians, also found that uncertainty in relation to the potential to misdiagnose a patient was a key concern among mental health nurses and influenced their clinical decisions. A lack of suitable secure areas in the emergency department in which to assess and treat mental health patients on their arrival has also been reported as a particular concern among emergency department clinicians (Weiland, Mackinlay, Hill, Gerdtz, & Jelinek, 2011). Moreover, Crowley (2000) found that cultural factors, such as staff values and beliefs, technology and communication patterns that are inherent in the emergency department environment may also explain why mental health patients are given a low status upon their arrival.
Importantly, Yellowlees (1996) draws attention to the issue of peer support and de-briefing following traumatic or frightening mental health incidents in the community. If paramedics are to provide high quality mental health care to patients, including initiating involuntary treatment, it is vital that they feel supported by fellow colleagues (including management) and other frontline emergency personnel and have access to adequate back-up assistance when required.

2.11.2 Mental Health Legislation and the Clinical Decision making

In the Australian context in particular, the literature relating to clinical decision making with respect to use of mental health legislation in clinical practice is generally confined to the discipline of psychiatry and to a lesser extent to the allied health professions. In addition, despite literature that addresses pre-hospital mental health care in the context of paramedic practice (Caroline, 2008; Sanders, 2005; Shaban, 2006; Townsend & Luck, 2009), there remains a dearth of discipline specific literature covering the clinical and legal issues surrounding the management of patients who require involuntary care and treatment by paramedics under mental health legislation in the NSW jurisdiction. In the absences of this literature, this section will review a number of studies that have been undertaken across a range of health disciplines.

In a theoretical paper, Ponterotto (1987) reviewed the legal, ethical and procedural aspects involved in the hospitalisation of voluntary and involuntary mental health patients in the United States of America and found counsellors [clinicians] were often provided with inadequate education and training in this area of clinical practice. Notwithstanding, the author claims that counsellors need to be cognisant of the issues involved in the voluntary and involuntary hospitalisation of mental health patients in order to prepare patients for what to expect once they arrive at the hospital. Ponterotto (1987) purported that, “it is fair to say that many counsellors [clinicians] are first exposed to issues of client hospitalisation when they are confronted with the issue in
vivo" (p. 542). When responding to a mental health emergency, the first decision that clinicians need to determine is whether the patient requires hospitalisation. However, this decision should not be arrived at without due diligence given the significant implications for a person's life, impacting on their a patient's self-esteem, self-efficacy, self-concept and self-control (Ponterotto, 1987).

Fiorillo (2001) conducted a study that sought to examine the subjective experiences of those who are often involved in the involuntary detention of persons under mental health legislation in Australia: patients, clinicians (mental health professionals) and relatives. The aims of this study were to identify key aspects involved in this process and to examine the impact this experience had on these relationships. The findings from this study revealed that all three groups, including clinicians, had experienced a range of negative responses with respect to their involvement in the detention of individuals under the mental health legislation. In particular, most of the clinicians in this study disliked the use of deceptive practices on patients and felt particularly uncomfortable by the distress caused to patients whom they had detained or the impact this had on their relatives. Some clinicians felt frustrated by the lack of available resources to promote the delivery of a less restrictive level of care, a view also expressed by mental health professionals who participated in Aviram's earlier study (1993). In addition, some of the participants felt annoyed when their decisions to detain a patient under the mental health legislation were overturned by emergency department clinicians upon arrival at the emergency department and the person was not admitted.

A number of studies from the United Kingdom that explored the use of nurses' power to detain involuntary patients under the Mental Health Act (1983) in the United Kingdom, also found that nurses felt uncomfortable with their new statutory powers and preferred instead to use the power of persuasion and de-escalation when responding to patients experiencing a mental health emergency (Bowler & Cooper, 1993; Houlihan, 2000).
Similar findings were found in a study by Farrow, et al. (2002) that looked at the prescribing rights (authority to detain voluntary patients for up to 6 hours pending outcome of follow up by a medical officer) granted to mental health nurses under mental health legislation in New Zealand.

Bagby, Thompson, Dickens, and Nohara (1991) conducted a study in Canada that examined the importance of a range of factors involved in the decision making to detain patients under mental health legislation. The study recruited 495 psychiatrists who were required to review a range of hypothetical case vignettes and make clinical decisions about whether patients required hospitalisation. Factors relating to the legal criteria for commitment, the treatability of the psychiatric condition, the availability of alternative resources and the degree of psychotic symptoms present were assessed.

The study found that the decision by psychiatrists to detain patients in hospital involuntarily were primarily dependent upon the legal criteria for commitment being met and whether psychotic symptoms were present, and to a lesser extent, on the treatability on the psychiatric condition or the availability of suitable alternative resources.

In addition, psychiatrists in this study were more likely to detain patients under the mental health legislation who were considered to be at risk of harm to self, irrespective of whether psychotic symptoms were present, whereas those assessed as being a danger to others, were often only detained if psychotic symptoms were also present. This suggests that decision making in relation to the detention of patients under the involuntary provisions of mental health legalisation could be motivated by the desire of clinicians to safeguard the welfare of mental health patients who are considered to be at risk of self-harm rather than those presenting a danger to the public. In addition, there was a tendency for psychiatrists to make occasional errors in their decision making, with high rates of *false negatives* (i.e. making decisions not to detain patients...
under the involuntary provisions of mental health legislation who met the legal criteria for detention) as opposed to false positives (i.e. making decisions to detain patients under mental health legislation who did not meet the legal criteria).

The findings from this study suggests that clinicians had a preference for maintaining the rights and freedoms of mental health patients over protecting society from those deemed dangerous, although it is unclear from the findings of this study, the extent to which the availability of inpatient beds also influenced their decision making. Finally, there was evidence to indicate that psychiatrists occasionally make decisions to detain patients under the involuntary provisions of mental health legislation where patients did not meet the legal criteria for being detained. The practice of detaining patients who did not meet the legal criteria was identified in earlier studies (Lidz, Mulvey, Appelbaum, & Cleveland, 1989; Page, 1981). This suggests that additional factors beyond those set out in legislative requirements, could influence decisions made by clinicians to detain patients under the involuntary provisions of mental health legislation. In the case of Page (1981), decisions to detain individuals under mental health legislation were often based on little more than the belief or perception during the patient assessment that a person lacks insight into his or her condition, is ‘uncooperative’, ‘swearing and shouting’ or because they [patients] refuse treatment. Huxley (1985) also found that psychiatrists were more likely to hospitalise patients who were classified as single, male and of lower socio-economic status. This illustrates that factors extending beyond a patient’s clinical presentation can influence the decisions clinicians make in the context of mental health care. Bartlett and Sandland (2007) touched on this issue by arguing that, “although the admissions process is very often prompted by therapeutic considerations, it is focused on socially rather than medically problematic individuals” (p. 158).
In a mixed methods study, Aviram (1993) assessed the impact on commitment practices in response to amendments to civil commitment law in New Jersey (USA) and found that decisions by staff employed at local screening centres to involuntarily detain voluntary patients to hospital, were based largely on factors unrelated to the patient’s clinical presentation. Lack of alternative care pathways in the community, fear of liability and the lack of organisational support to find alternative less restrictive environments were among the main factors influencing the decision by staff to involuntarily detain otherwise compliant patients. In some cases, staff revealed the need to exaggerate the symptomology of patients who were agreeable for hospitalisation because of the difficulties inherent in finding available beds for voluntary patients. The practice of assessing patients as being more acutely unwell than they actually were was found to be more commonplace in areas where there was not a strong interagency relationship between screening centre staff and staff at the local hospital. Consequently, local hospital staff would often identify the detention of some involuntary patients as clinically inappropriate (Aviram, 1990). In addition, lack of post graduate education and training coupled with insufficient mental health experience meant that staff employed at local screening centres felt vulnerable to collegial pressure from private psychiatrists or other mental health professionals to inappropriately admit patients to hospital.

In a descriptive phenomenological study conducted by Anderson and Eppard (1995) in the USA, 24 psychiatrists, registered nurses and counsellors were asked to reflect on their involvement in involuntary psychiatric admissions. The aim of this study was to examine clinical decision making processes that occur prior to patients being involuntarily admitted. The study found that clinical decision making in relation to the detention of patients under the involuntary provision of mental health legislation is “systematic, cautious and individualised” (p. 727) and concluded that there were nine structural elements involved in clinical decision making in this context. These include:
Connecting with the patient: Connectedness and establishing a therapeutic rapport with patients is regarded as essential. It facilitates the sharing of the patient’s experience and helps clarify risk and vulnerability.

Systematic approach: Assessments are generally based on available facts and the patient’s situation.

Individualised process: The importance of being flexible and individualising the process based on the patient’s needs and tolerance.

State-mandated criteria: The patient assessment involves determining whether patients meet the legal criteria for involuntary psychiatric admission, specifically by demonstrating imminent risk of harm to self or others.

Investigation of alternatives: In keeping with the principle of ‘least restrictive treatment’ requirements, clinicians must consider all available alternatives to involuntary admission.

Intuitive reasoning: The importance of listening to ‘gut-feelings and being aware of ‘red flags’ that heighten awareness of the vulnerability of patients and increase the clinician’s ability to make clinical decisions in relation to the needs for involuntary admission.

Caution: The importance of looking beyond the presenting facts and engaging in decision making that evaluates the consequences of different outcomes e.g. detaining versus not detaining patients.

Inability to control contingencies: The recognition that in spite of their best efforts to do what they perceive as right for patients, carers and the community, clinicians cannot control all contingencies.

Decisions are not made alone: The decision to involuntarily hospitalise patients is supported by team collaboration. Further, collegial relationships provide an invaluable support to clinicians particularly when decision making is complex or ambiguous.
The structural elements described above provide a revealing insight into the factors and circumstances that can influence decision making by clinicians with respect to the involuntary psychiatric admission of patients. In particular, it describes a process that appears to be predominantly focused on, wherever possible, engaging patients in a therapeutic discourse and identifying and minimising risk. This is a process that seeks to protect patients from harm by balancing their right for freedom with their need for protection. However, what this study did not reveal was whether there were any significant differences among the different health disciplines in the degree of importance that each element had on influencing decision making in this context.

A self-reported survey conducted by Hendryx and Rohland (1997) in the USA sought to identify the factors considered by community mental health professionals as likely to influence their decision making with respect to their recommendation for psychiatric hospitalisation. Participants were provided with a list of 17 factors that mental health professionals might regard as precursors for recommending mental health patients be hospitalised. The study found that most participants agreed that a high risk of suicide and risk of harm to others were significant factors for hospitalising patients. In addition, there was general agreement that receipt of insurance, the demands of family members and psychiatric diagnosis alone should not be considered significant enough factors to influence decisions by mental health professionals to hospitalise mental health patients. There was, however, consensus among participants with respect to the significance attributed to other factors such as impaired ability to self-care, the need for medication stabilisation and a lack of support systems. The degree to which each of these factors impacts on an individual’s functioning in the community was considered by the authors to be largely dependent upon the subjective interpretations made by each of the participants. A notable limitation with this study was that the mental health professionals who took part did not have legislative powers to admit mental health patients to hospital; rather they could only recommend to psychiatrists that such
admissions take place. Notwithstanding, the authors acknowledged that decision making by some of the psychiatrists who took part in this study was heavily influenced by the recommendations made by mental health professionals.

In the following section, the concept of ethics in a pre-hospital care is examined. In addition, this section reviews a number of frameworks that have been developed to promote and guide ethical decision making by health professionals in clinical practice. A range of factors that can impact on ethical decision making in clinical practice is considered.

**2.12 Ethics and Clinical Decision making**

Ethics in health care is represented as a fundamental requirement that health professionals act and behave in a manner that protects and safeguards the health and wellbeing of patients, a principle commonly referred to in health care as *non-maleficence* (Purtilo & Doherty, 2010; Townsend & Luck, 2013b). Other ethical principles that are commonly recognised across the health professions as fundamental to the provision of ethical healthcare include, *autonomy* (i.e. where possible, clinicians should support patients to make informed decisions about the care they receive and should respect a patient’s self-determination), *beneficence* (i.e. clinicians should help their patients) and *justice* (i.e. clinicians should treat their patients fairly and according to their needs) (Beauchamp & Childress, 1994; Luck, 2013).

Ford (2001) argues that ethical behaviours are those that are considered right or appropriate for each situation. In clinical practice, this is expressed by the notion that health professionals have a duty of care towards patients in their care and to ensure that their actions and behaviours are clinically justifiable and in the best interest of the patient's condition. For paramedics in particular, the Paramedic Professional Competency Standards mandates that paramedics are to engage in clinical practice
“within the legal and ethical boundaries of their profession” (The Council of Ambulance Authorities, 2010, p. 7). Sine and Northcutt (2008) conducted a later mixed methods qualitative study in the USA to identify the central values of a small cohort of paramedics and how these values affect decision making when paramedics are confronted with ethical conflicts or dilemmas. The researchers found that the central values included, i) displaying compassion for those being served; ii) possessing absolute clinical objectivity; iii) patient advocacy; iv) establishment and acknowledgement of the paramedics as a medical authority; v) setting aside personal bias; vi) delivering survivor care; and vii) competent to deliver treatment and knowledge of procedures.

In the context of pre-hospital mental health care, there are a number of context specific ethical issues that paramedics must deal with, that differ from other aspects of pre-hospital care. For instance, behaviourally disturbed patients are more likely to experience a reduced capacity to make informed decisions in their current condition or situation due to a lack of insight. In addition, health professionals are usually trained to recognise individuals who are presenting in this manner such that the temporary deprivation of a patient’s freedom of movement under these circumstances is likely to be considered justifiable or reasonable in the long term (Lo, 2005).

2.12.1 Frameworks to Promote Ethical Decision making

A number of frameworks have been proposed to guide and support health professionals in making ethically sound clinical decisions (Bush, Connell, & Denny, 2006; Haas & Malouf, 1989; Hansen & Goldberg, 1999; Jonsen, Siegler, & Winslade, 2002; Kerridge, Lowe, & McPhee, 2005; Kitchener, 1984; Luck, Steer, & Townsend, 2013; Staunton & Chiarella, 2008). In paramedic practice, ethical decision making in most developed countries is guided by ambulance policies and professional codes that outline the standards of behaviour and conduct expected of each paramedic. These
overarching frameworks promote core principles that are required to inform the
decisions and behaviours of paramedics, and reflect such things as competence,
ethical behaviour and decision making, responsibility, accountability and respect for
individuals (NSW Ombudsman, 2003). They underscore the importance of paramedics
having a duty of care for their patients, the public and staff.

In New South Wales, the Ambulance Service of NSW has adopted the NSW Health
Code of Conduct policy which stipulates the ethical, behavioural and professional
conduct that is required by all employees working across the public health system in
New South Wales, Australia. This is underpinned by the Our Values document
promulgated across the organisation which also sets out the standards of professional
and personal behaviour and conduct expected of all staff (Ambulance Service of NSW,
2007b). These include key concepts such as professionalism, responsibility,
accountability, care, respect and teamwork. To promote ethical behaviour, the Code of
Conduct policy directs paramedics to consider a number of guiding standards when
engaging in clinical decision making (NSW Health, 2012a).

According to Luck et al., (2013) the implementation of ambulance-specific professional
codes, as illustrated above, can be further strengthened and supported if it is aligned
with ethical decision making models that relate to paramedic clinical practice. In the
earlier literature, Staunton and Chiarella (2008) proposed an ethical decision making
framework, known as the PRECARE model.

This model recognises the challenging environments and situations in which
paramedics operate and contains the following seven core components to guide ethical
thinking in clinical practice:

i. Problem- Identify the ethical problem
ii. Reconnaissance- Get the facts
iii. Ethics- Consider the four principles of bioethics
iv. Code- Consider your professional code of conduct 

v. Alternative-Consider an argument for an alternative course of action 

vi. Regulations- Consider the relevant legal regulations 

vii. Evaluate- Evaluate the various considerations and make your final decision.

Similarly, Saunders (2005) proposed a useful framework to guide ethical decision making in crisis situations. This approach recommends that paramedics answer a series of specific questions to assess the ethical implications for their actions in clinical practice. These include:

i. What is in the patient’s best interest?

ii. What are the patient’s rights in this circumstance?

iii. Does this patient have competency and capacity to make an informed decision?

iv. What is the paramedic’s professional, legal and moral responsibility in this situation?

Halpern (1989) suggests that health professionals should be encouraged to be flexible and open-minded, routinely ask themselves specific questions about clinical situations they are involved in at the time and to consider alternative perspectives before arriving at their final decision. The approach Halpern proposes has been found to be effective at limiting the potential effects of cognitive distortions while also promoting ethical decision making in clinical practice. However, given the time critical nature that can sometimes occur when paramedics are responding to behaviourally disturbed patients in the community, delaying decision making to make these careful considerations may not be in the best interest of patient care or safety.

Importantly, Ford (2001) claims that the use of ethical codes such as these "serve to sensitise all members of the profession to ethical issues involved in the practice of the profession" (p. 4). While the use of relevant state-wide policies and professional codes provide a useful outline of expected behaviours and actions required for professional
and ethical practice, their generic nature and use of broad terminology mean that they often provide limited guidance to paramedics in relation to their decision making in clinical practice. Pettifor (2001) claims that this shortcoming is particularly relevant for health professionals working in the field of mental health care because they can often find themselves in situations where they are confronted with conflicting ethical issues such as the requirement to maintain confidentiality and respect for a person’s autonomy versus protecting the welfare of others. Arguably this can apply equally to circumstances whereby clinicians are required to involuntarily detain patients under mental health legislation.

While the frameworks outlined above, (NSW Health, 2012a; Sanders, 2005; Staunton & Chiarella, 2008) have been helpful in conceptualising the steps involved in ethical decision making in clinical practice, they are largely descriptive in nature and based on the normative assumption that ethical decision making involves rational and deliberate thought processes and follows a sequential pathway. In addition, the relevance and application of these ethical decision making frameworks with respect to paramedics exercising their legislative responsibilities under mental health legislation in NSW, has not been examined in the existing literature. Ford (2001) and Rogerson et al. (2011) also claim that frameworks such as those outlined above disregard non-rational influences such personal beliefs, attitudes, or emotions, as not being intrinsically involved in the cognitive reasoning that occurs when health professionals make clinical decisions. This view was supported by Cottone (2001) and Haidt (2001), who assert that complex interpersonal and personal influences impact on the decision making process. As a consequence, these frameworks are limited in their ability to provide practical guidance around useful strategies health professionals can adopt to minimise the effects of these factors when making ethical decisions.
What these frameworks illustrate is that the ultimate success of any framework is likely to be dependent upon the availability of all relevant pieces of information to enable clinicians to structure a comprehensive clinical picture. In pre-hospital care however, this is not always possible or practicable, as paramedics are often required to make quick clinical decisions with limited information and in time critical and unpredictable circumstances. Further, the effectiveness of any of these frameworks is likely to be dependent upon the complex interplay between the nature of the clinical situation, the clinical environment in which it is occurring and the significance of the clinical situation to the individual paramedic. Importantly, Luck (2013b) argues that it is vital that paramedics develop the skills that are necessary “to resolve, rather than avoid, ethical dilemmas” when they arise in clinical practice (p. 9). This is particularly pertinent when paramedics find themselves in difficult and challenging situations that require delicate patient care decisions to be made.

A number of theorists have proposed the need to reconsider the content and delivery of ethics education in health care, to ensure socio-cultural issues relating to non-rational influences, such as personal beliefs and attitudes and their potential involvement in ethical decision making are addressed (Ford, 2001; Rogerson, et al., 2011). Historically, the delivery of ethics education for health professionals has emphasised the need to understand the logical and rational basis of ethical decision making while minimising or denying the involvement of non-rational influences. The underlying rationale is that if health professionals are trained to be aware of how their own non-rational influences may inadvertently impact on their ability to engage in ethical decision making, then they may be less likely to be influenced by them. Raising awareness of how non-rational influences may impact on decision making is also likely to enhance the means by which health professionals are able to recognise at the earliest opportunity, the conditions and circumstances which are likely to create an ethical dilemma.
Enhancing the delivery of ethics education for health professionals may also provide an ideal opportunity to facilitate peer-group discussion around these issues. Anderson and Gesner-Anderson (1987) recommend the use of case studies to provide health professionals with a forum in which to discuss and explore ethical issues that may occur in clinical practice and to consider options for resolving these in advance of them occurring in the clinical setting. Johnstone et al. (2004) conducted a study that examined the experiences of nurses when confronted with ethical dilemmas in clinical practice and found that the majority of participants (86.9%) expressed a preference for dealing with ethical issues in the context of peer discussions. This suggests that supportive collegial relationships provide an important and meaningful opportunity where health professionals can discuss and share experiences relating to ethical issues in clinical practice as well as a forum for finding resolutions to these issues. While the above illustrates the benefits that can be gained from peer discussions to deal with ethical issues and dilemmas that arise in clinical practice, these interactions may also reinforce unhelpful beliefs and attitudes held by the individual or those that reflect a broader organisational culture rather than being an opportunity for colleagues to encourage and promote alternative perspectives.

Anderson and Glesner-Anderson (1987) have also suggested that there is value in establishing a dedicated ethics committee or in providing staff with access to a medical ethicist, whose primary function is to consider and provide advice to health professionals on ethical issues as they arise in clinical practice. Johnstone, De Costa, and Turale (2004) claim the establishment of ethics committees provides health professionals with a "safe place outside of the hierarchy of powers and authority characteristics of institutions" (p. 29).

The following section explores the personal beliefs and attitudes of health professionals towards individuals who experience a mental illness and examines what impact these factors may have on ethical decision making in clinical practice.
2.12.2 Effects of Personal Beliefs and Attitudes on Ethical Decision making

But stigma is not solely the domain of others. As professionals we need to be conscious of our own stigma-prone behaviours or the internalised stigma we may perpetuate (Charbonneau, 2007)

Generally speaking, paramedics are in a unique position as they are often the first health professionals to respond to individuals in the community who are experiencing mental health concerns. Paramedics, like other clinicians, also bring their own personal beliefs and attitudes to each clinical encounter (Charbonneau, 2007; Ford, 2001; Kitchener, 1984; Rogerson, et al., 2011). It is therefore important that as far as possible, the decisions they arrive at during these clinical encounters are not clouded by their own personal attitudes or stigmatising beliefs.

Personal beliefs and attitudes help to shape our perceptions and understandings of our environments and the people who occupy it and they inform the way in which we determine what is right and wrong in any given situation. They are influenced by a range of socio-cultural factors which may include culture, religion, environment and tradition, family and society and are individual characteristics. In clinical practice, personal beliefs and attitudes can influence the assumptions that are made by health professionals with respect to the aetiology and prognosis of mental illness and treatment decisions that are made (Kitchener, 1980). Ford (2001) asserts that being an ethical professional means having insight into our own attitudes and personal beliefs and the impact these influences can have on our clinical practice.

Poor mental health literacy coupled with responses such as fear of individuals with a mental illness and an intolerance and ignorance, are often cited as the main reason for negative attitudes towards individuals who experience a mental illness persist (Johnstone, et al., 2004; Jorm et al., 1997; Link, Phelan, Bresnahan, Stueve, & Pescosolido, 1999; Noffsinger & Resnick, 1999).
While research examining the personal beliefs and attitudes of paramedics with respect to mental health patients remains sparse, research examining these factors among other health professionals (nurses, medical practitioners and psychologists) has found that being a health professional, including being a mental health professional, does not equate to having a more positive attitude towards individuals who experience a mental illness, than those of the general population (Hansson, Jormfeldt, Svedberg, & Svensson, 2011; Lauber, Ajdacic-Gross, & Rossler, 2004; Lauber & Rossler, 2007; Lewis & Appleby, 1988; Porter, 1998; Thornicroft, Rose, & Kassam, 2007; Thornicroft, Rose, & Mehta, 2010). Sivakumar, et al. (1986) examined the attitudes of medical students in the United Kingdom in relation to their clinical placements in psychiatry and found that 28% of medical students had described mental health patients as ‘not easy to like’. This figure rose to 56% when the same dimension was measured among experienced general physicians, suggesting that experience in the provision of mental health care does not necessarily promote or facilitate attitudinal change amongst experienced clinicians. In fact, for some generalist clinicians, exposure to individuals with a mental illness in the context of clinical practice may in fact strengthen and reinforce existing negative and stereotypical attitudes and beliefs with respect to mental health patients.

A survey study conducted by Jorm, Korten, Christensen and Henderson (1999) compared the attitudes of 2031 members of the Australian general public with 2454 health professionals (general practitioners, psychiatrists and psychologists) towards individuals who experience a mental illness. The study found that stigma and negative attitudes such as cynicism, with respect to the long-term outcomes for individuals who experience a mental illness, were higher among health professionals than the general public. However, the authors claimed that health professionals tend to have more contact with individuals who experience a mental illness and that, coupled with their
medical training, may result in their being more realistic about a prognosis with respect to the efficacy of treatments for these conditions.

A range of studies has sought to examine what the impact of negative and stigmatising attitudes and beliefs towards individuals who experience a mental illness have on clinical practice. For instance, in a qualitative study using interview data, Liggins & Hatcher (2005) examined the experiences of patients and health professionals in a New Zealand general hospital in relation to stigma associated with mental illness. The study revealed that health professionals routinely engaged in stigmatising behaviours ranging from silence, disbelief and invalidation when caring for patients who were perceived as having a mental illness. This often meant that those suspected of having a mental illness were regarded by health professionals as not being genuinely ill and consequently had their self-reported history and experiences disregarded as invalid. Moreover, while individuals who experience a mental illness have been found to experience higher rates of physical illnesses when compared with individuals without a mental illness (Harris & Barraclough, 1998), they also appear to have less access to primary health care to deal with these conditions (Levinson, Druss, Dombrokwski, & Rosenheck, 2003). In a discussion paper from Canada, Nielson (2010) claims that stigma associated with mental illness can have a profound and direct impact on the provision of health care services for mental health patients. Typically this translated into longer waiting times for patients presenting with mental health issues. The longer waiting times were attributed to assumptions that physical conditions warrant a higher priority and a more timely response and also diagnostic overshadowing where physical conditions described by patients with a mental illness were considered to be 'all in your head'. These views were also reflected in the findings of an earlier study in which mental health consumers were heavily critical of the care and treatment they had received from emergency department clinicians. In particular, some clinicians were described as being intolerant and dismissive of their health care needs, and in some
cases, felt they were being punished if they had engaged in self-harming behaviours (Mazeh, Melamed, & Barak, 2003). According to the authors of this study, this dissatisfaction with the care they had received was the main reason for mental health consumers not initiating contact with services in the future.

In another study conducted in Switzerland, Nordt, Rossler, and Lauber (2006) examined the attitudes of health professionals (psychiatrists, mental health nurses and psychologists) and those of the general populations towards individuals who experience a mental illness and explored their willingness to restrict the rights of people with mental illness. The study found that overall, psychiatrists possessed more negative attitudes and beliefs towards individuals who experience a mental illness than the general population. On the dimension of social distance (the physical distance between one’s self and another person in a social setting), the study found that both sample groups (mental health professionals and the general population) reacted with greatest social distance in relation to patients with schizophrenia compared with patients with major depression. This suggests a belief among health professionals and the general population that patients with a diagnosis of schizophrenia are more likely to be perpetrators of violence than patients with other psychiatric conditions such as mood or anxiety disorders. Baumann (2007) identified that other factors such as older age, male gender and different cultural background, can predict social distance from individuals who have a mental illness. According to Baumann, this social distance helps to explain why individuals with a mental illness are often recognised as ‘strangers’. In addition, mental health professionals (excluding psychiatrists) were three times more likely to favour legal restrictions for individuals who experience a mental illness than the general population sample. Similar to the views expressed by Jorm’s, et al. (1999), the presence of such attitudes among health professionals may be a result of their increased contact with individuals experiencing an acute phase of their
mental illness and thus they [mental health professionals] may be more aware of the likely long-term outcomes.

In the United Kingdom, a mental health crisis interventions advisory group identified “stigma associated with mental illness as being one of the main reasons why there are often poor relationships between police and mental health consumers” (Mental Health Foundation, 2000, p. 14). In this context, the authors claim the effects of stigma can be multifaceted.; They can relate to the police attitudes and misconceptions about individuals who experience a mental illness (i.e. the fear experienced by police officers when they are confronting a person with a mental illness who is threatening violence) and the attitudes and misconceptions by individuals who experience a mental illness towards the police (i.e. the genuine fear of the police uniform and the potential use of police weapons).

Research examining the experience of mental health consumers in their interactions with health professionals has revealed some disconcerting findings. For instance, mental health consumers and advocacy groups have expressed concerns that health professionals routinely display negative attitudes and discriminatory behaviours towards mental health consumers when they come to access health care (Lauber, Nordt, & Rossler, 2006; Mental Health Council of Australia, 2011; Walter, 1998). For some individuals, the experience of stigma and discrimination from health professionals can have a direct negative impact on the recovery process (Link, Streuning, Neese-Todd, Asmussen, & Phelan, 2002). A study conducted by Rossi (2002) found that participants who had felt patronised and disrespected when accessing healthcare services were less likely to engage in future help seeking behaviours.

The Disability Rights Commission in United Kingdom found that clinicians working in emergency departments in particular are often thought of with much disdain by mental health patients because of the complete lack of respect many experience when
presenting in crisis. Others describe their experiences with the health system as dehumanising and disabling (Thornicroft, et al., 2010). For patients who had been involuntarily hospitalised, Friese (1997) found that many felt frightened and were traumatised by their experience of the health system. As a consequence, many were unwilling to accept follow up services that could reduce the possibility of relapse.

A study conducted by the Mental Health Council of Australia (2011) that sought to examine the extent of stigma and prejudicial attitudes from health and mental health professionals towards individuals who experience a mental illness and their carers revealed a disturbing reality. The study surveyed the experiences of 413 mental health consumers and 200 carers and found that the degree of stigma experienced varied considerably according to the specific diagnosis of the individual and the discipline of the health professional involved in their care. This reflected the findings from an earlier study that found mental health nurses had a negative emotional reaction and displayed stigmatising attitudes towards patients diagnosed with borderline personality disorder (Deans & Meocedvic, 2006). The study also found that the extent of stigma and prejudicial attitudes that were experienced by mental health consumers and their carers were similar to those received from the general population. The effects of stigma and discrimination meant that over half the participants in this study expressed concerns that disclosure of their mental health diagnosis may have a negative impact on subsequent care that is provided by health professionals.

These findings suggest that in part, education and increased knowledge and contact with mental health consumers may not be enough on its own to promote the development of positive attitudes and beliefs among health professionals. A notable limitation with this study related to the representativeness of the sample (Mental Health Council of Australia, 2011).
In an earlier study, a survey of 557 mental health consumers of mental health services in the United Kingdom, found that 44% reported that they had experienced direct stigma from their GP and that the behaviours of GPs were often considered to be dismissive and overly dependent on drugs for treatments (Mental Health Foundation, 2000). In addition, 32% of mental health consumers had reported similar experiences from other health professionals and 70% of mental health consumers reported discrimination across a range of other settings. Types of discrimination included being patronised and made to feel inferior by health professionals and physical illness not being taken seriously. These findings support those identified in an earlier study in which one-third of mental health consumers considered that their primary health care providers treated them unfairly. For example, physical complaints were disregarded as being ‘all in your head’ (Mind, 1996). A later study that examined the experience of mental health patients in relation to inpatient mental health care, found that most considered the experience as un-therapeutic and detrimental to their mental health (Mind, 2000).

In addition, research has found discrepancies often existed between ethical reasoning and subsequent ethical behaviour in clinical practice. For example, Smith, McGurie, Abbott and Blau (1991) conducted a survey study that examined ethical decision making by 102 mental health professionals in the United States of America and found that their behaviours in clinical practice were often influenced by a range of personal factors such as values and beliefs along with situational and contextual variables. The authors also suggest that these factors may also affect the resolution of ethical dilemmas when they arise. This study concluded that organisational policies and guidelines intended to promote ethical decision making in clinical practice, are limited as they only influenced in part, the behaviours of mental health professionals.
The work by Rogerson et al. (2011) exploring non-rational influences on decision making has shown how emotions and conflict can impact on decision making. For example, they claim that emotions typically evoked in response to exposure to stimuli in our environment, can impact on cognitive processes of clinicians and their later decision making outcomes. Consequently they argue that health professionals may react and make decisions based on their affective responses to their environment rather than making objective, considered and rational decisions. The desire for health professionals to minimise or avoid conflict or dissonance in their clinical environment means that they may selectively focus on information that will likely reduce the conflict in their emotional state. In the context of clinical practice, this internal conflict can result in clinical decisions being made either in haste, delayed or altogether avoided, which may then result in potentially adverse clinical outcomes.

The above studies have indicated that health professionals can harbour negative attitudes and personal beliefs with respect to individuals who experience a mental illness and these can have a negative and detrimental impact on the clinical decisions made in clinical practice. However, a number of studies have found that positive attitudinal change can occur for health professionals in response to their repeated exposure to individuals who experience a mental illness. For example, Halter (2004) conducted a descriptive, correlational study in the United States of America that examined the attitudes of 135 student nurses towards individuals with depression as described in case vignette and the effects of personal help-seeking intention. The study found that negative and stigmatising attitudes held by student nurses towards individuals who experience a mental illness decreased and help-seeking intention increased as they progressed through their nursing training. That is, specific mental health training and psychiatric clinical rotation through a mental health unit had a positive impact on promoting positive attitudes toward individuals with a mental illness and changing personal beliefs with respect to coercion and segregation interventions.
for the control and management of behaviourally disturbed patients. In conclusion, the author argued that familiarity with mental illness, which can occur in various ways, can play a significant and important role in improving the attitudes and personal beliefs held by individuals towards those who experience a mental illness.

The important role that increased contact with individuals who experience mental illness can have on improving attitudes and personal beliefs was also found in a study conducted in New Zealand by Read and Harre (2001). In this study, the more contact that participants (undergraduate psychology students) had with individuals who experience a mental illness, the fewer negative and stigmatising attitudes they were found to possess in this area. The authors concluded that rather than focusing predominately on illness-based explanations of mental illness as a means of promoting attitudinal change among students of health disciplines, the priority should be on increasing their contact with individuals who use mental health services. Earlier findings from Sivakumar, Wilkinson et al, (1986) however contradict the view, suggesting that increased contact with mental health patients does not promote positive attitudinal change among health professionals.

Collectively, these studies indicate that familiarity with mental illness either through increased contact with individuals who experience a mental illness, from attending mental health training or in response to personal experience of having a mental illness, helps to promote positive attitudes and fewer stigmatising behaviours among health professionals.
2.12.3 Additional Factors Affecting Ethical Decision making

While the above has described factors relating to personal beliefs and attitudes that impact on ethical decision making in clinical practice, other factors have also been found to affect the decision making outcomes of clinicians. These include, short time on-scene, confusion about roles and powers in pre-hospital care, poor interagency relationships, lack of training and resources (Brown & Grantham, 2009; Roberts, 2007; Roberts & Henderson, 2009; Shaban, 2006; Shaban, et al., 2012; Townsend & Luck, 2009; Townsend & Luck, 2013b); the requirement to transport behaviourally disturbed individuals to an emergency department for further assessment rather than directly to a mental health facility (Elder, Evans, & Nizette, 2008); practical and moral issues relating to end-of-life care (Brown & Grantham, 2009; Setterlund, Tilse, & Wilson, 2002; Townsend, 2013); child protection matters (Bartlett, 2013); consent and refusal of treatment (Betts, 2013); advance directives (Brown & Grantham, 2009; Mackay, 2004); medico-legal matters (Brown & Grantham, 2009); and historical policies and systems that have traditionally governed the provision of emergency mental health care in Australia (Shaban, et al., 2012).

As the abovementioned factors illustrate, paramedics can find themselves in situations where they are required to make important and often delicate ethical clinical decisions at a time when they themselves may feel uncertain and anxious about their actions. These issues can be compounded further through concerns that they may be held legally accountable if they fail to act or respond appropriately. These can be seen as highlighting the interplay that exists between the legal and ethical considerations that clinicians must learn to navigate in the clinical setting (Brown & Grantham, 2009; Caroline, 2008; Luck, et al., 2013; Townsend & Luck, 2013b). Koocher and Keith-Spiegel (2008) acknowledge this issue with respect to the involvement of mental health professionals in crisis situations. They assert that mental health professionals are often called upon to make critical decisions about a person’s circumstances in the absence
of detailed information, heightening their fear that their actions may be regarded by others as inadequate.

Koocher and Keith-Spiegel cautioned that any approach resembling a defensive approach to ethical decision making, has the potential to create a perception among health professionals that patients perceived as difficult to manage or high risk increase their exposure to litigation. Under such conditions, health professionals’ cognitive processing abilities may be depleted, further impacting on their ability to engage in ethical clinical practice. Hanson, Kerkhoff, and Bush (2005) recognise the cognitive challenges associated with mental health care, claiming that health professionals working in the field of mental health care face significant ethical and legal obligations when making clinical decisions in less-than-optimal situations.

In addition, organisational culture has been found to influence ethical decision making among health professionals. In a causal analysis that sought to examine a multiple-influences causal model of ethical decision making behaviour, Trevino and Youngblood (1990) found that health professionals who perceive themselves as possessing high ethical or moral standards in relation to clinical practice can be discouraged from engaging in ethical decision making in clinical practice if they perceive unprofessional behaviours and conduct in the workplace to be systemic or part of the organisation’s culture. These influences can be reinforced in a number of ways, for instance, support for and condoning of unethical behaviour or actions among colleagues, inaction by management when unethical practices were suspected or pressure to conform to organisational norms. They also found that ethical dilemmas are more likely to occur when health professionals perceive they are not supported in their decision making by management or where organisational or clinical policies are not consistent with their own core beliefs and values and their application to clinical practice.
The issues relating to ethical decision making that have been discussed in the existing literature are particularly relevant to this study, since the introduction of new mental health legislative powers for paramedics was likely to present further complexity to a core aspect of clinical practice that they have already described as challenging and stressful. With this in mind, a key aim of this study was to explore how paramedics navigate the interplay between their professional experience of dealing with behaviourally disturbed individuals, their personal beliefs and attitudes regarding behaviourally disturbed patients and their legal powers under mental health legislation. At the heart of this, is the impact these factors may have on paramedic clinical judgement and decision making in the context of pre-hospital mental health care.

KEY ASPECTS OF THE EXISTING LITERATURE

With the recent introduction of new and unprecedented emergency powers for paramedics under state and territory-based mental health legislation in New South Wales, Queensland, Victoria and Northern Territory, the role and responsibility of paramedics in the context of mental health care has expanded significantly (Shaban, et al., 2012; Townsend & Luck, 2009). In particular, paramedics in these jurisdictions are granted the authority to involuntarily detain, restrain or sedate patients who are assessed as being mentally ill or mentally disordered behaviourally disturbed patients for the purpose of safely conveying them to hospital for further assessment (NSW Government, 2007). In response to these legislative changes, a number of ambulance authorities have implemented enhanced mental health training for paramedics that is intended to provide them with the necessary clinical knowledge and skills required to take on these new powers (Roberts & Henderson, 2009; Shaban, 2004). Moreover, specific mental health decision tools such as protocols and clinical guidelines have been developed to underpin this training and to support paramedics in making
confident and clinically justifiable decisions in this area of clinical practice (Parsons, O’Brien, & O’Meara, 2011; Shaban, 2006).

The existing literature proposes a range of cognitive models claiming the ability to account for clinical decision making and problem solving in paramedic clinical practice (Alexander, 2010; Bendall & Morrison, 2009; Sanders, 2005). While these models provide an introductory insight into decision making and problem solving in clinical practice, the literature suggests that the success or usefulness of any individual model is likely to vary between individual clinicians. Moreover, the literature suggests that clinicians probably use a range of approaches whether individually or collectively, depending largely on the knowledge base and experience of individual clinicians, characteristics of each clinical situation and the unique settings in which clinicians find themselves (Sandhu, et al., 2006). However, the main limitation with these conceptual models and frameworks is that they lack a solid research and evidence base when applied to clinical judgement and decision making in paramedic practice.

The existing research into paramedic practice has mostly examined the factors influencing the non-conveyance of patients to hospital, patient outcomes following paramedic interventions and the practice of triage in pre-hospital care. Assessment of paramedic clinical practice is often based on comparisons that are made with other health professionals, notably physicians. A broad range of contextual, situational and environmental factors that impact on decision making and problem solving in paramedic clinical practice has also been highlighted in the recent literature (Shaban, 2011).

Research examining the role of experience in paramedic practice has found that as paramedics gain increased clinical experience and exposure to clinical situations, they become less reliant upon decision tools such as protocols and clinical guidelines to inform their clinical decision making. Moreover, they are seen to engage in an intuitive,
flexible and independent approach when problem solving and making clinical decisions (Shaban, 2005c; Wyatt, 2003). In the context of pre-hospital mental health care, the literature suggests that clinical experience is mostly relied upon by paramedics when caring for the mentally ill (Shaban, 2011). In addition, formal education has been found to assist health professionals in making more confident and informed clinical decision making (Del Bueno, 1983; Schon, 1991). Supportive collegial relationships have also been identified as providing an important opportunity for clinicians to verify the appropriateness of their clinical decisions (Hedberg & Larsson, 2003; Sands, 2009; Wyatt, 2003). In some situations, the roles of patients, bystanders, family members and authority figures have also been found to guide and inform paramedics in decision making outcomes (Porter, et al., 2007; Shaban, 2011).

The existing literature suggests that mental health training programs are often regarded by paramedics as limited in scope and failing to equip them with the necessary theoretical knowledge or assessment skills that can be used to provide confident pre-hospital mental health care (Roberts, 2007; Shaban, 2005c). Additional factors such as lack of back up assistance, concerns about personal safety, inadequate organisational protocols and clinical guidelines have been found to compromise their decision making in this context (Brown & Grantham, 2009; Roberts & Henderson, 2009; Shaban, 2011). Collectively, these factors have been found to have a significant impact on the degree to which paramedics feel confident and able to deal with individuals who experience a mental illness.

Previous studies examining the use of mental health legislation among health professionals from other disciplines have found that many health professionals have a preference for relying on non-restrictive forms of clinical interventions rather than placing restrictions of a person’s civil liberty (Farrow, et al., 2002; Houlihan, 2000). When decisions are made by health professionals to detain patients under the involuntary provisions of mental health legislation, the literature suggests that these
decisions are usually made in response to patients who are identified as being at risk of harm to self regardless of whether there are other acute psychiatric symptoms present and therefore are in keeping with the principles of mental health legislation.

However, some studies have revealed that factors additional to the patient’s clinical presentation, may influence this decision, factors such as the concern that an otherwise voluntary patient may not be admitted to hospital (Aviram, 1993). Regardless of the circumstances that influence the decision by health professionals to detain patients under the involuntary provisions of mental health legislation, the existing literature has found that decision making and problem solving in this context usually follows an individualised and structured framework, designed to meet the patient's individual and unique clinical and situational needs (Anderson & Eppard, 1995).

While the existing research and grey literature outlined above have enhanced our understanding of decision making and problem solving in paramedic practice as well as offering a significant theoretical contribution to the field of pre-hospital mental health care, a number of shortcomings have been identified.

First, while a number of studies and discussion papers presented in the literature that have examined paramedic decision making in the context of pre-hospital mental health care in Australia (Roberts, 2007; Roberts & Henderson, 2009; Shaban, 2011; Shaban, et al., 2012; Townsend & Luck, 2009), none has specifically examined the lived experience of paramedics decision making when exercising their legislative powers under mental health legalisation in the NSW jurisdiction. Second, it is unclear the extent to which factors that have been found to impact on decision making in clinical practice (such as prior experience, the use of decision tools, educational preparedness and personal beliefs and attitudes) are also involved in this area of clinical practice. Third, the need to examine the lived experience of paramedics is further supported by the growing evidence of the clinical and ethical challenges that are faced by other
health professionals when caring for people with mental illness; the often poor experience of people with mental illness when seeking help; and recent expansion in the role and responsibility of paramedics in this area of clinical practice. Moreover, the continuing expansion in the role of paramedics in relation to emergency mental health care has also made it necessary to generate a research base that can substantiate claims that such reforms have resulted in improved quality of mental health services for patients in the community setting.

Finally, advancements to the professionalisation of the paramedic discipline can only be made by increasing the theoretical and research base and creating an evidenced-based discipline specific body of knowledge. Until this occurs, advocating for change to government policy in relation to the establishment of a professional status for paramedics is likely to remain a challenging pursuit.

In conclusion, Bartlett and Sandland (2007) remind us that, “the study of any area of law will be deficient unless the legal rules and procedures in question are studied in their operational context” (p. 95). With this in mind, the purpose of this research was to examine the use and application of mental health legislation by paramedics in the NSW jurisdiction with a key focus on their lived experience of clinical decision making in this context.

The following section details a number of philosophical and theoretical frameworks that attempt to describe the way in which individuals make decisions.
2.13 THEORETICAL FRAMEWORKS RELEVANT TO THE STUDY

A significant body of research exists in the area of decision making and clinical judgement across the health professions (Benner & Tanner, 1987; Chapman & Sonnenberg, 2000; Clement, 2001; Corcoran, 1986; Higgs, et al., 2008; Loftus, 2006; Standing, 2011b; Tanner, et al., 1987) but as yet there remains considerable debate about the constructs and processes that can provide a comprehensive account of these tasks in practice.

To date, the literature with respect to clinical decision making has been largely restricted to the disciplines of medicine, nursing and psychology (Benner, 2001; Chapman & Sonnenberg, 2000; Higgs, et al., 2008; Shaban, 2004, 2011; Shaban & Considine, 2011; Standing, 2011a; Thompson & Dowding, 2002), with few studies that have focused exclusively on clinical decision making in paramedic practice (Alexander, 2010; Brown, et al., 2009; Burrell, et al., 2013; Hauswald, 2002; Porter, et al., 2007; Roberts, 2007; Shaban, 2005b, 2011; Snooks, et al., 2006; Wyatt, 2003). This paucity of research activity and theoretical debate highlights a lack of knowledge and understanding of the cognitive and critical thinking processes that are used by paramedics when they engage in daily clinical practice. Shaban (2011) argues that the disjointed nature of previous studies that have attempted to conceptualise and account for pre-hospital care, has failed to deliver a comprehensive theoretical framework for describing or understanding the processes involved in clinical decision making in paramedic practice.

According Bell, Raiffa and Tversky (1995), these theoretical frameworks can be classified into three broad theories: the normative theories, the descriptive theories and the prescriptive theories.
2.13.1 Normative theories

Normative theories of decision making fall within the systematic-positivist paradigm that attempts to examine what individuals should be doing to make better decisions (Standing, 2011a; Thompson & Dowding, 2002). They are based on the traditions of mathematics, statistics, psychology and economics (Bell, Raiffa, & Tversky, 1988). Classical decision theorists who subscribe to the normative stance attempt to develop logical and coherent processes that can be adopted to promote rational decision making. The normative stance assumes that individuals approach decision making in a rational manner and therefore seek to discover how decisions should be made in ideal conditions. Furthermore, normative decision theorists minimise both the need to understand how individuals actually approach decision making and the natural settings in which decision making typically occurs (Bell, et al., 1988; Chapman & Sonnenberg, 2000).

A number of normative theories of decision making have been developed to promote rational decision making. These include the expected utility theory, the subjective expected utility theory and the multi-attribute utility theory (Chapman & Sonnenberg, 2000). The focus of these theories is the use of decision analysis that attempts to identify the processes involved in decision making in a particular situation. Decision analysis works by adopting the use of decision trees that break a decision down into key components, with each component assigned a numerical value based on the probability of each outcome or event occurring (Chapman & Sonnenberg, 2000; Dowding & Thompson, 2007). The key difference in these theories is that the subjective expected utility theory acknowledges that individuals have different beliefs about the probability of different outcomes on the decision making process, whereas the multi-attribute theory is used when there are multiple objectives of interest to the decision maker (Chapman & Sonnenberg, 2000). Decision analysis and decision trees have been used in numerous studies to examine decision making and clinical
judgement approaches in relation to complex clinical problems, including those supporting nurses to make better decisions in relation to the diagnosis and treatment for acute and chronic condition (Lauri & Salantera, 1995), or to enhance decision accuracy with respect to chronic wound care (Letourneau & Jenson, 1998).

Clinicians are routinely confronted with uncertainty and risks in their clinical lives, where patient and treatment outcomes can be difficult to predict (Hammond, et al., 1980; Thompson & Dowding, 2001). This is particularly evident in the context of pre-hospital care in which paramedics operate (Shaban & Considine, 2011; Shaban, et al., 2004). An important aspect of normative theories of decision making is how clinicians deal with this uncertainty and mitigate for risks with which they are confronted.

Hammond and colleagues propose that clinicians often rely on unconscious routines, commonly referred to as ‘heuristics’, to deal with uncertainty and complexity inherent when making decisions. In a later paper, Hammond, Keeney and Raiffa (2006) claimed that while reliance on heuristics can serve individuals well in the decision making process, they can also lead to errors or mistakes when making decisions. These common traps include, i) jumping to conclusions which may be fundamentally wrong; ii) framing questions in a certain way that is more likely to generate certain responses; iii) recallability, that is, basing future decision making on previous event such as the impact of previous significant adverse clinical events on a clinician’s future decision making; and iv) anchoring as previously described.

In the context of health care, clinicians typically utilise formal risk assessment tools and measurement instruments as a means of identifying and assessing the risks that are associated with particular clinical situations (Thompson & Dowding, 2002). Suicide risk assessment tools are an example of such tools and are routinely used by mental health clinicians to assess an individual’s risk of harm to self or others (Davies, 2000; NSW Health, 2009). However, it should be noted that some opponents have raised particular
concerns about the reliability of these tools for predicting future suicide risk or violence (Ryan & Large, 2013).

While normative theories from the classical decision making paradigm offer a quantitative means of arriving at decisions under ideal conditions, these theories do not represent decision making that typically occurs in real-life clinical settings and environments. A claim expressed by theorists from the naturalist decision making paradigm. Further, they claim that normative theories do not reflect the reality that clinicians often make decisions that are based on limited and incomplete information (Thompson & Dowding, 2001), where uncertainty, risks and cognitive limitations are commonplace (Chapman & Sonnenberg, 2000). Shaban and Considine (2011) argue that these issues remain a notable shortcoming of classical decision making theories to explain and account for decision making and clinical judgement approaches that are adopted by paramedics in clinical practice.

2.13.2 Descriptive theories

Recognition of the real-life settings in which individuals exist and the conditions and context in which decisions are made, has seen the advent of the descriptive theories and models of decision making. Descriptive theories place significant emphasis on understanding the interplay between environmental, contextual and individual factors that are involved in the decision making process, and seek to better understand how ordinary people reach the decisions they do (Bell, et al., 1988; Standing, 2011a). They aim to describe the experiential and cognitive components of ordinary people, and seek to determine if their behaviour and action is consistently based on rational reasoning processes (Shaban & Considine, 2011). A popular approach within this domain is that of the Information Processing Theory (Newell & Simon, 1972). This approach proposes that an individual's capacity to engage in reasoning and decision making is contingent
upon their memory stores and their subsequent capacity to use this stored information when gathering and synthesising relevant information in the environment.

Descriptive theorists recognise the cognitive limitations of human capacity and reasoning and the impact that uncertainty, risk and error can have on the decision making process (Shaban, et al., 2004). A range of heuristics strategies or cognitive or mental shortcuts have been purported to assist individuals in dealing with uncertainty when making decisions (Cioffi, 1997; Thompson & Dowding, 2002). These include, representativeness heuristics, where a decision about a condition is based on previous encounters with similar conditions (Cioffi, 1995); availability heuristics, where a decision about a current condition is based on the recency of experience with a similar condition (Cioffi, 1997); and anchoring and adjustment heuristics where an individual uses an initial value as a starting point, known as an anchor, and then adjusts information until an acceptable value is achieved (Epley & Gilovich, 2006). Clinical experience can be seen to play an important role in the development and utilisation of heuristics by clinicians. However, while heuristics can lead to better decisions being made when clinicians are faced with uncertainty, they can also result in errors being made (Thompson & Dowding, 2002).

A notable limitation in the studies that have adopted this framework is that they are often conducted in research laboratories and not in the natural clinical environments in which decisions are generally made. As a consequence, the ecological validity of their findings remains questionable (Thompson & Dowding, 2002).
2.13.3 Prescriptive theories

In response to the shortcomings and continuing disquiet relating to the normative and descriptive theoretical positions and models, Bell, Raiffa, & Tversky (1988) proposed a third ‘trichotomy’ perspective known as the prescriptive position. The main focus of the prescriptive stance is that it attempts to help clinicians make better decisions by looking at, and understanding how decisions are made and formulated (Bell, et al., 1988; Standing, 2011b; Thompson & Dowding, 2002).

The popularity of the prescriptive tools can be seen in the increasing use of what are essentially cognitive tools such as clinical guidelines (that are designed to help clinicians make the most appropriate decisions) and protocols (that build upon the information provided in the clinical guidelines and describe how a particular procedure should be performed) (Rycroft-Malone, 2002; Thompson & Dowding, 2002). Both tools are aimed at encouraging and prompting the use of standardised decision making practices by health professionals in relation to specific conditions. In addition, they are intentionally designed to enhance the quality of care and limit the possibility of clinicians making incorrect clinical decisions or deviating from approved practices (Thompson & Dowding, 2002). Further discussion of the applicability of clinical guidelines and protocols that relate to clinical decision making in paramedic practice has been provided under sub-heading Decision Tools and Clinical Decision making.

Shaban and Considine (2011) further added that

“Each of the theoretical positions is contextually bound, bearing rich, complex and contested philosophical origins emanating from specific professions…they overlap, often because of shared theoretical and philosophical positions” (p. 169).

Broadly, by paying particular attention to the contextual and situational factors that influence the decision making process, the aim of this research was to gain a better
understanding of the lived experience of paramedics as they engage in clinical decision making in the context of pre-hospital mental health care. The phenomenon of decision making and clinical judgement in health care has, among other things, been characterised as a mostly invisible process, largely automatic, not readily accessible to others or research, and heavily embedded in contextual nuances (Higgs, Trede, & Loftus, 2006). With this in mind, the descriptive theoretical framework was considered the most appropriate approach to be adopted for this research. By adopting a descriptive theoretical framework, this research positions itself alongside other theorists who claim that decision making occurs in dynamic settings, where clinical presentations can be ill-defined and ambiguous, and when clinical decisions are often made under stress and time pressure (Orasanu & Connolly, 1993; Reynolds, 2009; Sanders, 2005; Shaban, et al., 2012). This description of clinical life is true of much of pre-hospital care, where clinical decisions are frequently made by paramedics under pressure and based on limited and incomplete information (Bendall & Morrison, 2009; Shaban, 2011), where uncertainty and risk often prevail (Shaban, et al., 2004; Wyatt, 2003) and where the adverse effects of sleep deprivation can impact on their decision making capabilities (Croskerry, 2006).

Adopting the descriptive theoretical framework for this study is not intended to reject or minimise the significance of classical or normative decision making approaches as these serve as important frameworks in which to assess and test the accuracy and quality in decision making. Instead, adopting a descriptive theoretical framework allowed this research to explore the essential features of the lived experiences of paramedics when responding to and managing behaviourally disturbed patients' care and the factors that influence their decision making in this context. These factors included their thoughts, feelings, emotions, perceptions, relationships, motivations and drives and the unique context in which they perform their clinical duties.
The following chapter outlines the conceptual framework and study methods adopted for this study.
CHAPTER THREE: QUALITATIVE RESEARCH METHODOLOGY AND METHODS

Chapter 2 identified a broad range of current controversies and gaps in the literature around the care and management of individuals who are experiencing a mental health emergency in the pre-hospital environment. This chapter introduces qualitative interpretative research methodology and in particular hermeneutic phenomenology, as an appropriate and viable framework to enable further exploration of these issues and as a suitable approach for generating new knowledge to fill the gaps in the literature.

3.1 Methodology

According to Crotty (1998), the development of a research inquiry must begin with a clear research proposal, where it is the role of researchers to lay out the foundation for their research project. To assist in the development of this, Crotty proposes a top-down conceptual research framework that consists of four core elements where each element is used to inform the next (see Figure 1).

Figure 1: Conceptual research framework proposed by Crotty (1998)
In this framework, Crotty proposes that the first element, *epistemology*, is the theory of knowledge such as objectivism, constructionism or subjectivism which is embedded in a specific research inquiry, “a way of understanding and explaining how we know what we know” (p. 3). Epistemology is in contrast to ontology which is the study of ‘being’ and ‘existence’. The second element, *theoretical perspective*, is the philosophical stance being adopted by the research inquiry, for example, interpretivism (such as hermeneutics, phenomenology and symbolic interactionism), positivism, critical inquiry, feminism or post-modernism. The third element, *methodology*, relates to the specific research plan or strategy (such as phenomenological research, ethnography, grounded theory or action research). It then underlines the fourth element, *methods*, that has been chosen for conducting the research (such as, interviews, observations, case study or sampling). Section 4.3 ‘Research Approach Adopted in this Research’ provides a framework that is aligned with Crotty’s conceptual research framework.

### 3.2 Qualitative Interpretative Research Paradigm

Traditionally, the discovery of new scientific knowledge in the medical and health sciences has been based on the epistemology of objectivism and the empirico-analytical paradigm. This is a positivist reductionist stance that claims ‘meaning’, ‘knowledge’ and ‘truth’ reside objectively and independently in the world, and is separate from human consciousness. This conventional deductive line of reasoning to scientific research relies on quantitative measures to test hypotheses concerning the relationship between variables and makes use of statistical calculation to interrogate quantitative data (Berglund, 2001; Thompson & Harper, 2012). However in recent times, health researchers have begun to recognise the importance of understanding patients and clinicians lived experience of disease and illness, and of treatments and interventions. This approach provides a valuable insight into how people make sense of health issues and how they go about making important health-related decisions. The
discovery of this rich source of human knowledge is impossible from the traditional empirico-analytical paradigm.

The focus on the meanings that individuals give to their lived experiences is firmly aligned with the interpretative research paradigm. Research undertaken within the interpretative paradigm utilises a wide range of approaches that focuses primarily on the socially constructed nature of reality or ‘phenomenon’ and pays particular attention to the context in which reality or ‘phenomenon’ occurs. These approaches reflect different philosophical orientations that include:

i. hermeneutics (seeks to elicit peoples interpretations of phenomena)
ii. phenomenology (seeks to understand peoples lived experience of a phenomena)
iii. phenomenography (seeks to examine the different ways in which people experience phenomena)
iv. ethnography (seeks to examine the cultural and societal influences on phenomena)
v. grounded theory (seeks to generate new theory of phenomena based on conceptual ideas)
vi. critical social theory (seeks to identify oppositions and socio-political conditions that influence the experience of phenomena).

The interpretative research paradigm is founded on the epistemology of idealism which proposes that an individual’s reality consists of ideas that exist in their own mind. The concept of constructionism is central to the interpretative stance and suggests that humans construct and craft meaning in their lives in unique and individualistic ways. In this regard, humans are continuously trying to make sense of their world and therefore all meanings that individuals give to their experiences in the world are equally valid and no-more superior than someone else’s. Crotty describes this as the “meaning-making
activity of the individual mind” (p. 58). The social constructionism view of meaning-making also claims that humans are unavoidably influenced by cultural and societal forces that impact on the way they perceive and experience the world around them, in particular their ‘thoughts’ and ‘feelings’. This view holds that language is centrally used by humans to construct meaning of their experience of reality (Gergen, 1985).

The main objective of research undertaken in the interpretative paradigm is to gain a contextual understanding of human beings in their natural environment and to acknowledge that subjective interpretations play a prominent role in the way that people see and understand the world around them. Researchers therefore attempt to elicit and describe subtle and subjective meanings that are attached to events, actions and motivations that occur within the social world and the realities of those involved. As Loftus (2006) points out, “the meanings that people attribute to things around them is not only constructed but are contingent” (p. 106). The construction of meaning by individuals is therefore dependent upon and influenced by the historical and cultural context in which individuals reside. This view of meaning construction, reinforces the notion that reality is experienced uniquely and individually by people. In the research arena, both participants and researchers bring their own unique personal histories and perspectives to the research setting. Loftus acknowledges this relationship, suggesting that “a research method employed to discover the understandings and meanings people have of a particular phenomenon (such as clinical decision making) must permit these various influences to show through, and must take account of them”. Rather than seek universal truths, researchers using an interpretative approach strive for a deeper understanding of the particular. From this viewpoint, there is no question of conducting research in a totally detached manner. As Dahlberg, Drew, and Nystrom (2001) claim, all findings derived from interpretative research are profoundly affected by the values, theories, assumptions and even pre judgements that the researcher brings to the research process.
In the health sciences, it is becoming increasingly evident that research within the interpretative paradigm provides a rich and important mechanism in which to further expand the scope of evidence in clinical decision making (Attree, 2001; Barbour, 2000; Hammond, 1996; Ritchie, 1999; Standing, 2011a; Thompson & Harper, 2012; Walker, 2013). The goal of this research was to explore the experiences of paramedics as they engage in clinical decision making in the context of pre-hospital mental health care, in particular, when exercising their legislative powers under mental health legislation. To gain an enhanced understanding of this phenomenon, this research focused on the interpretations that paramedics give to their experiences in this area of clinical practice and how these interpretations of their experiences influenced their behaviours, actions and decision making in the context of pre-hospital mental health care. Therefore, this research is ideally positioned within the interpretative research paradigm. Since this research focused on exploring the lived experiences of paramedics as they engage in clinical practice, hermeneutic phenomenology was chosen as an appropriate methodology and is discussed in more detail in the following section.

3.3 Phenomenology

Phenomenology is the study of experience and aims to explore the structure and meaning of everyday life (Rapport, 2005; Thompson & Harper, 2012). The principles of phenomenology can be traced back to Edmund Husserl (1931/1961) who emphasised the importance of the ‘lifeworld’ or lived experience and our fundamental perception of reality as it is presented to human consciousness (Ajjawi, 2007). Husserl’s view of phenomenology is epistemological and assumed that we could only know what we experience in our reality.

As part of the rise of existential philosophy, Husserl sought to make phenomenology a commensurable science of its time, refuting the then established and popular belief that traditional sciences that were aligned with the philosophies of positivism and
Empiricism were the only means for examining and understanding the world. Husserl’s theory of phenomenology focused on the divide between the individual (subject) and the object, that is, an individual and their consciousness of objects in their environment. According to Husserl, this consciousness constitutes our experience of an object. Husserl theorised that intentionality was an individual’s continuous awareness (‘consciousness’) of something in the world of lived experiences. In particular, intentionality represents an individual’s conscious effort to pay attention to specific objects in their environment. A process he termed as phenomenological reduction. It reflects the idea that the lifeworld is not an objective environment or even a subjective consciousness but rather, it is what an individual perceives and experiences it to be (Finlay & Gough, 2003). The study of a person’s unique experience of a phenomenon, using phenomenological methods, reveals this consciousness (Crotty, 1996). Rapport (2005) claimed that Husserl’s “exploration extended well beyond an understanding of the relationship between consciousness and real objects such as tables and chairs, to a plethora of objects or phenomena of experiences such as feelings, concepts, dreams, hallucinations, emotions, sensations, fantasies, referential objects and thoughts” (p. 126).

Husserl also introduced the metaphor of bracketing, another form of phenomenological reduction, to describe the act of bracketing out one’s prejudices and preconceived ideas and thoughts about a phenomenon in order to fully understand the meanings that are used by individuals to describe their experiences. This philosophical idea was later challenged by other emerging phenomenological philosophers such as Gadamer (1976a), Heidegger (1962), Merleau-Ponty (1976) and Sartre (1948) who argued that it is not possible to remove [bracket out] one’s own preconceived ideas or knowledge of a particular phenomenon but instead, we must bring our prior knowledge and experience of the particular phenomenon to the investigation in order to fully understand how others experience that phenomenon. Moreover, Husserl proposed the notion of subjectivity to describe an individual’s ability and capacity to engage with and
understand another person’s perception of their reality and their subjective interpretation of their experience of the lifeworld.

Throughout its evolution, phenomenology has continued to prosper and has branched out into new philosophical horizons. The following provides a chronological overview of the four main traditions of phenomenology along with their prominent figures.

i. Transcendental phenomenology: The focus on understanding an individual’s experience in the world and how these are mediated through their senses and interpreted through their consciousness. Objects of experience are constituted through human consciousness (Edmund Husserl 1859-1938).

ii. Existential phenomenology: The focus on understanding an individual’s place within their broader culture, history, concerns and relationships with others, and attempts to understand and describe an individual’s experience of free choice (Jean-Paul Sartre 1905-1980, Maurice Merleau-Ponty 1908-1961 and Paul Ricoeur 1913-2005).

iii. Interpretative phenomenology: The focus on understanding an individual’s account of their experience and interpretations in the broader social, cultural and theoretical context and foregrounds the researcher’s interpretative role (Smith, Flowers, & Larkin, 2009).

iv. Hermeneutic phenomenology: The focus on understanding the interpretative structures of an individual’s experiences in the world and how they interpret and make sense of their experiences. Central to this, is how language is used by individuals to express their interpretations and meanings of experience (Martin Heidegger 1889-1976, Alfred Schutz 1899-1956, Hans-Georg Gadamer 1900-2001 and Max van Manen 1942- ).
The tradition of hermeneutic phenomenology was considered particularly suitable methodology for this study and a description of its philosophical and historical development, and its application in research is provided in the following section.

3.4 Hermeneutic Phenomenology

This section provides an overview of the history of hermeneutic phenomenology and the assumptions on which it has been developed. The objectives of the hermeneutic phenomenology and examples of hermeneutic phenomenological research will be provided.

3.4.1 History of Hermeneutic Phenomenology

During his early formative career, Martin Heidegger (1962) was mentored by Edmund Husserl and was inspired by Husserl’s (Husserl, 1931/1961) initial philosophical ideas of ‘knowing’ and ‘being’ but later rejected the notion that transcendental phenomenology could elucidate objects of consciousness and that individuals (subjects) can only know objects through a state of consciousness. Instead, Heidegger recognised the interpretative nature of understanding phenomena and argued that individuals are already suited within the world and function by maintaining intimate relationships with all aspects of their world. This according to Heidegger constitutes an individual’s own sense of reality (Heidegger, 1962; Hoy, 1993). This notion is a shift to a more ontological rather than epistemological basis and describes an individual’s ‘being in the world’ or what he famously described as Dasein (‘being there’). In his theorising, Heidegger emphasised the importance of language and speech that enables individuals to understand and give meaning to their ‘being in the world’. Accordingly, Heidegger became interested in understanding how individuals give meaning to their existence in the world and the interpretations they make of their own experiences. Heidegger’s contrasting view from his predecessor Husserl had seen a stark shift away from the transcendental phenomenology movement.
Hans-Georg Gadamer (1976b) is regarded as one of the eminent figures in the field of hermeneutic phenomenology and began his career working as Heidegger’s student. (Thompson, 1990). In his writing, Gadamer’s focus was on describing the unique conditions in which understanding of a phenomenon takes place, emphasising the important role that history and tradition play in the interpretative process. In a circular way, the interpretations that one makes of any phenomenon will ultimately be influenced by the interpretation one makes of that phenomenon. This is illustrated by Smith, Flowers, and Larkin (2009), who claimed that “when we read a text, our reading and understanding are forms of engaging in a dialogue between something that is old (a fore-understanding) and something which is new” (p. 26). Thus, an individual’s interpretation of phenomena represents a dialogue between the past and the present.

Gadamer used the term text broadly to refer to language, contending that our experience of the world is bound to language. Human beings exist in a world of language and language is used to seek understanding of the world (Moran, 2000). Language relates to unique situations and phenomena and is therefore intrinsically influenced by tradition, history and culture and as such can be viewed as pre-dating the individual. It is therefore viewed as being part of the world.

According to Gadamer (1976b), the emphasis on understanding in hermeneutics has given rise to four significant concepts that are considered intrinsically involved in understanding. These relate to hermeneutic circle, fusions of horizons, prejudice and the act of dialogue.

The ‘hermeneutic circle’ represents one of the most prominent ideas in hermeneutic phenomenology and is considered the ontological basis of how humans understand each other. The hermeneutic circle relates to the circular interplay between the part and the whole. That is, to understand any distinct part of the phenomenon, one must understand the whole; to understand the whole of the phenomenon, one must focus on
the distinct parts that make up the whole. When applied to text, or more broadly, language, the meaning of words can only truly be understood when seen in the context of the whole sentence. Similarly, the meaning of a sentence can only be fully understood by the collective meanings of individual words. Taylor (1993) points out that each time the reader of the text goes round the circle, understanding of the text grows and matures.

When applied to research, the hermeneutic circle illustrates the iterative means by which data analysis and interpretations are performed: a continual process of going back and forth through a series of different ways of analysing the data. According to Finlay (2003), reflexivity is a form of hermeneutic reflection, “a process of continuously reflecting upon our interpretations of both our experience [as a researcher] and the phenomena being studied so as to move beyond the partiality of our previous understandings and our investment in particular research outcomes” (p. 108). Thus, the emergence of new knowledge and understanding of experience occurs from a dialectic interaction between the researcher’s pre-understanding from the past and the present research process. In addition, Gough (2003) argues that reflexivity in hermeneutic phenomenological research is illustrated by “the researcher’s incorporation of information relating to the research context and to relevant personal thoughts and feeling into the research report” (p. 22).

Others have extended the theorisation of reflexivity in hermeneutic phenomenological research by proposing different stances and approaches. For example, Wilkinson (1988) distinguishes between three interrelated forms of reflexivity in the research process. Personal reflexivity is the effects of the researcher’s own motivations, interests and attitudes that relate to the research inquiry. Functional reflexivity is the effects of interpersonal dynamics and different identities in the research process, in particular, perceptions of power and status between the researcher and participant. Disciplinary reflexivity is the effects of broader debates about theory and methods and particular research inquiry under examination. Gough adds further that the practice of
reflexivity can occur either at one stage of the research process or incorporated throughout. With enhanced understanding of the whole, examination of parts of the data at a deeper level drives the analysis forward (Cohen, Kahn, & Steeves, 2000). Smith et al. (2009) remind us that what sets phenomenological research apart from other qualitative research methods, is the iterative process of analysis. In this process, there is a shift back and forth across different ways of thinking about the text, rather than a progression in a linear or step-by-step fashion.

Gadamer’s second metaphor for understanding relates to ‘fusions of horizons’. According to this metaphor, understanding occurs when the horizon of the text, which is derived from the past, fuses with the horizon of the interpreters, which constitutes the present - the coming together of vantage points (Koch, 1996) or the fusing of horizons. Gadamer (1976b) described horizon as “the range of vision that includes everything that can be seen from a particular vantage point” (p. 228). When incorporated into a research inquiry, the task of the researcher is to illustrate the fusion between the participant’s reality of a phenomenon and the researcher’s reality of that phenomenon (Koch, 1996) . An important aspect of horizons also relates to how our own prejudices can influence the perception of our own reality and the interpretations we make of the reality of those we seek to understand. In this regard, researchers must maintain an openness to the worldview of others (how others interpret their world) while acknowledging the inevitable influence that our own prejudices have in the process.

Gadamer did not regard prejudices as negative influences, rather they are the by-products of gender, culture, race and class, and facilitate access to the world and therefore to understanding.

The ‘prejudice’ metaphor coined by Gadamer is used to represent the background and pre-conceptions we bring to our interpretation of the world. Thus, we can only truly have access to the world through our individually constructed prejudices which as
Gadamer suggests, constitute the initial directedness of our whole ability to experience. Prejudices are biases of our openness to the world (Gadamer, 1976b). To this end, when researchers seek to interpret a phenomenon, they must make the phenomenon familiar to themselves. Rapport (2005) claims that the relationship between trust and prejudice is fundamental to our understanding of experience.

In Gadamer’s final concept, ‘act of dialogue’, understanding of a phenomenon occurs in response to a process of dialogue between the researcher and the text, which is comprised of a range of questions and answers (Ajjawi, 2007). The gradual discovery of understanding and meaning of a text occurs once the researcher has discovered the questions that the text is to answer (Taylor, 1993). During this active dialogue with the text, the researcher must remain open to the likely questions that may arise.

### 3.4.2 Hermeneutic Phenomenological Research

Research adopting the hermeneutic phenomenological approach allows researchers to study how individuals interpret their lives and how they make meaning from their experiences. The structure of phenomena is much less important than how phenomena are interpreted by individuals. When undertaking hermeneutic phenomenological research, van-Manen (1990) postulates that the aim is not to discover what we should do or even how we should do something but rather it seeks to reveal to us the relationship between “being and acting, between who we are and how we act” (p. 13). It is at this juncture, that Gadamer’s (1976b) own philosophical influence in relation to contemporary hermeneutic phenomenology becomes apparent. Gadamer argues that because hermeneutics is focused on examining the language that people use to describe meaning, the objective of hermeneutic phenomenological research is to examine, understand and make sense of this language, and the individual user of that language. From Gadamer’s perspective, “our experience of the world is bound to
language" (Cohen, et al., 2000, p. 5). If we are to understand and examine this experience we must understand the language people use to describe this experience.

The aim of research using the hermeneutic phenomenological approach is to develop a rich description of a particular phenomenon in a particular context and in the lifeworld of those having the experience (van Manen, 2007). From an epistemological perspective, this means that hermeneutic phenomenological research can be described as constructivist since its key focus is on generating knowledge that is based on the construction of meanings that participants use to describe their subjective experiences. Van Manen (2007) later wrote that “phenomenology is focused on making known the internal meaning structures of lived experience” (p. 10). In research terms, hermeneutic phenomenological methods are most useful when researchers wish to understand a particular experience as it is understood by those who are having it. More specifically, the participant’s experience of ‘what it is like’ to have a particular experience.

Dahlberg and colleagues (2001) purports that “being in the world thus means that we cannot avoid meaning. This fact is the starting point for phenomenological research” (p. 113). Hermeneutic phenomenological methods are also useful for examining and understanding common themes or trends that go across a cohort of individuals who experience the same phenomenon, and also provides an important opportunity to discover any issues that are alluded to by those who may not articulate them in their discussions of a particular issue.

What makes hermeneutic phenomenological research distinctively different from other interpretative qualitative approaches is its emphasis on examining a single phenomenon (or experience) rather than other broader aspects of that phenomenon, such as the social processes (grounded research) or cultural nuances (ethnographic research). As Cohen & Omery (1994) reminds us, while these factors may be important
and form part of an individual’s experience, they are not overtly the focus on our interest from a hermeneutic phenomenological perspective. Hermeneutic phenomenological research also takes the position that individuals are self-determining in their existence and is therefore interested in gaining an understanding of how self-determining individuals create and develop meaning in their lives from their lived experiences.

Rather than seeking to discover and understand the beliefs and cultural aspects of paramedics in their clinical environment, as is the focus of ethnographical-orientated research, hermeneutic phenomenological research focuses on the lived experience of paramedics as they engage in clinical decision making, and importantly, the interpretations that are made of their lived experiences within the context of their clinical practice. Hermeneutics focuses our attention on how individuals interpret and come to make sense of their world. In research terms, the researcher plays an active role in the research process whereby the researcher attempts to assume an insider’s perspective and tries to gain a contextual insight into how the experience is perceived by the participant (Conrad, 1987). In the case of this study, my principal task was to gain an insight and intimate understanding of the lived experiences of paramedics as they make use of their mental health legislative powers when providing care and treatment to individuals with a mental illness.
3.4.3 Hermeneutic Phenomenological Research Methods in Action

Hermeneutic phenomenology has a long history of being used in the broader context of health research with a particular emphasis on investigating lived experiences from the perspective of both patients and clinicians (Christensen, 2007; Crotty, 1996).

A review of the research literature identified only one study that used hermeneutic phenomenological research methods to examine paramedic practice. In this study, Walker (2013) sought to explore the lived experience of pre-hospital and in-hospital clinicians (namely, paramedics and nurses) when performing adult cardiopulmonary resuscitation in the presence of lay-persons (family members, friends, colleagues or strangers). The study of 10 clinicians identified five themes (unifying themes) and 15 sub-themes (collective themes) to encompass the research findings. Moreover, the concept of exposure, featured predominately in the findings of this research. This relates to exposure to lay people observing interventions associated with the event, exposure of self when performing CPR in the presence of the lay person, and the exposure to the patient receiving CPR in the presence of others. Interestingly, this study also identified the need to strengthen intra-professional and inter-professional networks between paramedics and nurses in order to promote a holistic approach to emergency resuscitative care. The study also purported that nurses could benefit significantly from opportunities to observe paramedics as they engage in clinical practice in the pre-hospital environment, particularly since paramedics are routinely required to perform CPR in the presence of lay persons.

Researchers have also adopted hermeneutic phenomenological research methods to explore clinical decision making across other clinical settings and professional health disciplines. For example, Drury, Francis and Dulhunty (2005) used hermeneutic phenomenology to compare and contrast the experiences of nurses working in rural and metropolitan locations. The study revealed that unlike nurses working in
metropolitan areas, those working in rural and remote locations often carried out clinical duties in isolation, were found to employ more advanced nursing practices and tended to assume a multifaceted approach to clinical care.

Loftus (2006) employed hermeneutic phenomenological methods to examine the way in which physiotherapists working in clinical teams use language when they engage in clinical decision making. The study found that the behaviours and interactions of and between physiotherapists (both written or verbal) were very much dependent upon the characteristics of language such as narrative, hermeneutics and rhetoric, which are in turn formed from words, metaphors and categories for each participant. From this perspective, Loftus contended that clinical decision making as experienced by physiotherapists was viewed as a social phenomenon.

In another study, Baker (2001) sought to examine clinical decision making in relation to a patient’s experience of pain and how the perceptions among nurses in relation to a patient’s experience of pain changed over time. From this study, Baker was able to identify that the clinical environment, the role of other clinicians and prior experience greatly impacted on and influenced clinical decision making behaviours and actions among nurses. For example, the study found that as nurses gained clinical experience, they were found to rely more on experiential knowledge and less on theoretical principles and clinical guidelines.

The abovementioned examples illustrate how hermeneutic phenomenological methods can be used to examine clinical decision making across of range of settings and clinical disciplines. What these examples have in common is the view of participants [clinicians] as being actively involved in the lifeworld [clinical practice] and therefore research that is primarily focused on understanding how participants make sense of this uniquely personal experience.
SUMMARY

As previously mentioned, the goal of this research was to gain a better understanding and description of the phenomenon of clinical decision making used by paramedics in relation to pre-hospital mental health care. This research explored how paramedics make sense of their past experiences caring for the mentally ill and how their own interpretations influence their decision making outcomes in this context. This research is therefore ideally placed within the interpretative paradigm whilst also being aligned with the descriptive theoretical framework. In addition, the philosophical stance being followed is aligned with the Idealism: where knowledge and meaning are socially constructed by people (Higgs & Jones, 2000) and “where storied realities of the social world are recognised and acknowledged” (Higgs & Loftus, 2008, p. 215). By taking this stance, a number of assumptions are also acknowledged. First, that the act of clinical decision making takes place within a particular context and second, that attempts to quantify the essential features of this phenomenon using quantitative methods, is unlikely to capture rich contextual information about it.

This study was undertaken within the interpretative paradigm as this approach is most relevant to understanding paramedics in their natural environment. According to the interpretative paradigm, meanings are constructed by human beings in unique ways, depending on their context and personal frames of reference as they engage with the world they are interpreting (Crotty, 1996). From this perspective, this study selected hermeneutic phenomenology as this was considered an ideal framework to gain a contextual understanding and insight into how paramedics engage in clinical decision making in the pre-hospital environment. The specific advantages of hermeneutic phenomenology over other approaches is that it enables an exploration of how paramedics construct meaning from their lived experiences of clinical decision making in pre-hospital mental health care. This includes how paramedics approach decision
making when caring for the mentally ill and how they perceive their role within the clinician-patient relationship.

If the experience of clinical decision making is to be fully explored and examined, a researcher must strive to capture this phenomenon as it occurs in its natural setting (Baker, 2001). Therefore, the study of clinical decision making in paramedic practice requires the use of a research approach that will capture the perceptions of the clinical decision making as it is experienced by each of the participants. With this in mind, a hermeneutic phenomenological approach will focus on the lived experience of paramedics as they engage in clinical decision making in the provision of mental health care, and importantly, the meanings that are constructed by them of their lived experiences within the context of clinical practice. Accordingly, this research is positioned from a contextual constructionist stance since its goal is to generate knowledge about how paramedics construct meaning within a particular context. It was also assumed that hermeneutic phenomenology was a suitable and viable research method that would enable me to draw upon my own professional and personal knowledge and understanding to aid in the interpretative process.
CHAPTER FOUR: RESEARCH PROCESS

This section describes the research design of the study. It provides a description of the research and recruiting procedure, the participants who took part in this study, the approaches used for data collection and management, and the stages of data analysis. However, in keeping with the traditions of qualitative methods and hermeneutic phenomenology in particular, I will first provide a personal statement that positions my involvement and interest in this research.

4.1 Position as Researcher in this Study: A Personal Statement

When undertaking research from a hermeneutic phenomenological perspective it is incumbent on researchers to reflect upon their own pre-understandings, pre-suppositions and assumptions in order to fully enter the lived experience of others. This represents a process of reflexivity (or critical consideration) of their influence on the research inquiry and enables researchers to approach the phenomenon with a sense of ‘open-ness’ (Finlay & Gough, 2003; van Manen, 1990). To facilitate this, my first task was to reflect on my investment and position as researcher and colleague in this research inquiry.

I was motivated to undertake this study for a number of reasons. First, as a corporate employee of the Ambulance Service of NSW in Australia at the time this study commenced, I had been actively involved in the implementation of strategic directions that were outlined in the Ambulance Mental Health Strategic Plan (Ambulance Service of NSW, 2007a). This Plan guided the development of specific clinical, operational and educational components of the Service that related to and supported the provision of clinical mental health care. In particular, a key component of this Plan included responsibility for the oversight of the new legislative powers for paramedics under the Act into clinical practice.
Prior to my employment with the Ambulance Service of NSW, I had worked as a psychologist and clinician in a variety of mental health positions across the public health system in New South Wales, Australia. This experience enabled me to acquire comprehensive knowledge and understanding of contemporary pre-hospital, ambulatory and inpatient practices in relation to mental health care. For example, assertive case management, acute and crisis care, transitional care and specialist care for those with complex needs. From this, I have experienced my own professional and personal rewards, frustrations and dilemmas that, for the most part, did not appear too dissimilar to the participants in this study. This clinical experience, particularly during my employment working on an acute community mental health team, taught me that decision making and clinical judgments were largely focused on the identification, assessment and management of risk issues, particularly suicide and self-harm risk. Moreover, decision making and clinical judgments in community mental health care were usually guided by our capacity as clinicians to strike a balance between the wishes of patients experiencing a mental illness, the wishes of their family members and carers, and the requirements that we provide clinically appropriate care and treatment keeping patients and others safe. In crisis situations, the active participation and collaboration with other frontline personnel such as police officers, mental health case managers or emergency department staff was seen as critical in managing combative and non-compliant patients and those presenting a significant risk of harm to themselves or others. This required a degree of coordination, cooperation and negotiation between agencies regarding specific roles and responsibilities. This, coupled with limited availability of follow-up community-based mental health case management services, usually determined the extent to which we were able to provide care and treatment in the least restrictive means possible. Overall, decision making and clinical judgments that were made in crisis situations felt, at times, more challenging and stressful to me than those made in non-crisis situations.
Throughout my career, I have continuously advocated for the protection and promotion of the rights and dignity of individuals who experience a mental illness and I have promoted the importance of recovery-focused care.

During this study, I was both a researcher and colleague of those who took part in the study. While I was not from the same professional background as the participants who took part in this study (my professional background is in psychology, public health and health management), I still considered this dual relationship and collegial bond enabled me to establish a good rapport with each of the participants. I believe this greatly facilitated access to their clinical world. Furthermore, I am confident that my involvement in the implementation of the Ambulance Mental Health Strategic Plan, and my later involvement in the establishment of the first ambulance employee wellbeing and mental health program of work, enabled me to gain an increased understanding and appreciation of the evolving nature of pre-hospital mental health care and the changing role of paramedics in this context. The knowledge and insight that I had gained from my exposure to the ambulance workforce environment (both operational and corporate) had proven extremely beneficial during the data collection and analysis stages of this research. Nevertheless, while these factors were of great benefit to me throughout this study, it was important that I incorporated a range of strategies and techniques into the study design to ensure these factors did not inadvertently or unduly influence or cloud my own decision making. These strategies and techniques are discussed in more detail under the following sub-heading ‘Rigour and Trustworthiness’.
4.2 Rigour and Trustworthiness

The importance of demonstrating rigour and trustworthiness of findings derived from qualitative research is critical if research is to be considered scientifically rigorous, credible and of sound quality (Hammell, Carpenter, & Dyck, 2000). In quantitative research, the reliability, validity and generalizability of research findings are methodological criteria that are commonly measured for this purpose (Kitto, Chesters, & Grbich, 2008). However, in qualitative research, the term rigour is used to describe the thoroughness of the study, where all decisions are carefully considered. For example, the appropriateness of the research methods that are used, the congruence of the participants to the research aims, the quality of the data collected and the analysis that is subsequently undertaken (Smith, et al., 2009). The term trustworthiness on the other hand, refers to the extent to which the research methods and findings of a study are credible, sound and trustworthy (Berglund, 2001).

A number of strategies can be utilised at various stages of a study to demonstrate rigour and trustworthiness which are also congruent with fundamental principles of phenomenology. Strategies include, collecting data using a variety of methods (Denzin & Lincoln, 2000); constructing an audit tool that provides a detailed description of how the research was undertaken (Lincoln & Guba, 1989); a process of participant validation, whereby the researcher seeks additional clarification and consensus from participants about the identification of emerging themes and; a peer review process, whereby an experienced colleague reviews the data or findings at various stages of the analytic process in order to validate or question the analytic linkage being made between the data, categories and emerging themes (Hammell, et al., 2000).
Moreover, scrutiny of the researcher’s use of reflexivity and recognition of how their own thoughts and views influence their understanding of the participants’ experiences and the participants’ constructions of meaning also plays an important role when evaluating a hermeneutic phenomenological study.

A full description of the strategies that were incorporated into this study to enhance the rigour and trustworthiness can be found in Chapter 7 under sub-heading ‘Strengths of the Study’.
4.3 Research Approach Adopted in this Study

**RESEARCH PARADIGM**
- Interpretative Paradigm
- Hermeneutic Phenomenology

**METHODODOLOGY**
- Ethics Clearance & Organisational Approvals
- Participant Recruitment

**APPROACHES TO DATA COLLECTION**
- Participant Information
- Informed Consent
- Demographic Information
- Observation (Field Notes)
- Interviews

**STAGES OF RESEARCH AND DATA ANALYSIS**

**PART 1: Six steps proposed by van Manen (2007)**
1. Turning to a phenomenon of interest
2. Investigating experience as we live it
3. Reflecting on the essential themes which characterise the phenomenon
4. Describing the phenomena- the art of writing and rewriting
5. Maintaining a strong and orientated relation to the phenomenon
6. Balancing the research context by considering the parts and the whole

**PART 2: Isolating Thematic Statements**
1. The Detailed reading approach
2. The Selective approach
3. The Holistic approach

**PART 3: Identification of Emerging Themes and Sub-themes**

**OUTPUT**
Comprehensive description of clinical decision making in relation to paramedics exercising functions under the Mental Health Act 2007 (NSW)
4.4 Research Design

A qualitative interpretative research design was used in this study. The study employed data collection methods of demographic questionnaire, observations and semi-structured interviews. The use of more than one source of data played an important role in enhancing the validity and credibility of the study's findings.

Hermeneutic phenomenology was chosen as a suitable methodology for this research and was informed by the philosophical writings of eminent theorists in this area (Cohen, et al., 2000; Gadamer, 1976b; van Manen, 1990). It is a research approach focused on the examination of how individuals make sense of their life experiences and is aimed at exploring the meaning that individuals attach to these experiences. With this in mind, the principle aim of this research was to examine paramedics’ experiences of fulfilling their legislative powers under the Act and to reveal the factors that impact on their decision making in this context.

The following outlines the six steps proposed by (van Manen, 1990) that were adopted for this study. I have provided feedback information describing how each of these steps related to this study.

1. Turning to a phenomenon of interest

As previously discussed, I was motivated to undertake this study as it related directly to my involvement in the development, implementation and evaluation of the Ambulance Mental Health Strategic Plan and reflected my professional interest in the area of mental health care. In addition, this study was greatly influenced by other researchers who have previously sought to examine the phenomena of clinical decision making in the provision of pre-hospital mental health care (Shaban, 2005c, 2006; Townsend & Luck, 2009). These researchers have each argued the need for further research in this area of clinical practice. This research sought to specifically investigate the lived
experiences of paramedics as they make use of their mental health legislative powers in clinical practice.

2. Investigating experience as we live it
A range of data collection strategies was used in this study to reveal and capture the lived experiences of paramedics in this area of clinical practice. These approaches included semi-structured interviews to elicit the stories, narratives and experiences of each participant, observations to witness and observe participants in their own clinical world and the collection of demographic information for the purpose of describing the participants who took part in this study.

3. Reflecting of the essential themes which characterise the phenomenon
The identification, discovery and reflection of essential themes commenced during the interviews. Participants were prompted and encouraged to reflect more deeply on the pertinent themes that were being revealed. At the completion of each interview, audio-recordings were transcribed verbatim so the formal data analysis process could commence. This process involved the reading and re-reading of each transcript individually and collectively so that significant words, phrases and statements in the participants experience could be identified. Data collected during the observations (field notes) and my own personal notes that were made during each interview were incorporated into the process. (A full description of this stage of the data analysis process is provided under the sub-heading ‘Data Analysis Approach’).

4. Describing the phenomena-The art of writing and rewriting
Throughout different stages of this research, the process of writing and rewriting helped to enhance my understanding and knowledge of this lived experience. The act of writing down my evolving thoughts, interpretations and ideas forced me to ‘stare’ at what I had written, to ponder and reflect on these further. It was a process of
continuous refinement as I attempted to make external what was internal to me. It encouraged me to reflect at a deeper level on the significance of themes and sub-themes that were emerging and represented a core part of my hermeneutic dialogue with the data.

3 Maintaining a strong and orientated relation to the phenomenon
The long process, over many months, of reading and rereading interview transcripts and field notes allowed me to immerse myself in the lived experiences of each of the participants and helped to form and sustain a close and intimate relationship with the research data. The narratives and stories portrayed in these interviews and my own field notes were also relevant to my paid work with the Ambulance Service of NSW. This further fuelled my curiosity for wanting to understand participants' experiences at a deeper level.

4 Balancing the research context by considering the parts and the whole
Each participant contributed their own unique experience of the phenomenon under investigation. Understanding each of these experiences as a ‘whole’ and then as ‘parts’ and then comparing and contrasting this with the ‘whole’ and ‘parts’ of other participants, allowed these stories to be incorporated as a ‘whole’. (The importance of considering the ‘parts’ and the whole’ of the phenomena is provided under the sub-heading ‘Data Analysis Approach’).
4.5 Participants

This following describes the strategies used to recruit participants. It includes the inclusion criteria and a description of the participants.

4.5.1 Inclusion Criteria and Recruitment Strategies

Only qualified paramedics were invited to participate in this study. To be classified as a qualified paramedic in the New South Wales context, individuals must be employed by the Ambulance Service of NSW and be in receipt of a Certificate to Practice. To be eligible for a Certificate to Practice, paramedics must have completed, as a minimum, either the diploma of paramedical science course through the in-house ambulance vocational education training program or a university based undergraduate degree in paramedical science. Therefore, probationary and intern paramedics were not invited to participate in this study.

Inclusion criteria were that participants:

i. were qualified paramedics working in New South Wales, Australia

ii. had completed the mandatory one day mental health training program

iii. were in receipt of the required written authority to exercise emergency powers granted to paramedics under the Act.

4.5.2 Participant Description

There were a total of 13 participants involved in this study. The participants’ ages ranged from 25 years to 53 years, with a mean age of 42 years (see Table 3). There were eight male participants and five female participants (see Table 4)
Table 3: Age of participants

<table>
<thead>
<tr>
<th>Age group (years)</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-39</td>
<td>10</td>
<td>77</td>
</tr>
<tr>
<td>40-69</td>
<td>3</td>
<td>23</td>
</tr>
</tbody>
</table>

Table 4: Gender of participants

<table>
<thead>
<tr>
<th>Gender</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>8</td>
<td>62</td>
</tr>
<tr>
<td>Female</td>
<td>5</td>
<td>38</td>
</tr>
</tbody>
</table>

Table 5: Length of employment as a qualified paramedic

<table>
<thead>
<tr>
<th>Years working as a paramedics</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-9</td>
<td>9</td>
<td>69</td>
</tr>
<tr>
<td>10-29</td>
<td>4</td>
<td>31</td>
</tr>
</tbody>
</table>

At the commencement of the study, all participants were in full time employment with the Ambulance Service of NSW. The duration of employment as a qualified paramedic ranged from one year to 30 years. The mean length of employment was 12.5 years. Further information can be found in Table 5. All participants were qualified paramedics; five were classified as Intensive Care Paramedics. A summary of demographic information obtained from the demographic questionnaire is provided at Table 6.
TABLE 6: PARTICIPANT DEMOGRAPHIC INFORMATION

<table>
<thead>
<tr>
<th>PSEUDONYM</th>
<th>AGE</th>
<th>GENDER</th>
<th>CLINICAL LEVEL</th>
<th>QUALIFIED PARAMEDIC (Years)</th>
<th>INTERVIEW</th>
<th>OBSERVATION</th>
<th>HIGHEST QUALIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1M</td>
<td>49</td>
<td>Male</td>
<td>Intensive Care</td>
<td>26</td>
<td>Yes</td>
<td>No</td>
<td>Unknown</td>
</tr>
<tr>
<td>2M</td>
<td>37</td>
<td>Male</td>
<td>Intensive Care</td>
<td>6</td>
<td>Yes</td>
<td>No</td>
<td>Postgraduate Diploma (Education)</td>
</tr>
<tr>
<td>3M</td>
<td>39</td>
<td>Male</td>
<td>Intensive Care</td>
<td>18</td>
<td>Yes</td>
<td>No</td>
<td>Bachelor Degree (Applied Science)</td>
</tr>
<tr>
<td>4F</td>
<td>27</td>
<td>Female</td>
<td>Qualified Paramedic</td>
<td>6</td>
<td>Yes</td>
<td>Yes</td>
<td>VET: Diploma Paramedical Science</td>
</tr>
<tr>
<td>5F</td>
<td>25</td>
<td>Female</td>
<td>Qualified Paramedic</td>
<td>3</td>
<td>Yes</td>
<td>No</td>
<td>Postgraduate Diploma (Intensive Care Paramedic)</td>
</tr>
<tr>
<td>6M</td>
<td>30</td>
<td>Male</td>
<td>Intensive Care</td>
<td>3</td>
<td>Yes</td>
<td>Yes</td>
<td>Bachelor Degree (Clinical Science)</td>
</tr>
<tr>
<td>7M</td>
<td>34</td>
<td>Male</td>
<td>Intensive Care</td>
<td>9</td>
<td>Yes</td>
<td>No</td>
<td>VET: Diploma Paramedical Science</td>
</tr>
<tr>
<td>8F</td>
<td>31</td>
<td>Female</td>
<td>Qualified Paramedic</td>
<td>1</td>
<td>Yes</td>
<td>Yes</td>
<td>Postgraduate Degree (Health Science)</td>
</tr>
<tr>
<td>9M</td>
<td>54</td>
<td>Male</td>
<td>Intensive Care</td>
<td>31</td>
<td>Yes</td>
<td>No</td>
<td>Graduate Certificate (Clinical Education)</td>
</tr>
<tr>
<td>10F</td>
<td>35</td>
<td>Female</td>
<td>Intensive Care</td>
<td>12</td>
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<td>No</td>
<td>Bachelor Degree (Health)</td>
</tr>
<tr>
<td>11M</td>
<td>29</td>
<td>Male</td>
<td>Qualified Paramedic</td>
<td>3</td>
<td>No</td>
<td>Yes</td>
<td>Bachelor Degree (Forrest Science)</td>
</tr>
<tr>
<td>12M</td>
<td>40</td>
<td>Male</td>
<td>Qualified Paramedic</td>
<td>5</td>
<td>No</td>
<td>Yes</td>
<td>Bachelor Degree (Education)</td>
</tr>
<tr>
<td>13M</td>
<td>32</td>
<td>Male</td>
<td>Qualified Paramedic</td>
<td>6</td>
<td>No</td>
<td>Yes</td>
<td>Bachelor Degree (Unknown)</td>
</tr>
</tbody>
</table>
4.6 Data Collection and Management

4.6.1 Observations

An Ambulance Station in the Sydney metropolitan area was chosen as a particularly suitable location to conduct the observations because of the increased number of emergency mental health responses undertaken by paramedics when compared with other locations across New South Wales, Australia. Thus, we were more likely to be tasked to responses that were categorised as “Psychiatric”.

I liaised with the station manager at the Ambulance Station and arranged four dates that would be convenient to conduct the observations (i.e. 'Ride along' with a paramedic crew). The station manager sought approval from each crew member to be observed by me as they engaged in daily paramedic duties. Once approval was gained, the participants were provided with a copy of the Information for Participants sheet (Appendix B). Each observation lasted between three and six hours. Participants were required to give written consent for me to observe them engaging in clinical practice.

4.6.2 Interviews

The study employed two strategies to invite participants to participate in interviews.

i. Participants who took part in the observations were invited to take part in an individual interview at a later date. Those who expressed an interest in being interviewed were contacted at a later date so a convenient time could be arranged to conduct the interview.

ii. Participants who were known to have exercised powers granted to paramedics under the Act were sent an email invitation to take part in an interview
Participants were identified as having exercised their powers following the mandatory completion of recording requirements.

Participants who had expressed an interested in participating in the study were then provided with an Information for Participants sheet (Interview) (Appendix D). A total of ten participants took part in the interviews. Each interview lasted between 45-60 minutes.

4.7 Ethical Considerations

4.7.1 Informed Consent

Participants were provided with written information about the nature and purpose of the study. This information was reiterated verbally to participants prior to the commencement of the study. In addition, participants were provided with an opportunity to ask questions related to the study.

Participants were informed that I was undertaking this study as part of my enrolment in a higher degree research program and that their participation in the study was strictly voluntary and could be terminated at any point without reason. No participants withdrew from the study. Participants were required to sign a Participant Consent Form (Appendix E).

Although the paramedics were the principle participants in this research, it was necessary to gain consent from patients and family members who were involved in the interaction with the paramedic during the observation. To address this issue, on arrival at each incident, the participant (treating paramedic) followed usual protocol and introduced themselves and their partner. During these introductions, patients and
family members were informed that I was conducting research that required my
observation of paramedics as they engaged in clinical practice and that no personal or
other identifying information would be recorded during this observation. Permission for
this observation was sought from all patients and family members.

4.7.2 Confidentiality and Storage of Data

Confidentiality was maintained throughout the study. Each audiotape was transcribed
verbatim as soon as possible after interview. At transcription, all identifying details were
removed and replaced with pseudonyms. Digital audio recordings were destroyed once
this process had been completed. Identifying details were also removed from the
demographic questionnaires and replaced with pseudonyms. Pseudonyms were used
in all subsequent stages of the study.

Digital audio-recordings, transcriptions and all other study data were stored in a locked
cabinet at the researcher’s home office when not in use. An electronic file copy of all
study data (interview transcripts / field notes / demographic data) was stored on the
Ambulance computer system which was password protected. No third parties had
access to the audio tapes or transcripts.

The research proposal was approved by the Human Research Ethics Committee,
South West Area Health Service, NSW Health (Appendix F), the Human Research
Ethics Committee, University of Newcastle (Appendix G) and Ambulance senior
managers including the Chief Executive (TRIM 09/1850).

Subsequent approval was granted by the Human Research Ethics Committee, South
West Area Health Service, NSW Health, to recontact participants for the purpose of
obtaining additional demographic information, namely participant’s highest educational qualification (Appendix H).

4.8 Data Collection Approaches

The purpose of using a multi-perspective approach for data collection was to explore the experience of decision making by paramedics from different viewpoints. This approach is particularly compatible with the hermeneutic phenomenological framework of the research paradigm and serves to enhance access to participants, lived experiences (Cohen, et al., 2000) and increases the internal reliability and the authenticity of the findings (Denzin & Lincoln, 2000). In hermeneutic phenomenological research, this is most often achieved by interpreting and describing lived experience either by using language in the form of words to recount past experiences during interviews or by making observations of participants that are then inscribed using words and textual data (Khan, 2000). For the purpose of this research, it was thought that using different methods for data collection would also enable the development of a more detailed understanding and appreciation of the clinical environment that paramedics were reflecting upon when recounting their past experiences of clinical decision making in clinical practice. The use of observations, field notes and interviews are well suited to the hermeneutic phenomenological framework adopted for this study and afforded access to the lived experiences of paramedics.
In this section, the data collection approaches are described.

4.8.1 Demographic Questionnaire

Each participant was asked to complete a demographic questionnaire (Appendix I). The demographic questionnaire was designed to elicit basic demographic information that is, age, gender, level and years of experience of each participant.

Participants were asked to complete a demographic questionnaire at the commencement of the observations and interviews. The demographic questionnaire was not re-administered at the time of interview to those who had previously participated in the observation, as consent and demographic information had previously been obtained [at the time of the observation].

4.8.2 Observations

Some researchers claim that decision making in clinical practice is heavily influenced by the context in which it takes place (Shaban, 2011; Smith, et al., 2012). While I had previously worked on community and acute mental health teams, the specific context in which this research was undertaken, paramedic clinical practice, was largely unfamiliar to me. Therefore, the decision to undertake observations of participants for data collection purposes was to gain a contextual understanding and insight into the pre-hospital clinical environment and to observe paramedics as they engage in the act of decision making and problem solving. As Cohen et al. (2000) argues, “observations [as part of hermeneutic phenomenological research] are necessary to construct a field text, providing important context and source of information for the narrative data collected through interviews” (p. 64). Ajjawi (2007) also argued that the advantage of using observations in addition to other data collection methods is that much of the thinking
involved in clinical decision making in the clinical environment occurs swiftly, particularly with experienced clinicians.

At the commencement of each observation, participants were asked if they had read the ‘Information for Participants’ sheet and were required to sign a consent form. This was also an opportunity to provide a verbal account of the purpose of the research and to field questions from participants. During these discussions, I reminded participants that the purpose of the observation was simply to be observed engaging in normal operational duties. I did not participate or interfere with participants performing any clinical duties nor did I offer any clinical advice, opinion or direction. That said, I was aware that my presence within their clinical environment may have altered or influenced the behaviours or actions of the participants to the extent that the participants wished to be perceived in a particular light.

Each observation session took place in the inner Sydney metropolitan area. Due to the nature of pre-hospital care, the exact location continuously changed throughout the duration of each observation and was dependent upon the scene location of each patient. During each observation, I observed participants responding to a diverse range of clinical presentations which included both mental health and non-mental health patients.

During each observation, I maintained an appropriate distance from participants and patients. Typically this was approximately two to four metres. Between call-outs I sat with each crew and interacted in a friendly manner. Once patients who were transported to hospital were loaded into the ambulance vehicle, I rode in the front passenger seat of the ambulance vehicle, where I was able to continue to observe the participant-patient interaction from a distance. I did not interfere with this interaction nor did I record any patient identifying information or review individual medical records. On
one occasion, a patient had been left at the scene since his condition did not require transportation to hospital for further treatment.

Throughout the observations, I recorded field notes in a black bound paper reflexive diary and later recorded them on an electronic recording device. No electronic recording devices were used at any point during the observation. The field notes included, but were not limited to, descriptions of the actions and behaviours of paramedics, the physical environment and my own experience and perceptions of being an observer, including my feelings and thoughts. Importantly, recording field notes as well as personal reflections allowed me to recreate the environments in which paramedics operated and led to a better understanding of their experiences in these environments. These field notes also provided an opportunity to construct my own meaning of my experiences during the observation, for later reflection. The following provides two examples of field notes that were recorded:

*The physical environment was poorly lit and other then going back through the house, there was no noticeable exit points out from the backyard. There was an unleashed medium size dog present although it sat motionlessly under the outdoor table. There were two other males present and although intoxicated they were quite amiable and pleasant. I was also aware that the situation could change at any moment. I felt a sense of relief when we finally made our way back to the safety of vehicle out front. (Observation 3: Field Note)*

*The treating paramedic performed a brief mental health assessment, exploring the patient current self-report mood state, what were his current concerns, his level of risk of harm to self and others and previous medical history. During this assessment, the patient disclosed that he has a history of depression and had recently commenced treatment with anti-depressant medication. He denied any suicidal ideation, plan or intent. (Observation 2: Field Note)*

4.8.3 Interviews
In hermeneutic phenomenological research, semi-structured interviews provide an important opportunity for the researcher and participant to engage in a dialogue for the explicit purpose of eliciting rich contextual narratives that relate to participants’ lived experience of a particular phenomenon. The semi-structured interview is a conversational forum that encourages participants to speak freely and reflectively about their experiences in their own language (Cohen, et al., 2000; van Manen, 2007). It also allows the researcher to probe interesting and important areas as they arise as well as an opportunity for participants to introduce issues or ideas that the researchers may not have previously considered. In this regard, it is generally recognised in hermeneutic phenomenological research that interviews are often guided by the participants’ own interests and concerns that relate to the research topic. As a consequence this can produce unexpected and meaningful insights that may otherwise go unexplored.

For the purpose of this study, the semi-structured interview encouraged paramedics to reflect on their personal experience of clinical decision making in pre-hospital mental health care and provided participants with the flexibility to describe their experience without being confined by a traditional structured interview schedule. Thinking aloud about reflection-on-practice also has the advantage of being less intrusive to the clinical environment in which paramedics perform their duties and to the patients under their care.

An interview schedule was used for each semi-structured interview (Appendix J). The interview schedule contained questions that were intended to elicit important information that related to actual experiences of clinical decision making in the context of pre-hospital care, both in the general context of clinical practice and specifically in relation to pre-hospital mental health care. The interview schedule also covered areas
that are thought to underpin and support clinical decision making such as mental health training.

The questions included in the interview schedule were reviewed by my supervisors and two ambulance educators. The purpose of this review was to check the relevance of these questions to pertinent areas of clinical practice.

The interview schedule was intentionally structured to facilitate a casual interaction between myself and the participants, and to allow each participant the flexibility to engage in reflection in order to provide an account of their experiences. However, I did not adhere to the interview schedule at all times. For example, there were times when participants’ responses deviated from the interview schedule. If I thought their experiences were relevant to my study, they were encouraged to continue.

The interview questions were arranged in such a way as to first provide an opportunity for participants to reflect on their actual experiences of clinical decision making in pre-hospital care and the development of their clinical skills over time. It was felt that this would help participants become more relaxed while talking about their experiences of working as a paramedic in the general sense, before moving into areas that related to their actual experiences of clinical decision making specific to mental health care and use of their legislative powers under mental health legislation. I also chose to explore mental health care in the second part of the interview schedule as I felt it important to first explore broader aspects of clinical decision making in paramedic practice before honing in on a specific area. When structuring the interview, each of the questions, was open-ended in style so as to encourage participants to provide a full and descriptive response. Different types of semi-structured questions were included in the interview guide. These included, Descriptive questions (for example, Reflecting on your experiences can you tell me what skills are required for managing and treating
patients?), *Narrative questions* (for example, Can you describe for me the type of clinical presentations you enjoy treating and what makes these experiences stand out?), *Evaluative questions* (for example, Can you describe how your experiences approaching clinical decision making may have changed since becoming a qualified paramedic?), *Structural questions* (for example, Can you tell me about your experiences exercising your powers under the Mental Health Act? Can you walk me through this experience, what did you do?), and *Contrasting questions* (for example, Can you tell me how your management of mental health patients is different from that for non-mental health patients?). When formulating each question, an attempt was made not to make too many assumptions of participants’ experiences and tried not to direct them to answer questions in a particular way. I also avoided the use of emotive and pejorative language.

During the interviews, each paramedic was required to respond to a broad range of questions which was designed to illustrate information pertaining to emergency mental health care, paramedic clinical practice, use of the Act and mental health training. These included, but were not limited to:

i. Can you describe how your experiences approaching clinical decision making may have changed since becoming a qualified paramedic?

ii. Can you tell me about your experiences exercising your powers under the Mental Health Act?
   a. What makes this experience stand out?
   b. Can you walk me through this experience, what did you do?
   c. Can you tell me what influenced your decision to exercise your legal powers?
iii. Can you tell me about the training you have received in relation to pre-hospital mental health care? Has this changed the way you approach decision making when managing mental health patients?

The full interview schedule can be found in Appendix J.

In addition, clarifying questions were also used to elicit a deeper description of areas that were thought to be particularly interesting or relevant to the study and is a key feature of the hermeneutic phenomenological interview. These included, but were not limited to, i) Can you explain that in more detail? , ii) What do you mean? , iii) Why do you think that is? and, iv) How did that make you feel?

Interviews were held in quiet rooms on ambulance premises. Before each interview commenced, participants were asked if they had read and understood the ‘Information for Participants’ sheet outlining the aims of the study, previously provided to them. Participants were assured of their anonymity in the study and were encouraged to disclose and express any opinion without fear of being identified. In addition, participants were reassured that there were no right or wrong answers to the questions but rather that the interview served as an ideal opportunity for the participant to describe their own experiences. Participants were encouraged to draw upon relevant examples and real life experiences wherever possible.

Participants were required to sign a consent form before the study commenced. In addition, they were given the option of terminating the interview at any time. All interviews were recorded on a digital audio-recorder with the participant’s consent. Interviews lasted from 45-60 minutes. In consultation with my supervisor, it was determined that by the tenth interview, no new emerging themes or relevant themes
were being identified. This was evidence that the data collection had yielded a sufficient quantity of depth and richness of information.

### 4.9 Data Analysis Approach

The following section provides a detailed description of the stages involved in reflexive data analysis including the process of identifying themes and sub-themes that describe the phenomena of paramedic clinical decision making in the context of pre-hospital emergency mental health care. It must be acknowledged that while an attempt was made to remain faithful to the participants accounts of their experiences of the phenomenon under investigation (including the meanings they attribute), the final outcomes in relation to the analysis of the research data reflects only my own interpretation of the meaning of this phenomenon. Other researchers may therefore derive different meanings and interpretations in this data. Kvale (2008) asserts that when analysing interview data, the analysis is centred on constructing the meanings of the interviews, “bringing the subjects own understanding into the light as well as providing new perspectives from the researcher” (p. 102). Similarly, van Manen (1990) had previously argued that “when we analyse a phenomenon, we are trying to determine what the themes are, the experiential structures that make up that experience” (p. 79). With is in mind, I am confident that my analysis and interpretation of the research data has been able to capture and represent significant aspects of the participants’ experiences and the meanings that these experiences hold for them. This was supported by adopting a number of important strategies to enhance the rigour and trustworthiness of this study. These strategies are discussed in more detail under the sub-heading *Rigour and Trustworthiness*.

#### 4.9.1 Demographic Data
The intention of the information derived from the participant questionnaire was to provide a basic description of the participants who took part in the study to ensure diversity in the sample and to provide detailed background of participants on which to foreground the findings. This data was not further analysed nor did it undergo any statistical calculation.

4.9.2 Observation and Interview Data- Stages of Analysis

The process of undertaking the analysis of the data from a reflexive hermeneutic phenomenological perspective required me to dedicate periods of quiet reflection and considerable periods where I was able to mull over and immerse myself in the experiences of each of the participants. This period also enabled me to explore my own preconceptions as well as emerging understanding of the phenomenon throughout the duration of the study. It also enabled me to construct meanings and narratives that were able to capture the experience of this phenomenon as it is experienced by the participants.

The key feature of hermeneutic phenomenological analysis is that the researcher is interested in examining and understanding the participants’ realities or more specifically, the texture and essence of their ‘lived experience’. All transcribed data was analysed in keeping with the thematic data analysis approach proposed by (van Manen, 1990) and the following hermeneutic phenomenological techniques developed by Gadamer (1976a) that represent the circular and dialectic nature of the interpretation process: the hermeneutic circle (the interplay between the ‘part’ and the ‘whole’), fusions of horizons (the fusion between the participant’s experience and the researcher’s understanding of that experience while maintaining a sense of openness to the worldview of others), prejudice (the background and fore-knowledge that we bring to our interpretation of the world) and the act of dialogue (the process of dialogue
between the researcher and the text and the gradual discovery of meaning that occurs). Employing these approaches enabled me to engage in a dynamic and interpretative dialogue with the data. When I commenced the formal data analysis process, I had vague and tentative ideas about meanings that had already been elucidated to me during the interviews and observations. The proceeding process of data analysis allowed me to scrutinise these ideas and meaning, and subject them to further inquiry whilst opening myself up with new insights and understandings. It was particularly interesting to note that the data collection and data analysis stages of this study had effectively rendered me a participant in my own study, a process of striving to make sense of the participants’ meanings of their experiences whilst grappling to make sense of my own. According to Finlay (2003), this represents the intersubjectivity of hermeneutic reflection or more simply, the relationship between the researcher and researched.

The following thematic analysis approaches were adopted for the identification of themes and sub-themes in the research data.

4.9.2.1 Isolating Thematic Statements

Van-Manen (1990) proposed that pertinent themes can be derived or isolated from the data following three distinct approaches. Each approach provides the researcher with the opportunity to analyse the data in a uniquely different manner and in doing so the researcher is able to elicit different pieces of information from each approach.

4.9.2.2 The Detailed Reading Approach

A dense collection of texts was yielded for each participant. They were constructed from interview transcripts and field notes recorded during each observation. Field notes
were particularly useful for reconstructing the clinical environment in which paramedics engage in clinical decision making. When analysing data in the form of sentences and clusters of sentences, van-Manen (1990) proposed that researchers should continuously ask: “What does this sentence or sentence cluster reveal about the phenomenon” (p. 93)? I meticulously read and re-read each interview transcript and assigned key words or descriptions to whole or parts of sentences and paragraphs that appeared particularly relevant and interesting. This stage of the data analysis is referred to by van-Manen (1990) as immersion. This was a laborious process but helped to discover uncover some preliminary ideas about the lived experience of each participant as well as the similarities and differences that existed among each of the lived experiences. These were then transferred into a table and each assigned a *concept*. This method formed part of my initial approach to thematic data analysis.

### 4.9.2.3 The Selective or Highlighting Approach

During this process I also began by highlighting sections of the interview transcripts and field notes considered meaningful or potentially relevant to the study. During this phase, I paid particular attention to key words, phrases or explanations contained in the text that appeared of significance to this study. I also focused on identifying the structures of experience and searching for essential and incidental themes and descriptors of experience, and paid particular attention to how the data was speaking to me. This process was heavily influenced by my own personal history and knowledge and represented the dynamic nature of the hermeneutic circle, it resembled my hermeneutic conversation with the data. Highlighted sections of the interview transcripts and field notes were copied from the text recorded in a file. Each extract was accompanied with my preliminary comments down the right hand side of the
document. This stage of the analysis was preliminary centred on taking a broad sweep of the data and enabled me to record my initial thoughts and comments, that either referred to the participants' words, their use of language and metaphors or my own thoughts, understandings and opinions, which were based on theoretical and personal knowledge as they relate to each highlighted section.

For example:

They can't fix the patient and so they're frustrated by these patients. So the Mental Health Act enables them to deal with it differently but it puts them in their care rather than somebody else's care and bringing it to their care sometimes they resent that and resist that because now I have to do something with something that I can't fix. 1M

In the preliminary analysis, review of the transcripts highlighted meaningful statements. They were cut and pasted, and became linked to the key words for example, ‘Frustrated and Challenged’ which lead to the concept, ‘Cognitive Dissonance’. In the final analysis, this highlighted quote became part of the sub-theme, ‘Facing Ethical Dilemmas’ and the theme ‘Being Stuck Between a Rock and a Hard Place: Facing Ethical Dilemmas and Stigmatisation’.

At the end of this process, all extracts from the text were grouped under relevant constructs for each sub-group.

4.9.2.4 The Holistic Reading Approach

The final approach to thematic data analysis van-Manen (1990) suggests is the “holistic reading approach” and is performed at the end of the data analysis (p. 92). This approach refers to the in-depth analysis of the text as a complete whole and examines
which features of each sentence or paragraphs capture the fundamental meaning or importance of the text.

The following illustrates this approach. In attempting to discover salient meaning in the data, I identified ‘Being stuck between a rock and a hard place’, to be a common and therefore important representation in the data. This is because the majority of paramedics in the study shared the experience of feeling uncomfortable engaging in decision making with respect to use of legislative powers under the Act, yet being required to use it. I decided that ‘Facing Ethical Dilemmas’ was a suitable sub-theme to group similar experiences because it reflected the emotional state of cognitive dissonance which paramedics were found to experience in this context. During each stage of the data analysis, I adhered to the philosophical principle of the hermeneutic circle, thus moving back and forth from the parts to the whole of the research text and taking into consideration the contexts that exist in between. This enabled the phenomenon of paramedics engaging in clinical decision making with respect of use of the legislative powers under the Act to be illuminated.
CHAPTER FIVE: FINDINGS

5.1 Perceptions of Clinical Decision making

The aim of this section is to provide a comprehensive analysis and interpretation of perceptions of clinical decision making relating to the provision of pre-hospital mental health as it is experienced by those who participated in this study: the participants and the researcher. The information provided in this section is derived from the narratives extracted at interview and the field notes recorded during the observations.

The analysis and interpretation of the data revealed four themes and 10 sub-themes that described the phenomena of how paramedics engage in clinical decision making in relation pre-hospital mental health care and in particular, when fulfilling their legislative powers under the Act.

The first theme ‘Managing the scene with a person thought to have a mental illness’ contains four sub-themes; ‘Managing the Scene’, ‘Establishing a Connection’, ‘Assessing the Presentation’ and ‘Using a Stepped Approach to Decision making’. This theme examines how paramedics approach decision making in relation to pre-hospital mental health care and the key features of the clinical presentation that paramedics reveal as influencing their clinical decision making in this context.

The second theme ‘Lacking adequate Clinical Knowledge, the Significance of Experience and Working with the Act and protocols’ contains two sub-themes; ‘Finding clinical knowledge inadequate’ and ‘Working with the Act and protocols’. This theme reveals two factors relating to clinical knowledge that can impact on clinical decision making; the degree of clinical knowledge a paramedic possesses and the use and reliance on decision aids to enhance clinical knowledge and to support decision making.
The third theme ‘Decision making at the Interface’ contains one sub-theme; ‘The role of others’. This theme describes the varied roles and influences that other key stakeholders play in relation to the provision of pre-hospital mental health care.

The fourth theme ‘Being stuck between a rock and hard place: Facing ethical dilemmas and stigmatisation’ contains three sub-themes; ‘Facing ethical dilemmas’, ‘Dealing with personal beliefs and attitudes’ and ‘Allowing risk aversion to cloud clinical judgement’. This theme focuses on a range of factors relating to personal beliefs, attitudes and emotions that may influence clinical practice and decision making in relation to pre-hospital mental health care. It also examines some of the personal challenges and dilemmas that paramedics may experience in this context and the strategies they rely upon to deal with these.

While themes are interrelated, they have been referred to separately in order to enhance the representation of the phenomena under investigation. The themes and sub-themes are provided below in Table 7 and are discussed and examined in more detail thereafter.
### TABLE 7: Themes and Sub-themes for How Paramedics Engage in Clinical Decision making in Relation to Fulfilling their Legislative Powers under the Mental Health Act 2007 (NSW).

<table>
<thead>
<tr>
<th>THEMES</th>
<th>SUB- THEMES</th>
</tr>
</thead>
</table>
| 1. Managing the Scene with a person thought to have a mental illness | 1.1 Managing the Scene  
1.2 Establishing a Connection  
1.3 Assessing the Presentation  
1.4 Using a Stepped Approach to Decision-Making |
| 2. Lacking adequate Clinical Knowledge, the Significance of Experience and Working with the Act and Protocols | 2.1 Finding Clinical Knowledge inadequate  
2.2 Working with the Act and Protocols |
| 3. Decision making at the interface | 3.1 The Role of Others |
| 4. Being stuck between a rock and a hard place: facing ethical dilemmas and stigmatisation | 4.1 Facing Ethical Dilemmas  
4.2 Dealing with Personal Beliefs and Attitudes  
4.3 Allowing Risk Aversion to Cloud Clinical Judgement |
5.1.1 Theme 1: Managing the Scene with a Person Thought to have a Mental Illness

The following describes the features of the clinical presentation that paramedics revealed as influencing clinical decision making in relation to pre-hospital mental health care. These features relate to scene management, establishing a rapport and using communications skills, assessing the clinical presentation and subsequent decision making strategies.

Sub-theme 1.1: Managing the Scene

The provision of care in the pre-hospital setting is often delivered in settings that are unpredictable and chaotic, environments that for many paramedics are often perceived to be exciting and dynamic yet at times dangerous and frightening. Effectively managing a scene was found to relate to a range of factors in their immediate physical environment. These factors included patients who are in their care, bystanders, animals, objects or other hazards. The perception and belief that paramedics needed to be able to identify situational or environmental hazards that may present a danger to them, featured predominately in the data. The descriptions of the pre-hospital environment contained in the following extracts provide a revealing insight into this clinical world:

*When we arrived on-scene, there was a crowd of about 15 intoxicated party go-ers lingering around outside the pub. There were four police officers on-scene and standing with the patron who had been assaulted. I noticed that further up the street there were two males arguing and pushing each other around, eventually one of the police officers instructed them to move along in opposite directions. (Observation 2:Field Note)*

*The physical environment was poorly lit and other than going back through the house, there was no noticeable exit points out from the backyard. There was an unleashed medium size dog*
present although it sat motionlessly under the outdoor table. There were two other males present and although intoxicated they were quite amiable and pleasant. I was also aware that the situation could change at any moment. I felt a sense of relief when we finally made our way back to the safety of vehicle out front. (Observation 3: Field Note)

These descriptions illustrate that in the pre-hospital environment, even the most seasoned and experienced paramedics at times find their clinical world scary and unsettling, where concerns about their own safety heighten and become a distraction from their clinical duties:

If you can’t talk to your patients to be able to get the information that you need, if you can’t de-escalate a situation, you’re going to get yourself hurt. (Interview 4F)

…it’s just a problem for me [behaviourally disturbed patients], it’s going to make a mess of my truck, it’s going to maybe hurt me. (Interview 1M)

For paramedics, promoting a safe scene environment was viewed as a priority in the provision of pre-hospital mental health care. Thus, reflecting how decision making by paramedics is often guided by factors to keep everyone safe:

We have to protect every single member of the community - including patients with mental health issues - and our role is to first of all protect them from their own action. (Interview 2M)

In the extract above, the paramedic’s belief that they were responsible for protecting patients from their own actions suggests that some paramedics consider their role to be both caregiver and protector.

It was also noted during the observations, that a useful strategy for creating a safe scene environment was to encourage ambulatory patients to walk to the ambulance vehicle so the patient assessment could be performed:

Eventually the patient agreed to come downstairs and meet with the paramedics. Once downstairs, she was then asked to accompany them to the ambulance so they could ‘have a
proper chat somewhere private’. I wondered if this was used as a strategy to prevent patients
from absconding if they later changed their mind. (Observation 2: Field Note)

The observation above illustrates the persuasive and tactful manner in which
paramedics approach rapport building in order to gain the trust and cooperation of
individuals who are thought to have a mental illness. Being too assertive or forceful
with mental health patients may discourage them from engaging in a dialogue.

I wondered if the paramedic’s comment above, ‘have a proper chat somewhere
private’, may also imply that paramedics have a symbolic attachment to their
ambulance vehicle, a private place that may be perceived to be familiar, safe and
secure within broader clinical environments that has been described as at times unsafe
and unsecure.

At times, behaviourally disturbed patients can be perceived as being unpredictable and
pose a potential threat to their own safety. In the context of pre-hospital mental health
care, police were found to play an important and supportive role in the joint
management of behaviourally disturbed patients. Generally, the availability and
responsiveness of police assistance was seen as providing a degree of reassurance to
paramedics: a useful means of assisting paramedics to manage and control difficult
and challenging situations. Accordingly, knowing when to request back up assistance
was considered to play an important role in scene management. It also recognises that
some situations involving acutely disturbed patients are beyond the sole responsibility
of paramedics. The decision of when or under what circumstances to request back up
assistance, was found to vary among paramedics. The degree of clinical experience
and confidence among paramedics appeared to influence this decision making:

…sometime you’ll see the younger, inexperienced officers play that card too soon and
sometimes you see a negative effect on the patient once they hear the word or term ‘police’. A lot
of the times you cannot talk down but you can reassure mental health patients that what you’re offering them and what you’re trying to do for them is a better option than not choosing to go that way. (Interview 7M)

The paramedic’s description above ‘inexperienced officers play that card too soon’ appears to have metaphorical weight in this context. It represents decision making as a game in which paramedics and patients are both engaged. The decision to request police assistance is seen by some paramedics as the ultimate ‘trump card’, an act that will outrank any subsequent responses (actions or behaviours) patients may choose to engage in.

In addition, when responding to patients with suicidal ideation, informing them that police assistance would be sought if they continued to be non-compliant, was considered a useful strategy to encourage compliance. This approach was a way of escalating their response accordingly and demonstrated to patients the seriousness taken by paramedics in regard to patients considered to be at risk of suicide or self-harm:

> Once we had arrived on-scene, the female patient who was expressing suicidal ideation was also refusing repeated attempts by the crew to gain access to her apartment. She [patient] insisted that she didn’t need to go to hospital and that the friend who called Triple Zero was overreacting. The crew reaffirmed to the patient, that given the information they had, they needed to speak with her in person. Eventually, the treating paramedic informed the patient that unless she was willing to talk to them in person about her current circumstance, they would be forced to request police assistance. This seemed like a familiar situation to me and I found myself wanting to step in and assist. It also reminded me how much I had missed doing clinical work. Afterwards, I wondered whether I was at risk of losing my own clinical skills, skills that I had crafted over time

[Observation 2: Field Note]

However, there were specific types of incidents, such as those involving patients who had been assaulted, that mandated paramedics always notify the police:
The treating paramedic informed the patient that she was legally required to notify the Police of this assault. The patient didn’t seem to mind though, I did wonder whether there might be occasions when patients would react negatively to this news and which would consequently place paramedics in potentially dangerous situations. (Observation 2: Field Note)

In relation to the involvement of police, paramedics were found to be in unique positions to influence that certain decision making outcomes that are in the best interest of patient care occur. For example, acting as an advocate for patients in custody who require transportation to hospital for further assessment:

there’s three words you can tell a police officer and he will agree with you in everything and that’s ‘death in custody’. You say those three words and they will agree with anything you want to do. So I said that to this copper. I said, “Mate you don’t want a death in custody tonight do you?” I said, “I'm taking him to hospital”. (Interview 1M)

In the above extract, the paramedic’s comment ‘death in custody’ is an example of how paramedics can manipulate others as a means of facilitating that certain decision outcomes occur, particularly those that are in a patient’s best interest. In this example, it appears the paramedic was attempting to evoke fear in the police officer by portraying a likely scenario that must have been both real and frightening for the police officer involved. This extract also illustrates the often hierarchical nature of inter-agency responses to mental health emergencies that occur in the community and the degree to which paramedics are able to exercise authority and control over other agencies in these circumstances.

Sub-theme 1.2: Establishing a Connection

While clinical knowledge was found to influence decision making and consequently the management of mental health patients, most responses indicated that use of advanced communication skills, including active listening and ability to assess non-verbal behaviours, aided in the establishment of a therapeutic rapport with mental health
patients, and therefore was a major determinant to effective decision making. In situations where paramedics are unable to establish a meaningful rapport with patients, decision making and patient care can then become significantly compromised:

*The most important skills around mental health are actually communication skills.* *(Interview 3M)*

*Communication skills, absolutely. This job is – 80% of it is communication.* *(Interview 4F)*

The common belief shared among paramedics that effective communication skills play a critical role in the engagement and management of mental health patients, underscores the significance that paramedics place on the ability to establish a meaningful interpersonal connection with patients.

It was noted during the observations that the use of informal and jovial language by paramedics was often found to be an effective communication style when establishing a discourse with patients:

*Obviously matching the language to the patient. If they’re not going to understand the terminology then you bring it down to whatever level they need to understand what you’re saying.* *(Interview 10F)*

*The patient had been involved in an altercation with another intoxicated patron at the hotel. He had sustained an upper eye injury which was bleeding profusely. While attending to the patient’s injury, the treating paramedic relied on humour as a strategy to calm the patient. The patient seemed to respond well this, laughing occasionally and quipping that ‘gotta a lot of respect for you guys [paramedics].* *(Observation 2: Field Note)*

*When making contact with the patient, the treating officer used very informal, almost humorous, banter. This seemed to facilitate a positive rapport with the patient, potentially reducing the likelihood that he might become aggressive and difficult to manage. It also seemed to work really well in getting the patient to comply with her requests for information. During the journey to the hospital, the patient and paramedic appeared to chat freely, always casually, as he provided more information about the circumstances which lead to the assault.* *(Observation 3: Field Note)*
The reliance on casual humour and informal language to establish a rapport with patients appears to be motivated by the desire of paramedics to be perceived by patients and others at the scene as friendly and non-threatening. As the extracts above illustrate, patients often respond well to this form of interaction and are therefore, more likely to engage with paramedics in a positive manner.

The benefit of advanced communication skills was found to extend beyond the paramedic-patient relationship. In particular, as the response to mental health emergencies in the community often involves other agencies such as police or community mental health teams, decision making could be adversely impacted if the interpersonal relationship between other frontline agency workers was poor:

> If you can’t liaise with other services around the area then you’re not going to work effectively as a team. *(Interview 4F)*

Since the provision of pre-hospital care is delivered in diverse community settings, paramedics can face particular challenges when communicating and interacting with individuals from socio-economic and cultural backgrounds that are different from their own. Therefore, the selection and modification of syntax and vocabulary was viewed as an important part of the interview discourse between paramedics and patients. Consequently, it appears that paramedics may need to continuously evaluate the extent to which a patient is able to comprehend what is spoken and if necessary, modify their use of language accordingly to improve the paramedic-patient discourse:

> Obviously matching the language to the patient. If they’re not going to understand the terminology then you bring it down to whatever level they need to understand what you’re saying. *(Interview 10F)*

> I noticed that the treating officer had used basic English when interacting with this heavily intoxicated patient. This appeared to enable him to elicit the information they needed to form part
of their clinical assessment. In fact, at times his tone was found to take on a directive manner such as ‘Listen to me, I need you to sit down on the stretcher for me’. (Observation 2: Field Note)

Responses suggested that if paramedics experience difficulties initiating a dialogue with mental health patients it could adversely impact on their ability to perform the patient assessment and thus their ability to engage in effective decision making. In some circumstances, this could even limit the ability of paramedics to promote a safe scene environment, thereby exposing them to an increased risk of injury. As a result, having the competency and skills to de-escalate difficult and challenging situations is considered to be a core skill of a confident and experienced paramedic:

If you can't talk to your patients to be able to get the information that you need, if you can't de-escalate a situation, you're going to get yourself hurt. (Interview 4F)

Paramedics viewed an ability to empathise as being a key determinant in developing rapport with mental health patients. This ability was often dependent upon the degree to which paramedics were able to empathise with the patients’ situation:

You have to like people. If you don't like people you're not going to survive this job.

(Interview 4F)

Probably some sort of level of compassion to be able to understand people's problems.

(Interview 6M)

The focus during the initial conversation at the scene appeared to centre on identifying what the patient perceived to be the presenting problem. This suggests that patients must be given a voice and an opportunity to tell their story. This was only possible for those patients who displayed a degree of insight into their current circumstance or those who were willing to express their concerns openly:
It’s about communicating respect and empathy for the person in their situation and their environment, It’s about finding out what their concerns are. *(Interview 3M)*

managing mental health, It’s more about relating on a personal level, finding their own self-interest in the situation and bringing that to be the focus, *(Interview 5F)*

Paramedics reported the duration of time on-scene was generally longer for mental health patients compared with non-mental health patients. This may reflect the sensitivity and complexities of issues that are often involved in the provision of mental health care. The decision by paramedics to remain on-scene for an extended period of time appeared to be motivated by a desire to enhance the therapeutic relationship with a patient. As illustrated in the extracts below, this therapeutic relationship can be greatly enhanced by acknowledging and by demonstrating respect for a patient’s reality, their sense of autonomy and their environment. Consequently, this was found to have a positive impact on subsequent decision making outcomes:

*It took approximately ten minutes, talking with patient through the intercom system, before she [patient] eventually agreed to come down stairs and talk with the paramedics. Once downstairs, it took some careful negotiating with her before she finally agreed to accompany them [paramedics] to the ambulance. Throughout this dialogue, she was adamant that she didn’t need to go to hospital and just wanted to go back upstairs and go to bed. It took what seemed to be ten-fifteen minutes of negotiating with her before she eventually agreed to be taken to hospital.* *(Observation 2: Field Note)*

*you need to be able to talk clearly about what it is that you’re doing and what you want them to do because you’re not in this controlled environment, you’re in somebody’s house. They may not want to go to hospital, they may not know why you’re there.* *(Interview 8F)*

*If you realise - if they need to go to hospital and they're not going to go, then you need to then turn around and , "Try and talk to them for 20 minutes or half an hour” because, again, you can’t rush mental health patients. Mental health cases take as long as they take. If you start pushing and rushing and yelling and screaming, it's a waste of time.* *(Interview 9M)*
An extended time on-scene was found to influence decision making outcomes in relation the use of the Act. In these circumstances patients, who would otherwise have been detained as an involuntary patient under the Act, maintained their civil liberty and were transported voluntarily to hospital for further assessment. Where practicable, the role of paramedics appears to be focused on encouraging and guiding patients during the decision making process so that they can ideally make informed decisions themselves:

*It took quite a bit of time before the patient agreed to accompany the paramedics to the ambulance. She was adamant that she didn't want to go to hospital because she wasn't a danger to herself. The paramedics informed her that given she had previously threatened to harm herself, they were required to transport her to hospital for an assessment. Eventually she [patient] relented and agreed to be taken to hospital as a voluntary patient.* *(Observation 2: Field Note)*

*There is many other incidences where I have got close to using a section 20 [involuntary provision of the MHA] but I didn't because we spent that extra time on-scene trying to convince patients.* *(Interview 2M)*

However, paramedics can find themselves in situations that can cause them to feel frustrated by time taken to encourage compliance of mentally ill patients who require conveyance to hospital for further assessment.

Notwithstanding the above, the majority of responses indicated that paramedics experienced a sense of discomfort when engaging in a dialogue during the patient assessment and examination process. For many paramedics, engaging in a dialogue with mental health patients evoked strong feelings of discomfort, and in some cases, a genuine fear that they might unintentionally provoke and ignite a rage that they perceive may exist in patients who are thought to have a mental illness:

*…when it comes to mental health, you have to watch almost every word you say. You have to direct the conversation in such a way that you're not going to get them too upset so that they*
explode and get violent in the car or they’re not going to get so depressed that they’re going to want to try and jump out of your car or hurt you or hurt themselves.  *(Interview 4F)*

It was also interesting to note in the extracts below that some paramedics described the reactions and beliefs of colleagues regarding mental health care in the second and third-person context. This suggests that some paramedics have a preference for distancing or even disassociating themselves from colleagues whom they feel dislike the responsibility of caring for mental health patients or who find these interactions difficult and challenging to manage.

*I think a lot of ambulance officers are uncomfortable asking questions of patients who are mentally ill because it’s an illness that you can’t see and you can’t measure and you can’t quantify it in any way, and it’s often quite uncomfortable to bring up certain topics.*  *(Interview 5F)*

*I guess, a lot of people find it difficult to communicate with people because they don’t understand and they’re a little bit scared of what’s going to happen if they do broach certain topics.*  *(Interview 6M)*

…it’s kind of overwhelming. You often get afraid of saying the wrong thing and then, you know, sometimes you do say something and they do go off sort of thing and then you sort of thing, “oh my god, I shouldn’t have said that”.  *(Interview 8F)*

In addition, attempting to predict how mental health patients might react to questioning during the patient assessment and examination meant that some paramedics felt acutely conscious and mindful of their own behaviour and actions during these interactions. This meant that some paramedics censored how questions that were directed at patients were framed. Under these conditions, the decision making process appears to be an unsettling ordeal for some paramedics:

*So every time you think about what you’re going to say or the question you’re going to ask next, you have to double think about it.*  *(Interview 4F)*
The delivery of pre-hospital mental health care was found to require a significant amount of emotional investment for paramedics. As a consequence, this could have a negative emotional impact on some paramedics treating mental health patients, thus impacting on the ability of those affected to engage in effective decision making:

So trying to give out that empathy and that compassion and that amount and doing all that juggling at the same time is exhausting. To do a full day of mental health, I'd probably go home and cry because it would just absolutely drain me. (Interview 4F)

On the other hand however, some paramedics were found to experience a positive emotional response when called upon to care for and manage mental health patients:

And it represents [introduction of new legislative powers for paramedics], I think, a new age of community responsibility for paramedics and I think that's professionally quite a boost for what we do. (Interview 3M)

I find a lot more challenge in dealing with someone who's emotionally disturbed or are behaviourally disturbed. I find that more interesting. (Interview 3M)

A number of paramedics expressed concern that if mental health patients had previously experienced their treatment by paramedics in negative terms, it would likely discourage patients from engaging in help seeking behaviours in the future and would also have implications for paramedics in future being able to establish a therapeutic rapport. This concern about awareness on the impact of future paramedic-patient dynamics was found to influence current decision making:

...[The] patient remembers how the paramedic treated them previously - if they're being treated badly or they've been offended or they've been rushed into things, they will remember it. You really have to be mindful that to make your job and your colleague's job easier, you have to remember that they will present to a paramedic in the future as well and if you break their trust and that relationship in the first instance, they will remember and next time they might not even call you. (Interview 2M)
…what we can do as frontline people providing intervention to make the whole transition easier for them; to make it a more pleasant experience. I guess to give them an experience that is going to make them likely to call again. (Interview 5F)

As further illustrated in the extracts above, the provision of pre-hospital mental health care can often be a distressing experience for those who are involved. At times, it can be a difficult path that paramedics must learn to navigate: a dual role of being caregiver and controller, and a guardian verse adversary. The need to provide appropriate care and treatment to patients in a manner that is both respectful and compassionate must be balanced with the need to preserve and safeguard the fragile trust that is formed in the clinician-patient relationship.

Sub-theme 1.3: Assessing the Presentation

Once the determination has been made that the scene is safe and an initial rapport has been established with the patient, the paramedic’s focus shifts to gathering relevant information that relates to the patient’s clinical presentation. Responses revealed that range of patient-centred factors guide this process and influence the decision making:

The treating paramedic performed a brief mental health assessment, exploring the patient’s current self-report mood state, what were his current concerns, his level of risk of harm to self and others and previous medical history. During this assessment, the patient disclosed that he has a history of depression and had recently commenced treatment with anti-depressant medication. He denied any suicidal ideation, plan or intent. (Observation 2: Field Note)

Generally, the process was also found to relate to the patient’s physical appearance and their mental state and behaviour:
…their mannerisms, behaviour, appearance, what they’re saying, their thoughts, medical history. Sort of an accumulation of all that kind of rolled into one. (Interview 6M)

Looking at their general demeanour; are they anxious, are they quite calm? Are they organised and ordered or are they completely disorganised and dishevelled. You can get a fairly good indication of what's happening from that. (Interview 10F)

For most paramedics in this study, their visual gaze during these encounters was on the physical appearance of mental health patients as this was considered to be a primary source of information to inform decision making, in particular, whether patients appeared unkempt or dishevelled. This process resembles the scanning of the physical scene environment for important cues, that is, how is the patient presenting, what does their physical appearance reveal, what is the environment in which they are located:

So when you're talking to someone who may have a mental health condition, you know, you're looking at their clothes, you're looking at the state of their feet, you're looking at - have they showered? (Interview 4F)

that they haven't been looking after themselves, they haven't been looking after their personal hygiene, they haven't been showering. (Interview 10F)

The physical appearance of patients engaging in physical self-harming behaviours also provided paramedics with a source of information to guide and inform subsequent decision making:

…but from the state that she was, she had a bit of cuts on her head from the banging on the wall (Interview 2M)

In addition, assessing whether the patient’s thoughts and emotions were congruent with their behaviour was used as an indicator of specific psychiatric conditions and was seen as aiding decision making:
So their behaviour, their emotions, whether they're matching, whether they're not matching - what they're saying isn't matching what they're portraying. Are they organised and ordered or are they completely disorganised and dishevelled. You can get a fairly good indication of what's happening from that. *(Interview 10F)*

Being able to recognise potential barriers that may impact on the availability of relevant information was found to be an important feature of the patient assessment process:

*Why can't I get the correct information? Is it a language barrier? Is it the patient isn't cooperative?* *(Interview 10M)*

Importantly, experience was found to improve the ability of paramedics to quickly identify salient visual cues in the pre-hospital clinical environment. This experience of the clinical environment helps to make the patients they are exposed to, feel more familiar:

*Just the tiny little things that you pick up after being on road for years, but picking those things up earlier on, they'll get picked up quicker.* *(Interview 4F)*

For some paramedics, establishing a provisional or working diagnosis was found to enhance patient assessment. This enabled some paramedics to tailor their line of questioning as a means of exploring specific aspects of the patient’s presentation such as the degree to which a patient may be exhibiting certain characteristics that are consistent with a particular diagnosis:

*…asking them what thoughts have they had. If we suspect that they're schizophrenic or we know that they're schizophrenic, you know, are they hearing any voices, are they having any thoughts that they don't think are rational.* *(Interview 10F)*

After arriving on-scene, the crew quickly ascertained that the patient had a depressive disorder and that her self-harm attempt was in the context of a recent relationship breakdown. Identifying the patients history of depression seemed to influence the patient assessment, enabling the paramedic to tailor his questioning on exploring aspects of the patients history of depression,
what treatment she was presently taking and her level of risk of self harm. (Observation 1: Field Note)

In some circumstances, paramedics have to rely on information obtained from other parties [bystanders and family members] to inform their decision making. In these circumstances, other persons who may be unrelated to patients can quickly become a critical part of clinical encounters. Importantly, they can become a valuable source of knowledge, information and support for paramedics to use to aid subsequent decision making:

Sometimes they won't talk to you so you've only got information of bystanders to go by. (Interview 6M)

...bystanders and family members can often give you a really good history if the patient can't, for whatever reason. (Interview 10F)

The patient’s middle aged daughter was on-scene and was able to provide the paramedics with an in depth medical history about the patient. This seemed particularly useful given the patient was quite elderly and spoke poor English. (Observation 4: Field Note)

Relevant information recorded during the initial emergency call may also be relied upon as collaborative information to inform decision making:

Sometimes it’s what the person calls or says to 000, information we get on the MDT because you might get to them and they’ll deny ever having called or done anything but you’ve got their name and what they’ve said they’re going to do. (Interview 6M)

Whilst driving to each scene, the Control Room provided the crew with summary information obtained during each Triple Zero call. This information was relayed to the crew via the on-board computer system. (Observation 4: Field Note)

Gathering relevant information that relates to the patients medication regime was also found to contribute to the patient assessment and was used to inform subsequent decision making:
Medications, knowing what medications are for when you look at a patient’s bag of tricks. You can often work out what their history is to some extent, and what their issues are. (Interview 10F)

During the patient assessment, the paramedic sought information about any medications he was current taking. The patient disclosed that he was taking medication to treat hypertension. This information seemed to influence the decision by the paramedic to then administer aspirin. (Observation 2: Field Note)

Once all the available information is gathered, effective decision making in the context of pre-hospital mental health care was found to be heavily dependent upon the prioritisation of tasks. As represented in the accounts below, decision making is a complex and dynamic process of identifying, gathering and synthesising a broad range of information, making objective assessments of this information, formulating appropriate care and treatment decisions before prioritising and reprioritising the tasks that need to be undertaken:

Being able to listen to people, to filter through information, to prioritise information and then problem-solving skills. So you've got to take that information and the facts you're presented with and make decisions around what's wrong, what's a priority, what needs to be dealt with early, what can be dealt with later. (Interview 3M)

So yeah, working out which category, what my priorities are, how am I going to do it and basically getting it done. (Interview 10F)

The patient disclosed that she had ingested a significant amount of anti-depressant medication this evening. Once she had disclosed this information, the crew then decided to transport the patient without delay to hospital for immediate treatment. (Observation 1: Field Note)

Some paramedics acknowledged that their own world view could inadvertently influence or prejudice their decision making behaviours and actions:

I guess we have to then filter through our own beliefs and values about the person and to be aware of our own project or our own understanding. (Interview 3M)
The abovementioned extract suggests that paramedics need to exercise a degree of self-awareness, personal insight and sound judgement when engaging in clinical practice otherwise their decision making could become compromised.

**Sub-theme 1.4: Using a Stepped Approach to Decision making**

In the context of pre-hospital mental health care, the majority of responses viewed decision making as taking on a stepped approach. For most participants, it was important for them to try and encourage patients to engage in the decision making process from the outset. When decisions were subsequently made to detain mentally ill or mentally disordered patients under the involuntary provisions of the Act, they often followed in response to failed attempts to gain compliance of the patient, notably where the patient was refusing to be taken to hospital voluntarily. The following extracts provide a revealing insight into the fragile and precarious relationship that so often exists between paramedics and patients who are thought to have a mental illness. The reliance on charisma and charm as a strategy to gain the acceptance and trust also illustrates how paramedics set about establishing this relationship with patients:

*We give a lot of options to the patient. I don’t believe in just going brutal, aggressive with the patient.* (Interview 2M)

*There has to have been attempts to try and coax the person to go to hospital. So it’s not the first ditch attempt, it’s usually the third for me.* (Interview 3M)

*…that piece of paper [Section 20 of the MHA] is my last – it’s like my final act. If I can’t win them with charm, if I can’t control the situation, if I can’t get them to come with me or if they’re in such an acute psychosis that they can’t be managed or they can’t be rationalised with, then that piece of paper is my last chance to get them help.* (Interview 4F)
The paramedic's response in the last extract, ‘that piece of paper is my last- it’s like my final act’, appears to be symbolic of the currency to which the mental health legislative powers are regarded by some paramedics. In this extract, the metaphor ‘final act’ reinforces the belief that the legislative powers are considered by some to be the ultimate trump card that paramedics may choose to play at any time.

The behaviours and actions of paramedics were described as taking on a more assertive and directive approach as further attempts failed to gain patient compliance.

*The crew spend a significant amount of time trying to encourage her to come to hospital voluntarily. She eventually agreed, after they informed her, in a direct and no nonsense manner, that the police would be called if she continued to refuse transportation. (Observation2: Field Note)*

Further, once decisions were made to detain patients under the Act, some paramedics sought to verify the appropriateness of these decisions with their colleagues. This was seen as a way of seeking reassurance and validation about their decision making. This implies that under certain conditions, decision making takes on a joint collaborative approach.

*I try gentle, therapeutic persuasion and influence then I try more direct persuasion and influence and then I make a decision and talk to my colleagues and then discuss the implications then of depriving someone of their liberty - forcing them to go to hospital. (Interview 3M)*

For some paramedics, bringing patients into the decision making process by providing them with options relating to possible outcomes was found to be an effective strategy to not only encourage patients to be compliant but also for minimising the need for patients to be detained under the Act. This suggests that paramedics have a preference, where practicable, for allowing patients to maintain their autonomy by
exercising control over their situation and for providing them with options so that they can make informed decisions

...by telling them and describing to them exactly what's going on in this situation, what has to happen, and offer them choices because the way to make someone even more angry and aggressive is by taking away their choices and telling them that they have to do something. So by offering - manipulating the situation - or by taking that assertive stance, “You know, Stanley, you're acting very aggressively at the moment and you're scaring me a little bit. I'd really like you to calm down and maybe we can sit down and we can talk and you can tell me what's going on today.” And if we can take that step, “Okay, Stanley, I understand what you're saying to me at the moment. How about - what we can do is we can jump in the car, I can take you down, we can have a cup of tea”, talk through that entire situation, let them know what's happening, what's going on, and the choices that they have and what consequences those choices will have. (Interview 4F)

...to bring them around to making the decision for themselves, that this is the best choice. (Interview 5F)

Sometimes it's as simple as just saying, “We've got a couple of options, you can walk to the car with us or the police have to help you walk to the car” kind of thing. A lot of the times that sort of jolts people into motion. (Interview 6M)

You're talking to a patient and yeah, giving them options and you're sort of leaving that card and you'll play that card at the very last resort and maybe not even bring it into the picture at all if you can get them to comply. (Interview 7M)

While the above approach may be considered the preferred approach to providing mental health care in the less restrictive means possible and thus in keeping with the spirit of the Act, there were still occasions when this approach failed and patients remained non-compliant. In these circumstances, it then becomes necessary for paramedics to temporarily remove a patient’s civil liberty by detaining them under the Act. At this point, it was found that paramedics exerted more authority and control of
the situation by taking over the decision making process and rendering patients powerless and unable to engage in ongoing acts of self-determination:

"She was refusing to go, refusing to go and we negotiated for a while. A female police constable tried to negotiate with her to get her to come and she didn’t want to come and it wasn’t until we gave her well you don’t have any other choice now, we’ve made a decision, you’re coming and we’re going to under the Mental Health Act take you against your will if we have to. We’re going to schedule you to be seen by a doctor to be assessed. (Interview 1M)"

Another important dimension of the clinical presentation of patients in pre-hospital settings that was found to impact on decision making in relation to the use of the Act related to the degree of actual or perceived risk of suicide or harm to self or others. In these circumstances, most paramedics were found to experience heightened concern for the safety and welfare of patients who were thought to be at risk of self-harm or suicide:

"...the reasons that I sectioned her was because she clearly communicated to me that she was contemplating suicide and had been for some time. She’d been feeling down for an extended period and had been contemplating suicide for more than two weeks and I believed that she was very much a threat to herself. (Interview 5F)"

"...with the suicidal and depressed patients or anyone who tells me that they’re going to hurt themselves or has made clear threats to other people that can be verified, I’ll be sectioning those patients. (Interview 5F)"

A number of responses indicated that as paramedics develop confidence from their experiences of exercising their functions under the Act, their decision making appears to take on an intuitive stance. In the following extract, the sensation of ‘get[ting] that feeling a lot earlier’ illustrates the speed by which this instinctive awareness is experienced by paramedics and how this can promote a sense of confidence when engaging in decision making in this domain.
I think I kind of get that feeling a lot earlier on now, as opposed to sort of being on-scene for half an hour pleading with them, "Come on, let's go, let's go" whereas now, if I get the feeling they're not going to go, then it's done, they're under the Mental Health Act and we're going to the hospital. I'm more upfront about it now with using it and telling them about it as well. (Interview 6M)
SUMMARY

This analysis illustrates four key aspects of the clinical presentation that influence clinical decision making in pre-hospital mental health care. These relate to: promoting a scene environment that keeps everyone safe; using advanced communication and interpersonal skills to establish a therapeutic rapport with mental health patients; assessing environmental and patient cues as a means of determining the extent to which a patient is mentally ill or mentally disordered; and decision making that takes on a stepped approach.
5.1.2 Theme 2: Lacking adequate Clinical Knowledge, the Significance of Experience and Working with the Act and Protocols

Responses during the interviews revealed two factors relating to clinical knowledge that impact on clinical decision making. They are: the degree of clinical knowledge and the use of decision aids to enhance clinical knowledge and to support decision making.

Sub-theme 2.1: Lacking adequate Clinical Knowledge

Overall, most paramedics described the one-day mandatory mental health training as providing them with insufficient clinical knowledge to enable them to engage in confident decision making in the context of pre-hospital mental health care. Collectively, the following extracts provide an insight into the perceived lack of confidence that many paramedics in this study had in their own clinical knowledge and skills with respect to mental health care. They also reveal the disappointment that some paramedics felt about their mental health training failing to provide them with enough detailed knowledge and skill development to allow its application to their own clinical practice.

“We don’t have the knowledge and the experience to treat them [mental health patients].

(Interview 2M)

I’ve been speaking to a lot of people that have done that training. They come out, they still don’t know what to do and they don’t know….Just whether they need to section someone. (Interview 6M)

… it didn’t really address how to deal with people who are mentally disordered or having a mental health crisis. It didn’t really teach us all that much. (Interview 8F)

At the start of the shift, I spent about an hour sitting around the station with the crew. This was a good opportunity to talk to them about my study and they seemed genuinely interested in the area of mental health. During this discussion, both remarked that they didn’t find the mental health training program really prepared them with the clinical skills and knowledge to deal with mental health patients effectively. (Observation 4: Field Note).
Some paramedics considered their mental health training as being focused predominately on safety issues and scene management and to a lesser extent on key aspects relating to therapeutic clinical mental health care that may assist in developing competent decision making skills.

...it was very much focused on safety, patient safety and ambulance safety...the training we get
...is lacking, but the information that you do get, you have a lot of information about how to stand to be safe in situations where somebody might be aggressive. (Interview 5F)

One paramedic reflected that he lacked sufficient knowledge of medical terminology as it relates to mental health care and consequently, its application in clinical practice. From this, the paramedic was acutely aware that he had deficits in his clinical knowledge which made him feel insecure and lack confidence in his ability to justify his decision making:

...probably the hardest part that personally I have found in all because we are not properly trained in terminology. We might use terminology in the wrong context, schizophrenia, psychosis and sometimes it doesn't add up or something in the protocols that you can't refer like protocols where you refer - like schizophrenia means this, psychosis, this. Delusional is this. Not everybody has that level of knowledge to be able to confidentially say, "Oh that patient was a paranoid patient, schizophrenic patient or was a delusional patient or..." lack of reference. (Interview 2M)

In addition, paramedics generally reported that there was insufficient training that dealt specifically with the legislative powers granted to paramedics under the Act. Consequently, many paramedics in this study felt confused and uncertain about the circumstances in which they should (or should not) exercise these functions. Under such conditions, decision making appears almost futile:

I guess more specifically it was a little bit unclear as far as when we should actually fill the Section 20 out and still is a lot of confusion out on the road. (Interview 7M)
The one that we did recently where we were looking at sectioning and scheduling, it was very confusing. *(Interview 8F)*

Both [paramedics] also commented that even after completing the mental health training they still felt confused about when they should or should not exercise their functions under the Act. *(Observation 4 : Field Note)*

Overwhelmingly, most paramedics in this study had an expressed desire for more enhanced clinical knowledge relating to the provision of mental health care. The belief that there were deficits in their training and clinical knowledge base relating to mental health care meant that some paramedics regarded their ability to care for mental health patients as comparable with non-medically trained persons. This may reinforce the lack of confidence that many paramedics experienced in relation to their skills and decision making in this domain:

*I wish we had more skills in learning about patient assessment for mental health. We don't really have much training at all. I mean, you know, if you get called up to The Gap and somebody is on the other side of the fence, I mean, we don't have any more skills than the general bystander.* *(Interview 8F)*

Most paramedics described a broad range of strategies, some of which had been handed down from experienced paramedics, that were relied upon to address the perceived deficits in mental health training and to improve their clinical knowledge and subsequent decision making abilities. In some cases these strategies were found to be self-initiated:

*So I was always taught back then that if you wanted to know more, you learnt off the partners that you work with or if you wanted to know more, then go and arrange training or go and read this textbook or talk to the emergency nurses.* *(Interview 4F)*

In addition, experienced paramedics were found to be an important source of clinical information upon which less experienced paramedics could draw. This included
improving their knowledge base and how to develop their own decision making skills as they relate to the use of functions under the Act: thus representing an informal mentorship arrangement:

...its only through the senior officers on station and talking to them afterwards, you know, sort of going through the case sheets at night-time and then sort of asking someone, "Did you think about sectioning this person?" then you'd have a conversation with them the next day about it and then you might sort of say, the next time they go to a similar job, they would have done it and they felt a lot more comfortable about it. (Interview 6M)

Whilst driving to the scene, the more experienced paramedic was observed reminding the junior paramedic of important aspects of the patient’s presentation that he must cover once they arrived on-scene. (Observation 2: Field Note)

One participant remarked that there were some very experienced paramedics at his station and that he learnt by watching how they manage the 'difficult' patients, how they talk to them…’ (Observation 4: Field Note)

Furthermore, clinical knowledge could also be enhanced by accessing knowledge and advice through informal professional networks, for example, observing other health professionals [triage nurses and medical officers] as they dealt with mental health patients. Paramedics were then able to incorporate this newly acquired clinical knowledge into their clinical practice, thus directly benefiting their own decision making. However, as the extracts below illustrate, while nurses working in emergency departments are at times perceived by paramedics as being key sources of relevant clinical knowledge to inform skill development, paramedics must be personally motivated to seek out this information:

...if you wanted to know more…talk to the emergency nurses. So a lot of my oldest friends are emergency nurses because we would just sit down and talk for ages about - you know... (Interview 4F)
just through experience and listening to triage nurses - they are a wealth of information and they will ask anything, and I learn a lot from their initial assessments of my patients and I've started to build that into my practise as well. There's certain stuff that I come up with that has worked for me in the past that I will use again and again and again, and I'll teach to people that I'm training. (Interview 5F)

I've learnt more on the road by talking to people in hospitals who deal with the mentally ill in terms of the keywords and the phrases that are important to know. (Interview 8F)

Paramedics who had prior clinical training from another health discipline [e.g. nursing], were found to draw upon this knowledge base and experience to inform their decision making when responding to mental health patients:

I guess the thing that sticks out most for me is the nursing training. So I feel like I've learnt a lot in that, and it was basically how to do a mental state assessment, so things to look for; appearance, behaviour, thought form and content, those sorts of things, and understanding medications for certain illnesses and the side effects that they have. And just sort of from a clinical level, that was the nursing training that I got. (Interview 5F)

One participant commented during our informal discussion tonight that he considered his background in nursing had provided him with good foundation knowledge of mental health (Observation 4: Field Note)

While desire overall for more detailed clinical knowledge of emergency mental health care featured prominently in the interview responses, some paramedics felt that specific types of clinical knowledge such as psychopharmacology would significantly enhance their decision making skills and their management of mental health patient in clinical practice. Lacking sufficient clinical knowledge and understanding of psychopharmacology meant that some felt their decision making capabilities were impaired, particularly regarding the appropriateness of decisions to transport low acuity patients to hospital for further assessment.
… the other thing what would be really helpful would be more explanation of the medications that people use in the mental health - there's no education on that anywhere for anything, whether its medical trauma or mental health. What happens when somebody takes antidepressants? What happens when they stop taking them? What does an antipsychotic do? How long from if you stop taking it would you start to see effects? That would be really helpful actually. (Interview 8F)

The other thing that's common is, "I've been taking antidepressants for three days and its not working". So unless you know that it actually takes weeks for them to work, "Oh, great, well let's take you to hospital and get your medication changed". Well that's not really appropriate. (Interview 8F)

Several participants felt that being cognisant of other relevant pieces of legislation that deal with broader human rights issues was viewed as aiding in the development of confidence around the use of the Act in the context of pre-hospital mental health care:

I've done research and reading beyond what I was trained in to ensure that I understand the ethics, the legal ramifications. I've gone and looked at other pieces of legislation about deprivation of liberty and so on so that I understand what the limit is to what I can do. So I feel quite prepared to go and use them. (Interview 3M)

Lacking an understanding of the consequences and repercussions for patients who were involuntarily detained [under the Act] by paramedics meant that some paramedics felt apprehensive when engaging in decision making that involved the use of the Act. While this implies that paramedics were able to appreciate the gravity associated with exercising these powers, they nonetheless lacked the confidence in their decision making when called to use these powers:

I don't think they really understand what the Section 20 [Mental Health Act] means for the patient and it just makes people very edgy about whether they're going to do it or not. (Interview 6M)

Sub-theme 2.2: Working with the Act and Protocols
A range of decision aids was found to support paramedics in their clinical practice by providing them with a framework in which to respond to mental health emergencies. These decision aids included the Mental Health Act document (as referred to under section 2.11.1) and a locally developed mental health resource book that contained a centralised repository of key organisational documents relating to mental health care. Importantly, the standardised Mental Health Protocol issued by the organisation was not found to be overtly relied upon by paramedics to support or guide decision making in this context.

It was observed during each participant observation, that the organisational protocol and pharmacology manual, issued to each paramedic, was not overtly relied upon as a practical resource guide to inform decision making:

*It was noted during the observations, that the Ambulance ‘Protocols and Pharmacology’ manual was not specifically referred to when responding to each incident. Perhaps they memorised this information and were able to recall aspects of this as required. (Observation 1-4: Field Note)*

For some paramedics, the Act itself was regarded as a useful decision tool that stipulated the parameters in which their decision making outcomes could operate:

*Call it [the Act] guidelines, protocols, call it whatever you want. Some direction of which step I should and with some of the patients. It also defines some boundaries on - which is my scope of powers for a particular patient and basically telling me what I can and what I cannot do.*

*(Interview 2M)*

Another paramedic indicated that the standard organisational protocol relating to the provision of emergency mental health care was considered limited in scope and primarily focused on dealing with patients who were presenting as a risk of harm to self/others. The existing mental health protocol was also regarded as failing to take into
account the broad spectrum of mental health conditions that are more prevalent in the community and thus more often dealt with by paramedics:

*Obviously there’s the protocol, which has the clear outline of what a suicidal patient - what sort of risks there are and things like that, social red flags and the fact that a mental health assessment needs to be done. But it’s a bit limited…. Because it doesn’t take in every type of mental health problem. I think that there’s nothing in there about your manic patients who are arguably the same level of risk as a suicidal patient. There’s nothing in there really about your psychotic patients, your acutely psychotic patients, and even your mildly psychotic patients who are quite pleasant and easy to manage. So yeah, It’s just limited. It’s very narrow-focused. (Interview 5F)*

When used in combination, the protocol and clinical knowledge derived from mental health training was still regarded by many paramedics in this study as an inadequate foundation on which to deliver confident mental health care and therefore not considered as particularly useful for supporting them in their decision making:

‘…we’ve got a brief protocol, we’ve had a day of training, is that sufficient to assess someone’s mental ability and leave them be? Yeah, will the Coroner come back to you and say, “You’ve done wrong; you should have transported that patient”? And you’ve got to say, "I’ve done a day of training, I’ve got this little protocol, they seemed alright to me. I’m not professionally trained in mental health". (Interview 6M)

Furthermore, in the extract above, the paramedic poses a hypothetical question of whether the standardised mental health protocol and related pre-hospital emergency mental health training could be reasonably viewed as providing paramedics with adequate resources to make competent and accurate decisions in relation to the care and management of mental health patients. Framing this hypothetical question in the context of an adverse outcome involving a Coronal inquiry, further illustrates the genuine concerns that some paramedics have about their capacity to confidently and competently perform these duties in this area of clinical practice. This further reflects the fear of being held accountable of their actions and decisions in this context. This
sentiment was further illustrated by the paramedic's belief that “I’m not professionally trained in mental health”. Notwithstanding, a reference sticker that provided information on how to complete a patient’s medical record for those detained under the Act was regarded as useful:

‘They [paramedics] comment that the recent implementation of the mental health sticker on the medical records folder has been very useful and a good reminder on how to accurately record and document use of Mental Health Act interventions. (Observation 2: Field Note)

Another paramedic felt that a supplementary document [protocol] providing specific instructional information about the application of the Act and guidance on the appropriateness of decisions made in these circumstances, would be more beneficial. In the absence of such a supplementary document [protocol], there remains a perceived lack of confidence to engage in independent decision making when exercising powers under the Act:

‘… a pocket reference card, that would be a great help…..like a pocket reference card with, you know, like few sentences so just the - what we are authorised to do, what the police can do for us. Some kind of reference card you can quickly pull out of your pocket, have a look, “Oh yeah, this is fine”, put it back. (Interview 2M)

One paramedic had taken the initiative to develop a supplementary decision aid in the form of a mental health resource book. It was designed to provide an additional level of support for those inexperienced paramedics when dealing with mental health patients or exercising their functions under the Act. The decision to develop this local resource recognised that some paramedics do not have exposure to individual’s experiencing a mental health emergency on a regular basis and so do not have an opportunity to develop and build skills and knowledge in this domain:

I put a book together for the ambulances so that they had a bit of a reference because you don’t get mental health patients on that much of a regular basis. So if you’re not using it all the time,
you won't remember it. So having something in the vehicles where they're able to refer to, I've found that that's just another little bit of a safety net for them as well, and a bit more - something just to assist them if they've got to deal with a mental health patient. *(Interview 9M)*

**SUMMARY**

Most paramedics considered the core mental health training program and organisational mental health protocol as inadequate for preparing them with the necessary clinical knowledge, skills and tools [decision aids] to deliver competent pre-hospital mental health care. In particular, responses from the interviews revealed a deficit in knowledge and understanding among other frontline agency staff such as police and emergency department clinicians of the workings of the Act. Overall these factors were found to undermine the confidence of paramedics and lead them to underestimate their ability to engage in confident clinical decision making when called on to fulfil their legislative powers under the Act.

**5.1.3 Theme 3: Decision making at the Interface**

The following describes the varied roles that others play in relation to mental health care that is delivered in pre-hospital settings and in an emergency department (ED). In addition, this section describes the influences that others play in paramedic clinical decision making within this context, in particular, patients, bystanders, police, colleagues and other clinicians.

**Sub-theme 3.1: The Role of Others**

Some paramedics sought the advice and guidance from senior colleagues [station managers or clinical educators] when making decisions about the appropriateness of detaining patients under the involuntary provisions of the Act:
I know who to call to find out. I call Susan, you know? She teaches everything [mental health educator]. (Interview 2M)

I had a phone call the other day from one of my crews saying that they were at a patient who was depressed - said that they [patient] were depressed, didn't want to go to hospital. They didn't call the ambulance, they didn't perceive there to be any immediate danger but they were just a bit stuck, they didn't know what to do, they didn't know where their responsibility ended and this is somebody that has recently done that mental health package. They still wanted somebody to back them up. (Interview 10F)

Senior colleagues seem to play a key role in providing reassurance and clinical support to paramedics during the development of their decision making skills in this domain.

Seeking advice and guidance from others may indicate that some paramedics lack the confidence that is required for independent clinical practice in the context of pre-hospital mental health care. Further, the need for clinical advice from senior colleagues may reflect a degree of inexperience with decision making around the use of the Act:

So it still isn't familiar enough to paramedics for them to make that call. They still wanted somebody to back them up. (Interview 10F)

The majority of paramedics believed there was widespread misunderstanding of the Act among other frontline agencies. In this study, many paramedics had been exposed to a range of negative experiences in relation to the ongoing care and management of patients whom they had involuntarily detained under the Act. These experiences had left many feeling annoyed and resentful with the broad systems of care. This in turn caused them to question the value that these recently introduced legislative powers have had on improving and streamlining the provision of care between the pre-hospital and emergency department interface:
So the Mental Health Act where it says that we can detain somebody, they've got to go to hospital, they have to be seen within 12 hours, blah, blah, blah, I don't know what happens once I've left my patient but I do know that patients have walked out the door. (Interview 1M)

I think that it was poorly defined, the extent of that power. So I've had nurses at hospital say, “Oh, well this is useless once you walk through the door” but then I've had mental health nurses tell me, “Well no, it takes them all the way up to getting a medical assessment by someone who is trained in that area.” And then I've had people say that, you know, its really not worth the paper its written on. (Interview 5F)

During our informal discussion, one of the paramedics further remarked that ‘I get the impression most of us don’t understand it [the Act].’ (Observation4: Field Note)

Some paramedics were found to question their own decision making capabilities and in some circumstances, the legitimacy of their decision making functions. It was generally in response to the apparent misunderstanding by other health professionals, of the powers granted to paramedics under the Act. The shared experience of feeling anxious and confused about the requirements for the ongoing involuntary detaining of patients under mental health legislation once they arrived at the emergency department has been captured in the following extract:

then the hospital have said to them, “Oh, have you sectioned them?” and they kind of - “Oh, no...” and they said, “Oh, but if you do it makes it easier for us” and they kind of go, “Oh, should I? They're here now, that's what our section covers.” People are just very wary. I don't think they really understand what the Section 20 means for the patient and it just makes people very edgy about whether they're going to do it or not. (Interview 6M)

A number of responses indicated a generally held belief that the provision of on-going care in emergency department settings was poorly coordinated and often failed to provide adequate security arrangements for keeping patients safe. For many paramedics, receiving inconsistent responses from emergency department clinicians regarding the ongoing care and management of involuntary patients had left many
paramedics feeling further perplexed and frustrated with the perceived inadequacies of the broader health system:

*at [a metropolitan hospital] they don't - if you take a patient in who's sectioned, that patient is seen by a mental health professional within three hours. If you take a patient in with that paperwork somewhere else, "Oh yeah, they can sit in the waiting room." There's very different reactions to the paperwork.* (Interview 5F)

*During our general discussion about mental health care, one participant remarked that he felt that most ED staff were confused and even misunderstood the legislative powers granted to paramedics under the Act, which consequently meant that they get a different response depending upon which hospital they arrived at with involuntary patients.* (Observation 2: Field Note)

For paramedics, the failure by emergency department clinicians to provide the expected level of ongoing care once patients arrive at the emergency department, may reflect a lack of confidence by emergency department clinicians in the clinical assessment of patients by paramedics and in their decision making outcomes:

*You can enhance mental health care and pre-hospital care delivery of mental health by getting the hospital care right and making sure that when we take them there they actually get care and they're not just released and walk out the door which so often does happen.* (Interview 1M)

*If that form is not filled in, they can disappear and then no one has the power to actually drag them back*. (Interview 6M)

In addition, some paramedics expressed frustration that some others [health professionals] seemed to fail to share the same level of concern for the safety of patients as demonstrated when EDs failed to make security and supervision arrangements when a patient arrived at the emergency department. As the following extracts reveal, the provision of ongoing secure care for mental health patients can at times cease once they arrive at the emergency department:
I've had experiences in the past where I haven't filled out a Section 20 form and then watched as the hospital have simply let the patient go because the patient has changed their mind. (Interview 7M)

...there's a frustration: why should I [patient] engage in this front end when the back end doesn't do it properly. They're [ED] happy to get involved in STEMI because they know they're going to go away and get a stent. They're happy to get involved in trauma because they know they're going to go to a trauma centre and get the good care. But there's a resentment of 'I'm doing this but they're not doing it right and so why am I wasting my time'. (Interview 1M)

This sense of disbelief and resentment that some paramedics experienced could be compounded further by incidents where patients had subsequently died from suicide once discharged from hospital. Such outcomes can have a profound emotional impact on the initial paramedic crew. The following extracts provide a confronting and disturbing account of these events. Both these accounts appear to illustrate that while the inter-agency (ambulance and police) response to mental health emergencies that occur in the pre-hospital setting can be successfully coordinated keeping patients safe until they arrive at hospital, it is the capacity and ability of some hospitals to continue to provide ongoing and secure care of mental health patients that appears problematic.

There's a job recently that has tainted me since the last time that you and I did a ride-along and that was spending - having a friend of mine spend 45 minutes on the scene talking to this young girl who had gone to the Gap [famous landmark for suicides] earlier that day and wanted to jump and had, in the end come home - because she wanted to get a few things sorted out - told one of her friends, her friend has called the ambos, they came. Spent 45 minutes talking to her and said, "There is light at the end of the tunnel, there is a treatment for this", went through everything. And by the sounds of it she did everything right and put a lot of this emotionally into getting this young girl to hospital, and scheduled her through the Act so they would hold her and at least assess her. She was put into [mental health unit] overnight, released on day release the next day. She went to the Gap and she jumped - gone. So that particular paramedic, who is at the moment, was absolutely devastated. So if you'd asked me before that story, I would have said
to get them to hospital to be assessed. And now I think I'm a bit cynical about it all. (Interview 4F)

…it's not a good story, it's a bad story. We had a patient who we stood on [a] cliff ledge with for three or four hours. The police were there, the police negotiators were there. She had just been diagnosed with schizophrenia the day before. Her GP gave her a prescription for antipsychotics and sent her home. She then spent that whole night sitting on the cliff thinking about jumping. When we found out about it, it was then another four hours for us and the police - they talked her down off the cliff. First thing she said was, "that was a mistake, I should have jumped". So my partner, who also had the Section 20 powers, said, "Yep, we're definitely going to be sectioning this patient". The police organised for her to go straight to [a general hospital psychiatric unit] and she was admitted. The very next day, they released her on day release and she went and jumped off the very same cliff that we were at the day before. That was incredibly distressing because it was preventable - wholly preventable - and I think that - obviously I hope that they would have scheduled her when they got her to [the psychiatric unit] in that first day, but perhaps the Section 20 didn't have as much weight as I would have liked it to have, as much influence with the staff at that hospital. So that was very distressing as well for that patient. (Interview 5F)

This lack of confidence that other health professionals, in particular, emergency department clinicians, will adequately assess and act to protect the safety of voluntary patients who are brought to an emergency department by paramedics, was found to influence future decision making behaviours among some paramedics. In particular, this included compliant and voluntary patients being involuntarily detained [under the Act] for no clinically justifiable reason. Thus, under such conditions decision making was found to take a precautionary approach:

I've also filled it in on patients who I didn't feel were necessarily a flight risk. (Interview 5F)

So I sort of changed my view that I'll fill out a Section 20 form whether they're compliant and also when they're not compliant as well. Yeah. So perhaps just that part of the training, when or when not to complete the paperwork or the Section 20 form. (Interview 7M)
Some paramedics seemed to be motivated to detain voluntary patients under the Act because of their desire to transfer legal responsibility and duty of care for mental health patients onto others. In this context, it appears to be important for paramedics in some circumstances, to be able to transfer legal responsibility and accountability for mental health patients onto emergency department clinicians regardless of whether patients had met the legal criteria for involuntary detention or not. It also suggests that paramedics have a strong desire to distance themselves from emergency department clinicians in the event that future accusations are made that the provision of appropriate care and protection had been poorly coordinated and had failed to keep patients safe.

So he could have agreed to come with us, yeah fine, but the moment he gets to hospital they're going to chuck him in the waiting room - he's gone, he's not going to sit around and wait. So that's when I decided that I'm going to do a Section 20 too, because this boy desperately needs to be assessed and I can't run the risk that - in the busy-ness of the hospital, this guy is going to get lost and he needs help, so I'm going to do a Section 20 even though he voluntarily came with us.

(Interview 4F)

I guess, just recently there's been a few cases where people have absconded and I think someone's jumped off a building and there's been a couple of things where people have actually gone and followed through what they had threatened they were going to do in the first instance and they were either sectioned and it was the hospital not providing adequate security or they weren't sectioned and they had been assessed by an ambulance officer. So I guess I kind of take more precautions now as a result of those incidents. They probably just don't really understand it.

(Interview 6M)

…it's like - at the moment, if I'm not sure, I transport them under the Act and then down at the hospital, they can't do anything to themselves there. If they're released by the hospital, then that's their decision. Unfortunately with a lot of stuff we do, its cover your own arse kind of thing.

(Interview 6M)
I still completed a Section 20 form on this person because - I guess because of the way that the hospitals are at the moment, there's no guarantee that you can take a person to a hospital and they'll actually keep them there. But if I know that I've filled out all my paperwork correctly then, you know, then I've done the job to the full extent and whatever happens in that emergency department is on them. *(Interview 7M)*

My rationale is to make sure that they're not going to walk out the door before they see somebody that can help them and they're not going to walk out the door and then jump on the freeway or jump off a bridge or anything else. That's my rationale, is to make sure that if triage are under pressure to release the ambulance crew, they still have an obligation to make sure that that patient is cared for and not put in a waiting room and forgotten about. That's my rationale. *(Interview 10F)*

Some paramedics described occasions when emergency department clinicians had challenged their decision making outcomes where patients had been detained under the Act for no clinical reason:

> there's a couple of people who sort of say, "Oh, the patient is voluntary, why did you section them? *(Interview 5F)*

Paramedics reported confidence in mandating the involvement of others [police] in the onward management and transportation of those patients detained under the Act. This appears to reflect a degree of authority and leadership in these situations:

> For them [police] picking up mental health patient, take them to a hospital and be stuck with them for a couple of hours because security is not available to take over from them – that's really big pain and they verbalise that to you and, if they can, they will offload it to you, just say, "Okay, the patient now, he is cooperative, you can take him to the hospital.” And you have to be forceful to say, No, I need to have you - one of you guys in the back of the car with us.” *(Interview 2M)*

> There have been issues where police would call and say to the Ambulance, we want you to section this person and the Ambulance has gone, "Hang on a second…” and they talk to the patient and they can't find any reason why this patient should be sectioned. And they say to the
police, "Well I can't section them". "Yeah, but we want you to". I say to the staff, that being the case, you say to the police that "if you believe the patient is acting in bizarre behaviour, whatever, and you're concerned about the patient, you do the Section 20 on the patient. We're more than happy to transport that patient, this is our patient, but you're doing the paperwork. But I'm not going to be told to section someone just because you want me to". (Interview 9M)

SUMMARY

The responses by participants during the interviews revealed a range of contrasting roles and influences of others on clinical decision making. In some cases the role of others was found to support paramedics in their clinical decision making. Conversely, the influence of some other health professionals sometimes made paramedics question the merits of their decision making when managing involuntary and voluntary mental health patients. At times, police were also found to play a supportive role in the provision of pre-hospital mental health care.

5.1.4 Theme 4: Being stuck between a rock and a hard place: Facing ethical dilemmas and stigmatisation

Participants’ responses during the interviews revealed a range of factors relating to personal beliefs, attitudes and emotions [such as fear], that influenced clinical practice and decision making in relation to pre-hospital mental health care.

Sub-theme 4.1: Facing Ethical Dilemmas

A majority of paramedics described feeling uncomfortable engaging in decision making outcomes that involved patients being detained or restrained (physically or chemically) under the Act. In these circumstances, paramedics were confronted with an ethical dilemma, a paradoxical situation whereby their decision making actions and behaviours, which were being guided, in part, by organisational protocols and their
legislative obligations, were fundamentally inconsistent with their own personal beliefs and values. This presented a challenge for paramedics in decision making within this context:

...some of the guys express their lack of enthusiasm to actually restrain somebody and sedate them [paramedics authorised under Section 81 of the Act] because they feel that that’s wrong they shouldn’t be doing that... (Interview 1M)

...my view is, even if the Act protects me and giving me the permission to restrain the patient, I don’t think I would ever restrain. I don’t think I would ever touch a patient, you know? Its not my job - I don’t think its my job to physically restrain people. (Interview 2M)

...this one officer [paramedic] was resistant on the grounds that it was a mental health patient. She didn't see herself in that role and she didn't like that role, she was uncomfortable with it. (Interview 3M)

However, for most paramedics, there was recognition and appreciation that occasions arise during clinical practice when they must accept that they are required to act and behave in a manner that is inconsistent with their own personal beliefs and values:

... think its never nice having to sedate somebody and its never nice having to restrain somebody... it just needs to be done. So I don't feel particularly comfortable with it, but it's part of what we have to do. (Interview 5F)

...a lot of people are still reluctant to do it; they have to sort of be coaxed into filling out the form. (Interview 6M)

**Sub-theme 4.2: Dealing with Personal Belief and Attitudes**

Three of the paramedics in this study reported that there was a shared belief among some of their colleagues in the workplace that individuals with mental health issues were not the responsibility of ambulance services or in need of emergency healthcare.
Instead, some regarded their role as primarily focused on treating patients with physical complaints:

> I’ve had guys say to me I’m never going to use this. I’ve had them in class, I’m never going to use this, I’m never going to detain someone, I’m never going to do that, I’m never going to.  
> *(Interview 1M)*

> I’ve worked with some of these people [paramedics] - don’t feel that mental health patients are our concern. They believe that we are there for people that fall over, people that break legs, people that have heart attacks, people that have breathing problems, but they don’t see that behavioural disturbance or mental illness is necessarily part of our core role. *(Interview 3M)*

> I think for a lot of paramedics they just don’t feel its their role. They want to do the big traumas, they want to do the arrests, and they just don’t see mental health as being an ambulance issue. *(Interview 10F)*

Consequently, paramedics may lack a fundamental desire or willingness to engage in decision making if it is perceived to fall outside their role and responsibility or if they were unable to observe any tangible results from their involvement. In addition, describing the existence of this belief among others in the workplace further indicates that some paramedics preferred to distance themselves from colleagues who were perceived as possessing negatives attitudes and beliefs towards mental health patients. In the following extract, the paramedic’s description of being unable to ‘fix’ patients with a mental illness reflects not only a poor understanding of mental illnesses but also the restricted view of his capacity to provide effective and therapeutic interventions that may have a positive impact on the emotional wellbeing and even broader health status of individuals who are experiencing a mental illness.

> So there is possibly negativity and not resentment but resistance to it because of ‘I can’t really fix this, I can’t do anything for this’…Ambos. have an attitude and ambos are people who want to fix things and so you give them morphine and they’re happy because they’ve fixed the pain; you give
them a splint they’re happy because they can put a splint on; you give them defib. they’re happy because they can defibrillate the patient; but mental health you can’t fix the patient, they cannot fix the patient and so its frustrating for them. (Interview 1M)

On the other hand, others regarded mental health care as a rewarding component of their role as a paramedic and reported they gained a sense of personal satisfaction and reward when caring for mental health patients. In particular, the delivery of pre-hospital mental health care was seen by some as providing them with unique challenges and rewards that are not generally experienced when they care for patients with physical complaints:

I find mental health cases far more interesting than I guess some ... You know, its about immobilisation, haemorrhage control, airway breathing, circulation and transport the patient urgently to a surgical facility and I don't see a great amount of challenge in that, where personally I find a lot more challenge in dealing with someone who's emotionally disturbed or are behaviourally disturbed. I find that more interesting. (Interview 3M)

While we were sitting around talking about the role of paramedics in relation to mental health care, both remarked that they considered mental health as being a very rewarding part of their job. (Observation 4: Field Note)

Clinical practice and decision making was also found to be influenced by emotions [such as fear], negative attitudes and prejudicial beliefs that extended beyond issues relating to mental illness:

This one girl that I trained, we went to a young transsexual boy or girl who was behaviourally disturbed and she refused to get into the back of the ambulance with this guy and there was no rational reason for. I asked her, "Why aren't you - what's the problem?" and she said, "I'm not getting in the back with that." Whether it was a prejudice against his transexuality, whether it was a misunderstanding of his mental illness, I'm not sure. (Interview 3M)
Some paramedics acknowledged that socio-economic and cultural factors as well as negative attitudes and beliefs towards mental health patients, could adversely impact on their decision making with respect to mental health care:

…it if someone’s a drunken Aboriginal living in Redfern with no money in a housing commission house, we might personally carry views around that and the prejudices around that, and its important we’re making mental health decisions, or decisions in any sense, to not allow those things - to be aware of them, but not allow them to influence our practice. (Interview 3M)

Under these conditions, paramedics needed to exercise a degree of insight into the impact that such attitudes or beliefs may have on their decision making behaviours otherwise decision making could be comprised:

I guess we have to then filter through our own beliefs and values about the person and to be aware of our own project or our own understanding. (Interview 3M)

Several of the paramedics in this study also described a belief that individuals with mental health issues were more likely to be perpetrators of violence and therefore felt vulnerable and afraid when called upon to manage and care for patients who were experiencing an acute mental health emergency in uncontrolled community settings. This type of reaction may in turn serve to further reinforce other negative stereotypical beliefs and stigma associated with mental illness:

…it’s just a problem for me, it’s going to make a mess of my truck, it’s going to maybe hurt me. (Interview 1M)

They don’t get that whole concept of a mental illness is an illness, it is a medical problem, these are not criminals… I wish it would. (Interview 10F)

The false belief that mental health patients were more likely to commit acts of violence made some paramedics feel scared and fearful of patients who were thought to have a mental illness. They had a real sense of concern that mental health patients may hurt
them. As a consequence, this belief was found to impact on paramedic decision making with respect to the involvement of police. In some cases, the decision to request police assistance was associated with those [paramedics] regarded as less experienced or who lacked confidence dealing with mental health patients:

I think there's a fear involved. Some paramedics would label mental health patients as all violent… But paramedics, I guess, are people too and they carry their own level of understanding or their own level of fear around those things. And where they're afraid or conditioned into doing it - if someone's not mature in the job, they're quite new, if they were trained by someone who called the police for every single mental health patient, then they may just simply repeat the same strategy when they go to someone. (Interview 3M)

I guess the level of experience and the level of understanding people have will determine at what point they will call the police. I mean, I'm happy to sit with a patient or to be with a patient for some time if there's no evidence of weapons, if there's no evidence of means of assaulting me or my partner, I'm actually quite happy to hang outside the flyscreen door and talk to them through the door or go and sit on the back veranda with them or whatever, you know? Some paramedics would call for police quite early if they were concerned or didn't understand what was happening with the patient. (Interview 3M)

While negotiating with the patient over the intercom, the junior paramedic was observed discreetly questioning his [experienced] partner about whether they should call for back up police assistance to gain entry to her apartment. His partner didn't think that that was warranted at that point, wanting to continue their own efforts to get her to come down voluntarily. (Observation 2:Field Note)

While some paramedics described a reluctance to act on their legislative powers under the Act, others considered the introduction of these powers as legitimising their involvement in the delivery of mental health care:

Its a huge privilege and a huge responsibility at the same time, but its a welcome relief from the days when we just threw everyone in the back of a police car. I personally identify mental health
patients as a patient who has a unique type of need, much the same as diabetes and diabetics have a unique type of need. (Interview 3M)

Both [paramedics] acknowledged that the introduction of powers for paramedics under the Act was an important recognition of their role and that mental health patients should be cared for by paramedics and not police. Notwithstanding, they still felt that police had an important role to play in managing those patients who were aggressive and combative. (Observation 1: Field Note)

The expansion in their clinical powers to include mental health was viewed by some as further strengthening the evolving professional status of paramedics. For some paramedics, the continuing development of their own professional identity as a health professional promoted a sense of confidence in their own decision making capabilities. For these paramedics, it also represented an improved quality of care for mental health patients:

So today, I think it represents a better level of practice and it justifies what we've been doing all along. Certainly for the last 10 years - 10 to 12 years - we have been searching patients, we have been tying patients down to the stretcher with bandages or whatever, or calling the police to handcuff the people down. And it represents, I think, a new age of community responsibility for paramedics and I think that's professionally quite a boost for what we do. (Interview 3M)

They've enthusiastically jumped at the chance because it empowers them to manage these patients better. I think it enables them to practise a better level of practice for these patients. (Interview 3M)

Experience providing mental health care was found to play an important role in challenging negative attitudes and beliefs about mental health patients and enabled some to develop a greater appreciation of their role with respect to mental health care. In some cases, this corresponded with the continuing emergence of confidence and experience engaging in decision making with respect to the care and management of mental health patients. It also reflected the broader changing roles and responsibilities
of key agencies that are generally tasked with responding to and managing mental health emergencies in the community setting:

When I first got the Section 20 powers, I was convinced I would never, ever use them. I figured that if I had to use them, the police would be involved and it would most probably be a violent, dangerous situation and they could go in the back of the paddy wagon because I wasn’t going to put myself at risk for that. So I just thought, okay, great, I’ve got this piece of paper, I’m never going to use it. Since coming into the city from Blacktown, I have used that paper almost every block of four that I’m at work. The thing about it is that it seems to, at some hospitals, accelerate the patient care. (Interview 5F)

[When] I started on-road in my probation I feared every mental health job I went to because I didn’t feel that I knew how to communicate with someone like that - having some sort of mental health crisis. I thought if you talked to someone about certain - if someone has said they’re suicidal, if you broached that topic with them, I thought that meant that that was probably confirming the idea for them and they were more likely to go and do it. (Interview 6M)

Furthermore, prior experience interacting with mental health patients in other settings had a positive impact on paramedics developing a greater awareness and understanding of mental health issues. This exposure enabled a number of paramedics to become familiar with the broad spectrum of mental health presentations and their symptoms. This exposure also enabled a number of paramedics to develop confident interaction with mental health patients and clinical decision making in this domain. Importantly, this experience may also help to shape attitudes and impact positively on the development of future confidence and subsequent decision making:

I spent three weeks doing nursing training in a mental health facility, going in every day Monday to Friday and hanging out with people who were mentally or behaviourally disturbed and seeing them either improve or deteriorate and talking with them daily. That made a big difference for me being able to do this job. (Interview 5F)
I was a registered nurse before joining this job. During my nursing training, we had a fair percentage of time in the mental health area, both community and institutions. I spent quite a few weeks at [a large psychiatric hospital], both acute, non-acute, watched ECT, spent a couple of weeks in drug rehab and methadone clinics... I have been exposed to quite a few patients of varying degree of illness and I think that experience backs up that confidence that I have in making those decisions but I think there are a lot of people that are out there that are still afraid to use the MRD that will go to chemical far too quickly before trying to talk to the patient and try and get into the patient's head a little bit. (Interview 10F)

I feel very fortunate to have had the experience at [a psychiatric unit] Unit with daily contact with patients suffering from a variety of mental illness, and I think that made a big difference to myself. I think that it would make a big difference to every paramedic if they could have that experience. (Interview 5F)

Colleagues, particularly training officers, were found to play an important role in challenging stereotypical beliefs and negative attitudes towards mental health patients. They also played an important role in modelling appropriate professional conduct and behaviours when interacting with mental health patients. This mentorship arrangement was also found to benefit less experienced paramedics, allowing them to develop decision making skills and confidence when dealing with mental health:

I guess it was the training officer that I had at the time. It was my first training officer. He really enjoyed the mental health aspect of the job, so that was kind of instilled in me; watching him communicate with people the way he did it, the way he questioned them, reassured them. It sort of reinstalled in me that its a lot - you can just talk to them like a normal person. They are a normal person but you don't have to be afraid of asking them questions and afraid of the answers. (Interview 6M)

I certainly say “there are people in this room who could have family members that have got mental health problems”. So it tends to - that's why I try and make it personal but don't treat them any differently. (Interview 9M)
Conversely, some colleagues were found to reinforce and even promote stereotypical and negative attitudes relating to mental health patients among less experienced paramedics:

I guess it’s how you see someone else do those jobs. If all your training officers don’t like it, don’t want anything to do with it, then that, even though you may not want it to that gets instilled in you. It’s like a learned experience. (Interview 6M)

Paramedics who had been personally affected by mental illness were found to possess positive attitudes towards mental health patients. This intimate experience of mental illness may enable paramedics to understand and appreciate the patient experience, which may then influence decision making when caring for mental health patients:

I’d had some experience outside of work personally when I was growing up as a kid with depression and a friend with depression and how that just changed the person that I knew and, you know, the final outcome. (Interview 4F)

I’ve got one of my children who’s been suffering from depression since he was 12, so that’s another thing to me as well… my own personal thing- so I can try and get that in my training sessions, you know, people might have friends and/or relatives that might be suffering. (Interview 9M)

Sub-theme 4.3: Allowing Risk Aversion to Cloud Clinical Judgement

As previously mentioned, the concept of fear was represented in many of the paramedics’ experiences and extended beyond the patient domain. For example, for some paramedics, fear was embedded in issues relating to accountability. In these circumstances, decision making was found to be heavily influenced by the fear that they [paramedics] would be held accountable to others [Coroner] should serious adverse outcomes occur, that is, the suicide of a patient. As a consequence, their
reaction to fear made many of the paramedics feel anxious and wary of their role and responsibility in the context of mental health care:

...these legal powers that have come in are putting paramedics in a position where they're actually impinging on patient rights because they're so frightened that they're going to get pulled into Coroner's Court or, you know, pulled up to a please explain. (Interview 4F)

I feel like it's - this sounds terrible - it's more to cover my own arse situation because when that goes to the coroner, if they have my supporting paperwork that says I, [paramedic] of the Ambulance Service was this concerned about this patient because of this, I guess it doesn't come back to bite me. (Interview 5F)

...something happens to them, and then I've got questions to answer to quite a lot of people. So it's a very big responsibility. (Interview 6M)

SUMMARY

In some circumstances, the provision of pre-hospital mental health care was found to have a negative emotional impact on some paramedics, particularly if their decision making behaviours and outcomes were conflicting with their own personal beliefs. In addition, a range of responses indicated that negative attitudes, beliefs and even emotions such as fear that is associated with mental health patients, could inadvertently impact on clinical decision making outcomes when exercising their functions under the Act. On the other hand, some paramedics in this study described the provision of pre-hospital mental health as a rewarding and enriching part of their professional role and felt privileged having legal powers under mental health legislation bestowed upon them.
SUMMARY OF RESULTS

This chapter presented a summary of the findings of this study, with an emphasis on aspects of the participants’ experiences that were considered to be of significant importance.

In Theme One, ‘Managing the scene with a person thought to have a mental illness’, the experience of paramedics engaged in decision making in relation to the provision of mental health care was primarily focused on keeping those at the scene safe. The ability of paramedics to promote a safe scene environment was typically found to be influenced by the degree to which they were able to exert authority and control over persons or objects present in their immediate scene environment. Irrespective of the circumstances or context in which clinical encounters occurred, the pre-hospital environment was generally perceived by paramedics to be unpredictable and at times dangerous and hazardous. For some participants, the ambulance vehicle provided them with the only safe and secure environment in which to conduct their clinical duties.

There were times when the involvement of police was seen as critical for managing dangerous and risky situations involving mental health patients. In some instances, the involvement and presence of police on-scene was also found to encourage compliance, particularly among patients who were combative and non-compliant. Prior clinical experience and the perceived confidence of individual paramedics were found to influence decision making with respect to requests for police assistance, with less experienced paramedics more likely to arrive at that decision sooner than experienced or confident paramedics.
Most considered the need to establish a therapeutic rapport with mental health patients as a significant factor in facilitating effective decision making. A flexible and adaptive use of language and effective communication skills was found to play a critical and influential role in establishing this connection with patients. These attributes were also found to be important tools that paramedics could rely upon to de-escalate and control situations involving aggressive patients. Conversely, when paramedics experienced difficulties establishing and maintaining a positive rapport and interaction with mental health patients, decision making could be adversely compromised. Regardless of their perceived ability to interact effectively with behaviourally disturbed patients, some of the participants in this study still experienced significant discomfort and a sense of fear during these interactions.

In this study, the assessment of mental health patients was found to be primarily focused on the physical aspects of a patient’s presentation rather than on issues relating to their emotional wellbeing. This patient assessment process also involved scanning of the scene environment for important cues as well as the seeking out of collaborative information from other sources to inform the decision making outcomes at which paramedics arrived.

Further, a number of strategies were found to have a positive impact on decision outcomes for patients whereby patients maintained their civil liberty and were conveyed to hospital as a voluntary patient rather than being detained under the involuntary provisions of the Act. These strategies included, allowing for an extended time on-scene to enhance the establishment of a therapeutic rapport with patients as well as inviting patients into the decision making process by giving them options about decision outcomes. Allowing the patient a choice, encouraged them to engage in a process of shared decision making. Nevertheless, when decisions were ultimately made by
paramedics to remove a patient’s civil liberty by detaining them under the involuntary provisions of the Act, decisions were usually made in response to previous failed attempts to convey patients to hospital voluntarily. In addition, patients assessed as being at increased risk of self-harm or suicide greatly influenced decisions by paramedics to exercise their functions under the Act. In these circumstances, paramedics were found to experience an overwhelming sense of concern and desire for keeping patients safe and contained until they arrived at the emergency department. It was important for some participants to seek reassurance and validation from other colleagues of the appropriateness of their decision making outcomes before making final clinical decisions. This suggests that under certain circumstances, there is a preference for engaging in a joint collaborative approach to decision making in the context of emergency mental health care. As some paramedics gained experience and confidence in exercising their mental health legislative powers, their approach to decision making was found to become more independent and intuitive.

In Theme Two, ‘Lacking adequate Clinical Knowledge, the Significance of Experience and Working with the Act and Protocols’, clinical decision making in relation to paramedics exercising their functions under the Act was found to be compromised by issues relating to perceptions of insufficient clinical knowledge with respect to the broader provision of mental health care and the subsequent lack of confidence that many participants experienced in this domain. This lack of sufficient mental health knowledge, training and skills development had left many participants feeling genuinely disempowered and incompetent in this area of clinical practice. Some of the participants found it onerous and difficult to engage in competent and confident decision making. In particular, many of the participants felt, at times, confused and uncertain about the legal requirements and validity of their decisions when exercising legislative powers in clinical practice. This meant that most participants felt ambivalent
and frustrated when called upon to engage in decision making in this context. As a consequence, most participants expressed a desire for more clinical knowledge with respect to the provision of emergency mental health care and the legislative framework in which care should be delivered. Most participants wanted specific instructional information to guide them in their decision making when exercising their legislative powers under the Act as well as improved foundation knowledge relating to the broader aspects of mental health care. Participants were found to rely upon a range of strategies to compensate for perceived deficits in their clinical knowledge and which were considered to be useful to support them in their decision making in this area of clinical practice. For example, experienced colleagues (senior paramedics or other health professionals) were found to play a supportive and mentoring role for less experienced paramedics. This informal mentorship arrangement was found to be particularly useful as paramedics developed their own clinical knowledge base relating to emergency mental health care. In addition, those who entered the paramedic profession with prior education and training from other health disciplines such as nursing or psychology, were found to be more confident when engaging in clinical decision making with respect to emergency mental health care when compared with those who entered the profession with no prior health education or training. For these participants, prior clinical knowledge could be drawn upon and adapted for use within the pre-hospital emergency context.

It was generally considered by participants in this study, that specific ambulance protocols that dealt with the provision of emergency mental health care as well as organisational codes intended to guide ethical decision making in paramedic practice, were often limited in scope and not universally applicable to decision making that involved the use of the Act into clinical practice. To respond to some of these perceived shortcomings in organisational guidelines and policies, one participant
developed his own mental health resource to support and guide him and local colleagues in their decision making with respect to the use of the Act in clinical practice.

In Theme Three, ‘Decision making at the interface’, the role of others was found to inform and in some cases influence paramedic clinical decision making in relation to the use of the Act. Some participants sought reassurance and validation from experienced colleagues about the appropriateness of their decision making outcomes when enacting their legislative powers under the Act. This appeared to reflect a lack of confidence by participants to engage in independent decision making in this domain or as mentioned previously, a preference for engaging in a joint collaborative approach to decision making in this context.

Most participants in this study considered their decision making had been adversely influenced because other health professionals (namely, emergency department clinicians) were not fully cognisant of the workings of the Act as it relates to paramedic clinical practice or of the requirements for providing ongoing involuntary detention once patients arrive at the emergency department. Furthermore, a lack of confidence and assurance that other health professionals would adequately protect the safety of patients once they arrived at the emergency department was found to negatively influence future decision making actions and behaviours of paramedics. In these circumstances, the decision by paramedics to remove a patient’s civil liberty by detaining them under the involuntary provisions of the Act was often motivated by the desire to force others (emergency department clinicians) to be accountable for the ongoing care and management of mental health patients, irrespective of whether patients met the legal criteria for involuntary detention. In this context, participants were often left with an overwhelming feeling of frustration with what appeared to be a gap in
continuity between pre-hospital paramedic care and hospital care. Participants felt poor co-ordination and management of potentially critical situations was the result and therefore at times, patient safety was compromised. In some cases, this defensive approach to decision making was seen by some paramedics as being the only effective strategy for distancing themselves from emergency department clinicians should future accusations of malpractice be made.

In Theme Four, ‘Being stuck between a rock and a hard place: facing ethical dilemmas and stigmatisation’, accounts of clinical decision making that reflected an array of personal beliefs and attitudes held by paramedics were included. Each of these accounts revealed a complex interplay between a paramedic’s personal beliefs and attitudes towards people experiencing a mental illness, their roles, responsibilities and powers in the context of mental health care, and their subsequent decision making when called upon to care for mental health patients. In some cases, participants were confronted with an ethical dilemma when their actions and organisational responsibilities were incongruent with their personal beliefs and values, that is, when the necessary detention of patients under the involuntary provisions of the Act was at odds with their own personal beliefs. More specifically, the concept of fear was represented in different domains of pre-hospital mental health care. Some referred to this emotional response in the patient domain- a fear of mental health patients. Others on the other-hand, referred to this in the professional domain- a fear that they lacked sufficient clinical knowledge and skills required to deliver proper mental health care. Some also referred to this in the legal domain- a fear of being held accountable to others should an adverse outcome occur while patients are under their care. Under these conditions, clinical decision making for paramedics in this context was considered a challenging and unsettling experience.
In addition, some paramedics were found to exhibit a range of negative attitudes and stereotypical beliefs with respect to mental health patients. These ranged from the belief that mental health emergencies in the community were not the responsibility of ambulance services through to the belief that mental health patients were viewed without good reason as being potentially dangerous and generally likely to commit acts of violence. Negative attitudes and stereotypical beliefs meant that some participants held unsympathetic attitudes to individuals who were thought to have a mental illness. This in turn, could have a negative impact on subsequent clinical decision making. Conversely those who had prior clinical experience caring for mental health patients or those who had been affected by mental illness personally, were more likely to hold positive attitudes and beliefs with respect to mental health patients. Consequently such paramedics were found to exhibit increased confidence when managing mental health emergencies in the community and when engaging in independent and confident clinical decision making in this context.

The following chapter discusses key aspects of the findings of this analysis and examines how the findings relate to the literature. Study conclusions in relation to the four key research questions are presented.
CHAPTER SIX: DISCUSSION AND CONCLUSIONS

The purpose of this chapter is to present an overview of key situational and contextual factors that were identified as influencing decision making in the context of pre-hospital mental health care. This will serve to further illuminate this phenomenon. It also examines the findings of this study in relation to the existing literature and theoretical underpinnings of clinical decision making in paramedic practice. Finally, this chapter presents the conclusions drawn from this study in relation to the four key research questions.

6.1 Overview of Factors which may Compromise or Enhance Decision making in the Context of Pre-hospital Mental Health Care

The findings of this study identify the experience of clinical decision making by paramedics in relation to pre-hospital mental health care as a complex, varied and multi-dimensional phenomenon. The following information provides an overview of the broad range of situational and contextual factors that can either compromise or enhance decision making by paramedics in relation to pre-hospital mental health care. In addition, factors that influence the decision by paramedics to exercise their legislative powers under the Act, are provided. This information has been derived from the findings of this study.
TABLE 8: SITUATIONAL / CONTEXTUAL FACTORS THAT CAN COMPROMISE DECISION MAKING IN RELATION TO PRE-HOSPITAL MENTAL HEALTH CARE.

<table>
<thead>
<tr>
<th>INTERPERSONAL AND INDIVIDUAL FACTORS:</th>
<th>ORGANISATIONAL AND SYSTEM FACTORS:</th>
<th>ENVIRONMENTAL FACTORS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Difficulties establishing a rapport with patients</td>
<td>• Perceived lack of theoretical knowledge to underpin decision making</td>
<td>• Unsafe, uncontrollable or unpredictable scene environment</td>
</tr>
<tr>
<td>• Poor communication skills</td>
<td>• Protocols that provide limited guidance or direction</td>
<td>• Lack of back up assistance to manage combative patients</td>
</tr>
<tr>
<td>• Difficulties empathising with patients</td>
<td>• Lack of understanding of medical terminology</td>
<td>• Difficulties accessing collaborative information from others</td>
</tr>
<tr>
<td>• Poor interagency relationships</td>
<td>• Lack of dedicated decision tool around the use of the Act in clinical practice</td>
<td>• Short on-scene time</td>
</tr>
<tr>
<td>• Difficulties accessing knowledgeable peer/s to verify appropriateness of clinical decisions</td>
<td>• Lack of appropriate supervision in the emergency department to keep patients safe</td>
<td>• Intoxicated bystanders</td>
</tr>
<tr>
<td>• Personal beliefs and/or negative attitudes towards mental health patients</td>
<td>• Conflict between personal beliefs and attitudes, and professional and legal powers</td>
<td>• Previous negative experience / outcome</td>
</tr>
<tr>
<td>• Reluctance engaging in decision making</td>
<td>• Lack of experience exercising powers</td>
<td>• Feeling confused about role, responsibility and legislative obligations</td>
</tr>
<tr>
<td>• Lack of confidence engaging in decision making in this context</td>
<td>• Concerns that patients will not be adequately supervised in the emergency department</td>
<td>• Perception that mental health patients are violent.</td>
</tr>
<tr>
<td>• Previous negative experience / outcome</td>
<td>• Intoxicated bystanders</td>
<td></td>
</tr>
<tr>
<td>• Feeling confused about role, responsibility and legislative obligations</td>
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</tr>
</tbody>
</table>

Table 8 reveals factors that were found to compromise decision making by paramedics in relation to pre-hospital mental health care. These factors included, but were not limited to, the perception that they lacked sufficient foundational theoretical knowledge relating to mental illnesses, and insufficient clinical experience and organisational resources to underpin decision making in this context. In addition, the influence of negative attitudes towards mental health patients, the internal conflict between one’s own personal beliefs, attitudes and professional powers, and the belief that the
continuum of care at the emergency department interface is poorly coordinated, were also found to present significant challenges for paramedics and compromised their decision making.

**TABLE 9:- SITUATIONAL AND CONTEXTUAL FACTORS THAT CAN ENHANCE DECISION MAKING BY PARAMEDICS IN RELATION TO PRE-HOSPITAL MENTAL HEALTH CARE.**

<table>
<thead>
<tr>
<th>SOCIO-PROFESSIONAL FACTORS:</th>
<th>PATIENT FACTORS:</th>
<th>ENVIRONMENTAL FACTORS:</th>
</tr>
</thead>
</table>
| • Experience improves the recognition of cues  
• Experience promotes a more intuitive approach to decision making  
• Ability to establish a provisional diagnosis  
• Being skilled at prioritising tasks  
• Access to supportive collegial relationships to verify the appropriateness of decision outcomes  
• Decision making takes a stepped approach  
• Possessing a positive regard towards mental health patients  
• Optimal interagency relationship with others  
• Confident communication skills to establish a rapport with key agencies  
• Confidence in the coordination of on-going care at the emergency department interface | • Patients who are compliant  
• Engaging in shared decision making e.g. bringing patients into the decision making process  
• Being able to empathise with patients  
• Possessing confident communication skills to establish a rapport with patients | • Extended time on-scene  
• Scene environments which are perceived as safe or controllable  
• Timely access to back up assistance if required  
• Ready access to back up assistance |

While Table 8 highlights factors that can compromise decision making by paramedics in the relation to pre-hospital mental health care, Table 9 reveals those factors that can enhance their decision making in this process. In particular, paramedics were found to place significant importance on the role of confident and adaptable communication skills and an extended time on scene to establish a meaningful rapport with mental health patients. Further, establishing this rapport with mental health patients was seen as crucial in gaining the compliance of patients and encouraging them to participate in
the decision making process. In addition, supportive collegial relationships with peers and other frontline agencies and increased clinical experience in the provision of pre-hospital mental health care, were seen as important factors that specifically enhanced decision making in this context.

**TABLE 10:** SITUATIONAL AND CONTEXTUAL FACTORS THAT CAN INFLUENCE DECISION MAKING BY PARAMEDICS WHEN EXERCISING THEIR LEGISLATIVE POWERS UNDER THE MENTAL HEALTH ACT 2007 (NSW).

<table>
<thead>
<tr>
<th>SOCIO-PROFESSIONAL FACTORS:</th>
<th>PATIENT FACTORS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Decision making takes a stepped approach</td>
<td>• Actual or perceived risk of harm to self or others</td>
</tr>
<tr>
<td>• Lack of supportive collegial relationships to verify the appropriateness of decision outcomes</td>
<td>• Physical signs of injury resulting from self-harming behaviour</td>
</tr>
<tr>
<td>• Confidence using the legislative powers increases with clinical experience</td>
<td>• Non-compliant patients</td>
</tr>
<tr>
<td>• Desire to transfer accountability and responsibility on to others</td>
<td>• Thoughts and emotions that are congruent with behaviour</td>
</tr>
<tr>
<td>• Fear and lack of confidence that emergency department clinicians will keep patients safe on arrival</td>
<td>• Physical signs and symptoms are a dominant source of information</td>
</tr>
<tr>
<td>• Belief that the continuum of care at the emergency department interface is poorly coordinated</td>
<td>• Difficulties engaging in decision making</td>
</tr>
<tr>
<td>• Lack of experience delivering pre-hospital mental health care</td>
<td>• Evidence that patients are unable to engage in adequate self-care</td>
</tr>
</tbody>
</table>

Finally in Table 10, the decision by paramedics to exercise their legislative powers under the Act is influenced by factors that for some extend far beyond the patient’s presentation. In particular, the belief that the ongoing care for mental health patients is poorly coordinated once they arrive at the emergency department and the lack of confidence that other health professionals will keep patients safe, were found to have significant influence on the decisions by some paramedics to detain patients under the involuntary provisions of the Act. In these situations, paramedics felt pressured to make the difficult decision to detain patients who may not have met the legal criteria for involuntary detention under the involuntary provision of the Act. This was often seen as a means of exercising duty of care by transferring responsibility and accountability for the welfare of patients onto other clinicians. Other factors that influenced the decision
by paramedics to detain patients under the involuntary provisions of the Act related to previous failed attempts to gain compliance of patients, those considered to be at actual or perceived risk of harm to self or others and evidence that patients were unable to adequately self-care.

In the following section, the key factors identified above as impacting on decision making in relation to pre-hospital mental health care are discussed in more detail, particularly as they relate to the existing literature and theory.
6.2 Research Findings in Relation to the Literature

6.2.1 Recognition and Management of Mentally Ill Patients

Broadly speaking, this study found that paramedic recognition, assessment and management of mentally ill patients focused primarily on gathering and synthesizing a broad range clinical and non-clinical information. This information was then used by paramedics to establish a provisional diagnosis and for deciding on an appropriate action plan that typically included treatment or interventions that would best meet the needs of the patient’s condition and circumstance. Patient assessment details were then documented on the patient health care record. This approach to paramedic decision making in mental health care was similar to the individualised ‘Enacted Systematic Approach’ adopted by paramedics in Shaban’s study (2011). According to Shaban, this approach to decision making and problem solving comprises five core sequences, namely, assessment, judgment, planning, implementation and re-assessment, with the sequences being repeated three times.

Moreover, findings from this study found that establishing a therapeutic rapport with patients was regarded as being of paramount importance in creating a sense of trust between paramedics and patients. This was considered by the participants to be a major contributor to effective decision making and problem solving in relation to pre-hospital mental health care. The importance of possessing advanced interpersonal and communication skills to effectively manage patients in pre-hospital settings supports the view expressed in much of the paramedic literature (Caroline, 2008; Sanders, 2005). The importance of establishing a therapeutic rapport with behaviourally disturbed patients supports claims previously put forward by Yellowlees (1996), that a major determinant to successfully responding to mental health emergencies in the
community context, is the means by which health professionals are able to establish rapport and trust with behaviourally disturbed patients.

Many of the paramedics in this study felt their ability to establish a therapeutic relationship with behaviourally disturbed patients had a direct impact on whether decision making outcomes ultimately involved use of their legislative powers under the Act. More specifically, paramedics who were able to establish a therapeutic relationship with behaviourally disturbed patients, were more likely to gain their co-operation and compliance and therefore, were more likely to transport patients to hospital voluntarily. In these circumstances, paramedics were less reliant on their legislative powers under the Act to manage these types of clinical encounters. Conversely, paramedics who experienced difficulties establishing this relationship with behaviourally disturbed patients were more likely to arrive at decisions that involved the use of their legislative powers under the Act to manage the clinical encounter.

Some of the paramedics in this study described a range of personal attributes and values that were considered important for establishing this connection with behaviourally disturbed patients in the community and to support effective decision making in this context. These included: i) the capacity to use advanced and flexible communication styles to engage patients in the therapeutic discourse and to assist in de-escalating risky situations; ii) displaying patience in order to build trust and rapport; iii) well-developed interpersonal skills that promote effective working relationships with key stakeholders; iv) capacity to empathise with a patient’s situation; v) taking the role of protector and care-taker to keep patients safe and to minimise harm; vi) respecting cultural and social differences, and vii) acknowledging and respecting a patient’s sense of autonomy. The identification of these core attributes among paramedics was similar to those identified in earlier studies (Shaban, 2011; Sine & Northcutt, 2008). However,
it was interesting to note that the personal values and traits described above varied considerably among the participants who took part in this study. Importantly, they appeared to be significantly influenced by the personal beliefs and attitudes of paramedics with regard to mental health care and those who experience mental illness. This is discussed in more detail under the section ‘Impact of Personal Beliefs and Attitudes’.

Additionally, it was found that an extended time on-scene had a positive outcome for behaviourally disturbed patients, whereby paramedic decision making outcomes were less likely to involve use of the Act. This supports previous claims put forward by Alhituv, Igbaria and Stella (1998) that decision making could be impacted when individuals are under time pressure; the rationale being that an extended time on-scene provides paramedics with an opportunity to establish a therapeutic relationship with (behaviourally disturbed) patients thereby enhancing the likelihood that patients would voluntarily agree to be transported to hospital for further assessment. Broadly speaking, this seems contradictory to organisational demands and pressure that can often encourage paramedics to adhere to short on-scene times. Consequently, if mental health care in the context of paramedic clinical practice is to be provided to patients in the least restrictive means possible, which is in keeping with the overarching principles of mental health legislation, then ambulance authorities need to promote an organisational culture where there are systems and processes in place that support paramedics to deliver care in whatever time is necessary to establish a therapeutic and trusting relationship with the patient.

This study also found that for some paramedics, their priority in the first instance was on ascertaining what the patient’s primary self-reported concerns were before attending to other issues. This appears central to initiating a therapeutic rapport with patients.
The focus initially on the patients' concerns rather than the paramedic's own concerns and priorities, supports the recommendations made by Yellowlees (1996) and reflects the commencement of a collaborative and shared approach to problem solving.

In relation to the recognition and assessment of patients with mental health concerns, this study found that paramedics had a preference for focusing on cues relating to the physical aspects of a patient's presentation such as their physical appearance, as opposed to behavioural or psychological cues. The focus by paramedics on the physical status of patients with mental health concerns was identified in Shaban's (2011) earlier study that examined paramedic clinical judgment and problem solving in mental illness. Moreover, this appears to resemble the pattern recognition approach to decision making and problem solving that has been described in the existing paramedic literature (Alexander, 2010; Bendall & Morrison, 2009; Sanders, 2005), whereby cues that are considered personally meaningful are identified in the clinical presentation and matched with similar events or experiences in the paramedic's past.

An increase in the ability of paramedics to recognise patterns in the patient's presentation appears to improve decision making for some in relation to the care and management of mental health patients because there is greater understanding of the whole clinical situation. This has been asserted in the previous literature that theorises clinical decision making among clinicians (Baker, 2001; Benner & Tanner, 1987; Corcoran, 1986) and suggests that prior experience coupled with increased clinical knowledge, with respect to the broader provision of pre-hospital mental health care, contributes to the development of enhanced pattern recognition skills and clinical decision making competencies in this domain. Decision making and clinical judgement practices in pre-hospital mental health care were therefore found to be largely driven by ‘Interpersonal and Individual factors’. Similar findings were identified in Shaban’s (2011) study. It was found that paramedic clinical judgment in mental illness was
influenced by, among others things, a combination of paramedic prior evaluative knowledge, experience and knowledge. According to Shaban, these factors enhanced paramedics ‘field knowledge’ of mental illness that could then support future decision making in this context. Benner (2001) referred to this type of knowledge as ‘domain knowledge’, claiming that it develops in response to exposure to specific clinical situations. The more exposure a paramedic has to a particular clinical context, for instance, managing patients with mental health concerns or exercising their legislative powers under the Act, the more domain knowledge they are likely to develop. In the existing literature, domain knowledge has been identified as contributing to the development of expert decision making in health professionals (Baker, 2001; Benner, 2001; Wyatt, 2003). In this study, despite their domain knowledge, paramedics considered themselves disadvantaged because they lacked sufficient theoretical knowledge that could be used as a foundation on which to engage in confident decision making. These key issues are discussed in more detail under the section ‘Role of Experience in Clinical Decision making’ and ‘Educational Preparedness and Training’.

This study also found that during the initial patient assessment, paramedics attempted to recognise and identify signs or symptoms that focussed on risk of self-harm or suicide or an individual’s capacity to make appropriate health care decisions, before initiating subsequent care. A prior history of mental illness was also found to influence the assessment and decision making process. In these circumstances, the decision by paramedics to detain patients under the involuntary provisions of the Act usually occurred in response to failed attempts to gain a patient’s compliance and cooperation for the purpose of conveying them to hospital voluntarily. Thus, decision making actions took on a stepped approach in relation to the use of the Act, where decision making actions were modified in response to changes in the patient’s presentation. If patients were assessed as being at high risk of self-harm or suicide, if they were
presenting as combative and/or non-compliant, or if patient willingness to cooperate subsequently changed, decision outcomes were more likely to involve the use of the Act. The decision by paramedics to detain patients who were considered to be at risk of self-harm or suicide also reflected similar decision making practices identified in earlier studies (Bagby, et al., 1991; Hendryx & Rohland, 1997). Importantly, these findings suggest that paramedics have a preference for approaching decision making when exercising their legislative powers under the Act in a circumspect, individualised and structured manner. This structured and responsive approach when making decisions to involuntarily detain patients reflects a similar systematic approach relied upon by health professionals in the study conducted by Anderson and Eppard (1995).

As mentioned previously, this study found that in some cases, the paramedic’s belief or perception that a patient lacked the capacity to make informed decisions about their own circumstance, as opposed to being at risk of harm to self or others, was a predictor that influenced their subsequent decision to involuntarily detain patients under the Act. However, it should be noted that a lack of capacity to make informed decisions about one’s own circumstance on its own does not meet the legal criteria for detention under the Act. Under these circumstances, decision making outcomes of this type fall outside the scope of authorised practice.

It was consistently identified in the findings of this study, that the challenge for some paramedics when they were called upon to manage patients with mental health concerns, was knowing the point at which their decision making should (or should not) involve their exercising their legislative powers under the Act. Some of the paramedics in this study were found to have reached this decision relatively early in the patient assessment process. This confidence in using their powers under the Act was attributed to their prior experience providing pre-hospital mental health care. Others,
however, were much more reluctant to arrive at the decision to detain patients under the involuntary provisions of the Act, preferring instead to convey patients to hospital voluntarily. This suggests that the decision by paramedics to exercise their legislative powers under the Act can be made at different stages of the decision making process and is influenced by a range of considerations and factors that individual paramedics consider important.

Nevertheless, most of the paramedics in this study expressed a preference for conveying patients to hospital voluntarily rather than relying on their legislative powers under the Act. This adds further support to the notion that decision making by paramedics in relation to pre-hospital mental health care appears to take on a stepped or staged approach. As previously mentioned, such an approach to decision making in this context reflects the guiding principle of the Act, recommending that mental health care be provided in the least restrictive means possible. In clinical practice, this means the detention, restraint or sedation of behaviourally disturbed patients must be clinically appropriate and justifiable at all times. Similar practices have been identified in a number of studies from abroad that examined the circumstances in which nurses relied on their legislative powers when managing mental health patients. These studies concluded that mental health nurses had a preference for the use of interpersonal skills such as de-escalation and persuasion techniques to encourage patients to cooperate rather than relying on coercive or restrictive practices such as physical restraint or the removal of patients’ civil liberty (Bowler & Cooper, 1993; Farrow, et al., 2002; Houlihan, 2000). These collective findings illustrate an overall reluctance by paramedics and other allied health professionals to engage in restrictive or defensive forms of clinical practice, particularly where they are ultimately responsible for placing restrictions on a person’s civil liberty.
As previously noted, a key focus of research into paramedic judgment and decision making has been the non-conveyance of patients to hospital for further assessment (Gray & Wardrope, 2007; Haines, et al., 2006; Hoyle, et al., 2012; Snooks, et al., 2005). In part, these studies have sought to examine how paramedics make decisions on whether or not patients require treatment and transportation to hospital for further assessment and their reliance on organisational decision tools (protocols and clinical guidelines) to support this practice. The findings from this study did not subsequently identify occasions when paramedic judgment and decision making did not result in the conveyance of mentally ill patients to hospital for further assessment. That is, based on the personal accounts of participants in this study, all patients who were presenting with mental health concerns were conveyed to hospital for definitive care. For mentally ill or mentally disordered patients who were unwilling to be transported to hospital, the Act mandates that paramedics involuntarily detain patients for the purpose of transporting them to hospital for a mental health assessment. Therefore, the decision by paramedics in this study to convey all patients who were assessed to be mentally ill or mentally disordered to hospital was in accordance with requirements outlined in organisational protocols, clinical guidelines and legislation around the management of mentally ill patients. These constraints around decision making options for the management of mentally ill patients, particularly in relation to the lack alternative referral pathways, reflects similar practices that were observed in previous studies (Shaban, 2011; Snooks, et al., 2005). It also suggests that paramedics may feel uncomfortable or unwilling to deviate from established practice and expectations by making decisions not to transport patients with mental health concerns to hospital for further assessment. Of particular note in Shaban’s (2011) earlier study was that the conveyance of mental health patients to hospital was considered akin to providing
'protection' to patients, a view that was shared by many of the participants in this present study.

Overall, the findings from this study found that decision making and clinical judgement practices adopted by paramedics when exercising their legislative powers under mental health legislation in NSW, were similar to those identified in Shaban's (2011) earlier study undertaken in the Queensland jurisdiction. Furthermore, similarities were found in the factors that influence decision making and clinical judgment outcomes with respect to the management of patients with mental health concerns. Shaban’s study described paramedic clinical judgment and decision making in mental illness as comprising of three fundamental components, namely: i) Contextual Element; ii) Practice Element; and iii) Mediating Element. Moreover, Shaban purported that the factors influencing paramedic decision making in this context included, i) Organisational and Occupational factors; ii) Institutional and Environmental factors; iii) Practitioner-specific factors and, iv) Individual factors. In this present study, the findings also highlighted a broad range of situational and contextual factors that either enhanced or compromised decision making in relation to paramedics exercising their legislative responsibilities under mental health legislation in NSW. These included a range of: i) Interpersonal and Individual factors; ii) Organisational and System factors; iii) Environmental factors; iv) Socio-professional factors and; v) Patients factors.

In the following section the use of decision tools that relate to the mental health care in paramedic practice is discussed.

6.2.2 Organisational Protocols and Clinical Guidelines relating to Pre-hospital Mental Health Care
Most paramedics in this study described the existing mental health protocol as narrow in scope, heavily focused on psychotic and self-harm/suicide presentations, and not reflective (or specifically descriptive) of the diverse range of mental health presentations typically seen in the context of paramedic practice. They also reported that mental health decision tools did not give due consideration to the complexities involved in decision making when responding to patients with mental health concerns that are not strictly considered an emergency. Shaban (2011) touched on this issue in his earlier study citing evidence that suggested the provision of mental health care in paramedic practice is generally in the context of individuals who are in situational or social crisis rather than those who are strictly experiencing a ‘psychiatric emergency’.

Many of the paramedics in this study expressed frustration that the existing mental health protocol failed to provide them with sufficient guidance around the circumstances that would require them to enact their legislative responsibilities under the Act. This resulted in the decision being left up to the individual paramedic, whose subjective interpretation of each clinical presentation was likely to result in a wide range of circumstances where the Act would (or would not) be used. As a result of these concerns, the mental health protocol was not considered by most paramedics in this study, to be a comprehensive or reliable tool in which to guide, inform or support their clinical decision making with respect to the use of their legislative responsibilities under the Act. Similar concerns were identified in Shaban’s (2011) study that explored the efficacy of key organisational tools relating to the provision of pre-hospital mental health care. As a consequence, these limitations appear to inhibit the ability of paramedics to adhere to established requirements as prescribed in organisational policies and protocols when responding to patients with mental health concerns.
In response to the perceived inadequacy of existing organisational tools, many of the participants in this study expressed a desire to access an improved decision making tool to support them in undertaking more advanced and confident clinical assessments of a patient’s mental state and presentation, before making clinical decisions. Furthermore, claims put forward by Wyatt (2003), that decision making and problem solving among novice paramedics was heavily influenced by organisational protocols and clinical guidelines, were not fully supported in this study. In fact, most paramedics in this study were experienced paramedics yet were found to be disadvantaged as a consequence of not having access to a specific organisational protocol that could be relied upon to inform and guide their decision making with respect to mental health care and use of their legislative powers under the Act. As a consequence, many of the paramedics in this study were found to have developed their own personal algorithms around the management of mental health presentations that were based largely on prior clinical knowledge and experience. This adds further support to claims that experienced health professionals often develop their own personal algorithms to support future decision making in clinical practice (Sandhu, et al., 2006).

To address some of the perceived shortcomings identified in the existing mental health protocol, some of the paramedics in this study expressed a desire for a specific Mental Health Act protocol that could be used to provide guidance and clarification around the circumstances in which they should (or should not) exercise their legislative powers under the Act. The creation of a specific Mental Health Act protocol was viewed by some of the paramedics in the study as an important aid to support them as they developed confidence in the use of their legislative powers in clinical practice. The desire to have ready access to a comprehensive decision tool to guide and inform clinical decision making with respect to the management of mental health patients requiring involuntary detention under mental health legislation, was previously put
forward by paramedics who took part in the study by Roberts and Henderson (2009) as well as other frontline health professionals (Sands, 2009).

In the following section, the role of experience and the subsequent emergence and development of skills and confidence in the context of pre-hospital mental health care is discussed.

6.2.3 Role of Experience in Clinical Decision Making

There were many examples in the findings of this study where paramedics, and in particular, intensive care paramedics, described the presence of an instinctive and intuitive response to their decision making and problem solving when responding to behaviourally disturbed patients in the community, for example, “gut feeling” and “getting that feeling a lot earlier”. This suggests that paramedics with advanced education and training in paramedical science may have a preference for engaging in independently driven decision making that, at times, falls outside the scope of organisational decision tools. Moreover, this also provides some support for claims put forward by other researchers who claim that intuitive decision making often occurs when experienced and highly skilled clinicians engage in clinical practice, and is a particularly helpful approach when clinicians are faced with uncertainty and ambiguity (Benner & Tanner, 1987; Corcoran, 1986; Hammond, et al., 1980; Newgard, et al., 2011; Rew, 2000; Reynolds, 2009; Shaban, 2005c; Wyatt, 2003).

Findings from this study suggested that for some paramedics, increased clinical knowledge resulting from direct clinical experience had a positive effect on increasing their perceived level of confidence when engaging in clinical decision making with respect to mental health care. This was consistent with an earlier study finding that
individual factors relating to a paramedic’s knowledge, experience, interpersonal skills and personal traits, influenced their clinical judgment and decision making in pre-hospital mental health care (Shaban, 2011). In contrast, there were other paramedics who felt that experience engaging in clinical practice in relation to mental health care did not correlate with an increase in their clinical knowledge or perceived level of confidence in this domain. As a consequence, these findings provide only partial support for those identified in other studies (Benner & Tanner, 1987; Corcoran, 1986; Rew, 2000; Wyatt, 2003).

In addition, while the paramedics in this study had gained significant clinical experience in the delivery of pre-hospital mental health care, the majority of paramedics lacked significant clinical experience in exercising their legislative powers under the Act at the time the study was undertaken. Consequently, this lack of clinical experience described by some of the paramedics in this study may have inhibited the development of their domain knowledge and perceived level of confidence engaging in independent clinical decision making when exercising their legislative power under the Act. This would add further support to the claims put forward by Benner (2001) and Wyatt (2003), that domain knowledge as opposed to theoretical knowledge, is enhanced in response to specific clinical situations. If clinical knowledge and subsequent confidence in engaging in clinical decision making increases in response to being exposed to specific clinical encounters, then arguably the perceived confidence of paramedics will likely increase as they are exposed to clinical situations that involve their making use of their legislative powers under the Act.

When it comes to experience, a number of similarities appear to exist between paramedics and mental health nurses when responding to a mental health emergency. For instance, Sands (2009) found that nurses typically rely on prior clinical experience
rather than specific clinical decision making models or frameworks when managing patients who are presenting with mental health concerns. The reliance on knowledge gained from past clinical experience over theoretical knowledge or the adherence to formal clinical decision making models reflects findings derived from previous studies (Shaban, 2005c, 2006; Wyatt, 2003). In addition, some of the participants who took part in Sands study, had received no emergency mental health training, yet considered prior experience as being a significant and contributing factor in supporting them in decision making in this context. Collectively, these studies indicate that prior clinical experience can play a significant and influential role in developing confident decision making skills in relation to both pre-hospital and hospital-based mental health care. It also suggests that some clinicians develop a degree of expertise when caring for the mentally ill that is not wholly consistent with traditional theories that have been proposed to account for decision making in this context.

However, this study also found the development of confidence by paramedics around the use of their legislative powers can also be significantly compromised following negative experiences or adverse events that occurred in relation to the ongoing care and management by emergency department clinicians of patients they [paramedics] had previously detained. For example, some paramedics were found to question the legitimacy of their legal powers and their confidence around these powers if it was later discovered that patients had left the emergency department before receiving a mental health assessment. In response to this negative experience, paramedics felt that they would be less willing to rely on these powers for the purpose of conveying patients to hospital for further assessment in the future. This was identified as a major concern for many participants of this study and is explored in more detail under sub-heading ‘Dealing with Ethical Issues’. 
The importance of reflecting on one’s own clinical performance during and after clinical practice has been promoted as a core attribute of a skilled clinician and is generally used to improve future approaches to decision making during clinical encounters. Moreover, Wyatt (2003) emphasised the importance of paramedics engaging in this reflective process during clinical practice as this helps to further develop the skills and abilities that are required to manage clinical situations. The findings from this study indicate that several paramedics had engaged in this reflective activity following their involvement in mental health related incidents. This ‘reflection-on-practice’, as previously described in the literature, appeared to reinforce their awareness of their struggle, in certain circumstances, to engage in confident decision making in this context.

In the following section, educational preparedness and training that relates specifically to the provision of mental health care in paramedic practice is discussed.
6.2.4 Educational Preparedness and Training

A striking finding from this study was that most paramedics perceived they had limited theoretical knowledge relating to mental health care, including the use of mental health legislation in clinical practice. This limitation hindered their ability to provide sound clinical opinions or to make legally informed clinical decisions regarding a patient’s presentation and their need for treatment. These sentiments reflect those expressed in earlier studies and discussion papers addressing key issues relating to mental health care in paramedic practice (Roberts & Henderson, 2009; Shaban, 2011; Townsend & Luck, 2009).

In this study, a perceived lack of suitable education and training with respect to the provision of pre-hospital mental health care featured predominantly in the participants' responses. This is consistent with findings from previous studies that examined the effectiveness of mental health training programs delivered to paramedics (Roberts & Henderson, 2009; Shaban, 2005c, 2009; Shaban, et al., 2012; Townsend & Luck, 2009). Most paramedics in this study reported that the mandatory mental health training program that was designed to provide them with the necessary theoretical knowledge relating to pre-hospital emergency mental health care, was narrow in scope and as a consequence had failed to provide them with sufficient foundation knowledge on which to further develop competent clinical skills. In particular, the majority of paramedics still perceived that at the completion of the mandatory mental health care training, they lacked sufficient knowledge and understanding of common mental illnesses, the requirements for providing clinical mental health care and the appropriate use of mental health legislation in clinical practice. As a consequence, many of the paramedics in this study expressed the belief that this lack of training had directly impacted on their perceived level of confidence to engage in independent clinical
decision making with respect to use of the Act. Similar concerns were raised in a discussion paper by Townsend and Luck (2009) that examined the evolving role of paramedics in New South Wales, Australia in relation to clinical mental health care in paramedic practice.

To address the perceived deficits in theoretical knowledge, the majority of paramedics in this study expressed a keen desire for additional education and training with respect to the provision of clinical mental health care. This included a need for additional training that could enhance their understanding of the workings of the mental health legislation as it applies to clinical practice. The desire for enhanced mental health education and training was consistent with the needs of paramedics, emergency department clinicians and mental health nurses as identified in previous studies in Australia (Jelinek, et al., 2013; Roberts & Henderson, 2009; Sands, 2009; Shaban, 2005c, 2006; Weiland, et al., 2011).

Nevertheless, while the findings of this study revealed a general dissatisfaction with the quality and scope of clinical mental health education and training provided to paramedics in NSW, there was evidence to suggest that paramedics who had entered the paramedic profession with prior allied health qualifications (such as nursing or psychology) were likely to display more developed and confident decision making skills with respect to the provision of emergency mental health care compared with those who had entered the paramedic profession from a non-allied health background. This provides support for the findings identified in previous studies that revealed a positive correlation between educational preparedness and increased clinical decision making competencies among health professionals (Del Bueno, 1983; Tanner, et al., 1987). There were however, distinct differences in the methods used in previous studies to examine this relationship. For example, previous studies used a range of vignettes
(case-studies or video simulations) of patient presentations to examine clinical decision making among differently qualified nurses. Whereas in this study, participants were either observed engaging in clinical decision making in the context of both mental health and non-mental health cases in real-life settings or were required to reflect upon and describe their own subjective experience of engaging in clinical decision making during particular clinical encounters.

In the following section, the value and significance of relationships in the clinical environment to support decision making by paramedics in the context of pre-hospital care is discussed.

6.2.5 Relationships in the Clinical Environment

This study found that when approaching decision making in the context of pre-hospital mental health care, including when making decisions to exercise their legislative powers under mental health legislation, paramedics had a preference for engaging patients in a collaborative and shared decision making process. Moreover, decision making outcomes were also found to be influenced and guided by the active participation of family members, carers, friends and even bystanders. Recent research examining aspects of paramedic clinical practice, including mental health care, also identified the contribution of shared decision making in influencing and guiding paramedic decision making outcomes (Porter, et al., 2007; Shaban, 2011).

Overall, this study found that a shared decision making approach was used in an attempt by paramedics to gain the cooperation of patients by providing patients with options about decision outcomes from which to choose. For most paramedics in this study, encouraging mentally ill patients to agree to be transported to hospital voluntarily
was their preferred action outcome and thus their main focus during the clinical
encounter. Importantly, this approach to decision making is in keeping with the
overarching principle of mental health legislation that promotes the use of less
restrictive interventions wherever possible.

In this study, supportive collegial relationships shared between paramedics were found
to play an important role as clinical knowledge is developing in relation to use of the
Act. For example, a number of paramedics who perceived they lacked confidence
engaging in independent clinical decision making with respect to use of their legislative
powers under the Act, sought verification regarding the appropriateness of their
decisions, from colleagues who were perceived as possessing specialist clinical
knowledge in this context, colleagues such as paramedic educators or intensive care
paramedics. This strategy to enhance competent decision making in pre-hospital
mental health care also reinforces the importance of the apprenticeship framework that
supports the intra-professional development and transfer of knowledge among
paramedics previously described in the literature (Reynolds, 2009). Previous studies
have also underscored the value of supportive collegial relationships in clinical practice,
particularly as one’s clinical knowledge is developing in a specific clinical area
(Anderson & Eppard, 1995; Cioffi, 2000; Jelinek, et al., 2013; Orme & Maggs, 1993;
Shaban, 2011).

Anderson and Eppard (1995) earlier found that health professionals could benefit
significantly from engaging in shared decision making with respect to the involuntary
hospitalisation of patients. Engaging in a consultative discourse with other colleagues
either during or after clinical encounters appears to provide less experienced
paramedics with an opportunity to clarify clinical knowledge and to explore the
appropriateness of their clinical decisions. This need to verify the appropriateness of
decisions from more experienced colleagues either during or following clinical encounters supports similar practices that have been observed among health professionals in other disciplines (Hedberg & Larsson, 2003; Orme & Maggs, 1993). Moreover, Jelinek et al., (2013) found staff confidence when managing mental health emergencies in the emergency department context, could be significantly enhanced when emergency department clinicians had access to skilled psychiatric support staff. These studies have shown that the development of clinical knowledge and subsequent decision making competencies can be greatly enhanced when supportive and collaborative collegial relationships exist between colleagues. This suggests that in the context of paramedic practice, there are likely to be significant benefits gained from partnering less experienced paramedics with senior and more experienced paramedics, as this can create an optimal learning environment where the transfer of clinical knowledge is most likely to occur. Conversely, this study found that where there is limited or no access to collegial relationships to verify the appropriateness of decisions to exercise legislative powers under of the Act, then independent and confident decision making can become challenging and difficult for paramedics.

This study also found that the reliance on collegial relationships to support decision making can be problematic if experienced paramedics perceived themselves as lacking sufficient clinical knowledge and understanding of the workings of the Act. The paramedics who took part in this study were described as relatively experienced paramedics (see Table 6), yet most considered themselves as possessing poor and insufficient clinical knowledge with respect to the application of the Act into clinical practice. It meant that they felt ill-prepared to take on these legislative responsibilities and therefore lacked the confidence when faced with these encounters. Under these conditions, there is the potential that experienced paramedics may feel less confident sharing clinical knowledge with less experienced paramedics.
Importantly, this study found that collegial relationships extended far beyond the relationship shared between paramedics to include the relationship that exists between paramedics and emergency department clinicians. Moreover, it reflects the hierarchical positioning of clinicians from different health disciplines that has been described in the existing literature (Gonsoulin & Palmer, 1998; Hawks & Hammond, 1990; Reynolds, 2009; Shaban, 2011). This is best illustrated by the cross-over of professional authority and responsibilities from paramedic care to physician or nursing care that occurs at the pre-hospital and in-hospital interface.

In this study, there was evidence that revealed that some paramedics felt significantly frustrated by the perceived lack of knowledge and understanding of the workings of the Act among emergency department clinicians (those colloquially regarded as gatekeepers to the emergency department). In particular, some paramedics perceived that emergency department clinicians appeared confused or uncertain about the legal requirements regarding the ongoing care and management of involuntary patients once they arrive to the ED in care of paramedics. A number of previous studies also touched on this issue when citing concerns that have been raised by ED clinicians across a number of Australian jurisdictions regarding a lack of sufficient training with respect to the application of mental health legislation in the ED setting as well as the requirements with respect to the broader provision of mental health care (Jelinek, et al., 2013; Sands, 2009). This, in turn, raised concerns amongst paramedics in this study with respect to the implications this may have on their own clinical powers. There were often inconsistent decision making outcomes made by emergency department clinicians with respect to the ongoing care and management of patients once patients had been triaged in the emergency department. This study found that in some instances, emergency department clinicians directed involuntary patients to either wait in unsecured areas such as public waiting rooms, effectively overturning the decisions
made by paramedics to restrict a patient’s freedom of movement, or alternatively, admitted these patients to a secure area in the emergency department with appropriate nursing or security staff in place to provide supervision. A recent study conducted by Weiland, et al., (2011) also found that ED clinicians felt frustrated by a lack of suitable secure areas in the ED setting in which to locate mental health patients upon their arrival. Moreover, the decision by triage clinicians in emergency departments to not admit all mental health patients directly into the emergency department may also reflect an uncomfortable tension. This tension may result from the experience of not wanting to be perceived by other ED clinicians as making soft decisions and for not maintaining the [ED] department’s stance regarding the high threshold for admission. Crowley (2000) suggested the individual values and beliefs held by ED clinicians coupled with broader cultural influences of the emergency department environment may also help to explain why mental health patients receive a different level of care when they arrive at the ED. Similar to the reports identified in Shaban’s (2011) study, paramedics in this study also reported occasions when emergency department clinicians would scrutinise or disagree with their assessment of mental health patients and their clinical judgments and decisions regarding the need for transporting [mental health] patients to hospital for further assessment. This further illustrates the hierarchy that appears to exist when clinicians from different health disciplines interact and reinforces what has been described previously in the literature (Gonsoulin & Palmer, 1998; Reynolds, 2009; Shaban, 2011). Moreover, the practice of emergency department clinicians overturning the decisions made by other health professionals with respect to the ongoing involuntary detention of patients under mental health legislation, was previously cited in a study conducted in Australia by Fiorillo (2001). The findings of this study also support similar practices in Canada that were identified by Nielson (2010), in which mental health patients typically experienced a different level of clinical care, namely longer
times during their stay in the emergency department. Collectively, these findings suggest that emergency department clinicians can often display a lack of confidence in the clinical decisions that are made by paramedics in the context of mental health care or that they do not understand the nature and practice of community-based clinical care. The study conducted by Sands (2009) in Australia claimed that inconsistent decision making outcomes by emergency department clinicians regarding the management of mental health patients in the ED may have been a reflection of either the individual nurse’s prior experience of mental health care in the emergency department setting, or differences that exist in local arrangements at each facility regarding mental health practices.

The development of the Memorandum of Understanding for Emergency Mental Health Care (2007) framework document in New South Wales, Australia has arguably had some success in clarifying these interagency issues, as well as enhancing the streamlining of health care services for mental health patients between the community and hospital interface. Nevertheless, it would appear timely to consider a review of what (if any) in-service training is provided to emergency department clinicians with respect to the workings of the Act and the implications this legislation has for clinical practice and care pathways in the emergency department setting. It is likely that the delivery of an enhanced and dedicated in-service training for emergency department clinicians may assist in further clarifying the legal requirements that exist for both voluntary and involuntary patients once they arrive at the emergency department. Clarifying the issues associated with the provision of emergency mental health care as well as enhancing the availability, coordination and responsiveness of security or supervisory arrangements in the emergency department setting is likely to significantly enhance the continuum of care of mental health patients as they transition through the health system.
Finally, the decisions by paramedics to exercise their legislative powers under mental health legislation in NSW can at times be influenced by their working relationship with frontline police on-scene. The study found that, in some circumstances, paramedics felt empowered to take a coordinating and authoritative role when an inter-agency response is required on-scene to manage behaviourally disturbed patients. This may reflect a mutual appreciation and understanding of the challenges involved in providing community-based mental health care and suggests police may have a preference for being guided by paramedic judgement and decision making in these situations. Interestingly, Shaban (2011) claimed that paramedics and police may perceive a shared identity as ‘emergency service workers’ while performing their respective duties, but this identity is not overtly shared by paramedics and ED-based clinicians.

In the following section, the existence of personal beliefs and attitudes that relate to broader concepts of mental health, mental health patients and the role of paramedics in the context of mental health care is examined; in particular, what impact these factors can have on the decision making process during clinical practice.

6.2.6 Impact of Personal Beliefs and Attitudes

A revealing finding of this study was that paramedics possess a range of strongly held beliefs and attitudes when it comes to issues relating to mental health. For example, some paramedics expressed positive attitudes towards mental health patients and this was reflected in their core beliefs that the response to mental health presentations in
the community should, where practicable, be dealt with by paramedics rather than
being the responsibility of the police. Furthermore, paramedics who possessed a
positive regard towards mental health patients were more likely to perceive their role in
this domain with more positive attributes. In addition, they were more likely to be
enthusiastic about their role when called upon to care for patients with mental health
concerns, generally embraced the opportunity to care for these patients and felt
comfortable making use of their legislative powers under the Act for the purposes of
conveying patients to hospital for further assessment. For these paramedics, the
introduction of legislative powers for paramedics under the Act signifies an
acknowledgement and legal recognition that they have an active and important role to
play in the provision of pre-hospital mental health care. These sentiments were
different from the views expressed in previous studies, that clinicians from other health
disciplines were generally reluctant to take on similar legislative powers under the
mental health legislation in the United Kingdom (Bowler & Cooper, 1993; Hansson, et
al., 2011; Houlihan, 2000; Liggins & Hatcher, 2005; Thornicroft, et al., 2010).

In contrast, there was evidence in this study supporting claims in the literature that
there is a link between prejudicial attitudes among clinicians and individuals who
experience a mental illness (Bayar, Poyraz, & Poyraz, 2009; Lauber, et al., 2004; Lewis
& Appleby, 1988). In this study, a number of paramedics expressed the belief that
some of their colleagues perceived mental health emergencies as not being the
responsibility of paramedics, and that they regarded their role in this context as being
limited to the transportation of patients to hospital rather than involving the delivery of a
therapeutic form of clinical care. This sentiment was also identified in the studies
undertaken in Australia by Shaban (2004) and Roberts and Henderson (2009). As a
consequence, paramedics could be reluctant or ambivalent about engaging in clinical
decision making in this domain. In the study conducted by Liggins and Hatcher (2005),
health professionals who held negative attitudes toward mental health patients were more likely to engage in behaviours or actions that would limit their interactions with mental health patients in the clinical environment. In paramedic practice, the overt practice of limiting interactions with patients suspected of having a mental illness is neither possible nor practicable since paramedics do not self-select the types of call-outs they are tasked to attend, nor do they have the option of refusing to deliver clinical care on the basis of their own preference. They may however, decide to deliver a diminished or reduced quality of care when they find themselves in these circumstances. Importantly, recent publication of the report, A Contributing Life: the 2012 National Report Card on Mental Health and Suicide Prevention in Australia, reaffirmed the expectation across all health disciplines that the level and quality of care provided to individuals who experience a mental illness should be equal to that of individuals with other medical conditions (National Mental Health Commission, 2012). The challenge for ambulance authorities is to embed clinical governance systems that can eliminate (or at least inhibit) discriminatory practices in clinical practice and foster an organisational culture that discourages and condemns the delivery of sub-standard care to individuals who are experiencing a mental health emergency.

Paramedics who possessed negative attitudes about mental health patients or who were unsympathetic towards them were also more likely to possess stereotypical beliefs such that they perceived mental health patients as being more likely to perpetrate acts of violence and therefore pose a risk to their own safety. The belief that mental health patients present an increased risk of violence towards others has been reported in earlier studies (Noffsinger & Resnick, 1999; Pescosolido, Monahan, & Link, 1999; Phelan, Link, & Stueve, 2000). These stereotypical beliefs reinforced the view among some paramedics that mental health patients should be managed by police and not paramedics. Consequently, paramedics in this study who possessed negative
attitudes towards mental health patients felt frustrated and annoyed when called upon to engage in clinical decision making with respect to the use of the Act, because the legislative powers which they have been mandated to use, are not wholly consistent with their core beliefs about their role in this domain. In other words, some paramedics were annoyed and frustrated because they did not see this as being a core part of their clinical role or responsibility. This perception among some paramedics that mental health patients require a reduced level of care reflected similar views that were expressed by paramedics who participated in the study conducted by Roberts (2007) although these views were not identified in Shaban’s (2011) later study.

Reports from the participants in this study suggested that those who entered the paramedic profession with prior experience of interaction with mental health patients or those who had been personally affected by mental illness, were more likely to possess a positive attitude towards mental health patients. The assumption is that direct contact with individuals who have a mental illness can help to de-mystify and challenge negative or stereotypical beliefs or attitudes. This supports previous studies findings that individuals who had previous contact with mental health patients were more likely to possess positive attitudes towards mental health patients. Such an attitude can directly contribute to a decrease in the use of stigmatisation (Halter, 2004; Read & Harré, 2001; Sadow, Ryder, & Webster, 2002). In the paramedic profession, this suggests that increased contact with individuals who have a mental illness in contexts that are either personally meaningful or in clinical environments that are considered safe and supportive, may facilitate and promote positive attitudinal change among the paramedic workforce. Furthermore, it was felt that incorporating a practicum component into the existing mental health training curriculum would serve as an ideal opportunity to challenge negative attitudes or stereotypical beliefs that paramedics might hold. This may also improve clinical knowledge of mental health care and thus
inform future decision making. However, findings from an earlier study in the United Kingdom found prior clinical experience providing mental health care did not correlate with a positive attitude towards mental health patients among health professionals (Sivakumar, et al., 1986).

This study also found that attitudes and personal beliefs held by paramedics can be influenced by their colleagues in the workplace. For instance, paramedics who possess positive attitudes towards mental health patients were found to play an important role in helping to shape and promote positive perceptions of those patients. In some cases, they were well placed to challenge negative and/or stereotypical beliefs among their peers in the workplace. Conversely, colleagues who possess negative attitudes and/or stereotypical beliefs towards mental health patients could also play a powerful role in further reinforcing and promulgating these attitudes and beliefs among peers in the workplace.

Response from some of the paramedics in this study suggested internal training courses could provide an ideal opportunity for ambulance authorities to foster and promote positive attitudes and beliefs with respect to mental health patients, and an opportunity to reinforce the important role that paramedics play in the context of pre-hospital mental health care. Moreover, training courses could provide a suitable forum in which to challenge any negative pre-existing ideas and beliefs held by paramedics, as illustrated by one of participant in this study “It was my training officer. He really enjoyed the mental health aspect of the job, so that was kind of instilled in me”. Conversely, there were some responses from paramedics indicating that earlier training courses may have reinforced the traditional view that the responsibility of paramedics in relation to pre-hospital mental health care was focused primarily on the
transporting patients to hospital rather than providing any form of therapeutic clinical care. Another participant in this study commented “If all your training officers don’t like it, don’t want anything to do with it, then that, even though you may not want it to that gets instilled in you, it’s like a learned experience”. Possessing personal beliefs and attitudes such as these meant that for some paramedics, providing high quality pre-hospital mental health care was neither considered necessary nor an accepted part of their clinical role. Similarly, the responses by emergency department clinicians to mental health patients who were brought in by paramedics, suggested that mental health patients may also be viewed by other health professionals as requiring a lower level of clinical care as previously mentioned.

The following section examines a range of ethical, moral and professional dilemmas that were identified in this study as having the potential to impact on paramedic clinical practice in the context of pre-hospital mental health care. This section also examines the range of strategies that were typically relied upon by paramedics to deal with these dilemmas as they arose.

6.2.7 Dealing with Ethical Issues

This study found that paramedics can find themselves faced with complex ethical and professional judgement dilemmas when responding to mentally ill patients in the community and are consistent with some of the issues that have been described in the recent literature (Townsend & Luck, 2013a). In relation to pre-hospital mental health care in particular, these challenges were found to be more demanding and complex when conflicts arose between a paramedic’s own personal beliefs and attitudes and their clinical responsibilities and legal obligations. They may also occur when the clinical decisions made are not consistent with the patient’s own wishes. This may be represented by the refusal of patients to receive recommended treatment. Cottone
(2001) and Haidt (2001) both touched on these issues, claiming that interpersonal and personal factors can impact on the decision making outcomes clinicians reach. Luck (2013b) also cautioned that paramedics need to consider the ‘ethical’ in all instances of professional practice, rather than choosing to think ethically in particular situations.

Nevertheless, paramedics in this study were found to possess and subscribe to a professional identity that reflected sound behavioural and attitudinal beliefs and concepts around professionalism, care, respect and lawful conduct during clinical practice, and that were consistent with those prescribed in core policy documents such as the Health Services Act and the organisation’s Code of Conduct (NSW Government, 1997; NSW Health, 2012a). Importantly, these attributes appeared to underpin their approach to ethical decision making when exercising their legislative powers under the Act.

As previously outlined, this study also found that a useful approach to guide decision making in relation to pre-hospital mental health care was to engage in a collaborative and joint approach to clinical practice to ensure clinically justifiable decisions were being made. It is likely that this consultative approach to decision making may provide an important opportunity for paramedics to discuss ethical and moral issues that arise during the decision making process and that may inadvertently impact on their decision making capacity. The potential reliance on peer discussions to assist paramedics to deal with clinical and ethical issues are consistent with similar practices that have been observed among clinicians from other health disciplines (Johnstone, et al., 2004). While the use of peer discussions forms an important component of the mental health training program for paramedics, where clinical issues relating to the provision of pre-hospital mental health care are raised and discussed, the extent to which these interactions
provide an opportunity for paramedics to consider potential ethical issues that may later arise in clinical practice was unclear.

A fundamental requirement for promoting ethical decision making in paramedic practice is that decisions relating to patient care issues must be clinically justifiable, lawful and consistent with organisational policies. However, as mentioned previously, findings from this study indicated that factors beyond a patient’s presentation, such as the impact of negative attitudes from other colleagues, can inhibit the ability of paramedics to engage in ethical decision making when called upon to deliver pre-hospital mental health care.

Under certain conditions, paramedics can be forced to make the difficult decision to defy formal requirements of professional practice in the interest of safeguarding the welfare and safety of patients. Such decision outcomes may be viewed as inconsistent with mandated policies and procedures but may still be considered clinically justifiable in these circumstances since they are perceived to be motivated by the need to act in the best interest of the patient. As this study found, detaining patients who did not meet the legal criteria for detention was seen by some paramedics as a means of transferring accountability and responsibility for the ongoing care and management of mental health patients onto hospital clinicians. That is, a strategy for maintaining a duty of care to their patients whilst forcing other clinicians to be legally responsible. Similar practices were found among health professionals in earlier studies in North America (Aviram, 1993; Lidz, et al., 1989; Page, 1981). These earlier studies reflected the belief that involuntary patients were more likely to receive a different level of response once they arrived at the emergency department. This defensive form of paramedic practice had been earlier identified by Shaban (2005c). He also found that decision making by paramedics in the context of pre-hospital mental health care, could be negatively compromised by the fear of future litigation. This in turn could create a likelihood that
paramedics might arrive at clinical decisions that are neither necessary nor clinically justifiable. A fear of being sued by patients or their families for clinical negligence was identified as a significant concern for many of the paramedics who took part in this study. These concerns do not appear unfounded given previous legal cases that have been cited in the literature where emergency department clinicians have been prosecuted for failing to provide adequate supervision to mental health patients who had subsequently left the ED without notice and had successfully suicided (Doyle & Vissers, 1999). Nevertheless, the practice of detaining voluntary patients is contrary to recovery-oriented approaches to the mental health systems of care that now predominate in western healthcare, whereby the provision of care to individuals who are experiencing a mental illness is now focused on empowering individuals to make their own choices in regards to care planning. The decision by paramedics to detain patients under the involuntary provisions of mental health legislation may also be a reflection of a broader systemic issue, notably a belief held by some paramedics that the public health system in New South Wales, Australia may at times experience a reduced capacity to deliver a coordinated, seamless and integrated level of mental health care to patients. Paramedics in earlier studies have voiced similar concerns in response to mental health reforms that have taken place across other Australian jurisdictions (Roberts, 2007; Roberts & Henderson, 2009; Shaban, 2011).

In summary, this research has shown that paramedic decision making in the context of pre-hospital mental health care is influenced and guided by the interplay between a multitude of situational and contextual factors which relate to each individual clinical encounter. In answering the key research questions that were proposed in section 2.4 (‘The Purpose of this Study’), this study has been able to respectfully acknowledge the skills and expertise of frontline paramedics when they are called upon to manage and care for patients with mental health concerns, despite apparent institutional and system
inadequacies, and how they approach and navigate decision making in this context. Furthermore, this research has also been able to highlight key areas that could enhance the capacity of paramedics to engage confident and skilled decision making when responding to mental health presentations. Overall, this study has played an important role in contributing to the growing body of theoretical knowledge of paramedic clinical judgment and decision making in the context of pre-hospital mental health care.

In the following section, the conclusions drawn from the findings of this study are discussed in relation to the four key research questions and their corresponding objectives.
RESEARCH QUESTION 1: What is the experience of paramedics clinical decision making in the context of pre-hospital mental health care, in particular, when making use of their legislative powers under the Act?

For most paramedics in this study, the experience of providing mental health care in the community is often stressful and presents challenges and rewards that make it uniquely different from other areas of paramedic clinical practice. All the paramedics in this study underscored the importance of using advanced communication and interpersonal skills to establish a therapeutic and trusting relationship with patients who present with mental health concerns. Moreover, the paramedics in this study described a range of personal values and attributes that were considered essential to support effective decision making in pre-hospital mental health care.

This study found that most paramedics appeared skilled at identifying and recognising important cues typically seen in the context of mental health presentations. Being skilled at gathering and synthesizing relevant clinical and non-clinical cues enables paramedics to construct a clinical impression of each clinical encounter and assists them in establishing a provisional diagnosis before determining and initiating subsequent care and treatment. Behavioural and physical cues of a patient’s presentation, as opposed to their psychological and emotional cues, were considered to be a primary source of information that can be used to guide and inform decision making in relation to pre-hospital mental health care. These included behavioural cues such as overt psychotic features (strange behaviours, disorganised or incoherent speech) or physical cues such as signs of self-inflicted injuries, or a dishevelled or unkempt appearance.

Prior clinical experience in the provision of pre-hospital mental health care was found to play an important role in the development of pattern recognition skills among
paramedics. Prior clinical experience enables paramedics to develop an increased understanding of these types of clinical encounters. The more experience paramedics have in attending mental health presentations then the more competent they will be in recognising relevant cues. Furthermore, prior clinical experience can promote a fast, intuitive and instinctive approach to decision making in this context. This suggests that the decision making skills of paramedics working in busy areas where there are higher incidences of mental health presentations (e.g. metropolitan areas) are more likely to benefit from increased exposure to these types of clinical encounters compared with those working in regional areas (e.g. country towns or provincial areas) where there may be fewer incidences of mental health presentations.

In addition, this study found that paramedics who had prior experience in the broader provision of mental health care were generally more likely to perceive themselves as confident and capable of engaging in independent decision making when delivering pre-hospital mental health care. Nevertheless, when decision making outcomes necessitate the involuntary detention of patients under the Act, the majority of paramedics describe how they lack confidence and skills to enable them to engage in independent clinical decision making in this context because, in part, they had insufficient experience engaging in decision making in this domain.

This study found that independent clinical decision making when attending to mental health presentations could be greatly enhanced when paramedics had access to supportive collegial relationships. Supportive collegial relationships provided an important opportunity for paramedics to verify the appropriateness of the clinical decisions they made. On the other hand, a lack of supportive collegial relationships could make decision making in this context uncertain and risky for paramedics. The study also found that patients, family members, bystanders and frontline police officers
influence the decision making process. Overall, the study found that paramedics have a preference for engaging patients in a collaborative and shared decision making process for the purpose of gaining the patient’s cooperation. This study found that when decisions were made by paramedics to detain patients under the Act, they were usually made in response to previous failed attempts to gain the compliance and cooperation of patients for the purpose of conveying them to hospital voluntarily. Thus, decision making was an event driven and staged process, where decisions were re-evaluated and modified in response to changes in the patient’s presentation.

RESEARCH QUESTION 2: What meanings do paramedics give to their experience of undertaking the Ambulance mental health training and has this experience impacted their subsequent approaches to decision making in the context pre-hospital mental health care?

The introduction of the pre-hospital emergency mental health course in 2007 was intended to equip paramedics with enhanced theoretical knowledge and clinical skills to enable them to make confident and independent decisions when exercising their new legislative powers. In addition, training was supported by the implementation of dedicated mental health decision tools. However, this study found that most paramedics still perceived themselves as lacking sufficient theoretical knowledge at the completion of this training and as a consequence, lacked confidence engaging in independent and confident decision making in the context of pre-hospital mental health care. The experience of completing the mental health training course had culminated in the belief among many of the participants that they still had inadequate understanding of the aetiology, prognosis and treatment pathways of most mental illnesses. They had poor understanding of relevant medical terminology and psychopharmacology, and felt
a sense of confusion and uncertainty about the circumstances in which they should (or should not) make use of their new legislative powers under the Act during clinical practice.

In response to these shortcomings in the existing mental health training course, most paramedics expressed a keen desire for additional mental health training to further increase their theoretical knowledge in this evolving area of clinical practice. This was in spite of the findings of this study that indicated other supportive factors such as clinical experience and access to skilled and knowledgeable colleagues (other paramedics, emergency department clinicians, mental health professionals and medical officers) were at least, if not more effective than theoretical knowledge alone.

It was found that paramedics who had entered the paramedic discipline with a background from other health disciplines were able to draw upon their existing theoretical knowledge to inform their decision making in the context of pre-hospital mental health care. In addition, senior paramedics and other health professionals (ED nurses, mental health professionals and medical officers) were identified as an ideal source of supplementary information and theoretical knowledge with respect to the provision of mental health care that other paramedics could draw from, learn and enhance their future decision making and problem solving skills. This underscored the significance of the communities of practice that exist across health disciplines.
RESEARCH QUESTION 3: What is the experience of paramedics making use of existing Ambulance decision tools that relate to emergency mental health care?

The reliance on specific mental health decision tools such as the Mental Health Protocol to support and guide paramedic clinical decision making in the context of pre-hospital mental health care, was not fully supported in the findings of this study. By contrast, the findings from this study suggest that paramedics may have developed their own personal algorithms and approaches to decision making relating to the general requirements for pre-hospital mental health care that are based largely on their own prior clinical experiences and lessons learnt in the field over time.

In its current form, the mental health decision tool was considered by paramedics to be inadequate and limited in scope and therefore was not a comprehensive decision tool that could be used to support and guide their decision making when attending to mental health presentations. Nor could it provide enough guidance and direction on how to use and apply their legislative powers under the Act in clinical practice. Based on their experiences, most of the paramedics in this study recommended the development and implementation of a dedicated ‘Mental Health Act’ decision tool that could be used for support in making confident and independent clinical decisions when attending to mental health presentations. There was however some preliminary unsubstantiated evidence suggesting that a locally developed non-authorised reference book, similar to a decision aid, may have been useful in providing some paramedics with a degree of guidance and support around the management of mental health patients.
RESEARCH QUESTION 4: What is the experience of paramedics as they negotiate the interplay between their professional experience of dealing with behaviourally disturbed patients, their individual beliefs and attitudes regarding behaviourally disturbed patients, and their legal powers under the Act?

Engaging in ethical decision making when attending to mental health presentations appears to be a fundamentally complex area of clinical practice that paramedics must learn to navigate and rationalise. Factors extending far beyond the patient’s presentation were found to impact heavily on this process. When attending to mental health presentations, this study found that paramedics possess a broad range of strongly held personal beliefs and attitudes that can influence their ability to engage in effective decision making. It was found that personal beliefs and attitudes related to how mental health patients are perceived by paramedics, either with positive or negative attributes, or how paramedics perceive their own role in the context of pre-hospital mental health care. This study found that those who possess positive beliefs and attitudes towards mental health patients are more likely to consider mental health presentations as being part of ambulance work and therefore more likely to value and respect their role in the provision of pre-hospital mental health care and feel comfortable exercising their legislative powers under the Act. In contrast, this study found that the challenges some paramedics experienced with respect to their delivery of the pre-hospital mental health care, were often associated with a general reluctance or dislike of having to care for mental health patients. In these circumstances, those paramedics who regarded mental health presentations as not being their responsibility or disliked having to manage mental health patients, were forced to reconcile the differences between their own personal beliefs and the organisational and legislative obligations with which they were required to comply.
Engaging in confident and ethical decision making in these circumstances appeared, at times, to be difficult or cumbersome for some paramedics. For most, ethical decision making represented more than just the adherence to organisational policies and professional codes. It symbolised the congruent relationship that ideally existed between a paramedic’s personal beliefs and values and their clinical decision making behaviours and actions. In situations where this equipoise became compromised, ethical dilemmas and conflicts were more likely to arise.

Two dominant factors influenced the decision by paramedics to detain patients under the Act, the belief that the continuum of care at the emergency department interface is at times poorly coordinated, and the concerns that emergency department clinicians may not have the capacity to keep patients safe. This suggests that under situational pressure or in extenuating circumstances, paramedics may decide that the best course of action is to go against organisational protocols and legal directives. Under these circumstances, it can be considered by some paramedics to be wholly appropriate for them to involuntarily detain otherwise voluntary patients, even if it falls outside the scope of clinical protocols or legal parameters, providing they believe such action is in the best interest of the patient’s situation or circumstance. From this perspective, their decision making outcomes are perceived to be the ethically right thing to do if it safeguards the wellbeing and safety of patients. While their altruistic intentions appear understandable in these circumstances, there are inherent dangers for paramedics and more importantly for patients, when interventions extend beyond standardised clinical practice. It is not an insignificant decision to remove liberty and impose legal restrictions on any person. More specifically, it can present a real danger that patients may be exposed to inappropriate treatment and interventions (such as under-treatment or over-treatment) or treatments that are outside existing protocols. Initiating clinical
procedures that fall outside standardised clinical practice creates a risk of exposing paramedics to future legal liability and prosecution.

The following section discusses the strengths of this study with particular reference to the methodology and study design.
CHAPTER SEVEN: STRENGTHS, LIMITATIONS AND IMPLICATIONS

7.1 Strengths of the Study

There were a number of significant strengths in relation to the methodology and study design used in this study which must be acknowledged. First, the reliance on hermeneutic phenomenology as a suitable and innovative approach in which to conduct this study, allowed for the close and detailed examination of the phenomenon of pre-hospital mental health care. In particular, the use of hermeneutic phenomenological methods facilitated access to the participants’ lived personal experience of clinical practice in this domain. The observations afforded me an invaluable opportunity to access each participant’s clinical world so that I was able to gain a greater understanding and appreciation of the context in which clinical practice occurs for paramedics. Semi-structured interviews allowed what was important and meaningful to the participants to be given privilege and allowed for investigation of actual real life examples of events in each participant’s history.

As referred to in Chapter 4 under sub-heading ‘Rigour and Trustworthiness’, there are a number of systematic strategies that can be incorporated into qualitative research studies that employ hermeneutic phenomenology methods to enhance the rigour and trustworthiness of the research findings. The following describes the strategies that were incorporated into this study:

7.1.1 Data Collection from More than One Source

More than one source of data collection was used in this study to enhance the richness and quality of the data, and to increase the internal reliability and creditability of the research findings. Data sources included semi-structured interviews, observations, field and journal notes and a demographic questionnaire. Paramedics recruited to this study
represented different geographical areas, and different levels of experience which provided an important opportunity to elicit different experiences and perspectives of the phenomenon under investigation.

7.1.2 Audit Tool and Decision Trail

I constructed a clear and detailed audit tool (or paper trail) that covered all stages of the research process and is presented throughout this thesis. This process included identification and adoption of the research paradigm, methodology, ethics and organisational clearance, recruitment strategies, approaches to data collection, stages of data analysis and outcome. An overview of key stages of the research process can be found in Chapter 4 under section 4.3 ‘Research Approach Adopted for this Study’. This diagrammatical framework is aligned with the conceptual research framework proposed by Crotty (1998) (See Figure 1). In addition, I maintained a full account of the rationale for the decisions made with respect to the research design, methods and methodology, recruitment strategies and approaches to data collection and data analysis which are documented throughout this thesis. In addition, files containing interview transcripts (‘parts’ and ‘whole’), personal notes and writings produced throughout this research were also stored.

7.1.3 Peer Review

During all stages of the research process, my supervisors provided considerable theoretical, academic and professional knowledge and expertise from their respective disciplines. This included initial discussions about the feasibility of undertaking this research, consideration of the most appropriate methods and methodology to be used, and the development of the research design. At key stages of data analysis, my supervisors were consulted on a regular basis for their input and endorsement of significant findings and themes that were identified, their relevance to the research
topic and how they relate to each of the research questions. Throughout this study, a number of peer reviewed articles were produced and published in professional scientific journals. These journal articles were supported by the delivery of presentations at national and international conferences. (See Page 8 for a full list of these publications and conference presentations).

7.1.4 Providing Evidence to Support Interpretations
A comprehensive selection of the participants verbatim quotations were incorporated into the data analysis process. These quotations were used to both support and underpin my interpretations of the research data. They also played an important role in illustrating how experiences and meanings were expressed by the participants.

7.1.5 Review of Previous Studies
A number of research studies that have previously examined aspects of clinical decision making or clinical practice in paramedic and non-paramedic practice where reviewed (Baker, 2001; Crotty, 1996; Drury, et al., 2005; Loftus, 2006; Shaban, 2011; Walker, 2013; Wyatt, 2003). The review of these studies allowed me to gain a greater understanding of the key issues relevant to this topic and helped me to consider suitable strategies that could be used to examine the phenomenon under investigation.

The following section discusses the limitations of this study with particular reference to Representativeness of the sample group and Aspects of the research design.
7.2 Limitations of the Study

There are a number of notable limitations associated with research undertaken in the interpretative paradigm and must be considered in the context of this research study. These limitation areas relate to the: Representativeness of the sample group and Aspects of the research design.

7.2.1 Representativeness of the Sample Group

In relation to the representativeness of the sample group, consideration should be given to how representative of all qualified paramedics, were the participants who took part in this study. A number of key issues were identified in this area.

First, the participants who took part in this study all worked in busy metropolitan locations in New South Wales, Australia and, when compared with their colleagues working in regional or rural locations in New South Wales, Australia, were arguably more likely to have access to a broader and more diverse range of clinical encounters on which to reflect. As a consequence, they may have developed more advanced clinical knowledge, skills and competencies that influenced their approaches to decision making. It is therefore likely that the participation of paramedics working in regional or rural locations may have produced different findings from those identified in this study.

Second, the participants who accepted the invitation to be interviewed as part of this study, could be regarded as a displaying a greater level of interest (professionally or personally) in the area of pre-hospital mental health care and therefore more motivated and willing than others, to reflect upon and share their lived experiences. Nevertheless, their participation enabled me to elicit rich and meaningful narratives that may otherwise have been difficult.
Third, data collection that incorporated both interview and observation occurred for only three of the 13 participants. In addition, official patient health care records were not reviewed and incorporated in the data collection. Broadening the scope of data collection to include clinical notes recorded on a patient’s official health care record may have provided additional descriptive information about how paramedics approach and record decision making and problem-solving in clinical practice.

Fourth, this study did not examine the relationship between tertiary versus vocationally trained paramedics and decision making and problem-solving in clinical practice. Therefore, it is difficult to ascertain whether those who had entered the paramedic profession with formal tertiary training in paramedical science (or other health-related disciplines) had different clinical knowledge, skills and competencies related to clinical practice than those who had entered the paramedic profession through the ambulance vocational training pathway.

Finally, the focus of this research study was on decision making by paramedics in the context of pre-hospital mental health care. Therefore, the findings of this research may not be wholly applicable or transferable to decision making by paramedics in other areas of clinical practice. Further, as Crotty (1998) reminds us, research findings that are generated in an interpretative paradigm are non-generalisable because there is no single universal truth or way of interpreting the world in which we live. Nevertheless, it was the intention of this research to elicit recurring themes and shared descriptions of experiences among those who participated which would suggest that these findings may have resonance with other paramedics working in this context, thus reflecting similar experiences among other paramedics.
7.2.2 Aspects of the Research Design

In relation to the second limitation area of this study, aspects of the research design, several factors should be considered in light of the findings.

First, participants who were interviewed as part of this study were required to reflect upon their previous clinical encounters involving individuals who were experiencing a mental health emergency. This reflective activity required participants to focus on their behaviours and actions during these encounters. As such, interviews rely upon participants being able to recall complete and accurate information and then being willing to disclose it to the researcher (Breakwell, Hammond, Fife-Schaw, & Smith, 2006). However, in light of some of the perceived sensitivities associated with the provision of pre-hospital mental health care (perceived lack of preparedness and the effects of personal beliefs and attitudes on decision making), it is possible that some of the participants in this study may have been too embarrassed to disclose specific information or may have chosen to censor their responses accordingly. In particular, participants may have felt insecure about disclosing information that risked indicating poor clinical knowledge and skills, inconsistent with organisational protocols, guidelines, actions or behaviours not reflective of professional standards of conduct.

Second, it was possible that my involvement as a research student in the clinical environment during the observations may have influenced the behaviours and actions of participants such that participants may have had a desire for me to perceive them in a particular way. Breakwell, Hammond et al. (2006) refers to this as the reactivity effect. Nevertheless, during the observations, I maintained a physical distance of between two and four metres from the participants and so it was possible that I eventually became an inconsequential part of the clinical environment, thus decreasing any reactivity effect over time.
Third, not being a member of the same profession may have affected my ability to fully comprehend the clinical environment in which the participants perform their clinical duties. In addition, this may have made it difficult for me to understand the meaning of the language participants used to describe and account for their experiences. Collectively, these factors may have affected my ability to accurately interpret and make sense of the data collected.

Fourth, given the relatively recent introduction of the new mental health legislative powers into clinical practice at the time this study was undertaken, it is likely that participants may not have had enough opportunities in which to make use of their legislative powers in clinical practice. This may have impacted on the quantity and quality of the experiences upon which they were able to reflect during the interviews. In addition, as paramedics gain increased exposure to clinical encounters that involves exercising their legislative powers under the Act, then it is likely that the descriptions and accounts of clinical decision making in this context will be different from those generated in this study.

The following section discusses the findings of this study in relation to the implications for paramedic practice.
7.3 Implications for Paramedic Practice

The findings from this study have a range of implications for paramedic practice. Broadly, these relate to the following areas: education & training, professional development and clinical governance.

7.3.1 Education and Training

A major finding of this study was that paramedics expressed significant concern about the lack of theoretical knowledge with respect to the provision of pre-hospital mental health care. This included detailed understanding of the aetiology, prognosis and treatment options of common mental illnesses and the appropriate use of common medical terminology as it relates to this area of clinical practice. In addition, many of the participants in this study described the existing organisational algorithm [Mental Health Emergency Protocol] as limited in scope and failed to provide them with sufficient instructional information or clinical direction to inform and support decision making in this context. These factors were perceived to be major barriers that adversely impacted on the ability of paramedics to engage in effective and confident decision making in the context of pre-hospital mental health care. A focus on enhancing core mental health education and training for paramedics is intended to build a solid foundation knowledge with respect to key aspects of mental health care that will enable paramedics to make more informed and confident clinical decisions when responding to the mentally ill in the community.
To address these issues, the following key priority activities have been identified:

1. A formal evaluation of the existing Ambulance mental health training course to identify where further enhancements can be made to the training content and curriculum. Ideally, this evaluation would be undertaken in conjunction with experts in the field of emergency mental health care, such as a consultant psychiatrist and those who are experienced in developing and delivering health and medical related training courses for an adult learning environment. Moreover, the value of also involving consumers of mental health services in curriculum development and delivery of education to mental health professionals has been promoted in recent times and should therefore be adopted within this context (Happell, et al., 2014). A consultation process that seeks feedback and input from paramedics should be incorporated as a key component of this evaluation. In addition, given the gravity of these legislative powers, paramedics should be required to demonstrate advanced knowledge and understanding of mental health care and the Act and how to apply it appropriately during clinical practice. Therefore, this evaluation should seek to reconsider the procedure for assessing the competencies of paramedics once they complete the mandatory mental health training course. In particular, consideration should be given to implementing a more robust form of participant assessment such as those used as part of the New South Wales Institute of Psychiatry- Accredited Person training program (Bazzana & Shaw, 2009). This program requires participants to complete essays and case-based scenarios. A process for undertaking periodic re-certification and assessment of these skills and knowledge should also be considered to ensure that these clinical skills and knowledge are being maintained at a satisfactory level.
Once complete, findings from the evaluation process should be used to inform the development of a range of enhanced mental health training courses that focus on providing paramedics with detailed and enhanced theoretical knowledge of mental illnesses, their aetiology and treatment pathways, as well as the role and application of the Act as it is applied for paramedic clinical practice. Future mental health training should also seek to enable paramedics to perform comprehensive mental state and psycho-social assessments (where practicable) and further develop advanced communication and de-escalation skills.

2. Review and revise existing organisational protocols and clinical guidelines

relating to the provision of pre-hospital mental health care to ensure that these tools provide paramedics with more detailed information and management options relating to the broad spectrum of mental health presentations encountered in the pre-hospital setting, particularly, psychiatric conditions such as depression and anxiety that are not deemed a mental health emergency. In addition, the development of these organisational tools will need to be underpinned and supported by relevant mental health training. Also, the development of a specific protocol or clinical guideline to provide instructional advice and direction to paramedics around the appropriate use of their mental health legislative powers in clinical practice should be investigated. Revising relevant protocols and clinical guidelines in this area of clinical practice is likely not only to enhance the quality of pre-hospital mental health care but may also assist paramedics in making more confident, consistent and independent clinical decisions when exercising their legislative powers under the Act. It should be noted that a review of the existing Mental Health Emergency protocol was undertaken prior to the completion of this study. This review
resulted in a revision of the existing protocol. To coincide with the release of this revised protocol, a new Suicide Risk Assessment and Management protocol was produced.

3. **Investigate the feasibility of implementing mandatory refresher training** that seeks to build upon and enhance existing theoretical and domain knowledge, for all paramedics. Delivering refresher training in a supportive environment with peers, is likely to provide an ideal opportunity for paramedics to reflect upon and critically appraise their own experiences of providing pre-hospital mental health care, including those occasions where they have exercised their legislative powers under the Act. Improving the mental health literacy of the ambulance workforce may also have a positive impact on helping to promote change by further challenging any negative attitudes and beliefs towards mental health patients.

4. **Investigate the feasibility of paramedics undergoing brief (one or two day) clinical placements at mental health facilities and / or consider rotating paramedics through busier metropolitan areas** where there are a greater number of mental health emergencies. Providing paramedics with increased exposure to individuals experiencing a mental health emergency would supplement their classroom based learning and could further develop their clinical skills and domain knowledge for application to their own clinical practice. The study by Halter (2004) found that clinical practice with respect to mental health care could be improved by increasing the contact that health professionals have with mental health consumers. In a later discussion paper, Simpson (2006) explored a range of benefits that can be gained by involving mental health consumers in the education of mental health professionals and from creating opportunities for student clinicians to undergo placements at
mental health facilities as part of their training. According to Simpson, contact with mental health consumers in this context provides an opportunity for clinicians to develop the interpersonal and clinical skills that are often required to manage individuals in distress, and for enhancing the understanding of the challenges faced by individuals who have a mental illness. The development of these skills and the emergence of confidence can then be translated in the clinical practice in the field.

7.3.2 Professional Development

The scope of clinical tasks and duties for which paramedics are responsible has continued to expand and evolve in recent years, and this is especially so for the delivery of care and treatment to behaviourally disturbed patients. In this regard, concerns were identified in the findings of this study that relate to potential ethical or moral dilemmas that paramedics can be exposed to in this area of clinical practice and for which they may struggle to find resolution.

To enhance the support that is provided to paramedics as they take on these new responsibilities and legislative powers in the context of pre-hospital mental health care, the following key priority activities have been identified:

1. *Delegation of 'mental health specialist paramedics' and professional development* for those paramedics who are interested in gaining advanced clinical education and training with respect to the provision of emergency mental health care should be further explored. Available mental health specialist paramedics could then be tasked as first responders to mental health emergencies in the community. They would also serve as a useful point-of-
contact (via telephone or face-to-face) for paramedics who require additional advice or guidance around the provision of emergency mental health care. In the UK, the continuing expansion in the role of emergency care practitioners (ECPs) across ambulance services has seen significant benefits from investing in skill development training of ‘specialist’ paramedics (Cooper, et al., 2004). Key benefits include, the reduction in the number of unnecessary ambulance transport to emergency departments, the ability of ECPs to stand down emergency vehicles, and the strengthening of inter-agency referral pathways (with local GPs and community mental health teams).

### 7.3.3 Clinical Governance

The practice of detaining patients who did not meet the legal criteria for involuntary detention under the involuntary provisions of the Act, was a worrying finding of this study. It raises particular concerns about the apparent disregard by some paramedics of the civil rights of patients who are experiencing a mental health emergency. There is a risk that some paramedics may not provide care and treatment in the least restrictive means possible as stipulated in mental health legislation. To monitor the appropriate use and application of these new legislative powers in paramedic practice, the following key priority activity has been identified:

*Establish a formal clinical governance framework* where all cases involving the involuntary detention of patients by paramedics under the Act are reviewed by an internal governing body. This governing body should consist of operational representatives [paramedics], patient safety officers, paramedic educators and a consumer. A clinical governance framework of this nature would enable ambulance authorities to review and monitor the application of these powers in clinical practice and may provide an ideal opportunity to identify trends in the
variations to approved clinical practice. This process may also enhance an understanding of the causal factors that influence the decision by paramedics to exercise their legislative powers.
As previously mentioned, the findings of this study have provided support for previous studies which found that the respond to and management of behaviourally disturbed patients can present significant ethical and moral challenges for frontline clinicians, in particular, for paramedics, emergency department and community mental health staff and police. These challenges have been found to occur in response to genuine concerns that are held by clinicians over where their duty of care actually ends when dealing with behaviourally disturbed patients. This is especially given the fact that mental illnesses are the only type of clinical presentations whereby the refusal by patients to accept required treatment can be overturned by the treating clinician if they deem it necessary. Patients with serious physical injuries or illnesses on the other hand can refuse medical care, which must be respected by their treating clinicians, even if such decisions are deemed to have detrimental consequences on the patient’s health. Furthermore, there may also be the outright reluctance by some clinicians for being responsible for using restrictive practices (such as restraint or sedation), as authorised under mental health legislation, to forcibly manage and contain non-compliant patients.

In light of the above-mentioned, the findings from this study also have a range of implications that extend beyond paramedic practice. Broadly, these relate to inter-agency clinical practice and training issues.

### 7.4.1 Inter-agency Clinical Practice and Training

The findings of this study suggest that consideration should be given for reviewing and, where necessary, enhancing the coordination of ongoing care and management in the emergency department setting for behaviourally disturbed patients who have been
detained by paramedics under the Act. In part, this follows concerns raised by paramedics about the apparent failure of emergency department clinicians to provide appropriate security arrangements for involuntary patients once they arrive at the emergency department. In response to these issues, a range of key priority activities have been identified. These include:

1. *a review of the existing Mental Health for Emergency Departments: A Reference Guide*, specifically sub section ‘Legal Issues’, to ensure this instructional document provides specific advice and guidance to all stakeholders regarding the requirements for care, treatment and supervision for patients who have been involuntarily detained by paramedics under the Act. A review of this document during the course of this research study had revealed an obvious omission with respect to important information regarding the recent amendments that were made to the Act in NSW regarding the extension of legislative powers to paramedics. The need to review and update this document is further supported by the brief that was held by some of the participants in this study that some frontline ED clinicians appear to lack a basic understanding of the roles and responsibilities of paramedics in mental health care. For some, this had impacted heavily on future decision making outcomes, whereby they had a preference for adopting a defensive approach to decision making when caring for potentially combative and non-compliant patients.

2. *a requirement that all emergency departments review the availability of designated secure areas in their departments* where patients who have been involuntarily detained by paramedics under the Act can be safely held on their arrival. Ideally, a number of secure areas should be identified in each department to adequately accommodate multiple presentations which may occur at the same time. Unsecured waiting rooms should not be viewed as
suitable areas for this purpose. As outlined above, the resource and workforce factors within the emergency department environment were consistently reported by many of the participants in this study to have had a detrimental impact on their future decision making actions and outcomes with respect to mental health patients. Moreover, often these concerns were centred around a perceived lack of available resources and personnel to keep mental health patients safe upon their arrival at the emergency department.

3. **scope out the feasibility of expanding the availability and utilisation of telehealth (telepsychiatry) technology across the public health system in New South Wales, Australia.** Expanding the utilisation of telehealth technology would be particularly useful at hospital sites where there may be a limited or reduced on-site availability of authorised medical officers who are able to perform the initial medical examination for the purposes of determining whether ongoing detention is required for patients who have been initially detained by paramedics prior to their arrival at hospital. Access to local telepsychiatry may also significantly reduce the distance that is required to transport patients to hospital.

4. **evaluate the effectiveness of Local Protocol Committees (LPCs) to ensure all local frontline staff [paramedics, police, mental health clinicians, emergency departments clinicians] are familiar with the procedure for reporting interagency incidents and disputes to their LPC as they occur.** This evaluation should also include a retrospective analysis of all interagency incidents and disputes which have been referred to local LPCs for resolution. A review of this data may identify broader systemic or interagency issues occurring at the emergency department interface that requires a higher level policy response. The findings of this study have already revealed that inconsistent approaches currently exist with respect to arrangements and systems for providing ongoing care and
managements of mental health patients once they arrive at emergency departments.

5. *provision of mandatory in-service training for all emergency department staff* which raises awareness of key aspects of the Act which are applicable to emergency medical care and which sets out the interagency procedure for managing the handover of mental health patients at the emergency department interface. The delivery of a dedicated in-service training for emergency department clinicians would provide greater clarity with respect to the roles and powers of all frontline agencies. Furthermore, scoping out the feasibility of emergency department staff undertaking ‘ride-alongs’ with paramedics in the pre-hospital setting as part of their professional development may also be beneficial in promoting a greater multi-disciplinary awareness of decision making approaches that occur across different clinical settings, that is, community and hospital-based settings.

A broad and diverse range of implications that relate specifically to paramedic and non-paramedic practice, and based on the findings of this study, has been proposed. The following chapter presents a range of recommendations for future research.
CHAPTER EIGHT: RECOMMENDATIONS FOR FURTHER RESEARCH

The findings of this study have built upon and contributed to the limited evidenced-based research currently existing in the area of pre-hospital mental health care in paramedic practice. To further understanding and knowledge in this area of clinical practice, several key areas for future research are recommended.

RECOMMENDATION 1: A comparative study to examine the clinical decision making behaviours and actions of paramedics working in metropolitan versus non-metropolitan locations when exercising their legislative powers under the Mental Health Act 2007 (NSW).

This study examined the clinical decision making behaviours and actions of paramedics who were stationed in a busy metropolitan area. The rationale for recruiting paramedics stationed in metropolitan areas was based on the premise that there was a higher incidence of mental health emergencies in these areas compared with non-metropolitan areas. Consequently, having regular exposure to mental health emergencies during the course of clinical practice may have provided the participants with the opportunity to develop enhanced clinical knowledge and subsequent decision making skills with respect to the use of their legislative powers under mental health legislation compared with their non-metropolitan based colleagues.
As a result, findings from this study may not be transferable to paramedics working in non-metropolitan areas. Future research objectives may therefore include:

i. to explore the clinical decision making behaviours and actions of metropolitan and non-metropolitan paramedics when exercising their legislative powers under the Act

ii. to examine the role of experience in the development of clinical knowledge and subsequent clinical decision making skills with respect to use of legislative powers under the Act in paramedic practice.

A future study examining the clinical decision making behaviours and actions of both cohorts may enhance our knowledge and understanding of the differences that may exist between the two cohorts. It is also likely to reveal if additional targeted refresher training or other support mechanisms are needed to better equip paramedics stationed in non-metropolitan areas, to respond to and deal with mental health emergencies when they occur.

RECOMMENDATION 2: An examination of the clinical decision making behaviours and actions of other allied health professionals who share similar legislative powers under the Mental Health Act 2007 (NSW).

When the Mental Health Act 2007 (NSW) was passed by Parliament in early 2007 and came into effect, authorised paramedics were added to the range of health professionals (e.g. accredited persons and medical officers) who have been granted legislative powers under the involuntary provisions of the Act, to remove a person’s civil liberty on the grounds that a person is mentally ill or mentally disordered and to convey them to hospital against their will for further assessment. For the purpose of the Act,
accredited persons (e.g. mental health nurses, psychologists or social workers) are those with extensive clinical experience in the provision of mental health care which is supplemented with appropriate educational qualifications. The present study’s research design has proven well suited to the examination of clinical decision making among a cohort of qualified paramedics and could therefore be adapted for future research examining this phenomenon among other health professionals. Future research objectives may therefore include:

i. to explore strategies and approaches used by a range of health professionals when making clinical decisions to exercise their legislative powers under the Act within their respective fields of clinical practice

ii. to examine the extent to which relevant agencies provide adequate preparatory training for their staff to take their legislative powers under the Act.

The examination of the same phenomena in other cohorts may help to identify multi-disciplinary approaches and strategies relied upon by health professionals when exercising their legislative powers under the Act. It is also likely that future research findings in this area may inform future considerations regarding the feasibility of developing a standardised mental health emergency training program that addresses the application of the Act’s powers and responsibilities into clinical practice across the health professions.
RECOMMENDATION 3: A study that employs a longitudinal research design to examine the emergence and development of paramedic clinical decision making competencies and skills in relation to the use of the Mental Health Act 2007 (NSW) over time.

At the time this study commenced, the legislative powers granted to paramedics under the Act had only recently been introduced into clinical practice. Consequently, while all the paramedics in this study had completed the revised ambulance mental health training program designed to prepare them to take on their legislative powers under the amended mental health legislation, they had only a maximum of two years for opportunities to use these powers in clinical practice. Future research questions may therefore include the following.

i. Can prior theoretical knowledge with respect to pre-hospital mental health care alone be relied upon by paramedics to make clinically justifiable decisions with respect to use of their legislative powers under the Act?

ii. To what extent does clinical experience assist paramedics in developing clinical decision making competencies and skills when exercising their legislative powers under the Act?

A longitudinal study of this nature would provide an opportunity to examine this phenomenon across time, and would also provide paramedics with an opportunity to develop their decision making competencies in this context.

RECOMMENDATION 4: A study to explore the clinical decision making behaviours and actions of paramedics working in other Australian jurisdictions where similar
legislative powers under their respective state and territory based mental health legislation have been granted.

In some other Australian states or territories (Queensland, Victoria and Northern Territory) paramedics have been granted similar legislative powers (under their respective state or territory based mental health legislation) as paramedics working in New South Wales, Australia. Therefore, future studies should seek to compare and contrast the decision making strategies and approaches taken by paramedics as they exercise their legislative powers, across different jurisdictions. In addition, future studies should examine the range of organisational tools, systems and processes that has been developed by each ambulance authority to support and guide paramedic decision making in this context.

Future research objectives may include:

i. to examine the strategies and approaches used by paramedics across different jurisdictions when making clinical decisions to exercise their legislative powers under Australian state or territory based mental health legislation

ii. to examine the efficacy of organisational specific tools, systems and processes that have been developed to support and guide decision making by paramedics in the context of pre-hospital emergency mental health care.

This proposed study should be supported by the establishment of a national ambulance database for recording case details relating to clinical incidents where patients have been detained, restrained or sedated by paramedics under involuntary provisions of relevant state and territory-based mental health legislation. An analysis of this data would facilitate a better understanding of the nature and extent to which paramedics across different ambulance jurisdictions rely upon their mental health legislative powers to deal with individuals who experience a mental health emergency.
The establishment of this database would also support Recommendation 3: ‘*Reduce the use of involuntary practices and work to eliminate seclusion and restraint*’ outlined in the National Mental Health Commission Our Report Card, *A Contributing Life: the 2012 National Report Card on Mental Health and Suicide Prevention* (National Mental Health Commission, 2012). More specifically, the establishment of a national ambulance database would also enable ambulance authorities to consider future strategies to assist in reducing the reliance by paramedics on involuntary interventions to manage behaviourally disturbed patients in the pre-hospital and inter-hospital context.

**RECOMMENDATION 5:** To examine the lived experience of patients who have been detained by paramedics under the involuntary provisions of the Act as well as the families and carers of those who have been detained.

The aim of this study was to examine the nature of paramedic decision making in relation to pre-hospital mental health care with a particular emphasis on the lived experiences of paramedics when exercising their legislative powers under the Act. While the findings of this study have contributed to the growing body of research that exists in this important area of clinical practice, it has now become necessary to examine this phenomenon from the perspective of patients who have been involuntarily detained and the perspective of families and carers. In particular, future research should carefully examine the impact these legislative powers have had on patients’ perceptions of care provided by paramedics and whether this affects their willingness to seek and initiate ambulance care in the future. Future research objectives may therefore include:
i. to examine the lived experiences of patients who have been detained by paramedics under the involuntary provisions of the Act

ii. to examine the lived experiences of families and carers of patients who have been detained by paramedics under the involuntary provisions of the Act

iii. to examine the potential impact on the willingness of patients who previously have been detained by paramedics under the Act, to trust and engage in a therapeutic rapport with paramedics in the future.


Kitto, S., Chesters, J., & Grbich, C. (2008). Quality in qualitative research: criteria for authors and assessors in the submission and assessment of qualitative...


### APPENDICES

**Appendix A: Summary of Demographic Information**

<table>
<thead>
<tr>
<th>PSEUDONYM</th>
<th>AGE</th>
<th>GENDER</th>
<th>CLINICAL LEVEL</th>
<th>PARAMEDIC (Years)</th>
<th>INTERVIEW</th>
<th>OBSERVATION</th>
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Appendix B: Information for Participants (Observations)

Project Title:

Clinical decision making and the role of paramedics fulfilling their legislative powers under the Mental Health Act 2007 (NSW). A hermeneutic phenomenological study.

Introduction

You are invited to take part in a research study into the clinical decision making processes used by paramedics when fulfilling their legislative responsibility under the Mental Health Act (2007).

The study is being conducted by Vaughan Parsons, Mental Health Project Officer, Clinical Development Unit. The study is being co-supervised by Professor Louise O'Brien and Professor Peter O'Meara at the Faculty of Science, Charles Sturt University.

Procedure

If you agree to participate in this study you will be asked to sign the Participant Consent Form.

Participation will involve the investigator simply observing you engaging in normal operational duties for approximately three hours. The investigator will not participate or interfere with you when you are in contact with patients. The investigator will record field notes during the 'ride along'

Confidentiality/Risks

All the information collected from you for the study will be treated confidentially and only the researcher named above will have access to it. The study results may be presented at a conference or in a scientific publication, but individual participants will not be identifiable in such a presentation.

Benefits

While we intend that this research study improves paramedic practice and the care of patients with mental health problems in the future, it may not be of direct benefit to you.

Cost

Participation in this study will not cost you anything, nor will you be paid.

Voluntary Participation
Participation in this study is entirely voluntary. You do not have to take part in it. If you do take part, you can withdraw at any time without having to give a reason.

**Further Information**

When you have read this information, Vaughan Parsons will discuss it with you further and answer any questions you may have. If you would like to know more at any stage, please feel free to contact him on 0420940975.

This information sheet is for you to keep.

**Ethics Approval and Complaints**

This study has been approved by the Ethics Review Committee (RPAH Zone) of the Sydney South West Area Health Service. Any person with concerns or complaints about the conduct of this study should contact the Executive Officer on 02 95156766 and quote protocol number X10-0118.
Appendix C: Email Invitation

Project Title:
Clinical Decision making and the Role of Paramedics Fulfilling their Legislative Powers under the Mental Health Act 2007 (NSW).
A hermeneutic phenomenological study.

EMAIL INVITATION

Dear,

I am a registered psychologist enrolled in a Doctor of Health Science program at the Faculty of Science (Bathurst campus), Charles Sturt University. I am conducting research into the clinical decision making processes used by paramedics when fulfilling their legislative responsibility under the Mental Health Act 2007 (NSW).

I would like to invite you to participate in an interview that would involve your recalling previous clinical situations you have been involved in during the course of your paramedic practice. Specifically, those occasions when you have been required to manage patients experiencing a mental health emergency.

Interviews can be held at Ambulance State Headquarters (Rozelle) or at an alternative venue at a time convenient to yourself. The interview will last approximately one hour.

If you are interested in participating in the study please contact Vaughan Parsons for more information on 0420940975 or email: vaughanparsons@hotmail.com

The study is being supervised by Professor Louise O'Brien and A/Professor Peter O'Meara at the Faculty of Science (Bathurst campus), Charles Sturt University.

Your participation in this study would be greatly appreciated.

Kind Regards

Vaughan Parsons

(Note: In January 2012, the candidate transferred to the Doctor of Philosophy program at the University of Newcastle after data collection had been completed)
Appendix D: Information for Participants (Interviews)

Project Title:

Clinical decision making and the role of paramedics fulfilling their legislative powers under the Mental Health Act 2007 (NSW). A phenomenological study.

Introduction

You are invited to take part in a research study into the clinical decision making processes used by paramedics when fulfilling their legislative responsibility under the Mental Health Act (2007).

The study is being conducted by Vaughan Parsons, Mental Health Project Officer, Clinical Development Unit. The study is being co-supervised by Professor Louise O’Brien and Professor Peter O'Meara at the Faculty of Science, Charles Sturt University.

Procedure

If you agree to participate in this study you will be asked to sign the Participant Consent Form. The semi structured interview will last approximately one hour and will involve your recalling previous clinical situations during the course of your paramedic practice, specifically, those occasions when you have been required to manage patients experiencing a mental health emergency.

If you agree to participate in this study, you will be asked to permit interview sessions to be recorded by audiotape. These recordings will be transcribed and then analysed by the investigator. Names will be replaced by pseudonyms during the transcription. You will also be asked to complete a Demographic Questionnaire at the commencement of the study. The questionnaire will seek basic personal information and will take 2 minutes to complete. Any personal details or information collected as part of this study will remain strictly confidential.

Benefits

While we intend that this research study improves paramedic practice and the care of patients with mental health problems in the future, it may not be of direct benefit to you.

Cost

Participation in this study will not cost you anything, nor will you be paid.

Voluntary Participation
Participation in this study is entirely voluntary. You do not have to take part in it. If you do take part, you can withdraw at any time without having to give a reason.

Confidentiality/Risks

All the information collected from you for the study will be treated confidentially and only the researcher named above will have access to it. The study results may be presented at a conference or in a scientific publication, but individual participants will not be identifiable in such a presentation.

Further Information

When you have read this information, Vaughn Parsons will discuss it with you further and answer any questions you may have. If you would like to know more at any stage, please feel free to contact him on 0420940975.

This information sheet is for you to keep.

Ethics Approval and Complaints

This study has been approved by the Ethics Review Committee (RPAH Zone) of the Sydney South West Area Health Service. Any person with concerns or complaints about the conduct of this study should contact the Executive Officer on 02 95156766 and quote protocol number X10-0118.
Appendix E: Participant Consent Form

Project Title:

Clinical Decision making and the Role of Paramedics Fulfilling their Legislative Powers under the Mental Health Act 2007 (NSW). A hermeneutic phenomenological study.

PARTICIPANT CONSENT FORM

I, .......................................................................................................................... [name] of .............................................................................................. [address] have read and understood the Information for Participants on the above-named research study and have discussed the study with ..................................................

I have been made aware of the procedures involved in the study, including any known or expected inconvenience, risk, discomfort or potential side effect and of their implications as far as they are currently known by the researchers.

I freely choose to participate in this study and understand that I can withdraw at any time.

I also understand that the research study is strictly confidential.

I hereby agree to participate in this research study.

NAME: ...................................................................................................................

SIGNATURE: ...........................................................................................................

DATE: .....................................................................................................................

NAME OF WITNESS: ..........................................................................................

SIGNATURE OF WITNESS: ..................................................................................
Appendix F: Ethics Approval to Proceed-South West Sydney Area Health Service

SYDNEY SOUTH WEST
AREA HEALTH SERVICE
NSW HEALTH

ADDRESS FOR ALL CORRESPONDENCE
RESEARCH DEVELOPMENT OFFICE
LEVEL 3, BUILDING 82
ROYAL PRINCE ALFRED HOSPITAL
CAMPBELLTOWN NSW 2560

TELEPHONE: (02) 9513 6795
FACSIMILE: (02) 9513 7175
EMAIL: kevin.townsend@emn.nsw.gov.au
REFERENCE: X10-0116 & HREC/10/RPAH/223

2 June 2010

Mr V Parsons
35 O'Connell Street
NEWTOWN NSW 2042

Dear Mr Parsons,

Re: Protocol No X10-0116 & HREC/10/RPAH/223 - “Clinical decision making and the role of paramedics fulfilling their legislative responsibilities under the Mental Health Act 2007 (NSW). An interpretative phenomenological study”

The Executive of the Ethics Review Committee, at its meeting of 27 May 2010, considered your correspondence of 24 May 2010. In accordance with the decision made by the Ethics Review Committee, at its meeting of 12 May 2010, approval is now granted to proceed.

This approval includes the following:

- Research Proposal (Version 2, 26 May 2010)
- Information for Participants (Interviews) (Version 2, 18 May 2010)
- Information for participants (Participant Observation) (Version 2, 18 May 2010)
- Participant Consent Form (Version 2, 18 May 2010)
- Email Invitation Letter (Version 2, 18 May 2010)
- Demographic Questionnaire (Version 2, 18 May 2010)
- Interview Guide (undated)
You are asked to note the following:

- This approval is valid for four years, and the Committee requires that you furnish it with annual reports on the study’s progress beginning in June 2011.
- You must immediately report anything which might warrant review of ethical approval of the project in the specified format, including unforeseen events that might affect continued ethical acceptability of the project.
- You must notify the HREC of proposed changes to the research protocol or conduct of the research in the specified format.
- You must notify the HREC, giving reasons, if the project is discontinued before the expected date of completion.
- You are responsible for the following:
  - arranging an identity pass for any researcher who is not employed by the Sydney South West Area Health Service. You should contact the Ethics Officer on 02 9615 7869 for advice on this matter, and
  - if appropriate, informing the study sponsor that this human research ethics committee (HREC) has been accredited by the NSW Department of Health as a lead HREC under the model for single ethical and scientific review and is constituted and operates in accordance with the National Health and Medical Research Council’s National Statement on Ethical Conduct in Human Research and the CFM/FCH Note for Guidance on Good Clinical Practice.
- If you or any of your co-investigators are University of Sydney employees or have a conjoint appointment, you are responsible for informing the University’s Risk Management Office of this approval, so that you can be appropriately indemnified.
- Where appropriate, the Committee recommends that you consult with your Medical Defence Union to ensure that you are adequately covered for the purposes of conducting this study.

Yours sincerely,

Lesley Townsend
Executive Officer
Ethics Review Committee (RPAH Zone)

HERC9350R10-09
Appendix G: Ethics Approval- University of Newcastle

HUMAN RESEARCH ETHICS COMMITTEE

Notification of Expedited Approval

To Chief Investigator or Project Supervisor: Professor Louise O'Brien
Cc Co-investigators / Research Students: Mr Vaughan Parsons
Re Protocol: Clinical decision making and the role of paramedics fulfilling their legislative responsibilities under the Mental Health Act 2007 (NSW). A hermeneutic phenomenological study.
Date: 19-Jun-2012
Reference No: H-2012-0151
Date of Initial Approval: 22-May-2012

Thank you for your Initial Application submission to the Human Research Ethics Committee (HREC) seeking approval in relation to the above protocol.

Your submission was considered under L1 Low Risk Research Expedited review by the Chair/Deputy Chair.

I am pleased to advise that the decision on your submission is Approved effective 22-May-2012.

In approving this protocol, the Human Research Ethics Committee (HREC) is of the opinion that the project complies with the provisions contained in the National Statement on Ethical Conduct in Human Research, 2007, and the requirements within this University relating to human research.

Approval will remain valid subject to the submission, and satisfactory assessment, of annual progress reports. If the approval of an External HREC has been "noted" the approval period is as determined by that HREC.

The full Committee will be asked to ratify this decision at its next scheduled meeting. A formal Certificate of Approval will be available upon request. Your approval number is H-2012-0151.

If the research requires the use of an Information Statement, ensure this
number is inserted at the relevant point in the Complaints paragraph prior to distribution to potential participants. You may then proceed with the research.

**Conditions of Approval**

This approval has been granted subject to you complying with the requirements for *Monitoring of Progress*, *Reporting of Adverse Events*, and *Variations to the Approved Protocol* as detailed below.

**PLEASE NOTE:**

In the case where the HREC has "noted" the approval of an External HREC, progress reports and reports of adverse events are to be submitted to the External HREC only. In the case of Variations to the approved protocol, or a Renewal of approval, you will apply to the External HREC for approval in the first instance and then Register that approval with the University's HREC.

- **Monitoring of Progress**

Other than above, the University is obliged to monitor the progress of research projects involving human participants to ensure that they are conducted according to the protocol as approved by the HREC. A progress report is required on an annual basis. Continuation of your HREC approval for this project is conditional upon receipt, and satisfactory assessment, of annual progress reports. You will be advised when a report is due.

- **Reporting of Adverse Events**

1. It is the responsibility of the person first named on this Approval Advice to report adverse events.

2. Adverse events, however minor, must be recorded by the investigator as observed by the investigator or as volunteered by a participant in the research. Full details are to be documented, whether or not the investigator, or his/her deputies, consider the event to be related to the research substance or procedure.

3. Serious or unforeseen adverse events that occur during the research or within six (6) months of completion of the research, must be reported by the person first named on the Approval Advice to the (HREC) by way of the Adverse Event Report form within 72 hours of the occurrence of the event or the investigator receiving advice of the event.

4. Serious adverse events are defined as:
   - Causing death, life threatening or serious disability.
   - Causing or prolonging hospitalisation.
   - Overdoses, cancers, congenital abnormalities, tissue damage, whether or not they are judged to be caused by the investigational agent or procedure.
   - Causing psycho-social and/or financial harm. This covers everything from perceived invasion of privacy, breach of confidentiality, or the diminution of social reputation, to the creation of psychological fears and trauma.
   - Any other event which might affect the continued ethical
acceptability of the project.

5. Reports of adverse events must include:
   o Participant's study identification number;
   o date of birth;
   o date of entry into the study;
   o treatment arm (if applicable);
   o date of event;
   o details of event;
   o the investigator's opinion as to whether the event is related to the research procedures; and
   o action taken in response to the event.

6. Adverse events which do not fall within the definition of serious or unexpected, including those reported from other sites involved in the research, are to be reported in detail at the time of the annual progress report to the HREC.

- Variations to approved protocol

If you wish to change, or deviate from, the approved protocol, you will need to submit an Application for Variation to Approved Human Research. Variations may include, but are not limited to, changes or additions to investigators, study design, study population, number of participants, methods of recruitment, or participant information/consent documentation. **Variations must be approved by the (HREC) before they are implemented** except when Registering an approval of a variation from an external HREC which has been designated the lead HREC, in which case you may proceed as soon as you receive an acknowledgement of your Registration.

**Linkage of ethics approval to a new Grant**

HREC approvals cannot be assigned to a new grant or award (ie those that were not identified on the application for ethics approval) without confirmation of the approval from the Human Research Ethics Officer on behalf of the HREC.

Best wishes for a successful project.

Professor Allyson Holbrook
**Chair, Human Research Ethics Committee**
*For communications and enquiries:
Human Research Ethics Administration*

Research Services
Research Integrity Unit
HA148, Hunter Building
The University of Newcastle
Callaghan NSW 2308
T +61 2 492 18999
F +61 2 492 17164
Human-Ethics@newcastle.edu.au
Linked University of Newcastle administered funding:

Appendix H: Ethics Approval to Recontact Participants - South West Sydney Area Health Service

23 May 2012

Mr V Parsons
35 O’Connell Street
NEWTOWN NSW 2042

Dear Mr Parsons,

Re: Protocol No X10-0118 & HREC/10/RPAH/223 “Clinical decision making and the role of paramedics fulfilling their legislative responsibilities under the Mental Health Act 2007 (NSW). An interpretative phenomenological study”

The Executive of the Ethics Review Committee, at its meeting of 20 April 2012, considered your correspondence of 19 April 2012 concerning your request for approval to re-contact participants in the above study in order to obtain additional demographic information in order to obtain additional demographic information, and gave its approval to proceed.

The Email Correspondence (Version 1, 19 April 2012) was noted and approved.

Yours sincerely,

Lesley Townsend
Executive Officer
Ethics Review Committee (RPAH Zone)
HERCDECORD12-05
Appendix I: Demographic Questionnaire

Project title:
Clinical Decision making and the Role of Paramedics Fulfilling their Legislative Powers under the Mental Health Act 2007 (NSW). An hermeneutic phenomenological study.

PARTICIPANT’S NAME:

GENDER:

AGE IN YEARS:

ASNSW LEVEL:

NUMBER OF YEARS WORKING AS A QUALIFIED PARAMEDIC:

PARTICIPANT CODE:
Appendix J: Interview Schedule

Project Title:
Clinical Decision making and the Role of Paramedics Fulfilling their Legislative Powers under the Mental Health Act 2007 (NSW): An hermeneutic phenomenological study.

Questions to be asked at Interview

A. Clinical Decision making (General)
   - Reflecting on your experience can you tell what skills are required for managing and treating patients?
   - Reflecting on your own experiences can you tell me what factors are likely to influence your management and treatment of patients?
   - Can you describe how your experiences approaching clinical decision making may have changed since becoming a qualified paramedic?
   - Reflecting on your own experiences can you describe for me the type of clinical presentations (i.e. the type of patients) that you enjoy treating and what makes these experiences stand out?
   - Reflecting on your own experiences can you describe for me the type of clinical presentations (i.e. the type of patients) that you do not enjoy treating and what makes these experiences stand out?

B. Clinical Decision making (Mental Health Care)
   - From your own experiences can you describe for me what skills are required for managing behaviourally disturbed patients?
   - From your own experiences can you describe for me what factors are likely to influence your clinical decision making in relation to the management and treatment of mental health patients?
   - From your own experiences can you tell me how your management of mental health patients is different than it is for non-mental health patients?
   - Can you tell me how the powers granted to paramedics under the Mental Health Act may have changed the way in which paramedics experience the delivery of pre-hospital mental health care? How has this experience changed over time?
   - From your own experiences how does it make you feel having these legislative powers?
   - Can you tell me about your experiences exercising your powers under the Mental Health Act?
     - What makes this experience stand out?
     - Can you walk me through this experience, what did you do?
- Can you tell me what influenced your decision to exercise your legal powers?

C. Mental Health Training
- Can you tell me the training you have received in relation to pre-hospital mental health care? Has this changed the way you approach decision making when managing mental health patients?
- Can you tell me what would improve your management of mental health patients and what impact do you think this would have on your experiences in this context?

Additional / Clarifying Questions
- Can you explain that experience in more detail?
- What do you mean?
- Why do you think that is?
- What do you think of that?
- How did that make you feel?
- How does that make you feel?