Nursing in secure and forensic psychiatry: contexts, contributions and concepts

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Abstract

This thesis details a body of empirical knowledge about issues key to the effective delivery of forensic and secure psychiatric care and treatment: differentiation between fire-setters, tobacco smoking in secure psychiatric care, prevalence and management of violence and aggression, medication administration and delegation, and outcomes measurement. The work was conducted in the context of UK provision of secure and forensic services, specifically the independent sector, and in the context of the professional discipline of forensic psychiatric nursing and its extant evidence base. The empirical work is presented in relation to these contextual elements in order to demonstrate that it comprises a coherent and related body of knowledge. It constitutes a contribution to the current knowledge base per se, and is congruent with available definitions of forensic psychiatric nursing and of its related evidence base.

Specifically, it fuses general psychiatric nursing knowledge with specialist knowledge of secure and forensic concepts. Exploration of the body of work in relation to its contexts raises practical and theoretical questions about current conceptualizations of forensic psychiatric nursing. There is a relative lack of evidence of effectiveness compared with the growing theoretical literature on the role of the forensic psychiatric nurse, and there are apparent differences between nursing roles in different levels of security such that it is not clear what precisely constitutes a forensic psychiatric nurse.

It is proposed that the contexts used to examine the published research submitted in support of the thesis offers a new way to understand the psychiatric nursing role in the secure and forensic care arena. Explication of these contexts, or dimensions of practice, are made and mapped to produce a zonal model of secure and forensic nursing. The zonal model is a way of understanding how the research submitted in
support of the thesis makes a contribution to a coherent field of practice. It also facilitates a redefining of the forensic psychiatric nursing role as one of advanced practice within a framework of expert knowledge of the secure and forensic dimensions in which it operates, requiring an understanding and translation of the best research evidence from any relevant field into practice, containing elements of expanded practice and wider knowledge of the political and sociocultural context in which practice occurs. The implications of the model for future research and development are addressed.
Chapter 1. Introduction

1.1 Overview

The body of research described in this thesis was published in peer reviewed journals between 2004 and 2010. It is the product of a number of projects focusing on issues relevant to those responsible for the organisation or delivery of forensic and secure psychiatric services, and to individuals in receipt of the care and treatment provided.

i) Firesetting among people referred for forensic psychiatric examination (conducted 2007-8)

ii) Perspectives of staff and patients about smoking in secure psychiatric care (conducted 2003-4)

iii) Prevalence and management of aggression and violence in psychiatric care (conducted 2007-9)

iv) Medication administration and errors in secure psychiatric care (conducted 2005-6)

v) Outcomes measurement in secure psychiatric care (conducted 2006-9)

This thesis aims to demonstrate that the body of empirical work outlined above has contributed significant new knowledge across a zone of practice relevant to psychiatric care in the context of secure and forensic settings. The work is framed by a number of related contexts:

i) The forensic and secure context. The environments and circumstances in which the research was conducted and to which the research applies provide a backdrop to the body of work. Specifically, the research was
conducted in the context of UK secure and forensic psychiatric care between 2004 and 2010.

ii) *The professional disciplinary context.* The candidate’s professional qualification and practice is in the field of psychiatric nursing, and thus the relevance of the work to and its implications for what has been termed forensic psychiatric nursing (Morrison & Burnard, 1992) provides the primary context. Much of the work has practice implications for clinical professionals of other specialty disciplines working within secure and forensic services including psychiatrists and psychologists.

iii) *The evidence context.* Forensic psychiatric nursing is an emerging discipline within the field of forensic mental health. The submitted work can therefore be considered in the context of the current evidence base for this discipline, and in the context of how this evidence base is currently defined.

iv) *The independent sector context.* The research presented was largely conducted within an independent sector setting outside of the UK National Health Service, namely at St Andrew's Healthcare, a unique charity-sector organization providing specialist secure mental health care to adolescent, adults and older adults with mental illness, learning disability and acquired brain injury.

v) *The wider political context.* The research presented was conducted in an era largely comprising mental health care expansion, an issue inextricably intertwined with the independent sector context outlined in iv) above. It was also conducted in an era increasingly dominated by targets, results and outcomes. In a cultural sense some would argue that the period also saw a
shift towards the micro-management of people's personal lives through the prism of health, perhaps best typified by the public smoking ban that commenced in England in 2007 and extended to psychiatric hospitals from July 2008.

This chapter expands on these contextual elements by outlining current conceptualizations of forensic psychiatric nursing and the related evidence base for the discipline in the UK; the development and current picture of secure and forensic care in the UK; and the independent sector role in UK secure provision. The rationale for this contextualisation is that there is intent to demonstrate that the body of work comprises a body of forensic psychiatric nursing knowledge. This means that the concept of forensic psychiatric nursing must be addressed. It is not the intention to undertake a formal concept analysis of the role, however current conceptualizations will be interrogated in order to determine whether a) the body of work described here fits within those definitions, or b) whether those definitions adequately define the area of forensic psychiatric nursing. Duncan et al. (2007) have argued that shared understanding of the meaning of concepts is contextual and thus may change over time and between settings. The contextual explication of the research, from this viewpoint, will therefore be central to the understanding of the work as a body of forensic psychiatric nursing research. Contextualisation in this chapter sets the scene for Chapter 2 where the publications that form the central thesis are described, critiqued, and their specific contributions to practice identified. The final chapter of the thesis synthesizes the body of work presented in Chapter 2 with the contextual information presented in Chapter 1 in order to demonstrate the coherence of the research, common themes, and lessons to be drawn. The following cases are made:
i) The body of work in itself represents a significant contribution to knowledge for psychiatric practice in secure and forensic environments.

ii) The work can be understood as a contribution to the body of broadly defined forensic psychiatric nursing knowledge through definitions that emphasise the centrality of the nursing process, the professional discipline of the researcher, and the intended target audience of the journal of publication.

iii) An examination of the research in relation to its contexts suggests that current conceptualizations of 'forensic psychiatric nursing' may not fully account for specialty practice in this arena. Specifically, future theories of nursing in this arena should be less exclusively forensic-orientated; should speak to all nurses who require expertise in the assessment and management of aggression, violence and other dangerous behaviour working at all levels of security (including none); should reflect the centrality of multidisciplinary working; should focus on the central importance of the patient's viewpoint and experience; and should inform the development and implementation of programmes of research to demonstrate effectiveness. A preliminary model is offered as an aid to understanding the area. This maps out the interfaces and overlaps between forensic, secure and non-secure practice arenas; and between nursing and non-nursing activity within these arenas.

In summary, the specific objectives of the thesis are:

i) To identify the context(s) in which the empirical research submitted in support of this PhD has been conducted.
ii) To detail the research conducted, and to critically evaluate the extent to which it constitutes a significant body of forensic psychiatric nursing research with reference to its context(s)

iii) To identify the implications of the work for the definition and role of the forensic psychiatric nurse

1.2 Contextual Background of the Research

1.2.1 UK secure and forensic psychiatric services

Secure psychiatric services provide inpatient care for people with a mental disorder that may put them at risk of harming either themselves or others (Department of Health, 2010). Forensic psychiatric services deal with issues arising at the interface between psychiatry and the law (Arboleda-Florez, 2006). There is considerable but incomplete overlap between the two. In the UK, secure services include forensic psychiatric inpatient services that are designed to provide care and treatment for people who have been diverted to mental health services from the criminal justice system, sometimes termed Mentally Disordered Offenders (MDOs), and who pose a risk to the public (Sainsbury Centre for Mental Health, 2007). High, medium and low secure psychiatric services provide, respectively, care and treatment for people with mental disorder who pose a grave and immediate danger to the public, for individuals who display dangerous behaviour and those who display disturbed behaviour (Sainsbury Centre for Mental Health, 2007; Department of Health, 2002, 2007).

The modern history of UK secure services can be dated to the introduction of the Mental Health Act of 1959. Prior to 1959 most psychiatric hospitals, known as County Asylums, had locked wards where MDOs who required secure care could be managed (Bluglass, 1978). A small number of high security hospitals provided
psychiatric care for MDOs who were considered so dangerous that they required care in conditions of 'special security'. The special hospitals, at that time, were Broadmoor and Rampton in England and, in Scotland, the State Hospital at Carstairs. The 1959 Act promoted an 'unlocked doors' policy which saw psychiatric hospitals become increasingly reluctant to admit potentially dangerous MDOs from the courts, or those felt to no longer need high secure care in the special hospitals. The 1975 Butler Report (Committee on Mentally Abnormal Offenders, 1975) supported recommendations to develop a network of Regional Secure Units, the precursors of current Medium Secure Units, to fill this gap in provision. Low secure units are a relatively recent addition with the development and auditing of standards in the past decade having led to greater consistency in provision (Dix et al, 2005).

The precise definitions and components of security in these various psychiatric care environments have become clearer in recent years, with the term currently considered to have three theoretical domains (Collins & Davies, 2005):

- **Physical security**: including perimeter fences or walls of particular heights dependent on security level, alarms, locks, doors and CCTV cameras

- **Procedural security**: relates to the procedures that take place within the physical security elements in order to maintain security integrity and includes restriction of items, searching of patients and the environment, frequency of patient observation, supervision and restriction of visitors, and staff to patient ratio.

- **Relational security**: refers to the detailed understanding of those who receive secure care including risk signals and behaviours, and skills to prevent and manage violence and aggression.
These theoretical domains have some transferability into real-world secure forensic psychiatric settings. A 22-item Security Needs Assessment Profile (SNAP) covering the three domains was developed to examine the security needs of male patients in low, medium and high-secure care (Collins & Davies 2005). Patients were rated by their Responsible Medical Officer or primary nurse on the 26 SNAP items and an overall rating was also made of the most suitable placement (High, Medium, Low or open security levels) for the patient irrespective of his current placement. Total SNAP scores for those thought to be best placed in high security were significantly greater than those felt to be best placed in medium or low security, suggesting that those needing high security care are a group with very special security-related needs. Scores for those thought to be best placed in open conditions were significantly lower than those thought to be best placed in low or medium security. There was an overlap of scores for individuals felt to be best placed in low or medium security and the authors suggest this may be due to shared characteristics of low and medium secure services. Thus it appears that UK secure services broadly reflect the security needs of their patients. However, Collins and Davies’ results cannot be assumed to generalise to women who have been argued to have security needs quite distinct from those of men (Bartlett & Hassell, 2001).

Recent developments have highlighted the subtle differences between secure services and forensic services. These include the provision of mental health ‘in-reach’ services in prisons (Brooker & Gojkovic, 2009) which clearly deliver mental health care in a secure environment and in a forensic context, although in contrast to mental health services it is prison guards and not psychiatric nursing staff who are responsible for maintaining security. Other developments, such as community forensic mental health teams (Mohan et al. 2004) and work with victims of MDO’s (Mezey, 2007) constitute
forensic services in that they involve work at the legal interface, but they are clearly not secure services. A range of services share some of the physical, procedural and relational security features of inpatient forensic services but their primary use may not be to provide care for convicted offenders. This includes Psychiatric Intensive Care Units (PICUs) and a range of other locked accommodation such as wards for both older people and adults with brain injury who display disturbed and aggressive behaviour.

Some secure forensic units will host patients who have never been convicted of a crime, including chronically disturbed patients who have been transferred from general psychiatric wards on civil sections (Pereira & Dalton, 2006). Thus Reed et al (2005) were able to study and describe the characteristics, and in particular the aggressive and violent behaviour of, ‘forensic’ and ‘non-forensic’ learning disabled patients in one UK low secure unit. This suggests that, at least to an extent, it is the care recipient who attracts the ‘forensic’ label and that it is not simply a function of the unit in which they happen to reside. Taken on its widest interpretation of work at the interface between psychiatry and the law (Arboleda-Florez, 2006) then any unit, including those in general adult services, where patients are detained under section of the Mental Health Act is providing a ‘forensic’ service. It may be concluded then that there is a degree of overlap between forensic, secure and general psychiatric services. Many writers agree that the common thread linking secure and forensic services is that nurses and others are required to balance the therapeutic needs of their patients with appropriate security considerations in order to protect the public (Storey & Bradshaw, 2000). This is a longstanding feature of psychiatric services: for example, Gournay et al (2008) remark that one of the key tasks of mental institutions has been
to protect the public since Bedlam, the 16th century forerunner of London's Bethlem Royal Hospital.

In conclusion therefore it can be stated that 'forensic' and 'secure' are not interchangeable terms, and that there is also a degree of overlap between what are termed 'secure services' and inpatient psychiatry more widely. Whilst these may appear to be merely semantic distinctions, it is the intention of this thesis to demonstrate that a broad definition of this zone of professional practice is required.

1.2.2 Forensic psychiatric nursing

Different terms are commonly used to refer to psychiatric nurses who work in secure and forensic contexts: 'forensic mental health nurse' (National Forensic Nurses' Research and Development Group, 2008); 'forensic psychiatric nurse' (Lyons, 2009; Mason, 2002); 'forensic nurse' (Kettles & Woods, 2006). For purposes of brevity this thesis generally refers to 'forensic psychiatric nurses' except when referring directly to the work of a third party who themselves use a different term.

Dale et al (2001) suggest that forensic psychiatric nursing in the UK can be dated to the development of the first Criminal Lunatic Asylum at Broadmoor in 1863. The first period of development of the profession, largely conducted in high security hospitals and characterised by secrecy, lasted more than one hundred years until the development of Regional Secure Units in the wake of the Butler Report (Committee on Mentally Abnormal Offenders, 1975). A second period of development, lasting until 1996, saw the first descriptive accounts of forensic psychiatric nursing emerge (Benson, 1992; Burnard, 1992). Only from 1995 onwards were empirical accounts published (Robinson & Reed, 1996; Burnard & Morrisson, 1995) and in its modern
form forensic psychiatric nursing therefore dates back less than two decades. Mason (2002) concurred, stating that ‘forensic’ was generally accepted in the nursing literature from the mid-1980s as a term to refer to nurses working with MDOs in secure psychiatric services, but that it became a more all-encompassing term from the 1990s onwards and was used to refer to nurses working at other mental health-legal interfaces such as those working with victims of perpetrators of violence (International Association of Forensic Nurses [IAFN] 1999, p. 2). Kettles and Woods (2006) have usefully distinguished between ‘victim’ and ‘perpetrator’ forensic nursing, and in the UK it is generally members of the latter group who are understood to constitute the set of ‘forensic psychiatric nurses’.

In 2001 Martin reviewed the literature on forensic psychiatric nursing and argued that in order for the profession to prove its claim to be specialised form of psychiatric nursing then it would need to demonstrate two things. First, what it is that these nurses do that is distinct from other psychiatric nurses and, second, what is therapeutic about it? Martin concluded that, at that time, there were few perceptible differences between the putative specialty of forensic psychiatric nursing and psychiatric nursing more generally (Kinsella & Chaloner, 1996; Robinson & Reed, 1996) and that the therapeutic value of forensic psychiatric nursing remained unproven.

A considerable literature about the role and specialist skills of the forensic psychiatric nurse has developed since Martin’s review including literature reviews (Bowring-Lossock, 2006; Mason, 2002; Mason et al., 2008a, 2008b), edited books (National Forensic Nurses Research and Development Group, 2008), concept analysis of the role (Kettles & Woods, 2006), and empirical investigations (Mason et al., 2008a, b;
Mason et al. (2009a, b). The special or distinguishing skills or attributes of forensic psychiatric nurses are commonly reported to be the balancing of physical, procedural and relational security needs with therapeutic needs (Dale & Storey, 2004; Mason, 2002), teamwork or multi-disciplinary approaches (Dale & Storey, 2004; Kettles & Woods, 2006), and risk assessment and management (Bowring-Lossock, 2006; Kettles & Woods, 2006) with particular reference to the management of inpatient violence (Mason et al., 2008a).

Kettles and Woods (2006) conducted a concept analysis of 'forensic' nursing with the aim of clarifying the nature of the role. Arising from this Kettles and Woods proposed a definition of 'forensic' nursing as being a role that integrates evidence from general psychiatric nursing and psychology with specific forensic knowledge about the criminal justice system, risk, and safety that is applied to practice both in secure settings and in the community. Their definition encompasses evidence-based practice, multidisciplinary working, and family and significant other-oriented work. Their model case of the forensic nurse was identified as having the following characteristics:

- Registered Mental Nurse (RMN) or Registered Nurse for the Mentally Handicapped (RNMH) trained
- Experienced (eight years) in a high security environment with personality-disordered, substance misusing patients
- Post registration certificate in substance misuse and masters degree in interventions with this group
- Planning to undertake a specialist 'forensic' qualification as either a diploma or doctorate.
• Skilled in individual and group work with forensic patients
• Involved in external working groups on education for those working in forensic settings
• Skilled in forensic assessment using Structured Professional Judgement and actuarial instruments, and translates this into appropriate risk management and treatment selection decisions

The model case above clearly has characteristics including qualifications, knowledge, experience, and competencies that are relevant to professional practice in a secure forensic setting. Kettles and Woods then differentiated the 'model' forensic nurse from a borderline case, for example an RMN employed in a medium-secure unit but with no postgraduate forensic training, and from an alternative case of an RMN working in elderly care who only uses skills learned in pre-registration training. The degree of similarity of any nurse to the model case, and thus the appropriateness of the 'forensic nurse' label, is judged with reference to attributes that are shared with the model case. These attributes are argued to lie in three specific areas: i) risk assessment, ii) professional, legal and ethical aspects of care, and iii) interpersonal competencies.

Concept analysis therefore facilitated Kettles and Woods’ (2006) rich and flexible definition of forensic psychiatric nursing. Interestingly, however, whilst some theorists (Walker & Avant, 1988) claim that concept analysis is a necessary precursor to theory building, that is to say that the clarification of the concept must happen before further theoretical work can ensue, others feel that theoretical commitment is itself a precursor of concept analysis (Paley, 1996). In support of this view Kettles and Woods refer to many of their own works in their explication of the concept of the
forensic nurse; however, this may be inevitable in an emerging field. Additionally, Duncan et al. (2007) have noted that concept analysis is relativist inasmuch as it does not attempt to create a fixed meaning but rather to create a useful understanding of the shared meaning of a concept within a specific context. This thesis will argue that the contextual information surrounding the submitted research suggests that Kettles & Woods (2006) definition of forensic psychiatric nursing may need to be re-examined. Alongside this theoretical critique a number of practical observations can be made about Kettles and Woods' definition of forensic nursing. First, the model case forensic nurse proposed is clearly aspirational; the model is so well endowed with experience and qualifications that it is unclear to what extent the specialist epithet 'forensic nurse' is generalisable to other nurses who work in similar settings. Specifically, what proportion of those who work in secure and forensic services could be defined as forensic nurses? This question has implications for research into the effectiveness of interventions delivered by this group because an operational definition with explicit inclusion and exclusion criteria is still required. Second, it is not entirely clear what it is that distinguishes this specialist forensic nursing role from that of those engaged in other areas of professional practice. Presumably, psychiatrists, psychologists, occupational therapists and others working in forensic environments would claim expertise in the three specialist forensic attributes listed by Kettles and Woods, namely risk assessment, legal issues and interpersonal competencies. Third, it is not entirely clear why the model forensic nurse is defined as having such extensive experience in high secure environments and largely with patients with a diagnosis of personality disorder when this contradicts the reality of UK secure psychiatric services. Medium secure beds outnumber high secure beds by a ratio of 4:1 in England and Wales (Sainsbury Centre for Mental Health, 2007) and most (76%)
detained patients in secure services are diagnosed with a mental illness with or without other disorders rather than solely with psychopathic disorder (12%, Sainsbury Centre for Mental Health, 2007). Nevertheless, taken in its widest sense Kettles and Woods (2006) definition of forensic nursing is flexible and multi-dimensional. Whether this definition will aid with the future evaluation of the effectiveness of the role remains to be seen.

A different perspective on forensic psychiatric nursing emerges from two strands of empirical research conducted by Mason and colleagues (Mason, 2002; Mason et al, 2008a, 2008b; Mason et al, 2009a, 2009b). This body of work assumes as a starting point that forensic psychiatric nurses are simply psychiatric nurses who work in UK low, medium and high secure psychiatric services. The clear strength of this approach is that it provides an operational definition of a relatively large and accessible population with whom empirical research can be conducted about the psychiatric nursing role in these environments.

Mason et al (2008a, 2008b) surveyed more than 1,000 forensic psychiatric nurses, defined as nurses working in low, medium and high secure psychiatric hospitals, plus other general psychiatric nurses, defined as psychiatric nurses outwith the preceding group, and participants from other disciplines. They asked about the role dimensions of forensic psychiatric nurses, and about the clinical aspects of the role. Forensic and general psychiatric nurses both reported that experience, empathy, listening, and patience are key role strengths; both reported that key skills include listening and communication. There were clear differences between non-nurses and both forensic and general psychiatric nurses about nursing roles; non-nurses viewed clear boundaries, monitoring medication and ability to work with low staff to patient ratios...
as key forensic nursing strengths, but these issues were rarely mentioned by nurses. Comparisons were not made between forensic nurses in high, medium and low security and thus variation within the forensic nursing role could not be examined. However, a second strand of research (Mason, 2002; Mason et al., 2009a, 2009b) facilitated such comparisons.

Mason (2002) viewed the forensic psychiatric nursing role as underpinned by a collection of domains of practice, characterised by binary oppositions constituting role tensions, namely: medical vs. lay knowledge, i.e., the extent to which forensic nurses employ medical theory or lay perspectives to explain patient behaviour; transference vs. counter-transference i.e., the positive feelings associated with facilitating change vs. the negative feelings associated with some forensic patients and their crimes or misdemeanours; iii) win vs. lose, i.e., feelings of control, or lack of control, that are related to the perception of whether particular interactions with patients have been 'won' or 'lost'; iv) success vs. fail, i.e., whether staff feel they are therapeutically effective; v) use vs. abuse, i.e., whether staff feel they are viewed as therapeutically effective; vi) fear vs. confidence related to the daily possibility of violence in the work setting of the forensic psychiatric nurse.

In later work, statements were developed relating to each pole of the six binary constructs with responses measured on a seven-point likert scale (Mason et al., 2009a, 2009b). Development of the tool was detailed, with involvement of independent forensic psychiatric nurses in development, pilot testing, and test-retest reliability checking. The resulting questionnaire was completed by 416 qualified forensic psychiatric nurses working in UK low, medium and high secure psychiatric services. Analysis demonstrated numerous statistically significant differences between the
ratings of staff working at the three different security levels although the authors concluded that they cannot explain exactly why this was the case. In brief, nurses working in high security agreed more with statements on the win-lose axis, suggesting greatest need for control in these settings. Nurses working in all levels of security tended to endorse lay explanations of patient’s behaviour and to reject medical reasoning, this particularly being the case in high security settings; the researchers speculated that this may indicate a perception among nurses working in high security settings that this highly selected group of patients are not amenable to treatment. High secure nurses report more fear and less confidence which is unsurprising given the particular security needs of the patient population.

The results of Mason et al’s (2009a, 2009b) binary construct analysis demonstrated that nurses working in low secure services differed significantly from those working in high secure services on most items. They were more likely to accept medical explanations and less likely to accept lay explanations about patient behaviour; they agreed less with statements about both transference and countertransference; they agreed less with statements representing the win factor; they agreed more with statements about success and less with those about failure; similarly they felt that they were viewed as therapeutically effective (‘use’) rather than ineffective (‘abuse’); finally, they were significantly more confident and felt less fear. Medium secure nurses were more like high secure nurses on transference and countertransference, but there was no pattern where medium secure nurses sat directly in between the two other security levels.

Mason’s studies are interesting because they demonstrated measurable and observable differences on role tensions between nurses working in different levels of security.
However, it is not made explicit what implications the role tensions proposed have for nursing practice. For instance, it is not elucidated whether a strong culture of either medical or lay explanations about patient's behaviour is desirable. Presumably it would be beneficial for nurses to view themselves as therapeutically effective (high ratings on ‘use’) but it is unclear whether this view is objectively related to the actual therapeutic effectiveness of nurses in secure and forensic environments. However, the results do suggest that nurses working in high secure settings hold a significantly different set of beliefs about their role than those in low secure environments. Although the link between beliefs and practice is not clear we can speculate that, if beliefs do reflect roles, then there may be fundamental qualitative differences between low and high secure psychiatric nursing roles such that they do not fall under the same category membership. One way of interpreting this is that, if Mason et al’s role constructs are accepted as accurately reflecting the key elements of forensic psychiatric nursing, then it is not at all clear to what extent nurses working in low secure environments are ‘forensic’ nurses in the same way as those who work in high secure environments. Furthermore, whilst Mason et al’s operational definition of forensic psychiatric nurses facilitates research into the role it is not clear to what extent his nurse participants would meet the definition of forensic nurse, that is to say the extent to which they possess the experience, competencies and qualifications suggested by Kettles and Woods (2006). Kettles and Woods are championing a highly specialist role whilst Mason and colleagues appear to be describing those who practice their nursing in secure environments. Mason et al have not currently explored whether the overall profile of nurses who work in secure settings distinguishes them from other professional practitioners in similar settings, nor whether forensic psychiatric nurses differ from general psychiatric nurses on their measures of role.
tension. This could be one potential way of attempting to distinguish a clear nursing role in the secure and forensic arena.

To summarise, in the UK there appear to be competing definitions of forensic psychiatric nursing. One describes a decidedly specialist role with particular skills in risk assessment and management, considerable legal knowledge and highly developed interpersonal competencies (Kettles & Woods, 2006) while a second defines the role pragmatically and in relation to nursing practice in specific secure environments (Mason, 2002). It is therefore problematic to simply refer to ‘forensic psychiatric nursing’ as if there were one commonly understood definition. Empirical studies of ‘forensic psychiatric nursing’ largely employ definitions similar to Mason’s (Carrion et al, 2004; Mason et al, 2009a, 2009b, 2010; Timmons, 2010) which is thus perhaps more likely to gain common currency over Kettles and Woods (2006) more esoteric conceptualization. However, empirical investigation of forensic psychiatric nurses so defined on the role tensions that purportedly characterise the role has offered no compelling evidence of differentiation from general psychiatric nurses. On the contrary, there is some evidence that there are wide variations between those working in high secure environments and those in lower security services. The epithet ‘forensic psychiatric nurse’ may therefore be inappropriate for those who work in some secure environments. Furthermore, there is little empirical evidence that reliably distinguishes the specialist forensic psychiatric nursing role from that of other practitioners in the secure and forensic mental health arena. In fact the role dimensions thought by non-nurses to best identify the forensic psychiatric nursing role (boundaries, medication monitoring, ability to work with low staff: patient ratios) were rarely mentioned by nurses in Mason’s (2008a, 2008b) studies.
1.2.3 The evidence base for nursing practice in secure and forensic care

Forensic psychiatric nursing is an emerging discipline within the broader field of forensic mental health. As outlined above, there has been considerable discussion and some research about the role of the forensic psychiatric nurse, but less work around the evidence for that role. In short, less is known about the effectiveness of the role and, to an extent, it is unclear how the body of forensic psychiatric nursing research should be defined and what its key elements are. This section discusses how the evidence base for the discipline can be understood and defined.

Exploration of the broader and more mature discipline of general psychiatric nursing suggests that its own evidence base is defined in various ways. Reviews of psychiatric nursing research (Davis, 1981; Fox, 1992; Jones & Jones, 1987a,b; McCarthy et al., 2006; Merwin & Mauck, 1995; Sills, 1977; Zauszniewski & Suresky, 2004) have used an assortment of inclusion and exclusion criteria to define the body of knowledge. Yonge et al (1997) argued that psychiatric nursing research should address ‘an aspect of the nursing process’; other reviews have used operational criteria that include only those studies published in nursing journals (Jones & Jones, 1987a; Zauszniewski & Suresky, 2004) or where authorship is by a nurse (McCarthy et al, 2006); Merwin & Mauck (1995); whilst at least one simply used their own judgement to identify studies that constituted psychiatric nursing research (Sills, 1977).

The definitions used to define the body of knowledge for psychiatric nursing practice therefore do not seem particularly satisfactory and all have weaknesses. Those reviews which define psychiatric nursing research in relation to the nursing process (Yonge et al, 1997) explicitly exclude from the evidence base studies of nurse’s own
behaviour and attitudes, and studies of nursing education. It is likely that any review of forensic psychiatric nursing research that was operationalised in relation to the nursing process, and thus excluded studies of nursing roles, would be limited. For example, Mason (2009a) has commented that there is a paucity of literature on forensic psychiatric nursing that could broadly be defined as experimental, and presently there is no available systematic review of the effectiveness of forensic psychiatric nursing interventions equivalent to Curran and Brooker's (2007) systematic review of the effectiveness of general psychiatric nursing interventions. Reviews which place the publication's title or its intended audience as the defining feature of psychiatric nursing research may unreasonably exclude important nursing-related and nurse-led research studies. Finally, reviews which simply define their evidence base on their own judgement (Sills, 1977) run the risk of bias. Given the failure to satisfactorily delineate a more mature field, it is therefore unlikely that an operational definition of 'forensic psychiatric nursing research' can be easily constructed against which to ascertain whether the body of work submitted in this thesis can be described as a body of work in the field of forensic psychiatric nursing. However, in Chapter 3 the extent to which the work submitted in support of this thesis meets some of these criteria is critically examined.

There is, however, room for some optimism that rigorous criteria can be constructed and deployed to delineate areas of practice that are related to the work of forensic psychiatric nurses and used to investigate the effectiveness of the role. Woods and Richards (2003) conducted a systematic review of the effectiveness of nursing interventions with people diagnosed with personality disorder. Whilst the study does not claim to be either a review specifically of forensic nursing interventions, or of interventions conducted solely with legally defined forensic patients, it is clearly
related to the work of forensic psychiatric nurses. Woods and Richards concluded that the evidence-base in this area is weak, in particular, the evidence for the effectiveness of nursing management is poor compared with that for psychological approaches where both nurses and other practitioners are delivering the intervention. This finding appears to indicate a lack of evidence for the effectiveness of specific nursing interventions with this population. Indeed, the apparent lack of effectiveness for nursing interventions means that nurses might be best advised to look outside of the nursing literature for the best evidence.

Other research studies indicate a lack of breadth and depth of evidence for forensic psychiatric nursing. Carrion et al (2004) have demonstrated that forensic psychiatric nurses report that the major barriers to utilising research are i) that the relevant research is not compiled in one place, and ii) that they do not feel the results of research are generalisable to their own setting. Gildberg et al (2010) highlighted that, in an area key to forensic psychiatric nursing, namely staff-patient interaction, only seven studies involving patients as participants had been conducted. All were qualitative interview or questionnaire studies that attempted to describe the nature of staff-patient interactions rather than attempting to evaluate the effectiveness of those interactions. In summary, academic concentration on the role of the forensic psychiatric nurse has not been mirrored by equivalent focus on the effectiveness of nursing interventions with forensic and secure patient groups. Martin's (2001) exhortation to demonstrate the effectiveness of forensic psychiatric nursing in support of its distinct identity therefore does not appear to have been fully achieved.
1.2.4 The UK independent mental health sector

The final contextual element of the work submitted in support of the current thesis is its situation within a non-NHS setting. The UK independent health sector comprises all non-NHS facilities including commercial enterprises and ‘not for profit’ services. The inception of the modern independent sector can be traced to the years following the second world war (Sugarman, 2011). At that time there were around 160,000 inpatient beds in England for people with mental illness (Green 2009), although these were largely provided in unsuitable and decaying asylums, and used treatments with little evidential value including lobotomy and electroconvulsive therapy (Mashour et al. 2005). From the 1950s, the introduction of medicines such as chlorpromazine facilitated the dismantling of most of these beds with around 40,000 remaining by the 1980s (Sugarman, 2011). The formation of the NHS in 1948 brought almost all existing local authority and charitable hospitals together, with just four (including St Andrew’s Hospital, Northampton) charitable hospitals forming a nascent independent sector providing specialist services for people with challenging behaviours who did not require the highest security in the NHS-run special hospitals. As now, the independent sector provided care for NHS patients on a contractual basis with surplus monies returned to investors in the form of share bonuses in for profit providers and re-invested in services for non-profit providers such as The Retreat and St Andrew’s Hospital. The need for beds at lower levels of security (see 1.2.1) and the consequent emergence of Regional Secure Units (RSUs) in the 1970s was in part met by the growth of the independent sector, particularly from the late 1980s onwards, who specialised in providing care for long-term, hard-to-treat patients that local NHS units were unable or unwilling to manage (Sugarman, 2011). Simultaneously, despite the intention behind the RSU network, few patients were admitted from general
psychiatric hospitals because the spaces were filled by transfers from the high secure hospitals and from prison (McKenna, 1996). As a result there was piecemeal development of local, closed units provided by both the NHS and independent sector which, due to shortage of beds in the medium-secure RSUs, became ad hoc admission units for individuals with serious offending histories (Beer et al., 1997). A subsequent development of national standards for low-secure units (Department of Health, 2002; 2008) means that forensic mental health services are now provided at levels of high (800 beds; Sainsbury Centre for Mental Health, 2007), medium (3,500 beds; Sainsbury Centre for Mental Health, 2007) and low security (1,583 beds; Pereira et al., 2006).

Currently, the independent sector provides 13.7% of all inpatient mental health beds in England & Wales (Raleigh et al., 2008). Patients in independent sector provision are younger, more likely to be detained and more likely to be in secure provision compared with those in NHS services (ibid). This reflects the fact that the independent sector plays a large role in the secure mental health market, providing approximately 35% of medium secure capacity (Sainsbury Centre for Mental Health, 2007), 27% of secure adolescent mental health inpatient capacity (O’Herlihy et al., 2007). Some highly specialist locked or secure settings, for example for people with acquired brain injury and extreme challenging behaviour who require neurobehavioural rehabilitation, have all inpatient beds are in effect provided by the independent sector (Royal College of Physicians, 2010). This share of secure beds provided by the independent sector appears to be much greater in highly specialist niche areas, for example the independent sector is the commonest provider of ‘high cost’ services for people with learning disability, i.e., those displaying the most challenging behaviour (Hassiotis et al., 2007). There has been a small increase in the share of secure beds
provided by the independent sector but a large increase in the total number of secure beds since 2001 (Jaycock & Bamber, 2001). This has occurred in an overall context of declining numbers of non-secure inpatient psychiatry beds (Keown et al., 2008). The independent sector therefore plays an increasingly important role in the UK mental health care market. Furthermore, there is data to indicate that the low and medium secure independent sector population differs from its NHS equivalent. Moss et al (1996) compared patients admitted to NHS and independent sector medium secure units and concluded that the latter providers demonstrated increased flexibility in terms of admitting patients deemed to present exceptional management problems. As described above, independent sector providers are increasingly prominent in highly specialist niche service provision. Moss (1999) has argued that the independent sector is now providing services that are unavailable in the NHS, namely long-term care in conditions of security (or for those who simply cannot live independently including those with dementia. In contrast, Deery & Raleigh (2008) have shown that care quality data is lacking in quality to compare the quality of care, as opposed to the population cared for, in independent sector providers relative to their NHS counterparts. The NHS is currently the sole provider of high secure services and thus provides care and treatment for those deemed to be the most dangerous MDOs. However, this population has declined from 1859 in the early nineties (Butwell et al., 2000) to approximately 653 in England in 2007 (Sainsbury Centre for Mental Health, 2007). There are therefore indications that in growing areas of provision, namely medium and low secure care, and particularly in specialist niches, secure care is increasingly provided by the independent sector. Furthermore, many of the most challenging patients cared for within this sector.
All of the submitted empirical work was conducted during the author’s employment by St Andrew’s Healthcare, a charity and leading UK independent sector provider of specialist mental health care. A considerable portion of the work was conducted across its extensive secure care pathways. St Andrew’s is unique in that it represents in microcosm the UK specialist secure mental health sector in its widest definition on one site: services for adolescents, adults and older adults with mental illness, learning disability or acquired brain injury in conditions of low, medium and open security.

1.2.5 The political context

The research was conducted entirely in the latter part of a period of health care expansion in the United Kingdom under successive Labour governments. The Labour government elected in 1997 had committed to remaining within the published spending plans of the previous Conservative government for a period of two years. This had led to widespread public discontent (Pollock, 2004: 66), but by 2000 fiscal surpluses allowed this cap to be lifted and Labour committed to significant increased spending in line with the NHS Plan (The Stationery Office, 2000). Net expenditure on the NHS in England increased from £59.8 billion in 2001/2 to £102 billion in 2007/8, an average rise per year in real terms of almost 7%. (House of Commons Library, 2009). This increase was reflected in spending on mental health services (Sainsbury Centre for Mental Health, 2007). The NHS Plan (2000: 96) which ushered in spending increases made it explicit that “ideological boundaries or institutional barriers should not stand in the way of better health care for patients... The private and voluntary sectors have a role to play in ensuring that NHS patients get the full benefit from this extra investment”. As a result, and as demonstrated in 1.2.4 above, the independent sector has played an increasingly large role in the provision of secure
mental health care in England. Concurrently, enhanced spending became increasingly regulated through the establishment of National Service Frameworks (including for mental health, Department of Health, 1999) with outlined protocols and service arrangements; and through the creation of quasi-governmental agencies including the National Institute for Clinical Excellence (NICE) to assess the effectiveness of drugs and medical technology, and the Commission for Health Audit and Inspection (CHAI) a unified body to regulate both public and private/independent sector care. In particular the period saw an increasing emphasis on delivering measurable outcomes including for mental health patients (Holloway, 2002). However, it also saw more coordination, research and policy directed at issues including inpatient aggression and violence (e.g., NICE [2005] guidelines on the short-term management of violent behaviour), patient safety (creation of the National Patient Safety Agency in 2001), and arson (e.g., ODPM, 2002).

Alongside increased expenditure and regulation, the period during which the research in this thesis was undertaken also saw a continuation of a trend in recent years of increasing state management of people’s personal lives. Writers including sociologist Frank Furedi (2003) have noted that this is a symptom of the post-cold war collapse of politics’ traditional struggle between left and right, and the end of grand competing visions of the good society. Left in its place are ‘micropolitics’ which are essentially managerialist, technocratic and ‘evidence-based’. In health care this has seen the rise of a ‘new public health’ (Fitzpatrick, 2000) which has aimed to regulate lifestyle often based on statistics from epidemiological studies which can confuse association with causation (Skrabanek & McCormick, 1989). Furthermore, epidemiology tends to be dominated by so-called ‘objective’ factors, in particular the statistics of morbidity and mortality, and ignore ‘subjective’ factors including, crucially, people’s beliefs.
attitudes, feelings and freedom to choose to act in ways that are not optimally beneficial to them on (Charlton, 2001). Two published studies included within the thesis pre-dated the public smoking ban which came into force in England in 2007, and a year later in psychiatric hospitals, a result of the Health Act (2006). Importantly, the Act did not provide for a ban on smoking in outdoor areas of hospitals, and it made exempt from the ban residential premises including prisons but not secure hospitals.

1.3 Contextual summary and thesis objectives

The contextual issues outlined in 1.2.1 to 1.2.5, namely secure and psychiatric care provision, forensic psychiatric nursing, the research evidence base for nursing interventions in these settings, the UK independent sector healthcare market and the wider political context provide the background for the empirical work submitted. The thesis is intended to be understood in relation to ‘secure and forensic psychiatric care’ in the widest possible sense because, whilst elements of the work have implications exclusively for those currently working in, or providing, secure inpatient services, other elements have practice implications for mental health professionals who come into contact with people who may require secure psychiatric services.

The research presented is concerned with both users of services, that is to say patients, and providers of services such as nurses and other clinical practitioners. Research methods were utilised that were suitable for the research questions posed and all sit within a positivist epistemological framework. In Chapter 3 it will be argued that the work should be considered in its entirety as a contribution to the field of forensic and secure psychiatric nursing and forensic and secure psychiatric care in general.
Chapter 2. Review of publications

This chapter reviews the research submitted and is organised by research topic: firesetting, medication administration and errors, violence and aggression, staff and patient views on smoking, and secure psychiatric service outcomes. Each of these topical themes is illustrated by two papers which are presented in full in Appendix I. Related publications, citations, other dissemination and related professional activities for each topical area are detailed in Appendix II.

2.1 A note on the author’s contributions to each published study

The ten submitted empirical papers are dual or multi-authored (range 2 to 6 authors), and the candidate is the lead author of eight. The International Committee of Medical Journal Editors (ICMJE) state that an “author” is generally considered to be someone who has made a substantive intellectual contribution to a published study: “An author must take responsibility for at least one component of the work, should be able to identify who is responsible for each other component and should ideally be confident of their co-author’s ability and integrity” (ICMJE, 2009). Authorship credit should be based on meeting the following conditions:

1) Substantial contributions to conception and design, acquisition of data, or analysis and interpretation of data.
2) Drafting the article or revising it critically for important intellectual content.
3) Final approval of the version to be published.

Furthermore, Newman and Jones (2006) have argued for first authorship of a research paper to be the right of the author of the first draft of the paper. These criteria are used
within this chapter as the basis for assessment of the candidate’s published contribution submitted as part of this doctoral thesis.

2.2 Research related to firesetting


One in a hundred United States adults has a self-reported lifetime history of deliberate firesetting and for 38% of these the behaviour persisted beyond the age of 15 years (Blanco et al, 2010; Vaughan et al 2010). Based on US population figures (US Census Bureau, 2010), there are approximately 1 million US adults who have deliberately set fires since age 15 and in the UK the figure would approach 200,000 (Office for National Statistics 2005). Arson, defined as the crime of deliberate firesetting as opposed to the simple behaviour of lighting fires, accounts for 36% of all fire-related economic costs, amounting to £2.53 billion in England and Wales in 2004 (ODPM, 2005). It has long been established that the typical firesetter is young and male (Lewis & Yarnell, 1951), but in reality they are a heterogeneous group cutting across categories of gender, age and intellectual ability. One in six firesetters is female (Blanco et al, 2010); half of intentional firesetting brought to professional’s attention is committed by adults (Cassel & Bernstein, 2007); and Enayati et al (2008) have reported learning disability to be a feature in 10% of males and 9% of females convicted of arson and referred for forensic psychiatric examination. Therefore, it is important to try to distinguish between subgroups of firesetters in order to inform the
assessment of future risk. A favoured approach to firesetter differentiation, and one that drove a considerable amount of inquiry from the 1970s to the 1990s, was typology based on motivation, that is “the driving force or forces responsible for the initiation, persistence, direction and vigour of goal directed behaviour” (Colman, 2009). More recently, motivational classification has been viewed as flawed (Gannon & Pina, 2010), primarily because motives like revenge are often confused with characteristics (such as institutionalisation); but also because entirely different cases of firesetting, such as fires endangering and not endangering life, can be conflated under one heading such as revenge (pace Soothill, 1990).

Surprisingly little research has been undertaken to differentiate between broader, naturally occurring groups of firesetters such as by gender or intellectual ability; or more and less dangerous firesetters i.e., those who repeatedly set fires, and those who set the most dangerous, potentially life-threatening fires. Gannon (2010) has noted the paucity of research on female arsonists that uses adequately matched controls of offending females or male arsonists. Only one previous study (Harris & Rice, 1996) had attempted to specify the characteristics of the most dangerous firesetters. Harris and Rice (1995) examined 243 male mentally disordered firesetters (mean age 28.7 years, mean IQ = 93) admitted to a maximum security psychiatric institution for firesetting over an 11 year period and found that 20 (8%) index fires had led to high levels of injuries and property damage. There were few differences across a range of childhood and adult variables between those involved in the most and less destructive fires except for youth and presence of an extensive firesetting history.
Firesetting is a feature of a significant proportion of those people who come into contact with psychiatric services. Psychiatric morbidity is common among those convicted of arson (Anwar et al., 2009; Enayati et al., 2008), and in order to assist in their determination of disposal, the courts are generally inclined to call for psychiatric reports in all but the most straightforward cases (Prins, 2005; R v Calladine [1975]). Whilst those referred for psychiatric referral may not be representative of all firesetters because, arguably, they comprise a subset of unsuccessful firesetters who get caught. However, they do represent a majority of those who are apprehended. In the UK, case law (R v Hoof [1980]) has established that there should be separate counts relating to arson with intent to endanger life, arson reckless as to whether life was endangered, and simple arson. In effect, the court should attempt to distinguish reckless and intentional firesetting, a final decision being made by the jury. Further, this distinction will be reflected in sentencing, and cases of arson with intent to endanger life and/or aggravating features including premeditation are punishable by 8 to 10 years in prison, or even with indeterminate sentences (Averill, in press).

Practitioners, chiefly forensic psychiatrists but also others, are required to make informed judgements about the presence or absence of mental disorder in referred firesetters, and to comment about risk of future offending.

In these two linked studies (Papers 1 and 2, Dickens et al., 2007, 2009) a retrospective, observational case-controlled survey design was employed. Sociodemographic, family and psychiatric history data from variables identified as relevant in previous studies was extracted from the clinical case records of 167 (23%, n=38 female) adults referred to West Midlands forensic psychiatry service over a 24-year period for assessment following an episode of firesetting. The main advantage of this design was that retrospective review facilitated the relatively rapid acquisition of large amounts
of data that was collected over a long period; in this instance data was based on the
records of those assessed over a 24-year period even though arson accounted for 10%
of all referrals. The main disadvantage is that the research is reliant on accurate
record-keeping. Two thirds of notes used in this study were rated as being of good
quality, 30% as of moderate quality and the remaining seven sets of notes as poor
quality. Another limitation is that, while the sample which comprised half of those
referred over the period, was selected randomly, the population of those referred is
almost certainly not representative because only unsuccessful firesetters are
apprehended. Retrospective studies like this one can only answer questions about
association and not about causality. Despite the numerous studies of firesetting
motivation (Icove & Estepp, 1987; Inciardi, 1970; Kidd, 1997; Lewis & Yarnell,
1951; Prins, 1994; Rautaheimo, 1989; Ritchie & Huff, 1999; Rix, 1994), all based on
similar retrospective case information, it was found to be very difficult to ascribe
motive.

2.2.1 Gender and firesetting (Dickens et al., 2007):

There are a limited number of studies that compare female firesetters with an
appropriate control group. One potential control group, comprising women who were
referred for assessment following apprehension for other crimes, was considered for
this study but rejected. However, this author has recently, with others, conducted a
complementary piece of work [Long et al., in press] to examine differences between
firesetters and non-firesetters in a female inpatient secure psychiatric service. In her
recent comprehensive review of the literature on female arsonists, Gannon (2010) was
able only to identify four studies (Dickens et al., 2007; Icove & Estepp, 1987; Lewis
& Yarnell, 1951; Rix, 1994) that compared male and female firesetters across a range
of variables and Dickens et al (2007) was “unique” (Gannon, 2010: 180) in its use of inferential statistical analysis. Dickens et al (2007) is marginally the largest gender comparison study of firesetters referred for psychiatric assessment; Rix (1994) reported on $N = 153$ (16%, $n=24$ female) firesetters, and the remaining two studies are based primarily on insurance reports (Lewis & Yarnell, 1951) and on police interview data (Icove & Estepp, 1987).

The novel contribution of this work was to add empirical evidence to an emergent picture of differentiation between men and women who deliberately set fires. Women firesetters are more heterogeneous than males in terms of age. Women were less versatile in their overall offending than men e.g., less prior offending, fewer convictions for theft and vehicle offences. Interest in the phenomenon of fire itself seemed to be less prevalent among women; suicidal or parasuicidal elements were more frequently present in women. We also highlighted the high risk for women firesetters to have a history of reported childhood abuse relative to males. Whilst the evidence base regarding treatment and intervention with adult arsonists is very thin (Palmer et al, 2007; Hollin, in press), and there probably is overlap between the treatment needs of men and women (Gannon, 2010), the differences supported by findings from this research suggest some differential needs in terms of treatment strategy. Women in particular may require more intervention aimed at ameliorating the effects of previous victimisation and abuse. Given that this abuse is likely to have occurred at the hands of men then gender specific treatment pathways are indicated.
2.2.2 Firesetting recidivism and dangerousness (Dickens et al., 2009)

‘Risk’ is understood in multiple ways. In the field of mental health it is generally taken to refer to potential adverse events involving violence and aggression or self-harm. More precisely, risk comprises elements including the prediction of the likelihood of dangerous behaviour based both on actuarial data and clinical experience, and on the potential destructiveness or the consequential severity of the behaviour (Gunn, 1982, 1993; Kettles, 2004; Pagani & Pinard, 2000). One way of understanding forensic risk, therefore, is as a product of the likelihood of repeated dangerous behaviour or recidivism and the potential severity or destructiveness of that behaviour in terms of death, injury or psychological distress (Doyle, 1999; Kettles, 2004).

The term ‘dangerousness’ to denote the product of the actuarial likelihood of repeated risk behaviour and the severity or destructiveness of that behaviour has fallen out of favour in recent years (Kettles & Woods, 2006). However, it is a useful shorthand way of conceptualising some of the constituent elements of risk, and one which we employed in this study. Recidivism among firesetters had been studied previously (see Brett, 2004 for a review, and Dickens et al., 2009) though rarely with a data set comprising variables specifically derived from previous literature on firesetting recidivism. Furthermore, in this study statistical tests were employed to identify significant differences between recidivist and non-recidivist firesetters on a range of variables validated by psychiatrists as indicating varying degrees of dangerousness (see Sugarman & Dickens, 2009), and regression analyses were employed to identify the variables that predict recidivism. This is the only study in the extant literature to employ this useful method of analysis in relation to firesetting recidivism (Gannon &
However, we took as a starting point Soothill’s (1990) assertion that categorisation of firesetters by motivation means that very different firesetting activities may be conflated under a motivational type, and this is elucidated in depth in Dickens & Sugarman (in press).

The central study hypotheses tested the characteristics of i) individuals defined as recidivist or multiple firesetters compared with one time only firesetters and ii) individuals defined as setters of severe fires, i.e., those fires causing extensive property damage or threat or actual loss of life or major injury, when compared with those who set less severe fires. Results suggested that recidivism was not associated with previous setting of serious fires, but that specific firesetting behaviours are: notably multiple-point firesetting and the use of accelerants. Although very few individual characteristics were associated with the setting of severe fires, the discriminant function analysis identified previous violent/sex offences as predictive of severe firesetting but not of recidivist firesetting. This supports previous research that indicated that a discrete sub-group of arsonists are violent offenders (e.g., Jackson et al, 1986). Whilst it has been traditional received wisdom that all fires are potentially deadly (Barker, 1994) and, as a corollary, there is little value in distinguishing between more and less serious fires, this finding suggests that those who have set more serious fires are probably the more dangerous group. This lends empirical support to claims (Gannon & Pina, 2010; Webster et al, 1997) that risk assessment for firesetters should treat the behaviour as a violent offence or as a property offence as appropriate. Although it remains very difficult to predict which firesetters will set serious fires in the future this work offers evidence that particular fire-related behaviours should be given considerable weight in risk and dangerousness.
assessment. The study is one of the few to examine the predictive ability of various variables in recidivist firesetters (Gannon, 2010).

2.2.3 Author’s contribution

For both of the above papers the candidate made a substantial contribution to the conception and design of the study, specifically to the literature review and hypothesis formulation, and to the analysis and interpretation of data. Both articles were drafted by the candidate who also had overall approval of the final article content in consultation with co-authors.

2.3 Research related to staff and patient views on smoking in secure inpatient services


Smoking is responsible for 30% of all UK cancer deaths, or 46,000 deaths per annum (Cancer Research UK, 2007) and smokers die 10 years earlier than non-smokers (Doll *et al*, 2004). About 24% of the UK population aged over 16 years are regular smokers (National Statistics, 2006), but up to 70% of inpatients in mental health units smoke tobacco (Mind, 2008). People with mental illness are disproportionately affected by
smoking-related ill health and mortality (Lichtermann et al., 2001; Tsuang et al., 1980, 1983).

From July 2008 stringent new smoking guidelines came into effect in psychiatric care premises in England, Wales and Northern Ireland. Under the Health Act (2006), smoking was prohibited for any patient staying in a psychiatric hospital for less than six months. In forensic psychiatric settings, where two thirds of patients will stay for more than two years (Sainsbury Centre for Mental Health, 2007), patients were not outlawed from smoking and were able to continue doing so in designated outdoor areas. However, some forensic/secure hospitals and units, notably the high-secure Rampton Hospital (Cacciottolo, 2008), introduced a blanket smoking ban in both their buildings and grounds and some medium-secure units have followed suit (Shetty et al., 2010). Because of the security restrictions in place in secure units, for example secure perimeter boundaries, patients are effectively prohibited from smoking at all.

Interestingly, bans like this are preceded by “preparation, education, patient advocacy and access to treatment” (ibid: 287) but not by consultation, despite the current vogue for user involvement in services (Tait & Lester, 2005). Woods (2004: 609) has argued that the views of service users in forensic services are ‘relevant… however, the extent to which these can be acted upon may be limited’. This limitation appears to be based on security needs, but it has never been argued that the smoking ban in secure forensic units has any relation to security, and has largely been couched in terms of health (Cormac et al., 2010). Where smoking bans have been implemented in UK secure settings it appears to have been done so expressly against the wishes of patients, for example in one medium secure unit 89% of patients were smokers, and the majority objected to a ban (Royal College of Psychiatrists, 2008).
Given these subsequent moves to ‘solve’ the smoking problem by diktat in secure inpatient psychiatry the two studies presented here, conducted in 2003 and 2004 before there had been any realistic suggestion of a ban, may seem slightly anachronistic. The rationale behind the studies was that new information about the attitudes and beliefs of staff and patients about smoking in psychiatric services would inform the development of educational interventions and policies that, whilst aimed at ultimately reducing smoking, would do so in a context that respected individual autonomy to make poor health decisions. It should be borne in mind that when these studies were conducted it was the norm for psychiatric hospital wards to have a designated smoking area. In the context which has been outlined here, there was considerable interest in the issue of smoking in psychiatric inpatient settings, particularly in the views and attitudes of staff to patients smoking, and in the views of patients themselves.

Surveys are a useful method of collecting information, describing, comparing or explaining knowledge, attitudes and behaviour and for determining opinion (Fink, 1995). Given the dearth of knowledge at the time about the attitudes and beliefs of clinical staff, chiefly psychiatric nurses, about their own smoking behaviour, attitudes and beliefs; and those of psychiatric patients themselves, two exploratory survey studies were conducted. It was anticipated that findings from both studies would be used to aid policy development and educational interventions.

2.3.1 Staff views on smoking (Dickens et al, 2004)

In this study (Paper 3, Dickens et al, 2004) a prospective, cross-sectional questionnaire survey design was utilised. Question statements were devised and piloted for the study in order to examine attitudes amongst a variety of clinical staff.
groups working in a large psychiatric hospital (total clinical staff population 1,471).

Question statements were generated from a review of the literature and refined through a process of consultation with a multidisciplinary reference group (the organisational Health Promotion Group). The study was anonymous, and there was no means by which non-respondents could be identified in order to improve response rate by follow-up of non-responders. Overall response rate of 50.3% was acceptable, although lower among unqualified nursing staff. Case control was applied by comparing the responses of three different professional groups: Registered Nurses, Healthcare Assistants and other professions. Further analysis of nurses who were themselves smokers and other nurses was conducted in order to ascertain the degree to which this variable operated independently of profession. It emerged that mental health nurses had significantly different - arguably more liberal – attitudes than their multidisciplinary colleagues. The new knowledge emerging from this study was that nurses, and particularly nurses who themselves were smokers, were more likely to endorse that staff should be allowed to smoke with patients, that smoking with patients is of value in the creation of therapeutic relationships and that problems with patients were more likely when they were unable to access cigarettes. Healthcare assistants had significant educational needs relative to registered nurses and other healthcare professionals. A small but significant group of healthcare assistants were likely to believe that cigarettes should be used to achieve therapeutic goals. The study does have limitations including its being limited to a single-site; however, it provided, and continues to provide, a relevant perspective and has been cited on 16 separate occasions in subsequent research studies.
2.3.2 Patient’s views on smoking (Dickens et al, 2005)

This study (paper 4, Dickens et al, 2005) aimed to triangulate the views of staff explored in the previous study with views of patients. Prospective cross-sectional survey design was utilised. Question statements were developed from the literature, which, in some cases, mirrored those in the survey of staff attitudes (paper 3, Dickens et al, 2004). On this occasion data was collected in a structured face-to-face interview format, for which there is good evidence for increased response rate (Sitzia & Wood, 1998) and it is well known that it is difficult to recruit psychiatric patients, particularly those with a diagnosis of schizophrenia, into research studies (Lester & Wilson, 1999). Results indicated a difficulty in recruiting older, male patients; a problem that has been addressed in subsequent studies by oversampling from among the male population in order to achieve representativeness (Dickens et al, 2010).

Findings illustrated a dilemma faced by mental health nurses in that patients valued social time with nurses that involved cigarette smoking, but concurrently experienced this as a disincentive to quit smoking.

2.3.3 Author’s contribution

The candidate made a substantial contribution to the conception and design of the two studies described above. Specifically, this involved the design and piloting of questionnaires, the literature review and hypothesis formation. For the patient-focused study the first author acquired the data through recruitment of participants and face-to-face interviews and was responsible for the analysis and interpretation of data. The candidate drafted both articles, revised them in consultation with colleagues and had overall approval of the final article content.
2.4 Research related to violence and aggression


Violent and aggressive behaviour towards clinical staff in mental health inpatient settings remains a serious problem. The management of violent incidents is a key concern for providers of secure psychiatric services. Nurses appear to be at particular risk: a recent survey indicated that 46% of nurses employed in working age psychiatric services and 64% in older people’s psychiatric services had been the victim of a physical assault at work (Healthcare Commission 2007a; 2007b). Up to one in five non-nursing staff also claim to have been assaulted (ibid), but these figures conflate data covering smaller professional groups such as physiotherapists, occupational therapists and speech and language therapists. Management of violence has been reported as one of the key role competencies of forensic psychiatric nurses (Mason, 2008). These two studies investigated two facets relating to the prevalence and the management of aggressive and violent behaviour.

2.4.1 Prevalence of aggression and violence against physiotherapists working in mental health settings (Stubbs & Dickens, 2009)

This study (Paper 6, Stubbs & Dickens, 2009) attempted to define point prevalence and 12-month incidence of physical assault by patients against a small and previously
understudied group: physiotherapists who work in UK mental health settings. This group of practitioners, like mental health nurses, spend considerable amounts of contact time with patients/service users and this may involve making challenging physical demands: for example, rehabilitation programmes involving iterated exercise regimens. There is, therefore, reason to suspect that this group will experience violence/aggression from patients at greater rates than some other health professionals in psychiatric settings. However, it is not known whether this is the case because previous studies of violence against healthcare staff tend to collapse non-medical and non-nursing clinical staff into one category, namely the ‘allied health professional’ (Ipsos MORI, 2010). It has previously been identified (Stubbs & Dickens 2008) that the regulatory bodies responsible for various allied health professionals have been slow to adopt training on the prevention and management of violence into pre-registration training programmes, and consequently these groups may be under-prepared relative to their nursing and medical colleagues.

The existence of a national UK special interest group for physiotherapists working in mental health settings facilitated the potential for a comprehensive survey of their experience of violence in the work setting. Survey design was chosen in order to first gauge the extent of the problem. A total of 178 questionnaires were distributed to members of the special interest group and 116 (65%) were returned. Over half (51%) of respondents had been assaulted by a patient in their career a quarter (24%) within the past 12 months. This result suggests that violence against physiotherapists who work in mental health is higher than previous estimates for allied health professionals as a group, and is more closely akin to the experience of psychiatric nurses (Winstanley & Whittington, 2004). Concrete recommendations for education and practice were made including the need for more training on violence prevention and
management in preregistration education. The main strengths of the study were its reasonably high response rate, and focus on a specialist group of practitioners with consequent high relevance to this group's practice. Limitations included the retrospective nature of the study, which may result in selective recall, and lack of wider applicability across healthcare professionals.

### 2.4.2 Breakaway techniques (Dickens et al, 2009)

One of the key policy responses to the problem of violence in psychiatric settings has been the wide roll out of ‘breakaway training’. The National Institute for Mental Health in England (NIMHE, 2005) have recommended that staff who are exposed to violence and aggression should be trained in physical intervention skills, including ‘breakaway’ techniques. These techniques are defined by the National Institute for Clinical Excellence (NICE) (2005) as “a set of physical skills to help separate or breakaway from an aggressor in a safe manner... [and] do not involve the use of restraint”. The Nursing and Midwifery Council (2001) have also recommended that staff, including non-clinical employees, be trained in the use of de-escalation techniques and breakaway skills which aim to equip practitioners with skills to remove themselves from situations involving violence including holding, strangling, grabs and hair pulls. Training in these skills is usually mandatory for mental health staff, but there is very little standardisation of training, and even less evidence that training actually achieves its objective of helping people to escape. In one study (Rogers et al, 2006), 40% of nursing staff in a UK medium-secure unit were unable to successfully break away from a simulated assault scenario. In a separate study, Rogers et al (2007) demonstrated that breakaway training is characterised by demonstration and practice of multiple, complicated techniques for roughly 14 minutes each. The
authors argued that it was unrealistic that physical skills could be learned in such a short period of time. Previous studies of breakaway techniques have relied on retrospective, self-report data (Wright et al, 2005) or data from prospective studies where breakaway techniques were rarely implemented (Southcott & Howard, 2007).

This study (Paper 5, Dickens et al, 2009) utilised a prospective observational audit design with predetermined standards against which to measure whether – in simulated scenarios – staff trained in breakaway techniques at routine annual refresher sessions were able to recall and implement those same techniques. The study largely replicated that of Rogers et al (2006) who explicitly called for replication studies in other settings in their report. Collaboration with the charity-wide Prevention and Management of Aggression and Violence (PMAV) of conflict management advisors was essential. This team are trained in teaching breakaway techniques and were thus responsible for the delivery of the study in terms of data collection.

The study team made some additions to extend the scope and transferability of the work of Rogers et al through the inclusion of non-nursing staff and non-clinical staff who also are trained in breakaway techniques. Participants (N=147) were drawn from a pool of staff working in a variety of specialist care pathways at St Andrew’s Healthcare, Northampton including low and medium secure forensic wards, adolescent, older adult and brain injury care settings. Arguably this makes the study more widely applicable than to the medium-secure only setting of Rogers et al’s (2006) study which recruited 47 participants drawn from nursing staff only. A different set of breakaway techniques to that reported by Rogers and colleagues was tested. Importantly, this study added an extra measure in order to investigate not only whether the correct taught technique was used, but also whether escape was effected.
in any event. Whilst ethical implications meant that the study lacked some ecological validity, i.e., it was not possible to assault participants with real vigour and intent, measures were taken to maximise study rigour. Dual raters were used to test inter-rater reliability and randomisation was utilised to assign participants to the various study conditions, that is to say the different breakaway ‘hold’ tested. Extension of previous work in this area made findings more generalisable to the mental health workforce. Results suggested that routine training is not effectively translated into skills acquisition and retention because only 14.3% of participants fully employed the correct technique to effect an escape. However, 79.6% of participants were able to effect escape but did not fully employ the taught technique to do so. This result is a departure from Rogers et al’s (2006) study, and uncovers a hitherto hidden grey area that requires further examination.

Two questions in particular are raised by the findings of this study. First, to what extent can the relatively poor performance here be attributed to shorter periods of time spent in, or the different content of, breakaway refresher training? This question provides testable propositions that are the subject of an ongoing research project in which the author is a collaborator. Second, to what extent would people be successful in escaping from these scenarios in any event if they had received no training? Might their natural reaction not be sufficient to assist them in escaping, and indeed might not a very complex training regime actually interfere with these natural instincts? This study therefore supports developments in thinking around breakaway training that stress the importance of the primal reflex in the human response to threat, and building training around these reflexes (Mott et al, 2009). Breakaway training at St Andrew’s has, as a result, now concentrates on a reduced number of techniques that
build on natural responses, and it is an aim to re-audit the training in order to evaluate its effectiveness.

2.4.3 Author's Contribution

The candidate made a substantial contribution to the conception and design of the studies described in 2.4.1 and 2.4.2. This included, for 2.4.2, consultation with expert colleagues to develop a suitable audit tool, and design of the study methodology. For the study of physiotherapists (2.4.1) it involved design of the data collection tool based on literature review and supervision of its pilot phase. The candidate was largely responsible for the overall design and recruitment strategy. Analysis and interpretation of data for both studies was conducted by this author, who drafted the breakaway paper and co-drafted the physiotherapy paper.

2.5 Research related to medication administration


The safe and effective administration of medicines, and associated activities including the monitoring of side-effects, is a key part of the psychiatric nursing role, particularly in inpatient environments. It is one of the few activities to lie solely in the nursing domain as no other profession administers medication in the inpatient environment,
although it of course interfaces with medical professional roles. Whilst considerable attention has been paid to medication administration and errors in general medicine (Bates et al., 1995; Phillips et al., 2001; Tissot et al., 2003) very little research has been conducted in inpatient mental health settings (Maidment et al., 2006).

Prior to 2007, only nine studies specifically related to medication administration had been conducted in psychiatric or learning disability settings. Most of these studies focused on the nature and frequency of medication errors in psychiatry as identified by incident report or chart review, including previous works by the same research team (Haw, Stubbs & Dickens, 2005; Dickens et al., 2006). However, these methodologies are limited: incident reporting grossly underestimates error frequency (Flynn et al., 2002) chiefly because it is contingent upon errors being detected and/or reported if they are detected. Additionally, error reporting may be mediated by local culture, for example nurses’ perceptions of the likelihood of disciplinary action arising from reporting an error. Chart review can detect many errors and can provide useful data relatively quickly. However, most errors detected by this method are actually clerical in nature. For example, the nurse has administered the drug correctly but has failed to sign the medicine chart to this effect. Additionally, information from chart review is generally thin on contextual detail (Dickens, 2007). Observational studies of medication administration of nurses working in psychiatric or learning disability settings have been small-scale and small in number. Thrulle (2000) studied medication administration in learning disability group homes but made only 16 observations. Branford et al. (1997) observed medication administration in day centres for people with learning disabilities but made only a brief description of nursing practice. Haglund et al. (2004) observed medication administration on two Swedish short-stay acute psychiatric wards and gave a very brief description of nursing.
practice. Interviews with nurses and patients in this study suggested that time spent undertaking medication administration represents for nurses an opportunity to develop interpersonal contact with patients. The authors concluded that nurses should be given guidelines about how to perform routines connected with medication administration.

A systematic review of medication errors in older people with mental health problems (Maidment et al., 2008) included only four studies that examined administration errors, only one of which (Haw, Stubbs & Dickens, 2007) used “the gold standard method for detecting this kind of error”. The study quality of the study by Haw, Stubbs & Dickens, 2007 was rated as high by Maidment et al (2008).

2.5.1 Medication administration errors (Haw, Stubbs & Dickens, 2007)

Building on previous work describing routinely reported errors in psychiatric care (Haw et al, 2005) and chart review of recording of medication errors (Dickens et al, 2006) it was recognised that observation was likely to detect far more errors than other methods including chart review or routine error reporting (Flynn et al, 2003).

An observational study was therefore conducted in order to investigate medication administration errors in a psychiatric setting. The study was a prospective, observational study of medication administration on two wards for older adults with mental disorder, one a locked ward for those with ‘challenging behaviour’ and one for frailer adults providing nursing home type care. In many ways the study design resembled an audit where current practice was measured against an explicit standard that no errors would occur. The wards were selected for observation because the nature of the patient group suggested that medicines administration would be a complex, lengthy process and therefore a rich data source. Nine Registered Nurses who consented to participate were observed during 36 routine medication
administration rounds. Equal numbers of the four daily medication rounds (0800, 1200, 1800 and 2200 hours) on each ward were observed. In total, the administration of 1,313 doses of medication, 100 omissions in error and 10 omissions for valid clinical reasons, a total of 1,423 prescribed doses of medication, was observed.

Observational data was cross-referenced with medication charts after each medication round in order to identify any discrepancies between our observation and nurse’s own recordings. The acceptability of the observational study technique to psychiatric nurses was also investigated by an anonymous questionnaire administered at the end of the study which presented the first published data from prospectively gathered data for incidence of administration errors in a psychiatric setting. We detected 369 errors, i.e., there was an error in 25.9% of all doses which sits at the high end of error rates of 3.5% to 27% reported in the literature from general medical settings (Ridge et al., 1995; Ho et al., 1997; Barker & McConnell, 1962; Tissot et al., 2003; Barker et al., 2002; Prot et al., 2005). No errors were reported during the study period using the standard hospital medication error reporting system, suggesting that almost all errors in this setting went undetected. The commonest errors were changing dosage form by for example crushing tablets without the authorisation of the prescriber (28.7%), dose omission without valid reason (27.1%) and failure to sign for administered medication (23.6%). One (0.3%) error was judged to be likely to lead to serious effects as it resulted in the omission of administration of insulin. Most errors were judged to be of negligible (69.1%) or minor (7.3%) importance whilst a further 23.3% were judged to be of unrateable severity because the nature of the error was clerical in the form of unsigned for doses. Despite the low severity of detected errors it is likely that errors lead to sub-optimal therapeutic effects, and compromised patient care.
This study provided important new knowledge about the incidence of medication errors in a psychiatric inpatient service for older adults many of whom display challenging behaviours. The nature of one of the error categories (dose form modification) was probably specific to the patient group because 41% of patients to whom we observed medicines being administered had dysphagia. This limits the generalisability of the study results to secure or general inpatient psychiatry. Additionally, many patients were prescribed very complex medication regimes which may have increased the capacity for error. However, other common error types including dose omission and clerical errors are likely to occur in other psychiatric settings. The study has clinical and training implications for those working with similar patient groups. Clearer guidance is required about dose form alteration and dose omission. The finding that there were proportionally fewer errors at the night time medication round suggested that environmental differences played a significant part in error causation in this setting; these medication rounds were characterised by quiet and a sense of unhurriedness that was not the case in the daytime. Nurses in these settings need to be supported to provide a calm environment and to set aside dedicated time for medication administration.

Limitations of this study are the potential observer effect. Arguably, this could act to increase administration accuracy (via a Hawthorne effect) or decrease accuracy by making the administering nurse feel anxious. Conversely, the observational techniques allows for analysis of direct care giving in a real-life situation thus increasing the ecological validity of the findings (Robson, 1993; Hammersley & Atkinson, 1983). Nurses were asked how the process of observation had felt for them. None rated the experience as unpleasant and all those who responded said they would be willing to be observed in the future. Whilst this does not negate any potential
observer effect it does suggest that the technique is acceptable. It was also demonstrated that observation is feasible in this environment and that it detects far more errors than alternative methods.

2.5.2 Delegation of medicines administration (Dickens et al, 2007)

Delegation of medicines administration occurs when a Registered Nurse (RN) prepares one or more prescribed medicines for administration and requests another Registered Nurse or a non-registered Healthcare Assistant (HCA) to deliver that medicine to the patient and to report back on the outcome. This outcome may be that the patient takes the medication as requested, that the patient refuses to take the medicine or some other incident occurs. An RN can delegate medicines administration to an HCA in circumstances where delegation best serves meeting the needs of individual clients or patients (Nursing & Midwifery Council, 2004).

However, the Commission for Social Care Inspection (CSCI, 2006) disagree; their position is that “some care homes permit a care worker to take medicines to residents when the nurse has prepared them. This is not best practice . . . the person who prepares should also administer medicines and sign the record” (CSCI, 2006).

The second piece of work in this strand related to research into medicines administration reports on a study conducted concurrently with the work on medication errors described above. A literature review demonstrated that little empirical work had been undertaken around the phenomenon of delegation of medicines administration; the existing work was reliant largely on nurse self-report questionnaire survey methodology (Kapborg & Svensson, 1999; Reinhard et al, 2006; Glazer, 2002; Spellbring & Ryan, 2003) or chart review (Dickens et al, 2006). The study (Dickens
et al. 2008), conducted concurrently with Haw, Stubbs and Dickens (2007) and sharing the same data set, appears to be the first to present empirical data from naturalistic observation. In brief, it was found that delegation of medicines administration in a psychiatric care setting for older adults was common (78% of all doses) and that one in five of delegated doses was administered by a non-registered HCA. Doses of medicine delegated to HCAs to administer involved some of the most complex patients including confused and aggressive individuals. The vast majority of errors occurred during the preparation of medicines, for example wrong dose, and not in final administration. The study setting was a long term care ward where HCAs would be expected to know patients very well, thus minimizing the opportunity for errors of mistaken identity. Delegated nurses and HCAs were not followed into private areas to observe medication administration so it is possible that some errors were not detected.

This result suggests that it may not be inherently dangerous to delegate the administration of medicines to another nurse or HCA, and indeed in a very busy ward it may facilitate the timely administration of medicines. However, those who are involved should receive training and preparation for the role. As with the study on errors, similar research needs to be undertaken in more settings in order to increase the generalisability of the work.

2.5.3 Author’s contribution

This author made a substantial contribution to the conception and design of the studies described in 2.5.1 and 2.5.2 above; to the acquisition of data and to the analysis and interpretation of data. This author drafted the article on delegation (2.5.2)
and made revisions to the observation paper, in particular being responsible for the feasibility and acceptability portion of the study. A body of related work is detailed in Appendix II.

2.6 Research related to risk and recovery outcomes in secure and forensic mental health services


Over the past decade mental health care providers have become increasingly concerned about demonstrating the effectiveness of their services as delivered in real-life, as opposed to the efficacy of individual interventions as tested in artificial randomised controlled trials. Historically, the outcome measures proposed or used to measure the effectiveness of forensic mental health services have, not unreasonably, been long term outcomes such as reconviction, readmission or mortality (Davies *et al*, 2007; Sahota *et al*, 2009). However such measures do little to inform service providers or users about shorter to medium-term outcomes across a wider range of outcomes. Additionally, they are prohibitively time consuming and expensive to collect routinely, and enhanced ethical approval is required to access criminal records data.
None of the outcomes studies in the extant literature present data from routinely collected, patient-based outcome measures. In part, this lack of published outcome data reflects a collective failure within the UK to routinely measure patient care needs and outcomes in a standardised way (Salvi et al., 2005). The modern outcome movement, with its emphasis on research relating to effectiveness rather than efficacy, was ushered in by Ellwood’s (1988) Shattuck lecture which demanded the routine collection of outcome measures by clinicians. Outcome measures are useful for healthcare providers who need to demonstrate clinical effectiveness to stakeholders, but there is also some evidence that the routine use of outcome measures may have added benefits evidenced by reduced inpatient days and service costs in adult mental health services (Slade et al., 2006). There is not universal agreement; Dunn (2010: 25), for instance, feels that there is no place in for routine outcome measures in “the haphazard world of routine clinical practice”. One could equally argue, though, that this is unnecessarily nihilistic: if routine clinical practice is so haphazard and ultimately different from treatment delivered in research studies, then results from highly controlled research have little validity in the context of practice. Simply put, results from very tightly controlled research studies demonstrate what can happen in the real world, but not necessarily what will happen given the interplay of various extraneous variables (Gravetter & Forzano, 2009).

The Health of the Nation Outcome Scales (HoNOS) emerged in the wake of the UK Government White Paper ‘Health of the Nation’ (Department of Health, 1992) which identified mental illness care and treatment as a priority area. The paper contained an explicit target to improve the health and social functioning of people with mental illness, necessitating the development of tools to measure mental health outcomes. HoNOS was developed in the UK as a brief way of quantifying the health and social
functioning of people with mental illness (Wing et al., 1998). HoNOS, together with related variants including HoNOS LD for people with a learning disability (Roy et al., 2002) and HONOSCA for children and adolescents (Gowers et al., 1999) were developed from the early 1990's onwards as patient-based, mental health outcomes measures. A review of all HoNOS research concluded that the tool can “be regarded as appropriate for routinely monitoring outcomes” (Pirkis et al., 2005: 1).

The HoNOS for users of secure and forensic mental health services (HoNOS-secure; Walker & Sugarman, 2007) were developed by modification of, and addition to, the original HoNOS for working age adults (Wing et al., 1999) and were intended to be more reflective of the needs of users of secure services. HoNOS-secure is a team-rated tool comprising 19 items, each rated on a 5 point likert scale with each point tied to a narrative anchor. Twelve items are based on the original HoNOS scales and cover areas relating to:

1. Overactive, aggressive, disruptive or agitated behaviour
2. Non-accidental self-injury
3. Problem drinking or drug-taking
4. Cognitive problems
5. Physical illness or disability problems
6. Problems with hallucinations and delusions
7. Problems with depressed mood
8. Other mental and behavioural problems
9. Problems with relationships
10. Problems with activities of daily living
11. Problems with living conditions
12. Problems with occupations and activities

A further seven items are intended to rate outcome in terms of current need for secure care. This is intended to capture the risk-related needs of people who use secure services.
A. Risk of harm to adults or children
B. Risk of self-harm (deliberate or accidental)
C. Need of building security to prevent physical escape
D. Need for a safely staffed living environment
E. Need for escort on leave (beyond the secure perimeter)
F. Risk to individual from others
G. Need for risk management procedures.

Iterated HoNOS-secure rating across the course of a user’s episode of contact with a mental health service means that outcome can be tracked over time. In theory, this data can be used at individual, ward/service or organisational level to answer the crucial question “Do mental health services increase their patient’s wellbeing?” In addition, routine outcomes results can inform clinical audit activity. Analysis of routinely collected ratings allows progress to be tracked either in terms of service performance indicators (Dickens & Sugarman, 2010; Sugarman et al, 2009) or for clinical populations (Dickens et al, 2010; Long et al, 2010).

2.6.1 Inter-rater reliability of HoNOS-secure (Dickens et al, 2007)

All outcomes tools should possess strong psychometric characteristics including validity and reliability (Dunn, 2010). This study (Paper 9, Dickens et al, 2009) was conducted to identify whether HoNOS-secure could claim to possess interrater reliability. Bearing in mind issues about the use of outcomes instruments in routine practice (ibid), the aim of the current study was to ascertain whether the instrument possessed reliability in the context of routine clinical practice rather than under some more strictly defined research design. A prospective study of inter-rater agreement was devised. Rater dyads comprising two independent clinical staff were recruited. Each dyad rated a patient known to them on all 19 items. Raters were given free access to any clinical information they required in order to make a rating including clinical notes, risk assessments and so on.
The intraclass correlation coefficient (ICC) provides an assessment of interrater reliability by comparing the amount of variation between individual raters with overall variance. This is the appropriate test to use when multiple raters are involved and is a measure of reliability equivalent to weighted kappa (Fleiss & Cohen, 1973). Landis & Koch (1977) suggest that a test of the reliability of an instrument is provided by the following rubric: 0.21 – 0.40 = fair, 0.41 – 0.60 = moderate, 0.61 – 0.80 = substantial, 0.81 – 1.00 = almost perfect. Calculation of test statistics for ICC’s indicated that, for all 19 items, rating was consistent between raters at levels significantly greater than chance, with ICC’s mostly in the moderate and substantial range. These results suggest that inter-rater reliability is demonstrated by the HoNOS-secure. Since this study the glossary descriptors, though not the items themselves, for HoNOS-secure items have been amended in order to improve clarity.

2.6.2 Tracking risk and recovery in secure/forensic mental health care

(Dickens et al, 2010)

Modern mental healthcare governance relies on feedback loops that convey meaningful information about service functioning to managers across a range of performance indicators (Sugarman & Watkins, 2004). In secure and forensic mental health care these indicators will include proxy measures of clinical quality, but until relatively recently such measures have tended to measure process – essentially, asking ‘are we delivering care in the ‘right’ way?’ – rather than outcome: ‘does the care we deliver work for our service users?’ Routine use of outcomes measures also facilitates the testing of hypotheses about broadly defined groups within the secure and forensic service population, for example those with a primary diagnosis of mental disorder and those with learning disability.
This study aimed to determine whether short to medium term outcomes as captured by HoNOS-secure for a male cohort (N=180) during a period of inpatient stay could be demonstrated, thus indicating responsiveness to change of the tool. An additional aim related to a review of the literature on longer term outcomes for users of mental health and learning disability pathways within secure services which indicated no significant difference between the two groups in terms of recidivism or re-hospitalisation; thus the second objective was to examine whether this was mirrored in the symptomatological, functional and risk outcomes captured by HoNOS-secure. HoNOS-secure ratings were routinely captured by clinical teams over a 2-year period as a matter of organisational policy largely to drive a key performance metric based on average quarterly change for cohorts (see for example, Dickens & Sugarman, 2010; Sugarman, Walker & Dickens, 2009). However, the raw data was utilised in this study in order to track individual change. Results confirmed that it is challenging to demonstrate change for this cohort, although this appears to be especially the case among men in the mental health pathway whereas statistically significant change on HoNOS-secure, reflecting shorter admission periods was demonstrated.

There are tensions arising from the desire to use routine outcomes measures as widely as possible and the sometimes conflicting desire to use only validated tools with established psychometric properties and then only in populations with whom they have been validated (Burns, 2008). However, a wide variety of outcome measures have been proposed for use in secure populations (Chambers et al, 2009). This study demonstrated that such a measure can be successfully implemented in a secure setting; however, it also demonstrated that newer more sensitive tools may be needed to capture change especially in secure mental health pathways. Alternatively, the results demonstrate a lack of success in effectively treating this population. Results
from an equivalent study of female patients (Long, Dickens et al., 2010) where change is demonstrated more effectively, suggests the latter may be the case.

2.6.3 Author’s contribution

The current author made substantial contribution to the conception and design of both studies described above, and to the analysis and interpretation of data. For the reliability study (2.6.1) the author played a substantial role in the acquisition of data through recruitment of participants. Both articles were drafted by this author who was involved in revision based on co-author feedback. Overall approval of the final article content was the responsibility of this author for both studies.
Chapter 3. Synthesis and conclusions

3.1 Overview

This chapter will critically evaluate the extent to which the submitted body of work constitutes a significant body of forensic psychiatric nursing research with reference to its context(s) and will identify the implications of the work for the concept and role of the forensic psychiatric nurse.

The first argument made in support of the submitted research as a significant contribution to psychiatric practice in secure and forensic care is simply that the sum total of the work detailed in Chapter 2 meets this definition *per se* both in respect to its quantity and its demonstrable quality. The work represents a range of empirical research that is central to forensic psychiatric nursing and forensic practice and which presents many important theoretical and practical findings. In summary, the research has resulted in new or refined knowledge in relation to firesetting in the differentiation between male and female firesetters, and between more and less dangerous firesetters; attitudes to smoking among psychiatric staff and inpatients; the prevalence of violence and aggression towards physiotherapists working in mental health settings; the efficacy of methods for escaping from or avoiding assault; the causes of and contributory factors to medication errors; delegation of medicines administration; reliability of an outcomes tool for use in secure services and the utility of that measure when used in routine clinical practice in secure psychiatry. Full details for each submitted study are included in Appendix I.

The following sections examine the submitted research in the contexts in which it was conducted, demonstrates that the research contributes to a coherent area, namely
secure and forensic psychiatric care, and identifies how this unification of the body of work within its contexts can inform the ongoing debate about the role of the forensic psychiatric nurse.

3.2 Contributions in context: current definitions of forensic psychiatric nursing

3.2.1 Nurses who work in secure psychiatric services \textit{(pace Mason, 2002; Mason et al., 2008a, b)}

In section 1.2.2 two differing definitions of forensic psychiatric nursing, both UK derived, were explicated. Mason (2002; Mason \textit{et al.}, 2008a, b) viewed forensic psychiatric nursing as comprising a number of role tensions; empirical investigation of these tensions implied a definition of forensic psychiatric nurses as those working in low, medium and high security environments. This definition was then used to investigate the role of the forensic psychiatric nurse empirically and results indicated substantial, and apparently security level-related, differences between nurses on measures of these tensions. Therefore there was significant heterogeneity across the population defined as forensic psychiatric nurses on the role tensions measured.

Mason and colleagues did not examine differences on these hypothesised role tensions between forensic nurses and general psychiatric nurses. However, it can certainly be hypothesised that nurses working in low and medium-security settings are more like general psychiatric nurses in their reports about their role than they are like nurses who practice in high security. To some extent it can thus be concluded that Mason's definition does not fully account for forensic psychiatric nursing as an area of specialist practice. Nevertheless, despite these reservations about Mason's definition of forensic psychiatric nursing, much of the body of work submitted in support of the current thesis has relevance to forensic psychiatric nurses so defined.
The majority of the work was conducted in, or with those working in, broadly defined low and medium secure environments (Papers 3, 4, 5, 7, 8, 9, and 10) and offered new insights for those working in these services.

3.2.2 The forensic psychiatric nurse as specialist (pace Kettles and Woods, 2006) and as advanced practitioner

Kettles and Woods (2006) concept analysis offered a multi-dimensional definition of the forensic nurse role and identified that these practitioners work in different levels of security, community and prison settings, and with diverse groups including both offenders and victims. The definition was flexible and reflexive: the role of the forensic nurse amounts to what the self-defined and specialist forensic nurse does in those environments where they practice. The role was thus defined equally by experience, competencies and qualifications as it was by the location of practice, security level or specific patient group. This marks an important distinction with the definition implied by Mason (2002): for Kettles and Woods, a nurse working in a medium secure unit who has undertaken no further postgraduate study can be classified as a ‘borderline’ case of a forensic psychiatric nurse. By this logic secure services employ both specialist forensic nurses and others who practice their psychiatric nursing skills within a secure context and may or may not aspire to become specialist forensic practitioners. Kettles and Woods’ work in this area is theoretical rather than empirical and thus it is not known whether this is in fact the case, nor what the implications of this may be. It is potentially problematic that the rich definition provided by Kettles and Woods precludes, or at least complicates, empirical research into the role in the manner of Mason’s work. What would be the precise inclusion criteria in terms of qualifications and experience? How many
specialist nurse practitioners would meet these criteria? How would specialist skills in risk assessment, knowledge about legal aspects and interpersonal competencies differentiate this group from non-nursing forensic professionals? One solution to this problem is that we now shift focus from lengthy expositions of the role of the forensic psychiatric nurse and on to the effectiveness of interventions deployed by them and others in the secure and forensic arena. One way of facilitating this will be to examine forensic psychiatric nursing in relation to advanced practice nursing rather than to the specialist role addressed thus far.

An alternative method of examining the issue of forensic psychiatric nurse as specialist practitioner would be to conceptualise the scope and potential for advanced nursing practice in forensic psychiatric settings. Kettles & Woods (2006) identified that it is the level of skills and competencies of nurses which distinguish their specialism as well as the particular patient group with whom they work. The 'model' forensic nurse they describe shares many attributes with that of the advanced nurse practitioner. Advanced Practice Nursing (APN) is an umbrella term that has been used to refer to nurses in all specialties who operate at a higher level than traditional nurses (Sheer & Wong, 2008). There is, however, no universally accepted, clear definition of APN and the variations between advanced roles may reflect the clinical context in which they have developed (Elsom et al, 2005). The titles used to identify nurses working at such a higher level have, in the UK, included 'consultant nurse' and 'clinical nurse specialist'. The trend towards APN has been described as global (Sheer & Wong, 2008). Of importance, at least in the UK, the drive for codification of an advanced role was generated from the reduction in the working hours of junior doctors from 2003 which expanded the scope of nursing role boundaries into traditionally medical areas (Royal College of Nursing, 2010). The advanced
practitioner has been commonly described as holding a higher level of \textit{clinical skill and expertise} relative to basic nursing competences, as implementing an \textit{explicit evidence-based practice}; and as having an \textit{autonomous role with expanded role boundaries} (Callaghan, 2008; Ruel & Motyka, 2009). Other reported features, though less universally so, include leadership, research activity, consultancy, collaboration (Callaghan, 2008), and specialization (Ruel & Motyka, 2009). In the UK, guidance on proper usage of the term Advanced Nurse Practitioner and on requirements for accreditation as such comprising 115 areas of competence across seven domains have been issued (Royal College of Nursing [RCN], 2010). The RCN views an undergraduate honours degree as the minimum qualification required to practice at an advanced level whereas a master’s degree is a requirement in many countries (Sheer & Wong, 2008).

In mental health nursing, Jinks & Chalder (2007) conducted action research with consultant nurses to describe the dimensions of their practice, concluding that they comprised themes relating to general issues, clinical practice, leadership, research and education, thus largely reflecting the APN role dimensions described above. Allen (1998) reported a survey of members of a mental health nursing research interest group who were supportive of an advanced practice role for psychiatric nurses including some medical tasks such as formulation of psychiatric diagnoses, broader powers under mental health act legislation, and limited prescription and modification of already prescribed drugs. However, non-medical roles, including provision of talking therapies, were viewed as more central to advanced nursing practice.

Advanced practice roles in forensic psychiatric nursing have also been described to a small extent in the literature. Langton (2008) defines the key role dimensions of
forensic consultant nurses as being related to service development, workforce planning, expert practice, research and education, maintenance of a national perspective, and particular duties related to the high security hospital including conducting investigations and incident command. These themes are largely reflected in a personal account by Aiyegbuisi (2002) who identifies the forensic nurse consultant role as comprising dimensions related to expert clinical practice, strategic management, teaching, research and leadership. A survey (Chalder & Nolan, 2001) of the views of a forensic mental health team about a proposed nurse consultant role indicated that a successful postholder would challenge interprofessional boundaries and raise the profile of nurses within the multidisciplinary team. It is notable that, whilst descriptions of APN in forensic psychiatry have shared the core element of clinical skill and expertise with the advanced practitioners described above, there has been less emphasis on the autonomous role with expanded role boundaries for APN in forensic psychiatric practice. It will therefore be necessary to examine the concept of autonomy in relation to APN in order to judge its relevance to forensic psychiatric nursing.

Elsom et al (2005) have identified two schools of thought relevant to the APN role in psychiatry: first, authors (Daly & Carnwell, 2003; Torn & McNicol, 1998) who view the degree of autonomy to make clinical decisions as being key to advanced nursing practice and, second, those who see the level of expertise held by the nurse in performing nursing tasks as most important (Manley, 1997). Elsom et al (2005) view the first of these conceptualisations as expanded practice and the second as advanced practice and, from this perspective, increased autonomy is not a prerequisite of advanced practice. In the UK, the RCN (2010) have attempted to square the circle by claiming that autonomy is central to advanced practice but that the definition
employed is crucial: Jones’ (1996) definition of autonomy as freedom to exercise
judgement, and to subsequently accept responsibility for decisions made, is supported
over a definition emphasising the ability to make independent decisions. The extent
to which expanded practice is possible within traditional forensic psychiatric nursing
settings – i.e., secure units – is currently unclear. Whilst recent changes to mental
health legislation in England & Wales allowing nurses to take charge of a patient’s
treatment, including decisions about discharge, were broadly welcomed (Merchant,
2007), it is not known whether forensic psychiatric nurses have taken up the role.
Similarly, there is a lack of information about how many of the 400 qualified mental
health nurses prescribers in the UK are forensic psychiatric nurses, particularly those
working in secure units (Patel et al., 2009). The concept of APN has been supported
with reference to methodologically strong Randomised Controlled Trials and
systematic reviews that have identified increased patient satisfaction in patients
treated by advanced practice nurses relative to doctors (Shum et al., 2000; Horrocks et
al., 2002). However, these types of studies have invariably been conducted in primary
care settings for people suffering minor ailments. Advanced practice cannot comprise
a set of homogeneous skills across contexts but is essentially context-bound. It is not
an established fact that an advanced practice nursing role in mental health, and
specifically in forensic psychiatric settings, would have similar benefits.

The relationship of the research submitted in support of this thesis to the concepts of
forensic psychiatric nursing as a specialist role, and to concepts of advanced nursing
practice in forensic psychiatric settings is now summarised. Kettles and Woods (2006)
definition viewed forensic psychiatric nursing as a fusion of general nursing and
mental health knowledge with specific forensic knowledge and applied theory in
multidisciplinary, secure and community contexts. Publications in this document
about medication administration and smoking focused very much on generating new knowledge based on general psychiatric nursing skills and practice, albeit delivered in the context of secure care and multidisciplinary practice. Work that was conducted later develops specific forensic themes with real world applicability in relation to understanding and managing aggression and violence, generating knowledge to inform risk assessment for firesetting and developing tools to measure outcome in secure and forensic services. In many respects, therefore, the body of work presented here fuses general psychiatric nursing, mental health and forensic knowledge, is related to multidisciplinary practice in secure and other forensic contexts. In relation to a APN role in forensic psychiatric settings the published work in this thesis speaks largely to notions of advanced practice in terms of increased clinical skill and expertise rather than to that of the expanded autonomous role with expanded role boundaries. Essentially, the research presented here provides informative new knowledge to enhance clinical decision making in areas of risk assessment, user views and autonomy, medication management, management of aggression and violence and outcomes measurement. There is currently some uncertainty about how APN which challenges traditional boundaries of autonomy in forensic psychiatric settings manifests itself and this will be a theme for future research recommendations.

3.3 Contributions in context: definitions of psychiatric nursing research

3.3.1 Research as applicability to the nursing process

The nursing process is: "An organised, systematic and deliberate approach to nursing with the aim of improving standards in nursing care" (Rush et al., 1996). The theory was developed inductively in the United States in the late 1950's by Ida Jean Orlando (Schmeiding, 1993) and proposed, simply, that there is 'good' and 'bad' nursing
practice. 'Good' nursing practice is characterized by a deliberative reaction by the nurse, whose goal is to help the patient, and is based on their presenting behaviour or symptomatology. 'Bad' nursing decisions are based on automatic responses whose aim lies elsewhere. From these observations, Orlando proposed a cyclical model to aid nursing practice (see Figure 1).

*Figure 1 The nursing process (after Schmeiding, 1993)*

Simply described, a holistic assessment of individual patient needs should inform a 'diagnosis' of the problem and a plan of action to help relieve it. The intervention phase involves the implementation of the plan and is succeeded by evaluation of the success or otherwise of the planned intervention in alleviating the presenting problem. This information informs further assessment and thus the process can be termed dynamic. In order that deliberative reaction occurs then evidence is required to inform that deliberation at each stage of the process. In section 1.2.3 the implications of using the adherence to an aspect of the nursing process (Yonge *et al.*, 1997) as an indicator of whether empirical research could be deemed to be nursing research were identified.
In effect, when operationalised in this way, psychiatric nursing research is itself defined by its relevance to aspects of the nursing process, and studies of nurses themselves fall outside of this scope. Using this definition, a majority of the studies presented in this thesis, and at least one in each of the five topic strands, address an aspect of the nursing process. Research on firesetting (see 2.1) gathered data on firesetters in order to answer questions about differentiation on gender and dangerousness and thus aid assessment. Research on patients' views of smoking in psychiatry (section 2.2.2) gathered information about beliefs and preference in order to inform intervention planning. Empirical work on breakaways (section 2.3.1) and medication administration (section 2.4) provided new information for specific interventions: in particular, successful breakaways are likely to reduce risk of injury both to patients and to staff and thus reduce potential negative legal consequences; reduction of medication administration errors should lead to enhanced pharmacological benefit. Finally, development and routine use of appropriate outcomes measures (section 2.5) will support appropriate evaluation of care and treatment. Some items of the submitted work (e.g., studies of nurse's views on smoking, section 2.2.1) may not meet this definition of psychiatric nursing research, but this is hardly surprising in a field dominated by such studies. Furthermore, it is demonstrated below that these do meet other definitions of nursing research. In short, the body of work submitted for this thesis constitutes in this context a unique contribution that is relevant to nursing practice in secure and forensic contexts.

3.3.2 Other definitions of psychiatric nursing research

In section 1.2.3 it was identified that reviews of psychiatric nursing research have used inclusion criteria including publication in nursing journals (Jones & Jones,
Clearly all the empirical research submitted in support of the current thesis meets the latter definition. Four of the ten papers submitted were published in what are immediately identifiable as nursing journals (Papers 3, 4, 5, 8). However, there are a number of considerations to make when selecting a journal for submission, not least whether the content may be of equal relevance for non-nursing forensic practitioners, hence an equal number of papers were published in multidisciplinary forensic journals (Papers 1, 2, 9, 10). The remaining two papers comprise a study of medication administration errors in a specialist secure older people's service published in a healthcare quality journal (Paper 7) and a prevalence study of violence against physiotherapists working in mental health settings published in a specialist physiotherapy journal (Paper 6). The former paper clearly comprises a study of nursing practice in a secure environment; the second provides new information to inform the prevention and management of aggression which has been identified as one of the key forensic psychiatric nursing roles (e.g., Mason et al., 2008a). By these criteria the submitted body of work constitutes a contribution to nursing and related clinical practice in secure and forensic contexts.

### 3.4 Contributions in context: psychiatric nursing interfaces with other professional disciplines

The scope of other professionals including psychiatrists, psychologists, social workers, and occupational therapists who work in the secure and forensic care arena is beyond the scope of this thesis. However, it is an assumption of the thesis that other practitioners operate in this arena and in all of the areas operated in by psychiatric nurses. It is a second assumption that a portion of this practice overlaps with that of psychiatric nurses, specifically in those areas identified above as key to the role of the
forensic psychiatric nurse. Much of the research submitted in support of this thesis has relevance to either a specific professional group, for example to physiotherapists (Paper 6) or to a range of groups for example the results from firesetting research are highly relevant to the practice of psychology and psychiatry professionals.

3.5 Contributions in context: secure vs. forensic care

Whilst there is considerable overlap, secure care and forensic care are not interchangeable concepts (see 1.2.1). The body of work submitted for this thesis was conducted across both secure and forensic settings and is thus widely applicable. Most (Papers 3 to 5, 7 to 10) was conducted across a range of specialist secure services, and much of it has relevance to these environments. Additionally, research on firesetting has applicability to those practicing in the community who may be required to assess arsonists for the courts. Within secure services theoretical domains of security reflect real differences in physical, procedural and relational security needs (Collins & Davies, 2005). The submitted work was conducted across a range of low and medium secure provision and thus also has wide applicability.

3.6 Contributions in context: the evidence base for forensic psychiatric nursing

The putative role of the forensic psychiatric nurse is a new one, and most research thus far has concentrated on the role rather than on its effectiveness. However, there is no extant review of forensic psychiatric nursing research literature as opposed to reviews of the role of the forensic psychiatric nurse, and the concept of forensic psychiatric nursing research has therefore not been fully explored. Examination of reviews of general psychiatric nursing research suggest different definitions of the concept with some including research on the basis of its publication in nursing
journals or authorship by a nurse. The research submitted in this thesis has eschewed focus on the forensic role and has instead aimed to provide practical information and knowledge about specific topic areas.

3.7 Contributions in context: the UK independent sector mental health market

Much of the submitted research was conducted in a UK independent mental health care setting which, uniquely, can be viewed as a microcosm of the UK secure care sector. This lends the work a broad view informed by perspectives from mental health, learning disability, and acquired brain injury, male and females, adults, adolescents and older adults. Whilst this may be viewed as atypical of secure care it should be stressed that all patients in studies undertaken in these settings were NHS funded patients and most had previously received care in NHS services. The independent sector provides over a third of the medium and low-secure bed capacity in the UK (Sainsbury Centre for Mental Health, 2007) and thus the work has wide applicability. However, as demonstrated in section 1.2.4, the independent sector is not simply a direct mirror of NHS secure provision. The independent sector provides care for many of the most challenging patients, and in many emerging specialist areas. The body of research presented here therefore, by virtue of its situation within the context of the independent sector, potentially adds considerable richness to the evidence base for forensic psychiatric nursing because of the diversity and hence uniqueness of the patient group. It highlights the need for nursing research in inpatient settings to adequately and accurately describe their sample populations in order to allow research consumers to gauge generalisability, and it acts as a reminder that researchers should embrace independent sector providers when planning and designing studies. Furthermore, the diversity of services provided by the independent sector where NHS
provision is virtually nil (e.g., secure neurobehavioural rehabilitation for people with extreme challenging behaviour) potentially adds richness to, and even challenges, the definition of what it means to be a forensic psychiatric nurse such that future conceptualisations will need to consider the independent sector context.

3.8 Contributions in context: the wider political context

This thesis has presented five explicit research areas in terms of topical theme. The political context of era during which the work was conducted has been outlined in chapter 1 (see 1.2.5), where it has been demonstrated that the work submitted was largely in keeping with the wider political context of the period of research including a focus on identified priorities. This demonstrates the relevance of the published research for clinical practice and public policy makers. In the case of two published papers results were used to inform an influential report (Jochelson & Majrowski, 2006) which provided encouragement to policy makers to extend smoking bans in psychiatric services on the basis that patients could still smoke outdoors; however, this underestimated the zeal of managers in secure services – as opposed to elected politicians - who have not shied away from more comprehensive prohibitions on smoking, effectively banning patients from smoking anywhere (Dickens, 2008). In other areas research conducted as part of the thesis has paved the way for the candidate to become involved in larger, funded projects, for example as lead local investigator for an Economic and Social Research Council study aimed at developing an evidence based intervention for deliberate firesetters.
3.9 Developing the concept of the forensic psychiatric nursing role: a zonal model of advanced nursing practice in secure and forensic environments

Thus far, the thesis has demonstrated that the diverse set of contributions contained within represent a significant and coherent contribution to the body of knowledge from which forensic psychiatric nurses might draw upon to assist them with their practice. The contributions of the individual papers to their respective fields have been identified. En route, the thesis has examined the contexts in which the research was devised and conducted and in which it was disseminated. Current conceptualizations of forensic psychiatric nursing have been questioned, in part because the submitted research, whilst demonstrably related to forensic psychiatric nursing, does not fit simply with existing actual or implied definitions. It is therefore proposed that current conceptualizations are insufficiently adequate to describe and explain forensic psychiatric nursing as an area of specialist practice and therefore to guide the future development of the profession. Specifically, it is insufficient to define the concept purely as a function of the type of ward or unit in which registered psychiatric nurses happen to work; nor is it acceptable to define an advanced role so heavily reliant on experience and knowledge related to high secure care. What is required is a richer understanding of the forensic and secure psychiatric care arena. It is proposed that this thesis, through its examination of the relevant literature and the contextual development of a body of forensic psychiatric knowledge, offers an opportunity for the basis of such an understanding. In order to facilitate such an understanding then a model is required as an abstract method of describing the complex real-world state of affairs (Box & Draper, 1987). In the current case then the real-world state of affairs to be modelled is the arena of psychiatric care, most
specifically nursing care, in forensic and secure contexts. The following two assumptions underlie the model:

Assumption 1:
Psychiatric nursing in the arena of forensic and secure care is an advanced practice role.

Assumption 2:
As noted in 1.1 and 1.2.2, context is crucial to conceptualization (Duncan et al., 2007) and therefore the precise nature of the advanced practice role will be informed by the contexts of practice.

The corollary of these two assumptions is that the precise nature of the advanced practice nursing role will vary according to the interplay of the contexts, or dimensions of practice, in which the role is seated. From the explication of contexts related to research submitted for this thesis, it is therefore proposed that forensic psychiatric nursing is an advanced practice role whose dimensions include:

i) **Security**: Expert knowledge of, and practice within the context of, the level(s) of security in which the practitioner operates including high, medium, low, locked and open wards, and no security including in the community.

ii) **Forensicity**: Expert knowledge of the offending or challenging behaviour related risks and needs of the population with whom practice is conducted.

iii) **Evidence based practice**: The extent to which practice is built upon an explicit evidence base relevant to the setting and patients or clients, and the extent to which that evidence differs from general psychiatric nursing evidence.
iv) Political knowledge: Knowledge of the extent to which special features of service provision impact on service organisation and delivery including state versus independent sector provision and wider political impact of economics and socio-cultural issues.

v) Expanded practice: The extent to which practice is expanded into other professional, but traditionally non-nursing, roles within the practice arena.

vi) Clinical expertise: The extent to which clinical practice can be considered to require advanced nursing skills defined here as a level of expertise and knowledge of a different order to the non-specialist.

The precise nature of the advanced practice nursing will, of course, differ in relation to the precise contextual position of the practitioner. To assist with understanding this proposed role these dimensions can be mapped in order to model the potential variety of roles. Figure 2 (see p. 85) therefore comprises a matrix of contexts or dimensions which reflects that dimensions of security and forensicity are inter-related and overlapping but not identical. Different levels of security are implied through shading, darker shading representing higher security with this being present in forensic environments and lighter shading lower security and open settings which may occur across forensic, borderline and non-forensic settings. Evidence based practice and expanded practice are represented by zones referring to psychiatric nursing and its evidence base and other mental health related professionals and their own evidence base. These zones sit within an overarching political and sociocultural context (Political knowledge). Clinical expertise occurs across and within overlapping zones and will vary according to the contexts supplied by those zones.
The zonal model of psychiatric nursing in forensic and secure care is therefore proposed as a means of understanding the real world complexity of nursing care in the secure and forensic mental health arena. Zones A to E reflect unique combinations of dimensions that may require specific advanced practice elements. Zone F represents a zone of expanded practice, possibly common to all roles, but varying in its precise form. Such expanded practice will include activity not traditionally within the sphere of responsibility of the nurse and may include overall clinical responsibility for patients, mental health nurse prescribing status, advanced risk assessment responsibilities, delivery of accredited psychological therapies and so on.

3.10 The submitted research as a coherent contribution to forensic psychiatric nursing: explained by the zonal model

Explication of both the research submitted in support of the current thesis and its contexts suggests a zonal map of the forensic and psychiatric care arena that both situates the body of work as a coherent whole across a number of linked zones of practice, and acts as a model of the area that may help others to clarify where their own practice is situated. Mapping the body of work submitted in this thesis onto these contexts suggests there is very little that is exclusively nursing focused, and that practice in this arena is essentially and inevitably multidisciplinary in nature.

- Medication administration and medication errors in secure elderly psychiatric care: related to psychiatric nursing practice in a secure environment (Zone A). Interfaces with other mental health professionals, notably psychiatrists (Zone C).
- Firesetting among people referred for forensic psychiatric examination: related to forensic practice for psychiatric nurses and other mental health disciplines in non-secure (Zone E) and secure forensic environments (Zone D).
- Aggression and violence prevalence and staff skills: related to psychiatric nursing and other mental health disciplines in secure and secure forensic environments (Zones A, B, C and D).
- Attitudes to smoking among patients and staff: related to psychiatric nursing and other mental health disciplines in secure and secure forensic environments (Zones A, B, C and D).
- Outcomes evaluation: related to psychiatric nursing and other mental health disciplines in secure and secure forensic environments (Zones A, B, C and D).

3.11 Implications of the zonal model for wider practice and for the profession

Thus far the zonal model presented has attempted solely to represent a complex arena in a simplified and abstract form. However, it is now proposed that the model could also be used to explain advanced practice in the secure and forensic psychiatric nursing care arena, could be used to structure and guide development for the psychiatric nursing profession in this arena, and could be used to generate hypotheses that would demonstrate the value added by advanced practice roles in this arena. The zonal model promotes a coherent and integrated overview of a specialist area of psychiatric nursing practice. It suggests a definition of "advanced and expanded psychiatric nursing practice within the context of security and/or forensicity, based on a developed understanding of the available evidence and a high level understanding of the wider political and sociocultural context". The wider definition offered by the zonal model increases the applicability of the model to areas beyond those traditionally viewed as 'forensic' and implies that the epithet 'forensic psychiatric
Zone A: Psychiatric nursing practice in secure non-forensic environments e.g., specialist older people or brain injury services, some low secure services, PICUs.

Zone B: Psychiatric nursing practice in secure forensic environments e.g., high and medium secure services, some low secure services.

Zone C: Multi-disciplinary practice in secure non-forensic environments (see A).

Zone D: Multi-disciplinary practice in secure forensic environments (see B).

Zone E: Multi-disciplinary forensic practice not in secure premises (e.g., community services, victim focused forensic practice).

Zone F: Zone of expanded practice. Expansion of nursing role into areas of expertise traditionally dominated by other mental health professionals.
nurse' is insufficient; in fact its continued use may serve to militate against the future development of the role. However, a period of consultation will be required to ascertain whether consensus can be achieved on an alternative title. The definition of the role as essentially an advanced practice role has important implications. First, there is a responsibility on practice developers to make explicit the knowledge and competences required in order to achieve advanced practice status within the field and develop an accredited advanced practitioner role. Not all registered nurses working within the dimensions of the model can claim to be advanced practitioners and therefore should not be referred to as forensic psychiatric nurses, or any alternative sobriquet that is deemed appropriate. The zonal model proposed suggests a working hypothesis to test this: psychiatric nurses working at an advanced level within a forensic context will differ significantly on key zonal model-related measures of forensic and security knowledge and skills, expanded and advanced practice, evidential and sociocultural/political knowledge relative to other nurses working in similar settings. To extend this, non-advanced practitioners who work in forensic contexts will not differ significantly on similar key measures from non-advanced practitioners who work in non-secure/forensic contexts (e.g., acute admissions ward). Again, this will require explicit articulation of the knowledge and competences required. Part of this explication will require identification of the relevant evidence base. It is proposed that a thorough review of the evidence base for the zones of practice identified by the model is conducted. The evidence for psychiatric nursing more generally has advanced significantly in recent years and the evidence from that, and other fields, should be evaluated in terms of its applicability across forensic and secure zones of practice. For example, to what extent is the evidence base for the identification of conflict and containment behaviours developed in recent years for
use in acute in acute adult psychiatric settings (see e.g., Bowers et al., 2006) applicable to secure and forensic zones? Such explication should also occur in relation to patient involvement, mental health nurse prescribing, psychological therapy and so on. Where inapplicability is identified then research programmes should be developed to strengthen the evidence base for secure and forensic practice. Indeed, where the outcomes that are required differ then programmes of work to identify and develop tools to measure identified outcomes should be conducted. As a result of such a programme of work it is expected that the true effectiveness of the advanced practitioner role in secure and forensic zones could be demonstrated as has been the case for advanced practitioners in primary care settings.

3.12 Conclusion

In conclusion, this thesis has described a body of published, empirical research conducted in the arena of secure and forensic care which has implications for practice and future knowledge needs. The opening chapter met the first objective of the thesis which was to “elucidate the context in which the research submitted as the empirical part of this PhD was conducted”. Chapter 2 then met the second objective which was “to detail the research conducted and published by the current author which contributes to the forensic research literature in the following key topic areas: firesetting, aggression and violence, attitudes to smoking, safe medicines administration, and outcomes measurement in secure psychiatry”. The final chapter has examined the relation of the research to its contexts, has explored the extent to which it can be considered a body of forensic psychiatric nursing research, and has identified the implications that this holds for current theories of forensic psychiatric nursing. Through explication of the relationship of the body of work to its contexts it
has emerged that those wishing to delineate the role of the ‘forensic psychiatric nurse’ have continued over the past ten years to proselytise for the role but have not fully demonstrated either its uniqueness or effectiveness. Current conceptualizations of forensic psychiatric nursing do not fully address the centrality of the patient’s views and experience of care. The body of work submitted here suggests that future theories of nursing practice in these settings need to concentrate on the commonalities between nurses and other practitioners, and of the effectiveness of interventions delivered by them all as has been demonstrated for general psychiatric nurses (Curran & Brooker, 2007). Nurses working in the secure and forensic arena, whether labelled as forensic nurses or not, rarely act in isolation or deliver distinct ‘forensic psychiatric nursing’ interventions. It may be time to question whether such distinct ‘forensic psychiatric nursing’ interventions either exist or can be shown to be effective. A zonal model of psychiatric nursing in secure and forensic care has been explicated by reference to the contextual elements of nursing in this arena and it the possibilities of this as both a descriptive and explanatory theory for future development has been made.
3.13 References


http://priory.com/psychiatry/Decline_NHS_Inpatient_Psychiatry.htm


*Health Act 2006* (c. 28), London: HMSO


http://www.mind.org.uk/News+policy+and+campaigns/Press/Smoking+bann.htm


*R v Hoof* (1980) 2 Cr.App.R.(S.) 299 There should be separate counts alleging arson with intent to endanger life and arson reckless as to whether life endangered.


APPENDIX I

Empirical papers supporting the thesis
Paper 1

Paper 2

Paper 3

Paper 4

Paper 5

Paper 6

Paper 7

Paper 8

Paper 9

Paper 10
APPENDIX II

Related publications, citations on PubMed, other dissemination and related professional activities in each topic area
Articles redacted:


APPENDIX II

Related publications, citations on PubMed, other dissemination and related professional activities in each topic area.
Firesetting

Citations

Papers 1 and 2 were cited in:


Related Conference Presentations


Lecturing/Teaching

Firesetting (MSc module Forensic Mental Health session, University of Northampton, 2010-11)

Professional groups

Invited membership Chief Fire Officers Association Mental Health Working Group.

Related Publications


Edited Texts


Current proposal for edited text:

Handbook of Risk Assessment and Treatment of Deliberate Firesetters (Eds R Doley, T Gannon, G Dickens)

Associated Research

Principal Investigator (St Andrew’s Healthcare site) Development of an offence process of firesetting in mentally disordered offenders. Chief Investigator Theresa Gannon.

**Smoking in inpatient psychiatry**

Citations

Paper 3 (Staff views on smoking) has 17 recorded.

Voci, S et al Impact of a smoke-free policy in a large psychiatric hospital on staff attitudes and patient behavior. General Hospital Psychiatry, 6, 623-630. [Impact Factor 2.669]


[Impact factor 1.063]

Paper 4 (inpatients views on smoking) has seven recorded citations. Additionally, the study formed a key element of data presented in a King’s Fund debate paper: (Jochelson & Majrowski, 2006) on smoking in psychiatric units.


[Impact Factor 2.22]


[Impact Factor 1.063]


[Impact Factor 0.966]


[Impact Factor 2.81]


[Impact Factor 2.81]


[Impact Factor 0.635]


[Impact Factor 5.78]


Results of the study are cited on six occasions within this document

**Conferences**
Related Publications


Peer Review

I have undertaken peer review on submitted papers related to smoking for the following journals:

- Journal of Public Health
- Preventive Medicine
- Chronic Illness
- Clinical Practice and Epidemiology in Mental Health
- European Psychiatry
- Pragmatic and Observational Research

Violence and Aggression

Citations

Paper 5: Physical assaults by patients against physiotherapists


Conferences

An audit of the use of breakaway techniques in a large psychiatric hospital: a replication study

- Workshop: Presented at the 1st International Conference on Workplace Violence in the Health Sector, Amsterdam, October, 2008
- Presented at University of Northampton Centre for Health & Wellbeing ‘Detecting the Evidence’ Conference, April 2009
- Presented at RCN Mental Health Conference & Exhibition, Royal College of Surgeons, Edinburgh, March 2009
Related Publications


Dickens, G, Rooney, C, Doyle, D. Breakaways in specialist secure psychiatry. Submitted paper.

Associated Research

Co-investigator: Determining appropriate training duration for breakaway techniques (Chief Investigator: Professor Paul Rogers, University of Glamorgan).

Medication Administration

Citations

Observational Study (paper 7)


Delegation study (paper 8)


Conferences


Related Publications


Peer Review

I have undertaken peer review on submitted papers related to smoking for the following journals:

CNS Drugs
British Journal of Nursing

Outcomes in Secure Psychiatry

Citations

Reliability study (paper 9)


Conferences

Security Measures: Mental health outcomes measures in secure and forensic settings. RCN Network for Psychiatric Nursing Research Conference ‘Mental health nursing research: Measuring success – multiple perspectives’, St Catherine’s College, Oxford University, September 2009. Concurrent session


Managing outcomes performance in mental health using HoNOS: Experience at St Andrew’s Healthcare. Poster presentation at Research in Medium Secure Units One Day Conference, Institute of Psychiatry, January 2009.

Professional Groups

I work closely with the Mental Health Providers Forum in order to analyse data related to a new recovery-oriented outcomes tool, and to develop and implement a new forensic-oriented recovery outcomes tool.
Related Publications


APPENDIX III

Application to study for a PhD by means of published works (original application February 2010)

[Appendix redacted].
APPENDIX IV

Papers substituted into the thesis during the registration period and statement of substantial and original contribution
During the course of the thesis, as writing progressed, a decision was made, in consultation with supervisors, to include two published papers which had previously been omitted from the application document. Five papers included in the application document were removed from the final thesis.

The two included papers


**Peer review integrity**

"Medicine, Science and the Law is an academic journal that publishes peer-reviewed papers on a wide range of subjects of forensic interest."

Co-author PS estimates my contribution to be about 50%.


**Peer review integrity**

"The BJFP is a peer reviewed journal and is both multi-agency and multidisciplinary in its outlook."

Co-author PS estimates my contribution to be about 60%.

This thesis for the degree of PhD by means of published work comprises papers that represent conjoint work. The extent to which the work is affected is detailed in Appendices III and IV. I confirm that a substantial part of the conjoint work is the original work of the candidate.

Signed: _______________________

Geoff Dickens
Candidate