

SECTION 1

REVIEW PROTOCOL

SECTION 1: RESEARCH PROTOCOL

1.1 Aims and Objectives of the Research

The purpose of this research was to provide a rigorous, systematic and comprehensive review of the relevant primary and secondary mental health literature in order to:

- a) inform the development of services for prisoners with mental disorders
- b) identify gaps in the current state of knowledge to inform a new mental health prison agenda.

1.2 Method

The work described here involved four different phases. The first two of stages were undertaken in order to inform the background section of the report; whilst the latter two involved systematically reviewing the literature relating to mental health problems in prisons in order to address the aims and objectives of the commissioned research.

1. A traditional review of the epidemiology of mental health problems in prisons in order to supplement the background of the report.
2. A brief overview of the effectiveness of specific interventions for mental health problems within the general population (at the evidence-based guideline and systematic review level only) in order to supplement the background of the report.
3. A systematic review of literature on interventions used to treat mental disorders in prisons, following the NHS Centre for Reviews and Dissemination (CRD) guidelines (NHS CRD, 2001)
4. A systematic review of the literature on service delivery and organisational issues relating to mental disorders in prisons, following the methods currently being developed by the NHS SDO Programme (Fulop *et al.*, 2001)

Details of the specific methodologies used are provided in subsequent sections.

1.3 References

Fulop, N., Allen, P., Clarke, A. & Black, N. (2001) *Studying the Organisation and Delivery of Health Services. Research Methods*. London: Routledge.

NHS Centre for Reviews and Dissemination (2001). *Undertaking Systematic Reviews of Research on Effectiveness: CRD's Guidance for Those Carrying Out or Commissioning Reviews*. (CRD Report Number 4). (2nd Edition).

SECTION 2

BACKGROUND TO THE REVIEW

2. Background to the Review

2.1 Strategic Context

At any one point in time 72,000 people are held in 135 prisons in England and Wales. A high proportion of these prisoners come from socially excluded sections of the community so it is perhaps not surprising that epidemiological research has shown that 90% of prisoners have either a mental health or substance abuse problem (Singleton et al, 1998). The figure of 90% rises to 95% if Young Offenders' Institutions are considered separately.

Despite the enormous size of the problem, however, the NHS Executive and HM Prison service made it clear in 'The future organisation of prison health care' (1999) that systems for dealing with the high incidence of mental health problems in prisoners are under-developed. Two major deficits have been identified: screening arrangements for the need for mental health care at reception; and the inadequate level of care-planning that takes place generally within prisons. The report further stated that to improve this situation the care of mentally ill prisoners should develop in the following manner:

- In general all future improvements should be in line with NHS mental health policy in particular the National Service Framework (NSF) for mental health (Department of Health, 1999).
- Special attention should be paid to the better identification of mental health needs at reception screening
- Mechanisms should be put in place to ensure the satisfactory functioning of the Care Programme Approach (to develop mental health outreach work on prison wings)
- Prisoners should receive the same level of community care within prison that they would receive in the wider community
- Policies should be put in place to ensure adequate and effective communication between NHS mental health services and prisons

A more recent document (Department of Health and Her Majesty's Prison Service, 2001) has developed a much more specific policy for modernising mental health services in prisons. The foreword re-affirms the principle of the National Service Framework underpinning the strategic direction of service development and sets out a vision for the next three to five years. It is recognised that this is likely to be a major challenge with 'mental health services in prisons struggling to keep pace with developments by the NHS'. The statement calls for a 'move away from the assumption that prisoners with mental health problems are automatically to be located in the prison health care centre'; with greater use of primary care, mental health in-reach services, day care and wing-based treatments that mirror the range of community-based mental health services that would be available outside the prison setting.

There is clearly recognition, within policy, of the need to plan more effective mental health services for prisoners that are locally commissioned, based on health needs assessment exercises previously undertaken and that acknowledge the type of prison, i.e. for women, young offenders, remand prisoners or open prisons. Resources for the plan are to be derived both from new investment (300 new staff for prison in-reach services will be funded by the DoH over the next three to four years) and from existing investment in prison health care - currently estimated to be 50% of the total budget of £90 million.

Core components of services that will be developed for prisoners are listed below:

Primary Care Services	To include screening at reception, diagnosis and recognition of complex disorders. The provision of talking therapies perhaps links to NSF planned graduate mental health workers.
Wing-based Services	Care co-ordination continues where applicable. CPNs as part of local CMHTs to provide some services. Involvement too with Probation services.
Day Care Services	Aim to provide a non-threatening therapeutic environment with access to more specialised services. HMP Brixton's Day Care Service quoted as an example of good practice.
In-patient Services	Full range of services reduces pressure on beds. However, some will still require 24-hour intensive support. Move to crisis resolution model flagged up in the NSF.
Transfer to NHS Facilities	Transfer might be necessary to NHS secure care when needs are severe. Need for co-ordination between Prison Service and NHS.
Suicide Prevention	A pilot study in five prisons launching a specific strategy for suicide prevention includes new prison in-reach pilots.

In addition, there will be further guidance on groups with special needs such as women and prisoners with either a learning difficulty or a dual diagnosis.

This is therefore the strategic context for this review. The Prison Health Policy Unit and the Task Force will oversee all these modernisation initiatives at a national level. It is anticipated that by 2004 some key deliverables will have been achieved which include: 300 more staff providing in-reach services; thus, 5000 more prisoners with a severe and enduring mental health problem receiving more comprehensive care; and every prisoner with a serious mental illness to have a care plan on release.

There remain questions, however, about how these changes can best be operationalised and this review of existing research may provide some answers regarding the type of interventions likely to be most effective in the treatment of mental disorders, the organisational approach that may facilitate effective mental health services for prisoners, and areas where more research is required. Before going on to these reviews, the epidemiology of mental disorders in prisons is considered. This provides a valuable context through which the adequacy of existing research in terms of the nature and occurrence of mental disorders in prisons can be assessed.

2.2 An Epidemiological Review Of Mental Disorders In Prisons

2.2.1 Introduction

a) Background

Although prisoners represent a very small proportion of the total population, approximately 0.1%, they are likely to be extensive consumers of a wide range of services (Singleton et al, 1998). Prisoners represent a socially excluded group, who experience many health and social inequalities (Shaw, 2002). In 1993, *The Review of Health and Social Services for Mentally Disordered Offenders and Others Requiring Similar Services* (Anon, 1993) identified research into the prevalence of mental disorders among remand prisoners as a priority. There is considerable research to suggest that the prison population are at greater risk of developing mental health problems compared with people of a similar age and gender in the community (Liebling, 1993). Furthermore, prisoners are less likely to have their mental health needs recognised, are less likely to receive psychiatric help or treatment, and are at an increased risk of suicide (Birmingham et al, 1996). *The National Service Framework (NSF) for Mental Health* (DoH, 2001) in England made it clear that its recommendations applied to all working age adults, including prisoners (Anon, 2001).

b) Prison and prisoner numbers

About 140,000 persons pass through English and Welsh prisons each year. At any one point in time, 72,000 people (National Electronic Library for Health, 2002) are held in 135 prisons in England and Wales (Anon, 2001). One 'worst case scenario' predicts that the prison population will rise to 83,500 in 2008 (Gray and Elkins, 2002). Approximately three-quarters of prisoners are male sentenced prisoners, 20% are male remand prisoners (including civil prisoners, such as immigration detainees and those in prison for contempt of court) and the remaining 5% are women prisoners (Home Office Research and Statistics Directorate, 1997; NACRO, 2002). Surveys have shown that as many as 90% of prisoners have a diagnosable mental illness, substance abuse problem or, frequently, both (Anon, 2002). Among young offenders and juveniles that figure is even higher, 95% (Anon, 2001). It is also known that mental illness can contribute to re-offending and problems of social exclusion (Anon, 2001).

c) Classification of mental disorders

The Mental Health Act 1983, section 1(2), defines mental disorder as 'mental illness, arrested or incomplete development of mind, psychopathic disorder and any other disorder or disability of mind' (Peay, 1991). There are two major methods of classifying mental disorders: ICD-10 (REF) and DSM-IV (American Psychiatric Association, 1994). This review is primarily concerned with five major mental disorder categories, as classified in ICD-10:

- *F10-F19 = Mental and behavioural disorders due to psychoactive substance use*
This includes mental and behavioural disorders due to the use of alcohol, opioids, cannabinoids, sedatives or hypnotics, cocaine, other stimulants (e.g. caffeine), hallucinogens, tobacco, volatile solvents, multiple drug use and use of other psychoactive substances.
- *F20-29 = Schizophrenia, schizotypal and delusional disorders*
This includes schizophrenia, schizotypal disorder, persistent delusional disorders, acute and transient psychotic disorders, induced delusional disorder, schizo-affective disorders, other non-organic psychotic disorders and unspecified non-organic psychosis.

- *F30-F39 = Mood (affective) disorders*
This includes manic episode (e.g. hypomania), bipolar affective disorder, depressive episode (mild, moderate or severe single episode), recurrent depressive disorder, persistent mood (affective) disorders (e.g. cyclothymia, dysthymia), other mood (affective disorders) and unspecified mood (affective) disorders.
- *F40-F48 = Neurotic, stress-related and somatoform disorders* (in particular F40-43)
This includes phobic anxiety disorders (e.g. agoraphobia, social phobia and specific isolated phobia), other anxiety disorders (e.g. panic disorder, generalised anxiety disorder, mixed anxiety and depressive disorder), obsessive compulsive disorder, reaction to severe stress, and adjustment disorders (e.g. post traumatic stress disorder), as well as dissociative (conversion disorders), somatoform disorders, and other neurotic disorders
- *F60-69 = Disorders of adult personality and behaviour* (in particular F60-F62)
This includes specific personality disorders (e.g. paranoid personality disorder, schizoid personality disorder, dissocial personality disorder, etc.), mixed and other personality disorders. This category also encompasses enduring personality changes (not attributable to brain damage and disease), habit and impulse disorders (e.g. pathological gambling), gender identity disorders, disorders of sexual preference, psychological and behavioural disorders associated with sexual development and orientation, other disorders of adult personality and behaviour, unspecified disorder of adult personality and behaviour. However, these latter disorders fall outside the remit of this review.

d) Methods Used to Assess Psychiatric Morbidity

A wide range of methods are used to estimate the prevalence of psychiatric morbidity; for example, clinical interviews, such as the Structured Clinical Interview for DSM-IV (SCID-II) for personality disorders, and Schedules for Clinical Assessment in Neuropsychiatry (SCAN) for psychotic disorders; and lay interviews, such as the Clinical Interview Schedule (CIS-R) for neurotic disorders (c.f. Singleton et al, 1998). Differences between estimates obtained from different studies may, therefore, be a reflection on the use of different methods of measurement.

2.2.2 Methods Used for Epidemiological Review

Unlike the methods used for the main review of mental health interventions in prisons, a traditional review of the epidemiological literature was undertaken. This is because the aim of this review is to give an overview of the prevalence of mental disorders among British prisoners in order to inform the scope and priorities of subsequent sections of this report.

a) Search strategy

References retrieved from the broader systematic literature searches were, therefore, identified that specifically related to the epidemiology of prisoner mental health. The following major electronic bibliographic databases were searched:

- ASSIA
- Database of Abstracts of Reviews of Effectiveness (DARE)
- Embase
- Medline
- Mental Health Abstracts
- NHS Health Technology Assessment (HTA) database
- PsycINFO
- Science Citation Index

- Social Sciences Citation Index
- Social SciSearch
- Sociofile

In addition, a number of 'grey literature' sources were searched, including:

- Google (an Internet search engine)
- Health Management Information Consortium (HMIC)
- SIGLE

The reference lists of relevant articles were also checked for additional references.

b) Selection of papers

Major recent reviews and large-scale population surveys of sentenced and remand prisoners conducted either in Britain or overseas and published in English after 1990 were included in this overview, as were key papers yielding additional useful information.

c) Data extraction and synthesis

Key data were extracted from the major British-based prevalence studies and tabulated (refer to **Table 1** and **Table 2** in the Appendices). Although no formal critical appraisal of the articles has been undertaken, reference to the limitations of the methodologies employed is provided in the textual summary below. As the focus of this review is on mental health services for prisoners in Britain, the British and international literature have been examined separately. Key differences between sentenced and remand, and male and female prisoners are also highlighted.

2.2.3 The prevalence of mental disorders within British prisons

There are now a large number of studies published examining the epidemiology of mental health problems among prisoners, many of which relate specifically to British prisoners. **Table 1** and **Table 2** highlight the key features of the major recent epidemiological studies conducted relating to sentenced and remand prisoners respectively. Until the mid-1990s, the majority of research in this field had been conducted by Gunn and Maden (e.g. Gunn et al, 1991a, b; Maden et al, 1995; Maden, 1996) and had generally focused on the remand population who were thought to be at particular risk, compared with both the sentenced and general population Maden et al, 1995; Maden, 1996; White, 1997). Badger *et al.* (1999) identified 12 items from the academic literature, published between 1990 and 1997, that related to mental disorder among sentenced prisoners in Britain (Gunn et al, 1991a, b; Dolan and Coid, 1993; Gunn, 1993; Gunn et al, 1991c; Institute of Psychiatry, 1992; Maden and Gunn, 1993; Maden et al, 1994a, b; Mitchison et al, 1994; Swinton et al, 1994; Swyer and Lat, 1996), and 17 articles reporting studies of remand prisoners in Britain. Four of these (Robertson et al, 1987; Coid, 1988; Taylor and Gunn, 1984; Taylor and Parrott, 1988) were ultimately not included in their review, because the data on which they were based dated from before 1983 (NHS Centre for Systematic Reviews and University of Reading (1999)). The remaining 13 studies all attempted to determine the prevalence of mental disorders (either in general or for specific conditions) among samples of British prisoners (Birmingham et al, 1996; Bannerjee et al, 1995; Brooke et al, 1996; Davidson et al, 1995; Dell et al, 1993a, b; Mason et al, 1997; Murphy et al, 1995; Robertson, 1988, 1992; Robertson et al, 1994; Watt et al, 1993; Weaver et al, 1997). The majority of these studies only examined male prisoners.

From an epidemiological viewpoint, Badger *et al.* (1999) identified a number of limitations to these earlier studies. Although detailed demographic and other information is given about the general population of sentenced prisoners, and of the sample of people

assessed during the studies, this information is not given for those found to have a mental disorder. Comparisons of this group with the sample, or with the prison population as whole, or with the general population outside the prison, are not given, and therefore the studies do not reveal the existence or significance of risk factors for being in prison and having a mental disorder. The Gunn *et al.* (1991a,b) study, for example, was wholly concerned with the prevalence of specific diagnoses of mental disorder in the sentenced prisoner population, and with estimates of the numbers and characteristics of those prisoners judged to have a need for treatment within prison, in a therapeutic community, or in a psychiatric hospital (Badger *et al.*, 1999). Many of these studies were point prevalence studies only providing a cross-sectional view of the spectrum of mental disorder and treatment needs in the prison population. Grubin *et al.*⁴⁷, therefore, attempted to address this weakness by undertaking a two-year longitudinal, prospective survey comprising a large cohort of unconvicted male prisoners, monitored throughout their entire time on remand. This early work proved useful in planning England and Wales' most significant survey of psychiatric morbidity among prisoners by the Office for National Statistics (ONS) in 1997.

a) The ONS Survey of Psychiatric Morbidity Among Prisoners in England and Wales (Singleton *et al.*, 1998)

The main aim of this survey was to collect baseline data on the mental health of male and female remand and sentenced prisoners in order to inform general policy decisions. These baseline data were compared with corresponding data from previous ONS (OPCS) surveys of individuals resident in private households, institutions catering for people with mental health problems and homeless people. In addition the survey aimed to examine the varying use of services and the receipt of these in relation to mental disorder and to establish key, current and lifetime factors which may be associated with mental disorders of prisoners. The survey included assessment of personality disorder, neurosis, psychosis, alcohol and drug dependence, deliberate self-harm, and intellectual functioning, and the co-morbidity of these disorders. All prisons in England and Wales were included in the survey. All inmates aged 16 to 64 years were eligible for selection in the sample. Women prisoners and men on remand are a comparatively small proportion of the total prison population, therefore, these groups were over-sampled to provide adequate numbers to allow separate analysis of the data for these groups. A total of 1,121 male and 584 female sentenced prisoners and 1,250 male and 187 female remand prisoners were studied.

b) Overall prevalence of mental disorders among British prisoners

The ONS survey indicated that nine out of every ten prisoners had at least one of the five disorders considered in the survey (neurosis, psychosis, personality disorder, alcohol abuse or drug dependence), (Anon, 2001). 7% (95% CI: 3-11) of sentenced men, 10% (95% CI: 6-14) of remanded men and 14% (95% CI: 8-20) of women had a psychotic illness within the past year (Singleton *et al.*, 1998; Melzer *et al.*, 2002; Fryer *et al.*, 1998). Other studies have found lower overall levels of prevalence: for example, Grubin *et al.* (1997) found that 62% of male remand prisoners had a current psychiatric disorder; this is in contrast to 71% lifetime prevalence. There are also marked differences between remand and sentenced prisoners: an estimated 66% of the remand population are thought to have some form of mental health problem, compared with 39% of the sentenced population (Institute of Psychiatry and Health Advisory Committee for the Prison Service, 1998). Although there are considerable mental health problems in the prison population, the majority of mentally disordered prisoners are not suffering from a severe mental disorder that would ordinarily require detention in hospital under the Mental Health Act 1983 for medical treatment (Anon, 2001).

Before examining the prevalence of specific mental disorders among prisoners in more detail, it essential to note that the figures quoted vary between studies. This is partly as a result of the range of psychiatric morbidity assessments used (see above [Singleton et al, 1998]), but also due to the manner of reporting; for example, it is not always clear whether the figures relate to lifetime or current prevalence. For the purpose of this review, emphasis is placed on the prevalence rates reported in the ONS survey (refer to **Table 3**). Across all studies and prisoners (sentenced vs remand; male vs female), the four major mental disorders are:

1. **Personality disorder** (ranging from 50% in both sentenced and remand female prisoners, to 78% in male remand prisoners Singleton et al, 1998)
2. **Neurotic disorders** (ranging from 40% in male sentenced prisoners to 76% in female remand prisoners, Singleton et al, 1998)
3. **Drug dependency** (ranging from 34% in male sentenced prisoners to 52% in female remand prisoners, Singleton et al, 1998)
4. **Alcohol dependency** (ranging from 19% in female sentenced prisoners to 30% in both sentenced and remand male prisoners, Singleton et al, 1998)

In addition, between 7% (male sentenced prisoners) and 27% (female remand) have **attempted suicide** in the last year; between 6% (male sentenced) and 13% (female sentenced and remand) have a **schizophrenic or delusional disorder**; between 5% (male remand) and 10% (female sentenced) have **self-harmed** during their current prison term; and 1-2% of prisoners have **affective psychosis** (Singleton et al, 1998).

The following section considers each of these major mental disorders, as classified in ICD-10, in more depth.

c) Major Mental Disorders Classified Under ICD-10

Disorders of adult personality and behaviour (ICD F60-69)

The rate of personality disorder reported in prisons varies enormously between 7% (Gunn et al, 1991a,b) and 78% (Singleton et al, 1998). Rates are generally higher among male prisoners. This large variation in prevalence rates is due to the difficulty in measuring personality disorder, and the lack of concordance between different rating instruments (Shaw, 2002; Gunn, 2000). For example, the ONS survey used standardised clinical interviews administered by non-psychiatrists (Gunn, 2000).

Neurotic, stress-related and somatoform disorders (ICD F40-48)

Neurotic disorders encompass a wide range of conditions, including phobias, panic disorder, anxiety disorders, and depressive disorders. Rates range from approximately 5% (Gunn et al, 1991a,b; to 63% (Singleton et al, 1998) and are generally higher among female prisoners.

Mental and behavioural disorders due to psychoactive substance use (ICD F10-19)

Rates of drug dependency have been reported between 10% (Gunn et al, 1991a,b) and 38% (Brooke et al, 1996), and are generally higher among remand prisoners. Large, population-based studies of prevalence of mental disorder in prisons have reported rates of alcohol dependence between 9% (Gunn et al, 1991a,b) and 30% (Singleton et al, 1998). Rates of alcohol dependency tend to be higher among male prisoners. Mason *et al.* (1997) conducted a study of substance abuse in remand prisoners at Durham prison. 548 prisoners were comprehensively screened for substance abuse (Shaw, 2002). 382 men

(70%) gave a history of illicit drug use at some point in their lives. Of these, 312 (57%) reported using illicit drugs during the last year, and 181 (33%) currently met abuse/dependency criteria. The research in this area has used mainly self-report measures, and many researchers have expressed concern about the reliability of these, particularly in custodial settings. It is probable that the true prevalence is much higher, particularly for drugs (Shaw, 2002).

Schizophrenia, schizotypal and delusional disorders (ICD F20-29)

Rates of schizophrenic or delusional disorder range from approximately 1% (Gunn et al, 1991a,b) to 13% (Singleton et al, 1998), and are generally higher in women and remand prisoners.

Mood (affective) disorders (ICD F30-39)

Prisoners suffer a number of psychotic and affective (mood) disorders, including manic episodes, bipolar disorder, and depressive episodes and disorders. Reported rates range from 2%(Singleton et al, 1998) to 4% (Gunn et al, 1991a,b), and are slightly higher among female prisoners.

Attempted suicide and self-harm

In addition, a number of documents report the rates of attempted suicide and self-harm (Towl et al, 1999). Concerns over the steady increase in the number of self-inflicted deaths in prisons in the 1980s led to the setting up of the first full thematic review by the Her Majesty's Chief Inspector of Prisons (commonly referred to as the Tumin report) which reported in 1990 (McHugh and Snow, 2002). The 1999 review showed that the average annual rate of suicide in English prisons was rising, and in 1998 was 128 per 100,000 population (Shaw, 2002). In 2001, there were 72 self-inflicted deaths in prisons in England and Wales (National Electronic Library for Health, 2002); the majority of which were suicides by women (The Samaritans, 1998). This was a 44% increase since 1990 and a 167% increase since 1983. It has been estimated that a prisoner is seven times more likely to kill themselves compared with someone living in the community (Mental Health Foundation, 1999). Liebling (1995) conducted a number of epidemiological studies on the nature and frequency of self-harm in prisons. She found that self-harm was common in young men, on remand, and one third occurred within three weeks of imprisonment (Shaw, 2002). These findings are echoed in a critique of UK research on suicide in prisons (Crichton, 2002). A HM Prison Service internal review recommended the three year implementation of a new suicide prevention strategy in 2001 (Meltzer et al, 1995).

Co-morbidity of mental disorders

The ONS survey indicated that no more than two out of ten in any sample group have only one disorder and 12-15% of sentenced British prisoners have four or five of the five major mental health problems (Anon, 2001). Rates for multiple disorders are higher among remand than sentenced prisoners (Singleton et al, 1998). Much of this co-morbidity is due to substance misuse and morbidity secondary to this, such as depression, anxiety and withdrawal phenomena (Maden et al, 1995).

2.2.4 The prevalence of mental disorders in the general population

In order to make sense of these figures, it is helpful to compare the rates to those in the general population. However, not only are there huge variations in the figures reported amongst prisoners, but also in those reported in the general population. It is also difficult

to compare these figures directly as the methods used vary considerably. In addition, the authors have been unable to find a single study that has covered all of the mental disorders examined in the ONS survey of prisoners.

Perhaps the most appropriate study to compare with is the OPCS surveys of psychiatric morbidity (Meltzer et al, 1995) upon which the ONS survey was based (Singleton et al, 1998). The OPCS surveys aimed to provide information about the prevalence of psychiatric problems among adults in England, Scotland and Wales, as well as their associated social disabilities and use of services. Four separate surveys were carried out from April 1993 to August 1994, including one covering 10,000 adults aged 16 to 64 years living in private households. The main focus of the survey was neurotic psychopathology as measured by the Clinical Interview Schedule – Revised (CIS-R). Attempts were also made to estimate the prevalence of psychosis (assessed via a clinical interview, SCAN), drug dependence and alcohol dependence (assessed by self-completion questionnaires).

Overall, approximately one in seven adults (160 per 1,000) had some sort of neurotic health problem (as measured by a score of 12 or more on the CIS-R) in the week prior to interview (Meltzer et al, 1995). This is in contrast to between 40% (male sentenced) and 76% (female remand) in prisoners. Prevalence was generally higher among women. However, the most common symptoms were fatigue, sleep problems, irritability and worry; none of which were covered by the ONS survey of prisoners. The most prevalent neurotic disorder within the week prior to interview was mixed anxiety and depressive disorder (7.7%), followed by generalized anxiety disorder (3.1%), depressive episode (2.1%), obsessive-compulsive disorder (1.2%), phobia (1.1%), and panic disorder (0.8%). Three other psychiatric disorders were covered in the survey. Functional psychosis was found to have a prevalence of 0.4% in the past year. The overall rate of alcohol dependence was 4.7% in the last year (compared to 19-30% in prisoners [Singleton et al, 1998]), and the rate of drug dependence was 2.2% in the past year (compared to 34-52% in prisoners [Singleton et al, 1998]). Very little information is provided about the co-occurrence of mental disorders.

2.2.5 The prevalence of mental disorders in prisons internationally

A number of studies have been conducted on the prevalence of mental disorders among prisoners internationally. Perhaps the most comprehensive are a systematic review of 62 surveys from 12 western countries (Australia, Canada, Denmark, Finland, Ireland, the Netherlands, New Zealand, Norway, Spain, Sweden, UK and USA) published in *The Lancet* by Fazel and Danesh earlier this year and a *Systematic Review of the International Literature on the Epidemiology of Mentally Disordered Offenders* undertaken in 1999 by Badger et al. on behalf of the NHS Centre for Reviews and Dissemination (CRD) and the High Security Psychiatric Services Commissioning Board (NHS Centre for Reviews and Dissemination and University of Reading, 1994). These reviews generally echo the findings found in British prisons.

The former review included data from approximately 23,000 prisoners, and suggested that 3.7% of men (95% CI: 3.3-4.2) had psychotic illness, 10% (9-11) major depression, and 65% (61-68) a personality disorder, including 47% with antisocial personality disorder (Fazel and Danesh, 2002), 4.0% women (3.2-5.1) had psychotic illnesses, 13% (11-14) major depression, and 42% (38-45) a personality disorder, including 21% (19-23) with antisocial personality disorder (Fazel and Danesh, 2002). Although there was a substantial heterogeneity among studies (especially for antisocial personality disorder), only a small proportion was explained by differences in prevalence rates between detainees (equivalent to remand prisoners in Britain) and sentenced inmates. Prisoners were several times more likely to have psychosis and major depression, and about 10

times more likely to have anti-social personality disorder, than the general population (Fazel and Danesh, 2002).

The Badger *et al.* review covered mentally disordered offenders (MDOs) in the criminal justice system, as well as in the general population, in special hospitals, and in the general psychiatric services system, *i.e.* had a broader remit than this review. 858 UK and international studies were identified and 393 were related to the criminal justice system. 104 of these were about mentally disordered sentenced prisoners, 80 were about committers of specific offences, while 34 considered the police management of mentally disordered people, a proportion of whom will not have committed any offence. More recent studies have been conducted in Europe (Anderson et al, 2000; Gosden et al, 2000; Joukamaa, 1995), the United States and Canada (Fisher et al, 2000; Corrado et al, 2000; Lamb and Weinberger, 1998; Swartz and Lurigio, 1999; Powell et al, 1997; Anderson et al, 1996; Jordan et al, 1996; Bland et al, 1990), Africa (Agbahowe et al, 1998), Asia (Ghubash and Eirufae, 1997; Fido and al Jabally, 1993), and Australia (Herrman et al, 1991) and New Zealand (Brinded et al, 1999a,b).

2.2.6 Prevalence of mental disorders among minority groups in prisons

According to the *Changing the Outlook* strategy (Department of Health/HM Prison Service, 2001), neither the Prison Service nor the NHS have been effective at recognising the particular mental health needs of specific groups of prisoners, in particular, women, people from minority ethnic groups (Hyslop, 2001; Bhui et al, 1998) and young people. This is supported by the general lack of research in this area. Fazel and colleagues (2001) recently highlighted the hidden psychiatric morbidity among elderly prisoners. In particular, they found, in a stratified sample of 203 male sentenced prisoners aged over 59 years from 15 prisons in England and Wales, that the prevalence of depressive illness was five times greater than that found in other studies of younger adult prisoners and elderly people in the community. Several studies have reported the prevalence of mental disorders among male juvenile offenders separately (Gunn et al, 1991a,b; Maden, 1996). These studies suggest that the rate of personality disorder is higher than among adult prisoners. Further research is now required to address how these specific mental health needs may be met.

2.2.7 Organisational Issues Effecting Estimation of Prevalence

This epidemiological review also highlighted the importance of a number of related issues, effecting estimation of prevalence of mental disorders in prisons: the acquisition of mental disorders (for example, how many prisoners enter a prison with an existing problem, how many see their problem become exacerbated in prison, and how many acquire a mental health problem actually during their prison sentence); screening for mental disorders in prisons (Shaw, 2002; Grubin et al, 1997; Hyslop, 2001; Fazel et al, 2001; Grubin et al, 2000; Birmingham et al, 2000; Morrison and Gilchrist, 2001); and, transfers to special hospitals (NACRO, 1995; Draine and Solomom, 1999). These service/organisation related issues are discussed in Section 5, the Review of Service Delivery and Organisation for Prisoners with Mental Disorders.

2.2.8 Implications for prison mental health services

The findings reported above suggest that the burden of treatable serious mental disorder in prisoners is substantial (Fazel et al, 2001). For example, application of these typical prevalence rates to the prison population of the US suggests that several hundred thousand prisoners might have psychotic illnesses, major depression, or both; an amount that is twice the number of patients in all American psychiatric hospitals combined (Torrey, 1995). To place this in a British context, in an average male prison population (*e.g.*

Brixton) of about 800 prisoners (Home Office, 2002). up to 720 prisoners will have a mental health disorder, 512 prisoners will have a personality disorder, 320 will have a neurotic disorder, 272 will be dependent on drugs, 240 will be dependent on alcohol, 56 will have attempted suicide in the last year, a further 56 will have self-harmed, and 48 prisoners will be schizophrenic [figures based on the ONS survey of prisoners, Singleton et al, 1998]. Given the limited, and varied (NACRO, 1995; Maden et al, 1994) resources of most prisons, however, it seems doubtful whether most prisoners with these illnesses receive appropriate care, such as mandated by the European Convention on Human Rights (Anon, 1989).

2.2.9 Overview

The main purpose of including an epidemiological review in the background to this report was to provide a focus for the overall study and help to interpret the findings. Despite the various methods employed in prevalence studies worldwide, findings are consistent: it is clear that prisoners with mental disorders are significantly over-represented in the prison population. The most common mental disorders among prisoners are personality disorders, neurotic disorders and drug and alcohol dependency, raising particular questions about ways of managing and treating these difficulties.

Other important findings of the epidemiological review include:

- a) 12-15% of all sentenced prisoners have 4 or 5 disorders (and these rates are even higher in remand prisoners)
- b) around 30% of all prisoners have history of one or more episodes of deliberate self-harm
- c) the incidence of mental disorders is higher in minority groups such as women, older people and those from ethnic minority groups.
- d) much of the research reported relies on point-prevalence studies to determine the numbers involved. It is therefore unclear whether prison life per se leads to a mental health disorder, or that the prisoner has a mental health disorder that goes undetected at reception or on appearance in court.

Considerations of the treatment of prisoners with mental disorder must be informed by the evidence regarding 'what works for whom'. For this purpose, the following background section provides a **brief overview** of the interventions for major mental disorders in the general population.

2.3 Overview of Interventions for Mental Disorders in the General Population

2.3.1 Introduction

The aim of this section is to give an overview of the existing evidence on the effectiveness of a range of pharmacological and non-pharmacological (e.g. psychological, psychosocial, etc.) interventions used to treat the major mental disorders, identified via the review of epidemiology presented earlier (i.e. personality disorder, neurotic disorders, alcohol and drug dependency, suicide and self-harm, schizophrenia and other related psychoses), in the general population. This section will, therefore, provide a useful background and set the context for the main review of mental health services for prisoners, by highlighting the interventions that have been shown to work in the general population and that could **potentially** be applied to a prison setting.

2.3.2 Methods used for this overview

Unlike the methods used for the broader review of mental health services for prisoners, exemplar references (evidence-based digests, guidelines or systematic reviews) were systematically identified and summarised for each of the major mental disorders in order to give an overview of the literature in the field. It was neither feasible (in terms of time or resources) nor within the original remit of the review to explore this area in any greater depth.

a) Search strategy

The following major electronic bibliographic databases were searched for evidence-based digests, guidelines and systematic reviews:

- Cochrane Database of Systematic Reviews (CDSR)
- Database of Abstracts of Reviews of Effectiveness (DARE)
- Embase
- Medline
- NHS Health Technology Assessment (HTA) database
- PsycINFO
- Science Citation Index
- Social Sciences Citation Index

In addition, a number of other sources (predominantly Web-based resources) were searched, including:

- Development and Evaluation Committees (DECs)
- eGuidelines
- Google (an Internet search engine)
- National Guideline Clearinghouse (NGC)
- National Institute for Clinical Excellence (NICE)
- Scottish InterCollegiate Guideline Network (SIGN)
- Turning Research into Practice (TRIP) database
- The 'mental health protocols' report (a piece of work previously undertaken by representatives from SchARR)

b) Selection of papers

For each of the major mental disorders, the most relevant publication was sought in terms of the:

- Type of publication: preference was given to digests of evidence, such as those provided by *Clinical Excellence* and *Health Evidence Bulletins Wales*, as these are

respected publications in the field of evidence-based health care, providing comprehensive summaries of the efficacy of treatment options. Where neither of these were available, an evidence-based guideline or systematic review was used.

- Date of publication: preference was given to publications published after 1997 in order to avoid the inclusion of out-of-date information.
- Location of publication: preference was given to publications originating from the United Kingdom; where such publications were not available, reference was made to European and North American publications.

Other key references were also retained and these are listed in the first column of **Table 4** (see Appendix). Of particular interest are ongoing National Institute for Clinical Excellence (NICE) guidelines, as well as ongoing and recently completed NICE technology appraisals.

c) Critical appraisal

Although no formal appraisal of the included studies was undertaken. Relevant checklists, such as Hayward *et al.* (1995) – for guidelines, and Oxman *et al.* (1994) – for systematic reviews, were used as a guide to assess the quality of the selected publications. The major points are highlighted in the second column of **Table 4**.

d) Data extraction and synthesis

Key components of the references were extracted and tabulated, and subsequently arranged under the relevant ICD-10 categories, reflecting the prevalence found in the epidemiological review, *i.e.* starting with disorders of adult personality and behaviour (F60-69), such as personality disorder, then moving on to neurotic, stress-related and somatoform disorders (F40-F48), *etc.* (refer to **Table 4**).

2.3.3 Overview of the Literature

There is a large variation in both the quantity and quality of literature relating to each of the major mental disorders prevalent in prisons. The greatest volume of high quality literature has been published on anxiety disorders, schizophrenia and depressive disorders; followed by personality disorders, panic disorder and bipolar disorder. There is very little evidence-based information available on drug and alcohol abuse, and self-harm and suicide, despite there being a considerable body of literature for each of these disorders. It is also interesting to note that where high quality publications do exist, such as *Clinical Evidence* and *Health Evidence Bulletins Wales*, insufficient details are provided to make a valued assessment of the methodologies used to derive the evidence statements. In addition, several of the references referred to (*e.g.* for personality disorders, self-harm and bipolar disorder) are now several years old, and, therefore, new evidence may have been published since. **NICE guidelines**, for example, are expected to be published during the next twelve months on the following disorders: *generalised anxiety, self-harm, schizophrenia (published in December, 2002), and depression*.

To summarise, interventions found likely to be beneficial for *disorders of adult personality and behaviour (ICD-10 F60-69)* include (Harris, 1998):

- Mono-amine oxidase inhibitors
- Carbamazepine
- Neuroleptics (*e.g.* phenelzine & haloperidol)
- Community mental health team (CMHT) management

In terms of *neurotic, stress-related and somatoform disorders (ICD-10 F40-F48)*, interventions found to be either beneficial or likely to be beneficial for *generalised anxiety disorder*, include (Gale and Oakley-Browne, 2002):

- Cognitive therapy
- Buspirone
- Certain antidepressants (paroxetine, imipramine, trazodone, opipramol, venlafaxine)

and, for *panic disorder* (Kumar and Oakley-Browne, 2002):

- Tricyclic antidepressants (imipramine)
- Selective serotonin reuptake inhibitors (SSRIs)
- Benzodiazepines (e.g. alprazolam) – although there is a trade off between benefits and harms

In terms of *mental and behavioural disorders due to psychoactive substance use (ICD-10 F10-F19)*, the following interventions have been found likely to be beneficial for *alcohol abuse* (Swedish Council on Technology Assessment in Healthcare [SBU], 2002):

- “Mini-intervention”, based on identifying hazardous consumption & providing information, motivation & support
- Pharmacologic treatment (acamprosate, naltrexone, disulfiram) – for alcohol dependence
- Psychosocial treatment focused on addiction – for alcohol dependence
- Withdrawal treatment (benzodiazepines) – for alcohol dependence

and, for *drug abuse* (Swedish Council on Technology Assessment in Healthcare [SBU], 2002):

- Pharmacologic treatment (methadone, buprenorphine, ORLAAM, naltrexone) – for heroin dependence
- Psychosocial treatment (relearning therapy) – for heroin dependence
- Withdrawal treatment (clonidine, buprenorphine, methadone) – for heroin dependence
- Psychosocial treatment (relearning therapy) – for cocaine dependence

There is currently insufficient evidence on which to make firm recommendations about the most effective forms of treatment for patients who have recently *deliberately harmed themselves* (including attempted *suicide*). However, the following interventions may be beneficial (Hawton et al, 2002; National Electronic Library for Mental Health, 2002):

- Problem solving therapy (PST)
- Dialectical behaviour therapy (DBT)
- Cognitive behaviour therapy (CBT) – for suicide
- Emergency card
- Depot flupenthixol
- Lithium – for suicide
- Selective serotonin re-uptake inhibitors (SSRIs) – for suicide (although there is a trade off between benefits & harms)
- Tricyclic antidepressants (TCAs) – for suicide (although there is a trade off between benefits & harms)
- Receipt of aftercare from same clinician
- Long term psychological therapy – for female patients with borderline personality disorder & recurrent self-harm

The evidence for effective interventions for *schizophrenia, schizotypal and delusional disorders (ICD-10 F20-29)* is much clearer, with the following interventions either beneficial or likely to be beneficial (Lawrie and McIntosh, 2002):

- Clozapine in people resistant to standard treatment
- Continuation of medication for 6-9 months after an acute episode
- Family interventions to reduce relapse rates
- Cognitive behavioural therapy to reduce relapse rates
- Psychoeducational interventions to reduce relapse rates
- Psychoeducational therapy for improving adherence
- Behavioural therapy for improving adherence
- “Compliance” therapy

Finally, a number of interventions are known to be either beneficial or potentially beneficial in *mood (affective) disorders (ICD-10 F30-F39)*. In terms of *bipolar disorder (Harris, 1998)*:

- Electroconvulsive therapy
- Lithium - for acute mania
- Sodium valproate - for acute mania
- Neuroleptics

and, in terms of *depressive disorders (Geddes and Butler, 2002)*:

- Tricyclic & heterocyclic antidepressants
- Mono-amine oxidase inhibitors
- Selective serotonin reuptake inhibitors (SSRIs) & related drugs
- Continuation drug treatment (reduces risk of relapse)
- Electroconvulsive therapy
- Cognitive therapy - in mild to moderate depression
- Interpersonal therapy - in mild to moderate depression
- Problem solving therapy - in mild to moderate depression
- St John’s Wort - in mild to moderate depression
- Combining drug & psychological treatment - in severe depression

In addition, for each of the mental disorders listed above, a number of interventions are of “unknown effectiveness”, usually as a result of insufficient high quality research; this, therefore, highlights potential gaps in the literature that require further investigation.

2.3.4 The effectiveness of mental health services

It is also useful to briefly mention at this stage a scoping review undertaken by the NHS CRD of the effectiveness of mental health services which has linked evidence from systematic reviews with the recommendations from the National Service Framework (NSF) for Mental Health. This found that 36 good quality systematic reviews had been undertaken and that 8 were currently being prepared in the areas of mental health promotion and mental health service delivery. Few of these, however, were able to conclude that an intervention was effective or not. This was due primarily to the poor quality, or limited amount of primary research. The only two interventions, which could be considered to be effective from the included primary research, were **assertive outreach** and **community mental health teams**. The **care programme approach** was not considered to be an effective intervention. For all of the other areas of mental health

service delivery evaluated by the systematic reviews, interventions have been poorly evaluated (or not at all) in the primary research (Jepson et al, 2001).

There are still many areas of mental health service delivery interventions which have not been evaluated by systematic reviews, including: services targeting more accurate diagnosis and assessment of common mental health problems; interventions within hospital settings, 24-hour staffed accommodation; more accurate assessment of risk of imminent violence (to self and others); and interventions for carers of people with a mental health problem. Only some included outcomes such as user's social networks, user and carer satisfaction, social relationships and quality of life (Jepson et al, 2001).

2.3.5 Application of findings to a prison setting

The extent to which the findings of this overview can be applied to prisoners will be explored in more detail later on in this review. However, at this stage, it is important to briefly identify some of the potential problems of applicability within a prison setting of those interventions shown to be effective in the general population:

- The practical difficulties, for example, of interventions that require the involvement of non-prisoners, for example, family interventions for schizophrenia may not be feasible in a prison setting
- Problems of transferring community-orientated 'outcomes' to a prison setting (for example, success in improving social functioning in general population studies, has limited application to a prison)
- Omissions of interventions and outcomes that might be specific to a prison setting, eg anger management might improve functioning in a prison

These issues are discussed in more depth in section 5.1.

2.3.6 Overview

The main purpose for the inclusion of this brief overview of the known effectiveness of interventions for the major mental disorders in the general population was to provide a context for the systematic review of interventions used to treat mental health conditions within a prison setting (see section 3). Even within the general population, there is a large variation in both the quantity and quality of literature relating to each of the major mental health disorders prevalent in prisons. The greatest volume of high quality literature has, on the whole, been published on the most prevalent mental disorders found within prisons. However, there are exceptions to this; for example, there is currently very little strong evidence for the effective treatment of drug and alcohol abuse. The advent of national evidence-based guidelines in several of these areas should help to address this in the future, although it should be noted that a substantive intervention literature exists which has not yet been reviewed or formed into guidelines.

It is worth reiterating that the extent to which these findings can be applied to a prison setting remains largely unknown since the guidance to date has not addressed many of the specific prison-based complications, such as co-morbidity. Priorities for future research, therefore, appear to be:

- To investigate the applicability of interventions known to be effective within the general population to a prison setting

- To further investigate areas of particular difficulty within a prison population, such as co-morbidity.

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SECTION 3

REVIEW OF INTERVENTIONS FOR PRISONERS WITH MENTAL DISORDERS

SECTION 3: REVIEW OF INTERVENTIONS FOR PRISONERS WITH MENTAL DISORDERS

3.1 Introduction

There are major considerations to be taken into account when applying evidence of what interventions work in the general psychiatric population to prisoners with mental disorders. This review of interventions for prisoners is not therefore directly comparable with the overview of evidence for interventions for non-offender psychiatric patients.

Mentally disordered offenders (MDOs) *may* differ in important ways from the patients in the community with the same diagnosis and on whom the evidence is based. A major feature of the MDO population, both in prisons and forensic health care settings, is the prevalence of co-morbidity. For this population, problems tend not to come singularly and the pattern of a major mental illness or personality disorder and a substance misuse problem is not uncommon. The Office of National Statistics (ONS) survey of 1997 (see section 3.3.1 on page 23) found that no more than 20% of their sample had a single mental disorder and that between 12-15% of sentenced prisoners had four or five major mental disorders. Rates of co-morbidity were even higher in remand prisoners. Substance abuse accounted for a significant amount of the co-morbidity along with withdrawal symptoms, anxiety and depression.

Systematic reviews may often be based exclusively or predominantly on randomised control trials (RCTs), generally viewed as the “gold standard”. Most RCTs are explanatory trials, that is, they are designed to answer the question “does the treatment work?” under tightly controlled conditions. Participants in the trial tend to be “pure cases”, without co-morbidity, and the trials themselves frequently take place at centers of excellence rather than the location where the majority of the interventions are likely to take place. In addition, and depending on the intervention under investigation, it is an atypical patient who agrees to be allocated to a treatment at random. These factors must be taken into account when generalising from an individual RCT or meta-analysis of RCTs to patients in the community or prisoners with the disorder.

The prison environment is self-evidently different from the community environment and this, too, may impact on the efficacy of treatment. With very few exceptions, prisoners don't want to be incarcerated and although they can be grateful that treatment is being offered the real problem can be finding a quiet room where an intervention might be conducted.

Is the intervention to alleviate the disorder, to reduce criminality or both? As an example, treatments for substance misuse may address both intentions if the prisoners offending pattern is related to substance misuse. For the purposes of this review we do not included papers and reviews specifically focused on the treatment of criminal behaviour but have included research where reduction in criminality may be a secondary benefit to treatment of the mental disorder itself.

We should also bear in mind that the prison environment might enhance the effectiveness of interventions. Prisoners are more closely monitored than patients in the community and long-standing disorders may only be identified after the prisoner has entered the criminal justice process. In these circumstances the prison has an important role in offering treatments that may arrest or reverse further deterioration. The salutary experience of

being in prison may also encourage a minority of prisoners to reflect on their mental state and behaviour and accept therapy that they might otherwise reject in the community.

For these reasons it is vital that research is carried out on the effectiveness of treatment for mental disorders in the prison setting in addition to the evidence of effectiveness in the community population.

3.2 Method

3.2.1 Inclusion criteria

Reviews, overviews and single studies had to meet all the following criteria to be included in this review.

1. The paper must describe substantive results and not be an evidentially unsupported discussion or opinion paper.
2. Study participants must have been serving prisoners in either adult or juvenile prison facilities.
3. Study participants had to meet ICD-10 diagnostic criteria (or DSM-IV equivalent) for at least one of the following:
 - Mental and behavioural disorders due to psychoactive substance abuse (F10-F19).
 - Schizophrenia, schizotypal and delusional disorders (F20-F29).
 - Affective disorders (F30-F39).
 - Neurotic, stress-related and somatoform disorders (F40-F48).
 - Disorders of adult personality and behaviour (F60-F69) but excluding disorders of sexual preference and sexual development and orientation (F65-F66).
4. The treatments described must be for mental disorder(s) and not for offending behaviours.

3.2.2 Search Strategy

The search aimed to identify all relevant literature relating to interventions for mental disorders in prisons.

3.2.3 Sources

A wide variety of sources were consulted covering medical, nursing, psychological and social science literature, as well as 'grey' literature. The following 22 electronic bibliographic databases were searched:

1. Arts and Humanities Citation Index
2. ASSIA
3. BIOSIS
4. Caredata
5. C2-SPECTR, a trials register of the Campbell Collaboration, covering sociology, psychology, education and criminology
6. Cinahl
7. Cochrane Controlled Trials Register (CCTR)
8. Cochrane Database of Systematic Reviews (CDSR)
9. Database of Abstracts of Reviews of Effectiveness (DARE)

10. Embase
11. Health Management Information Consortium (HMIC)
12. Index to Scientific and Technical Proceedings
13. Medline
14. Mental Health Abstracts
15. NHS Economic Evaluations Database (EED)
16. NHS Health Technology Assessment (HTA) Database
17. PsycINFO
18. Science Citation Index
19. SIGLE
20. Social Sciences Citation Index
21. Social SciSearch
22. Sociofile

In addition, over 20 Web sites were consulted, covering current research and relevant organisations in the field. These included:

1. The Association of Chief Probation Officers
2. The Association of Prisoners
3. COPAC
4. Current Research in Britain (CRiB)
5. Department of Health
6. Dissertation Abstracts
7. Google
8. The Home Office
9. Index to Theses
10. Medscape
11. MIND
12. NACRO
13. The National Association of Probation Officers
14. National electronic Library for Mental Health (NeLMH)
15. National Research Register (NRR)
16. NHS Centre for Reviews and Dissemination (CRD)
17. Regards
18. Research Findings Register (ReFeR)
19. Rethink
20. SchARR Library catalogue

Finally, the reference lists of relevant papers were checked for additional references, and key researchers and organisations were contacted directly.

3.2.4 Search Terms

A combined free-text and thesaurus approach was used. 'Population' search terms (e.g. prison(s), prisoner(s), remand, offender(s), jail(s), criminal(s), detention, etc.) were combined with 'mental health' terms (e.g. mental health, mental illness, mental disorder, forensic, psychiatric, etc.)

3.2.5 Search Restrictions

No study or publication type restrictions were applied at the search stage. However, searches were restricted to 1983 onwards to take in to account relevant legislation, such as the Mental Health Act 1983. Searches were also restricted to English language papers, as the focus of the review was on mental health services in prisons in the UK.

A sample Medline (OVID) search strategy is given at **Appendix B**.

3.2.6 Assessment of quality: reviews

Reviews were assessed using the Database of Abstracts and Reviews of Effectiveness (DARE) criteria for inclusion of reviews. Briefly, these criteria require that the review's inclusion/exclusion criteria are related to the primary studies that address the review question and that there is evidence of a substantial effort to search for all relevant research e.g. stated computer search strategy. In addition, the review must meet two out of three of the following: the validity of the included studies are adequately assessed; sufficient details of the included studies should be presented; the primary studies are summarized appropriately.

3.2.7 Assessment of quality: individual studies

While it is possible to use criteria such as DARE to assess the quality of reviews, assessing the quality of a heterogeneous range of studies is more problematic. Criteria are available for separate research designs but there are few criteria that are available to measure the quality of a study over a range of designs. Reviews of research in the general population may well limit the scope to one design, to the "gold standard", the RCT. It then becomes possible to equitably quality score all studies with a single set of criteria. However, for reasons already discussed and because the RCT requires informed consent and compliance by participants this design may be particularly problematic in a prison setting we have chosen not to limit the evidence to any one design. We have also chosen not to use the different quality criteria for different designs as there is no absolute 'yardstick' by which all research can be measured. We have chosen instead to categorise the design by the hierarchy in the table below (Sutton et al (1998) based on Deeks et al (1996)) and describe briefly the limitations and problems of each study within the Table of studies

Hierarchy of evidence

I Well-designed randomised controlled trials
Other types of trial: II-1a Well-designed controlled trials with pseudo-randomisation. II-1b Well-designed controlled trials with no randomisation.
Cohort studies: II-2a Well-designed cohort (prospective studies) with concurrent controls. II-2b Well-designed cohort (prospective studies) with historical controls. II-2c Well-designed cohort (retrospective studies) with concurrent controls. II-3 Well-designed case-control (retrospective) study. III Large differences from comparisons between times and/or places with and without intervention (in some cases these may be equivalent to level II or I) IV Opinions of respected authorities based on clinical experiences; descriptive studies and reports of expert committees.

3.2.8 Analysis of studies

If the data allows, subgroup analysis by gender and ethnicity will be carried out. Where six or more studies have unity of participants, interventions and outcomes meta-analyses and funnel plots (to investigate publication bias) will be carried out.

3.3 Summary of results by diagnostic category

The paucity of included studies meant that it was not possible to carry out any subgroup analyses, meta-analyses or funnel plots.

3.3.1 Mental and behavioural disorders due to psychoactive substance abuse

Knight et al (1997) reported a significantly lower rate of substance misuse, post sentence in prisoners who had participated in a therapeutic community programme compared to a control group who had not. Though, strictly speaking, outside the remit of this review the study also contained a sub group of the treatment cohort who had also participated in a post release programme. Participants who had undergone only the prison programme were no different from the control group in recidivism. However, participants who had undergone both programmes showed significantly less recidivism. The authors state that in all key demographics except one the controls and treatment participants were the same. The exception was that the treatment group had higher rates of previous drug offences, which enhances the results.

The study reported by Baldwin (1990) was an RCT of an Alcohol Education Course for young offenders with a self-reported alcohol problem and a history of alcohol related offending. Promising results are reported of better outcomes, post release, in both drinking habits and attitudes and offending in the treatment group compared to the controls. However, the study is underpowered and the quality of reporting of methodology is poor.

Prendegast (2002) was interested in the impact of prisoner perceived coercion to take part in a therapeutic community treatment for drugs and/or alcohol abuse. In what appears to be an adequately powered study there was no significant difference in change in psychological function between participants who perceived themselves as taking part voluntarily and those who perceived themselves as being involuntary participants.

3.3.2 Schizophrenia, schizotypal and delusional disorder

Condelli et al (1994) and Condelli et al (1997) report a large scale study of the impact of the New York State Intermediate Care Programme on a sample of prisoners with mental disorders, of which the largest single diagnostic group was schizophrenia (57%). The study found a post treatment decrease in serious behaviour, suicide attempts, reduction in disciplinary action, reduction in crisis care intervention, seclusion and hospitalisation. There were no significant differences, before and after, for serious infractions, loss of privileges, "keep lock" and emergency medications. The major problem with this study was the absence of any control group that means that it is not possible to attribute the positive findings to the treatment alone. The participant's behaviour and symptoms might have improved, over time, without interventions or with standard care available in the prison setting.

Conroy (1990) studied the outcome for a cohort of prisoners with serious mental illness being treated by a short-term acute care model service. The study showed improvements or stabilization of mental health, social skills and reduction in lock up status. However, the

description of the interventions and reporting of statistics are lacking in details and, once again, this is a study without controls.

Foley et al (1995) carried out a small, uncontrolled study of prisoners being treated with Clozapine. Five of the participants were diagnosed with schizophrenia and one diagnosed with schizoaffective disorder. Four of the prisoners also had diagnoses of Axis II disorders. The outcome measure was infraction record and all six participants showed an improvement with treatment. However, the small scale of the study and the lack of control group compromise this result.

Lovell et al (2001) studied the results of 448 prisoners with a range of severe mental disorders, including schizophrenia, who had undergone the McNeil Programme which includes counselling, medication, case management and psycho-educational classes based on cognitive behavioural principles. Significant reductions in symptoms were found as well as improvement in work or school assignments. However, again, these results are compromised by the lack of a control group.

Melville & Brown (1987) carried out an uncontrolled before and after study of an education programme on schizophrenia. The participants were 31 prisoners with a diagnosis of schizophrenia and who were taking anti-psychotic medication. The programme addressed definitions of schizophrenia, description of the disorder, what is known or speculated about the origins of schizophrenia and treatment. Post-test results showed a significant improvement in the patient's knowledge of their own diagnosis, symptoms, causes of schizophrenia, treatments and medications and attitudes to treatment.

3.3.3 Affective disorders

We found no specific research on interventions for prisoners with affective disorders but Condelli et al (1994); Condelli et al (1997); Conroy (1990); and Lovell et al (2001) research all contained, or were likely to have contained, a minority of participants with affective disorders.

3.3.4 Neurotic, stress-related and somatoform disorders

No research identified.

3.3.5 Disorders of adult personality and behaviour

Lees et al (1999) systematic review lends cautious support to the view that therapeutic communities do lead to change in persons with personality disorders. However, they also argue for more research in the area.

Rice et al (1992) study point to the divergent impact of therapeutic community approach. Prisoners with low or normal Hare Psychopathy scores do appear to benefit from such regimes but the author's raise the alarming possibility that therapeutic communities may increase recidivism in Hare "psychopaths".

3.3.6 Other categories

Bird et al (1999) & Caraher et al (2000) describe an evaluation of a postcard and leaflet campaign promoting mental health in incarcerated young offenders. The researchers used qualitative methods to measure awareness of the purpose of the campaign, evaluation of the impact of the material and the style of the material by prison staff and inmates.

Participants showed a lack of clarity about the purpose of the campaign and there were a number of criticisms of the material used.

3.4 Discussion

The paucity of research on interventions for prisoners with mental disorders is disappointing. What evidence exists is frequently of a poor quality and poorly reported. Only one study was an RCT and only two additional studies presented results from a concurrent control group.

The absence of RCTs might, in part, be attributed to the difficulty of carrying out random studies in a prison setting. RCTs require full consent and co-operation from participants in a way that retrospective prison record studies of matched groups may not. Consent and co-operation may prove particularly problematic with participants who are detained against their will or a population who may feel under duress to participate in experimental or pilot programmes.

However, this does not explain the number of studies where there was no attempt to identify a non-randomised control cohort, particular in those studies where the information was based largely or wholly on standard prison records. Elsewhere (Ferriter and Huband (2002)), the writer has argued that non-random controlled studies may prove an acceptable surrogate for randomised controlled trials and that the problems associated with randomisation should be weighed against the advantage when choosing the design of the study. However, if RCTs are impossible in a particular setting, this should not be used as an excuse to carry out uncontrolled studies. Without adequate controls, be they randomised or matched, it is impossible to say whether any treatment effect is as a result of change or maturation over time or the treatment, and non-controlled intervention studies are of little or no scientific value.

As stated above, it cannot be assumed that the characteristics of the mentally disordered prison population are the same as the community psychiatric population. The evidence of effectiveness of interventions in the community may be a starting point but it is not axiomatic that the effects of interventions in the mentally disordered prisoner population will be the same. There is a clear clinical and ethical need to carry out more intervention outcome research with this special population.

3.5 Overview

It is a salutary finding that there is little high quality research that has addressed the effectiveness of interventions for prisoners with mental disorders. Randomised controlled trials, the gold standard for such research, are not easy to conduct in prisons where consent might be difficult to obtain. Co-morbidity might play a part in compromising results from this type of study. There would appear to be two main tasks to address. First, to identify the results of effectiveness research in the general population that might be relevant for prisoners (see section 4). Second, to consider different approaches (such as case control designs) in priority areas of need for prisoners with mental disorders.

3.6 Recommendations

- Identify the effectiveness research that is likely to be relevant for prisoners with mental disorders that is derived from general population studies. This would include pragmatic studies of participants with co-morbidity.
- Consider in detail the organisational commitment and incentives that would need to be in place for the conduct of RCTs. As in the general population researchers have

a major task in educating potential participants in the need for research and also why specific research designs might be used to answer specific questions. In addition there is a need to also educate those charged with the care of prisoners so that both staff and prisoners are motivated to facilitate research of potential benefit to the participants and to the functioning of the prison service.

- Agree that in a number of instances, other designs (especially those that employ case-controls) will provide an acceptable surrogate to the use of RCTs where RCTs are either not feasible or might not be the best design to answer the research question. There are quality checklists available for non-random designs that can be used to provide guidance and reporting of such studies.
- There is a clear need for specific treatment outcome studies to be carried out on prisoners with mental disorders. There is also a need to recognise that prisoners represent a significant minority group of the mentally disordered population. Where feasible, general treatment outcome studies in mental health should contain cohorts drawn from the mentally disordered prison population.

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SECTION 4

REVIEW OF SERVICE DELIVERY AND ORGANISATION FOR PRISONERS WITH MENTAL DISORDERS

SECTION 4: REVIEW OF SERVICE DELIVERY AND ORGANISATION FOR PRISONERS WITH MENTAL DISORDERS

4.1. Introduction

As has become apparent, the literature search into the mental health of prisoners revealed two distinct areas of research. The first is concerned with therapeutic interventions and strategies for individual prisoners (Section 3). The second covers the broad area of service delivery and organisation. Whilst the latter is important for promoting, maintaining and restoring the mental health of prisoners, research in this area is far exceeded by published work in the area of service configuration.

A number of reasons might account for this. First, perhaps the greatest factor pushing reform of mental health care in prisons is the rapidly increasing numbers of prisoners with mental health problems throughout all parts of the criminal justice system (Singleton et al, 1998). Second, interventions can only be used if mental illness is identified so there must be a system of assessment and identification of mental illness as early as possible so that appropriate treatment can be instigated (Grubin et al, 1989). Third, the ill-effects of any closed institution have been recognised at least since the 1960s (e.g. Goffman, 1960). Within prisons, the discipline and loss of freedom exacerbate these effects; there is clearly a need to reduce the hazards of the prison environment and optimise the mental health of all prisoners (Smith, 1984). And finally, repeated reports have emphasised the lack of skills, resources and appropriate culture within prisons to provide adequate mental health care (e.g. Reed Committee, 1991).

Given this - far from complete - list of challenges, it is not surprising that recent prison health policy has prioritised changes and improvements at a system-wide level over the development of interventions for selected individuals (Anon, 2001). This has, at least in part, led to a proliferation of papers reporting recommendations, guidelines and standards for the identification and management of mentally ill prisoners as a group (see list of excluded papers, 4.7.6 & 7). Others have gone one step further and reported on the implementation of policy in local services (see 4.7.3).

This section of the review is concerned with the identifying, reviewing and summarising research into aspects of service delivery and organisation in order to make recommendations for the focus and method/methodology of future research in this domain.

4.2 Method

4.2.1 Search Strategy

The search aimed to identify all relevant literature relating to mental health services in prisons.

4.2.2 Sources

A wide variety of sources were consulted covering medical, nursing, psychological and social science literature, as well as 'grey' literature. The following 22 electronic bibliographic databases were searched:

23. Arts and Humanities Citation Index
24. ASSIA
25. BIOSIS
26. Caredata
27. C2-SPECTR, a trials register of the Campbell Collaboration, covering sociology, psychology, education and criminology
28. Cinahl
29. Cochrane Controlled Trials Register (CCTR)
30. Cochrane Database of Systematic Reviews (CDSR)
31. Database of Abstracts of Reviews of Effectiveness (DARE)
32. Embase
33. Health Management Information Consortium (HMIC)
34. Index to Scientific and Technical Proceedings
35. Medline
36. Mental Health Abstracts
37. NHS Economic Evaluations Database (EED)
38. NHS Health Technology Assessment (HTA) Database
39. PsycINFO
40. Science Citation Index
41. SIGLE
42. Social Sciences Citation Index
43. Social SciSearch
44. Sociofile

In addition, over 20 Web sites were consulted, covering current research and relevant organisations in the field. These included:

21. The Association of Chief Probation Officers
22. The Association of Prisoners
23. COPAC
24. Current Research in Britain (CriB)
25. Department of Health
26. Dissertation Abstracts
27. Google
28. The Home Office
29. Index to Theses
30. Medscape
31. MIND
32. NACRO
33. The National Association of Probation Officers
34. National electronic Library for Mental Health (NeLMH)
35. National Research Register (NRR)
36. NHS Centre for Reviews and Dissemination (CRD)
37. Regards
38. Research Findings Register (ReFeR)
39. Rethink
40. ScHARR Library catalogue

Finally, the reference lists of relevant papers were checked for additional references, and key researchers and organisations were contacted directly.

4.2.3 Search Terms

A combined free-text and thesaurus approach was used. 'Population' search terms (e.g. prison(s), prisoner(s), remand, offender(s), jail(s), criminal(s), detention, etc.) were combined with 'mental health' terms (e.g. mental health services, mental health, mental illness, mental disorder, forensic, psychiatric, etc.) A sample Medline (Ovid) search strategy is provided in **Appendix B**.

4.2.4 Search Restrictions

No study or publication type restrictions were applied at the search stage. However, searches were restricted to 1983 onwards to take in to account relevant legislation, such as the Mental Health Act 1983. Searches were also restricted to English language papers, as the focus of the review was on mental health services in prisons in the UK.

4.2.5 Inclusion/Exclusion Criteria

Three over-arching schemes were used to screen papers on health care/service organisation and delivery to people with mental illness in prisons: quality of the evidence, relevance to the review and theoretical framework. Given the breadth of subject matter, the various theoretical and philosophical approaches and the mixed methods encountered, the criteria developed within these schemes are necessarily loose. Papers were, however, selected independently by two reviewers, and where differences in opinion about inclusion and exclusion were observed, these were resolved through discussion.

4.2.6 Quality of evidence contained in the study

In order to focus on research rather than opinion, it was determined that all selected references must report findings rather than the author(s)' opinion. Included studies therefore take the form of research, inquiry, investigation or study. Commentary or simple (not replicable) description of local innovation are excluded (see Fulop et al 2001), but a full list of excluded papers is given as a guide to possible areas of good practice.

Once a review extends its scope beyond randomised control trials, the assessment of the quality of the evidence inevitably becomes more complex and more reliant on informed researcher judgement (Murphy et al 1998). This is particularly challenging in reviews of service delivery and organisation reviews because of the wide range of research methods and approaches encountered. Quality criteria are not, therefore, used primarily to exclude poorest quality evidence, but to assess the strength of evidence and the weight that findings should be given in the synthesis and conclusions of the review (Mays et al 2002).

Although hierarchies of evidence are available for the assessment of quantitative health service research, this is not appropriate for qualitative research. There are a number of questions that can be asked to help judge the 'validity' and 'reliability' of much qualitative research (see Popay et al 1998; Mays and Pope 2000; Blaxter 1996), but these have drawbacks in the present context. First, there are no specified criteria to be met – the reviewer must ultimately make a judgement about inclusion. Second, they generally refer to qualitative research below the level of the 'organisation', that is, judgements are made with reference to specific 'subjects' and subjective experiences, rather than with reference to the structures and processes across and between organisations that are the focus of the present review. Yet again, this demands a judgement of research quality by the

reviewer. In the present review, the task was further complicated by the paucity of rigorous qualitative research on health care delivery and organisation for mentally disordered offenders in prison: if published criteria were used to select studies of adequate quality, almost all work published in this field would be excluded.

For the purpose of this review, it was therefore decided to include all self-proclaimed research studies, but to give some details about method so that the final synthesis could accord appropriate weighting to studies with clear definitions of the service evaluated, use of an appropriate method, and acknowledgement of limitations and error.

4.2.7 Relevance to the Review

All studies included were specifically concerned with issues affecting the delivery of health services to people with mental health problems in prison. This criterion excluded studies concerned only with physical/ general healthcare, studies of mentally disordered offenders in other settings, studies of prisoners who do not have defined mental health problems, and studies concerned only with re-offending rates. Studies conducted outside of western cultures were also excluded, as further work would be necessary to assess generalisability to the UK.

4.2.8 Theoretical orientation of the study.

Within qualitative research, theory has a pivotal role in the interpretation of data. The extent to which researchers have sought to link their work to wider theoretical frames is a key aspect of many schemes developed to assess the quality of qualitative research. Although papers based solely on theory do not strictly fit the inclusion criteria for this review, they have been included to develop a theoretical framework within which to explore the relationships between findings from different studies, and to provide possible methodologies for future research.

Summary of inclusion/exclusion criteria for studies of service delivery and organisation

Over-arching Scheme	Inclusion and Exclusion criteria
Quality of evidence contained in the study	Include studies that present research, inquiry, investigation or study (exclude opinion, commentary and simple descriptions). Include all relevant studies, but give indication of clarity of definitions of the service/subjects studied, comment appropriateness of method, and acknowledgement of limitations and error.
Relevance to the Review	Include only studies specifically concerned with issues effecting the delivery of mental health services to people with mental health problems in prison. Exclude studies conducted outside of western cultures.
Theoretical orientation of the study	Conceptual analyses and theoretical papers are included in the final list of research studies to inform the theoretical framework for synthesis of findings, and to inform future research methodologies.

4.2.9 Categorisation of References

Given the breadth of the area reviewed, all studies were categorised primarily according to subject area. Where studies cover more than one category, they have been written up in that which they fit most closely. (Numbers in brackets indicate numbers falling into each category).

4.2.10 Included papers (72)

- Theoretical papers (9)
- Therapeutic Communities (5)
- Review papers (12)
- Evaluation (11)
- Audit (4)
- Pathway research (1)
- Needs Assessment (3)
- Organisational research into models/systems (2)
- Screening for mental health problems (9)
- Roles/Training of different professionals/multi-agency working (10)
- Service delivery for specific groups of prisoners with mental health problems (6)

4.2.11 Excluded papers (108)

- Descriptions of specific groups of MDOs without generalisable implications (5)
- Research into MDOs that does not refer to prisoners OR to mental illness (18)
- Service descriptions– some examples of good practice that may be useful (12)
- Opinion/viewpoints/commentary (25)
- Policy papers (12)
- Guidelines/standards/recommendations that are not evaluated (14)
- Descriptions of problems of current system, needs of mentally ill in prison (13)
- Rights of prisoners (4)
- The Law and Mentally Disordered Offenders (6)
- International studies (problems generalising to UK) (12)

4.3 Results

The results are presented by category with an overview of the issues raised in papers included for that section (for more detail about specific studies, see descriptions given for each paper in 'Included Papers' Section 4.6). Each category is followed by a list of the most obvious gaps in the research in that area and/or implications for future research.

A list of references of all included papers is given with a brief description of all key papers. This is followed by a list of excluded papers with a brief summary of selected papers.

4.3.1 Theoretical Papers

A number of papers provide sophisticated theoretical and conceptual analysis of services for prisoners with mental health problems. They touch on issues that are explored in more depth in the research reported in subsequent categories, but place these in a broader sociological context. Many are underpinned by debate about the function of prisons: rehabilitative and restorative vs. for punishing and protective. The case for the latter (most frequently associated with 'the criminal justice system') lies in the minimisation of risk, whilst arguments supporting a more rehabilitative regime (mainly put forward by 'the mental health system') are associated with decreasing levels of security. Within contemporary society, which is increasingly concerned with avoiding risk, there is enormous pressure, fed by the media, to punish 'mad criminals' and incarcerate them indefinitely to guarantee maximum security. Despite the infrequency of a person with serious mental illness committing a serious offence, the publicity afforded such cases has created a generalised terror of criminals with mental illness among the public at large. As a consequence, the discrimination suffered by people with a criminal history, or a diagnosis of mental illness is magnified for offenders who have mental illness within society as a whole, within the criminal justice system and within mental health services. Dvoskin and Patterson (1988) make the point that 'community acceptance of mentally disordered offenders depends upon the forensic system's ability to manage the most disturbed individuals'.

Yet there remains the view among these theoretical papers that problems in the support of mentally ill prisoners lie, in the main part, in the separation of two approaches working within the same system (Freeman and Roesch, 1989; Kunjukrishnan and Bradford, 1985; Hylton, 1995). Mental health and criminal justice services exist in 'parallel universes' (Cruser and Diamond, 1996) with contradictory values and goals, which are reflected in training, day to day practices and cultures. This separation of mental health care as a distinct entity within the criminal justice system means, in short, that MDOs are seen quite simply as offenders who happen to have mental illness. This leads to mental health care in prisons which is:

- a) seen as quite separate from the day to day running of the prison; something independent of the environment (even though evidence suggests that prisons are hazardous to physical and mental health);
- b) too often linked to severity of crime (the more serious the offence, the more likely they are to receive care in a special hospital);
- c) more likely to be ignored if problems are minor and/or do not interfere with the smooth running of the criminal justice system (e.g. depression, or mental illness in older prisoners);
- d) frequently conceived as addressing one homogeneous group. Assumptions of homogeneity have some validity in terms of the socio-demographic characteristics of prisoners (who are predominantly young, male and socially disadvantaged), but this preponderance can lead to the neglect of minority groups e.g. women and older people with fewer services available to meet the specific needs of individuals within these groups than are available for working age men.

The dis-connection of 'care' and 'custody' within prison systems inevitably effects the nature of research into prison mental health such that the *specific* effects of mental illness in a prison environment are inadequately addressed. For example, whereas difficulties

encountered in a community setting may be lack of structure to the day, problems with daily living such as paying rent, buying food, using public transport, finding employment, none of these are relevant in a prison setting. Within this environment, difficulties may be met in coping with boredom, structure, discipline, close contact with others and exploitation by other prisoners. Similarly, there is no research that directly assesses the effects of the prison environment upon mental health.

Moreover, there are a number of factors which suggest that, rather than those who are *not* mentally ill receiving one ('criminal justice') approach, and those who *are* mentally ill receiving another ('mental health') approach, all prisoners may well benefit from one integrated system with a shared philosophical basis and culture. They are not, after all, two distinct populations: causes of crime are similar to causes of mental illness; predominant populations of offenders share many socio-demographic characteristics with predominant populations with serious mental illness; and, a high proportion of prisoners who have mental health problems remain in the main prison - not all are identified, and of those who are, not all are treated in special healthcare units.

Not surprisingly, these theoretical papers, the vast majority of which are written by advocates of a 'mental health' approach, feature a common plea for a humane and respectful culture that promotes mental health, prevention of mental illness and reduction in psychiatric relapse among prisoners.

Three papers (two of which are by the same author and linked Wolff, [2002a,b]), provide frameworks for understanding the organisational culture of prison mental health care. Cruser and Diamond (1996) provide a potentially useful model for understanding the conflicts between value bases of the two competing systems and for describing changes in the system. This model describes the development and maintenance of the personal values of staff within the cultural and social policy context of either the health or the criminal justice system. The authors argue that these personal values culminate in opposing collective unconscious value systems which, in the case of prisons, serves to block improvements and change in the provision of mental health care. The authors use this model to illustrate gradual convergence of values among different workers in a prison undergoing change.

Wolff (2002a), however, is pessimistic about the prospect of improving the care of mentally disordered offenders through the integration of systems. She locates the problem in the wider social and political system: fragmentation of funding, inconsistencies and inadequacies in the funding system leads to rivalry, competition and 'passing the buck' rather than co-operation and collaboration. She cites the failure of previous attempts of multi-agency working in community mental health in the US to support her argument that public organisations are intransigent and inflexible.

In a second linked paper, Wolff (2002b) extends this perspective in a description of the various (failed) incremental integration approaches adopted by the UK government in recent years. She proposes a 'single ownership model' of integration as an alternative strategy, which minimises costs and maximises integration potential. This model merges the responsibilities and functions of separate entities under a common organisational structure. A stable cross-systems infrastructure is considered appropriate for MDOs because the complexity of their needs requires an inter-related response from multiple services, which is co-ordinated from one holistic entity. Wolff provides an extensive rationale for this holistic approach, and clear guidelines for its function and mandate. She concludes (p242) 'Collective responsibility for those who are the least advantaged and for whom the system and service boundaries are the thickest, and the clinical and social risks

are the highest, offers the greatest hope for achieving the promise of the community care model ...'.

Other authors (Wardlaw, 1989; Hylton, 1995; Kunjukrishnan and Bradford, 1989) have sought solutions at a direct service provision level rather than at a structural level. They have reviewed the organisation of distinct services for mentally disordered offenders within the prison and healthcare system. When all advantages, disadvantages and trade-offs are considered, they conclude that the optimum solution lies in a range of different services being available at a local, regional and state-wide/national level in order to meet the heterogeneous needs of mentally disordered offenders.

Summary/Research priorities

- *Identify factors that promote organisational ownership of mental health in prisons.*
- *Organisational research into integrating cultures and values of 'criminal justice' and 'mental health' services in prisons.*

4.3.2 Therapeutic Communities

A number of studies describe the development and operation of 'therapeutic communities' within prisons (Smith, 1984; Light 1985, Cullen 1988). Although these relatively dated papers constitute 'service descriptions' rather than research, they are included to illuminate regimes that have worked towards the integration aspired to in the theoretical papers (above). Theorists have discussed the problems of a system in which the management of prisoners is separated from their care, and proposed a shared humane, respectful and supportive culture. This is consistent with the therapeutic regime in therapeutic communities provided for small groups of prisoners with particular difficulties. Although these units do not appear to have demonstrated a 'therapeutic' effect in terms of prisoners' mental health (see previous chapter – review of interventions), they have facilitated the management of prisoners who were otherwise disruptive and difficult to manage. And it might be suggested that they have gone further than this, enabling some prisoners who were previously channelling their energies into sabotaging the system, to use their skills more constructively in the production of art and literature.

Summary/Research Priorities

- *Evaluate special units that incorporate the principles of therapeutic communities in terms of a) the organisational features that facilitate and hinder an integrated care and custody culture; b) impact of integrated culture on prisoner mental health, social functioning, behaviour, and staff morale and values.*

4.3.3 Reviews

There have been no systematic reviews of service delivery and organisational issues for mentally disorder offenders in prison over the time period of this review. The most comprehensive review to date has been published by the NHS Centre for Reviews and Dissemination. They provide a 'broad' review of the literature on the health and care of mentally disordered offenders (1999) but given the breadth of the subject area and the limited resources available focused on only 7 key areas. These did not include issues relating to service models and organisational approaches. However, drawing on gaps in the literature, the authors make specific recommendations for further research to strengthen the 'academic' and 'evidence' base, including further, more focused, reviews.

One further review focusing on the broad area of research into mental health care in prisons (Shaw, 2002) confines itself to ongoing research studies that have received funding, are registered on the National Research Register (NRR), or have been approved by the prison ethics committee. This identifies only one study in the area of service delivery and organisation, one focusing on multi-disciplinary team working, and one on staff training (none yet published). Not surprisingly the recommendations for further research are broad: more evaluation of service delivery systems, shared information systems and novel services.

A number of papers, which themselves claim to be reviews, provide 'personalised' updates on the state of mental healthcare in prisons (Eastman, 1993; Jemelka et al, 1989; Lucas, 1999; Lamb et al, 2001) with emphases reflecting the interests of the authors. Overall, these demonstrate that efforts to improve the mental health of prisoners have placed an emphasis on service systems rather than individual interventions. Yet the efforts to articulate 'what needs to be done' do not appear to be met by accounts of actually 'doing it'.

As evident in the number of excluded papers providing commentary/opinion with recommendations for practice, the literature is replete with recommendations, guidelines and standards with very few studies attempting to assess the effectiveness of these statements, nor to describe empirically their implementation.

Summary/Research priorities

- *More focussed and systematic reviews of the research into the needs and/or /effective treatment and management of clearly specified groups or prisoners with mental disorders.*
- *Reviews have culminated in many lists of guidelines, recommendations and standards. Further research is necessary to determine:
Can these be implemented?
Are they being implemented?
Do they make a difference?
Is their implementation related to prisoner well-being, staff satisfaction, better co-ordination etc?*

4.3.4 Evaluation of Services

Studies that use routinely collected data to report effectiveness of a specified programme/system of mental health care have been categorised as evaluations rather than research. Descriptions of innovative services with no assessment of effectiveness have been excluded.

Evaluations of local innovations may provide models for others to follow. For example, in a programme to implement the CPA in one prison, Rapaport (1998) reports on the development of a shared protocol, a new information system development, and staff training across 6 NHS Trusts resulting in better tracking and communication. Weaver et al (1997) describe the development of a dedicated service for male remand prisoners providing effective assessment of mental health problems and transfer to appropriate care; Bannerjee et al, (1995) also describe a system of mental health assessment and appropriate transfer that provided significant improvements over other similar services.

Common components of effective programmes appear to include the development of clear local policy/guidelines, collaborative working with local health care services, and training for all staff involved. Generalisability of these local evaluations cannot, however, be

assumed: every prison is different in population, culture, organisation and practice, and the availability of appropriate NHS beds varies between Regions.

Summary/Research priorities

- *Development of prison-specific measures for routine use (adaptation of HoNOS?)*
- *Research into adequacy of mental healthcare for those assessed as 'high risk' at screening.*
- *More systematic local evaluation, giving details of input and process (to allow replication) and using selected outcome measures (not only routinely collected data).*

4.3.5 Audit of Services

Two studies have compared practice against existing guidelines. In the first study (Robbins, 1996) this proved difficult, as service standards were not available. Although Local Authorities were working towards Reed Review targets, progress was slow, the infrastructure and information systems were inadequate and training was not targeted. Although Reed and Lyne's (2000) study had clearer guidelines to compare against, prison mental healthcare systems fell well below expectations. The questions remain: is it possible to implement given guidelines, and if they are implemented, do they have an impact on prisoners' mental health?

Summary/Research priorities

- *Studies of process of implementing given guidelines*
- *Effect of implemented change on prisoners' mental health*

4.3.6 Pathway research

There is only one published study into the pathways of care of prisoners with mental health problems. Porporino and Motiuk (1995) compared 36 prisoners with psychosis with 36 non-disordered offenders in a similar situation. Mentally ill inmates were less likely to get early release on full parole, and when released, were more likely to have their supervision revoked despite the fact that offenders in the non-disordered group were more likely to commit a new offence. This is a useful study, which suggests that even within the prison population, mental illness is the source of discrimination and further exclusion.

Summary/Research priorities

- *More research into individuals' pathways between prisons, healthcare services and discharge*

4.3.7 Organisational Research

Only two studies were identified that take an explicitly 'organisational approach' to the study of 'jail' mental health programmes and both were undertaken by the same research team (Morrissey et al 1984; 1983). These studies tackle questions related to effectiveness in organisational terms, rather than the effectiveness of a programme for individual prisoners' mental health. The research provides valuable insights into the influence of contextual factors, the complexity of the system as a whole, and the futility of seeking a

single ideal solution. Different models suit different circumstances, and every model of service delivery has advantages and disadvantages. Findings appear to suggest that organisational or inter-organisational research may provide a fruitful path towards understanding contextual influences on prison mental health programmes and raising awareness of the trade-offs associated with different models.

Summary/Research priorities

- *Identify range of potential models of mental health service delivery in the UK.*
- *Identify the factors associated with the success of different models (eg agencies involved, location and accessibility of various providers, size of prison, socio-demographic characteristics of area).*
- *Explore relationship between models of service delivery and prisoner outcome.*
- *Develop organisational research methods to determine factors effecting organisational 'culture' and effect of 'culture' on prisoners' mental health.*

4.3.8 Needs Assessment

Needs assessment is always complicated by the problems beset in distinguishing 'need' from 'problem', or 'need' from 'want'. And – perhaps particularly in the case of prisoners – different stakeholders have contradictory views on how need should be defined. Cohen and Eastman (2000) provide a useful analysis of needs assessment for mentally disordered offenders with an emphasis on the notion of need as 'ability to benefit'. They do not, however, arrive at any firm conclusion. In assessing need, they conclude, the aims of the exercise will determine optimum method and for this reason purchasers need to be clear about level (individual or aggregate) and type (e.g. group of MDOs) of data they require.

In a second paper, these same authors examine ways of measuring the extent to which 'needs are met' – that is, the measurement of outcome in mentally disordered offenders. As with any group whose needs are multiple, complex and fluctuating, outcome measurement is fraught with difficulties. Cohen and Eastman (1997) present a model for evaluating services in terms of input, process and outcome as one way of overcoming the practical, theoretical and ethical difficulties of conducting randomised trials in prisons.

Patrick and colleagues (2000) describe the use and effect of the Health Needs Assessment Schedule in developing services at Belmarsh prison. The schedule (described in excluded papers section) has been designed to enable a team to identify key areas for improvement and set goals and priorities for improving their services. In this account it identified subtle areas for improvement (such as prisoners taking control of their own health) as well as more concrete goals (such as staff re-profiling). Although the paper describes the development of an action plan, it does not report on the implementation of that plan.

The absence of any contribution from prisoners themselves in the definition of 'need' is notable. If prisoners' own views of their needs to improve mental healthcare were known, this may well inform services which are more accessible, acceptable and effective.

Summary/Research priorities

- *Development of an indicator of need from the perspective of prisoners using mental health services.*

- *How do different stakeholders' perspectives of needs of prisoners with mental health problems differ? What effect does this have on the support that different professional/provider groups provide?*

4.3.9 Screening for mental disorders

A number of studies have established that the detection of serious mental illness by criminal justice staff is currently inadequate. The speed of the criminal justice process, from arrest, charge, first court appearance and custodial remand, can be so rapid that a person's mental disturbance can go undetected (Fazel et al, 2001). All inmates need early assessment, but there is no consensus about the best tools, methods, staff or timing of this assessment and current screening practice appears to pick up only 25-33% prisoners with serious mental illness. Current screening practice is inadequate in terms of environment, skills of assessors and subsequent referral for treatment (Birmingham et al, 2000).

Screening instruments have been developed in the US and the UK. The Referral Decision Scale (developed by Teplin and Schwartz 1989) has been tested in a variety of situations, it has high levels of sensitivity, but also high levels of specificity – being focused on people with severe psychotic and affective disorders. More recently the Health Screening Questionnaire has been developed in the UK to detect a broader range of mental and physical health problems that require immediate treatment. It aims to operate as a triage, with an additional, full health assessment taking place during the first week. This has a higher sensitivity rate of 90%, but lower specificity (i.e. generates more false positives). It requires specific training which takes into account the particular needs and possible behaviour of prisoners that might skew findings. It has been tested in 6 male remand prisons (Grubin et al, 1999) and in two women's prisons (Grubin et al, 2000) with high levels of success in identifying mental health problems.

Questions remain about the mental health of prisoners who are not picked up at initial screening: How should their problems be identified? Is regular screening necessary? Also, what are the best tools for assessing the specific mental health problems of prisoners? There is little information about the appropriateness of existing norms of assessment schedules when applied to the prison population. A number of studies focus on establishing the validity of instruments in a prison setting (Gallagher et al, 1997; Wang et al, 1997; Boothby and Durham, 1999). Most questionnaires need further development to render them completely appropriate for a prison population (e.g. Beck's Depression Inventory (BDI) question on 'feeling in need of punishment, or questions about believing you are being plotted against).

Summary/Research priorities

- *Continued evaluation and development of reception health screening questionnaire*
- *Effect of large scale training of health care staff to use screening questionnaire (on beliefs, behaviour, culture)*
- *Further development of measures to assess specific difficulties of prisoners and adaptation of existing tools for prison setting*
- *Further screening of 'well' prisoners to identify emerging mental health problems*

4.3.10 Studies of specific groups

The particular needs of women, older prisoners, younger prisoners and prisoners from minority groups have not been researched in depth. Although a number of studies identify their needs (women – Veysey, 1998; York CRD, 1999; Teplin and Abram, 1997; Gorsuch, 1998. Children – Kurtz et al, 1998. HIV/AIDs infected prisoners – Mayer, 1995), few studies have evaluated ways of meeting these needs.

One particularly interesting study compares women who have proved 'difficult to place' in NHS beds, with those who were accepted for NHS beds (Gorsuch, 1998). Those who were difficult to place were not only more disturbed and disabled, they had also suffered significantly more abuse yet they were more likely to be perceived as 'untreatable'. This raises questions, yet again, of how best to manage those who are not believed to be deserving of treatment. Further research into therapeutic alternatives for this exceptionally vulnerable yet disturbed - and disturbing group - is required.

Summary/Research priorities

- *Needs of specific groups have largely been identified, we now need research that assesses ways of meeting these needs.*

4.3.11 Roles and responsibilities of different professional groups.

A number of papers offer a description of the roles of different professional groups involved in the mental health care of prisoners: police (Fahy, 1989), prison officers (Lombardo, 85; Applebaum et al, 2001), Psychologists (Towl, 1999), probation officers (Roberts et al, 1994), psychiatrists (Helbrum et al, 1992; Shah, 2001 – child and adolescent forensic psychiatrists), and nurses (Rogers and Topping-Morris, 1996). Many of these studies go on to establish the gaps in training for these groups, or inadequacies in resources. There is a strong case put forward for changing the training of prison officers so that they have a greater role in observation, monitoring and support of prisoners with mental health problems. This may lead to greater collaboration between prison officers and healthcare staff – this has not, however, been researched.

Three papers focus on the development of nursing services through strategic changes in assessment and support systems (Yates, 94; Polczyk-Przblyta and Gournay, 1999; Rogers and Topping-Morris, 1996), however the training needs of prison mental health nurses are not detailed.

Summary/Research priorities

- *Research into the training needs of all staff.*
- *Design of new training packages and evaluation with different groups of staff*

4.4 Discussion

4.4.1 Limitations of this part of the review

The selection of papers for this broad review of research into service delivery and organisation was not clear-cut. The decision to include or exclude a paper rested on the reviewers' judgement about the generalisability of the content. Another reviewer may have included more of the service descriptions that provided data on the population and their disposal, or more commentary papers with a review section. Alternatively, a decision could have been made to exclude papers reporting on a small, local sample, or review

papers that did not specify a research strategy. This being the case, inclusion criteria were interpreted generously, and a short summary of the 'excluded' papers that might be useful was given.

Once all 'included' papers were compiled, a system of categorisation was determined, but once again this was not a precision exercise. Categories were not mutually exclusive, and papers often bridged more than one area, the potential problems arising from this have been overcome by integrating findings from different categories in the discussion of the findings.

The summaries of 'included' papers are brief, and attempt to give an impression of both method and findings. Whereas many outcome studies lend themselves to a tight system of describing method and findings which give an immediate impression of the quality of the research, this is not the case for studies into organisational and service delivery issues: there are no 'off the shelf' rating scales assessing the quality of this broad typology of studies. Only having completed the relatively arbitrary summaries for this section of the review, are we in a position to put forward some ideas for presenting these types of studies in a more informative way.

4.4.2 Overall comments

Given the breadth of the subject area and the variety of methods/approaches, it is difficult to draw general conclusions. What can be said, however, is that almost all studies conclude with recommendations that support current prison mental health policy, and numerous papers (both included and excluded) summarise policy, or provide more detailed guidelines and standards. Relatively few studies review the practical implementation of policy through assessment of adherence to standards and guidelines and there is a total absence of studies which:

- a) assess the process of implementing current policy/guidelines
- b) assess the effectiveness of current policy/guidelines in achieving their own goals.
- c) assess the effectiveness of different models of mental health care provision within a UK prison context.

The starting point for the provision of effective mental healthcare in prisons is the identification of those who need support. The development of an effective health screening tool has provided a positive means of detecting mental health problems at reception and a useful vehicle for training prison officers and mental healthcare staff in the identification of mental health problems. This provides the basis of a programme of research to determine appropriate assessment tools and procedures (including training) for ongoing mental health assessment, and for the assessment of, and care planning for, specific mental health problems.

All prisons differ, and what works in one prison may not be effective – or even feasible - in another, therefore evaluations of local innovative practice are an appropriate and useful way of monitoring and informing local service development. Cohen and Eastman (2000) provide a pragmatic framework for evaluation research, which gives useful guidance for describing 'input', 'process' and 'outcome' from the perspective of different stakeholder groups.

At a more general level, theoretical papers have clearly illustrated the potential difficulties (and the reasons for these difficulties) in integrating the contradictory cultures or 'parallel universes' of mental health and criminal justice systems, but there is very little research into the organisation, culture and service systems within prisons. Wardlaw et al (1996)

conceptualise the main difficulties in the provision of effective prison mental health care lying in conflicting value systems operating within the same system. The challenge for research therefore, lies in examining beliefs (and changes in beliefs) about offenders with mental health problems. This research team has developed and utilised an organisational and social policy model as a means of understanding and illustrating the changes in values of individuals' values (and therefore the collective value system of the organisation) over a period of service improvements. This model may provide a useful tool for others seeking to measure movement towards stated goals of co-operative inter-agency, multi-disciplinary working.

Morrissey et al (1983; 1984) go beyond the confines of the prison environment to examine inter-organisational relationships and the impact of different systems on mental health care provision. Again, these authors provide a model for future research: Newman and Prices' (1977) typology of organisational arrangements for service delivery into jails provides a means of analysing and interpreting findings.

Cross-cutting issues that are of importance at all levels and in all services providing mental health care for offenders include: training (for all staff), and approaches to meet the needs of the entire spectrum of prisoners. Little is known of the impact of training on practice, nor of the impact of more therapeutic practice on the mental health of prisoners, but all studies reported here suggest that training of all staff is inadequate. Similarly, there is substantial evidence that the particular needs of minority groups of prisoners (e.g. women, elderly, ethnic minority groups) are not met, but more research is needed into 'what works for whom'.

4.5 Recommendations

The recommendations for this section derive directly from the gaps in existing research and possible priorities for future research that have been highlighted in each separate category of this section of the review. Given the size of the gaps in existing research, these recommendations are necessarily broad – they are not drawn from the literature, but from the almost total absence of literature - and are not listed in any order of priority:

- 1) Organisational research into integrating cultures and values of 'criminal justice' and 'mental health' services in prisons.
- 2) More focussed systematic reviews of research into specific issues or groups.
- 3) Reviews have culminated in many lists of guidelines, recommendations and standards.
 - Can these be implemented?
 - Are they being implemented?
 - Do they make a difference?
 - Is their implementation related to prisoner well-being, staff satisfaction, better co-ordination etc?
- 4) Development of prison-specific measures for routine use (adaptation of HoNOS?)
- 5) Identify range of potential models of mental health service delivery in the UK.

- 6) Identify the factors associated with the success of different models (eg agencies involved, location and accessibility of various providers, size of prison, socio-demographic characteristics of area).
- 7) Explore relationship between models of service delivery and prisoner outcome.
- 8) Develop organisational research methods to determine factors effecting organisational 'culture' and effect of 'culture' on prisoners' mental health.
- 9) Evaluate special units that incorporate the principles of therapeutic communities in terms of a) the organisational features that facilitate and hinder an integrated care and custody culture; b) impact of integrated culture on prisoner mental health, social functioning, behaviour, and staff morale and values.
- 10) Research into adequacy of mental healthcare for those assessed as 'high risk' at screening.
- 11) More systematic local evaluation, giving details of input and process (to allow replication) and using selected outcome measures (not only routinely collected data).
- 12) Studies of process of implementing given guidelines.
- 13) Effect of implemented change on prisoners' mental health.
- 14) More research into individuals' pathways between prisons, healthcare services and discharge.
- 15) Identify range of potential models of mental health service delivery in the UK.
- 16) Identify the factors associated with the success of different models (eg agencies involved, location and accessibility of various providers, size of prison, socio-demographic characteristics of area).
- 17) Explore relationship between models of service delivery and prisoner outcome.
- 18) Develop organisational research methods to determine factors effecting organisational 'culture' and effect of 'culture' on prisoners' mental health
- 19) Develop organisational research methods to determine factors effecting organisational 'culture' and effect of 'culture' on prisoners' mental health.
- 20) Development of an indicator of need from the perspective of prisoners using mental health services.
- 21) How do different stakeholders' perspectives of needs of prisoners with mental health problems differ? What effect does this have on the support that different professional/provider groups provide?
- 22) Continued evaluation and development of reception health screening questionnaire.
- 23) The effect of training to use a screening questionnaire on the beliefs and behaviour of health-care staff

- 24) Further development of measures to assess specific difficulties of prisoners and adaptation of existing tools for prison setting.
- 25) Further screening of 'well' prisoners to identify emerging mental health problems.
- 26) Needs of specific groups have largely been identified, we now need research that assesses ways of meeting these needs.
- 27) Research into the training needs of all staff.
- 28) Design of new training packages and evaluation with different groups of staff.

4.6 INCLUDED PAPERS¹

4.6.1 Theoretical Papers

Cruser A, & Diamond PM. An exploration of social policy and organizational culture in jail-based mental health services. *Administration and Policy in Mental Health* 1996;24:129-48.

Provides a theoretical framework for analysing changes in organisational culture and tests in one developing jail. Although the changes implemented/evaluated are not clear, this model appears to have potential to underpin organisational research. It is based on the assumption that people and systems translate unconscious values into social policy action, therefore the policies of an organisation reflect its collective unconscious value system. Effective organisations clearly define their values and establish compatible social policies. Mental health and criminal justice systems derive from different values and beliefs about causality (e.g. therapy vs. custody; treatment vs. punishment) and problems result from these 'parallel universes' with conflicts within and between systems both operating in the same system. They therefore need conceptual bridges to work towards shared values, which will facilitate more effective working in a common environment. A model for understanding problems, solutions and transformation in the system is illustrated.

Dvoskin JA., Patterson RF. Administration of treatment programs for offenders with mental disorders. In Wettstein R.M. (Ed) *Treatment of offenders with mental disorders*, New York: The Guildford Press, 1998

Focuses on politics and philosophical context of the treatment of MDOs. Compares implications of minimising risk (indefinite incarceration) vs. maximising rehabilitation (decreasing levels of security) in a context of finite resources and ever increasing numbers of MDOs. Reviews assessment of risk, services and locations, staffing levels and training and public presentation.

Conclusion: minimisation of risk is essential because community acceptance of MDOs depends upon the forensic system's ability to safely manage those few patients who pose the highest degree of risk to public safety.

Dvoskin JA.,Steadman HJ. Chronically Mentally-Ill Inmates - the Wrong Concept for the Right Services. *International Journal of Law and Psychiatry* 1989;12:203-10

Debate about ways of measuring disability within prison upheld by a survey of 9.4% of all prisoners in New York prison system in May 1986 (n=3684). Three sources of information: prison healthcare staff documented physical problems; correctional counsellors assessed behaviour; mental health services staff assessed functioning and psychiatric disability of all those who had contact with mental health services in the previous year. Findings: 8% had severe disability and 16% had significant disability – 25% therefore required mental health services. Discussion: any assessment needs to be based on functioning in prison, as disability and chronicity within the community refers to difficulties with living (such as housing, finances, going out, structuring day) that are not relevant in a prison (where food, clothing, shelter and structure are provided). Problems encountered in prison (e.g. predatory inmates, discipline, visits, isolation from family) may reflect different types of susceptibilities and require different interventions.

¹ organised alphabetically within each category

Freeman RJ., Roesch R. Mental disorder and the criminal justice system: a review. *International Journal of Law & Psychiatry* 1989;12:105-15.

Contends that because of their particular legal and psychological characteristics, the needs of mentally ill offenders are ill served and their rights are abrogated. Illustrates this with a review of issues that arise as mentally disordered offenders move from the community through arrest, trial, imprisonment and back into the community in a series of revolutions. Conclusion: there is a schism between the legal position of mentally ill offenders and their needs. The law formally recognises only those mentally ill who are unfit to plead, yet this ignores the vast majority of prisoners with mental illness. Until the extent of the problem is better delineated and creative solutions are found 'it seems that mentally ill offenders will be as much at risk from society as they will be a risk to society'

Hylton JH. Care or control: health or criminal justice options for the long-term seriously mentally ill in a Canadian province. *International Journal of Law & Psychiatry* 1995;18:45-59.

Debates the underpinning philosophy of provision for the mentally ill in Canadian prisons. Argues for a comprehensive system of mental health care in the community to reduce incarceration of seriously mentally ill in prisons; information and compassion within the justice system to reduce onset of disorders in prison and reduce suicide; creation of alternatives to imprisonment, including access to comprehensive mental health services for mentally ill offenders; and, special support where a person with mental illness is suspected of committing an offence to ensure appropriate diversion from prison where feasible and appropriate.

Kunjukrishnan R.,Bradford JM. Interface between the Criminal Justice System and the Mental Health System in Canada. *Psychiatric Journal of the University of Ottawa* 1985;10:24-33.

Discusses the relationship between criminality and mental disorder. Reviews research in 3 areas: mental disorder in the criminal population; criminality in the psychiatric population; mental disorder and criminality in the general population and any relationship between them. Conclusion: there is provision within Canadian law for psychiatric support for all those people who come into contact with the criminal justice system and have mental health problems, but the application of such statutes depends upon the knowledge and willingness of those working in both criminal justice and mental health services to act in co-operation. Suggestions are made for improved training, communication, and more individualised assessment, treatment and preparation of each offender.

Wardlaw G. Models for the Custody of Mentally Disordered Offenders. *International Journal of Law and Psychiatry* 1983;6:159-76

Reviews advantages and disadvantages of potential solutions to the problems presented by mentally disordered offenders in terms of the interests of the offender, the interests of society, and the interests of the administration. Models considered include a centralised psychiatric prison, small psychiatric units attached to prisons, regional forensic psychiatric centres, regional secure units in psychiatric hospitals, and a centralised psychiatric security hospital. Concludes that optimum solution would be an amalgam of prison psychiatric units and regional psychiatric centres.

Wolff, N. 'New' public management of mentally disordered offenders: Part1. A cautionary tale. *International Journal of Law and Psychiatry* 25 (2002) 15-28.

Analysis of mentally disordered offenders as a 'case study' of systems and services level dysfunction. Multiple agencies involved and multiple needs of individuals are further complicated by the segregated cultures and funding systems of those agencies involved in their support. Examines barriers to integration and current efforts to bridge them including: categorical funding of different agencies devolved locally (creating fragmentation);

resource allocation issues like inadequate and inconsistent funding; and, the bureaucratic intransigence of public systems.

Wolff, N. 'New' public management of mentally disordered offenders: Part II. A vision with a promise. *International Journal of Law and Psychiatry* 25 (2002) 427-444.

Proposes a 'single ownership model' as an alternative integration model, which minimises costs and provides a stable infrastructure to co-ordinate the multiple needs of MDOs in a sensitive and collaborative manner without the rivalry and competition that characterises multiple ownerships. Describes advantages and disadvantages of the holistic approach.

4.6.2 Therapeutic Communities

Cullen, E. Grendon and future therapeutic communities in prison. 1998. London, Prison Reform Trust.

Light R. The special unit - Barlinnie prison. *Prison Service Journal* 1985;14-7,21

Describes the conception and development of the Barlinnie Special Unit for prisoners who are difficult to manage (serving life sentences often with additional terms for offences committed in jail, with little chance of parole, nothing to lose). Based on a need to stop seeing 'punishment' and 'treatment' as two separate entities with the latter replacing the former, rather, using both rationally and logically. A self-help therapeutic community has emerged, with inmates encouraged to take some responsibility for running own lives and regain feelings of worth and self-respect, taking up more hobbies, having their own personalised space. Keystone is the 'community meeting' which breaks down barriers between staff and inmates, and inmates and their inhibitions, members can make decisions at this meeting (e.g. taking door off punishment room).

Effectiveness: Aims are to promote social growth and instill respect for persons. This is achieved in low levels of violence on the unit and reduction of tension elsewhere in the prison, high levels of artistic and literary productivity. In 1985, 23 prisoners had been admitted since the unit opened in 1973, 7 were still there, 6 had returned to the main prison, 9 had been released (of these 2 had been recalled) and one had died on the unit. This seems a positive record, particularly given the nature of prisoners.

Smith R. Grendon, the Barlinnie Special Unit, and the Wormwood Scrubs Annexe: experiments in penology. *British Medical Journal* 1984;288:472-5.

One of a series of articles based on research and personal observation, which raise serious concerns about health care in prisons. However, positively appraises the therapeutic regimes available at Grendon Underwood (psychiatric prison for diagnosed psychopaths, Barlinnie Special Unit for prisoners who are hard to manage, and Wormwood Scrubs Annexe for sex offenders and drug addicts. These give prisoners more choice and control, treat them with more respect, and expect them to take responsibility for their own actions. Outcome studies show mixed findings, but these units do demonstrate that integration of health and criminal justice cultures is possible in a humane manner; they provide a way of managing the most challenging prisoners; the prisoners themselves are positive about the therapeutic community regime; violence is reduced; prisoners become involved in a wider range of constructive activities.

Warren F., Dolan B. Treating the "untreatable": Therapeutic communities for personality disorders. *Therapeutic Communities: International Journal for Therapeutic and Supportive Organizations* 1996;17:205-16.

Wexler HK,Love CT. Therapeutic communities in prison. [Review] [40 refs]. *NIDA Research Monograph* 1994;144:181-208

4.6.3 'Review' papers

Eastman NLG. Forensic psychiatric services in Britain: a current review. *International Journal of Law and Psychiatry* 1993;16:1-26.

An 'update review' of cultural and organisational problems and potential solutions in the provision of forensic psychiatric services. Expresses substantiated opinion rather than systematically reviews literature (no search strategy). For example, the past focus on service development has failed to acknowledge cultural and organisational blocks to change (e.g. conflicting cultures in health and criminal justice system, and role of psychiatrists being confined to 'medical disorders' in people who happen to offend, rather than addressing intrinsic problems leading to offending...), and has led to a neglect of development of therapeutic interventions. Asserts that deinstitutionalisation has inevitably led to increase of mentally ill in prisons; services for specific groups remain inadequate; there is still a tendency to separate 'madness' from badness' and 'kick the ball elsewhere' rather than develop services for people who are mad and bad. Rather than mental health care being dependent on need, the nature of the offence governs access to services and quality of services offered (more serious offenders receive better quality mental health care). Concludes that integrated, high quality forensic psychiatry services linked with serious research will remain elusive until they become more multi-disciplinary and multi-agency, and less dominated by medical model. Research must focus less on (largely criminal) outcomes and more on social processes in institutions - particularly closed, secure institutions.

Jemelka R, Trupin E, Chiles JA. The mentally ill in prisons: a review. *Hospital & Community Psychiatry* 1989;40:481-91.

No search or review strategy. a description of the problems posed by, and faced by mentally disordered offenders in US prisons. Mentally ill offenders are often indistinguishable from other people with mental illness but are further disadvantaged by negative public perceptions forcing rapid 'disposal' – criminal justice system often seen as quicker and more efficient than mental health services; discrimination within prisons - meaning they are less likely to be released and unless crime is serious are unlikely to get into special hospital; on release from prison they are even less likely to find work, housing etc than people who are either offenders, or mentally ill.

Includes definition of MDOs, estimation of prevalence, emerging crisis in US prisons, and ways in which MDOs are treated within prisons (including centralised treatment facility, case management, an emphasis on continuity of care and careful transition back into the community).

Lamb HR, Weinberger LE, Gross BH. Community treatment of severely mentally ill offenders under the jurisdiction of the criminal justice system: a review. *New Directions for Mental Health Services* 2001;51-65

Draws arbitrarily on the literature to suggest actions at various levels in criminal justice and mental health systems in order for intervention to be effective:

- Steps to prevent inappropriate arrest of mentally ill
- Routine screening for serious mental illness of all arrested persons;
- Correctional institutions and mental health services should work together to provide multi-disciplinary health teams;
- Mentally ill prisoners who have committed minor crimes should be diverted either entirely to mental health services, or at least, for treatment ;
- Court monitored treatment supervision may be required to ensure compliance with treatment.
- Advocacy and case management for released offenders;
- Treatment for violent offenders;

- Availability of highly structured 24 hour care for released mentally ill offenders – provided by mental health services.

Lloyd, Charles. Suicide and self-injury in prison: a literature review. 1990. London: HMSO, 1990.

A review of empirical studies (1979-1990) in the Canada, the US and UK on: completed suicide in prison (n=13); deliberate self-injury (n=6); and, suicide prevention. Search methods not specified. Concludes that a number of preventive strategies may be useful but have not been statistically evaluated. These include: reducing over-crowding; smaller, more supportive regimes; increased contact with family – or other support from outside prison e.g. Samaritans; reduced isolation, preferably intense supervision, at least cell sharing; inmate watch schemes; electronic monitoring; making cells more suicide proof; improved reception process (allowing thorough assessment of risk); training of prison staff.

Lucas, W. E. Mental health and criminal justice. 1999. Paper presented at the 3rd National Outlook Symposium on Crime in Australia, Mapping the Boundaries of Australia's Criminal Justice System convened by the Australian Institute of Criminology and held in Canberra, 22-23 March 1999

A 'not exhaustive' review of opinion, reviews, editorials and research over previous 6 years. Reflections on the impact of mental illness and incarceration on further crime, mental illness, services and institutions. Covers:

- Health problems in prisons – impact of environment on physical and mental health of all inmates, exacerbated by nature of population incarcerated (predominantly young, male, poorly educated, lived on margins of community. High levels of drug dependency and high proportion from ethnic minority groups), and high incidence of abuse within prisons.
- Mental health of offenders – the less serious the problem is to the system, the less likely it is to receive attention. Older prisoners in particular are rarely treated in prison. Prisoners with personality disorder are unlikely to be treated for co-existing disorders.
- Crime and mental illness – significant proportions of serious offenders had had contact with mental health services but they rarely have diagnosis of schizophrenia and affective disorder, most commonly personality disorder and substance mis-using.
- Trends and problems in treatment and management of MDOs – including recommendations for providing services to specific groups.
- Legislation and related problems.

Mountain, G. Occupational Therapy in Forensic Settings. A preliminary review of the knowledge and research base. College of Occupational Therapists, 1998.

Review of the knowledge base concerning OT in forensic settings including evidence to support clinical practice to demonstrate gaps in knowledge and evidence. Cites four prison based studies. 1 US commentary of ways in which OT role might be developed in prisons; 2 described OT training programmes in prison; 1 described a prison based OT programme – none of these were specific to prisoners with mental illness. One final study assessed the occupational needs of MDOs in prison.

NHS Centre for Reviews and Dissemination and Policy Research Bureau, London. Scoping review of the literature on the health and care of mentally disordered offenders (CRD Report 16). 16. 1999. York, NHS Centre for Reviews and Dissemination, University of York.

Review of health and care of MDOs aiming to give a broad picture of key issues in the area, and identify the need for further research. Papers selected included reviews and primary research studies in 7 key areas: developments in the field, statutory framework,

existing provision for MDOs, casual and preventive studies, pathways in and out of care, and effectiveness research.

Concluded with recommendations for a future research agenda including:

- Improving the academic base through a further set of more focused reviews, a large scale epidemiological survey of the overlap between mental health problems and offending, and longitudinal research on pathways through the system over a number of years.
- Strengthening the evidence base for practice through development and testing of information gathering tools, a needs assessment exercise over provision types, a survey of definitions in use and their operationalisation, descriptions of interagency working arrangements, and costs and outcomes analyses.

Emphasise that the review is not complete; a starting point rather than a conclusion.

Petch E. Mentally disordered offenders: Inter-agency working. *Journal of Forensic Psychiatry* 1996;7:376-82

Describes current policy for inter-agency working and the role of different agencies and professional groups. Policy guidance includes Home Office circular on interagency working with MDOs (see excluded list, policy documents) and Building Bridges; currently funded research includes NACRO study to produce examples of well integrated services; Health and Social services reports include Health of the Nation and Reed Report, training resources have been developed by NACRO. Role (and relationship to one another) of police, probation, courts, prisons, legal representatives, equal opportunities legislation and homelessness services are described.

Pratt-Travis C. Are private prisons more cost-effective than public prisons? A meta-analysis of evaluation research studies. *Crime and Delinquency* 1999;45:358-71.

Meta-analysis of 33 cost-effectiveness studies of private and public prisons from 24 independent studies in the US. Reveals no difference between cost of private and public prisons. Strongest predictions of cost include size, age and security level of institution.

Roesch R. Mental health interventions in pre-trial jails. In Davies G, Lloyd-Bostock S, et al., eds. *Psychology, law, and criminal justice: International developments in research and practice*, pp 520-31. Berlin: Walter De Gruyter, 1995.

Reports on workshops held at International conference in Vancouver to promote collaborative research between delegates. 6 research topics prioritised: prevalence of mental disorder among prisoners; methods/models for detecting mental disorder in prison/jails; forensic assessments performed during jail incarceration; intervention in jails/prisons; diversion/transfer out of jails to mental health facilities; and gradual release programs and community management of mentally disordered offenders.

Conclusion: need for valid and reliable research; need to test generality of existing findings as research often confined to a single system; current research has identified number and needs of mentally ill prisoners, now need to know what prevents revolving door between community, prison and mental health services. Urgent need for more work on relationship between substance abuse and mental disorders.

Roesch R, Ogloff JR, Eaves D. Mental health research in the criminal justice system: The need for common approaches and international perspectives. [Review] [63 refs]. *International Journal of Law & Psychiatry* 1995;18:1-14

Briefly reviews (no strategy given) research into 6 topics concerning mental disorder and prisoners on an international basis with following summaries and recommendations for research:

- Prevalence: difficulties comparing different countries (or even systems within countries), possibility that screening tools do not provide accurate information on

specific nature and severity of disorders of mentally ill offenders – more research needed on mental illness and crime.

- Screening: in the absence of screening programmes detection rates appear to be low, but no agreed screening mechanisms. Potential measures include BPRS, RDS, Structured clinical interview for DSM, Global assessment of functioning scale. Tools and procedures need to be researched.
- Forensic assessments – particularly pre-trial to assess competency, fitness to stand trial, criminal responsibility, risk assessment: 80% of defendants referred for assessment are deemed fit, begging questions of how they came to be referred by prison officers. Apart from research into assessment, more research into way the system works is necessary.
- Interventions in prisons: two types of treatment considered here, the first to reduce symptoms of mental illness, the second to reduce criminality and rate of recidivism. Few studies of either. Must also research treatment/pathways within prison generally.
- Diversion schemes: these are based on assumptions that contact with prison is a bad thing, interventions can transform them into stable law abiding community members, and pre-trial diversion is more effective than incarceration. Research is needed in all these areas to test hypotheses.
- Release programmes: release into the community can be overwhelmingly stressful after a long period of rigid, structured and shared life. Positive reintegration to prevent return to either prison or psychiatric services is essential. A number of case management programmes have described successful reintegration into positive and valued social roles.

Shaw, J. Prison Healthcare. 2002. Liverpool, National R&D Programme on Forensic Mental Health

Reviews literature on mental healthcare research in prisons. No specified method for reviewing literature, identifies funded research projects, research known to prison ethics committee, projects registered on NRR. Finds little on service delivery and organisation. Cites research into a) models of service delivery (Pettinari and Piper's ESRC funded study of views on models of mental health care in prisons); b) MDTs (Jane Senior, PhD student funded by NHS Exec to explore MDTs in prisons); c) assessment and treatment models (cites Bannerjee et al, 1995) and d) staff training (Morriss et al, Cutler et al, Ramsey et al). Concludes that there is a need for :

- Evaluation of multi-agency working, models of service delivery, multi-disciplinary teams in prisons
- Research into shared information systems
- Evaluation of novel services in prisons.

4.6.4 Evaluation of Services

Anderson JB, Parrot J. Urgent psychiatric transfers from a prison in England and Wales; A prison perspective. *Criminal Behaviour and Mental Health* 1995;5:34-40.

A retrospective study of all emergency transfers from Belmarsh prison to general psychiatric care between April 1991 and March 1992. National rates varied during this time with Belmarsh transferring significantly more than other prisons, this may be due to local differences in: use of MHA, psychiatric services, availability of RSU beds. However, all Belmarsh referrals were accepted by psychiatric services, 14 went to locked wards, 5 to RSUs, 3 to maximum security hospitals. Average length of stay under conditions of transfer was 3.7 months. Reasons for urgent transfer included serious disturbance, serious suicide risk, self-starvation, and organic psychosis. 80% of urgent transfers were African Caribbean – a higher proportion than found in prison population as a whole. Conclusion: MHA provision for urgent transfer (S48) is useful; the majority of such referrals can be accommodated within general psychiatric services.

Banerjee S, Oneillbyrne K, Exworthy T, Parrott J. The Belmarsh Scheme - A Prospective-Study of the Transfer of Mentally Disordered Remand Prisoners from Prison to Psychiatric Units. *British Journal of Psychiatry* 1995;166:802-5.

Prospective study of a 6-month cohort of remand prisoners requiring transfer to hospital. Low threshold set for psychiatric assessment in Prison healthcare centre, full psychiatric assessment on next working day by general and forensic consultant supervisors and prison-based psychiatrists. 53 of 1229 (4.3%) new remands were transferred to psychiatric units (42 schizophrenia, 5 mania, 2 depression, 2 learning difficulties, 1 schizo-affective disorder and 1 adjustment disorder). 21 (40% were admitted to open wards, 18 (34%) to locked wards, 11 (21%) to RSUs, 1 to a special hospital and 1 to a learning disability unit. Although 41 (77%) had been in contact with psychiatric inpatients, only 18 (34%) were in contact with mental health services at the time of arrest. Significantly more black men were transferred to psychiatric services than any other remand group. For the transfer group, offences included violence against the person (17), sexual (4), acquisitive (9) drugs, and they were significantly more likely than other remands to have their type of offence classified as 'other' (including criminal damage and threatening behaviour). Effectiveness: Aimed to identify all those who require transfer, ensure that they are accepted for treatment and effect transfer as soon as possible: All those referred for psychiatric treatment or admission were accepted by psychiatric services. This is an improvement on other services where remand prisoners have been refused admission to psychiatric services (Coid, 1988 found that 20% MDOs remanded to Winchester prison were rejected for treatment by psychiatrists, Robertson et al (1994) found that 29% psychotic men referred for treatment from Brixton prison were rejected). Further aim that remand period should not be extended as a result of mental health problems: times that the transfer group spent on remand was significantly lower than that reported at Brixton (James and Hamilton, 1991; Joseph and Potter, 1993).

Cox JF, McCarty DW, Landsberg G, Paravati MP. A model for crisis intervention services within local jails. *International Journal of Law and Psychiatry* 1988;11:391-407.

Cox JF, Landsberg G, Paravati MP. The essential components of a crisis intervention program for local jails: The New York Local Forensic Suicide Prevention Crisis Service Model. *Psychiatric-Quarterly* 1989;60:103-17.

Both above papers referred to same program. New York State-wide advisory committee designed inter-agency program to identify and manage suicidal and seriously mentally ill inmates in local jails and police lockups based on explicit lines of accountability and responsibility, inter-agency working and integrated systems of support. Four major components of programme included: policy guidelines, screening guidelines, eight hour training programme for all officers, and a mental health practitioners' manual. Essential requirements for the model include: inter-agency conceptual agreement about *who* will be served, the *goals* of the program, and the expected *consequences* for the target population.

Effectiveness: 33% drop in suicide rates during implementation year (from 1.7 to 0.8 per 1,000) despite 14% increase in jail admissions.

Craig TJ, McCoy EC, Stober WC. Mental health programs in three county jails. *Journal of Prison and Jail Health* 1988;7:15-26.

Description of mental health programs running in three County jails in North New Jersey. Set up following inquiry into 2 suicides finding high levels of mental illness in jails and very high stress levels overall. Multi-disciplinary team from psychiatric hospital and CMHT visited jails weekly to: assess urgent cases, prescribe treatment and counselling, advise prison staff, arrange transfers, make recommendations in court, plan discharge support.

Effectiveness: 50% reduction in inmates sent to psychiatric services for assessment (leading to cost reductions), impressions of less disturbed behaviour, fewer restraints, less property damage and less stressful working environment. Mental health workers preferred providing in-reach services.

Meloy JR. Inpatient Psychiatric-Treatment in A County Jail. *Journal of Psychiatry & Law* 1985;13:377-96

Describes the development of inpatient psychiatric services within San Diego County Jail with a focus on support provided and patient characteristics. Discusses the potential inter-personal problems between prison staff and mental health professionals, and the difficulties of safeguarding the legal rights of patients detained under both civil law and mental health law.

Meltzner, J.L., Fryer, G.E., Usery, D. (1990) Prison mental health services: Results of a national survey of standards, resources, administrative structure and litigation. *Journal of Forensic Sciences*, 35, 2, 433-438.

Mental health services within prisons have been accelerated in the US as a result of successful legal action. This survey of all state correctional departments sought to identify factors correlated with successful legal action concerning mental health issues. 21 states were involved in such litigation. Only correlates with legal action were: presence of psychiatric hospitals operated by Department of Corrections (and with questionable mental health expertise) and prison system with more than 15,000 inmates.

Rapaport J. Prisoners of the Care Programme Approach. *Care Plan* 1998;4:19-24.

Describes the development of a programme to link 6 NHS Health Trusts and mentally disordered offenders in High Down Prison in Surrey through the CPA. Included a census of all people with mental health problems and an offending history in Surrey, devising and implementing a multi-agency training programme, and developing a CPA protocol between the prison and healthcare providers (covering: aims, prison reception, remand prisoners, during prison sentence, prison to prison transfer, prison to hospital transfer, release from prison). Effectiveness: Increase in liaison between prison and Trust areas, better tracking, information and care planning for mentally disordered prisoners with an option to hold CPA meetings. However, meetings have been difficult to arrange therefore a new nurse post has been created to operate the scheme.

Vaughan, P., Kelly, M., Pullen, N. Psychiatric support to mentally disordered offenders within the prison system.

Survey of numbers and needs of MDOs in Wessex Consortium area prisons. 16 prison healthcare centres exist in area, 10 have beds (not reserved for mental health care), 2 have in-house psychiatrists, 3 provide facilities for nearby prisons to use. 67 MDOs identified in the area but only 21 met Consortium's criteria as MDO, 15 of these were deemed to require care in an NHS facility. Authors conclude that there is a severe shortage of both services and trained staff available for MDOs in prison.

Weaver T, Taylor F, Cunningham B. The Bentham Unit: a pilot remand and assessment service for male mentally disordered remand prisoners. *British Journal of Psychiatry* 1997;170:462-6.

A retrospective before and after study of the pattern and speed of assessment and transfer of patients referred for NHS assessment before and after the Bentham Unit opened. (Bentham Unit set up in 1994 to identify male prisoners with serious mental illness in the former NW Thames RHA, to provide rapid assessment and transfer to appropriate NHS care). Number of referrals and transfers to hospital increased significantly between two periods, speed of assessment and transfer increased significantly. Results compared favourably with those reported in prisons where there is no

outreach service (eg Brixton, Robertson et al, 1994). Conclusions: Remand bed units need to incorporate a mental health assessment outreach service. Bentham Unit is regional rather than the local solution proposed in Reed Report (1992), but this leads to economies of size: local units targeted at remand population may not be feasible. In the long term, it may be desirable for follow-up by local services through CPA, care management and community supervision, but Bentham unit set up as a result of the difficulties that local services experienced fulfilling this role.

Weaver T, Taylor F, Cunningham B, Kavanagh S, Maden A. Impact of a dedicated service for male mentally disordered remand prisoners in north west London: retrospective study. *British Medical Journal* 1997; 314:1244-5.

Study of prisoners referred for NHS psychiatric assessment within NWTRHA before and after dedicated service for mentally disordered remand prisoners. Impact on intervals between remand, assessment and transfer was compared before and after the Bentham Unit was set up to provide rapid assessment and transfer to appropriate psychiatric care. Found large and significant reductions in intervals between remand and first assessment by NHS psychiatrist, and between remand and transfer following opening of Bentham Unit.

4.6.5 Audit

Meltzner, J.L., Fryer, G.E., Usery, D. (1990) Prison mental health services: Results of a national survey of standards, resources, administrative structure and litigation. *Journal of Forensic Sciences*, 35, 2, 433-438.

Mental health services within prisons have been accelerated in the US as a result of successful legal action. This survey of all state correctional departments sought to identify factors correlated with successful legal action concerning mental health issues. 21 states were involved in such litigation. Only correlates with legal action were: presence of psychiatric hospitals operated by Department of Corrections (and with questionable mental health expertise) and prison system with more than 15,000 inmates.

Reed JL, Lyne M. Inpatient care of mentally ill people in prison : results of a years programme of semi-structured inspections. *British Medical Journal* 2000;320:1031-4

Audit of prison mental health care systems against published guidelines. 13 prisons with inpatients facilities were visited by team of experts and compared with nine healthcare standards approved by the Prisons Board for implementation by 1997, covering assessment, service provision, transfer and discharge, mental health promotion, provision for HIV and AIDS, use of medicines and services for substance misusers.

Findings: no doctors in charge of inpatients had psychiatric training, only 24% of nurses had mental health training; patients were locked up for between 13 and 20 hours per day, where seclusion was used, average length was 50 hours. Services for mentally ill in prisons fell far below standards in NHS, patients lives were restricted and access to therapy limited strengthening case for mentally ill prisoners to be treated in NHS.

Robbins, D. Mentally Disordered Offenders; Improving Services (1996) Social Services Inspectorate, Department of Health.

Review of progress in 7 English Local Authorities towards key targets of Reed Review (ie quality of care, community rather than institutional, in least secure setting appropriate, maximising rehabilitation, near their families and homes). Interviews, observations and documentary analysis undertaken by a team of inspectors. Findings included:

- i) a need for standards against which services can be measured, and standards for collection and sharing of information,
- ii) much work going on: one strategy developed and finalised, others in process but this required appropriate representation from all stakeholders;

- iii) structures for implementing a strategy were being developed - but often in an ad hoc manner;
- iv) joint working was going on every authority and there was recognition of weaker areas and potentially vulnerable groups of MDOs;
- v) joint commissioning plans were being developed, but hampered by lack of core data;
- vi) joint working patchy, but where it existed had improved collaboration on assessment and care management;
- vii) 4 areas of concern in all areas included: provision of support for 'diverted' offenders, the use of ASWs as 'appropriate adults, provision of accommodation with 24 hour support, and the importance of outreach to prevent drop-out between services.

Although training was a stated priority, available training materials not being used.

Vaughan, P., Kelly, M., Pullen, N. Psychiatric support to mentally disordered offenders within the prison system.

Survey of numbers and needs of MDOs in Wessex Consortium area prisons. 16 prison healthcare centres exist in area, 10 have beds (not reserved for mental health care), 2 have in-house psychiatrists, 3 provide facilities for nearby prisons to use. , 67 MDOs identified in the area but only 21 met Consortium's criteria as MDO, 15 of these were deemed to require care in an NHS facility. Authors conclude that there is a severe shortage of both services and trained staff available for MDOs in prison.

4.6.6 Pathways Research

Poporino, F. and Motiuk, L. (1995) The prison careers of mentally disordered offenders. *International Journal of Law and Psychiatry*, 18, 29-44

Compared 36 prisoners with psychosis with 36 non-disordered offenders in a similar situation. Mentally ill inmates were less likely to get early release on full parole, and when released, were more likely to have their supervision revoked despite the fact that offenders in the non-disordered group were more likely to commit a new offence.

4.6.7 Organisational Research

Morrissey JP, Steadman HJ, Kilburn H, Lindsey ML. The Effectiveness of Jail Mental-Health-Programs - An Interorganisational Assessment. *Criminal Justice and Behavior* 1984;11:235-56.

Presents an inter-organisational approach to the assessment of jail mental health programs (this recognises the external inter-dependency of prison mental health systems), conceptual model consists of two parts: structural antecedents of interagency conflict, and the impact of conflict and these structural variables on the perceived effectiveness of jail mental health programmes. Data were collected in semi-structured interviews with key personnel in 33 jails to find out about structural data such as location, size, function and mental health services); this was followed with survey instrument to measure effectiveness of the jail mental health program (in terms of safety and service) and conflict between different agencies. Findings (selection of sites and small numbers limit generalisability) suggest that there is no single model that provides the best mental health services, but there are trade-offs associated with each inter-organisational arrangement. For example, mental health services outside the jail reduce inter-agency conflict but reduce safety, whilst an inside programme improves safety but has higher inter-agency conflict. Recommends further inter-organisational research to look at content of services delivered,

not just structure, and further research that considers the political, societal and human service context of MDO service provision.

Morrissey JP, Steadman HJ, Kilburn HC. Organisational issues in the delivery of jail mental health services. *Research in Community and Mental Health* 1983;3:291-317.

Presents US national data from 32 self-selected communities demonstrating how inter-organisational dimensions relate to the perceived effectiveness of jail mental health services. Uses Newman and Price's (1977) typology of organisational arrangements for service delivery into jails: *internal system* (jail provides all own services), *inter-section system* (external human service organisations work co-operatively with the jail), *linkage system* (one outside human service agency had direct contact with the jail and brokers services for them), *combination system* (a mixture of above types). Qualitative interviews with key staff were augmented by a questionnaire regarding effectiveness of jail mental health program, extent of inter-agency co-ordination and conflict. 323 forms returned - response rate of 68% (36% jail employees, 64% affiliated mental health agencies). Results revealed trade-offs between effectiveness, conflict and co-ordination. For example, internal organisations rated highly on effectiveness and safety but had greater inter-agency conflict; inter-section systems were less effective but had less conflict. Local jails were generally safer but liaison with external agencies was limited making long-term goals difficult to secure.

4.6.8 Needs Assessment

Cohen A, Eastman N. Needs assessment for mentally disordered offenders: measurement of 'ability to benefit' and outcome. [Review] [24 refs]. *British Journal of Psychiatry* 2000;177:493-8.

Review of government policy regarding MDOs' needs assessment and problems of conducting needs assessment on MDOs. Provide five categories of needs assessment methods with a critical assessment of each in relation to MDOs. All are theoretically and methodologically different, suitable for different populations and different purposes. Includes:

- Survey approach including measurement of needs in terms of ability to benefit from a service, this may be based on population figures for each disease category, but there is little evidence to on MDOs ability to benefit in terms other than recidivism; measurement of prevalence and incidence (likely to give imprecise information on MDOs because of complexity of problems); mental health needs of prisoners in various groups; and/or population based.
- Rates under treatment approach – uses current service use within a given population to estimate demand and needs. Confounded by problems interpreting service provision with service use and need (what about unmet needs?), and lack of adequate information systems or categories of data on existing information systems.
- Social indicator approach uses existing social data (eg census, deprivation indices) to make estimates of need in a given community. Indicators may be selected on theoretical basis, prior research or preliminary investigation of a population. Not yet applied to MDOs (but Coid developing a model in UK).
- Key informant approach – information obtained by interviews with key informants/experts. Has been used to determine purchasing priorities.
- Community Forum Approach – community members asked to assess needs of those within the community (not yet applied to MDOs).

Cohen A, Eastman N. Needs assessment for mentally disordered offenders and others requiring similar services. Theoretical issues and methodological framework. *British Journal of Psychiatry* 1997;171:412-6.

Reviews literature (no search strategy) on definition and measurement of outcome in relation to MDOs. Presents general principles of outcome measurement as a 'framework' and analyses the problems of conducting outcome research including: heterogeneity of MDOs and the complexity of their needs – some resulting from mental health problem, others related to offending (these may or may not be related), therefore outcome measurement must cover wide range of domains. Concludes that outcome must be placed within a broader evaluative framework of service evaluation to include 'input', 'process' and 'outcome' indicators which related to programme/policy objectives. Presents a 'comprehensive conceptual framework for the measurement of outcome, quality and service evaluation for MDOs'.

Patrick HE, Picken J, Lewins P, Cummings I, Parrott J. Improving health services for prisoners : A health needs assessment of Her Majesty's Prison Belmarsh. *Public Health Medicine* 2000;2:130-4

Describes process of assessing the health needs of HMP Belmarsh inmates (1999-2000). Project team made following priorities for improvements in services using the Prison Health Needs Assessment Toolkit (see excluded papers). Team identified a number of priority areas for improvement: information systems, staffing profile, need for a PCT and practice manager post, need for a CMHT in the prison, improvement of physical environment, development and implementation of protocols, prisoner empowerment to manage own health. Action plan has now been agreed.

4.6.9 Screening for mental health problems

Birmingham L, Gray J, Mason D, Grubin D. Mental illness at reception into prison. *Criminal Behaviour and Mental Health* 2000;10:77-87.

Evaluation of screening process at Durham prison on 546 consecutive remand prisoners. Findings of routine screening was compared with research screening, also comparison through observation and assessment of environment, healthcare staff were interviewed and prisoners' views on screening were identified. Findings: routine screening compromised by unsatisfactory environment and inadequate communication skills of prison healthcare staff, records were missing or incomplete in 10% of cases. Four variables were identified that were best predictors of mental illness and routine assessment included questions in these areas. Subsequent mental health assessment by doctors added little information. Conclusions - screening needs revision. Recommend preliminary screen by trained prison health worker, prison doctors to focus only on those who screen positive initially.

Boothby JL, Durham TW. Screening for depression in prisoners using the Beck Depression Inventory. *Criminal Justice and Behavior* 1999;26:107-24.

Describes use of Beck's Depression Inventory (BDI) during prison admission process and establish utility of BDI as a screening measure for depression among prisoners. Advantage of taking 5-10 minutes to administer, disadvantage of being a transparent instrument on which it is simple to 'fake good or bad'. BDI administered to 1,494 consecutive admissions to N. Carolina state prison. Scores differed by sex, age, custody status, recidivism and race. Factor analysis yielded four distinct interpretable factors labeled cognitive symptoms, vegetative symptoms, emotional symptoms, and feelings of punishment - all of which may suggest different responses to incarceration. The BDI may

not, therefore be measuring depression (eg punishment is a reality). Further testing is needed, and possible amendment before it is used as a screening tool for prisoners.

DiCataldo F, Greer A, Profit WE. Screening prison inmates for mental disorder: An examination of the relationship between mental disorder and prison adjustment. *Bulletin of the American Academy of Psychiatry and the Law* 1995;23:573-85.

Describes use of a modified version of the 'Referral Decision Scale' (developed from the diagnostic interview schedule). Authors suggest that survey results suggest this may be an effective screening mechanism for 'correctional settings'. Focus of this assessment is extent to which adjusted cut off scores generate a manageable referral rate, rather than accuracy of identification of prisoners with mental health problems.

Gallagher RW., Ben-Porath YS., Briggs S. (1997) Inmate views about the purpose and use of the MMPI-2 at the time of correctional intake. *Crim Just Behav* 1997; 2:360-369

Follow-up of inmates' views about completing MMPI-2. Found responses were distorted by proportion of inmates who completed it: some admitted to answering untruthfully. Also MMPI-2 may not transfer easily to prison settings as several items which count as psychotic on the MMPI are reality based for prison population (e.g. being plotted against).

Grubin D, Parson S, Hopkins C, Report on the evaluation of a new reception health questionnaire and associated training. *Unpublished Report from University of Newcastle, 1999.*

Evaluation of the Prison Service Health Care Directorate revised screening instrument for use by Health Care Officers. Field trials held in 6 remand prisons. Gives informative background to development of screening instrument and the need for sensitivity rather than specificity. Findings: health screen identified 86% serious mental illness (compared with 25-33% in previous studies) but follow-up action was not always instigated. Detection of those withdrawing from drugs and alcohol was also good, and training did cover issues of prisoners who were afraid of disclosing or who over-disclosed (in order to obtain medications). Screen asks about self-harm and suicide risk but it is not clear whether all those at risk are identified.

Grubin, D, Parsons S, Walker L, Garrett L, Ebie E, Mtanabari S, Healicon J. Mental health screening in female remand prisons. *Report for the National Programme on Forensic Mental Health R&D. 2000*

Uses Reception health screening scale in two female remand prisons to evaluate routine screening process/instruments, and assess level of mental illness among female remand prisoners. Finds routine screening detects less than one third of women with mental health problems. Identified 2 variables that detect 80% of mental illness in women. Recommend different screening for female and male prisoners, routine screening (including key questions) for all prisoners, with all those responding positively to two questions having further assessment by trained mental health worker.

Morris SM., Steadman HJ., Veysey BM. (1997) Mental health services in US jails: a survey of innovative practices. *Crim Just Behav*, 24:3-19

Found that a multi-tiered evaluation procedure was most effective with initial screening by a booking officer followed by a mental health screening by a member of mental health professional and where any evidence of mental health problems, a full evaluation by a trained mental health professional. Cost-effective, and successful in identifying large proportion of inmates needing mental health treatment.

Roesch R. Mental health interventions in pre-trial jails. In Davies G, Lloyd-Bostock S, et al., eds. *Psychology, law, and criminal justice: International developments in research and practice*, pp 520-31. Berlin: Walter De Gruyter, 1995

Describes screening process aimed at breaking the cycle of incarceration and release of mentally disordered offenders. All persons entering Surrey (British Columbia) pretrial (remand) jail are given mental health assessment including BPRS, GAFS, and semi-structured interview to identify mental health history, orientation, social adjustment and criminal history. All inmates considered to be at risk of mental illness are referred to forensic nurse where more detailed screening occurs and if necessary they are then referred for specialist mental health services. On discharge, mental health services are involved if necessary. Conclusions: Problems occur in co-operative working between CJS and health service, gap needs to be bridged by key personnel, and correctional staff need routine training in mental health problems.

Teplin L, Schwartz J, Screening for severe mental disorder in jails: the development of the referral decision scale. 1989. *Law and Human Behaviour*, 13:1-17

Describes development of Referral Decision Scale. This is successful at picking up people with serious mental illness (sensitivity 79%) with fewer false positives (specificity 99%) but 14 questions focus exclusively on psychotic disorders. It does not screen for physical illness, alcohol and drug withdrawal, or risk of self-harm).

Wang EW., Rogers R., Giles CL, Diamond PM., Herrington-Wang LE., Taylor ER. (1997) A pilot study of the personality assessment inventory (PAI) in corrections: assessment of malingering, suicide risk and aggression of male inmates. *Behav Sci Law*, 15: 469-482

Personality Assessment Inventory found to be particularly useful in identifying suicidal prisoners, and in distinguishing between 'malingering' and aggression'

4.6.10 Studies of Specific Groups

Gorsuch, N. Unmet need among disturbed female offenders. *Journal of Forensic Psychiatry*, 9, 3, 1998

Case note study of 44 women on psychiatric wing at HMP Holloway. All had been referred to NHS psychiatric services. Half the women were refused a bed at least once (n=22, 'difficult to place') the other half obtained beds without difficulty (n=22, 'comparison group'). These groups were compared on a range of socio-demographic and psychiatric variables. The groups differed significantly in the following ways: more of the comparison group had held skilled jobs; more of the difficult to place group were categorised as dangerous/violent and had more serious offences. Both groups had 'disturbed' personal histories but the difficult to place women were more likely to report suffering some kind of abuse and far more of this group had a history of self-harm. Most women in both groups (93%) had past contact with psychiatric services and all but one in the difficult to place group had diagnoses that included personality disorder. The authors conclude that these women were 'difficult to place' as a result of inadequate service provision *and* poor perceived treatability. This raises the need for alternative provision for these women, and more research into therapeutic interventions that may be effective.

Kurtz Z, Thornes R, Bailey S. Children in the criminal justice and secure care systems: how their mental health needs are met. *Journal of Adolescence* 1998;21:543-53.

Survey of the perceptions of relevant service providers about the mental health needs of young people considered for secure placement. Agreed by Departments of child and adolescent psychiatry, and forensic psychiatry, social services, youth justice, probation,

secure units and young offender institutions that highly disturbed young people are not adequately served. Their needs are neither well recognised, understood nor met. Available expertise and resources are patchy and limited.

Mayer C. HIV-infected prisoners: What mental health services are constitutionally mandated? *Journal of Psychiatry and Law* 1995;23:517-53.

The incidence of AIDS is 14 times higher in state and federal prisons in the US than in the general population. This paper reviews the constitutional rights of US prisoners with AIDS for mental health care, and lists their special mental health needs such as depression, anxiety, adjustment disorder, panic disorders, delirium and dementia. Interventions and treatments are briefly reviewed with recommendations for appropriate screening, monitoring and off-site specialised psychiatric care.

NHS Centre for Reviews and Dissemination and School for Policy Studies, Bristol University. Women and secure psychiatric services: a literature review (CRD Report No. 14). 1999. York, NHS Centre for Reviews and Dissemination, University of York.

Cochrane review addressing three questions: service models for providing psychiatric care in secure settings; information about populations of women deemed to need psychiatric care in secure settings; evidence of effectiveness of different service models. Search strategy specified and papers included met specified criteria: descriptive studies of service models and populations, effects studies. Results are given in detail. Descriptive studies included services where no specific provision is made for women, and services where wards are segregated (one for women and several for different categories of male patients). None of the papers measured effectiveness of model, and few recognised a need for specific provision for women. Population studies did not give data separately for women, but disproportionate numbers of women from ethnic minority groups. There was only one study of effectiveness of psychiatric care for women (this was conducted at Carstairs Special Hospital), it found a poorer outcome for women admitted from psychiatric hospital than from courts. Gaps in research appeared to be: knowledge of effects of different service models; impact of gender and social inequalities on women, and how they perceive themselves, their actions and needs; ways of measuring women's needs; experiences and needs of women diagnosed with PD; experience and needs of women from ethnic minority groups; comparative studies of male vs women prisoners with mental illness; all population studies should give figures broken down by sex. Although this review included secure hospital provision and general psychiatric services, these research gaps do appear to accord with research into female prisoners with mental illness.

Teplin LA, Abram KM, McClelland GM. Mentally disordered women in jail: Who receives services? *American Journal of Public Health* 1997;87:604-9.

Survey of 1272 female arrestees awaiting trial in Chicago, US, all assessed for mental illness (116 [10.7%] were deemed to need services on set criteria, but only 23.5% of these received mental health care of any kind. Type of disorder, treatment history and demographic variables affected the odds of them receiving services.

Veysey, BM. Specific needs of women diagnosed with mental illnesses in U.S. jails. In Levin BL, Blanch AK, Jennings A, eds. *Women's mental health services: A public health perspective*, pp 368-89. Thousand Oaks, CA, US: Sage Publications, 1998.

Review of needs of women with mental illness in US jails. No indication of search strategy, and no overall aims. Identifies that women have high level of childhood and adult physical and sexual abuse, high levels of general health problems (AIDs, HIV, hepatitis, TB, STD), 67% have children under 18 years, they have higher levels of depression than men. For women to have access to services tailored to their unique needs jails must provide women specific mental health services including 'classification beyond simply being female' to prevent relatively small populations of women being treated as

homogenous group. 87% women are arrested for non-violent crime which has implications for treatment by staff and levels of security. Recommendations are made for women sensitive screening, medication, crisis intervention and women only treatment groups, training of prison staff, and use of outcome measures that acknowledge women's experiences.

4.6.11 Roles and responsibilities of different professionals

Appelbaum KL, Hickey JM, Packer I. The role of correctional officers in multidisciplinary mental health care in prisons. *Psychiatric Services* 2001;52:1343-7
Stresses the importance of prison officers' contribution to the observation, assessment and management of prisoners with mental health problems. By virtue of continual contact with prisoners, correctional officers are the first to notice signs of change, and can provide important support on a subtle but long-term basis. They should therefore have a greater role in the ongoing monitoring and decision making about prisoners, more sense of being able to make a difference and play a part may begin to change their view of MDOs, and given appropriate information they are able to take more responsibility. They must come to view discipline and sanctions as an important part of maintaining safety, rather than as essential punishment. Collaboration rests on shared core values and respect, appropriate training, ongoing communication and co-operation.

Fahy TA. The police as a referral agency for psychiatric emergencies - A review. *Medicine, Science and the Law* 1989;29:315-22.

An observational study of the role of the police in recognising, managing and referring people with mental health problems.

Heilbrun K, Nunez CE, Deitchman MA, Gustafson D, et -al. The treatment of mentally disordered offenders: A national survey of psychiatrists. *Bulletin of the American Academy of Psychiatry and the Law* 1992;20:475-80.

Nationwide survey of psychiatrists working with MDOs in public mental health hospitals to determine what kinds of treatments were being provided, for what problems, with what frequency and to what kinds of patients. Directors of psychiatry from 71% of 115 facilities responded. Responses revealed that treatments were largely appropriate, but many (eg anger management, CBT and behavioural treatment) were used only rarely, and not always for the problems for which they have been shown to be most effective.

Lombardo LX. Mental-Health Work in Prisons and Jails - Inmate Adjustment and Indigenous Correctional Personnel. *Criminal Justice and Behavior* 1985;12:17-28.

Argues that traditional mental health services for prisoners have focused on the needs of those with identified mental illness. Correctional staff could play an important role in the main prison area by assisting inmates to cope with the stress produced by everyday institutional living conditions. Training would focus on changing the 'lens' or beliefs/values of staff, so that their role is viewed as rehabilitative rather than controlling; as having an effect on the manner in which inmates experience confinement; as limiting the damaging effects of the environment.

Polczyk-Przybyla M, Gournay K. Psychiatric nursing in prison: the state of the art?. [Review] [26 refs]. *Journal of Advanced Nursing* 1999;30:893-900

Describes problems in prison nursing at Belmarsh Prison and subsequent review and change in the light of policy guidance. Significant increases were made in clinical staff and disciplinary staff, with streamlining of administrative responsibilities. This allowed nurses to focus on nursing rather than admin and security and reduction in managerial responsibilities. Impact of changes discussed - many still ongoing (e.g. achieving nurse training status, recruitment of staff, changing care planning system). Developing new

therapeutic interventions specifically designed for prison environment e.g. nursing disturbed prisoners without medication (those who refuse medication must be transferred to NHS facility to be put on MHA section, but beds usually not available for several weeks); nursing prisoners in main prison (or developing optimum in-reach support from community teams).

Roberts C, Hudson BL, Cullen R. Working with mentally disordered offenders: the training of probation officers. *Issues in Social Work Education* 1994;14:34-50.

CCETSW funded survey of probation officers concerning their training needs in relation to MDOs. For 193 respondents, training, experience and relevance and content of training were surveyed. Findings suggest that basic training does not adequately cover mental health and forensic topics. A series of recommendations are made.

Rogers P., Topping-Morris B. Prison and the role of the forensic mental health nurse. *Nursing Times* 1996;92:32-4

Describes role of forensic nurse in medium secure units and potential for this role to be implemented in prison setting to improve mental health care available. Illustrated with a case example.

Shah PJ. Child and adolescent forensic psychiatry survey : in Scotland. *Health Bulletin* 2001;59:54-6.

Survey of forensic psychiatrists (n=79, response rate 70%) regarding services for child and adolescent offenders in Scotland in order to assess: available expertise, how this is organised, 'experts' perceptions of need for a specialist service, and referral criteria to such a service. Findings: only 3 psychiatrists had forensic training; few knew of a colleague to consult re child and adolescent offenders, the majority would refer the most difficult cases to a child and adolescent forensic psychiatrist if they were available.

Towl G. What do forensic psychologists in prison do? *British Journal of Forensic Practice* 1999;1:9-11.

Describes the role of forensic psychologists. Lists types of work: group work ('in enhanced thinking skills' and 'reasoning and 'rehabilitation', and with sex offenders, young offenders and women); management of more difficult and disruptive prisoners; in therapeutic communities; risk assessment and management of lifers; staff recruitment and training; research, policy and practice with lifers; with drug abusers. No outcome data presented.

Yates S. Promoting mental health behind bars. *Nursing Standard* 1994;8:18-21

Describes (with no outcome data) development of a prison psychiatric nursing service at Barlinnie Jail, importance attached to: developing a nurse led assessment system on arrival; giving treatment within main halls of the prison rather than just in psychiatric unit; liaising with all other staff; setting up a mental health forum - now run by discipline officers; providing group therapy for groups of prisoners with particular problems, working with CPN input to liaise with 'outside', working as advocates (preventing exploitation of vulnerable prisoners), training discipline officers.

4.7 Excluded papers (categorised by reason for exclusion)²

4.7.1 Description of Problems/Needs of specific groups of prisoners with no explicit implications for treatment (*included* if *studies* of interventions/systems to support specific groups)

Abram KM, Teplin LA. Co-occurring Disorders Among Mentally-Ill Jail Detainees - Implications for Public Policy. *American Psychologist* 1991;46:1036-45 – draws on prevalence studies to make recommendations for care of prisoners with dual diagnosis.

Birmingham L. Between prison and the community - The 'revolving door psychiatric patient' of the nineties. *British Journal of Psychiatry* 1999;174:378-9 – refers to impact of deinstitutionalisation on numbers of mentally ill in prison.

Coid J. Mentally abnormal prisoners on remand: 1 – rejected or accepted by the NHS? *British Medical Journal* 1988;29 :1779-82

Coid J. Mentally abnormal prisoners on remand: II: comparison of services provided by Oxford and Wessex regions. *British Medical Journal* 1988;296:1783-4.

These linked papers describing mental health provision for remand prisoners emphasise the need for mentally ill prisoners to receive the treatment they need (and much of this is possible in general psychiatric units) to avoid being criminalised.

Sims NE. The mentally disordered offender in the criminal justice system. *Dissertation Abstracts International* 1990;50:5893 – compares recidivism rates between MDOs in prison and prisoners without mental illness. Found no difference.

4.7.2. Papers that do not refer to people *in* prison OR do not refer to people *with* mental illness

Aderibigbe YA. Deinstitutionalisation and criminalisation: tinkering in the interstices. *Forensic Science International* 1997;85:127-34 – discusses problems of de-institutionalisation, homelessness and criminalisation.

Metzner JL, Dubovsky SL. The role of the psychiatrist in evaluating a prison mental health system in litigation. *Bulletin of the American Academy of Psychiatry and the Law* 1986;14:89-95.

Drewett, A. and Shepperdson, B. A literature review of services for mentally disordered offenders. 1995. Nuffield Community Care Studies Unit, University of Leicester.

A review of service provision for mentally disordered offenders *outside of prisons*.

McCabe J. Women in special hospitals and secure psychiatric containment. *Mental Health Review* 1996;1:28-30.

Lattimore PK, Witte AD, Baker JR. Experimental Assessment of the Effect of Vocational Training on Youthful Property Offenders. *Evaluation Review* 1990;14:115-33.

² Organised alphabetically within each category

Widiger TA, Corbitt EM. Antisocial personality disorder. In Livesley WJ, ed. *The DSM-IV personality disorders. Diagnosis and treatment of mental disorders*, pp 103-26. New York, US: The Guildford Press, 1995.

Prins H. Literature review: Psychiatry: Dangerous offenders. *British Journal of Social Work* 1983;13:443-8.

Laing, J.M. Mentally Disordered offenders and their diversion from the criminal justice process. PhD, Leeds, 1996 – not about MDOs in prison

Robertson G, Pearson R, Gibb R. The entry of mentally disordered people to the criminal justice system. *British Journal of Psychiatry* 1996;169:172-80 – assessment in police cells

Rogers R, Bagby RM. Diversion of Mentally Disordered Offenders - A Legitimate Role for Clinician. *Behavioral Sciences & the Law* 1992;10:407-18

Gottschalk R, Davidson II WS, Gensheimer LK, Mayer JP. Community-based interventions. In Quay HC, ed. *Handbook of Juvenile Delinquency*, pp 266-89. New York: Wiley, 1987.

Tyrer P, Coid J, Simmonds S, Joseph P, Marriott S. Community mental health teams (CMHTs) for people with severe mental illnesses and disordered personality (Cochrane Review). *The Cochrane Library, Issue 3, 2002. Oxford: Update Software. 2002.*

Bailey D. Services for mentally disordered offenders: a literature review. *Social Services Research, University of Birmingham* 1996;3:41-57

Birmingham L. Between prison and the community - The 'revolving door psychiatric patient' of the nineties. *British Journal of Psychiatry* 1999;174:378-9

Draine J, Solomon P. Describing and evaluating jail diversion services for persons with serious mental illness. *Psychiatric Services* 1999;50:56-61.

Lamb HR, Bachrach LL. Some perspectives on de-institutionalisation. [Review] [74 refs]. *Psychiatric Services* 2001;52:1039-45 - a general paper on de-institutionalisation, not focusing on prison population.

Vaughan PJ. A consortium approach to commissioning services for mentally disordered offenders. *Journal of Forensic Psychiatry* 1999;10:553-66 – excluded because not concerned with MDOs in prison setting.

The World Health Report 2000. Health Systems: Improving Performance. 2000. World Health Organisation – no particular reference to prisoners.

4.7.3 Service descriptions

Huckle P., Williams T. Providing a forensic psychiatric service to Cardiff Prison. *Psychiatric Bulletin* 1994;18:670-2 – description of prisoners referred to psychiatric outpatient clinic from Cardiff Prison.

Haddad JE. Implementing effective in-prison outpatient care for inmates with serious mental illness - The Ohio experience. In Landsberg G, Smiley A, eds. *Forensic mental health: Working with offenders with mental illness*, pp 19-1-19-11. Civic Research Institute, 2001 - description of the structure of a prison outpatient service in Ohio, US – no outcome data given.

Greene RT. A Comprehensive Mental-Health Care System for Prison-Inmates - Retrospective Look at New-Yorks 10 Year Experience. *International Journal of Law and Psychiatry* 1988;11:381-9 - description of the 'New York Approach' as a model for designing a system of care which provides comprehensiveness, continuity, co-ordination and co-operation.

Vaughan PJ. A consortium approach to commissioning services for mentally disordered offenders. *Journal of Forensic Psychiatry* 1999;10:553-66- Description of the Wessex Consortium needs assessment programme to determine psychiatric support needs for MDOs on their 'patch'. Telephone interviews were held with prison healthcare officers to find out about nature of services provided. This was followed up by visits to 16 prisons to interview prisoners with mental health problems and establish the problems they faced.

Murugesan G. Care of the mentally ill offender. A model service. [3 refs]. *Medicine & Law* 1999;18:601-6 - describes a medium secure facility in a psychiatric hospital in Sydney Australia. Gives breakdown of MDO characteristics and problems encountered with forensic patients, but no outcome data.

Carr K, Hinkle B, Ingram B. Establishing mental health and substance abuse services in jails. *Journal of Prison and Jail Health* 1991;10:77-89 – describes mental health and substance abuse program at Henrico County Jail including training of staff, developing trust with inmates, conservative medication, breaking down differences in psychological treatments and prison regimes – no outcomes reported.

Johnson SC, Hoover JO. Mental health services within the Federal Bureau of Prisons. *Psychiatric Annals* 1988;18:673-4.

Landsberg G. Developing comprehensive mental health services in local jails and police lockups. In Cooper S, Lentner TH, eds. *Innovations in community mental health*, pp 97-123. Sarasota, FL, US: Professional Resource Press/Professional Resource Exchange, Inc, 1992 – a summary of issues in planning developing and implementing mental health services in local jails and police cells – not research.

Smith JA, Faubert M. Programming and process in prisoner rehabilitation: A prison mental health center. *Journal of Offender Counseling, Services and Rehabilitation (New York)* 1990;15:131-53.

Description of the Mental Health Center for the North Carolina state prison system. Includes: philosophy of respect for the person and his potential; individually tailored programme of counselling and therapy led by psychiatrist (in which mental health problems are seen as quite separate from offence - not necessarily the cause of offence), integral system of staff development and support, evaluation and accountability.

Telfer J. Balancing care and control: introducing the care programme approach in a prison setting. *Mental Health and Learning Disabilities Care* 2000;4:93-6 – useful paper about the role of the Forensic mental health liaison nurse in a prison setting and the development of the CPA in a Beacon site service. Good example of 'good practice'.

Linehan T. Direct support. *Community Care* 1995; 1054:30

Describes neglect of female offenders and the publication of a directory of available services for this group.

4.7.4 Ethics/Rights of prisoners

Williams P. *The right of prisoners to psychiatric care. Journal of Prison and Jail Health* 1983;3:112-8

Birley J. Ethical issues concerning psychiatric care in prison: report from the Special Committee on Unethical Psychiatric Practices. *Psychiatric Bulletin* 1992;16:241-2.

Leibman FH, Leibman N. Developing trends in prisoners' rights to mental health treatment. *American Journal of Forensic Psychology* 1991;9:19-28.

Leibman FH. The prisoner's right to psychiatric and psychological treatment. *American Journal of Forensic Psychology* 1989;7:25-35.

The Law and Mentally Disordered Offenders

Akinkunmi A, Murray K. Inadequacies in the Mental Health Act, 1983 in relation to mentally disordered remand prisoners. *Medicine Science and the Law* 1997;37:53-7

Proposes revisions of MHA based on experiences at Bentham Unit – (which provides for Remand prisoners only). At present legislation requires that transfer to hospital differs between remand prisoners and convicted prisoners leading to interruptions in treatment.

Birmingham L. Detaining dangerous people with mental disorders. New legal framework is open for consultation. *BMJ*, 2002; 353-3.

Reform of the Mental Health Act 1983 : proposals for consultation. London: The Stationery Office, 1999, 1999.

Ratcliff R-AW. Mental health legislation for Scotland : 1960, 1983, and 1984. *International Digest of Health Legislation*. 1985;36:241-5

Department of Health. Criminal Justice Act 1991: Mentally disordered offenders. *LAC 93(20)*. 1993. London, Department of Health

Humphreys MS, Kenny-Herbert JP. New law enlightenment: will reform of current mental health legislation lead to improved care for mentally disordered offenders. *British Journal of Forensic Practice* 2000;2:17-21.

4.7.5 Opinion/viewpoints/commentary

Pogrebin MR, Regoli RM. Mentally Disordered Persons in Jail. *Journal of Community Psychology* 1985;13:409-12

Moulden M. Women prisoners with mental health problems. *Prison Service Journal* 1999;11-2 – argues for a national treatment strategy for women prisoners.

Johnson SC, Hoover JO. Mental health services within the Federal Bureau of Prisons. *Psychiatric Annals* 1988;18:673-4.

Harding J. Providing better services for mentally disordered young offenders: pitfalls and prospects. *Probation Journal* 1999;46:83-8 – identifies problems facing young mentally disordered offenders, gaps in service provision and role of probation service in multi-agency context. Sets an agenda for positive change.

Smith R. The mental health of prisoners. II. The fate of the mentally abnormal in prison. *British Medical Journal* 1984;288:386-8.

Smith R. The mental health of prisoners. I. How many mentally abnormal prisoners? *British Medical Journal* 1984;288:308-10.

Smith R. "Disorder, disillusion and disrepute". *British Medical Journal* 1983;287:1521-3 – a brief examination of the 'mess' that British prisons are in, with disorder in the organisation of the system, disillusion of all involved having an effect on what is expected, and the disrepute which brings undeserved problems for those working very hard to make the system work.

Osofsky HJ. Psychiatry behind the walls: Mental health services in jails and prisons. *Bulletin of the Menninger Clinic* 1996;60:464-79 – author draws on his experience as a 'court appointed consultant for mental health services in the local county prison' to consider growing need for appropriate mental health services in jails and prisons, and the types of services that are needed.

Adams K. Addressing Inmate Mental-Health Problems - A New Direction for Prison Therapeutic Services. *Federal Probation* 1985;49:27-33 – Describes differences between therapeutic activities in correctional institutions and mental health institutions and speculates that as correctional rehabilitation wanes, prisons could move towards an approach similar to mental health promotion, but there is a danger of all therapeutic activities being curtailed if mental health services move outside prison environment.

Tennant EE. Mentally disordered offenders in the prison setting. *Police Journal* 1997;70:291-301 - Describes chaotic sentencing policy for mentally disorder offenders and proposes alternative methods for 'disposing' of them.

Markham G. Policy and service development trends: forensic mental health and social care services. *Tizard Learning Disability Review* 2000;5:36-43

Mapp S. Barred from services. *Community Care* 1994;1022:21-2.

Keavney, P.J. Prison medicine : a crisis waiting to break. [London: - BMA House, Tavistock Square, London WC1H 9JP] : *British Medical Association*, 2001

Towl G. Reflections upon suicide in prisons. *British Journal of Forensic Practice* 2000;2:17-22.

Discusses the language used to describe suicidal and self-injurious behaviour. Outlines principles that might help to reduce suicide in prison, including changes in staff attitudes and presentation and further support from Suicide Awareness Teams.

Pogrebin MR. Symposium: The crisis in mental health care in our jails: Jail and the mentally disordered: The need for mental health services. *Journal of Prison and Jail Health* 1985;5:13-9

Richer AD. Should the prison medical service develop its role in the treatment of mentally ill offenders. *Prison Service Journal* 1990;15-8 – argues that MDOs should ideally be treated in hospital, but since many remain in prison, it is essential that proper provision for prisoners with mental illness is made.

Welsh A, Ogloff JRP. Mentally ill offenders in jails and prisons: advances in service planning and delivery. *Current Opinion in Psychiatry* 1998;11:683-7 - Random selection and commentary on contemporary papers, full papers obtained.

Cavanaugh JL, Brakel SJ, Haywood T. Mentally disordered offenders: Clinical, political and legal developments in the United States. *Psychiatry, Psychology and Law* 1994;1:71-9.

Harding J. Providing better services for mentally disordered young offenders: pitfalls and prospects. *Probation Journal* 1999;46:83-8

Watson W, Grounds A. The mentally disordered offender in an era of community care: new directions in provision: proceedings of the 20th Cropwood Conference, 10-12 January 1990. Cambridge: *Cambridge University Press*, 1993 – excluded as a series of conference papers reflecting expert opinion on a variety of issues – not research

Scannell TD. Community care and the difficult and offender patient. *British Journal of Psychiatry* 1989;154:615-9 – commentary – and not about prison inmates

Roberts C, Hudson BL, Cullen R. Working with mentally disordered offenders: the training of probation officers. *Issues in Social Work Education* 1994;14:34-50 – description of professional role.

Rogers P, Topping-Morris B. Prison and the role of the forensic mental health nurse. *Nursing Times* 1996;92:32-4 – Need for closer links between MSUs and prisons, role of forensic nurse with prisoners with mental health problems.

Scarnati RA. Prison psychiatrist's role in a residential treatment unit of dangerous psychiatric inmates. *Forensic Reports* 1992;5:367-84 – Emphasises importance of good working relationships in unit with highly challenging inmates; need for empathy, and experience as a way of encouraging careers in forensic psychiatry.

Stark MM. The medical care of detainees and the prevention of tragedy: the role of the forensic medical examiner. *Clinical Risk* 2001;7:15-9

4.7 6 Policy papers and DoH/HMP Reports

Anon. Changing the Outlook: A Strategy for developing and Modernising Mental Health Services in Prisons. 2001. *Department of Health; HM Prison Service; The National Assembly for Wales.*

Anon. Mentally Disordered Offenders: Inter-agency working

Anon. Reform of the Mental Health Act 1983: proposals for consultation. London: The Stationery Office, 1999 -highlights the role of different agencies involved in providing care, drawing on recommendations of the Ritchie Inquiry. Clarifies existing guidance and outlines examples of good practice.

Anon. Managing dangerous people with severe personality disorder: proposals for policy development. London: - 50 Queen Anne's Gate, London SW1H 9AT: Home Office; London: Department of Health, available from PO Box 777, London SE1 6XH, 1999 - Policy to reduce risk posed by people with severe personality disorder (estimated 2000 people in England and Wales at any one time). Makes 2 proposals: a) to strengthen legislation so that people with DSPD would not be released whilst they continue to present a risk to the public; b) to provide legal powers for the indeterminate detention of people with DSPD in facilities run separately from prison or health service, with a focus on therapeutic needs rather than offence. Home Office Circular No. 12/95, Mentally Disordered Offenders: Inter-agency Working. May 1995.

Anon. National Suicide Prevention Strategy for England. 2002. Department of Health

Anon. Prison Health Policy Unit and Task Force. Prison Health Handbook. 2001. London, Department of Health. - Describes the Task Force: who they are, what they do and their developmental work programme.

Anon. Prison Health Policy Unit and Task Force. Prison Health Handbook. 2001. London, Department of Health.

Health, social work and related services for mentally disordered offenders in Scotland. [Edinburgh]: Scottish Office, 1999.- Paper sets out steps for multi-disciplinary and multi-agency working to organise services which are safe, provide quality care with proper attention to needs of individuals, provide care in community rather than institutional settings, and provide care that maximises rehabilitation and individuals' independence. Examines all steps of a person's journey through the CJS: Investigatory procedure, Court proceedings, Prison services, Health and Social Care services, future health provision, future social care provision, services for people with a learning disability and makes recommendations for each stage. Agencies are requested to implement recommendations and will be monitored by Scottish Office.

Longfield, Mike and Winyard, Graham. The future organisation of prison health care. Report by the Joint Prison Service and National Health Service Executive Working. 1999. London, Department of Health - Working Group findings

Metzner JL. Guidelines for psychiatric services in prisons. Criminal Behaviour and Mental Health 1993;3:252-67 – describes a framework for delivery of psychiatric services in prisons, administrative models, guidelines and unique issues.

Reed J. Practical steps for a quality service for mentally disordered offenders. London: - Room 112, Wellington House, 133-135 Waterloo Road, London SE1 8UG : Department of Health - Room 201, 50 Queen Anne's Gate, London SW1H 9AT : Home Office, 1995.

Reed J. Review of health and social services for mentally disordered offenders and others requiring similar services Volume 6: Race, gender and equal opportunities. London: HMSO, 1994.

Reed J. Review of health and social services for mentally disordered offenders and others requiring similar services : Volume 2: Service needs : the reports of the community, hospital and prison advisory groups and an overview by the steering committee. London: HMSO, 1993.

Reed J. Review of health and social services for mentally disordered offenders and others requiring similar services : final summary report. London: HMSO, 1992

Reed's far-reaching review set the agenda for prison services for mentally ill and made a series of recommendations that still pertain. Broadly, stated that MDOs should be dealt with as far as possible in the community rather than institutional settings; under conditions of no greater security than is justified by the degree of danger they present to themselves or to others; and, in such a way as to maximise rehabilitation and their chances of sustaining an independent life; which should be as near as possible to their own families or homes if they have them.

4.7.7 Guidelines/standards/recommendations that are not empirically evaluated

Anon. Continuity of Offender Treatment for Substance Misuse Disorders from Institution to Community (1999) Center for Substance Abuse Treatment's Treatment Improvement Protocol Series No. 30, National Clearing House for Drug and Alcohol Information 800-729-6686 (Best-practice guidelines focus on collaboration between criminal justice and substance abuse treatment systems. *Psychiatric Services* 1999;50:717)

Best practice guidelines developed by consensus panel of 15 US national 'experts from the criminal justice and treatment systems'. Focus on improving the continuity of treatment when offenders are transferred into the community through outreach, in-reach and 'third party' contract. Favours case management approach as part of a transition team.

Severson MM. Redefining the Boundaries of Mental-Health-Services - A Holistic Approach to Inmate Mental-Health. *Federal Probation* 1992;56:57-63.

Explores existing problems in the provision of adequate mental healthcare within prisons. Prisoners in US do not have a right to 'rehabilitation', the priority is to 'stop inmates causing trouble' rather than to provide treatment and rehabilitation. This has been blamed on use of medical model, which takes problem out of the domain of the general prison environment and enforces belief that only mental health staff can be rehabilitative. Author proposes 10 'missing ingredients' necessary for a holistic approach towards improving the health of inmates, all based on elimination of traditional boundaries separating mental health staff from other prison staff: communication between all staff, medical information to be freely available, treatment environment with as few distractions as possible, training all employees so that all believe that have a part to play in inmates mental health, employee education through the same routes as inmates (currently some envy about all training etc for inmates), all staff involved in decisions about classification and placement of prisoners, visits should be encouraged – they are linked to successful resettlement after release, counselling for correctional staff, administrative support to allow maximum time to be spent with inmates.

American Psychiatric Association (2000) Psychiatric services in jails and prisons (2nd Edition), *American Psychiatric Association, Washington DC* – APA guidelines for psychiatric services in jails and prisons.

Clegg C, Beardsmore A, Finch J. The Health Advisory Service 2000: standards for mentally disordered offenders. London: - 46-48 Grosvenor Gardens, SW1W 0EB: *Health Advisory Service (HAS2000)*, 1999 Brighton - 8 St. George's Place, Brighton, E. Sussex, BN1 4GB: Pavilion Publishing, 1999

Standards and criteria used in HAS 2000 systematic reviews of services for mentally disordered offenders. Covers 4 levels with standards in each and criteria to assess standards:

Level 1 – Service delivery: Individual needs assessment, individual care planning, clinical interventions.

Level 2 – Organisation of care: Range of services, inpatient care, housing and specialist residential provision, information for users, carers and others.

Level 3 – Intra-agency organisational issues: policies, staffing levels and skill mix, staff support and supervision, staff morale, staff training, clinical governance, information management.

Level 4 – Planning, integration and commissioning: needs assessment, strategies, quality assurance, resource allocation, service agreements, joint planning, joint working, commissioners' and service planners' expertise and knowledge, research.

Farrant, Finola. *Troubled inside: responding to the mental health needs of children and young people in prison.* 2001. London - 15 Northburgh Street, London EC1V 0JR: *Prison Reform Trust*, 2001

Part of programme of work to improve the mental health response to young offenders with mental health problems. Of young people; free flow of information from GPs, immediate health and risk assessments; increased time out of cell in purposeful activity.

Health Advisory Committee for The Prison Service. *The Provision of Mental Health Care in Prisons.* 1997 - Standing Health Advisory Ctee for the Prison Service (HAC) provides advice to Ministers on issues affecting health of prisoners. This report draws on two pieces of commissioned work: (transfer of prisoners to and from NHS [E. Seymour, 1995], and care pathways of mentally ill prisoners to and from prison [M. Thornley, 1995]) to make recommendations about the provision of mental health care in prisons that is 'equivalent' to the NHS.

Henderson G.,Field V. *Overview on the commissioning and provision of services for people with mental health problems who come into contact with the criminal justice system.* *Mental Health Review* 1996;1:8-14 – useful guidelines for commissioners.

Holmes, S. P. and Barnes, S. B. B. *For People with Mental Health Problems (Part Two): Mentally Disordered Offenders.* 1994. NHS Executive (Trent) and The Centre for Mental Health Services Development, King's College London. Health Gain Investment Programme.

Lipton DS. *The correctional opportunity - pathways to drug treatment for offenders.* *Journal of Drug Issues* 1994;24:331-48

Imprisonment of substance abusers provides important opportunity for treatment. Success of 'Stay' n 'Out' and Cornerstone Programs in the US is described, and elements of a comprehensive treatment strategy are outlined.

Metzner JL. *An introduction to correctional psychiatry: Part III.* *Journal of the American Academy of Psychiatry & the Law* 1998; 26:107-15.

Metzner JL. *An introduction to correctional psychiatry: Part II.* *Journal of the American Academy of Psychiatry & the Law* 1997;25:571-9

Develops principles for psychiatric services for MDOs based on recommendations by the National Commission on Correctional Health Care (NCCHC) by a task force of the American Psychiatric Association (APA) and the American Public Health Association (APHA). Includes administrative structure, staffing, identification of inmates with mental illness by a formal screening process and mental health evaluation.

Metzner JL. Guidelines for psychiatric services in prisons. *Criminal Behaviour and Mental Health* 1993;3:252-67.

A review of US policies and guidelines for correctional healthcare programmes, with clear recommendations for basic principles of mental health systems including: Mission and goals; Administrative structure; Staffing; Procedures for identification of mental health problems; Treatment; Programmes available; Ethical standards; Training of staff; Quality assurance plan.

World Health Organisation. Mental health promotion in prisons. Report of the third meeting of the project. 18-21 November 1998, The Hague, Netherlands. 1998. London: W.H.O., R.O.E., 1998. – WHO recommendations for mental health promotion in prisons.

World Health Report 2000. Health Systems: Improving Performance. 2000. World Health Organisation. Descriptions of International services or research in cultures not generalisable to UK system

Anon. International perspectives on forensic mental health systems. *International Journal of Law and Psychiatry* 2000;23.

Agbahowe SA, Ohaeri JU, Ogunlesi AO, Osahon R. Prevalence of psychiatric morbidity among convicted inmates in a Nigerian prison community. *East African Medical Journal* 1998;75:19-26.

Asuni T. Mental-Health in Prison - the African Perspective. *International Journal of Offender Therapy and Comparative Criminology* 1986;30:1-9.

Freiberg A. The disposition of mentally disordered offenders in Australia: 'Out of mind, out of sight' revisited. *Psychiatry, Psychology and Law* 1994;1:97-118.

Hodgins S. Mental health treatment services in Quebec for persons accused or convicted of criminal offences. *International Journal of Law & Psychiatry* 1993;16:179-94.

Hoyer G. Management of mentally ill offenders in Scandinavia. *International Journal of Law and Psychiatry* 1988;11 no 4 p317-327:317-27.

Joukamaa M. Need for psychiatric care in prisoners: Results of the Health Survey of Finnish Prisoners (Wattu project). *Therapeutic Communities: International Journal for Therapeutic and Supportive Organisations* 1994;15:237-46.

Joukamaa M. Psychiatric Morbidity Among Finnish Prisoners with Special Reference to Sociodemographic Factors - Results of the Health Survey of Finnish Prisoners (Wattu Project). *Forensic Science International* 1995;73:85-91

Nedopil N., Ottermann B. Treatment of mentally ill offenders in Germany: With special reference to the newest forensic hospital - Straubing in Bavaria. *International Journal of Law & Psychiatry* 1993;16:247-55.

Perera C., Wilson B. The treatment and care of mentally ill offenders in Victoria, Australia. *Psychiatry Psychology and Law* 1996;3:47-61

Reali M., Shapland J. Breaking Down Barriers - the Work of the Community Mental Health Service of Trieste in the Prison and Judicial Settings. *International Journal of Law and Psychiatry* 1986;8:395-412.

Taborda JGV, Bertolote JM, Cardoso RG, Blank P. The impact of primary mental health care in a prison system in Brazil. *Canadian Journal of Psychiatry - Revue Canadienne de Psychiatrie* 1999;44:180-2.

4.8 General References

Blaxter M. (on behalf of the BSA Medical Sociology Group) 'Criteria for evaluation of qualitative research'. *Medical Sociology News* 1996;22:68-71

Fulop N., Allen P., Clarke A., Black N., (2001) *Studying the Organisation and Delivery of Health Services. Research Methods*. London: Routledge

Goffman E., (1960) *Asylums*, Harmondsworth: Penguin

Mays N., Pope C. (2000) 'Quality in qualitative data analysis' in C. Pope and N. Mays (eds) *Qualitative Research in Healthcare*, 2nd Edition, 89-110, London: BMJ Books

Murphy E., Dingwall R., Greatbach D., Parker S., Watson P. (1998) *Qualitative Research Methods in Health Technology Assessment: A Review of the Literature*. Health Technology Assessment, 2, 16:1-276

Popay J., Rogers A., Williams G (1998) 'Rationale and standards for the systematic review of qualitative literature in health services research', *Qualitative Health Research*, 8:341-351

Pope C., Mays N. (eds) *Qualitative Research in Healthcare*, 2nd Edition, 89-101, London: BMJ Books

SECTION 5

DISCUSSION OF FINDINGS

5. DISCUSSION

This review aimed to elicit the literature that relates to mental disorders and prisoners. It was primarily commissioned in order to inform future research priorities in this field in the light of the new strategy currently being implemented (Department of Health/HMP Service, 2001). The basic assumption underpinning the plan is that prisoners with mental disorders will no longer be automatically located in prison health care centres but will have increasing access to primary care, mental health in-reach services, day care and wing-based treatments. In short, the range of facilities will be available that will mirror the community-based mental health services provided outside of the prison setting for the general population and outlined in the National Service Framework for Mental Health (Department of Health, 1999).

The review has been divided into three broad sections: a background section that highlights the general background and includes the strategic context, the epidemiology of mental disorders in prisons and the effectiveness of interventions for the general population with mental disorders; a section that reviews the effectiveness of interventions for prisoners with mental disorders and finally a review of research relating to service delivery and organisation for prisoners with mental disorders. In addition, the review team invited a group of key stakeholders to a consultation day held in London. The subsequent discussions at the consultation event helped the team to clarify and prioritise a series of recommendations that conclude this report. It has been fascinating to observe the manner in which findings, and subsequent recommendations have merged despite being identified in seemingly very different sub-sections of the review.

The review has posed considerable challenges. Initial trawls of the literature indicated that there were a potentially high number of journal articles and books that might be included and 2,502 papers were identified originally. After further sorting, the full versions of 392 papers were obtained. For each of the sub-sections of the review different criteria had to be developed in advance, to make decisions about exclusion or otherwise. In one sub-section, which focused on service delivery and organisation issues, this was a highly complex process as many of the studies here used qualitative methods where the development of standardised quality assessment criteria is embryonic.

It is important to stress the importance of involving service users in the research process an area that the team have attempted to afford high priority despite our inability to identify even one study or report from the service user perspective. The consultation day, for example, benefited from the presence of at least four service users. In the afternoon sessions and one focus group was dedicated to a consideration of service user issues – a topic that will be developed later in this section.

The first aspect of the background for the review concerned the epidemiology of mental disorders in prison. The main conclusions were that not only is the prevalence of mental health disorder far higher in prisons than in the general population but that co-existing mental disorders is a significant issue. Especially high prevalence rates were consistently reported for minority groups including; young offenders, women, older people and those from ethnic minority groups. The key sources, such as the ONS commissioned point prevalence study, tended to provide a snapshot, but provided little clue to the aetiology of mental health disorder in prisons. Thus, the reviewed observational studies could only provide information about prevalence rates and did not offer any explanation for causality. Prisoners may have higher rates of mental disorders than the general population but it is unknown whether such rates are merely a reflection of the prisoner population and their higher risk factors or whether the process of imprisonment itself gives rise to such rates. For example, how many prisoners enter prison with an existing problem and how many

develop a mental health problem thereafter? This question is crucial in determining future policy. If prisoners do develop mental disorders as a result of imprisonment this obviously raises the question of what can be done about the process of imprisonment to reduce such rates. If, however, the rates reflect the population then the questions arise as to what can be done, perhaps in relation to public health initiatives, to reduce risks prior to imprisonment (e.g., poverty, child abuse, and poor social support). These main findings give rise to a number of areas in which research priorities might be usefully discussed which are listed in the recommendations section below.

The second aspect of the background to the review was to identify, from existing systematic reviews, guidelines and evidence-based digests, evidence for effective interventions used to treat the general population. This section of the review focused on the major mental disorders established in the review of epidemiology. The findings from the review of effective interventions for prisoners will be considered here as well as there is substantial overlap between the two areas. The review of the general population establishes that there is sound evidence for a number of interventions in the treatment of schizophrenia. For example, it is known that clozapine is beneficial for people resistant to standard treatment, that anti-psychotic medication should be continued for 6/9 months after an acute episode, and that family interventions reduce relapse, as do psycho-educational interventions. It is more difficult, however, to see the applicability of at least one of these interventions (i.e. family interventions) in the prison context. The main implications of these sub-sections of the review are therefore the need to consider the applicability for prisoners of those interventions with demonstrable effectiveness in the general population. In addition, the review of the effectiveness of interventions with prisoners demonstrates that there might well be inherent problems with the conduct of RCTs in the prison setting. Three factors are of major importance here. First, the consent of prisoners to participate might be hard to achieve. Second, the outcome measures used in general populations might be of limited relevance especially in the broad areas of family and social functioning but there might well be problems too in the use of disorder-specific measures. One example, cited on the consultation day, was the Beck Depression Inventory that includes the item 'I feel like I am being punished'. Third, the organisational commitment required to run randomised controlled trials in prison settings needs to be fully explored perhaps linking this to firmer research governance arrangements in prisons. Finally, one useful suggestion that was made at the Consultation Event was that it should be a pre-condition that, where relevant, all funded 'effectiveness' trials conducted on the general population should have a prison arm.

The largest and most complex area of the review was perhaps the section on service development and organisation where a total of 78 papers were included and 108 papers were excluded. This aspect of the review generated eleven separate categories with four of these constituting over half of all those papers included; reviews (12), evaluation (11), roles/training of different professions (10) and theoretical papers (9). The theoretical papers provide a crucial perspective to the whole of this review with eloquent arguments about the deep-rooted organisational problems that exist in the provision of mental health services to prisoners. Cruser and Diamond (1996) convincingly suggest, for example, that mental health and criminal justice services exist in 'parallel universes' with contradictory values and goals which are reflected in training, everyday practice and cultures. In short, MDOs are offenders who happen to have a mental illness. This unfortunate separation of 'care' from 'custody' inevitably impacts upon the research agenda such that the specific effects of mental illness within a prison setting are rarely addressed neither is there research that directly assesses the impact of the prison environment upon mental health (this has been previously highlighted as a difficulty with the 'snap-shot' point-prevalence approach to the epidemiology of mental disorders in prisons).

A number of studies have reported the use of routine data collection to evaluate the effectiveness of programmes/systems for mental health care in prisons. The common components of successful evaluation models appear to be the development of clear guidelines (often for assessment under the CPA), collaborative working with the local health services and training for staff. Possible research priorities that emanate from this track of work include the development and testing of a prison-specific routine mental health outcome measure perhaps an adaptation of HoNOS. This type of instrument might also be important in allowing the implementation of guidelines to be evaluated – a recommendation that flows from the consideration of audit (section 6.3.5). The continued screening for the emergence of mental health problems of prisoners beyond reception might also be enabled – a recommendation related to the screening element of the review (see Section 6.3.9).

Finally, it is important to raise the issue of the involvement of prisoners with mental disorders themselves in the emerging research agenda. There is not, for example, one paper that describes any perspective from a ‘service user’ least of all to any discussion about the needs of prisoners. This is somewhat alarming particularly in relation to specific sub-groups where needs are likely to differ, for example, women, older people, young offenders, and members of ethnic minority groups. The consultation day helped to identify a formal process for advancing the issue of formal user involvement in prison mental health that includes: goals, plans for accessing appropriate expertise, and the provision of training. More detail is provided at the end of the recommendations section.

There is an enormous R&D development agenda for taking forward research that relates specifically to prisoners with mental health problems. Although this review has identified some specific priorities that will require further discussion there are some more fundamental issues that need to be addressed in the first instance. One example of such an issue might be the range of challenges inherent in the conduct of RCTs in prison mental health research (see recommendation A2). In conclusion, it would be fair to say that prison mental health research has, at best, reached the theory (pre-clinical) and modelling phases of the Medical Research Council’s continuum of increasing evidence (MRC, 2000). An agenda should be set that allows the exploratory trial, definitive RCT and long-term implementation phases to flourish.

However, whilst the MRC framework will be crucially important for the future of controlled trials in the prison population – it should be clear from the breadth of the recommendations that other types of research are also demanded. Thus, the development of prison-specific outcomes measures requires a different methodological approach to research as do each of the recommendations in the section on service development and organisation. Finally, there are important R&D infrastructure issues to address and perhaps the most important amongst these is the meaningful introduction of a service user perspective into prison mental health research.

References

Department of Health (1999). National Service Framework for Mental Health. London:

Department of Health/HM Prison Service (2001) Changing the outlook: a strategy for modernising mental health services in prisons

Medical Research Council (2000) A framework for development and evaluation of RCTs for complex interventions to improve health
Medical Research Council, London

SECTION 6

RECOMMENDATIONS

6. SUMMARY OF RECOMMENDATIONS

A Methodology

- A1 How should prisoners with mental health problems be encouraged to participate meaningfully in research?
- A2 Consider in detail the organisational commitment and incentives that would need to be in place for the conduct of RCTs. As in the general population researchers have a major task in educating potential participants in the need for research and also why specific research designs might be used to answer specific questions. In addition there is a need to also educate those charged with the care of prisoners so that both staff and prisoners are motivated to facilitate research of potential benefit to the participants and to the functioning of the prison service.
- A3 Agree that in a number of instances, other designs (especially those that employ case-controls) will provide an acceptable surrogate to the use of RCTs where RCTs are either not feasible or might not be the best design to answer the research question. There are quality checklists available for non-random designs that can be used to provide guidance and reporting of such studies.
- A4 Primary research to develop valid and sensitive 'prisoner-specific' outcome measures across a range of major mental disorders that are likely to be the most prevalent in prisons.
- A5 More systematic local evaluation, giving details of input and process (to allow replication) and using selected outcome measures (not only routinely collected data).

B Service delivery and organisation

- B1 The swift identification at reception of those with a mental disorder and the routine subsequent screening of the prison population in order to identify those that develop mental disorders as a consequence of being imprisoned.
- B2 Identify the effectiveness research that is likely to be relevant for prisoners with mental disorders that is derived from general population studies. This would include pragmatic studies of participants with co-morbidity.
- B3 Some interventions might need to be developed and evaluated that are prison-specific, for example, the use of computerised cognitive behavioural psychotherapy.
- B4 Identify potential models of service delivery taking into account different agencies and locations of providers and examine the relationship between models and outcome.
- B5 How do different stakeholders' perspectives of needs of prisoners with mental health problems differ? What effect does this have on the support that different professional/provider groups provide? In particular, how do prisoners themselves identify their needs? How does their perspective differ from other groups?

C Organisational research

- C1 Organisational research into ways to integrate the cultures and values of 'criminal justice' and 'mental health' services in prisons.
- C2 Develop organisational research methods to determine factors effecting organisational 'culture' and effect of 'culture' on prisoners' mental health.

D Intervention

- D1 There is a clear need for specific treatment outcome studies to be carried out on prisoners with mental disorders. There is also a need to recognise that prisoners represent a significant minority group of the mentally disordered population. Where feasible, general treatment outcome studies in mental health should contain cohorts drawn from the mentally disordered prison population.
- D2 Identify the effectiveness research that is likely to be relevant for prisoners with mental disorders that is derived from general population studies. This would include pragmatic studies of participants with co-morbidity.
- D3 Co-morbidity is a significant issue in epidemiological studies of prisoners especially in relation to substance misuse. Very little is known about effective interventions for this group.

E Public Health

- E1 The needs of significant minority groups in prisons, such as women, older and younger people, and members of ethnic minority groups, who will have a higher prevalence of mental health disorder, should be studied further.
- E2 Development of an indicator of need from the perspective of prisoners using mental health services.
- E3 Continued evaluation and development of reception health screening questionnaire.

F Reviews

- F1 More focussed reviews into specific issues or groups.
- F2 Reviews have culminated in many lists of guidelines, recommendations and standards.

Can these be implemented?

Are they being implemented?

Do they make a difference?

Is their implementation related to prisoner well-being and health status, staff satisfaction, better co-ordination etc?

G Epidemiology

- G1 More research into individuals' pathways between prisons, health-care services and discharge.

H Training

- H1 The effect of large-scale training of health-care staff to use a screening questionnaire (on beliefs, behaviour, culture).

Implications of promoting user involvement in research into mental disorders and prisoners

(Ex)prisoners who have experienced mental health problems need to be recruited, trained in research skills and provided with appropriate support to enable them to contribute to:

- the establishment of research priorities,
- the selection of projects to fund,
- the design of interview schedules,
- the conduct of interviews,
- the analysis of information and the dissemination of findings.

User involvement in prison research should be evaluated to assess the effect of such involvement on definition of priorities, the nature of questions asked, the response (and response rates) of prisoners/research subjects. It will also be important to monitor the process of user involvement in research to identify potential barriers and ways of over-coming them.

- At the very least, all projects submitted for ethical approval must demonstrate appropriate consumer involvement.
- The 'Principles of Successful Consumer Involvement' developed by Sheffield University, and currently being piloted in general mental health research, should be piloted in a prison setting to find out just where the problems lie and generate ideas for overcoming them.

APPENDIX A THE RESEARCH TEAM

Project Lead

Prof. Charlie Brooker

Role: Project leader, project manager, content expert, report writer

Other Members of the Project Team

Andrew Booth

Role: Methodology adviser, literature reviewer (where required), report writer

Catherine Beverley

Role: Literature searcher, literature reviewer (epidemiological review), report writer

Naomi Brewer

Role: Literature searcher (where required), literature reviewer (general population review), report writer

Mike Ferriter

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Julie Repper

Role: Literature reviewer (prisoner review), report writer

Andy Tattersall

Role: Document supplier

Marilyn Tinsley

Role: Reference management

APPENDIX B SAMPLE MEDLINE SEARCH STRATEGY

1 *prisoners/
2 exp *prisons/
3 prison\$.ti
4 jail\$.ti
5 remand\$.ti
6 imprison\$.ti
7 offend\$.ti
8 criminal\$.ti
9 detention.ti
10 convict\$.ti
11 correctional facilit\$.ti
12 court\$.ti
13 detain\$.ti
14 inmate\$.ti
15 probat\$.ti
16 sentenced.ti
17 crime\$.ti
18 felon\$.ti
19 misdemean\$.ti
20 deliquent\$.ti
21 *juvenile delinquency/
22 goal\$.ti
23 or/1-22
24 *mental health/
25 exp *mental health service/
26 exp *mental disorders/
27 mental\$ health.ti
28 mental\$ ill\$.ti
29 mental4 disorder\$.ti
30 depress\$.ti
31 schizophreni\$.ti
32 suicid\$.ti
33 psychos\$.ti
34 psychiatr\$.ti
35 forensic.ti
36 exp *forensic medicine/
37 exp *forensic psychiatry/
38 or/24-37
39 23 and 38
40 therapeutic community/
41 therapeutic communi\$.tw
42 therapeutic living.tw
43 assertive case management.tw
44 intensive case management.tw
45 assertive community treatment.tw
46 crisis intervention/
47 cris\$ intervention\$.tw
48 social support system\$.tw
49 exp*social support/
50 (manag\$ adj3 violen\$).tw
51 rehabilitation, vocational/
52 vocational rehabilitation.tw

53 psychosocial rehabilitation.tw
54 psychoeducation\$.tw
55 housing program\$.tw
56 psychotherapy/
57 exp behavior therapy/
58 (cognitive adj2 therap\$).tw
59 ((behaviour\$ or behavior\$) adj2 therap\$).tw
60 exp *antipsychotic agents/
61 antipsychotic\$.ti
62 exp *antidepressive agents/
63 antidepressant\$.ti
64 or/40-63
65 23 and 64
66 39 or 65