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The Health of People with Court Orders Supervised by Probation Services: An exploratory study

by

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ABSTRACT

FACULTY OF MEDICINE

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Thesis for the degree of Doctor of Philosophy

THE HEALTH OF PEOPLE WITH COURT ORDERS SUPERVISED BY PROBATION SERVICES: AN EXPLORATORY STUDY

Emma Jane Richards

There is growing evidence on the association of health problems, such as mental health and substance use, along with social factors, such as unemployment, housing, education and social networks with offending. Most research has focussed on prisoners, rather than community offenders. Little is known about offenders with Court Orders, yet this information is needed to shape service delivery.

A mixed methods study was designed to address this knowledge gap; to quantify the prevalence of these health problems and social disadvantage within a cohort of offenders newly sentenced with Court Orders, and follow them up over the duration of their Court Order to assess service access and impact.

These offenders were shown to be more disadvantaged than the general population with higher levels of unemployment, low educational attainment, homelessness and childhood experiences of care. There were high levels of alcohol use, drug use and mental health problems which were similar to levels observed in prisoners. Those who used class A and B drugs (excluding cannabis) were over three times more likely to breach or commit further offences while on a Court Order than offenders who did not take these drugs.

Nearly half had inadequate health literacy levels, so interventions need to be tailored to reflect this. Offenders often experienced multiple problems and clustering of problems was observed. Those with identified needs did not always access services they required.

At follow-up, some improvements were observed, but gaps between need and service access were still evident. Qualitative results described how material deprivation, homelessness and adverse childhood experiences contributed to problems with mental ill health and addiction alongside offending behaviour. Offenders are a vulnerable population, where a single incident often leads to a downward spiral of complex needs. The value of Offender Managers supporting offenders with their complex problems was also highlighted.

A multi-pronged and multi-agency approach is needed to tackle the problems faced by offenders in addition to a systematic way of identifying those at risk of offending, providing appropriate interventions at different stages through the life course.

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Academic Thesis: Declaration of Authorship

I, Emma Richards declare that this thesis and the work presented in it are my own and has been generated by me as the result of my own original research.

THE HEALTH OF PEOPLE WITH COURT ORDERS SUPERVISED BY PROBATION SERVICES: AN EXPLORATORY STUDY

I confirm that:

1. This work was done wholly or mainly while in candidature for a research degree at this University;
2. Where any part of this thesis has previously been submitted for a degree or any other qualification at this University or any other institution, this has been clearly stated;
3. Where I have consulted the published work of others, this is always clearly attributed;
4. Where I have quoted from the work of others, the source is always given. With the exception of such quotations, this thesis is entirely my own work;
5. I have acknowledged all main sources of help;
6. Where the thesis is based on work done by myself jointly with others, I have made clear exactly what was done by others and what I have contributed myself;
7. None of this work has been published before submission

Signed: .....

Date: 28 February 2018

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Definitions and Abbreviations

A&E	Accident and Emergency
ACE	Adverse Childhood Experience
AIDS	Acquired immunodeficiency syndrome
APMS	Adult Psychiatric Morbidity Survey
ATO	Alcohol Treatment Order
AUDIT	Alcohol Use Disorders Identification Test
ASHNO	Assessment of the Health Needs of Offenders
CANFOR - S	Camberwell Assessment of Need – Forensic Version
CASP	Critical Appraisal Skills Programme
CI	Confidence intervals (95%)
CIS-R	Revised 'Clinical Interview Schedule'
CPN	Community Psychiatric Nurse
CPCS	Community Penalties Criminality Survey
CRC	Community Rehabilitation Company
CSEW	Crime Survey for England and Wales
DAST	Drug Abuse Screening Test
DRR	Drug Rehabilitation Requirement
EIF	Early Intervention Foundation
ESA	Employment and Support Allowance
IRAS	Integrated Research Application System
ID	Intellectual disability
GP	General Practitioner
HES	Hospital Episode Statistics
HIV	Human immunodeficiency virus
IoW	Isle of Wight
JSA	Job Seekers Allowance
LIPS	Learning disabilities in the Probation Service assessment tool
MAPPA	Multi-agency public protection arrangements
MoJ	Ministry of Justice
NDTMS	National Drug Treatment Monitoring System
NHS	National Health Service
NVS-UK	Newest Vital Sign UK
NHSCR	NHS Central Register
NIGB	National Information Governance Board for Health and Social Care
NOMS	National Offender Management Service
NPS	National Probation Service
NTA	National Treatment Agency
OASys	Offender Assessment System
OCD	Obsessive Compulsive Disorder
OGRS	Offender Group Reconviction Scale
ONS	Office of National Statistics
OPCS	Office of Population, Censuses and Surveys
PIS	Participant Information Sheet
PriSnQuest	Prison Screening Questionnaire
PTSD	Post-Traumatic Stress Disorder
SAPAS	Standardised Assessment of Personality – Abbreviated Scale
SMR	Standardised mortality ratio
SPCR	The Surveying Prisoner Crime Reduction cohort study
STI	Sexually transmitted infection
TOPs	Treatment Outcomes Profiles

UK	United Kingdom
VABS	Vineland Adaptive Behaviour Scales
WAIS-R	Wechsler Adult Intelligence Scale
WEMWBS	Warwick-Edinburgh Mental Wellbeing Scale

Rationale and Overview of Thesis

Rationale of thesis

Crime not only impacts on the lives of victims and their families but affects whole communities. The financial costs involved in protecting the public, investigating crime and processing offenders through the criminal justice system are significant. Reducing crime has been a priority for successive governments but tackling the complex interplay of factors that influence offending has proved a challenge. A significant amount of research has focussed on the health of offenders in the prison population [1]. Mental health, substance abuse and communicable diseases have been shown to be the main health issues in prisoners [2]. Offenders with Court Orders supervised by probation services may also experience complex health problems and need appropriate interventions yet the evidence base is limited [1].

In 2012 in England and Wales there were 84,143 new prison receptions for sentenced adult offenders aged 18 and above [3]. However, in the same period, the number of offenders starting a court order supervised by the probation service was nearly double that at 161,261 [4].

Understanding the modifiable factors relating to health and the wider determinants of health for offenders in the community is an important area of research. It has been suggested that social exclusion and poor health are associated with offending. Nine key factors that influence offending and re-offending are education, employment, drug and alcohol use, mental and physical health, attitudes and self-control, institutionalisation and life skills, housing, financial support and debt and family networks [5]. These factors are modifiable and can be the focus for interventions. Therefore, targeting these issues in offenders with Court Orders should not only improve their health and contribute to reducing inequalities, but also play a role in reducing re-offending.

In addition, qualitative studies [6, 7] have also pointed to many offenders describing a chaotic childhood with physical and/or sexual abuse, which suggests that interventions are also required to address adverse childhood events.

Previous research, conducted by colleagues at the University of Southampton, included qualitative interviews with NHS commissioners and probation staff and a national survey of 600 probation staff about the health of offenders they work with. The aim was to identify needs, barriers and enablers to health services and make suggestions for improvement. The key health needs identified were alcohol and drug use, and poor mental health, which were very similar to the needs identified in prisoners. Staff repeatedly emphasised a need for research directly involving offenders and for joint education and training for NHS and probation staff (Julie Parkes, personal communication). The probation setting provides the opportunity for accessing this vulnerable group in a safe environment for researchers.

Therefore, within the population of offenders with court orders, it is important to have accurate and comprehensive estimates of the prevalence of those aspects of health and the social determinants that are associated with offending but are also modifiable, so appropriate interventions can be targeted.

In addition, we should develop and understanding of the interplay and clustering of these factors alongside the actual experiences of offenders. From a public health perspective this should also help identify early life interventions that should be considered to prevent offending in the first place.

This information is vital for commissioners and providers of services. The NHS needs to work in partnership throughout the offender pathway with joint health and criminal justice offender health needs assessments and effective commissioning to inform service developments [1]. From 2010, joint strategic needs assessments have to include all those in contact with the Criminal Justice System, be informed by the evidence base for effective interventions and translate into joint and single agency commissioning strategies to meet needs. This research has the potential to help to support the commissioning process and tackle inequalities at a time when NHS funding is falling in real

terms and evidence for effective interventions to inform difficult commissioning decisions is needed.

This research will identify the scale of the problems faced by offenders, gain insights into the issues that offenders encounter when accessing services and will provide information that could inform the design of studies to evaluate interventions within probation in relation to specific health outcomes and reducing re-offending. The Medical Research Council (MRC) Complex Intervention Guidance (38) supports the use of randomised controlled trials (RCT), but development work such as is this study is needed in order to highlight the issues to design and intervention and run an RCT in this setting with this population.

This research will also be relevant to the National Offender Management Service (NOMS), National Probation Service (NPS) and the Hampshire Community Rehabilitation Company (CRC) as it will contribute to their key goal of protecting the public by reducing re-offending.

Aim of thesis

The overarching aim of this thesis is to quantify the prevalence of modifiable health problems and social disadvantage within a population of offenders in the community with Court Orders with a particular focus on those modifiable health aspects and social determinants of health that are associated with offending and re-offending. It then aims to explore these factors, by following offenders up, understand which services they access during a court order and any impact of these services on their modifiable problems.

Research questions

This thesis aims to answer the following research questions in the study population:

- What is the current knowledge (from the literature) about key health problems related to offending in offenders with Court Orders?
- How can this population be described in relation to social demographics that are known to influence offending, such as family networks, accommodation, education and employment?

- What is the prevalence of the modifiable health problems that have been identified in prison populations and are associated with offending?
    - Different types of common mental health problems
    - Drug use
    - Alcohol use
- What is the prevalence of learning disabilities?
- What is the level of health literacy amongst offenders with Court Orders?
- How do mental health and substance use change over the duration of the Court Order?
- What health interventions are received and what health services are used by offenders during their Court Order and how do these relate to their identified health problems?
- What is the feasibility of conducting research in this population and how could the lessons learned be translated into evaluating interventions in the probation setting in relation to recruitment, completion of instruments and follow-up?
- What are offenders' perceptions of their health problems?
- What are offenders' experiences of interventions received whilst on probation?
- How do offenders perceive the impact of any intervention or treatment order?
- What, in the view of offenders, are the facilitators and barriers to improving their health and accessing health services?
- What are the links between health and offending?

Overview of thesis

A flow chart detailing the overview and structure of this thesis can be found in Figure 1. Chapter 1 gives an introduction to set the context of this thesis. It sets the scene in relation to crime and offending and factors know to influence

offending. It then explains the current policy context of probation services, provides a brief history of probation services and community sentences, explains the use of Court Orders in the Courts and the requirements attached to them and describes the epidemiology of offenders both nationally and locally.

Chapter 2 describes the literature reviews to ascertain current knowledge and identify the research need in this area. Chapter 3 then describes how this knowledge was used to develop and plan the primary research which forms the main part of this thesis. It explains the rationale for the study design, and the approach taken to develop the research in conjunction with probation staff and with the input of offenders.

Chapter 4 documents the methods used for both the quantitative and qualitative elements of the research including how both the structured and semi-structured interview schedules were developed and conducted and the analysis of data.

Chapter 5 presents the results from the baseline questionnaire. It describes the population, gives prevalence estimates for the social determinants of health (in local authority care as a child, education level, unemployment and homelessness) and specific health issues associated with offending (mental health, drug and alcohol use), smoking and describes their physical health problems at the beginning of the offenders' court orders. It also investigates the clustering of risk factors for adverse health outcomes. These results are compared with general population and prison populations, where data are available in order to set some context for the results.

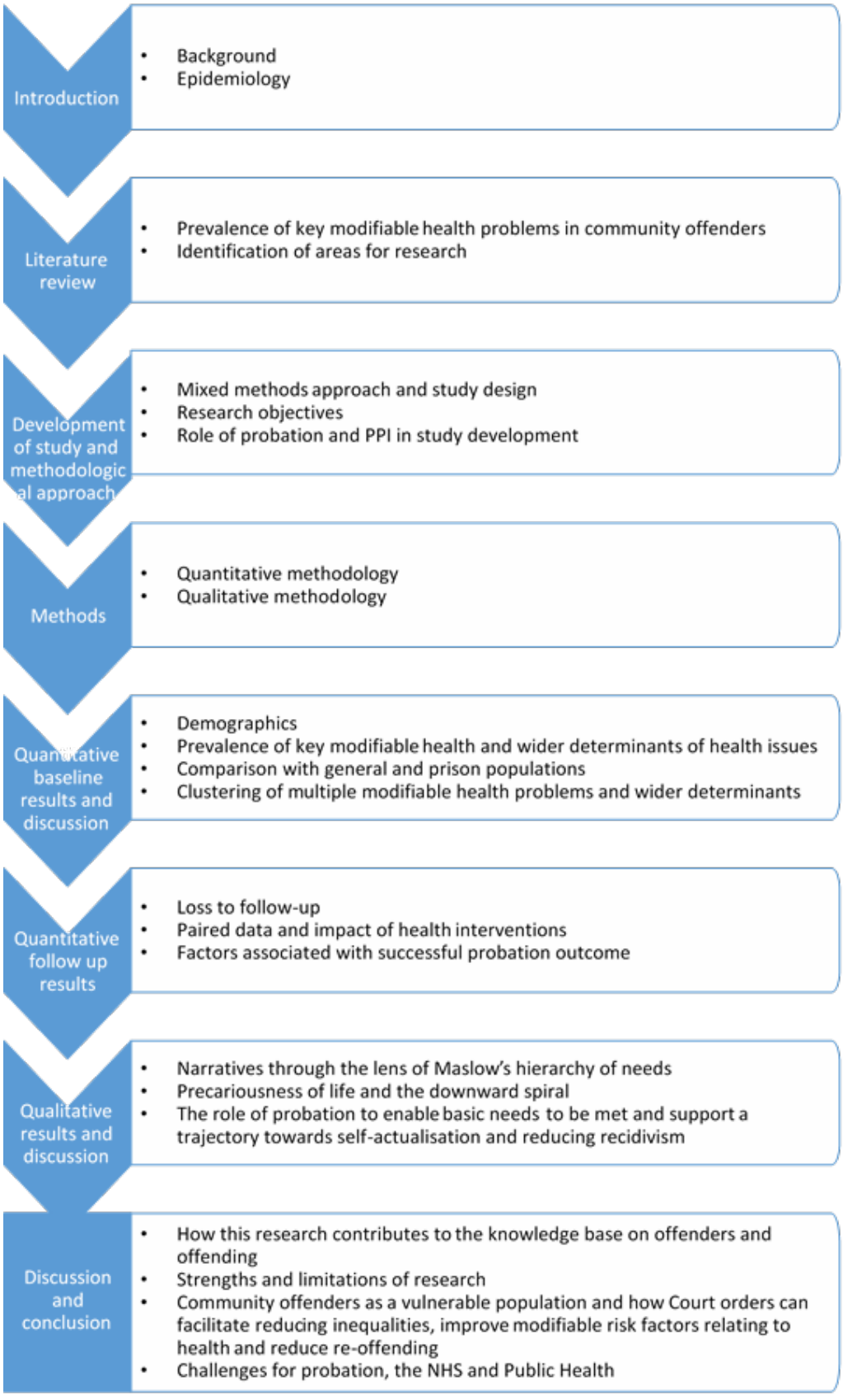
Chapter 6 is concerned with results of the follow-up including loss to follow-up, changes in modifiable factors (including both health-related and social determinants), and how these relate to interventions experienced during the Court Order. An examination of whether any of these related risk factors can be used to predict a successful probation outcome is also included.

Chapter 7 presents the qualitative results using Maslow's hierarchy of needs as lens to examine the narratives presented by the offenders. It demonstrates that many offenders were currently or previously struggling to meet basic needs and highlights social inequalities. Many narratives told of how

precarious life can be for this group, with little in the way of a safety net and with one problem leading to a downward spiral, which then affected other areas of their life. However, many highlighted the vitally important role of probation in enabling them to resolve problems, meet needs and get them some way on a trajectory to a 'normal' life without offending behaviour.

Chapter 8 is the final chapter which amalgamates the results. It describes offenders as a 'wicked' problem requiring a co-ordinated multi-agency approach. It then discusses the antecedent determinants of offending and supports the need for upstream interventions. It describes the strengths and limitations of the research and discusses its contribution to the knowledge base on offender health. It suggests areas for future research both dealing with current and upstream risk factors. Support during a Court Order supervised by probation services has the potential to help an individual and go some way to help reduce social and health inequalities yet co-ordinating the complex package of services individual require presents a multi-agency challenge.

Figure 1 Overview of thesis



1. Introduction

1.1 Introduction

This chapter gives a brief overview of crime in England and Wales and its impact on society. It then briefly discusses factors known to be associated with offending and introduces the concept of health literacy as an important factor in any intervention.

Next it gives an overview of probation services in England Wales with a brief history of probation services and community sentences to set the context of current practice. It then explains more recent policy and structural changes within the probation service. It then gives an explanation of the types of court orders that are used in sentencing, and how offenders are categorised into tiers and describes basic epidemiology of offenders both from a national and local (Hampshire) perspective.

1.2 The impact of crime on society

It is difficult to quantify the social and economic costs of crime in the UK. It is important to consider its detrimental impact on both individuals and society. Victims of crime may be affected both emotionally and physically in both the short and long term. In addition there may be damage to property, loss of working time and medical costs. Different studies have different perspectives and examine different aspects, which results in differing estimates.

The Home Office estimated the social and economic costs of crime against individuals and households in 2003/4 to be £32.6 billion [8]. In 2013, the Institute for Economics and Peace estimated that violent crime costs the UK economy more than £124 billion a year equating to £4,700 per household [9].

The National Audit Office in 2014 estimated the total cost of funding the criminal justice system in the UK by central government to be £17.1 billion and the

societal cost of organised crime in the UK to be £24 billion annually [10]. Although these estimates vary widely, it is clear to see that the fiscal costs of crime are substantial and add to the impact of crimes on victims and society in general.

1.3 Crime in England and Wales

No single data source can provide a complete picture of the range and impact of crime in England and Wales. Therefore, the Office for National Statistics provides a statistical bulletin that provides crime statistics from two main sources – the Crime Survey for England and Wales (CSEW – previously known as the British Crime Survey) and police recorded crime [11].

The CSEW is an annual face to face survey of households in England and Wales [12]. People are asked about their experiences of crime which relate to offences where either they or someone in their household were the victim in the 12 months prior to interview. The CSEW covers a broad range of crimes and includes crimes which do not come to the attention of the police. It includes crimes such as domestic burglary, car crime, vandalism, theft and robbery and violent crime [13].

For the year ending September 2014 data show that, for the offences it covers, there were an estimated 7 million incidents of crime against households and resident adults (aged 16 and over) in England and Wales [11]. Police recorded crime for the same period was 3.7 million offences [11].

The number of convictions in that period was 1,150,584 which resulted in 79,357 custodial sentences and 140,546 offenders starting a Community Order or Suspended Sentence Order supervised by probation services [14].

Re-offending is a challenge. Published statistics describe this as proven offences. A proven offence is defined as any offence committed in a one year follow-up period that leads to a court conviction, caution, reprimand or warning in the one year follow-up or within a further six month waiting period to allow the offence to be proven in court [15]. There are a substantial number of proven offences committed within one year of an offender being released from custody or receiving a non-custodial conviction at court, a caution, a reprimand or warning.

Re-offending statistics from April 2012 to March 2013 show that during this time, 25% of adult offenders re-offended within a year, committing, on average, three re-offences each. This equates to 121,094 re-offenders committing 364,271 further offences [15]. This represents around a third of all convictions.

In the 12 months ending March 2013, approximately 125,000 adult offenders commenced a court order in England and Wales. Approximately 33.8% (42,000) of these re-offended within a year [16]. Therefore, the issue is not just offending behaviour but recidivism by individuals and the need to address this.

1.4 Factors influencing offending behaviour

In 2004, The National Offender Management Service (NOMS) was established to bring together the Prison and Probation Services into one organisational structure. They developed seven pathways to reduce re-offending which are:

1. Accommodation
2. Education, training and employment
3. Health
4. Drugs and Alcohol
5. Finance, benefit and debt
6. Children and Families
7. Attitudes, thinking and behaviour

It was recognised that these pathways applied to both community offenders and prisoners and along with the use of the OASys (Offender Assessment System developed by both the prison and probation services) offending related needs could be identified and prioritised for each offender [17]. These pathways are also core to Public Health and encompass the wider determinants of health and lifestyle choices.

However, these problems are often intertwined and difficult to approach through individual pathways. Previous research has shown an association between housing and offending [5, 18] and it is suggested that this is a factor that can reduce re-offending rates by up to 20% [19]. Accommodation can provide stability for a previously chaotic lifestyle which can then enable individuals to address their

offending behaviour, access healthcare services, claim benefits and seek and gain employment [20].

However, the majority of offenders are single, so lack priority for assistance in the statutory sector, the only option is often renting in the private sector [21]. In addition, offenders often cannot raise the necessary deposits, face stigma because of their offending history so may end up with their only option being poor quality housing, hence being unable to break out of the poor housing, homelessness, chaotic lifestyle and reoffending cycle. Poor housing and health are also intrinsically linked. A recent review [22] described studies that have shown impacts on both physical and mental health.

Evidence from research with prisoners has shown that support to find employment while in prison was associated with a reduced likelihood of reoffending [23]. The link between employment and accommodation is clear. It is hard to find work without a fixed address and difficult to obtain decent accommodation without a job [23] which contributes to complexity of the problems faced by offenders.

In addition, the link between unemployment and health is both complex and two-dimensional. Poor health or illness can lead to short or long periods of unemployment, which itself can lead to poor health. The literature consistently points to unemployment having a negative effect on health [24-26]. In addition, there are more serious negative effects from unemployment for individuals with a poor social network [27].

A systematic review [28] has identified links between substance use and unemployment. It showed hazardous, binge and heavy drinking being more prevalent in the unemployed. They were also more likely to be smokers, use illicit and prescription drugs and to have alcohol and drug disorders. Substance use increased the likelihood of unemployment and decreased the chance of finding and keeping a job. The converse was also shown with unemployment as a significant risk factor for substance use.

There is also evidence that high prevalence of smoking is also associated with mental health problems, drug and alcohol misuse and homelessness [29]. Drug

users are estimated to be responsible for between a third and a half of acquisitive crime [30] and treatment can cut the level of crime they commit by about half [31].

There is now a growing evidence of the association between alcohol use and offending behaviour [32]. In 2013, approximately 14% of all road traffic deaths reported involved at least one driver over the drink drive limit [33]. The latest available analysis by the Office of National Statistics (ONS) of the Crime Survey of England and Wales found that victims perceived the offender or offenders to be under the influence of alcohol in 53% of violent incidents which is equivalent to an estimated 704,000 violent incidents. In addition in violent incidents between strangers, 64% were perceived to be alcohol related and injuries were more likely to be more severe in incidents of alcohol-related violence compared with other violent incidents [34].

The effects of drinking alcohol are not just limited to the health of the individual concerned. Negative impacts can affect the family, particularly relating to interpersonal conflict, financial problems and domestic and sexual violence [35, 36]. In addition the impacts on the wider community are also well documented. The estimated cost of alcohol harm to society in England is £21 billion per year [37].

The relationship between alcohol and offending behaviour is complicated and cannot be viewed in isolation. There is complexity in how drinking patterns and the amount of alcohol consumed intertwine with other individual and contextual factors [38], thus presenting a challenge to both the criminal justice system and public health policy.

This section has briefly outlined some of the problems and what has been shown is the complexity of problems in individuals that are difficult to address with separate pathways.

1.5 Mortality of offenders in the community

It is clear that offenders face multiple challenges that relate to health problems and the wider determinants of health. Therefore, it might be expected that

offenders supervised by probation services have higher mortality and although there are few studies that have looked specifically at this compared to deaths in prison [39].

There were two studies in the 1990s that looked directly at mortality [40, 41]. Both studies were in the 1990s but reported that at every age, the mortality of probationers was significantly higher than in the general population but indicate rates of suicide between 10 to 12 times that in the general population. When the rates are standardised for age the gap between probationers and the general population appears even greater. The group at highest risk of suicide in 1996 were the community offenders aged 45-54 at 13.1 times the risk of the general population and in 1997 community offenders aged 45-54 were 16.6 times and those aged 55-64 were 25.5 times more likely to dies from suicide than the general population [41].

More recently, the Howard League for Penal Reform commissioned a study that involved obtaining data regarding the number of adults who had died under probation supervision in England and Wales between the years 2006-2010. This study concluded that the death rate for offenders under supervision of probation services was twice that of prisoners and those offenders under post-release supervision had a higher death rate (0.43%) than those who were under community supervision (0.33%) [42]. There were limitations with the data and its subsequent analysis but they did conclude that in offenders under community supervision that men and women were equally likely to die from natural causes. Men were more likely than women to die from suicide, drug overdose, unlawful killing or an accident. Women were more likely than men to die from alcohol issues [42].

It had been reported that drugs and alcohol play a larger part in deaths of offenders under community supervision than those in prison [41] and an analysis of deaths which occurred under supervision showed that many offenders (particularly drug users), lead lives which puts them at a higher risk of harm [43]. An analysis of 28 offenders who committed suicide while under probation supervision in England showed the pathways leading to suicide are complex [44].

1.6 Health literacy and its role in health outcomes

Health literacy, the ability to make sound health decisions in the context of everyday life, is an important concept in addressing health inequalities. It is necessary to increase people's control over their health, their ability to seek out information and take responsibility (26). Low health literacy may mean a person cannot manage their own health effectively and has been shown to have a negative impact on clinical outcomes (27). Inadequate health literacy may contribute to difficulties addressing health problems. Brief health interventions are commonly used in areas such as alcohol reduction and are based on the assumption that the message can be understood. It could help identify those people who may benefit from brief interventions and those that may need additional help or indeed interventions to improve health literacy. Including health literacy screening in any further trials of brief interventions may identify a sub-group where brief interventions are beneficial.

1.7 History of probation and community sentences

Several reviews give a detailed account of the development of probation services [45-47]. This section synthesises those reviews to give a brief history and background to set the context of this research.

The origins of the probation service date back to 1876 when a London printer, Frederic Rainer, donated five shillings to the Church of England Temperance Society. He was concerned about the lack of practical help for offenders who came before the courts and wanted to rescue and help people who fell into crime through drunkenness as this was thought to be the cause of most petty crime at the time. That year the society appointed its first special missionary to Southwark Police Court and the following year another to Bow Street and Mansion House police courts. This formed the basis of the London Police Courts Mission (LPCM) who worked with magistrates to develop a system of releasing offenders on the condition that they kept in touch with the missionary and accepted guidance so diverting them from London's overcrowded prisons [45].

In the 1880s, the mission had eight full time missionaries in place and opened homes and shelters to provide vocational training and residential support. The Probation of First Offenders Act 1887 allowed courts around the country to follow London's lead and release certain first offenders 'on probation' with supervision by some authority to whom the offender would have to report, who in turn reported to the court. However, no formal mechanism for the supervision was set up and no legal sanctions could be applied.

The Probation of Offenders Act, 1907 laid the foundations of the modern Probation Service. It repealed the whole of the Probation of First Offenders Act (1887). The courts were now able to appoint paid probation officers with specified duties and introduced the phrase 'advice, assist and befriend'. It enabled courts to release offenders on probation, introduced the Probation Order, enabled the court to vary probation conditions and gave powers to convict and sentence for breach of probation. The Probation Order involved one-to-one sessions with a probation officer and lasted between 6 months and three years. The Probation Order could be applied to any offender who met the criteria and not just first offenders. This was the start of Probation as an organised, publicly funded, national agency.

In the first half of the 20th Century, the aim of probation was to rehabilitate offenders so the number of criminals could be reduces and the number of good citizens increased [46]. In 1925 the Criminal Justice Act established probation committees and the appointment of probation officers became a requirement of the courts and at least one probation officer had to be appointed for every probation area. The Home Office began to take on a larger role in the development and administration of the Probation Service and to develop it more fully as an alternative to prison.

After the Second World War and the introduction of the welfare state, probation services were also subject to the 1948 Criminal Justice Act, which, together with the Probation Rules of 1949 gave the Probation Service a stronger foundation and managerial structure, and also introduced prison after-care. The Home Office now funded, approved, regulated and inspected probation hostels and homes [45].

By the 1960s, work in prisons had become an integral part of the Probation Service's workload and in 1967 the Criminal Justice Act [48] introduced parole supervision.

Community Service Orders were first introduced in 1972. They were designed to be a punishment for the offender but also to enable them to carry out constructive work that benefitted the community.

The Criminal Justice Act 1991 [49] gave the Probation Service the lead on a variety of new community services. The Combination Order (combining probation supervision and community service) was introduced and then renamed in 2001 as the Community Punishment and Rehabilitation Order.

In 2001, the Community Service Orders' name was changed to Community Punishment Orders which included between 40 – 240 hours of community service.

In 2001, the National Probation Service for England and Wales was created in the Criminal Justice and Court Services Act 2000 [50]. This saw a reduction from 54 Probation Services which had been independent bodies corporate to 42 Probation Boards under a single Director accountable to the Secretary of State.

The Carter report, 'Managing Offenders, Reducing Crime: A new approach' [51] emphasised the need for the 'end to end management' offenders and proposed the creation of The National Offender Management Service (NOMS) which brought together both the prison and probation service and was established in 2004.

Lord Carter also recommended the introduction of 'greater contestability, using providers of prison and probation form across the public, private and voluntary sectors' as he thought this would lead to a more effective delivery of services [51]. This laid the foundation for future commissioning of services from the private and voluntary sector.

The Offender Management Act 2007 [52] made the legislative changes that transferred the statutory duty to arranging the provision of probation services from the local Probation Boards to the Secretary of State who could then commission most services directly from public, private and voluntary sectors.

This also paved the way for the 42 Probation Boards to become the 34 Probation Trusts in place at the beginning of this research in 2012.

On 1 April 2008, NOMS was restructured and established as an executive agency of the Ministry of Justice. It then had responsibility for commissioning and performance management for both prisons and probation within a single organisational structure with the aim to drive forward joined-up offender management and deliver efficiency savings [53].

In December 2010, the Ministry of Justice published the Green Paper 'Breaking the Cycle' [54]. This included the plans for introducing payment by results to all providers by 2015. The aim was to give providers the freedom to innovate to deliver results in reducing reoffending.

In July 2011 the Ministry of Justice published its Competition Strategy for Offender Services [55]. This introduced the first competitions for the community payback element of probation prior to the formation of CRCs and the competitive process for probation services managing low and medium risk offenders as set out in Transforming Rehabilitation [56].

1.8 Policy context for this research

The probation landscape has changed greatly during the duration of this research which was developed in 2011.

At the start, probation services were managed by 34 probation Trusts in England and one in Wales. Trusts received their funding under contract from the National Offender Management Service (NOMS), an executive agency of the Ministry of Justice (MoJ) and its main delivery arm to which the Trusts were accountable for their performance and delivery.

During the research period, the Ministry of Justice implemented an extensive programme of reform called Transforming Rehabilitation [57, 58]. The delivery of probation services across England and Wales was re-organised so low and medium-risk offenders (tiers 1-3) are now managed by private and voluntary organisations following a round of competition for the area contracts. There is a

payment by results element to these new contracts, which aims to incentivise the new probation organisations (known as Community Rehabilitation Companies - CRCs) to find innovative and effective ways of reducing reoffending. Post release supervision will also be provided to those leaving prison after a sentence of less than 12 months (previously on those with longer sentences received supervision and release on licence).

In Hampshire and the Isle of Wight, the consortium, 'Purple Futures' commenced their contract with the Ministry of Justice to provide probation and rehabilitation services from February 2015. Interserve, a services and construction company is the majority partner and is responsible for overall service delivery. The other partners are 3SC (which wins and manages public services contracts on behalf of third sector organisations), Addaction (a UK charity which provides drug and alcohol services), P3 (a charity and social enterprise that provides services aimed to support people in the community) and Shelter (the housing and homelessness charity). These organisations have formed a legal partnership which owns the Community Rehabilitation Company (CRC). The services will be delivered by the CRC and partners. The partners deliver key service under contract to the CRC [59].

The derivation of the word probation is from the Latin *probatio* - a time of testing, or proving. That derivation remains relevant because, at their best and most robust, community sentences run by probation services should test offenders, challenging them to change their offending lifestyles and to confront difficulties.

1.9 Criminal courts

All criminal cases are first heard in a Magistrates' Court. The cases are heard by either two or three magistrates or a district judge. Cases known as 'summary offences' are normally dealt with in a Magistrates' Court. These types of offences include, for example, most motoring offences, minor criminal damage and being drunk and disorderly. The Magistrates' Court can also deal with some of the more serious offences such as burglary or drugs offences. These are called 'either way' offences and can be heard either in a Magistrates' Court or in a Crown Court.

The more serious crimes such as murder, rape and robbery are always passed by a Magistrates' Court to the Crown Court. These are called 'indictable offences'. A Crown Court normally has a jury which decide on a guilty or non-guilty verdict and a judge who conducts the trial and is responsible for sentencing. It can give a range of sentences including Court Orders and prison sentences.

The Magistrates' Court can give punishments including up to six months in prison (or up to 12 months in total for more than one offence), a fine of up to £5000 or a Court Order. They can also combine punishments such as a fine and a Court Order [60].

1.10 Court Orders

There are now two types of Court Order to which offenders can be sentenced – the Community Order and the Suspended Sentence Order. The Suspended Sentence Order is a prison sentence which is suspended for a period of time. If during that time the offender breaks the conditions of their order or offends again then the prison sentence is activated.

The Community Order, introduced by the Criminal Justice Act 2003 replaced all other community sentences for adults aged 18 and over and came into effect in April 2005. It aims both to punish offenders and give them an opportunity to change. It consists of one or more of 12 different requirements that an offender can be ordered to complete. A suspended sentence order can also have one or more requirements attached to it (but some do not have any). These requirements are:

1. Community Payback – unpaid work to benefit the community
2. Compulsory activity – e.g. attending a drug centre/completing an education or skills course
3. Programme to address particular behaviour – e.g. violence, drug/alcohol abuse
4. Prohibited activity – a ban on an activity such as attending a football match

5. Curfew monitored by an electronic tag

6. Exclusion from entering a particular place for up to two years

7. Residence – live at a specified place, such as a probation hostel or private address

8. Mental health treatment

9. Drug rehabilitation

10. Alcohol treatment

11. Supervision – attending regular appointments with a probation officer

12. Attendance Centre – for 18-24 year olds to address offending behaviour

The Act also introduced Suspended Sentence Orders where a custodial sentence is suspended for between six months and two years, with the court specifying requirements similar to the Community Order. However, there is a clear presumption that a breach of the order will result in a prison sentence.

The requirements given above apply to those offenders who took part in this research. However, Section 15 of the Offender Rehabilitation Act 2014 amended the Criminal Justice Act 2003 and created a new Rehabilitation Activity Requirement for Community Orders and Suspended Sentence Orders. This replaced the existing activity and supervision requirements with a single requirement. This single requirement gives the providers of probation services greater flexibility to determine which rehabilitation interventions are delivered to offenders through the sentence plan developed by an offender manager.

1.11 Tiers of offenders

Offenders are categorised into tiers from one to four. The tier is determined by the level of risk of serious harm and likelihood of reoffending presented by the individual, combined with the complexity of the requirements given as part of the sentence. Tier 1 represents the lowest risk and tier 4 the highest.

1.12 Epidemiology of offenders with Court Orders

Understanding the sex, age, and ethnic profile of those on community sentences is important when considering what their health needs may be and how this group differs from both the prison and general populations. The information given below uses the latest available routine data to describe this population.

1.12.1 England and Wales

In the year ending December 2014, the total number of people sentenced by the courts was 1,209,202 [61]. This included 91,313 (8%) given immediate custody, and for the court orders, 52,979 (6%) were given suspended sentences and 112,638 (9%) given a community sentence. Of those receiving a court order, 139,822 had one or more requirements that involved supervision by the Probation Service (suspended sentences may not have requirements attached to them and the curfew requirement is not the responsibility of probation services).

Other sentences included fines, compensation and other disposals, such as absolute or conditional discharge [61]. The most common sentence given to all offenders at all courts is a fine, accounting for 70% of offenders sentenced in 2014. This is mainly due to the large number of fines issued for summary offences such as TV license evasion, less serious criminal damage, speeding, vehicle insurance offences and driving whilst disqualified at the Magistrates' Courts. Sentencing of offenders has generally been consistent over the last 10 years with around two thirds of offenders being sentenced to a fine in the 2004-2014 period.

The proportion of community sentences has decreased steadily since 2009. However, the use of suspended sentence orders has increased year on year since 2005. This can be attributed to the Criminal Justice Act 2003 which made suspended sentence orders more readily available as a sentencing option. Further changes to the availability of suspended sentence orders were made in the Legal Aid Sentencing and Punishment Offenders Act 2012 which has resulted in a 22% increase in suspended sentence orders for indictable offences between 2012 and 2014 [61].

In 2014, 78,222 males received a community order (82.4% of total community orders) and 38,181 received a suspended sentence order (85.0% of all suspended sentence orders). This compared to 16,656 females receiving a community order (17.6%) and 6, 763 receiving a suspended sentence order (15.0%) [62].

There are some differences in the types of offences committed by males and females who are supervised by probation services. For males on community orders, the most common offence type was other summary offences (these include common and other types of assault, assault on a police officer, unauthorised taking of vehicles, public order offences and miscellaneous sex offences) (41%) followed by theft and handling (20%), other indictable offences (11%) and summary motoring offences (10%). For males on suspended sentence orders, the most common types of offences were 25% other summary offences, 20% other indictable offences, 17% violence against the person and 15% theft and handling.

For females on community orders, the most common type of offence was other summary offences (33%) followed closely by theft and handling (29%) then fraud and forgery (13%) and summary motoring offences 10%). For females on suspended sentence orders, the most common offence type was theft and handling (24%), fraud and forgery and other summary offences both at 19%, and other indictable offences (14%) [62].

Both male and female offenders showed low numbers for sexual offences, robbery and burglary which reflects that these offences are likely to attract a custodial sentence.

In both males and females, for both community orders and suspended sentence orders, the 30-39 year olds were most represented and few were over 50 years old [62].

Ethnic minorities are over represented in this probation population, particularly the Black or Black British ethnic group which comprises 5% compared to national figures of 2% in the population [62, 63]. In total, ethnic minorities make up 15% of those with community sentences. This compares to 27% of the total prison population being from an ethnic group other than white [64].

1.12.2 Hampshire

Since the implementation of CRCs in 2015, there are no longer any nationally produced routine data that specifically deals with Hampshire's offenders. The low risk offenders are managed by Hampshire CRC and the higher risk offenders are managed by NPS South West (which covers Hampshire, Somerset, Dorset, Devon and Cornwall). The last available data for Hampshire Probation Trust which had 12 offices (Aldershot, Basingstoke, Andover, Winchester, Eastleigh, Lymington, Hythe, Southampton, Fareham, Havant, Portsmouth and Newport (IoW)) is for the year ending 31 December 2013. During that year 3,083 offenders commenced a Community Order and 1,141 offenders commenced a Suspended Sentence Order supervised by Hampshire Probation Trust. Of these, 94% were white, 1 % mixed, 2% Asian or Asian British, 2% Black or Black British, 1% Chinese or Other ethnic group and 14% did not have an ethnic group recorded. This show a much lower percentage of ethnic minority groups within the Hampshire Probation area than nationally but this is in line with population figures for Hampshire [65].

2. Systematic Reviews of the Literature – Prevalence of Key Health Problems and Health Literacy in Offenders with Court Orders in England and Wales

2.1 Introduction

This chapter sets out the systematic literature reviews. An important role of systematic reviews is to identify where further research is needed. This was the main purpose of these systematic reviews so the mixed method study which forms the majority of this thesis was designed to address some of the gaps in knowledge. The systematic reviews focussed on the main health concerns that have been identified in prison populations. These areas were substance use, mental health and learning disabilities and have been identified as an issue in prison populations and associated with offending. In addition, health literacy was also addressed to ascertain if any research had been conducted in this area.

The reviews were restricted to England and Wales as the aim was to look for gaps in the knowledge for this area and other countries (such as the USA) have a very different criminal justice system.

2.2 Methods

The methodology was designed in line with standard guidelines for systematic reviews [66]. A systematic approach ensures that all the relevant studies are identified, assessed for quality and the results summarised.

2.2.1 Research questions:

- What is the prevalence of mental health problems in people with court orders supervised by probation services in England and Wales?

- What is the prevalence of substance use (alcohol and/or drug) in people with court orders supervised by probation services in England and Wales?
- What is the prevalence of learning disability in people with court orders supervised by probation services in England and Wales?
- What is the prevalence of inadequate health literacy in people with court orders supervised by probation services in England and Wales?

2.2.2 Search strategy

The search strategies were designed to identify all papers, both peer reviewed and grey literature that were relevant to the research questions. The search strategy was developed to be more sensitive than specific as it was thought that the literature in this area was very limited.

The strategy was devised around two separate components. Firstly, words and terms that describe offenders who are managed in the community and secondly terms that related to topics in the research questions. Both controlled vocabulary terms and free text terms were used in the search because of the unreliability of indexing [67]. The search terms in each of the two concept areas were combined with the Boolean operator 'OR' and then the resulting two sets of results combined with the Boolean operator 'AND'. Limits were applied so only papers published from 1980 were included. This was because there has been a great deal of change in both the management of offenders and the health service in recent years and prevalence of conditions change with time. Additional limits were applied if possible to confine the studies to England and Wales to reduce the number of inappropriate studies from other countries.

The overarching search strategy is attached in Appendix 1.

To ensure that as many studies as possible were identified, databases were selected that included health sciences, public health, medicine, management, psychology and sociology and unpublished studies and reports. These were:

- EMBASE
- Social Policy and Practice

- MEDLINE
- PsycEXTRA
- PsycINFO
- CINAHL
- Web of Science (including Science Citation Index Expanded, Social Sciences Citation Index, Arts and Humanities Citation Index, Conference Proceedings Citation Index)
- Cochrane Library

Electronic database searching has limitations [68] so to ensure a more complete search of the literature the references of identified papers and those used for background information were also searched and Web of Science was used to check for further papers that had cited these papers. The electronic versions of Probation Journal and Journal of Offender Rehabilitation for the last ten years were also searched as these are two UK probation focussed journals.

The following websites were also searched for both papers and non-peer reviewed reports.

- Offender Health Research Network
- Ministry of Justice
- Home Office
- Department of Health
- Sainsbury Centre for Mental Health
- Prison Reform Trust
- Websites of local authorities for health needs assessments

All references from the searches were then downloaded into Endnote and duplicates removed. All the abstracts of the potential papers were read. Full papers were obtained from the agreed abstracts and if they met the inclusion criteria were included in the reviews and categorised by type of study.

Authors were contacted if papers were not able to be sourced through the library or inter-library loans and if data presented did not separate out community managed offenders from others in the criminal justice system.

2.2.3 Inclusion criteria

- The population studied was offenders aged 18 and over on a Court Order and supervised by the probation service in England and/or Wales.
- Studies that were based on probation populations that included offenders released on licence from prison were also included but identified as such in the results.
- Primary data relating to the mental health (including suicide and self-harm), drug or alcohol use, learning disability or health literacy levels of the defined population was extractable (this did not have to be the primary objective of the study but data relating to the topic must be available).
- It was published in English
- It was published from 1 January 1980 onwards
- Reviews of literature that included studies that met the inclusion criteria were also identified and their results compared with the results of this study to ensure that all relevant papers had been captured.

2.2.4 Exclusion criteria

- Studies on juvenile offenders
- Studies on released or ex-prisoners only and studies where the probation population results could not be separated from results for the whole criminal justice system
- Studies that examined prevalence in a small defined subset of probation such as those living in approved premises or those referred to a psychiatric service
- Published in a language other than English
- Published before 1980

- Study not in England and/or Wales

2.2.5 Data extraction and quality assessment

Data extraction and assessment of the quality of quantitative studies was carried out using a template for quantitative studies designed by the Health Care Practice Research and Development Unit, University of Salford [69] which covers the essential details of a study as well as its quality and value. This tool is of particular use where included studies are observational and traditional quality scoring systems used in randomised controlled trials could not be used. An example of data extraction and critical appraisal is attached in Appendix 2.

2.2.6 Data analysis and synthesis

Where data were available, tables were constructed to show the different results for prevalence of different health problems and other key results from the studies are stated. No meta-analysis was possible because of the heterogeneity of the studies, particularly in method of ascertainment of results.

2.3 Results

2.3.1 Included studies

In total 37 papers or reports were identified which represented 28 different studies. This included 22 papers published in a peer reviewed journal and 15 reports. In some cases, more than one paper was published for the same study or the full report was identified in grey literature along with the published paper. In these cases, all the papers were read, and results synthesised and presented in a single row in the results tables so that each row represents a different study but may include more than one paper or report.

Table 1 below summarises all the separate studies analysed in the literature reviews and identifies the individual papers. Several papers considered more than one aspect of health, so this provides an overview of all the papers and studies identified and an assessment of limitations or quality of each study.

Many of the studies reported analysis of OASys data. This is the Offender Assessment System which was introduced in 2001 and is used in England and Wales by prison and probation services to assess the risks and needs of criminal offenders under their supervision. It assists the offender managers to link these risks and needs to individual sentence plans and risk management plans. After sentencing, an OASys assessment should be completed in probation services for all offenders designated tier 2 and above, except those tier 2 cases which only have a stand-alone unpaid work requirement [70].

Only five studies were identified as being good quality, with the majority being of poor quality as they did not use validated tools and often relied on incomplete OASys data. However, all papers were still included in the reviews, but quality taken into account when discussing the results.

The subsequent sections go on to describe the results for each area of interest.

Table 1 Characteristics of studies included in the reviews

Study (Study Period)	Population/Setting	Quality Assessment (good/acceptatble/low) and Limitations	Number (Male/ Female)	Study Type	Health Area Covered			
					Mental Health/ Suicide/self-harm	Learning Disability	Drugs	Alcohol
Akhurst *et al* [58](1995).	Offenders in Kirklees and Calderdale, West Yorkshire Probation Services.	Acceptable Low response rate Older study	238 213 male 25 Female	Cross-sectional	X		X	X
Brooker *et al* [71, 72] (2008)	Offenders supervised by Nottinghamshire and Derbyshire Probation Trusts.	Good Well conducted health needs assessment using validated tools.	183 (150 male 31 Female 2 not recorded)	Needs assessment Cross-sectional	X		X	X
Brooker *et al* (2011) [73] (March 2009 – February 2010) Published papers: Brooker *et al* (2012) [74], Pluck *et al* (2012) [75], Brooker and Sirdifield (2013) [76], Brooker *et al* (2014) [77], Pluck and Brooker	Offenders on the caseload of Lincolnshire Probation Trust	Good Used validated tools. Initial sampling strategy had to be revised because of high attrition rates. Did not meet recruitment target of 228.	173 (150 (87%) male, 23 (13%) female	Cross-sectional	X		X	X

Study (Study Period)	Population/Setting	Quality Assessment (good/acceptatble/low) and Limitations	Number (Male/ Female)	Study Type	Health Area Covered			
					Mental Health/ Suicide/self-harm	Learning Disability	Drugs	Alcohol
(2014) [78], Pluck *et al* (2015) [79]								
Budd *et al* [80] (2002)	Offenders aged 16 or over serving a community sentence in England and Wales	Acceptable 53% response rate	1290 males and 288 females	Cross-sectional			X	
Cattell *et al* [81] (October 2009 – December 2010)	Offenders commencing a Community Order in study period, England and Wales.	Low Survey excluded tier 1 offenders. Aim was to look at effectiveness of Community Orders rather than specific needs. Survey did not include validated tools.	2919 (2452 males, 467 females) in longitudinal survey 144,388 administrative records (84% male, 16% female) analysed	Cohort study with cross-sectional data on health-related issues.	X	X	X	X
Clifford [82] (January – February 2013)	Offenders (aged 18+) attending a Wiltshire probation office between 21/1/13 and 1/02/13 and database analysis of Offenders	Low Health needs assessment. Lacked use of validated tools. Self-completed survey by offenders not face to face interview. Data returned to Offender Managers so	169 offenders (146 (86%) male, 23 (14%) female) (survey) 1717 offenders on caseload (90%	Cross-sectional Health Needs Assessment	X		X	X

Study (Study Period)	Population/Setting	Quality Assessment (good/acceptatble/low) and Limitations	Number (Male/ Female)	Study Type	Health Area Covered			
					Mental Health/ Suicide/self-harm	Learning Disability	Drugs	Alcohol
	on the caseload of Wiltshire Probation Trust.	issues about confidentiality.ms with literacy or understanding the questions. Data was missing on OASys analysis.	male, 10% female).					
Cochrane and Cooke [83] (2012)	Offenders supervised by Kent Probation Trust.	Low Low response rate 99/4304 (2%). Used a health and wellbeing questionnaire but no validated tools. Additional data from OASys with missing data.	99 (86% males, 14% females)	Cross-sectional HNA	X			
Cook and Borrill (2015) [84] (2009-2010 – one year period)	Offenders under community supervision in a metropolitan probation trust.	Low Only OASys data was analysed so does not include some low-risk offenders.	38,910 (gender not reported)	Cross-sectional	X			
Ebberson [85] (2015)	Offenders supervised by BENCH CRC (low and medium risk offenders in the community in Bedfordshire	Low Data from OASys with sizable proportions of missing data	843 (gender not reported)	Cross-sectional HNA mostly with qualitative data	X			

Study (Study Period)	Population/Setting	Quality Assessment (good/acceptatble/low) and Limitations	Number (Male/ Female)	Study Type	Health Area Covered			
					Mental Health/ Suicide/self-harm	Learning Disability	Drugs	Alcohol
Fazackerley [86] (October 2008 – March 2009)	Offenders supervised by probation services in Yorkshire and Humber Region	Low Prevalence calculated from available data on OASys so did not include all offenders. Report for local use rather than peer reviewed research.	8122 (gender not reported)	Cross-sectional				X
Institute of Criminal Policy Research (2011) [87] (2009-2010)	Offenders supervised by probation services in West Sussex	Low Data form OASys. Only 18 offenders supervised by probation interviewed with a structured questionnaire. No validated tools used. Health needs assessment approach	1504 OASys assessments (1357, 90% males 147, 10% females) 18 offenders interviewed	Cross-sectional HNA	X		X	X
Keene *et al* [88](1996-1998).	Probationers in a county	Acceptable Older study Single county	3979. 3398 male 581 female.	Cross-sectional	X	X	X	X
Kynch [89] (2003)	All probationers in Wales on May 30th 2003	Low Prevalence estimated using available data on probation database rather than survey of offenders.	12100 (10561 male (87%) 1539 female (13%)	Cross-sectional			X	X

Study (Study Period)	Population/Setting	Quality Assessment (good/acceptatble/low) and Limitations	Number (Male/ Female)	Study Type	Health Area Covered			
					Mental Health/ Suicide/self-harm	Learning Disability	Drugs	Alcohol
Lewis and Scott-Samuel [90] (2012)	Offenders on caseload of Merseyside Probation Trust on 29th February 2012.	Low Data from OASys with missing data.	7942 (7129 male (90%), 813 female (10%))	Cross-sectional (HNA)			X	X
Lloyd [91] (2012)	Offenders supervised by Cheshire Probation Trust (Cheshire East, Cheshire West, Warrington) who have an OASys assessment	Low HNA using data from OASys assessment completions at commencement of supervision. Results of based on criminogenic needs. The two Probation Trusts supplied slightly different data. Study is unpublished	Cheshire - 2224. Gender numbers not stated. Wirral 3082 (2606 85% male and 473 15% female with 3 not specified.)	Cross-sectional (HNA)	X		X	X
Mair and May [92] (1994)	22/54 probation areas across England and Wales.	Low Sample size 1/3 of that planned. Older study Did not use valifdated tools	1213 offenders Male 996 (82%) Female 214 (18%)	Cross-sectional	X		X	X

Study (Study Period)	Population/Setting	Quality Assessment (good/acceptatble/low) and Limitations	Number (Male/ Female)	Study Type	Health Area Covered			
					Mental Health/ Suicide/self-harm	Learning Disability	Drugs	Alcohol
Mason and Murphy [93] (1997-1998)	Probationers in Kent finishing their community sentences within a specified 6 month period.	Acceptable Small sample size. One county. Older study	90 offenders	Cross-sectional		X		
Mason and Murphy [94] (not stated, published 2002).	Probationers from one probation office in Kent	Acceptable Small study. One areas of Kent	70 offenders	Cross-sectional		X		
Morrish [95] (not stated, published 2011)	Offenders on probation caseload in Stevenage, Watford, Hertford and St Albans.	Low 10 minute interview with offenders as part of HNA. Validated tools were not used. No information on sample size compared to total probation population. No explanation on how OASys was analysed. No confidence intervals presented.	223 offenders 85.2% male, 13.5% female, 1.3% unidentified OASys data: 86% of offenders supervised by Hertfordshire Probation. (Tier 1 and stand-alone unpaid work not assessed on OASys)	Cross-sectional HNA	X		X	X

Study (Study Period)	Population/Setting	Quality Assessment (good/acceptatble/low) and Limitations	Number (Male/ Female)	Study Type	Health Area Covered			
					Mental Health/ Suicide/self-harm	Learning Disability	Drugs	Alcohol
Newbury-Birch [96, 97] (2006)	Probationers in Northumbria, Durham and Teesside	Good 61% response rate.	266 offenders 226 male (86%) 37 (14%) female (3 not stated)	Cross-sectional			X	X
Pari *et al* [98] (2011)	Offenders aged 18+ supervised by probation services in Reading and Newbury attending on a predetermined study day in May/June 2011.	Acceptable Self-administered questionnaire so literacy may have been an issue. Pragmatic sample that may not be representative.	132 109 male (83%), 23 female (17%)	Cross-sectional	X		X	X
Pritchard *et al* [99] (not stated, published 1990)	168 Young adults (aged 18-35) on probation caseload in Southampton and Bournemouth.	Low Older study. Does not give separate results for males and females, questionnaire completed by staff. No validated tools used	168 (102 (61%) male, 66 (39%) female)	Cross-sectional	X		X	X
Pritchard *et al* [100] (1991)	Probationers (18-35) across Hampshire and Dorset.	Low Older study. Does not give separate results for males and females, questionnaire completed by staff. No validated tools used.	214 84 (86%) male, 30 (14% female	Cross-sectional	X		X	X

Study (Study Period)	Population/Setting	Quality Assessment (good/acceptatble/low) and Limitations	Number (Male/ Female)	Study Type	Health Area Covered			
					Mental Health/ Suicide/self-harm	Learning Disability	Drugs	Alcohol
Pritchard *et al* [40] (1990-1995)	Male probationers (17-54) in Dorset.	Acceptable No confidence intervals presented. Only 28 deaths in probation group. Older study. One County.	7456 men	Observational cohort study with outcome of interest death.	X			
Robotham *et al* (2014) [101] (2012)	Offenders aged 15 and older supervised by Norfolk Probation Trust.	Low Small sample, validated tools were not used, questionnaires were completed by the participant and some answers were left blank.	83 (70 (84%) males, and 12 (14%) females, 1 blank).	Cross-sectional	X		X	X
Sattar [41, 102] (1996 and 1997).	Offenders supervised by probation in England and Wales.	Good Comprehensive study but now 20 years old.	1267 offenders 1140 male 127 female	Observational cohort study with outcome measure being death and cause of death.	X			
Shaw *et al* [103] (September to November 2010)	447 offenders supervised by probation in four London boroughs.	Good Validated tool used for personality disorder (SAPAS (standardised assessment of personality –	447 offenders 404 (90%) male and 43 female (10%).	Cross-sectional	X			

Study (Study Period)	Population/Setting	Quality Assessment (good/acceptatble/low) and Limitations	Number (Male/ Female)	Study Type	Health Area Covered			
					Mental Health/ Suicide/self-harm	Learning Disability	Drugs	Alcohol
		abbreviated scale)). Inner city multi-ethnic population might not be generalisable.						
Thames Valley Criminal Justice Board [104] (1 Jan - 30 Sept 2012)	5648 offenders supervised by probation in Thames Valley with OASys assessment. 6472 current offenders recorded on the integrated case management system (ICMS) on 30 September 2012 ie caseload.	Low Not all offenders have completed OASys assessments (low risk or subject to stand alone unpaid work are not assessed). ICMS items recorded by offender manager. No validated tools.	5648 (gender split not stated) 6472 (5863 (91%) males, 605 (9%) females)	Cross-sectional	X		X	X

2.3.2 Mental health

Figure 2 Flow chart of search results

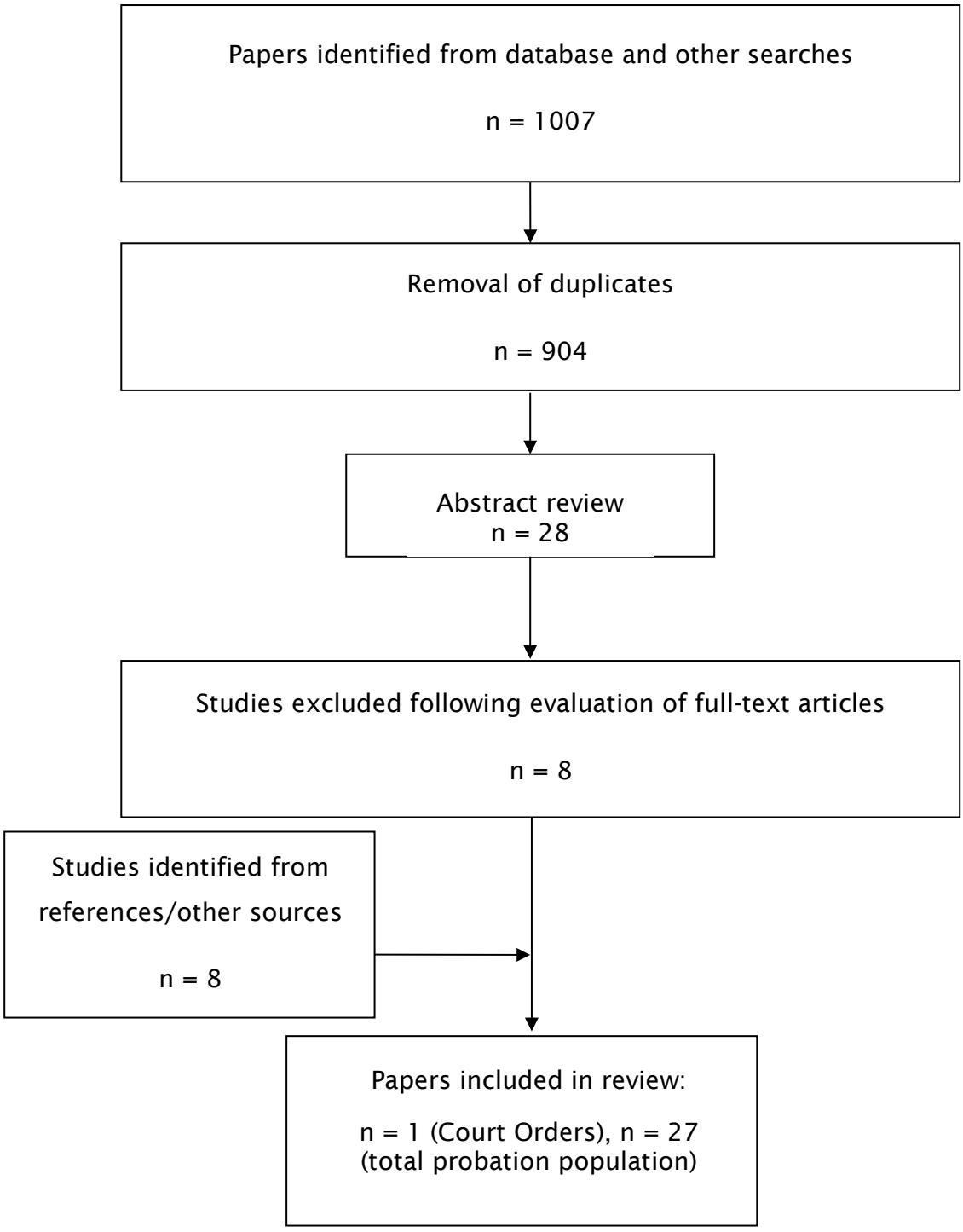


Table 2 Studies excluded and reasons

Study	Reason for Exclusion
Crilly *et al* (2009) [105]	Population was in the USA
Knowles *et al* (2011) [106]	Study was on young offenders aged 14-18
Palmer *et al* (2010) [107] –	Study only compared mean OASys scores. Author was contacted to see if she had any prevalence data or raw scores but she did not.
Hollin and Palmer (2004) [108]	Data are presented on both community offenders and prisoners together and cannot be separated.
Cohen *et al* (1999) [109]	Only examined a subset of offenders supervised by probation that were referred to a mental health worker scheme in a probation service in Wandsworth so unable to give prevalence estimates for all offenders under probation.
Wessely *et al* (1996) [110]	No new data – further discussion of Akhurst *et al* (1995) *[58]*
Rodriguez *et al* (2006) [111]	Police and probation data used and 'offender' defined as being charged with a least one offence rather than being convicted and given a community sentence so cannot separate those supervised by probation with those charged and not convicted.
King *et al* (2015) [112]	Did not give prevalence of suicide within probation populations only proportion of suicides that had contact with the criminal justice system.

2.3.2.1 Summary of included studies

Table 3 Prevalence of mental health problems

Study (period)	Population/Setting	Method of Ascertainment	Prevalence of Mental Health Problems	Other Results
Akhurst *et al [58]* (1995)	Offenders supervised by probation services in Kirklees and Calderdale	Probationer self-report using a survey	72/238 31.5% had ever been seen by a psychiatrist. 66 (32%) males 6 (32%) females 71/238 (30.5%) (60 (28%) of males, 11(44%) females) respondents admitted self-harm, of which 72% were a serious attempt to end their life.	86.5% assessed with a mental health problem also reported self-harm. 73.5% self-harmers also had alcohol related problems using the AUDIT questionnaire. 21/72 (30%) who had been seen by a psychiatrist had also been admitted to a psychiatric hospital.
		Reported by Probation Officers	15/175 (8.5%) had mental health problems	
Brooker *et al* [71, 72] (2008)	Offenders supervised by Nottinghamshire and Derbyshire probation services	Probationer self-report of ever been in contact with a mental health service	50/183 (27.3%) had ever been in contact with a mental health service	Most prevalent condition was depression 18/183 (10%). Mean mental health scores on the SF36 were significantly lower than general population for both men (71.73 compared to 88.08) and women (57.03 compared to 70.05)
Brooker *et al* (2011) [73] (March 2009 – February 2010)	Offenders supervised by Lincolnshire Probation Trust	Screened for mental illness with the Prison Screening Questionnaire (PriSnQuest) and those who screened positive	27% of offenders had a current mental illness (weighted prevalence 38.7% to take into account false negative rates on PriSnQuest).	Dual diagnosis - 72% of those with a current mental illness also had a substance misuse problem (either 8+ on AUDIT or 11+ on DAST)

Study (period)	Population/Setting	Method of Ascertainment	Prevalence of Mental Health Problems	Other Results
Published papers from this study: Brooker *et al* (2012) [74], Pluck *et al* (2012) [75], Brooker and Sirdifield (2013) [76], Brooker *et al* (2014) [77], Pluck and Brooker (2014) [78], Pluck *et al* (2015) [79]		(score 3+ so likely to have symptoms of mental illness requiring investigation by a professional or reported seeing someone formally in any kind of mental health service) were interviewed according to the Mini-International Neuropsychiatric Inventory (a structured clinical interview) CANFOR-S to assess the needs of individuals with severe mental illness to investigate self-reported 'needs' and support given. SAPAS (standardised Assessment of Personality – Abbreviated Scale) used to screen for personality disorder	21% had any anxiety disorder (CI 15.3-38.3) (weighted 27% (CI 18.4-38.3) Specific anxiety disorders: Panic disorder 1.2% (0.0-2.8) Agoraphobia 9.8% (5.4-14.3) Social anxiety 6.4% (2.7-10.0) Generalised anxiety 3.5% (0.7-6.2) Obsessive compulsive disorder (OCD) 1.7% (0.0-3.7) Post-traumatic stress disorder (PTSD) 4.6% (1.5-7.8) Any mood disorder 15% (9.7-20.4) (weighted 17.9 (11.3-27.3)) Major depressive episode: 14.5% (9.2-19.7) Mania: 2.3% (0.1-4.6) Any psychotic disorder 8.1% (4.0-12.2) (weighted 11.0% (5.8-20.0)) Psychotic disorder with mood disorder 2.9% (0.4-5.4) Psychotic disorder without mood disorder 5.2% (1.9-8.5) Any eating disorder 2.3% (0.1-4.6) (Weighted 5.2% (1.6-15.5)) 47% screened positive for	Co-morbidity with alcohol misuse is much higher than co-morbidity for drug misuse for those with a mental illness (66% versus 21%). 89.4% (80.6-98.2) of those with a current mental health disorder also had a personality disorder compared to 36.6% (21.8-51.3) of those who did not have a current mental illness Younger people were significantly more likely to report deliberate self-harm in the past month than were the older (7/48, 14.6% versus 1/47, 2.1%, Fischer's Exact, p=0.022). People with a lifetime history of attempted suicide were significantly more likely than those without to have had recent self-harm intentions or attempts.

Study (period)	Population/Setting	Method of Ascertainment	Prevalence of Mental Health Problems	Other Results
			personality disorder. Any past/lifetime mental illness: 39.9% (32.6-47.2) (weighted 48.6% (36.2-61.1)) Any mood disorder 38.2% (30.9-45.4) (weighted 43.9% (32.4-56.1) Panic disorder lifetime 9.8%(5.4-14.3) Any psychotic disorder 15.6% (10.2-21.0) (weighted 18.5% (11.7-28.0) 56/173 (32.4%; 95% CI=25.6-40.0) had attempted suicide over their lifetime.	
Cattell *et al* [81] (October 2009 – December 2010)	Offenders commencing a Community Order in study period, England and Wales.	Self-reported survey	690/2916 (23.7%) reported depression or bad nerves 463/2916 (15.9%) reported mental illness, phobia, panics or other nervous disorders. 870/2911 (29.9%) reported a psychiatric or mental health condition diagnosed by a healthcare professional (33% males and 47% of females)	770/2771 (27.8%) have ever received treatment or help for a psychiatric or mental health condition. 11.3% reported that they needed a little help and 12.1% reported they needed a lot of help with a mental health condition.

Study (period)	Population/Setting	Method of Ascertainment	Prevalence of Mental Health Problems	Other Results
		Analysis of admin records including OASys data on 144,388 offenders tiers 2-4.	No mental health prevalence estimates could be obtained using this method	Criminogenic needs identified on 144,388 offenders: Accommodation 18% Education, training and employment 27% Drug misuse 17% Alcohol misuse 18% Relationships 28% Lifestyle and associates 27% Thinking and behaviour 28% Attitudes 24% None 55%
Clifford [82] (January – February 2013)	Offenders (aged 18+) attending a Wiltshire probation office between 21/1/13 and 1/02/13.	Probation service user survey including the Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS). This records statements about their thoughts and feelings over the past two weeks.	152/169 completed WEMWBS. Mean score of 25.2 which was comparable to the national average of 25.3. Prevalence of a low WEMWBS score (19 or less) was 25/152 (16%). 80/166 (49%) identified a need for mental health support. 37/169 (22%) reported a mental health disability.	Only 47% recalled being asked about their mental health whilst on probation. Of the 80 who identified a mental health need, 29% said that no support was given.
	1717 offenders on the caseload of Wiltshire Probation Trust. 90% male, 10% female	OASys assessment with poor mental health defined as those identified as having emotional well-being linked to their risk of reoffending	Only 0.5% of the Probation caseload had a Mental Health Treatment Order - 6% had mental illness listed for them as a 'disability' - 29% (n=502) had had their evidence motivation for the offence	

Study (period)	Population/Setting	Method of Ascertainment	Prevalence of Mental Health Problems	Other Results
			recorded as 'emotional state (e.g. depression / stress/ anxiety/ obsessional thoughts/anger/jealousy)'. - 22% had emotional wellbeing classified as a 'disinhibitor at the time of the current offence.' - 20% (n=348) had emotional wellbeing linked to risk of reoffending - 4% (n=70) of the case load receive current psychiatric treatment or have treatment pending. 3% (n=53) have a specialist report required. - Of those with a recorded risk for self-harm or suicide, 24% were categorised as at risk of suicide and 18% as at risk of self-harm (393 of the 1717 people had no risk recorded).	
	37 Probation staff in Wiltshire Probation Trust. 73% were offender managers.	Survey of Probation Staff on staff perceptions about the prevalence of poor mental health amongst probation users	The majority of staff (70%) estimated that 21-4% or 41-60% their caseload had long term mental health problems. 14% estimated it was greater than 61%	Alcohol, depression, drugs and mental health were considered the greatest health problems in the probation population.

Study (period)	Population/Setting	Method of Ascertainment	Prevalence of Mental Health Problems	Other Results
Cochrane and Cooke [83] (2012)	Offenders supervised by Kent Probation	A health and wellbeing questionnaire but no validated tools. Additional data from OASys.	31/99 (31%) reported a mental health problem with 22 of these being treated. OASys data showed 3031 (50.2%) offenders disclosed a mental health condition to their offender manager.	46/99 (46%) reported that emotional problems such as depression or being anxious had an impact on their regular daily activities. 85% of these had problems sleeping.
Cook and Borrill (2015) [84] (2009-2010 – one year period)	38,910 offenders under community supervision in a metropolitan probation trust.	Analysis of OASys data so does not include some low-risk offenders.	12 % of clients were judged by staff as at risk of suicide. This was 19% females (868) and 11% of males (3683). Proportions varied by age group: 18-25 years – 8% (n=874) 25-44 years – 13% (n=2788) 45-65 years – 14% (n=843) 65+ years – 13% (n=49)	Highest rates of assessed suicide risk were in the white British ethnic group (16%, n=2879) with the lowest rate in the Chinese (6%, n=10) or black British (7.5%, n=797) ethnic groups. The proportion of risk of suicide was highest in sexual offenders (20%, n=254) and violent offenders (14%, n=1240). It was lowest in offenders with substance-related offences (6%, n= 222) or motoring offences (6%, n=189)
Ebberson [85] (2015)	Offenders supervised by BENCH CRC (low and medium risk offenders in the community in	Data from OASys with sizable proportions of missing data.	44% (n=384) physical or mental health conditions. 16% some or significant psychiatric problems. 23% some or significant problems with self-harm/suicidal	53% some or significant difficulties coping. 29% some or significant difficulties with social isolation.

Study (period)	Population/Setting	Method of Ascertainment	Prevalence of Mental Health Problems	Other Results
	Bedfordshire		thoughts/attempted suicide. 38% (n=324) some or significant difficulties with depression/psychological problems	
Institute of Criminal Policy Research (2011) [87] (2009-2010)	Offenders supervised by probation services in West Sussex.	Data from OASys and 18 offenders supervised by probation interviewed with a structured questionnaire face to face or by telephone.	From OASys data (1504 offenders): 13% had history of psychiatric treatment (18% for females, 12% males) 21.2% (34.7% females, 19.7% males) have been on medication for mental health problems in the past. 36% (48% females, 34% males) had a 'history of self-harm, attempted suicide, suicidal thoughts or feelings'. 7% (11% females, 7% males) currently receiving or awaiting psychiatric treatment. 14.2% were recorded as having a mental health condition and 58.4% of these had depression. 10/18 (56%) interviewees reported they had seen a doctor or psychiatrist for help with mental health concerns. 8 of these had been prescribed medication and 4 had experience of in-patient care.	Mental health disorders recorded on OASys (n=214) Unspecified:13 Eating disorders: 3 Paranoia: 3 OCD: 4 PTSD: 5 Personality diosorder: 9 Psychosis: 10 Schizophrenia: 13 Anxiety: 22 ADHD spectrum: 28 Depression: 125
Keene *et al* [88] (1996-1998)	Probationers in one county	Probation Officers' recording system – those classified with	Poor mental health: 2.4% (plus 6.7% classed with 'emotional instability'	

Study (period)	Population/Setting	Method of Ascertainment	Prevalence of Mental Health Problems	Other Results
		'poor mental health'		
		Overlapping Probation and Mental Health Trust records.	541/3979 13.6% (assessed as mentally disordered) 114 (19.6%) of females compared to 427 (12.6%) of males	25-64 year olds (15.7%) had highest prevalence
Lloyd [91] (2012)	Offenders supervised by Cheshire Probation Trust (Cheshire East, Cheshire West, Warrington) and those in Wirral supervised by Merseyside Probation Trust who have an OASys assessment	HNA using data supplied by Cheshire Probation Trust taken from OASys assessment completions at commencement of supervision. Results of based on criminogenic needs. Unpublished	Cheshire Probation Trust: 31% had disclosed or been assessed as at risk of self-harm or suicide Wirral: 1832 (59%) have an emotional well-being need. 578 (19%) were identified as being at risk of self-harm or suicide.	
Mair and May [92] (1994)	22/54 probation areas across England and Wales.	Probationers' self-report of mental health problems.	170/1213 14% reported a mental health problem Males: 133/996 13% Females 36 /214 17%	Prevalence of mental health problems in both males and females increased with age from 5% in 16-20 males to 17% in males 36 and over and 5% in females 16-20 to 33% in females over 36.
Morrish [95] (not stated, published 2011)	223 offenders on probation caseload in Stevenage, Watford, Hertford and St Albans. 85.2% male, 13.5% female, 1.3%	10 minute interview with offenders as part of HNA. Validated tools were not used	63/223 (28.3%) reported a diagnosed mental health problem. Another 45 (20%) admitted depression or self-harm not diagnosed.	8.5% had a dual diagnosis (mental health and drugs/alcohol misuse)

Study (period)	Population/Setting	Method of Ascertainment	Prevalence of Mental Health Problems	Other Results
	unidentified			
	86% of offenders supervised by Hertfordshire Probation. (Those on tier 1 and stand-alone unpaid work are not assessed on OASys)	OASys analysis	4.6% recorded as having a mental health problem	
Pari *et al* [98](2011)	132 offenders (109 male, 23 female) aged 18+ supervised by probation services in Reading and Newbury attending the office on a predetermined study day between May and June 2011.	Self-administered questionnaire including the mental component score of the SF 36 v2 scale	62/132 (47%) screened positive for depression (as identified by a cut-off of <42 of the Mental Component summary score of SF-36 V2 scale. This included 65% (95% CI 45·1–85·3) of females and 43% (33·7–52·5) of males.	The mental component summary (MCS) score was significantly lower than in the general population (40·9 vs 50·0, 95% CI for difference –10·8 to –7·4; p<0·0001), even in individuals from socioeconomic class V (40·9 vs 49·9, –10·9 to –7·2, p<0·0001). After accounting for confounding factors, poor mental health was significantly associated with history of self-harm (odds ratio [OR] 3·33, 95% CI 1·1–7·2; p=0·011), drug misuse (1·23, 1·1–1·4; p=0·003), and visit to a general

Study (period)	Population/Setting	Method of Ascertainment	Prevalence of Mental Health Problems	Other Results
				practitioner in the past 12 months (4·05, 1·4–8·5; p=0·002). Only 16/62 (26%) who screened positive for depression managed to get access to a mental health service in the previous year.
Pritchard *et al* [99] (1990)	168 Young adults (aged 18-35) on probation caseload in Southampton and Bournemouth. 102 (61%) male.	Questionnaire completed by staff	42/168 (25%) had a mental disorder and 99/168 (59%) had anxiety 21/168 (13%) had attempted suicide.	49/168 (29%) had an alcohol problem 35/168 (21%) took 'soft drugs' 19/168 (11%) took 'hard drugs'
Pritchard *et al [113]* (1991)	Probationers (18-35) in Hampshire and Dorset.	Probationer self-report of mental disorder, depression	45/214 (21%) had a mental illness 77/214 36% had attempted suicide	Drug misuse was significantly higher in this group than the rest of the sample
Pritchard *et al [40]* (1990-1995)	Men 17-54 on probation in Dorset	Probationers' deaths obtained via probation case records County male mortality obtained from OPCS data	The total suicide rate for probationers was almost 10 times the county rate (rate ratio 9.89) with the 35-44 and 45-54 year old probationers had a 35 times the rate of other males their age (rate ratios of 36.16 and 36.06 respectively)	Total mortality in all men aged 15-54, probationers had more than double the county's death rate (rate ratio 2.27). In the 25-34 age range, probationers had almost seven times the county rate (rate

Study (period)	Population/Setting	Method of Ascertainment	Prevalence of Mental Health Problems	Other Results
				ratio 6.91) Probationers had five times the 'external[1]' death rate of the male population (rate ratios 5.06) with the 25-34 age range had almost 15 times the 'external' death rate of their county peers.
Robotham *et al* (2014) [101] (2012)	83 offenders aged 15 and older supervised by Norfolk Probation Trust.	Self-reported questionnaire	45% were reported anxiety or depression.	31% had a long-standing physical or mental health problem.
Sattar [41, 102] (1996-1997)	Community Managed Offenders (including ex-prisoners on post-release supervision) that died in 1996 and 1997. Total population was 288,828 (254,560 male, 34,268 female)	Deaths while on probation from the Probation Index. Details then sent to the Office of National Statistics (ONS) for tracing on the central register to obtain death certificate	282/288,828 (0.1%) of community managed offenders died as a result of suicide or self-inflicted injury in 1996 and 1997. 282/1267 (22%) deaths were due to suicide/self-inflicted injury Suicide/self-inflicted death: The rate for probationers and prisoners was similar but 11 times (1996) or 12 times (1997) that of the general population.	46% of all community offender deaths were drug/alcohol related.

[1] External causes include overdoses, accidents and murder and where suicide cannot be confirmed.

Study (period)	Population/Setting	Method of Ascertainment	Prevalence of Mental Health Problems	Other Results
Shaw *et al* [103] (September to November 2010)	447 offenders supervised by probation in four London boroughs. 404 (90%) male and 43 female (10%).	Self-report or Probation Officer administered SAPAS (the standardised assessment of personality – abbreviated scale) to screen for personality disorder and risk data and factors associated with personality disorder taken from OASys	62 cases excluded for missing data. On SAPAS 40.3% were classified as PD. 15.1% (n=58; 95% CI: 11.7-18.5%) identified as PD from OASys	A chi squared test indicated that there was no significant association between the two measures and poor overall agreement. 56.9% of OASys PD cases were not classified as PD by SAPAS.
Thames Valley Criminal Justice Board [104] (1 Jan - 30 Sept 2012)	5648 offenders supervised by probation in Thames Valley with a valid OASys assessment completed between Jan-Sept 2012	OASys analysis – three questions in the Emotional Well-being section - Are there current psychological problems/depression? Is there a history of self-harm, attempted suicide, suicidal thoughts or feelings? Any current psychiatric problems?	Current psychological problems – 27% Self-harm, attempted suicide, suicidal thoughts or feelings – 24% Current psychiatric problems – 11%	

Table 3 summarises the studies found that relate to mental health. In total, 21 different studies (from 28 published papers and reports) were identified that reported some prevalence data for mental health problems or suicide and self-harm in probation populations. Only one study (Cattell *et al* [81]) focussed solely on offenders with community orders. The rest were conducted in probation populations that included both people with Court Orders and those supervised by probation services on their release from prison. In addition, two literature reviews were identified. The first was a review of mental health prevalence in probation populations (Sirdifield (2012) [114]). This review only identified four papers that gave prevalence estimates for whole probation populations in England and Wales, all of these are included in the above summary table. The second was by Mackenzie *et al* (2013) [115] who reviewed suicide and severe self-harm in community offender populations. They also identified four studies from the United Kingdom and those that produced rates had already been identified for this review. They concluded that suicide is much higher in probation populations than the general population but more research is needed on the reasons for this and underlying causes.

Eight studies were identified through searching local authority websites, Ministry of Justice website and reports uploaded to the Offender Health Research Network website. These were all reports that have not been published as papers. One was published by the Ministry of Justice and was a report of the Ministry of Justice's Offender Management Community Cohort Study (OMCCS).

There was a great deal of heterogeneity amongst the studies making it very difficult to obtain true assessments of prevalence. Many did not use validated tools to measure mental health problems but relied on self-reports from offenders or data from OASys. Those studies which did use validated tools used different ones which included SAPAS, the mental health component of SF 36 v2, WEMWBS, CANFOR-S and PriSnQuest. Only three studies reported confidence intervals around their results. In addition, the studies reported different aspects of mental health with some reporting any mental health problem and other reporting specific mental health problems such as depression or anxiety.

The given prevalence of any mental health problem ranged from 2.4% - 59%. Those estimates at the lower end of the scale were generally obtained by analysing data from systems that offender managers (probation officers) used to record information. For example 2.4% was ascertained from a probation officer recording system [88], 4.6% obtained from OASys records [95] and 8.5% obtained from reports by Probation Officers [58]. Prevalence at the higher end tended to be from interviews with offenders and by using specific tools to assess mental health. For example, Brooker *et al* [73] reported current mental illness using PriSnQuest gave an estimate of 38.7% and any past or lifetime mental illness at 48.6% and Clifford [82] reported that 49% of offenders identified a need for mental health support. The highest prevalence reported (59%) was by Pritchard *et al* [113] and was for anxiety in young adults aged 18-35.

However, there were exceptions to this with Cochrane and Cooke [83] using their analysis of OASys data to report that 50.2% of offenders disclosed a mental health condition to their offender manager. This may highlight different practices when using the OASys database both in recording health problems and which areas of it are used in any analysis.

All the studies had fewer females than males but this is expected given the proportions of men and women in the criminal justice system. However, the studies that reported male and female results separately, all but one (Akhurst *et al* [58]) reported a higher prevalence of mental health problems in women.

Many of the studies also highlighted the complex problems that people with poor mental health also have such as alcohol and drug abuse, high risk of suicide and self-harm and poor physical health.

2.3.3 Alcohol

Figure 3 Flow chart of search results

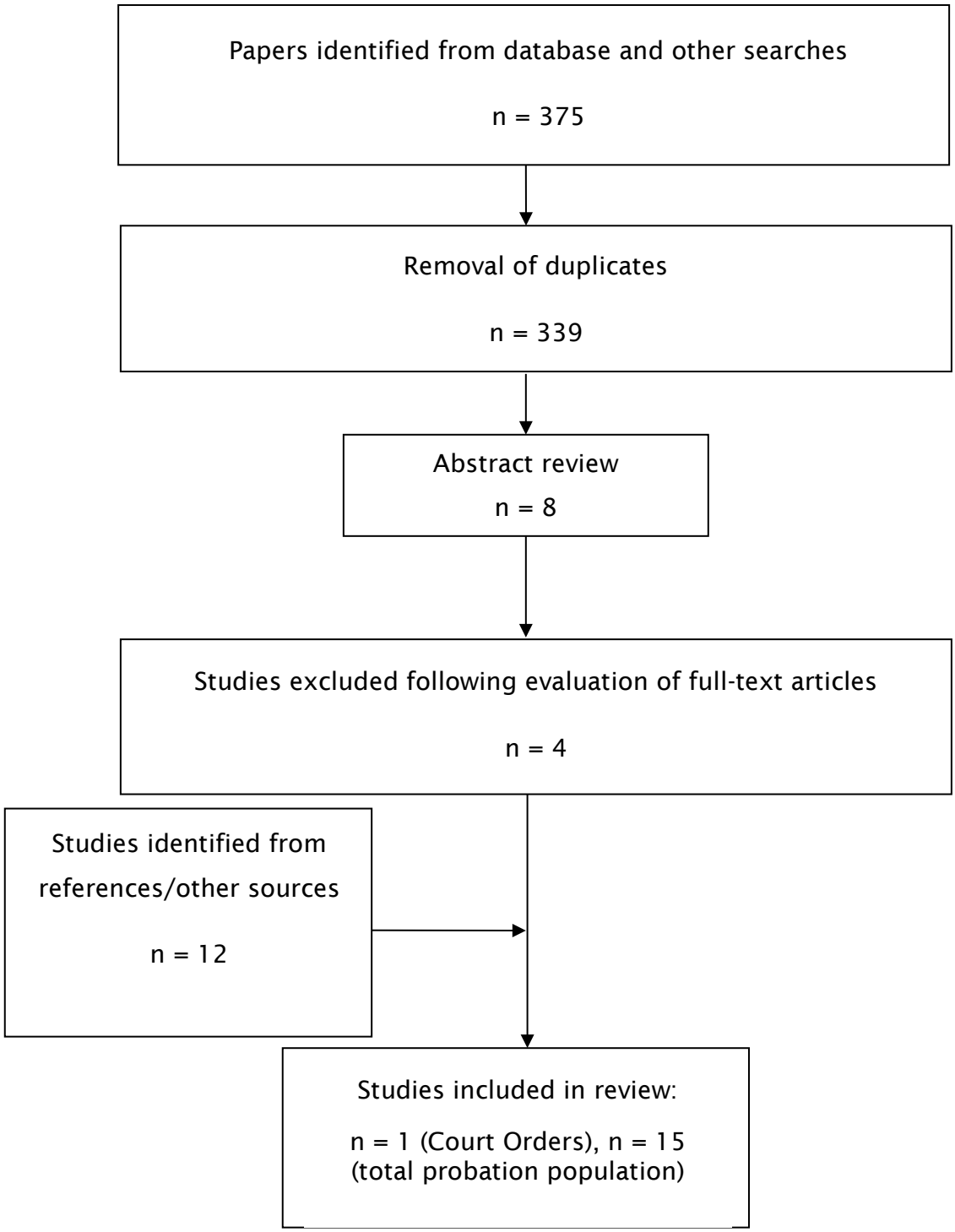


Table 4 Studies excluded and reasons

Study	Reason for Exclusion
Newbury-Birch *et al* (2014) [116]	No prevalence estimates in paper
Brown (1981) [117]	Study population was probation in New Zealand.
Palmer *et al* (2010) [107]	Study only compared mean OASys scores. Author was contacted to see if she had any prevalence data or raw scores but she did not.
Coulton *et al* (2012) [118]	No prevalence estimates given for probation only (only totals for whole criminal justice populations including prison, probation and police custody). Of this total only 46/205 were from probation.

2.3.3.1 Summary of included studies

Table 5 Alcohol/drinking problem prevalence in probation populations

Study (period)	Population/Setting	Method of Ascertainment	Prevalence of Alcohol Use	Other Results
Akhurst *et al* (23) (1995).	Offenders supervised by probation services in Kirklees and Calderdale	Reported by Probation Officers as number who had alcohol problems	38/175 (14.5%) alcohol problems	
Brooker *et al* [71, 72] (2008)	Offenders supervised by probation services in Nottinghamshire and Derbyshire	CAGE screening tool for identifying risk of alcohol abuse	81/183 (44%) were at risk of abuse or dependence on alcohol	
Brooker *et al* (2011) [73] (March 2009 – February 2010) Published papers from this study: Brooker et al (2012) [74], Pluck et al (2012) [75], Brooker and Sirdifield (2013) [76], Brooker et al (2014) [77], Pluck and Brooker (2014) [78], Pluck et al (2015) [79]	Offenders supervised by Lincolnshire Probation Trust	AUDIT	96/173 (55.5%) scored 8+ on AUDIT	
Cattell *et al* [81]	Offenders commencing	Self-reported survey	20% reported an alcohol need.	Of the 511/2595 that

Study (period)	Population/Setting	Method of Ascertainment	Prevalence of Alcohol Use	Other Results
(October 2009 – December 2010)	a Community Order in study period, England and Wales.		14% reported regularly drinking over 35 units a week for women or over 50 units a week for men. 10% reported drinking alcohol 3 or 4 times a week in last 28 days. 16% reported drinking daily or almost daily. 21% reported 7-12 units on average consumed per day, 13% reported 13-20 units and 7% reported 21+ units per day	reported an alcohol need only 307 (60%) had that need identified on OASys. 74 (14%) was recorded as 'no need' and 130 (25%) had no assessment recorded.
		Analysis of admin records including OASys data on 144,388 offenders, tiers 2-4.	Of those assessed on measure 24% had some and 20% had significant problems with levels of current alcohol use. 20% had some and 29% had significant problems with patterns of alcohol use (binge drinking).	32% of those assessed had some or significant problems with being motivated to change their alcohol misuse.
Clifford [82] (January – February 2013)	Offenders (aged 18+) attending a Wiltshire probation office between 21/1/13 and 1/02/13.	Probation service user survey which asked about health issues and concerns around alcohol misuse.	151/169 had a completed the survey. 33 (22%) reported concerns around alcohol use.	
	1717 offenders on the caseload of Wiltshire Probation Trust. 90% male, 10% female	OASys assessment with responses to the relevant questions about alcohol recorded.	298 (17%) reported that drinking too much alcohol was a problem (29% blank). 245 (14%) recorded as having	

Study (period)	Population/Setting	Method of Ascertainment	Prevalence of Alcohol Use	Other Results
			'some problems' and 282 (16%) recorded as having 'significant problems' with binge drinking or excessive use of alcohol in the last 6 months (23% blank).	
Cochrane and Cooke [83] (2012)	Offenders supervised by Kent Probation	A health and wellbeing questionnaire but no validated tools. Additional data from OASys.	52/99 (52%) drank alcohol. 22% were drinking at hazardous or harmful levels. OASys results for 3721 community offenders (not including those on licence) only: 701 (18.8%) were recorded as having some problems and 880 (23.6%) were recorded as having significant problems with binge drinking/excessive alcohol.	1024 (28%) had violent behaviour related to alcohol use recorded (38% not recorded)
Fazackerley (28)(October 2008 – March 2009)	Probationers in Yorkshire and Humber Region	Analysis of OASys assessments	For offenders who had valid OASys assessments, 50% had a need in relation to alcohol misuse.	Alcohol misuse higher for males than females, for offenders aged 18-24 years, and offenders who had committed offences of violence, robbery and criminal damage.
Institute of Criminal Policy Research (2011) [87] (2009-2010)	Offenders supervised by probation services in West Sussex. 1504 OASys records 18 offenders	Data from OASys. Only 18 offenders supervised by probation interviewed with a structured questionnaire face to face or by telephone.	Data from OASys: 28% (27% males, 29% females) assessed as having some current alcohol misuse problems 14% (14% males, 20% females) assessed as having significant	

Study (period)	Population/Setting	Method of Ascertainment	Prevalence of Alcohol Use	Other Results
	interviewed		problems. 19% (20% males, 18% females) had some binge drinking problems 22% (26% females, 21% males) had significant binge drinking problems.	
Keene *et al* (22) (1996-1998).	Offenders supervised by probation services in an English county (county not stated).	Probation Officers' recording system – those classified with 'alcohol misuse'	485/3979 (12.2%) classified as misusing alcohol.	Of these, 79/485 (16.3%) had been diagnosed as mentally disordered
Kynch (30) (2003)	Offenders supervised by probation services in Wales	Estimated from 3 sources: assessment by probation officers of a problem; direct evidence of treatment in sentencing; offence indirectly indicates a problem	Prevalence of alcohol problems estimated between 28% and 34%	Prevalence of either drug or alcohol problems estimated 44%-50%
Lewis and Scott-Samuel [90] (2012)	Offenders supervised by Merseyside Probation Trust	Data from OASys.	223/813 (27%) females and 1880/7129 (26%) males had an alcohol need identified.	194/813 (24%) females were not assessed and 1390/7129 (19%) males were not assessed.
Lloyd [91] (2012)	Offenders supervised by Cheshire Probation Trust (Cheshire East, Cheshire West, Warrington) and Merseyside Probation Trust in Wirral who have an OASys assessment	HNA using data supplied by Cheshire Probation Trust and Merseyside Probation Trust (for offender in Wirral) taken from OASys assessment completions at commencement of supervision. Results based on criminogenic needs.	Cheshire Probation Trust: 1045 (47%) of Cheshire offenders had current alcohol misuse problems at commencement of their supervision. 485 (21.8%) had the highest levels of need. Wirral: 914 (30%) identified as	Cheshire Probation Trust: Overall, 52% of offenders had binge drinking problems, 53% had a history of alcohol-related violence and 60% had alcohol as a problem assessed as contributing to their offending behaviour

Study (period)	Population/Setting	Method of Ascertainment	Prevalence of Alcohol Use	Other Results
			having an alcohol need	Wirral: Of those with an alcohol need, 96% were binge drinking, 76% had a history of alcohol related violence and 95% had alcohol linked to offending behaviour.
Mair and May (24) (1994)	22/54 probation areas, England and Wales.	Probationer self-report questionnaire.	10% of probationers had a drink problem	
Morrish [95] (not stated, published 2011)	Offenders supervised by probation services in Stevenage, Watford, Hertford and St Albans. 85.2% male, 13.5% female, 1.3% unidentified	10 minute interview with offenders as part of HNA. Validated tools were not used.	50/223 (22.4%) reported excess alcohol consumption. 38/223 (17%) drank in excess of 50 units per week, 22/223 (10%) drank in excess of 100 units per week.	19 (8.5%) had a dual diagnosis (mental health and drugs/alcohol misuse)
	86% of offenders supervised by Hertfordshire Probation. (Those on tier 1 and stand-alone unpaid work are not assessed on OASys)	OASys analysis	44.8% recorded as having alcohol problems.	
Newbury-Birch [96, 97] (2006)	Offenders supervised by probation services in North East England	Probationer self-report using AUDIT tool	0-7 32.8% 8-15 26.0% 16-19 8.0% 20+ 33.2% (35% men, 25% women)	When comparing to OASys alcohol scores 73% of those at hazardous risk, 46% those at harmful risk and 14% possible

Study (period)	Population/Setting	Method of Ascertainment	Prevalence of Alcohol Use	Other Results
			37% of 18-21 year olds were possibly dependant (20+) 8+ (67.2%)	dependence were missed by OASys Lack of training for probation staff on alcohol issues
		OASys assessments completed by probation service (January – October 2006)	Nationally 25.8% Alcohol needs North East: 24.4% Alcohol needs	
Pari *et al* [98] (2011)	Offenders aged 18+ supervised by probation services in Reading and Newbury attending the office on a predetermined study day between May and June 2011.	Self-administered questionnaire including AUDIT.	AUDIT 8+ 57/132 (43%) This was similar for male and females with 44% of female and 43% of male offenders.	Prevalence of hazardous drinking in female probationers was significantly higher than women in the general population (44% vs 15%, 95% CI for difference −0·49 to −0·08; p<0·0001) and was similar to that for female prisoners. Of 57 probationers who were identified as hazardous drinkers, only 13 (23%) had accessed drug and alcohol services in the previous year.
Pritchard *et al* (1990) [99]	Offenders supervised by probation services in Bournemouth and	Probation officers completed a survey about each client.	49/168 (29%) were reported as having an alcohol problem.	

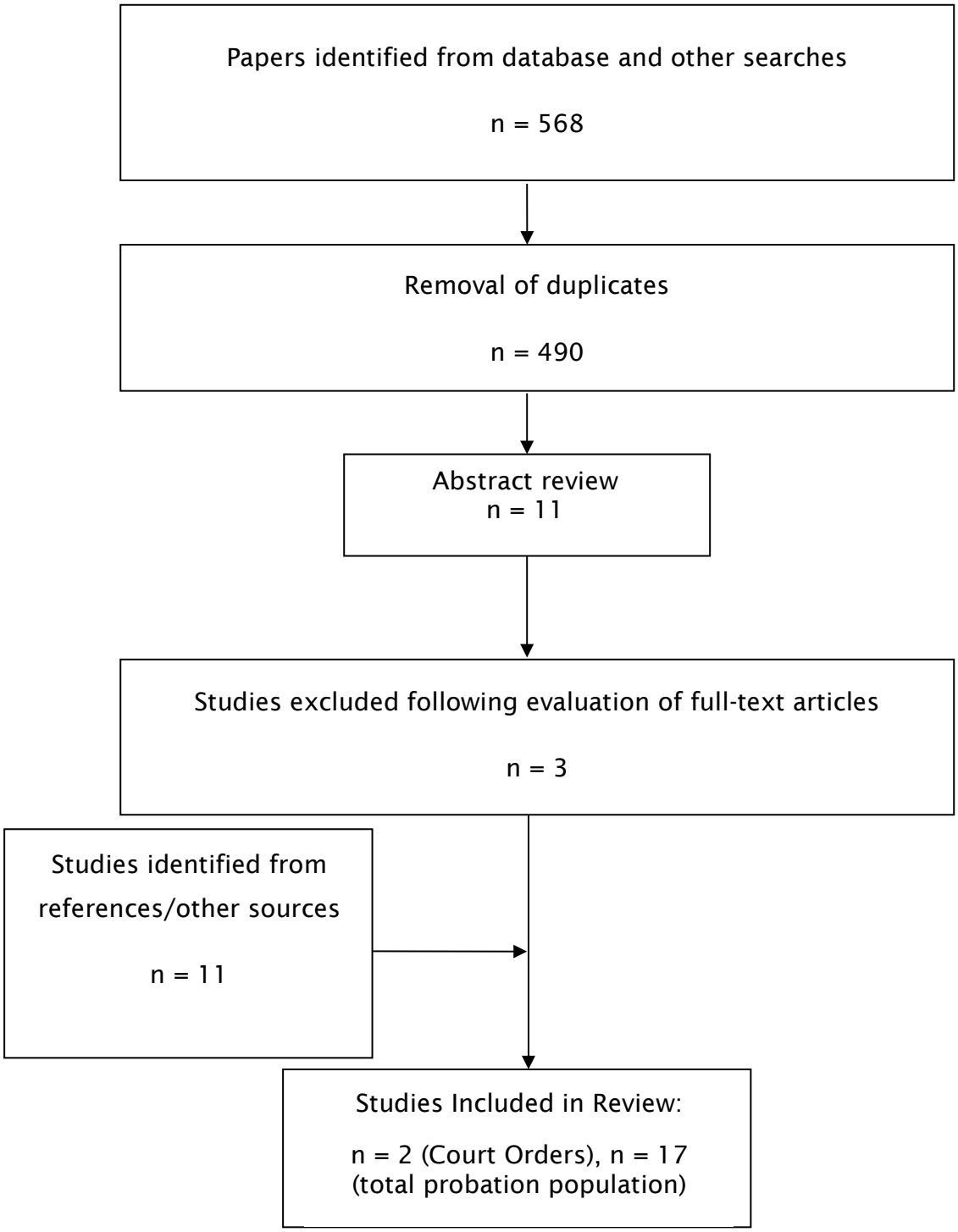
Study (period)	Population/Setting	Method of Ascertainment	Prevalence of Alcohol Use	Other Results
	Southampton aged 18-35.			
Pritchard *et al [100]* (1991)	Offenders supervised by probation services (aged 18-35) in Hampshire and Dorset.	Probation officers completed a survey about each client.	99/214 (46%) were reported as having an alcohol problem.	
Robotham *et al* (2014) [101] (2012)	Offenders aged 15 and older supervised by Norfolk Probation Trust (for questionnaire). 1139 offenders with OASys completed.	Self-reported questionnaire OASys analysis (for Norfolk and Suffolk CRC)	116/977 males (12%) had significant problems with alcohol use, 259/977 males (27%) had some problems with alcohol use. 24/162 (15%) females had significant problems and 34/162 (21%) had some problems with alcohol use.	48% of those surveyed reported drinking alcohol regularly, 11% drank on a daily basis and 2% drank on 5 or 6 days. 10% reported having a drink first thing in the morning.
Thames Valley Criminal Justice Board [104] (1 Jan-30 Sept 2012)	Offenders supervised by probation in Thames Valley with a valid OASys	OASys analysis	1864/5648 (33%) were assessed as having a current alcohol problem.	

Table 5 provides a summary of all the studies identified that gave prevalence estimates. Overall 16 different studies were identified that had some assessment of alcohol problems in offenders supervised by probation services. Only one of these studies reported data for offenders on community orders with the rest reporting for whole probation populations which included both offenders with community orders and offenders supervised after being released from prison.

Again the studies are heterogeneous with no agreement on a clear definition of an alcohol problem and the most appropriate way to measure this. Prevalence estimates vary widely. Low prevalence estimates of 10%, 12.2% and 14.5% were reported by some of the older studies [58, 88, 92]. More recent studies that used a validate tool estimated the prevalence of alcohol problems to be between 43% and 66% [71, 72, 97, 98]. Of the three studies who used AUDIT, the prevalence of an AUDIT score of eight or more (hazardous drinking or worse) the prevalences reported ranged from 43% to 62.2% [73, 97, 98]. Those studies which used data from OASys also gave varying results from 24.4% [97] to 50% [86] which point to the unreliability of this data set.

2.3.4 Drugs

Figure 4 Flow chart of search results



2.3.4.1 Excluded studies

Table 6 Studies excluded and reasons

Study	Reason for Exclusion
Haynes (1998) [119]	Study on 112 drug using offenders. No prevalence data.
Hearnden (2000) [120]	No prevalence given – study was on identified drug using offenders.
Palmer *et al* (2010) [107]	Study only compared mean OASys scores. Author was contacted to see if she had any prevalence data or raw scores but she did not.

2.3.4.2 Characteristics of included studies

Table 7 Prevalence of drug problems

Study (period)	Population/Setting	Method of ascertainment	Prevalence of Drug Abuse	Other Results
Akhurst *et al [58]* (1995).	Offenders supervised by probation services n Kirklees and Calderdale	Reported by Probation Officers as number who had drug misuse problems.	25/175 (14.5%) had a drug misuse problem	
Brooker *et al [71, 72]* (2008)	Offenders supervised by probation services in Nottinghamshire and Derbyshire	UNCOPE screening tool.	71/183 (39%) were at risk of substance abuse.	
Brooker *et al* (2011) [73] (March 2009 – February 2010) Published papers from this study: Brooker et al (2012) [74], Pluck *et al* (2012) [75], Brooker and Sirdifield (2013) [76], Brooker *et al*	Offenders on the caseload of Lincolnshire Probation Trust	The Drug Abuse Screening Test short version (DAST) – a 20 item screen for drug abuse (both illegal drugs and misuse of prescription drugs). A score of 6 or more indicates a substance misuse problem.	21/173 (12.1%) scored 11+ on DAST indicating either a substantial or severe level of drug abuse.	

Study (period)	Population/Setting	Method of ascertainment	Prevalence of Drug Abuse	Other Results
(2014) [77], Pluck and Brooker (2014) [78], Pluck *et al* (2015) [79]				
Budd *et al [80]* (2002)	Aged 16 or over serving community sentences in England and Wales.	Community Penalties Criminality Survey 2002 (CPCS) – A national self-report survey of offenders	Any drug use in past year: Males: 994/1578 (63%) Females: 144/288 (50%)	Prevalence of injecting drugs in males 17% Males probationers were significantly less likely to report using drugs in the 12 months prior to interview than prisoners in the 12 months prior to custody Prevalence of injecting a drug in females 14%
Cattell *et al* [81] (October 2009 – December 2010)	Offenders commencing a Community Order in study period, England and Wales.	Self-reported survey.	467/2592 (18%) reported drug misuse, 337 (13%) reported hard drug use (defined as using a Class A drug weekly or more or injecting)	Of the 467/2592 (18%) that reported a need with drug misuse only 288 (62%) had that need identified on OASys. 54 (12%) were assessed as 'no need' and 125 (27%) had no assessment recorded.
		Analysis of admin records including OASys data on 144,388 offenders, tiers 2-4.	Of those who were assessed: 19% used a Class A drug, 28% had significant problems with drug use,	29% of those assessed had some or significant problems with motivations to tackle drug abuse.
Clifford [82] (January – February 2013)	Offenders (aged 18+) attending a Wiltshire probation office between 21/1/13 and 1/02/13.	Probation service user survey which asked about health issues and concerns around drug misuse.	151/169 had a completed the survey. 24 (16%) reported concerns around drug use.	
	Offenders on the	OASys assessment	223/1717 (13%) reported drugs	

Study (period)	Population/Setting	Method of ascertainment	Prevalence of Drug Abuse	Other Results
	caseload of Wiltshire Probation Trust.	with responses to the relevant questions about drugs recorded.	as a problem (498 (29%) blank). 955 (56%) drugs ever misused (378 (22%) blank)	
Cochrane and Cooke [83] (2012)	Offenders supervised by Kent Probation	A health and wellbeing questionnaire but no validated tools. Additional data from OASys.	13/99 (13%) reported current illegal substance use. OASys results for 3721 community offenders (not including those on licence) only: 2370 (44%) have ever misused drugs 580 (16%) use at least weekly (2072 (56% not recorded) 165 (4%) have previously injected drugs 107 (3%) are currently injecting (56% not recorded)	6/13 offenders who used drugs said they would like help with their addiction.
Institute of Criminal Policy Research (2011) [87] (2009-2010)	Offenders supervised by probation services in West Sussex.	Data from OASys.	On a daily or weekly basis: 217/1357 (16%) males, 18/147 (12%) females use cannabis 54 /1357 (4%) males, 15/147 (10%) females use heroin 41/1357 (3%) males, 10/147 (7%) females use crack 14/1357 (1%) males, 4/147 (3%) females use benzodiazepines	Cannabis is the most commonly used drug by all age groups. Heroin and crack cocaine use is most common amongst those aged 25-40 years old. The 25-40 year old age group were much more likely to be current injectors (5%), compared to 2.3% of 18-20 year olds, 1.6% of 21-24 year olds and just 0.8% of 41+ year olds.

Study (period)	Population/Setting	Method of ascertainment	Prevalence of Drug Abuse	Other Results
			27/1357 (2%) males use cocaine powder 120/1504 (8%) previously injected 45/1504 (3%) (6% females, 2% males) currently injected.	
Keene *et al* [88] (1996-1998).	Offenders supervised by probation services in an English county	Probation Officers' recording system – those classified with 'drug misuse.'	421/3979 (10.6%) classified with 'drug misuse'.	Of these, 73/421 (17.3%) had been diagnosed as mentally disordered
Kynch [89] (2003)	All offenders supervised by probation services in Wales	Estimate of prevalence of drug abuse made from 3 sources – an assessment by probation officers of a problem, additional people with direct evidence of treatment in sentencing plus additional people where the offence indirectly indicates a problem.	N=12100. Prevalence of drug problems estimated between 29% to 35%.	Prevalence of either drug or alcohol problems estimated between 44% and 50%
Lewis and Scott-Samuel [90] (2012)	7942 offenders supervised by probation by	Data from OASys.	105/813 (13%) females and 1017/7129 (14%) males had an alcohol need identified.	194/813 (24%) females were not assessed and 1389/7129 (19%) males were not assessed.

Study (period)	Population/Setting	Method of ascertainment	Prevalence of Drug Abuse	Other Results
	Merseyside Probation Trust			358/813 (44%) females and 4246/7129 (60%) males had ever misused drugs.
Lloyd [91] (2012)	Offenders supervised by Cheshire Probation Trust (Cheshire East, Cheshire West, Warrington) who have an OASys assessment Offenders supervised by Merseyside Probation Trust in Wirral	HNA using data supplied by Cheshire Probation Trust taken from OASys assessment completions at commencement of supervision. Results based on criminogenic needs.	905/2224 (40.7%) of Cheshire offenders were assessed as having current drug misuse problems. 316/2224 (14%) of offenders were Class A misusers. Wirral: 1129/3082 (37%) were assessed as having a drug need. 502/3082 (16%) of offenders were Class A misusers.	The largest group of Cheshire current drug misusers were using cannabis (46.1%), followed by heroin (16.3%) and Crack (12.1%) For 49.4% of Cheshire offenders who were using drugs, this was linked to their offending behaviour. In Cheshire, Class A drug misuse was much higher proportionately amongst female offenders. Female offenders had 18% higher levels injecting drugs than males suggesting a more harmful use. The 18-20s had the lowest proportions of Class A use and the highest levels of cannabis and cocaine use. The 25-40 age group had the highest proportion and number of Crack users. The 41+s also had high levels of Heroin and Crack use. In Wirral 23% of drug misusers used at least weekly and 85% of drug users had this linked to their offending behaviour.
Mair and May [92] (1994)	22/54 probation areas across England and Wales	Probationer self-report questionnaire	582/1213 (48%) of offenders reported taking drugs in the past 12 months (121/1213 (10%) did not answer this question)	10% of offenders have injected drugs in the past 12 months compared with fewer than 0.5% of the general population (British Crime Survey 1992)
Morrish [95] (not stated,	Offenders on probation caseload in	10 minute interview with	71/223 (32%) reported taking drugs.	8.5% had a dual diagnosis (mental health and drugs/alcohol misuse)

Study (period)	Population/Setting	Method of ascertainment	Prevalence of Drug Abuse	Other Results
published 2011)	Stevenage, Watford, Hertford and St Albans	offenders as part of HNA. Validated tools were not used		
	86% of offenders supervised by Hertfordshire Probation. (Those on tier 1 and stand-alone unpaid work are not assessed on OASys)	OASys analysis	62.8% drug misuse recorded (total number not stated)	
Newbury-Birch [96] (2006)	Offenders supervised by probation services in Northumbria, Durham and Teesside	OASys assessments completed by probation service (January – October 2006). Number not stated.	Nationally 40.9% drug needs North East: 41.9% drug needs Number not stated.	
Pari *et al* [98] (2011)	Offenders aged 18+ supervised by probation services in Reading and Newbury attending the office on a predetermined study day between May and June 2011.	Self-administered questionnaire including drug abuse screening test.	50/109 (46%) male and 7/23 (30%) female offenders reported using illegal drugs in the previous year.	46% of male and 30% of female probationers reported a significantly larger use of illegal drugs in the previous year by contrast with 13% of men, and 8% of women in the general population (for men, Z=−9·57, p<0·0001; for women, Z=3·93, p<0·0001). After adjusting for confounders, Drug misuse was significantly associated with poor mental health (1·23, 1·1–1·4; p=0·003).
Pritchard *et al* (1990) [99]	168 offenders supervised by probation services in Bournemouth and	Probation officers completed a survey about each client.	The following prevalence were reported: Soft drugs: 35/168 (21%) Hard drugs: 19/168 (11%)	

Study (period)	Population/Setting	Method of ascertainment	Prevalence of Drug Abuse	Other Results
	Southampton aged 18-35.		Tranquilizers: 12/168 (7%) Solvent misuse: 7/168 (4%)	
Pritchard *et al [113]* (1991)	Offenders supervised by probation services (aged 18-35) in Hampshire and Dorset.	Probation officers completed a survey about each client.	74/214 (35%) were involved with drug misuse	Of these 31% were involved in HIV risk behaviour compared to 7% in the rest of the sample
Thames Valley Criminal Justice Board [104] (1 Jan - 30 Sept 2012)	Offenders supervised by probation in Thames Valley with a valid OASys assessment completed between Jan-Sept 2012	OASys analysis	4067/5648 (72%) recorded as having ever used drugs. 960 (17%) were recorded as using a Class A drug.	

Table 7 provides a summary of all the studies identified that gave prevalence estimates. 19 different studies were identified. These included seven health needs assessment carried out by or on behalf of local councils [82, 83, 87, 90, 91, 95, 104] which were found online, one report which was commissioned by NOMS in North East England and the results relating to alcohol (but not drugs) were subsequently published [96], a report published by the Home Office [80] and a report from the Ministry of Justice [81]. The remaining nine studies were published in peer reviewed journals but were of varying quality, with one only being a conference abstract [98] and six of these were published over 10 years ago [58, 88, 89, 92, 99, 113].

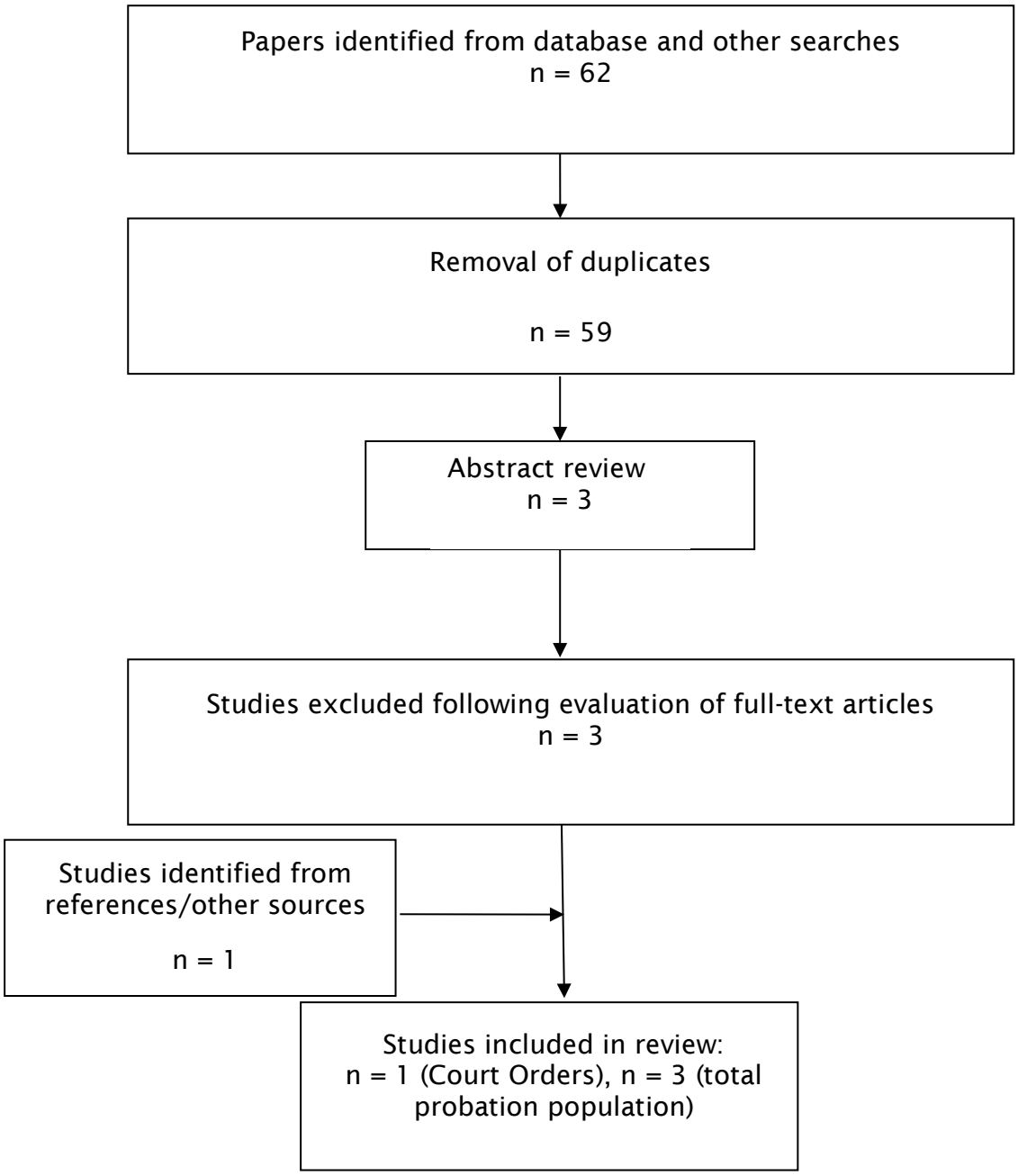
There was a huge amount of heterogeneity between the studies with different methods used to estimate prevalence. Only three studies used a validated tool [71, 73, 98] but even these three results gave varying estimates and different definitions of drug use. These were 39% at risk of substance abuse [71], 12.1% scored 11+ on DAST indicating either a substantial or severe level of drug abuse [73] and 46% men and 30% females reporting illegal drug use in the previous year.

Overall, the prevalence estimates ranged from 10.6% [88] (which was recorded by probation officers in a study conducted in 1996-98) to 72% recorded as having used drugs in OASys data [104].

The prevalence of current injecting amongst offenders varied from 3% (OASYS analysis with 56% not recorded) [83] to 14% in females and 17% in males in the Community Penalties Criminality Survey 2002 [80].

2.3.5 Learning disability

Figure 5 Flow chart of search results



2.3.5.1 Prevalence of learning disability

Table 8 Summary of studies of learning disability

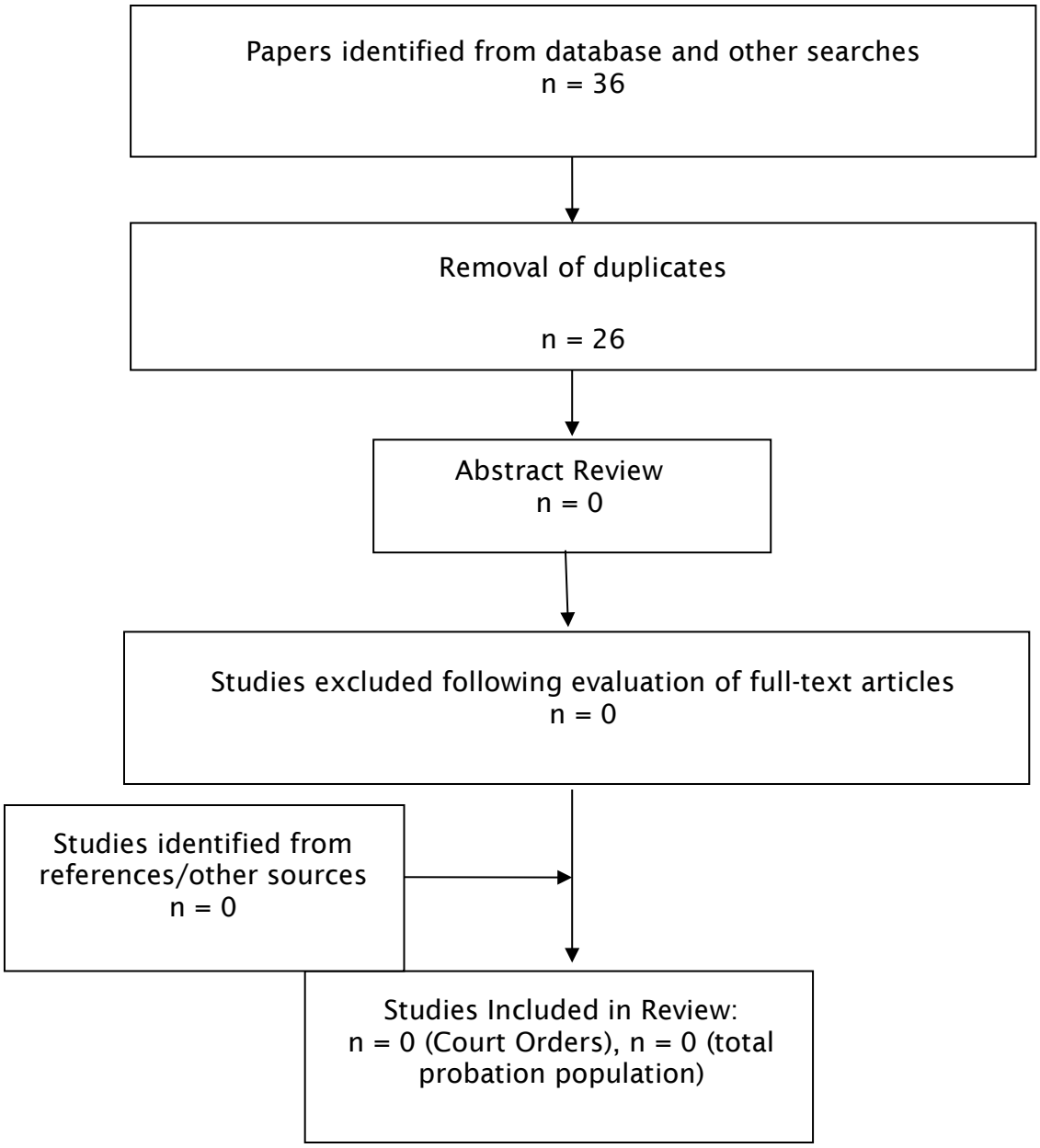
Study (period)	Population/Setting	Method of data ascertainment	Prevalence of learning disability	Other results
Cattell *et al* [81] (October 2009 – December 2010)	Offenders commencing a Community Order in study period, England and Wales.	Self-reported survey	98/2452 (4%) males and 19/467 (4%) females reported a learning disability.	
Keene *et al* [88] (1996-1998)	Offenders supervised by probation in one county	Probation Officers assessment using probation service's system criteria for defining problems encountered by clients.	26/3979 (0.7%) had a learning disability.	3/26 (11.5%) of those identified with a learning disability had also been assessed as mentally disordered
Mason & Murphy [94] (not stated)	Offenders from one probation office in Kent	Wechsler Adult Intelligence Scale (WAIS-R) and Vineland Adaptive Behaviour Scales (VABs)	4/70 (5.7%) had a diagnosed learning disability. 12/70 (17.1%) had significant cognitive deficit	
Mason & Murphy [93] (1997-1998)	Offenders in Kent probation service finishing community sentences within specified 6 month period	Learning disabilities in the Probation Service assessment tool (LIPS)	4/90 (4.4%) had a learning disability. An additional 13/90 14.4% had borderline learning disability	

This literature review only identified three very small scale studies that looked specifically at learning disability [88, 93, 94], one large study that considered a raft of issues and during a survey, 4% of males and 4% of females reported having a learning disability. These studies are summarised in Table 8.

Three of the studies were over 15 years old and not good quality [88, 93, 94]. These studies involved small samples and were for specific geographical areas. The prevalence of learning disability was estimated between 0.7% [88] and 5.7% [94]. However, an estimate of 17.1% was given for significant cognitive deficit [94] and an estimate of 14.4% [93] for borderline learning disability.

2.3.6 Health literacy

Figure 6 Flow chart of search results



2.3.6.1 Prevalence of low health literacy

No papers were identified that examined the prevalence of health literacy in probation populations.

2.4 Strengths and limitations of the reviews

The strengths of these reviews were that:

- Established guidelines were followed [66].
- Wide ranging literature search was completed taking expert information scientists advice.
- Some authors were contacted to obtain studies unavailable on line or from the British Library [89, 96].
- Exhaustive and complex searching of many databases which are, by nature of the subject matter, required. There was complexity in the search strategy which involved databases with different indexes (Appendix 1).
- The use of a thorough data extraction and critical appraisal tool [121]. An example of the full data extraction results using this tool can be found in Appendix 2.
- Grey literature was searched for this review which is important at it has been found that publication bias occurs in qualitative as well as quantitative research [122].

There were several limitations:

- The final review was limited to England and Wales. This was pragmatic because health and forensic policy is similar in these areas. Value of the review may have been increased by extending its scope to the developed world where studies may have used higher levels of research study methodology and addressed relevant health needs areas providing research exemplars for UK commissioners and researchers.
- There was a tension between the sensitivity and specificity of the search strategy. It was necessary to keep the search broad as there are limited

papers on this topic but this meant that many other papers were picked up by the searches which was very time consuming.

- There was only a single reviewer for the extraction of data.

2.5 Discussion

2.5.1 Statement of principal findings

Five literature reviews were conducted of the available literature that related to four specific health problems faced by offenders supervised by probation services and health literacy. A total of 37 papers and reports were identified which represented 28 different studies. Only three of these studies were specifically about offenders with a court order (community sentences). The remainder were conducted on probation populations that also included offenders supervised by probation on release from prison. The majority of the studies were cross sectional so trends or changes in health during probation supervision have not been measured. Table 9 below summarises the prevalence results.

Table 9 Summary of results of literature reviews

Health Area	Number of Different Studies Identified	Prevalence Estimate Ranges
Mental health	21	2.4% - 59%.
Alcohol	16	10% - 66%
Drugs	19	10.6% - 72%
Learning disability	4	0.7% - 5.7% Learning disability 14.4% Borderline learning disability
Low health literacy	0	Not applicable

There was a huge amount of heterogeneity amongst the studies giving such differing estimates of prevalence. The key variables were sample size, method of ascertainment (a variety of validated tools, unvalidated surveys and data base analysis), definition of the problem, self-reports versus probation staff reports, timing of study, size of study, and national results versus local results which may or may not be representative. Many did not report separate results

for males and females. This made it difficult to synthesise/meta-analyse but one key message was the complexity of health problems with which many offenders are burdened. Offenders often have more than one health problem which ultimately leads to a poor quality of life along with social needs and the risk of re-offending in a relatively young adult population who do not necessarily view health as a priority.

Eight studies used analysis of OASys or other probation databases as their only method of ascertainment and a further seven used OASys as part of their analysis of health problems. OASys is a structured assessment tool designed for use with convicted adult offenders in community and custodial settings. It has not been designed to clinically assess health needs.

The OASys database is used by offender managers to assess offence-related needs, likelihood of reconviction, and serious risk of harm to others. Its aims are to inform decision making with regards to managing offender risk of reoffending and addressing offence-related needs. An OASys assessment is completed on all offenders under probation supervision unless sentenced to a stand-alone community payback order. However, not all sections are completed for all offenders and it is clear from the results of the literature review that it is not fit for assessing the true extent of offender needs relating to health. There are high rates of missing information, information is self-reported by offenders to offender managers and assessments are often out of date. Levels of need demonstrated by OASys analysis are likely to greatly underestimate actual need.

This highlights the need for more comprehensive, timely and responsive ways of measuring and recording offender health-related needs.

2.5.2 Mental Health

The prevalence of mental health problems in probation populations was estimated up to 59% with links identified with suicide and self-harm, substance misuse, learning disability, and poor physical health. These results highlight the complex and multifaceted needs of offenders supervised by probation services. However, the knowledge base for mental health problems in offenders supervised by probation is poor when compared to the number of studies that have considered mental health problems in prisoners [1, 2, 12].

The Bradley Report [123] published back in 2009 highlighted the need for partnership working at all levels of the criminal justice system to support the development of local health pathways for offenders with mental health problems. Five years on from this and against a background of significant reform and organisational changes in both the NHS and probation services, an independent review [124] concluded that although much progress had been made, health and wellbeing boards, local authorities and clinical commissioning groups need to ensure that offenders diverted from custody receive effective support.

Clinical Commissioning Groups (CCGs) now have responsibility for healthcare for those serving community services yet (as of 2015) only six out of the 35 probation areas have been subject to a health needs assessment [125]. Concern has been raised that Clinical Commissioning Groups (CCGs) are yet to rise to the challenge of commissioning healthcare for offenders supervised by probation as following freedom of information requests to the 213 CCGs (in October and November 2013), out of the 109 who responded, only 5% said they directly funded general healthcare in probation, 25% thought it was the responsibility of the Area Team and 70% said they did not commission any healthcare in probation [125].

With the changed landscape of probation services, CCGs face a greater challenge as they now have to negotiate and agree services with two separate probation services – the National Probation Service and the Community Rehabilitation Companies who are unlikely to be co-terminus with the CCG population. The need for partnership working has never been greater or more complicated.

2.5.3 Alcohol

Estimates of problem alcohol use in probation were found to be up to 66% with the higher estimates of between 43% and 66% obtained using validated tools [71, 73, 97, 98]. This highlights a significant need in this population and there is evidence of an association between alcohol use and offending behaviour [32]. It has been estimated that alcohol was a factor in just over half of violent incidents in England and Wales [34]. Therefore, resolving alcohol problems in

offenders has the potential to both improve health of the individual and reduce offending behaviour.

However, there is currently limited evidence to determine the impact on reoffending of alcohol treatment for offenders [126, 127]. This includes any impact of the Alcohol Treatment Requirement (ATR). It is difficult to obtain evidence about outcomes relating to ATRs as there is no option currently for a randomised controlled trial as they are ordered by the court. A recent comparative study [128] showed no association between exposure to the ATR and the rate of reconviction at 12 months, the time to first re-offence and the number of proven re-offences.

Many offenders with alcohol problems also have mental health or other substance abuse issues which may mean that current interventions are not successful.

2.5.4 Drugs

Substance use is associated with re-offending with drug users often being prolific re-offenders [5]. NOMS' drug strategy aims to ensure that drug-misusing offenders are targeted to receive community sentences where appropriate [129].

A systematic review has shown that a wide range of drug interventions can have a positive impact on reducing crime [130]. These include methadone treatment, heroin treatment, therapeutic communities, psychosocial approaches, drug courts and supervision by probation. The review also found that drug programmes that were high intensity in terms of duration and continuity were 50 per cent more likely to bring about a reduction in criminal behaviour than low intensity interventions. Accessing drug treatment quickly, and receiving it for as long as required, together with wider support if necessary, is also more likely to support desistance [126].

Qualitative studies have highlighted a lack of knowledge of drug and other health issues for probation staff [71, 120] and this additional training which forms part of the drug strategy will be vital for the overall strategy to be a success.

However, none of the studies reviewed nor the drugs strategy discussed harm reduction. Abstinence may not be possible for all people and Kothari *et al* suggest that harm reduction should be considered as a first step [131].

In April 2013, responsibility for commissioning drug treatment services in England became the responsibility of Local Authority Directors of Public Health under the changes introduced in the Health and Social Care Act 2012 and offenders supervised by probation services should have access to these services as required as part of mainstream health provision. Therefore, it is crucial that there is ongoing collaboration between local authorities, health services and probation services.

2.5.5 Learning Disability

The paucity of research in this area is somewhat surprising given that learning disability has been identified as a risk factor for offending [132, 133]. A review concluded that there were no published studies of health needs assessments for offenders with learning disabilities [134].

The lack of information about learning disabilities in community offenders may be partly due to the fact there is no consensus on the number of offenders with learning disabilities across the whole criminal justice system and also on the most appropriate methods for assessing prevalence [135]. Of course, not all people with learning disabilities offend but there are difficulties identifying those offenders with learning disabilities an which of these are more likely to offend [136]. Further research needs to be conducted to provide a more accurate estimate of learning disability among offenders [137].

Offenders with learning disabilities are an especially vulnerable group who may find the process of probation difficult to cope with [138]. In addition, offenders with varying degrees of learning difficulties may also struggle with probation. Low literacy levels, communication and problem solving difficulties may cause problems for those on community sentences [138]. They may have problems understanding formal contracts, letters and information and not be able to take part in groups because of communication difficulties. They may not be able to convey their thoughts, feelings and issues to probation officers [93].

It is also important to recognise that that learning disability and mental health problems are often concurrent and ensure that interventions are not restricted to focus on recidivism but to the ability to benefit [134].

2.5.6 Health literacy

No studies that considered health literacy in the probation population in England and Wales were identified. However, it is likely to be poor and contribute to problems addressing health issues. Health literacy, the ability to make sound health decisions in the context of everyday life, is an important concept in addressing health inequalities. It is necessary to increase people's control over their health, their ability to seek out information and take responsibility (26). Low health literacy may mean a person cannot manage their own health effectively and has been shown to have a negative impact on clinical outcomes (27). Therefore, in any planned intervention for any health concern, levels of health literacy should be considered.

2.6 Conclusion

These reviews have highlighted the lack of information about the health of people specifically with non-custodial sentences. No studies that track offenders over the probation supervision period and assess any change in health problems over time have been conducted. It is important to understand not only the health problems faced by this group of offenders but also the services that are provided either as part of a person's order, sentence planning or generally available in the community that can be (or should be) accessed.

There is a clear need for high quality research to assess the health needs of this population, understand the probation pathway in relation to health and health-related interventions, and then from this information, it may be possible to develop appropriate interventions to address these needs.

3. Mixed Methods Study - The Health of People with Court Orders (HOCOS): An exploratory study

3.1 Introduction

This chapter sets out how the knowledge from the literature reviews was used to design the mixed methods study. It explains the rationale for the study design and the work carried out with probation staff and offenders to develop and plan the research. It then goes on to describe the methodological approach and gives an overview of the primary research. Finally, the ethical considerations relevant to this study are discussed and details of the ethics approval are given.

3.2 Rationale for the study design

The literature review identified a paucity of good quality research with offenders with court orders. To address some of the key health needs that are associated with offending, it is important to have accurate and comprehensive estimates of the prevalence of mental disorders and substance use but also understand the needs for specific services and the barriers and facilitators of an offender seeking the help they need. This was also an area also identified by staff of Hampshire Probation Trust during earlier research (Julie Parkes, personal communication). Therefore, a mixed methods study was developed in conjunction with Hampshire Probation Trust and service users to address this gap in research knowledge.

3.3 Development of the research with Hampshire Probation Trust

This study is based on a need identified by Hampshire Probation Trust staff for more information about the health problems that their offenders faced as well as the gaps in the literature identified.

I built strong relationships with staff at Hampshire Probation Trust. I discussed the proposed research to the Executive Team and gained their support. I also met with the operations managers at the different sites, had a lead senior offender manager allocated as lead for the project and presented to offender managers in the different teams. Although it took time to build the relationships, this enabled me to work effectively within the probation offices.

I was also invited to present at the Southampton Probation Conference near the beginning of the research and was well received. This permitted discussion about the research with staff at all levels.

3.4 Service user input into the research

In addition to working with staff at all levels within probation, service user input was also sought in the development stages of the research. A workshop was held with a service user group at Southampton Probation Office. This involved seven people who had recent experience of probation either from a court order or on licence. The proposed research was presented with the opportunity to ask questions and then in groups of two or three they explored three areas of the research:

1. Practicalities – how the participants might feel or think about different aspects of the research

2. A summary of the research that can be understood by all

3. Review of participant information sheet

Overall, the feedback was very positive. They felt that generally some people would volunteer to be in the study and be willing to answer questions about their own personal circumstances, health problems, drug and alcohol use and consent to having their probation records checked for information regarding their sentences and past convictions.

Following a discussion about the practicalities of the interviews, it was suggested that it would be best to have the interview when a person was already due to be in the probation office and to text people to remind them of their interview time. One person also said as the interviews would take about

an hour then some people might need to have a "fag break" half way through and the group all nodded in agreement.

When reviewing the lay summary the term 'health literacy' was pointed out as something that needed explaining so the following explanation was added 'which is about if people can understand information about their health'.

The group were happy that the participant information sheet was easy to read and understand. One member commented:

> "Well you would have to be really thick not to understand this!"

The other main comment was that research also needed to be conducted with people who were ex-offenders to help understand what factors enabled them to change and not to re-offend. This idea was then taken forward by a colleague during an academic placement.

3.5 Methodological approach

3.5.1 Mixed methods approach

This research utilised a mixed methods approach which was explanatory in design as the qualitative elements are designed to explore further and explain the quantitative data. This mixed approach was used as it can provide a more comprehensive understanding of research issues than a single approach [139] and this fits well with an exploratory study where the overarching aim is broad and seeks to characterise and understand. The mixed method design is a pragmatic approach to a broad public health problem and allows for, and values, both objective and subjective knowledge within the research [140]. The quantitative work will seek to estimate the prevalence of key health problems and their wider determinants in the study population, capture preliminary data on change in these factors over the period of the court order and quantify service use both before and during the court order. The qualitative work will provide theoretical insights into their health problems and experiences [141] and help explain how these problems arise, their association with offending behaviour and understand the factors involved in accessing services and helping these offenders address their needs.

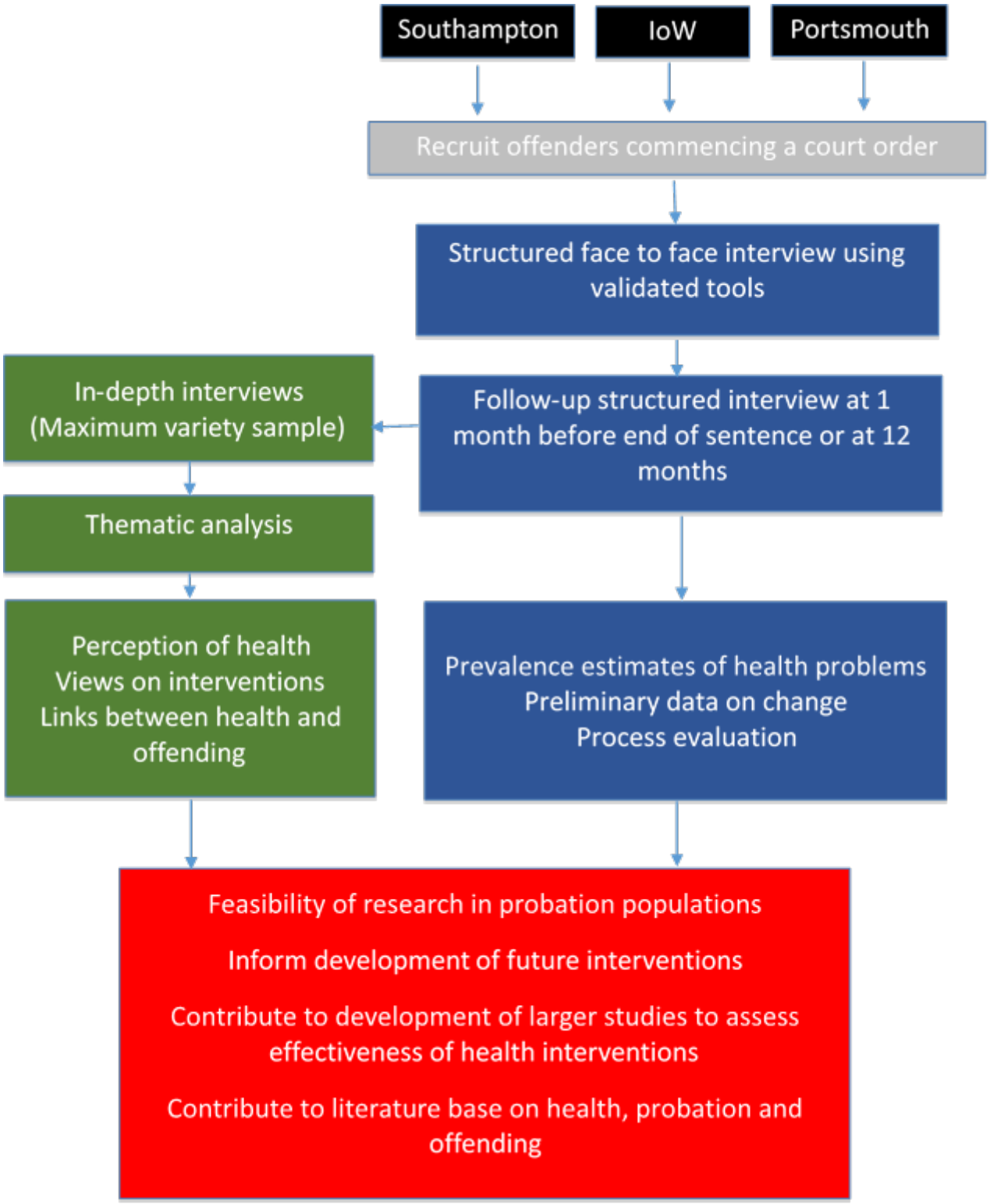
3.5.2 Study design and overview of research

The quantitative element has a prospective cohort study design. Participants were recruited at the beginning of a Court Order and followed up at the end of their court order (or at 12 months). Changes in health status (outcome) (eg substance use, mental health status) during the Court Order were captured along with information about services accessed (exposures) during that time. Multiple outcomes and multiple exposures were assessed.

At follow-up, a maximum variety sample of offenders was asked to also undertake a semi-structured in-depth interview.

The flow diagram in Figure 7 below shows an overview of the research with the main outcomes of each of the component parts and the research as a whole. Offenders were recruited from three probation offices (Southampton, Isle of Wight (IoW) and Portsmouth).

Figure 7 Overview of research



3.6 Ethical considerations, approval and governance

This was an observational study without a specific intervention. Participants were asked to complete face to face questionnaires which ask about health, wellbeing, drug and alcohol use and health literacy. There was no obligation to answer all the questions. Therefore, there was a low risk of harm to the participants. However, there were several ethical aspects that were considered when developing the research plan. These included recruitment, consent, and confidentiality.

Information about the study was presented to offenders during their induction programme. This was either done by probation staff if the offender had a one to one induction or by myself as a verbal presentation at a group induction. The research was explained and participant information sheets (Appendix 3) given out. Potential participants were given the option of completing the interview that day or making an appointment for a later date. It was explained that participation was completely voluntary, will not affect their probation supervision in any way, and all the results will be kept confidential.

Discussion with probation staff and the service user group suggested that for this group of offenders recruitment followed by an interview the same day (if acceptable) was the optimum way to maximise participation as their lives are often quite chaotic and they struggle keep appointments.

At the beginning of an interview the researcher went through the information sheet, allowed the participant to ask any questions then checked understanding by reading the statements on the consent form (Appendix 4) and the participant initialled each statement if they agreed to it, before signing the from. This was repeated at each separate interview.

Participants were given a £10 shopping voucher to thank them for taking part in the study. This was agreed with the Senior Management Team at Hampshire Probation Trust.

Informed consent for all parts of the study was sought including permission to access the probation record system to obtain information about their sentence, offences and any health assessments.

Confidentiality was discussed with each participant and it was explained that responses to questions would be kept confidential and personal identifiable information would be kept separately to the interview responses and in a locked cabinet. The occasions when confidentiality would not be kept were highlighted to the participant. These were detailed on the participant information sheet and stated:

- When information given by you concerns the abuse, harm or neglect of a child or when we have reason to believe that a child is being abuse, harmed or neglected.
- If by keeping confidential you or another person is likely to suffer serious injury
- If the Police have a court order for specific information relating to you
- We are obliged to pass information to the relevant authorities if the information relates to the Prevention of Terrorism Act (1990).
- If you disclose information relating to an offence either committed or planned.
- If you give us any information that relates to unprofessional activity

If a participant highlighted a specific problem then they were signposted to appropriate services or their GP.

Ethics approval was granted by NHS Research Ethics Committee (reference 11/EE/0433), NOMS and Hampshire Probation Trust. The research design was first presented to the Executive Directors of Hampshire Probation Trust, the operational managers in the different probation offices and then finally the relevant staff group. A senior probation officer was nominated in each probation office to oversee the project and be a key point of contact.

Hampshire Probation Trust provided safety, security and information governance training before access to the sites and relevant databases was given. All interviews were conducted at the relevant probation office and researchers had access to the panic button system used in each office.

4. Methods

4.1 Introduction

This chapter describes the methods used for both the quantitative and qualitative elements of the primary research.

4.1.1 Target population

The study population consisted of adults over 18 years on a new Court Order supervised by Hampshire Probation Trust in Southampton, Portsmouth or Isle of Wight. The study started in Southampton in order to pilot the recruitment methods and interview process and then rolled out to include Portsmouth and then the Isle of Wight. Therefore, the study period varied between the offices. The timings of recruitment and data collection in the three offices were:

Southampton: 16 March 2012 – 22 January 2013

Portsmouth: 3 July 2012 – 9 January 2013

Isle of Wight: 2 November 2012 – 9 January 2013

4.1.2 Inclusion criteria

Offenders aged 18 or over, sentenced to a new Court Order which included a requirement with input (specified activity, a treatment order or unpaid work) or supervision from Hampshire Probation Trust in Southampton, Portsmouth or Isle of Wight. The first interview (baseline interview) had to take place within 6 weeks of the sentence start (in the criminal justice system this is called the disposal date). This is because this is a prospective cohort study with offenders followed up over the duration of their Order.

4.1.3 Exclusion criteria

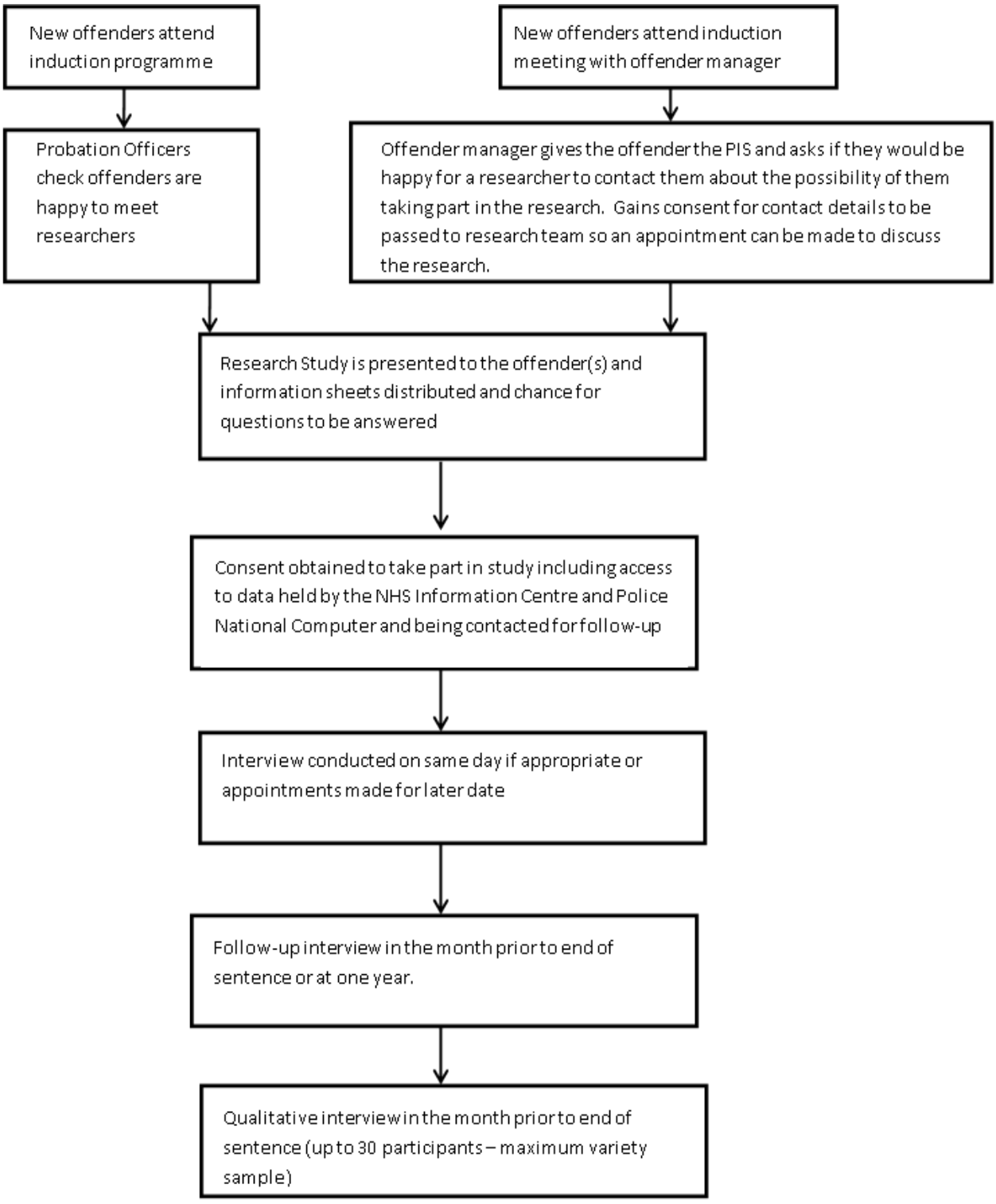
Offenders were excluded from taking part in the research for the following reasons:

- Any offender whose disposal date was more than six weeks ago (including those transferring into the Hampshire Probation Trust area from another Probation Trust). This was because the study required a baseline assessment prior to any possible interventions.
- Any offender who was not able to give informed consent.
- Any offender who was not able to speak English. This was for practical reasons but it is also recognised that these individuals may have different or additional needs.
- Offenders released on licence from prison. This study was only concerned with offenders starting a new Court Order so those released on licence and supervised by probation services were not included.

4.1.4 Recruitment strategy and process for consent

Figure 8 gives an overview of the recruitment and interview process.

Figure 8 Flow chart of recruitment and interview process



Some offenders attended a group induction, whereas others had an individual induction with their offender manager. Therefore, there were two methods of recruitment:

1. At the group induction, offenders were informed by an Offender Manager that research was being conducted by researchers at the University of Southampton and asked if they were happy for the researchers to come into the room during induction to talk about the study. If any offender did not agree to this then they were able to leave the room for the presentation. Participant information sheets (PIS) were distributed and the offenders invited to take part. If possible, the interested offenders gave consent and completed the baseline interview on the same day. This is because many have chaotic lifestyles and struggle to keep appointments so completing the interview at induction was a strategy used to reduce the drop-out rate. Appointments were made if a participant preferred to complete the interview at a later date. The interviews all took place at the relevant probation office.

2. Some offenders had individual inductions with their offender manager. The offender manager gave the offender the participant information sheet (PIS) and asked if they would be happy for a researcher to contact them about the possibility of them taking part in the research. They gained consent for contact details to be passed to research team so an appointment could be made to discuss the research.

Before every interview, participants were given the PIS and talked through it. The PIS for both the quantitative and qualitative elements of the study are in Appendix 3. Prospective participants were given the chance to ask any questions before they went on to initial every line of the consent form and sign the form. The consent forms are attached in Appendix 4.

To ensure that the questionnaire remained anonymous to anyone outside of the research team, identifiable information and contact details (for the purpose of follow-up only) were kept on a separate piece of paper which was stored separately from the main questionnaire, not entered onto the database, and the two were only linked by an ID number assigned by the interviewer. This form is attached in Appendix 5.

It was agreed with the Chief Executive and Directors of Hampshire Probation Trust that a £10 shopping voucher could be given to each participant after each interview as a thank you for taking part. This is in line with other studies which have shown that payments increase recruitment and follow-up rates [142]. In addition, the strategies used to reduce the number of failed interviews due to non-attendance included:

- Study interviews linked with other appointments that the offenders had in probation.
- Texts sent (with consent) the day before to remind participants of their appointment.
- Meeting with the offender manager to ask them to remind the offender that they were due to have a research interview after their appointment.
- Willingness to complete an interview immediately if the offender was available rather than make an appointment at another time.
- Follow up phone call if an offender did not attend to make another appointment at their convenience.

4.1.5 Development and content of the baseline and follow-up questionnaires

4.1.5.1 Baseline questionnaire

Questionnaire development was a balance between comprehensiveness and the time it would take to administer. It needed to include validated and reliable instruments and produce data which could be compared with the prison population and general population in order to set the context of the results and assess similarities and differences.

Therefore, the baseline questionnaire was based on that used by Singleton *et al* in 'Psychiatric morbidity among prisoners in England and Wales' [143]. This was a comprehensive study of psychiatric morbidity but also addressed substance use and learning disability alongside sociodemographic data.

Unlike Singleton *et al*, the aim of this study was not to produce such a comprehensive coverage of mental health disorders but focus on the more common mental health problems that can be targets for intervention and

support. In addition the questionnaire needed to consist of tools that could be administered by a lay interviewer as facilities were not available for clinical interviews. Therefore, the study questionnaire does not exactly follow that used by Singleton *et al* but utilised the tools relevant to the research questions.

'Quick Test for intellectual capacity' [144] was chosen because, as its name suggests, it only takes a few minutes to administer. The single form format of this test was used. This involved a card with four line drawings of scenes. The participants were asked to study the drawings and then say which picture fitted each word which was read out by the interviewer from a list which increased with difficulty until a participant gave six incorrect answers. The participant received a mark for each correct response given to give a final score. The score from the test can then be compared to published norms and converted to IQ scores. A score of 42 is equivalent of an IQ of 100. Learning disability is defined by an IQ of 69 or less which corresponds to a score of 26 or less on Quick Test.

'The Alcohol Use Disorders Identification Test' (AUDIT) [145-147] was used to assess levels of alcohol use. [145-147]. AUDIT consists of 10 questions covering hazardous alcohol consumption (frequency of drinking, typical quantity consumed and frequency of heavy drinking), dependence symptoms (impaired control over drinking, increased salience of drinking, and morning drinking) and harmful alcohol consumption (feeling of guilt or remorse after drinking, blackouts, alcohol related injury and others concerned about drinking). Answers given to questions are then scored between zero and four to give a total score out of 40. A score of 8-15 relates to drinking at a hazardous level which is defined as an established pattern of drinking which confers the risk of physical and /or psychological harm. A score of 16 -19 or more indicates harmful drinking which is defined by the presence of physical or psychological complications. AUDIT scores of 20 or more suggest alcohol dependence [148].

A systematic review [149] concluded that the AUDIT is the best screening instrument for the whole range of alcohol problems in primary care when compared to other questionnaires such as the CAGE questionnaire [150] which contains four clinical interview questions and is less effective in recognising less severe drinking disorders, and the Michigan Alcoholism Screening Test

(MAST) [151] which is much longer than AUDIT and has a focus on lifetime alcohol problems rather than current problems.

'Treatment Outcome Profiles' (TOPs) [152] was used to assess drug use. TOPs is used widely in the NHS to assess progress in treatment programmes. It records different types of drug use over the past four weeks and has been shown to be a reliable and valid instrument for monitoring treatment outcomes [152]. Therefore, it just assesses drug use rather than dependence as a clinical syndrome, and was a pragmatic choice as the drug use questions were similar to those used by Singleton *et al* [143] to allow comparison with a prison population. Additional questions were asked about lifetime use of drugs and injecting.

Mental health was assessed using two tools. The revised 'Clinical Interview Schedule' (CIS-R) [153] which allows for the diagnosis of 12 common mental health conditions and the Psychosis Screening Questionnaire [154] which was used as CIS-R did not include psychosis.

The CIS-R contains 14 sections which are designed to detect the presence and severity of a specific neurotic symptom. Each section starts with filter questions and a positive response leads on to further questions about the symptom including frequency, duration, severity and time since onset. Answers to these questions determine the scores for each symptom. Symptoms with scores of two or more are considered significant. A total score of 12 or more indicates a clinically significant level of distress and a score of 18 or more indicates a more severe level of symptoms very likely to warrant intervention such as medication or psychological therapy.

The answers given to the CIS-R generate a 10th International Classification of Disease (ICD-10) diagnosis. Diagnosis is assigned in a hierarchical order starting first with depressive disorders (severe, moderate, mild) through to mild neurosis. Further details on how the diagnoses are calculated can be found in appendix 6.

Functional health literacy was assessed using 'Newest Vital Sign' (NVS) (UK version) [155]. This was used as it takes around three minutes to administer, has been validated in the UK and correlates well with the much lengthier Test of Functional Health Literacy (TOFHLA) [155]. It consists of an ice cream

nutritional label with six associated questions which measure both literacy and numeracy skills. A score of four or more identifies those with adequate health literacy skills, a score of two or three indicates intermediate or marginal health literacy skills, and a score of zero or one indicates low health literacy skills. The NVS has high levels of acceptability in patient populations [156, 157] and is designed to be delivered by a lay person.

Self-reported long term illness was collected along with a self-assessment of current health on a five point Likert scale, and questions asked about smoking habits in order to obtain some general information on physical health. Smoking was included as its prevalence is known to be high in offender populations and it is a contributory factor in many physical illnesses.

Demographics collected included age, sex, ethnicity and probation office. Data items such as offence details, sentence duration, requirement type, number of previous convictions and age at first conviction were obtained from probation data system once the participants had agreed that I could access their records.

Individual characteristics and indicators of social disadvantage were collected. These included marital status, accommodation and living arrangements (who they lived with and how many children they had), employment status before Court Order and currently, highest educational qualification, school leaving age, childhood experiences including who they lived with most of the time and if they had ever been in Local Authority Care.

In addition, self-reported information was collected on GP registration and health services accessed in the year prior to the Court Order. These included GP, dentist, optician, psychiatrist, psychotherapist, community psychiatric nurse, psychiatric social worker, counsellor, psychologist, drug service, alcohol service, smoking cessation service, sexual health clinic, accident and emergency, hospital in patient, hospital outpatient, psychiatric hospital in patient, and any other not listed. It also collected self-reported information of ever being a psychiatric in-patient.

The baseline questionnaire can be found in Appendix 7.

4.1.5.2 Follow-up questionnaire

The follow-up questionnaire was designed to explore changes over the Court Order period. Multiple outcomes and multiple exposures were assessed. The Court Order period was the overarching exposure and this included different exposures relating to the modifiable health problems.

The follow-up questionnaire collected self-reported information on changes in individual factors such as marital status, accommodation and employment.

Changes in health status (outcome) in relation to modifiable health problems including alcohol use, drug use and mental health were assessed by repeating the AUDIT, TOPs and CIS-R. Also collected was information about health services accessed (exposures) during that time (repeated from the baseline questionnaire)

The questionnaire recorded self-reports of any referrals from probation to health services or Health Trainers. As the Health Trainer Service is quite a unique within probation, additional information was captured about offenders' use of Health Trainers including the types of issues they dealt with, improvements made as a result and how useful they found the service.

It also asked offenders about any treatment orders, their ability to comply with these and some open ended questions about compliance and how the treatment order helped or not.

The follow-up questionnaire is attached in Appendix 8.

4.1.6 Data collection for quantitative elements

Data at baseline (within 6 weeks of disposal date) and approximately one month before the end of their sentence or after one year (whichever was sooner) was collected using face to face structured interviews. The interview took place in the probation office and the questionnaire was administered by a researcher rather than asking the offenders to self-complete because literacy levels are low within the criminal justice system [158]. This also ensured that all sections were completed fully and allowed for action to be taken if any ethical issues arose such as offenders who disclosed suicidal intentions.

4.1.7 Data entry and analysis

The data from the structured interviews and probation's databases were entered into IBM SPSS version 22 [159] to give a full database of the information gathered. All data were entered and then double checked. Most of the data was entered by one person and then checked by another. In line with data protection and ethics, all information in the database was anonymous and stored on the University of Southampton Server with access only permitted to those involved in the research. All questionnaires were stored in a locked filing cabinet in line with the conditions set out in the research ethics applications.

4.1.7.1 Baseline analysis

Throughout the baseline analysis, prevalence results were presented with 95% confidence intervals and compared with available data from the general population and prison populations in order to make a comparison and set the context for understanding the study sample.

4.1.7.1.1 Representativeness of sample

In order to assess if the study sample was representative, a baseline comparison of proportions (age, sex, ethnicity, probation office, tier, type of order and offence type) between participants and all offenders commencing their sentence during the recruitment phase was analysed to describe any volunteer bias. Anonymised data on the characteristics of offenders at the three recruitment offices was obtained from Hampshire Probation Trust.

4.1.7.1.2 Demographics

The individual characteristics of offenders in the study sample were summarised with the proportions who received different numbers of requirements, each type of requirement and length of order, number of previous convictions and age at first conviction.

4.1.7.1.3 Individual characteristics and indicators of social disadvantage

Prevalence of individual characteristics and indicators of social disadvantage were calculated with 95% confidence intervals. All confidence intervals

presented were calculated using Confidence Interval Analysis version 2.2.1 [160].

These included marital status, accommodation and living arrangements, employment status, childhood living arrangements and experience of Local Authority care, type of school attended and highest qualification. Clustering of indicators of social disadvantage was then explored by assessing the proportion of offenders who experienced one or more of low educational attainment (defined as not obtaining a grade C or equivalent at GCSE), unemployment (including those not working because of sickness or caring responsibilities), ever being in Local Authority Care as a child (as a proxy for having experienced adverse childhood events) and those without a home of their own.

4.1.7.1.4 Prevalence of modifiable health problems

Estimates of the prevalence of key modifiable health problems that are associated with offending were calculated and presented with 95% confidence intervals. Prevalence in males and females was also calculated separately to explore differences between genders. Definitions of the key health problems were:

Alcohol use: AUDIT score of 8-15 (hazardous), 16-19 (harmful) and 20+ (dependence).

Drug use: Injected in last four weeks, ever injected drugs, Class A/B drugs in past four weeks (excluding cannabis as it is widespread in offender populations and often used recreationally and not in a dependent manner, so differentiating it from other Class A/B drugs allows for more differentiation in drug use in the population), any drug use in past four weeks and ever taking drugs regularly.

Mental health: Total CIS-R score ≥12, total CIS-R score ≥18, primary diagnosis from CIS-R, positive screen on psychosis screening test, any mental health issues (defined as either a CIS-R scores of ≥12 or a primary diagnosis or a positive psychosis screen).

Prevalence of currently smoking tobacco and previous smoking was calculated alongside age of starting smoking.

Clustering of these health problems was explored using AUDIT score of 16+, use of class A/B drugs excluding cannabis in last four weeks, any mental health problem and current smoker. Numbers of offenders with one or more of these problems were calculated.

4.1.7.1.5 Prevalence of learning disability

Scores from the Quick Test were calculated. Definition of learning disability would be an IQ of 69 or less which corresponds to a score of 26 or less on Quick Test. Prevalence of learning disability was calculated.

4.1.7.1.6 Prevalence of self-reported long-term conditions and current health status

Prevalence of self-reported health status from a five-point Likert scale was calculated. Long term health problems reported by offenders were summarised.

4.1.7.1.7 Prevalence of inadequate health literacy

Prevalence of inadequate health literacy (a score of three or less on NVS-UK) was calculated.

4.1.7.1.8 Service use in year before order

The proportions of offenders who used the different types of health services in the year prior to their Court Order are described. To identify unmet need, the service use of those offenders who scored 16+ on AUDIT or had any mental health problem or any drug use in last four weeks was examined and proportions of those with a problem who had not accessed services was calculated.

4.1.7.2 Follow-up analysis

4.1.7.2.1 Factors associated with a successful court order

The probation database was searched to see if any of the offenders in the study had re-offended or breached (did not meet the requirements of their order such as attending specified sessions) their Order. These proportions were calculated. A 'successful completion of Court Order' was defined as having

completed their probation (or at time of follow up if court order was greater than one year) without breaching their order or committing further offences.

To explore which health and social factors at baseline may predict a successful court order outcome, a logistic regression model was built. It is important to note that some offenders may have breached their order or reoffended and then gone on to successfully complete their order. However, for the purposes of this they would be in the group who did not have a successful outcome as they did not meet the definition above.

The factors investigated using logistic regression were those that were indicators of social disadvantage and modifiable health problems that have been associated with offending behaviour. This included having own accommodation, not previously been in local authority care, currently employed (full or part time) or in full time education, level of educational attainment at least grade C GCSE and in a secure relationship (married or living with partner) along with no substance use in last four weeks, no mental health problems (no diagnosis on CIS-R and psychosis screen negative), not scoring 16+ or 20+ on AUDIT. Adequate health literacy (a score of four or more on the NVS) was also included as it can also be a target for interventions.

OGRS (Offender Group Reconviction Scale) score [161] is used by probation as a predictor of re-offending based on static risks (age, gender and criminal history). It is the probability of re-offending within one year. In this analysis the probability of reoffending after one year was used as a controlling factor.

4.1.7.2.2 Analysis of paired data

4.1.7.2.2.1 Assessment of bias in follow-up

The offenders who completed a follow-up interview were compared with those who did not. Factors for comparison included both demographics and proportions with health related modifiable risk factors. Differences between the groups were compared using chi-squared/Fisher's exact test and those with p values of less than 0.05 were considered statistically significant.

4.1.7.2.2.2 Changes in individual characteristics and indicators of social disadvantage

Changes in marital status, accommodation, employment status were explored by comparing the paired data at baseline and follow-up.

4.1.7.2.2.3 Changes in the key modifiable health problems

These were also explored with proportions showing an improvement reported along with any association of this improvement with use of the relevant health services with p values reported.

There are two options for alcohol treatment available to the courts. The first is an alcohol treatment order which is targeted at offenders assessed as alcohol dependent and consists of community-based, care planned treatment. The second is as a specified activity which aims to deliver structured brief advice or more extended brief interventions to specifically address alcohol-related offending behaviour [162]. Specific results of those who had an alcohol treatment order or specified alcohol activity as part of their Court Order were also explored.

Defining improvement in alcohol consumption is difficult. A systematic review of the effectiveness of alcohol intervention in primary care populations found substantial heterogeneity between trials in measuring the participants' response to the intervention. Measures included quantity of alcohol consumed, frequency of drinking (including binge drinking), intensity of drinking (amount of alcohol consumed per drinking day), proportion of heavy drinkers (and definition of heavy drinking also varied) and laboratory markers of drinking [163].

A recent study used an outcome measure of less than eight on AUDIT as the aim of brief interventions is to reduce harmful or hazardous drinking [164]. However, in this study the follow-up questionnaire was not completed at an end point that was specific for alcohol consumption so some offenders may be part way through an alcohol intervention. Therefore, it is important to look at improvement and what may be a clinically significant improvement in this group. In addition, AUDIT is designed to address different domains of alcohol use including recent alcohol use, alcohol dependence and alcohol related problems rather than just a consumption measure [147].

A large observational study [165] used AUDIT score as a primary outcome with a clinically significant change in the level of alcohol used defined as moving from one category in AUDIT at baseline to another category at follow up. Therefore it seemed pragmatic and appropriate to use this approach for this study to assess improvement.

An improvement with drug use was defined as either no drug use in the four weeks prior to interview or cessation of taking class A/B drugs (excluding cannabis) (but may have taken other drugs).

A drug rehabilitation requirement (DRR) is an option for the courts in sentencing as part of a community order or suspended sentence order. The amount and intensity of the drug treatment can be tailored to the individual needs of the offender. DRRs can be given when the offender is dependent or has the propensity to take illegal drugs, the ability for the offender to benefit from the DRR is demonstrated and the offender shows willingness to comply with the requirement [162]. Specific results of those who had a DRR as part of their Court Order were also explored.

An improvement of mental health was defined as either an improvement of total CIS-R group (18+ to 12-17 or 12-17 to <12) or an improvement in primary diagnosis. The CIS-R provides a diagnosis in a hierarchical manner so an improvement in mental health was defined as an 'an offender with a diagnosis at baseline but a less severe or no diagnosis at follow-up.'

Any change in smoking was also explored.

4.1.7.2.2.4 Service use

Overall service use was explored and new access identified along with the types of services that offenders had been referred to by probation staff and the use of Health Trainers.

4.1.8 Development of the topic guide for the in-depth interviews

The in-depth interview was used because it is and effective way to explore in detail a participant's views, experiences and beliefs [166]. An interview was chosen as the method of data collection over a focus group for several

reasons. Firstly, given the fact that it was a challenge to arrange to interview a single offender, getting a group together at the same time may have been almost impossible. Secondly, I was more interested in the individual views and personal experiences so an interview would be better at capturing this than a focus group where participants may not feel able to disclose their true feelings in a group. Thirdly, the data gained in a focus group of the participants is often about or influenced by the interaction between the members of the group and I wanted individual views and opinions.

An important part of the in-depth interview is the ability to combine structure and flexibility in a semi-structured interview [167]. A topic guide was devised with this in mind and key areas were developed in line with the research questions. The topic guide is attached in Appendix 9.

4.1.9 Qualitative data collection

Purposive sampling was used [168] to obtain participants who had different characteristics with regard to demographics, experiences of offending, health issues and factors of social disadvantage (as assessed at the baseline quantitative interview). This was so as many different viewpoints and experiences could be captured. During the quantitative follow-up process I identified those participants that would be suitable for an in-depth interview so I could arrange for this to follow their quantitative interview.

All the interviews were face-to face and took part in an interview room in a probation office with only myself (as interviewer) and the participant present. All the interviews were recorded using a digital recorder operated by myself and lasted between 45 and 90 minutes.

After each interview, I wrote some reflective notes on how the interview went in relation to the topic guide, how the participant responded and key themes that emerged. Through this I discovered early on that the participants were more comfortable with the idea of 'telling me their story' and this yielded some rich data so I rephrased some of my questions to ask for the participants 'story' about particular issues such as drugs, alcohol and homelessness.

The aim was to continue interviewing until data saturation occurred meaning no new major themes or ideas emerge from the interviews [169]. From my

notes, I felt that the areas in the topic guide had been covered well. I would have liked to have included more females in the interviews but time constraints and the small number of females in the whole study meant this was not possible so it is possible that additional themes that were specific to females may have been omitted.

All the interviews were transcribed verbatim by one transcriber. I then listened to and checked each transcript in detail for accuracy and ensured anonymity by removing any references to people or places. The transcripts were then exported into Nvivo v 11, a qualitative data management software package.

4.1.10 Qualitative data analysis

There are many different approaches to qualitative data analysis. They differ in terms of their main focus and aims of the analytical process. I took a 'substantive' approach as I was interested in capturing and interpreting meanings in the data and focussing on what the text said in order to answer my research questions. This approach is in contrast to 'structural' or 'constructionist' approaches which include discourse analysis, conversational analysis and some narrative analysis. These approaches focus on language and the construction or structure of talk, text and interaction [170].

Thematic analysis is a substantive approach and was used because it is a pragmatic approach that involves discovering, interpreting and reporting patterns and clusters of meaning within the data [170]. This can then provide answers to specific research questions. Thematic analysis is particularly useful to address policy questions or to learn about people's experiences and their views and perceptions [171].

This type of analysis is a commonly used method for analysing qualitative data as it provides a coherent and consistent approach so supports the validity of the results. Therefore, I followed five key steps in data management for thematic analysis [170] which are detailed below:

4.1.10.1 Familiarisation

I listened to the interviews and read and re-read the transcripts. I identified some topics of interest, particularly those that related to the areas of the

research questions. I then discussed these ideas with my supervisor, Dr Julia Sinclair and we looked at some of the transcripts together and discussed the emerging themes. The main topics were health problems (mental health, alcohol and drugs), homelessness and housing, interventions received, barriers and facilitators to health and healthcare, support networks, childhood, money, reasons for offending, employment,

4.1.10.2 Constructing an initial thematic framework

The initial thematic framework was then developed in order to organise the data:

1. Health issues
    a. Mental health
    b. Alcohol
    c. Drug use
    d. Perceptions of health
2. Interventions
    a. Court ordered interventions
    b. Experiences of health services
3. Social factors
    a. Homelessness and housing
    b. Money
    c. Employment
4. Support networks
    a. Personal
    b. Professional
5. Childhood experiences
6. Future aspirations
    a. How health problems will be managed in the future
    b. Views on offending
    c. Short and long term goals
7. Offending and health

4.1.10.3 Indexing and sorting

I then started read through each transcript and labelling portions of the text that were about the same thing and coding it (in Nvivo) into the themes. Part

way through this process I discussed some of the transcripts and coding with Dr Julia Sinclair to gain agreement on how the portions of text were being coded. Some portions of text were coded more than once as they covered more than one theme. An example of this was a participant talking about how money was more of a problem when living on the streets as he had nowhere to store food so needed more money than living in a hostel. This was coded to both 'homelessness and housing' and 'money'.

4.1.10.4 Reviewing data extracts

Once coding of all the transcripts was complete, I reviewed all the data at each theme. There was a huge amount of data under each theme so in order to make more sense of it I proceeded to summarise the data in each theme by participant.

4.1.10.5 Data summary and display

In each theme, I summarised the data for each participant. An example of one of these matrices is on homelessness and attached in Appendix 10. This enabled me to easily discuss the data with Dr Julia Sinclair to ensure I had identified all the relevant pieces of data within each theme.

4.1.10.6 Interpretation of the data

For each matrix I then started to look at the interpretation or the themes that were developing within the themes. This interpretation column was then added to the matrices so enabled further discussion.

4.1.10.7 Presentation of the data

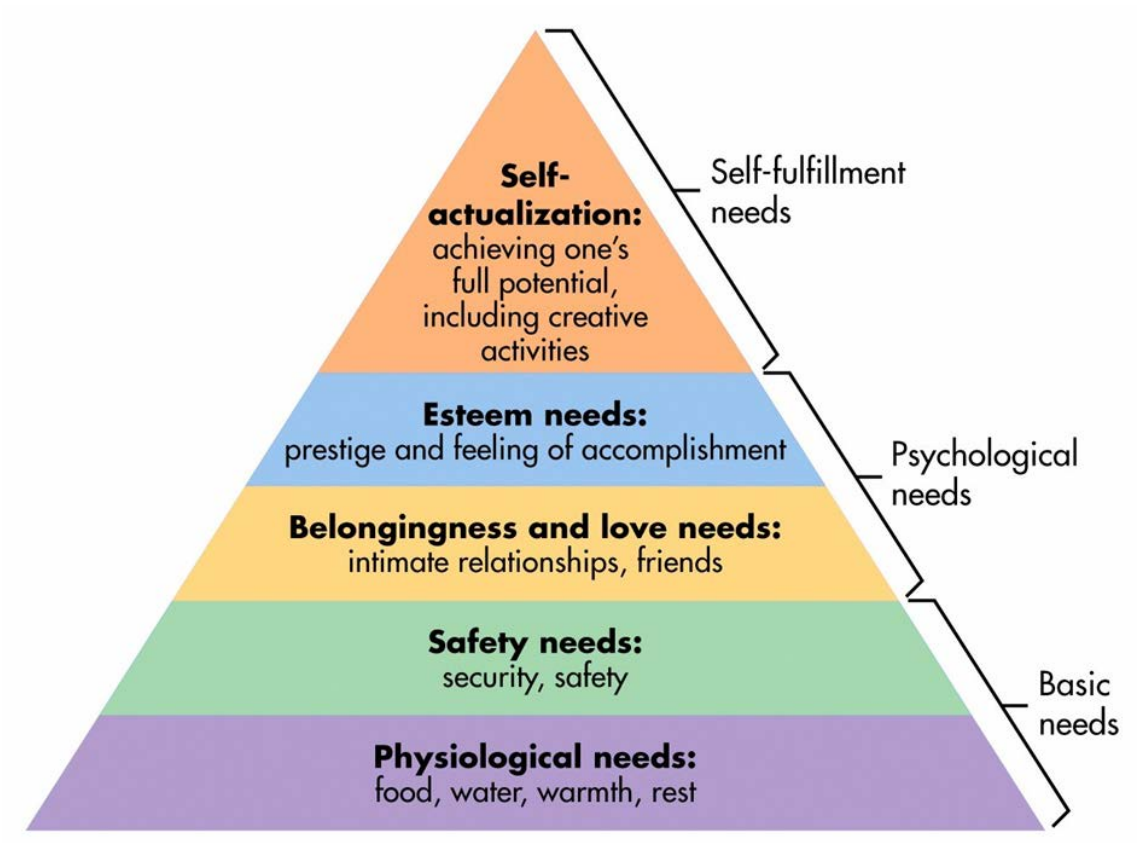
A huge amount of data had been synthesised and way of presenting this in a meaningful way was discussed. Often in qualitative research, the challenge is to interpret the data and tell the story in a way that it coherent, intelligible and presents the layered complexity of the participants' narratives. When discussing the various matrixes with Dr Julia Sinclair, it struck us how many of the themes related to Maslow's hierarchy of needs [172] and to further interpret the results using this as a lens would link with the concept of agency which is often discussed in other qualitative literature on desistance. Agency is the capacity of individuals to act independently and make their own free

choices and is an important component in reaching self-actualisation at the top of Maslow's hierarchy.

Maslow's hierarchy of needs model [173] is shown in

Figure 9. It is a five-tier model of human needs with the most fundamental needs at the bottom and the need for self-actualisation at the top. The first four levels are known as deficiency needs and the top level as a growth or 'being' need. Maslow suggests that human beings are not motivated by any higher level needs (love and belonging, self-esteem, self-actualisation) until the more basic, lower-level ones (physiological and safety needs) have been met. Therefore, this model was used to explain why offenders are often unable to address their substance use, mental health problems or offending behaviour if they are still dealing with issues further down Maslow's hierarchy such as income and housing.

Figure 9 Maslow's hierarchy of needs



The basic needs of food, water, warmth, safety, and security along with belongingness and love are necessary social determinants of a healthy life (the conditions into which people are born and experience throughout their life). If inequalities in these areas remain then those who are disadvantaged and do not have these needs met are less likely to be able to strive for self-actualisation. In addition, life events such as divorce or unemployment may cause an individual to move down the levels of the hierarchy so individuals may move back and forth between the different types of needs. Using Maslow's hierarchy as a lens to view the data enables these ideas to be explored and reported.

Maslow argues that all healthy individuals strive to obtain self-actualisation and this can be characterised as healthy and happy individuals striving for and achieving their potential and living a meaningful life. Individuals who have a meaningful life may be less likely to offend as they are in a position to be more concerned with problems external to themselves, be concerned with the wellbeing of others and have a clear understanding of right and wrong.

It has been identified that a lack of basic needs such as housing, employment, education and material deprivation alongside social or family networks influences offending and re-offending [5] but what is less clear is how deficiencies in these needs contribute to an offender's addictions, mental health problems and inability to move onto a law-abiding trajectory.

Although there has been criticism of Maslow's theories in relation to whether the needs are truly hierarchical [174], Maslow's model is useful in helping to identify why some offenders might become 'stuck' at the lower levels and might not be in a position to strive for the higher level 'self-actualisation' and desist from offending. When offenders are concerned about meeting their physical or basic needs, according to Maslow's theory, they probably will not be thinking about how to become law-abiding citizens. If a person is striving for self-actualisation, but something changes, which means that they have to focus instead on a lower category need, they can no longer focus on achieving their full potential and could relapse back to behaviours necessary to meet their basic needs (such as offending). Therefore, presenting the data using Maslow's theory as a lens through which to view the narratives of the offenders

may broaden our understanding of the links between people's lives and their offending behaviour.

Maruna *et al* [175] conducted the Liverpool Desistance Study, a qualitative study evaluating individual factors that influenced desistance (cessation of offending). The original aim was to interview two samples of ex-prisoners – one group that had re-offended upon release and another group who were 'going straight' and compare their responses. They found that actually, the vast majority of ex-prisoners did not fit into one of these two groups but were somewhere in between the two extremes. However, when focussing on the two extremes of clearly persisting and clearly desisting offenders, they found that the offenders who had stopped criminal activity had developed new identities for themselves and for what they wanted for their lives. They also tended to view their lives as a 'redemption script', where they acknowledged their criminal past but experienced a 'rebirth' and now strived to create a new life for themselves, viewing their previous criminal activity as 'not the real me'.

Perhaps the 'real me' is an offender who has moved up Maslow's hierarchy and is able to function as 'the real me' whereas previously they were so concerned with lower level needs that they could not be their 'true self'? Those who continued to offend saw themselves as victims whose fate was already determined and had no real plans for the future, so were perhaps still focussing on meeting their basic needs?

Byng *et al [176]* interviewed 35 offenders prior to and after release from prison, enquiring after their previous suicide attempts and how they saw their future. Those who had only attempted suicide once or not at all portrayed themselves as having more mastery. Those who had future plans which did not include reoffending demonstrated 'projective agency'. Projective agency as described by Emirbay and Mische [177] is the 'imaginative generation of actors of future possible trajectories' (p971). Although Byng *et al* did not discuss their findings in relation to Maslow, it is possible to see that those offenders who were not a suicide risk and had future plans set in a law-abiding trajectory could also be striving towards self-actualisation.

Therefore, the qualitative results are divided into sections that relate to the different levels of Maslow's hierarchy. It firstly describes problems faced by

participants that relate physiological needs at the bottom of the hierarchy and how these basic needs must be achieved before an offender has the capacity to move up the hierarchy. A key part of the analysis was to examine how a sudden loss one of the lower order needs became a catalyst for other problems such as mental health problems, substance use and offending behaviour. It then goes onto to discuss safety needs, including the impact of not having a safe childhood free from neglect and abuse. Belongingness and love needs examined social networks and where offenders could go for support, both personal and professional.

This then leads onto how offenders have been able to meet their esteem needs and then aim for self-actualisation and have plans for the future that do not involve offending. It then examines enablers and the role of probation staff in helping offenders to meet their basic needs as a platform towards self-actualisation and reduced recidivism. It then discusses the link between health aspects and offending.

5. Quantitative Baseline Results

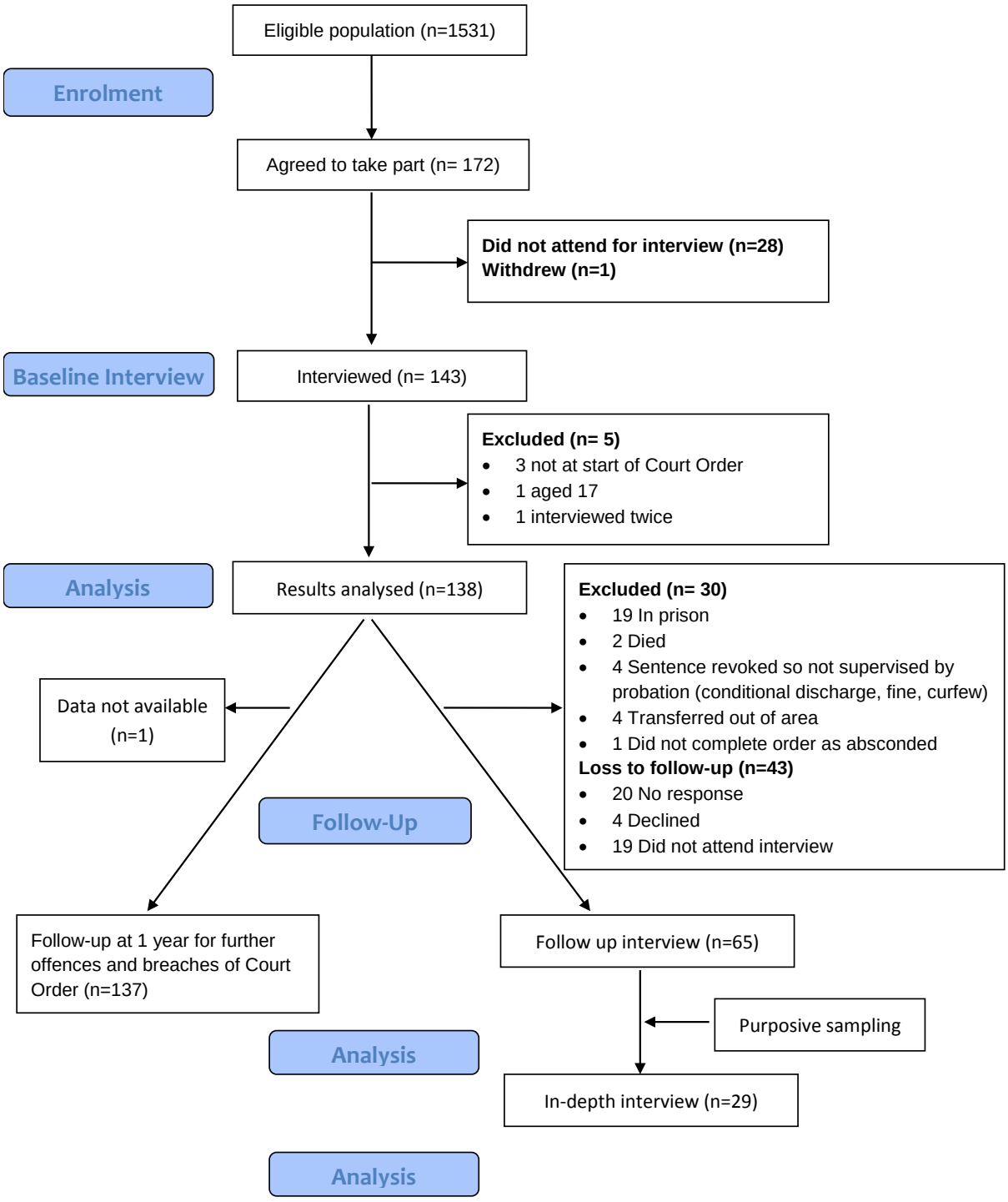
5.1 Introduction

This section firstly gives an overview of recruitment and flow through the whole research study. It then presents the first analysis, the results of the baseline questionnaire of the cohort of offenders who have just commenced a Court Order. It includes the prevalence results of the key health and social indicators, with 95% confidence intervals (CI) where appropriate and compares these with the general population and prison population where data are available in order to set a context.

5.2 Overview of study recruitment and follow-up

Figure 10 describes the flow of participants through the entire study. Of the 1531 offenders eligible to take part in the study from three probation offices, 138 were interviewed and results analysed, although one of these only partially completed the baseline interview because of time constraints but their data are included where available.

Figure 10 Flow diagram of study



5.3 Comparison of the study sample and total population

Table 10 Demographics of sample and total population

	Study Sample Number (%) n=138	Total Eligible Population Number (%) n=1531
GENDER		
Male	114 (82.6)	1271 (83.0)
Female	24 (17.4)	260 (17.0)
AGE		
Mean age years (SD)	34.6 (10.1)	32.11 (10.7)
Median age years (IQR)	34.0 (15)	30.0 (17)
Range in years	18-63	18-75
ETHNIC GROUP		
White British/Irish/Other	122 (88.4)	1344 (87.8)
Black Caribbean/African/Other	7 (5.1)	53 (3.5)
Asian: Indian/Pakistani/Bangladeshi/ Chinese/Other	1 (0.7)	29(1.9)
Mixed White and Black Caribbean or Black African or Asian or Other	4 (2.9)	25 (1.6)
Other	4 (2.9)	10 (0.7)
Refusal	0 (0)	4 (0.3)
Missing	0 (0)	66 (4.3)
PROBATION OFFICE		
Southampton	98 (71.0)	970 (63.4)
Portsmouth	26 (18.8)	502 (32.8)
Isle of Wight	14 (10.1)	59 (3.9)

Table 11 Demographics of sample and population relating to sentence and offence

SENTENCE TYPE	Study Sample Number (%) N=138	Total Eligible Population Number (%)
Community Order	105 (76.1)	1110 (72.5)
Suspended Sentence Order	33 (23.9)	421 (27.5)
TIER		
1	27 (19.6)	413 (27.0)
2	38 (27.5)	320 (20.9)
3	67 (48.6)	691 (45.1)
4	6 (4.3)	98 (6.4)
Missing	0	9 (0.6)
MAPPA		
Under MAPPA arrangements	7 (5.1)	48 (3.1)
TYPE OF OFFENCE		
Violence	13 (9.4)	122(8.0)
Sex offence	2 (1.4)	12 (0.8)
Robbery	1 (0.7)	8 (0.5)
Burglary	4 (2.9)	60 (3.9)
Theft and handling	23 (16.7)	282 (18.4)
Fraud and forgery	6 (4.3)	108 (7.1)
Criminal damage	5 (3.6)	52 (3.4)
Indictable motoring offences	1 (0.7)	16 (1.0)
Other indictable offences	9 (6.5)	64 (4.2)
Summary motoring offences	15 (10.9)	131 (8.6)
Other summary offences	50 (36.2)	569 (37.2)
Drugs	9 (6.5)	107 (7.0)

Table 10 and Table 11 show a comparison between the study sample and total number of people who were eligible for the study (met the inclusion criteria during the study time period). No individual data were available on the eligible population to allow a comparison between those that did and those that did not take part.

The sample represents just over nine percent of the eligible population of 1531 in the three offices in the study and has a similar range of characteristics,

although the study sample was slightly older which may reflect the fact that younger offenders were less willing to take part or less able to turn up to appointments.

The majority of participants were recruited from the Southampton office. This was because the study was first piloted there before being rolled out to the other offices. The difference between the percentages recruited at the different probation offices reflect the different recruitment strategies used and their relative effectiveness of recruitment, with Southampton having group inductions where the offenders could be recruited, and the Isle of Wight actively recruiting offenders and ensuring that their regular probation appointments were linked to the research interview.

Just over three quarters were on a community order, most were in tiers one to three with only seven (5.1%) being under MAPPA (Multi-agency public protection arrangements) which would reflect the seriousness of the crime or high risk of further offences.

The type of offence committed by offenders in the study sample was predominately other summary offences (36.2%). These were mostly (31/50 - 62%) common and other types of assault but also included offences such as assault on a Police Officer, unauthorised taking of vehicles, offences against public order and miscellaneous sexual offences. Theft and handling (16.7%) was the next highest group of offences followed by summary motoring offences (10.9%) which included driving licence related offences, driving etc. after consuming alcohol or taking drugs and accident offences. The relatively low levels of drug offences, burglary, robbery, sex offences and violence reflect that these offences are more likely to attract a custodial sentence.

5.4 Further demographics of sample

5.4.1 Court orders and previous convictions

Table 12 Factors relating to court order

NUMBER OF REQUIREMENTS	Number (%) n=138
1	51 (37.0)
2	64 (46.4)
3	19 (13.8)
4	4 (2.9)
TYPE OF REQUIREMENT	
Supervision	105 (76.1)
Unpaid work	44 (31.9)
Accredited Programme	26 (18.8)
Curfew	5 (3.6)
Drug Treatment	11 (8.0)
Alcohol Treatment	6 (4.3)
Specified Activity	45 (32.6)
Residential	2 (1.4)
Prohibited Activity	1 (0.7)
Exclusion	1 (0.7)
Mental Health Treatment	0 (0)
Attendance Centre	0 (0)
LENGTH OF ORDER (MONTHS)	
6	5 (3.6)
9	10 (7.2)
12	95 (68.8)
18	12 (8.7)
24	13 (9.4)
36	3 (2.2)

Table 13 Previous convictions

PREVIOUS CONVICTIONS? [2]	Total (%) n=137	Males (%) n=114	Females (%) n=23
Yes	115 (83.3)	99 (86.8)	16 (69.6))
No	22 (15.9)	15 (13.2)	7 (30.4)
NUMBER OF PREVIOUS CONVICTIONS			
Median (IQR)	6 (14)	7 (15)	3 (7)
Range	0-49	0-49	0-15
0	22 (15.9)	15 (13.2)	7 (30.4)
1-5	45 (32.8)	36 (31.6)	9 (39.1)
6-10	22 (15.9)	19 (16.7)	3 (13.0)
11-20	32 (23.4)	28 (24.6)	4 (17.4)
21+	16 (11.7)	16 (14.0)	0 (0)
CONVICTIONS AGED 17 OR UNDER?			
No	79 (57.7)	61 (53.5)	18 (78.3)
Yes	58 (42.3)	53 (46.5)	5 (21.7)
Range	0-18	0-18	0-3
Yes 1-5 convictions	45 (32.8)	40 (35.1)	5 (21.7)
Yes 6+ convictions	13 (9.5)	13 (11.4)	0 (0)
AGE AT FIRST CONVICTION			
Median years (IQR)	18	18 (10)	21 (13)
Range in years	11-61	11-56	14-61
11-17 years	58 (42.3)	53 (46.5)	5 (21.7)
18-25 years	42 (30.7)	32 (28.1)	10 (43.5)
26-39 years	27 (19.7)	21 (18.4)	6 (26.1)
40+ years	10 (7.3)	8 (7.0)	2 (8.7)

[2] Total for this table is 137 as this information was not recorded on the probation database for one of the offenders.

Figure 11 Box plot of number of previous convictions by gender

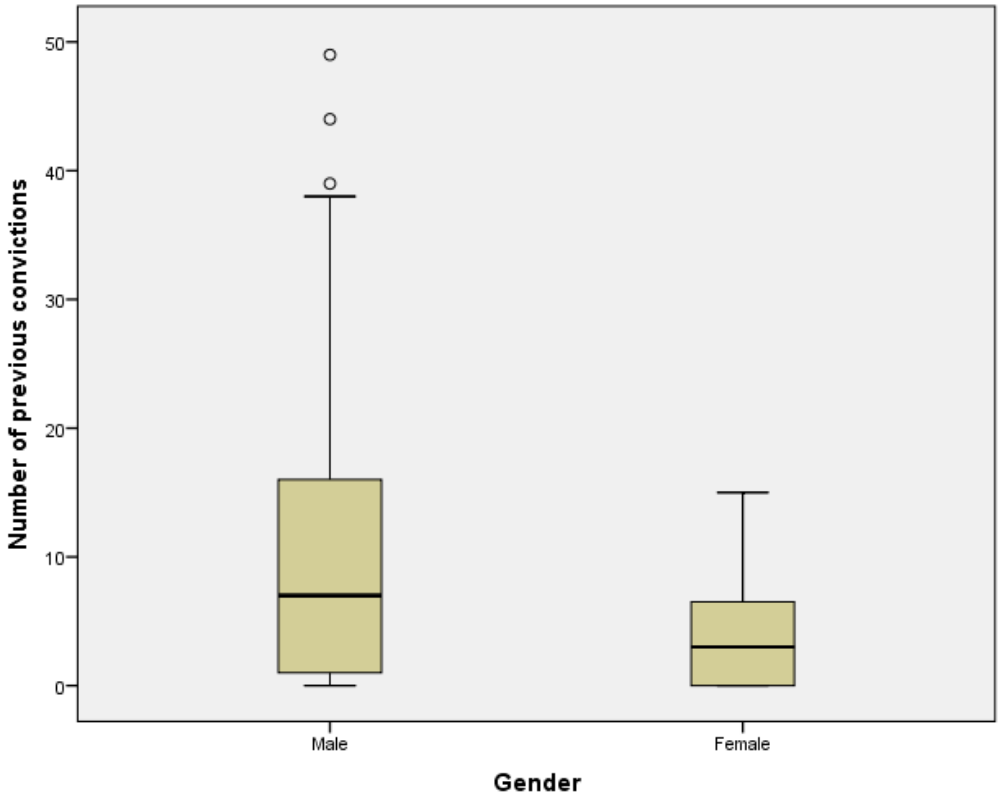


Figure 12 Box plot of age in years at first conviction by gender

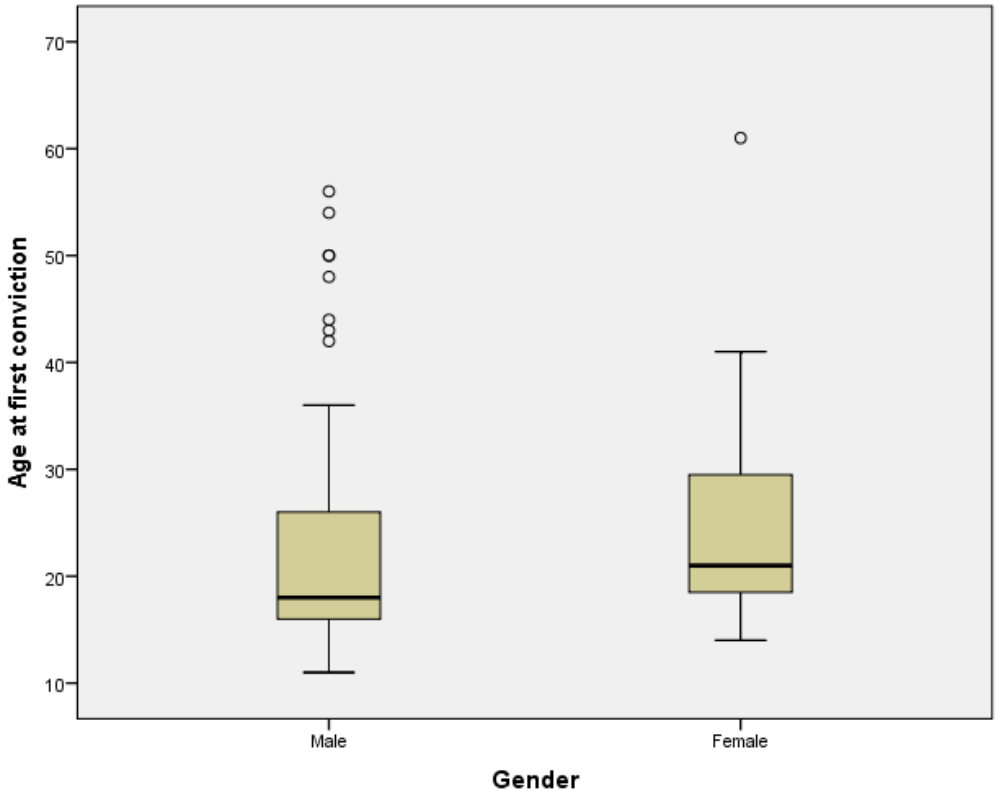


Table 12 gives information about the orders of those within the sample. More than 80% had one or two requirements attached to their order. The most common type of requirement was supervision which was given to just over three-quarters of offenders. This was followed by a specified activity (32.6%) and unpaid work (31.9%). Drug and alcohol treatment orders were only given in small numbers, 8.0% and 4.3% respectively.

The length of orders ranged from six months to 36 months with just over two thirds of offenders with a 12 month order.

Table 13 shows information about previous convictions. Over four fifths had previous convictions with a median of six. Just over a third had 11 or more convictions so were persistent offenders and just under half had been convicted as a juvenile (under 18 years) (median age was 18 years) so showing offending behaviour starting at a young age.

There are differences between males and females in number of previous convictions and age of first conviction. Figure 11 shows number of previous convictions by gender and Figure 12 show age at first conviction by gender. Whist recognising that the sample is very small for females, and the box plots overlap, generally males had more previous convictions and started offending at a younger age.

5.4.2 Individual characteristics and indicators of social disadvantage

5.4.2.1 Marital status and biological children

Table 14 Marital status

Group	Marital status	Number (%) (n=138)	Number (%(CI)) (n=138)
In a defined relationship	Married	12 (8.7)	35 (25.4(18.3-33.5))
	Living as a couple with partner	23 (16.7)	
No recorded relationship (but may have girlfriends/ boyfriends)	Single	85 (61.6)	103 (74.6(66.5-81.7))
	Widowed	2 (1.4)	
	Divorced	9 (6.5)	
	Separated	7 (5.1)	

Table 14 shows that the majority of offenders were single and only a quarter were married or living with a partner. This may reflect the young age profile of the sample or also be indicative of an offender not having a settled life. These results are also very similar to that described in the Surveying Prisoner Crime Reduction (SPCR) longitudinal cohort study of prisoners for newly sentenced prisoners prior to custody [178] which found 8% were married, 24% were living with a partner and 61% were single.

Over half (58.0% (49.1%-66.3%)) of offenders had children under 18 years which is similar to newly sentenced prisoners receiving sentences between one month and four years in the SPCR where just over half of these prisoners reported having children under the age of 18 years [178].

In the study sample, only a quarter of offenders who had children lived with one or more of their children. 13 out of 24 (54.2%) females had children under 18 years old and seven out of those (53.8%) lived with at least one of their children. 67 out of 114 males had biological children under 18 years old but only 13 (19.4%) lived with one or more of their children. Only seven (10.4%) of fathers lived with all their children so 89.6% (79.7% – 95.7%) of fathers had non-resident children.

For males in the study sample, this is the complete converse of the national picture as described by the Modern Fatherhood Study [179] which estimates that 17% of fathers have non-resident children (this includes fathers who live with some of their children). Even when considering younger fathers aged 16 to 24 years, only 34% report having non-resident children under the age of 16 years. However, the Modern Fatherhood Study report also found that fathers who have non-resident children are more economically disadvantaged than fathers who have resident children as non-resident fathers are more likely to have no qualification, less likely to be working and less likely to own their own home [179], so more like this offender population.

This may point to complicated family set ups with poor social capital and support networks amongst all offenders across the criminal justice system.

5.4.2.2 Accommodation

Table 15 Current accommodation

Category	Accommodation	Number (%) (n=138)	Number (%(CI)) (n=138)
Not homeless	Own home	11 (8.0)	115 (83.3(76.1-89.1))
	Rented self-contained accommodation	52 (37.7)	
	Rented bedsit or room with shared amenities	22 (15.9)	
	Staying in someone else's home (adult relations or partner)	30 (21.7)	
Homeless	Hostel or other temporary accommodation	8 (5.8)	23 (16.7(10.9 – 24.0))
	Probation hostel	2 (1.4)	
	Staying in someone else's home (not related)	12 (8.7)	
	No fixed abode (tent)	1 (0.7)	

Table 15 shows the offenders' accommodation at the time of data collection. Over a third did not have their own accommodation (but more than half of these were living in their parents, relatives or partner's home) and nearly a fifth were homeless.

Similar results have been observed in prisoners before custody with regards to home ownership with approximately only 13% living in their own home [180]. This is lower than the general population in the year 2011-2012, where in England, 10% of those aged 16-24 years owned their own home, as did 43% in 25-34 year age group and 64% in the 35-44 year age group [181]. 15% prisoners were sleeping rough or in temporary accommodation and a further 12% were staying rent free in accommodation owned by someone else (but not a family member or partner) [180].

Nearly half (63, 45.7% (37.1%-54.3%)) reported that they had lived in their current accommodation for less than six months. This compares to 28% of prisoners who had lived in their accommodation for less than six months prior to custody and 44% reporting being in their accommodation for less than a year [180]. Therefore, accommodation is often insecure in these groups.

5.4.2.3 Employment

Table 16 Employment status at baseline interview

Category	Employment Status	Number (%(CI)) (n=138)	
Not working	Unemployed seeking work	63 (45.7 (37.2-54.3))	101 (73.2 (65.0-80.4)
	Not working due to health reasons	34 (24.6 (17.7-32.7))	
	Not working as bringing up family	3 (2.2 (0.5-6.2))	
	Full time carers	1 (0.7 (0.02-4.0))	
Working or in full time education	Full time work	23 (16.7 (10.9-24.0))	37 (26.8 (19.6-35.0)
	Part time work	9 (6.5 (3.0-12.0))	
	Full time education	5 (3.6 (1.2-8.3))	

Table 16 shows the employment status at the time of interview. Only just over a quarter were in work either full or part time or in full time education. Nearly half were seeking work and nearly a quarter were not working because of health reasons and receiving either disability living allowance or Employment and Support Allowance (ESA) which appears high considering the age profile of the sample.

Prior their Court Order, nearly half (47.8% (39.3% - 56.5%)) were in full or part time work or education. 17 lost or left their job because of the Court Order, 12 left for another reason and one left education for another reason. Therefore, just under half of the sample were in some sort of employment prior to their court order but nearly half of these left or lost their jobs since receiving their court order and the first interview.

A similar picture has been described in newly sentenced prisoners prior to custody with 52% being in paid employment (full or part time) in the four weeks prior to custody or in the 48 weeks before the 4 week period [182]. However, this is vastly different from the general population of England. The 2011 Census showed 5% unemployment levels in the 16-64 year olds and only 5% economically inactive because of sickness [65]. As a local comparison,

Census data for Southampton showed only 1.5% of the working age population were claiming job seekers allowance or universal credit [65].

5.4.2.4 Childhood and education

Table 17 Living arrangements as a child

Who lived with most of the time	**Number (%(CI)) (n=138)**
Both parents	67 (48.6 (40.0-57.2))
One parent	42 (30.4 (22.9-38.8))
One parent and step-parent	14 (10.1 (5.7-16.4))
Adopted parents	1 (0.7 (0.02-4.0))
Grandparent(s)	3 (2.2 (0.5-6.2))
Other relatives	2 (1.5 (0.2-5.1))
Institution	3 (2.2 (0.5-6.2))
Ever been In Local Authority care	27 (19.6 (13.8 - 27.0))
Number of times in Local Authority care	
1	16 (59.3)
2-4	8 (29.6)
5+	3 (11.1)
Longest period spent in Local Authority care	
< 6 months	8 (29.6)
6 months - 2 years	6 (22.2)
2 - 5 years	7 (25.9)
5 years or more	6 (22.2)
Reasons for Local Authority care	
Family problems	13 (48.1)
Truancy	1 (3.7)
Parents couldn't control	6 (22.2)
Physical/sexual abuse	3 (11.1)
Don't know	1 (3.7)
Other	3 (11.1)

Table 17 shows the offenders' living arrangements in childhood. The majority lived with one or both biological parents. Just under half of the offenders spent most of their childhood living with both their parents and just over 40% with just one parent or parent plus step parent. In 1996 for UK households 7% of dependent children lived in cohabitating couple families and 73% lived with married couple families and 20% living in lone parent families [183]. Although not a direct comparison, this does suggest that offenders were less likely to live in two-parent families that the general population.

Nearly two fifths had spent some time in Local Authority care. This may be understated as seven of the sample were foreign nationals and spent their childhood in another country. Other studies who have examined the prevalence of looked after status in criminal justice populations exclude foreign nationals in their results [143, 178]. Using this approach 20.6% (14.0% - 28.6%) of the sample spent some of their childhood in Local Authority care.

15 offenders spent longer than a year in care and the most common reason for being taken into care was family problems. In addition, 11 out of the 27 (40.7% (22.4% - 61.2%)) who had been in care, had also attended a special school (six at a school for learning disabilities/difficulties, two a home office approved school/borstal and three a school for disruptive children). This compares to 12 out of 111 (10.8% (5.7% - 18.1%)) offenders who attended a special school and had no experience of care (one at a school for learning disabilities/difficulties, six at a home office approved school/borstals and four at a schools for disruptive children). There is a strong association between being in local authority care and attending a special school ($p = 0.001$)

There is also an association between being in Local Authority Care as a child and first conviction at age 17 years or under. 19/27 (70.4% (49.8% - 86.3%)) of those who had been in care received their first criminal conviction at age 17 years or younger. This compare to 39/110 (35.5% (26.6% - 45.2%)) who were not in care, $p = 0.001$.

Similar results have been observed in a prison population. The SPCR study reported that just under half (47%) of prisoners had lived with both parents during their childhood [178]. Nearly a quarter of these prisoners reported that they had been in Local Authority Care at some point during their childhood and

those who had been in care were younger when first arrested and were more likely to be reconvicted in the year after release from prison than those who had never been in care. This is similar to results from results from research with children and young people in custody in which 27% of young men aged 15-18 years (n = 1052) and 56% of young women aged 17-18 years (n = 40) reported having ever been in care [184]. The SPCR also found that short-term prisoners (sentences less than 18 months) were more likely than longer-term prisoners to report that they had ever been in care as a child (26% compared to 20%) [178].

In the year ending March 2015 there were 69,540 looked after children in England [185] but no up to date population comparisons are available regarding the prevalence of the adult general population that were in local authority care as child. The only estimate available is from the 1991 National Prison Survey which reported that 26% of prisoners had been cared for by a local authority at some point in their childhood, compared to just 2% of the general population [186]. This population estimate was derived by adding a question about experience of local authority care to the OPCS (Office of Population Censuses and Surveys – a predecessor to the Office for National Statistics) omnibus survey. This survey was carried out monthly among a random sample of approximately 2000 adults in Great Britain using face-to face-interviews. The question about spending time in Local Authority Care was added to the survey for two months, and the population estimate based on that result.

Even though this population estimate is from 1991, it is still clear that children who have contact with Local Authority care systems are at a higher risk of offending. Recorded at March 2014, out of 30,660 looked after children aged between 10 and 17 years, 1,710 (5.6%) had been convicted or subject to a final warning or reprimand during 2014 (this was 6.1% in 2013 and 6.9% in 2012). This compares to data from 2012 where 1.2% of all children in the general population were convicted or subject to a final warning or reprimand 1.5% in 2013. Offending was higher amongst older looked after children aged 16 – 17 years (10.0%) and more than twice as frequent amongst boys (7.4% compared to 3.3% of girls) [187].

This goes some way to suggest that some childhood experiences can be risk factors for offending.

Table 18 Education and schooling

Type of school	**Number (%(CI)) (n=138)**
Mainstream school	117 (84.8 (77.7-90.3))
School for disruptive children	13 (9.4 (5.1-15.6))
Home office approved school/borstal	1 (0.7 (0.02-4.0))
School for learning disabilities/difficulties	7 (5.1 (2.1-10.2))
School leaving age	
15 years or under	48 (34.8 (26.9-43.4))
16 years	56 (40.6 (32.3-49.3))
17 years	8 (5.8 (2.5-11.1))
18+ years	26 (18.8 (12.7-26.4))

Table 18 shows the type of school attended and school leaving age. The majority attended a mainstream school and only 12 (10.3%) of these reported having a statement of special educational needs. Just over 5% attended a school for learning disabilities/difficulties and a further 14 (10.1%) identified that they were removed from mainstream schools.

Just over a third of the sample left school at aged 15 years or under. The youngest was 12 years of age and when asked about this, the offender responded that he just did not go any more and no one made him. Less than one fifth had competed further education. This was similar to the prisoners in the SPCR where participants were asked at what age they had completed continuous, full-time school or college. 19% had completed by the age of 14 years, 49% by the age of 15 years, 85% by 16 years and 95% by 18 years [178]. As a comparison, in the general population, in 1998, almost half (49%) of 18 year olds (who in 2012 would be aged 32), were still in education, although this does include part-time education [188].

Table 19 Highest level of qualifications

Qualification	**Number (%) n=138**
University Degree	4 (2.9)
Teaching qualification or HNC/HND/BETEC higher	6 (4.3)
A or A/S levels/SCE higher or ONC/OND/BETEC/City and Guilds Advanced Final Level, NVQ 4	23 (16.7)
O Level or GCSE (A-C) or CSE Grade 1or City & Guilds Craft/Ord level, NVQ 3	46 (33.3)
CSE grades 2-5, O level D&E, GCSE grades D-G), NVQ 1-2	30 (21.7)
CSE or GCSE ungraded	1 (0.7)
Other qualifications	4 (2.9)
No qualifications	24 (17.4)

Table 19 shows the highest level of qualifications held by offenders in the sample. The young school leaving age reflects the level of qualifications obtained in the sample with less than a quarter having post-16 qualifications. Nearly half did not have a single GCSE grades A-C (or equivalent). This is quite similar to that found in prisoners. In the SPCR study, approximately 5% were educated to a level higher than A levels and approximately 3% had university degrees. 47% reported no qualifications [182].

Compared to the general population, education in offender populations is much lower. In the 2011 census for England and Wales (all adults aged 16 years or over), 27% of the population had qualifications at level 4 and above (Degree (for example BA, BSc), Higher Degree (for example MA, PhD, PGCE), NVQ Level 4-5, HNC, HND, RSA Higher Diploma, BTEC Higher level, Foundation degree (NI), Professional qualifications) and 54.9% had at least five GSCEs or equivalent. 22.6% reported no qualifications but it is important to note that the this figure includes those aged 16 years and over who were still studying and older adults than the study sample who are less likely to hold qualifications [65].

5.4.2.5 Clustering of indicators of social disadvantage

Figure 13 Venn diagram showing the clustering of multiple social disadvantage (n=138)

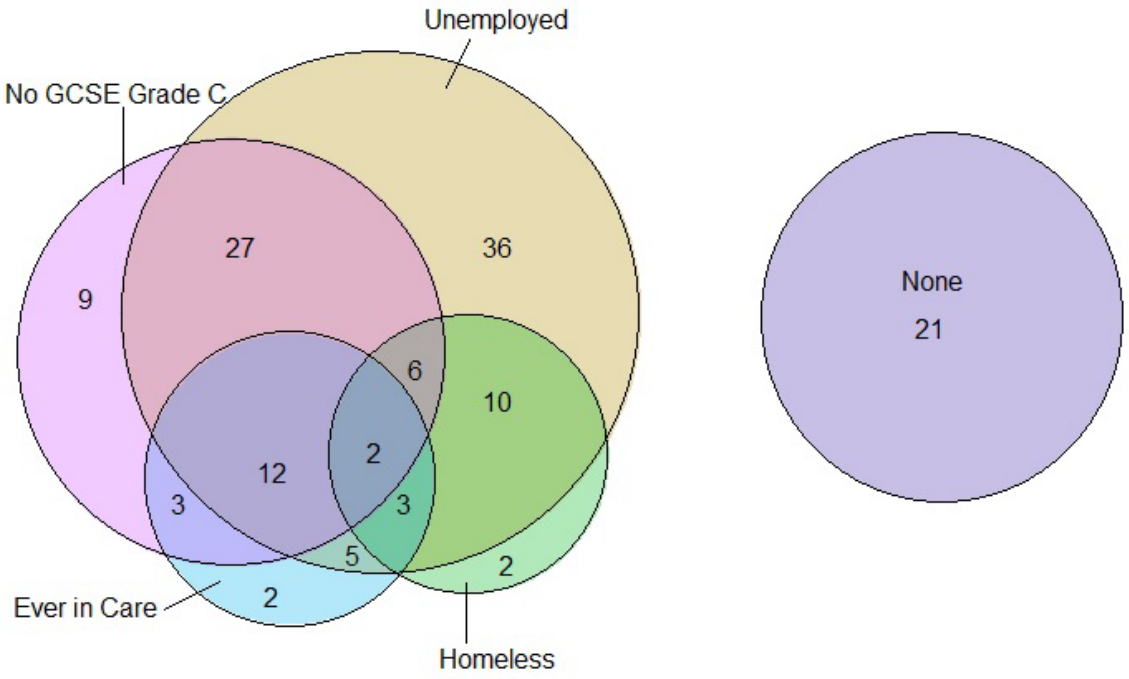


Figure 13 shows the complex interplay of multiple social disadvantages. When looking at those offenders who had not obtained at least one grade C at GCSE (or equivalent), were unemployed (including those not working for health or other reasons), homeless (in this case defined as not having own accommodation and not living with family members) or ever been in Local Authority care, it was found that 117 (84.8%) had at least one factor of social disadvantage. Two offenders (1.5%) experienced all four factors, 21 (15.2%) had three factors and 45 (32.6%) experienced two factors.

Although these factors can be associated with each other (for example, low educational attainment leads to lower job prospects, and unemployment can lead to homelessness) it does demonstrate the complexity of problems faced by this population.

5.4.3 Prevalence of key modifiable health problems

This section focusses on the key modifiable health problems know to be associated with offending and prevalent within the prison population. In addition, it also addresses smoking tobacco as its prevalence is also known to be high in offender populations and a contributory factor in physical illness.

Table 20 Summary of key modifiable health problems compared with prisoners and general population

Health problem	Study sample % (CI)	Sentenced prisoners	Remand prisoners	General population
Alcohol at hazardous levels or worse (8+ on AUDIT)	Total 67.9% (59.4%-75.6%)) Male 70.8% (61.5%-79.0%) Female 54.2% (32.8%-74.5%)	Male 63% Female 39% [143]	Male 58% Female 36% [143]	Total 19.7% Male 26.3% Female13.4% [189]
Alcohol at harmful levels or worse (16+ on AUDIT)	Total 40.8% (32.6%-49.6%) Male 42.5% (33.2%-52.1%) Female 33.3% (15.6%-55.3%)	Male 30% Female 19% [143]	31% male 20% female [143]	Total 3.1% (2.6%-3.6%) Male 4.4% (3.6%-5.4%) Female 1.8% (1.4%-2.4%) [189]
Any drug in last 4 weeks	Total 46.0% (37.4%-54.7%) Male 48.7% (39.2%-58.3%) Female 33.3% (15.6%-55.3%)	Total 64% took drugs in 4 weeks before custody [178] Male 53% Female 41% [143]	Male 58% Female 48% [143]	No direct comparison. Taken a drug in last year: Males 11.3%, Females 6.0% 16-24 year olds Males 26.4%, Females 17.1% [189] Total 2.2% frequent drug use [189, 190]
Class A/B drugs (excl cannabis) in last 4 weeks	Total 24.1% (17.2%-32.1%) Male 25.7% (17.9%-34.7% Female 16.7% (4.7%-37.4%)	43% used heroin, cocaine or crack cocaine in 4 weeks prior to custody [178]	No direct comparison	No direct comparison
Mental health problem on CIS-R scored ≥12	Total 43.1% (34.6%-51.8%) Male 43.4% (34.1%-53.0%) Female 41.7% (22.1%-63.4%)	Male 39% Female 62% [143]	58% male, 75% female [143]	Total 15.7% (14.7%-16.7%) Male12.2% Female 19.1% [189]
Mental health problem on CIS-R scored ≥18	Total 25.6% (18.5%-3.7%) Male 26.6% (18.7%-35.7%) Female 20.8% (7.1%-42.2%)	Male 24% Female 44% [143]	Male 43% Female 61% [143]	Total Male 6.4% Female 9.8% [189]
Current smoker	Total 76.1% (66.1%–82.9%) Male 77.2% (68.4%-84.5%) Female 70.8% (48.9%-87.4%)	Total 80% [191, 192] Male 78% Female 82% [143]	Male 86% Female 82% [143]	England 19.5% (Southampton 22.5% Portsmouth 22.5% IoW 19.7%) Unemployed 25-34 years 54% [193]

Table 20 summarises the prevalence results for smoking, alcohol use, drug use and mental health problems from the study sample and compares them with the prison population and general population where data are available. Further details are presented in the subsequent sections.

5.4.3.1 Alcohol

Table 21 AUDIT score grouped

AUDIT score	Total study number (%(CI)) n=137	Male (% (CI)) n=113	Female (%(CI)) n=24
0-7	44 (32.1 (24.4-40.6))	33 (29.2 (21.0-38.5))	11 (45.8 (25.6-67.2))
8-15	37 (27.0 (19.8-35.3)	32 (28.3 (20.2-37.6)	5 (20.8 (7.1-42.2))
16-19	12 (8.8 (4.6-14.8)	9 (8.0 (3.7-14.6)	3 (12.5 (2.7-32.4))
20+	44 (32.1 (24.4-40.6))	39 (34.5 (25.8-44.0)	5 (20.8 (7.1-42.2))

Table 21 describes the AUDIT scores of the sample (total 137) and also the scores split by gender. Just over two-thirds of the study sample scored eight or more and five in the 0-7 group were previously alcohol dependent but currently abstinent. Two fifths of offenders were drinking at harmful levels or worse (score of 16 or more) and nearly a third of these scored 20 or more which could indicate dependent drinking.

More males than females scored eight or more but this difference was not statistically significant (p=0.113). A higher proportion of males were drinking at possible dependent levels compared females but again this did not reach statistical significance (p=0.192). However, the lack of statistical significance in the difference between male and female AUDIT scores may be because the sample size for females is so small.

Just over half (50.4%) reported that they or someone else had been injured as a result of their drinking (question 9 on AUDIT) and of those 44 (64%) was in the last year. 61 (44.5%) reported someone had been concerned about their drinking (question 10) and of those 48 (78.7%) was in the last year.

Similar high prevalence has been found in other recent studies in the probation setting [71, 97]. In a prison study 63% of male and 39% of female sentenced prisoners had an AUDIT score of eight or more [143].

For the general population, data are available from the Adult Psychiatric Morbidity in England Survey 2014 (APMS) [189] which included AUDIT score. This was a household survey so likely to under-represent problem drinkers as they are more likely to be homeless or in an institution or be less likely to be willing, able or available to take part in a household survey. However, the prevalence figures are much lower than the probation sample.

The APMS 2014 reported that nearly one in five adults (19.7%) in the general population scored eight or more on AUDIT (26.3% of men, 13.4% of women). This included 3.1% of adults (4.4% of men and 1.8% of women) who scored 16 or more (harmful levels of drinking). 1.2% scored 20 or more indicating probable dependence [189].

5.4.3.2 Drugs

Table 22 Illicit drug use in study sample

Type of drug use	Study total (%(CI)) N=137	Males (%(CI)) N=113	Females (%(CI)) N=24
Injected drug in last 4 weeks	15 (11.0 (6.3-17.2))	12 (10.6 (5.6-17.8))	3 (12.5 (2.7-32.4))
Ever injected drugs	26 (19.0 (12.8-26.6))	22 (19.5 (12.6-28.0))	4 (16.7 (4.7-37.4))
Ever shared a needle when injecting	6 (4.4 (1.6-9.3))	6 (5.3 (2.0-11.2))	0 (0.0 (0.0-14.3))
Ever shared a spoon when injecting	7 (5.1 (2.1-10.2))	6 (5.3 (2.0-11.2))	1 (4.2 (0.1-21.1))
Class A/B drugs in past 4 weeks (excluding cannabis)	33 (24.1 (17.2-32.1))	29 (25.7 (17.9-34.7))	4 (16.7 (4.7-37.4))
Any drug use in past 4 weeks	63 (46.0 (37.4-54.7))	55 (48.7 (39.2-58.3))	8 (33.3 (15.6-55.3))
Ever regularly taken drugs	102 (74 (66.3-81.5))	85 (75.2 (66.2-82.9))	17 (70.8 (48.9-87.4))
Ever had treatment for drug use	39 (28.5 (21.1-38.8))	35 (31.0 (22.6-40.4))	4 (16.7 (4.7-37.4))

Table 22 describes the use of illicit drugs in the study sample. There was a lifetime history of injecting drugs for nearly a fifth of the sample and just over a tenth are currently injecting. Of those who have ever injected drugs, nearly a quarter reported sharing a needle and a similar number reported sharing a spoon. Therefore, blood borne viruses could also be a problem for this group of offenders and indeed, two offenders did report that they was being treated for hepatitis C.

Nearly half reported taking drugs in the four weeks prior to interview. This represented nearly half the males and a third of females. Excluding cannabis, nearly a quarter of the sample took class A or B drugs in the four weeks prior to interview. Overlapping confidence intervals show no statistical difference between males and females, however, this may be due to the small female sample size.

Out of those who took drugs in the last 4 weeks, 48 (76.2%) smoked cannabis, 15 (23.8%) took opiates, 9 (14.3%) crack cocaine, 15 (23.8%) cocaine, 9 (14.3%) amphetamines, 9 (14.3%) other drugs. Offenders had often taken more than one drug.

Nearly a third of male and a fifth of female offenders have ever had treatment for drug use. This help was predominately from a community drugs service (79.5%), 15.4% had had a residential rehabilitation, six offenders received treatment in prison, one offender had previously had a DRR, one had help from a psychotherapist, one a hostel keyworker and one from the youth offending team. Out of the 39 offenders who have received some sort of treatment for drug use in the past, only a quarter (25.6%) had not taken any drugs in the past four weeks highlighting the problem in either tackling addiction or maintaining a drug free lifestyle.

Nearly three quarters (78.4%) of the sample had ever taken drugs regularly. In this group, cannabis was the first (or amongst the first if a variety of drugs were used) drug used. The median age for starting drug taking was 16.0 years (range 8-47 years).

It is hard to compare these results with other studies in the probation population as methods of ascertainment varied as previously discussed in the literature review. However, Brooker *et al* (2008/9) [71, 72] reported that 39% of offenders in Nottinghamshire and Derbyshire probation services were at risk of substance abuse and Budd *et al* (2002) [80] reported any drug use in offenders serving community sentences in the past year as 63% for male offenders and 50% for female offenders so the study results do fit with this overall picture.

Studies of prisoners have found similar or even higher levels of illegal drug use. In the SCPR study, 64% of prisoners reported that they had used illegal drugs in the four weeks before custody [194] and nearly a third stated in their first interview in custody that they needed help with a drug problem [195]. 80% of prisoners had used an illicit drug during their lives and cannabis was the most commonly reported drug (70%) [196].

The Crime Survey for England and Wales (CSEW) examines the extent and trends in illicit drug use among a sample of 16 to 59 year old residents in

households in England and Wales. The latest CSEW for 2014/15 found that nearly 9% of adults aged between 16 and 59 years in the general population had taken an illicit drug in the last year [190] and just over 8% in the CSEW for 2012/13 [197]. However, the figure for frequent drug use in the general population is even lower at 2.2% of adults aged 16 to 59 years. This is defined as having taken any illicit drug more than once a month on average in the last year [190].

Even taking into account that younger people are more likely to take drugs than older people and the population level of drug use in the last year was highest among 16 to 19 year olds at 19% and 20 to 24 year olds at 20% [190], the probation sample is significantly higher than this.

5.4.3.3 Mental health

Table 23 Mental health summary results

Mental Health Problem	Study total (%(CI)) N=137	Males (%(CI)) N=113	Females (%(CI)) N=24
CIS-R Score ≥12	59 (43.1 (34.6-51.8))	49 (43.4 (34.1-53.0))	10 (41.7 (22.1-63.4))
CIS-R Score ≥18	35 (25.6 (18.5-3.7))	30 (26.6 (18.7-35.7))	5 (20.8 (7.1-42.2))
Any diagnosis from CIS-R	64 (46.7 (38.2-55.4))	52 (46.0 (36.6-55.7))	12 (50.0 (29.1-70.9))
Primary diagnosis from CIS-R			
Severe depression	17	13	4
Moderate depression	15	15	0
Mild depression	4	3	1
Panic disorder	2	1	1
General anxiety disorder (GAD)	5	4	1
Agoraphobia	0	0	0
Social phobia	0	0	0
Specific phobia	1	1	0
Mixed anxiety and depression	0	0	0
OCD	4	2	2
Mild GAD	3	2	1
Mild neurosis	13	11	2
Psychosis screening test			
Positive Screen	44 (32.1 (24.4-40.6)	35 (31.0 (22.6-40.4))	9 (37.5 (18.8-59.4))
Any mental health issue			
CIS-R Score ≥12 or Primary diagnosis or Positive Screen	76 (55.5 (46.8-64.0)	62 (54.9 (45.2-64.3)	14 (58.3 (36.6-77.9)

Table 23 displays a summary of the mental health results for the offenders in the study. The median total CIS-R score at baseline was 9.0 (IQR 4.0–18.5) with a range of zero to 37. Nearly half the sample scored ≥12 indicating a clinically significant level of distress and just over a quarter scored 18 or more

indicating more severe symptoms. The proportions of males and females scoring 12 or more and 18 or more were not significantly different.

Nearly half (46.7%) of offenders met the diagnostic criteria for at least one condition on the CIS-R. This was greater than the number of offenders that scored 12 or more as it is possible to have a diagnosis with a total score of less than 12.

The most common primary diagnosis was severe depression and the total prevalence of depression at baseline was just over a quarter (26.3%).

16.9% (23) of the sample had a secondary diagnosis which means they met the criteria for more than one diagnosis. 15 out of the 17 offenders with a primary diagnosis of severe depression also had a secondary diagnosis of either panic disorder (six), general anxiety disorder (seven), specific phobia (one) or obsessive compulsive disorder (one).

In the psychosis screening test, nearly a third screened positive. 31 of these also had a diagnosis on CIS-R. 12 only screened positive for psychosis and did not have a diagnosis on CIS-R.

The prevalence of mental health problems found in the study sample was similar to that found in prisoners except that in prison populations, females tend to have worse mental health than males (for example in sentenced prisoners, prevalence of CIS-R score of 12 or more was 39% in males and 62% in females [143]). However, the small sample size for females in the study as reflected in the wide confidence intervals may account for this difference.

A comparison can be made with the general population as the CIS-R has been used in the 2014 Adult Psychiatric Morbidity Survey (APMS) [189] to assess six types of common mental disorder – depression, generalised anxiety disorder (GAD), panic disorder, phobias, obsessive compulsive disorder (OCD) and common mental disorder not otherwise specified, as well as a score that reflects the overall severity of symptoms.

In the general population, the proportions scoring 12 or more and 18 or more on CIS-R are lower than in the probation sample (see Table 20) with more females reaching these thresholds than males.

In the general population this difference between males and females appears to have increased during recent years. For example, in 1993, 16 to 24 year old females (19.2%) were twice as likely as 16 to 24 year old males (8.4%) to have a CIS-R score of 12 or more. In 2014, a score of 12 or more was about three times more common in females of that age (26.0%) than men (9.1%). This does suggest that males in the study in particular are quite different with regards their mental health to the general population.

Scores of 12 or more were also found to be more prevalent in certain groups of the population. These groups included adults under the age of 60 years who lived alone, adults not in employment, those in receipt of benefits and those who smoked cigarettes. These associations are in keeping with increased social disadvantage and poverty being associated with higher risk of common mental disorder and go some way to explain why mental health problems might be more prevalent in people with court orders.

5.4.3.4 Smoking

105 which represents just over three quarters of the sample were current smokers (76.1% (66.1% – 82.9%)) and only 12.3% had never smoked. 77.2% (68.4% - 84.5%) of men and 70.8% (48.9% - 87.4%) of women were current smokers.

Over half (55.4%) of those who currently or previously smoked had stated smoking by the age of 15 years and by age 19 years, 90.1% had started smoking. 70.5% said they would like to give up smoking and 71.4% of current smoking said that they had previously tried.

This was similar to the levels found in Nottingham and Derbyshire probation (83%) [71] and in prisoners, estimates which are around 80% [191, 192]. This compares to a total national figure for England in 2012 of 19.5% (Southampton 22.5%, Portsmouth 22.5% and Isle of Wight 19.7%) [193].

Offenders tend to be from more deprived backgrounds where smoking prevalence is higher but even national smoking prevalence for the unemployed is at 39% and just over half (54%) of unemployed 25 to 34 year olds smoked in 2012 [198].

There is evidence that high prevalence of smoking is also associated with mental health problems, drug and alcohol misuse and homelessness [29]. Therefore, it is unsurprising that offender populations have such high smoking rates as they are a vulnerable group with complex needs. Smoking cessation programmes within the criminal justice system need to work alongside, rather than in isolation of, other interventions addressing the health and social needs of offenders.

5.5 Clustering of modifiable health problems

In this study population, multiple health issues were common. Considering smoking, using A or B class drugs (excluding cannabis) in the past four weeks, any mental health problem (CIS-R or psychosis screen positive) and alcohol (score of 16+ on AUDIT).

Table 24 shows the number of offenders that had multiple modifiable health problems and Table 25 shows the different clusters. The interplay of these health problems is shown in
Figure 14.

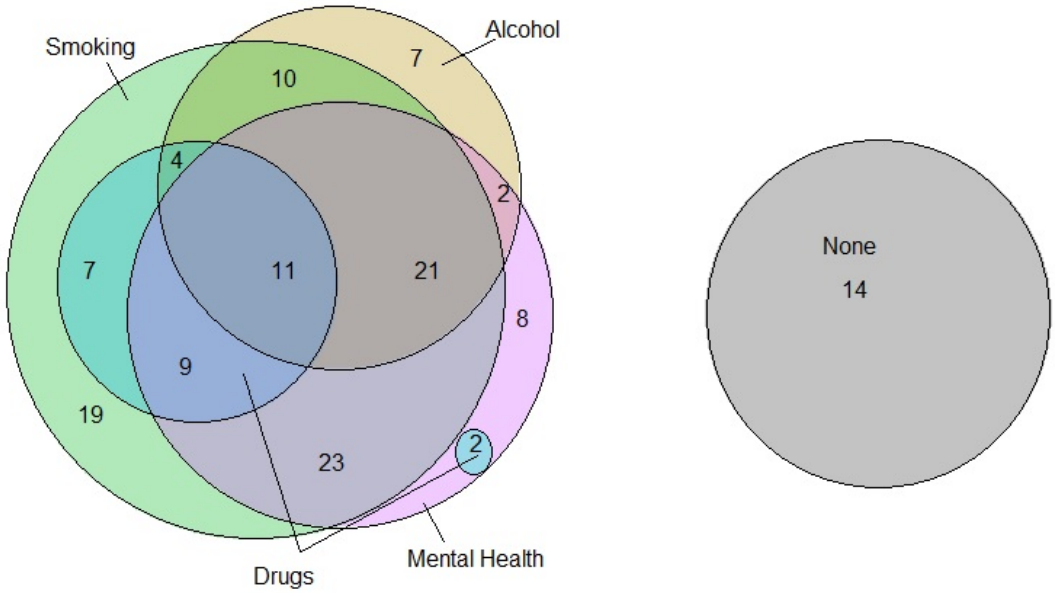
Table 24 Number of modifiable health problems

Number of health problems	**Number (%)** **n=137**
0	14 (10.2)
1	24 (24.8)
2	44 (32.1)
3	34 (24.8)
4	11 (8.0)

Table 25 Prevalence of clusters of modifiable health problems

Cluster	Number (%) n=137
None	14 (10.2)
Smoking only	19 (13.9)
Alcohol only	7 (5.1)
Mental health only	8 (5.8)
Smoking and alcohol	10 (7.3)
Smoking and mental health	23 (16.8)
Smoking and drugs	7 (5.1)
Alcohol and mental health	2 (1.5)
Smoking, alcohol and mental health	21 (15.3)
Smoking, alcohol and drugs	4 (2.9)
Smoking, drugs and mental health	9 (6.6)
Smoking, alcohol, mental health and drugs	11 (8.0)
Drugs and mental health	2 (1.5)

Figure 14 Venn diagram showing the clustering of modifiable health issues



Only a tenth had no health issues, nearly a quarter had one issue and nearly two-thirds had two or more issues. The largest groupings were smoking and mental health (16.8%) and smoking plus alcohol plus mental health (15.3%).

In a systematic review, Meader *et al* (2016) [199] examined a broad range of risk behaviours including smoking, physical inactivity, unhealthy diet, alcohol misuse, sexual risk behaviour and illicit drug misuse in UK studies. They reported that for adult populations, the strongest evidence for clustering was found for alcohol misuse and smoking with prevalence ranging from 9-14% across three studies (n=26,045). In this offender population, a third (33.6%) smoked and had an AUDIT score of 16 or more so nearly twice as high as a general adult population.

Meader *et al* also found that socio-economic status was the strongest predictor of engaging in multiple risk behaviours, so this may go some way to explain why nearly half of the study sample engaged in at least two of smoking, alcohol at harmful levels and taking class A/B drugs (excluding cannabis).

5.6 Prevalence of learning disability

Table 26 Quick Test (QT) scores of study sample compared to prisoners and general population

QT Score	Study sample			Prisoners from Singleton *et al* [143]				General Population
	Study Male (%(CI)) n=113	Study Female (%(CI)) n=24	Study Total (%(CI)) n=137	Male remand (%) n=1250	Male Sentenced (%) n=1120	Female remand n=187 (%)	Female sentenced (%) n=584	Total
42 or above	34 (30.0 (21.8-39.4))	4 (16.7 (4.7-37.4))	38 (27.7 (20.4-36.0))					(50)
41 or above	41 (36.3)	5 (20.8)	46 (33.6)	(14)	(24)	(12)	(16)	
36-40	51 (45.1)	10 (41.7)	61 (44.5)	(27)	(30)	(24)	(27)	
31-35	11 (9.7)	6 (25.0)	17 (12.4)	(27)	(24)	(33)	(28)	
26-30	9 (8.0)	3 (12.5)	12 (8.8)	(21)	(17)	(21)	(20)	
25 and below	1 (0.9)	0 (0)	1 (0.7)	(11)	(5)	(11)	(9)	
QT score mean (SE)	38.6 (0.53)	37.0 (0.93)	38.3 (0.47)	34	36	33	34	42

The mean scores for the study sample are lower than the general population. Just over a quarter scored 42 or above (indicating IQ of 100 or more). This is nearly half the number we would observe the general population.

The study sample had higher scores than prisoners but Singleton *et al* explains that the figures for prisoners might be lower as a computerised version of the Quick Test was used rather than the traditional paper format [143] . In addition, no adjustments were made for those offenders with English not as their first language.

Definition of learning disability would be an IQ of 69 or less which corresponds to a score of 26 or less on Quick Test. Only three offenders (2.2% (0.5%-6.3%)) scored 26 or less which is similar to other studies looking at learning disability in probation populations. Mason and Murphy (2002) [94] [93] reported a 5.7% (1.6% - 14.0%) and 4.4% (1.2% - 11.0%) prevalence of learning disability in Kent probation services.

5.7 Prevalence of self-reported long-term health problems

Table 27 Summary of self-reported long-term health problems

Type of issue	Number (%(CI)) n=138
Any mental health problem	33 (23.9)
Muscular-skeletal	16 (11.6)
Asthma/chest/lung problems	11 (8.0
Cardio-vascular	9 (6.5)
Alcohol	8 (5.8)
Visual impairment/eye problems	3 (2.2)
Epilepsy	3 (2.2)
Drug abuse	3 (2.2)
Diabetes	2 (1.5)
Irritable bowel syndrome	2 (1.5)
Hepatitis C	2 (1.5)
Pancreatitis	2 (1.5)
Other	1 (0.7) each of chronic fatigue, hernia, stomach ulcers, thalassemia, ulcers on leg following operation
Total number of offenders reporting some sort of long term health problems	79 (57.3 (48.6-65.6))

Just over a fifth of the study participants (21.0% (14.55%-28.77%)) reported that their health was bad or very bad and just over half (57.3% (48.55%-65.6%)) reported a long-standing illness.

The types of long-standing health problems are detailed in Table 27. Some offenders reported more than one problem. The most frequently reported issues were mental health, with nearly a quarter of offenders followed by muscular-skeletal problems, and asthma or chest and lung problems. The numbers reporting alcohol, drugs or mental health problems were much lower than the prevalence obtained in the study. It may be that offenders themselves do not see these types of problems as long-standing or do not recognise them as health problems at all.

5.8 Prevalence of inadequate health literacy

Table 28 Score on NVS-UK

NVS-UK Score	**Number (% (CI)) n=138**
0 – 1 (low health literacy)	23 (16.7 (10.9-24.0))
2 – 3 (intermediate health literacy)	42 (30.4 (22.9-38.8))
4 – 6 (adequate health literacy)	73 (52.9 (44.2-61.5))

Table 28 shows the offenders' scores on the NVS-UK. Nearly half scored three or less indicating inadequate health literacy skills so could have implications for the success of any interventions.

There is no UK population-wide comparison available but these results are similar to that found by Protheroe *et al* [200] who found 52% inadequate health literacy using the NVS-UK in a general population sample from Stoke-on-Trent where health, level of deprivation and educational attainment are lower than the English average.

NVS cannot measure the full range of skills needed to be health literate but as a short screening tool can be useful in this setting when brief interventions are being considered for an offender as part of sentence planning for supervision. It could help identify those people who may benefit from brief interventions and those that may need additional help or indeed interventions to improve health literacy. Including health literacy screening in any further trials of brief interventions may identify a sub group where brief interventions are beneficial.

5.9 Health service use in year prior to order

Table 29 Service use in year prior to court order compared with prisoners in the year prior to custody and offenders on a probation caseload in Nottinghamshire and Derbyshire

	Study sample			Singleton *et al* (1998)[143]				Brooker *et al* (2008) [71]
Service	**Number who used service (%) n=138**	**Male n=114**	**Female n=24**	**Male remand (%) n=1249**	**Male sentenced (%) n=892**	**Female remand (%) n=183**	**Female sentenced (%) n=491**	**Offenders on probation caseload in Nottinghamshire and Derbyshire (%) n=183**
GP (all problems)	91 (65.9)	72 (63.2)	19 (79.2)					146 (80)
GP (Mental health problems only)	36 (26.1)	26 (22.8)	10 (41.7)	(14)	(13)	(28)	(31)	
Dentist	55 (39.9)	39 (34.2)	16 (66.7)					101 (55)
Optician	30 (21.7)	25 (21.9)	5 (20.8)					47 (26)
Psychiatrist	13 (9.4)	10 (8.8)	3 (12.5)	(8)	(5)	(16)	(12)	
Psychotherapist	1 (0.7)	1 (0.9)	0 (0)	(1)	(0)	(1)	(2)	
Psychologist	0 (0)	0 (0)	0 (0)	(2)	(2)	(2)	(2)	
Community Psychiatric Nurse	6 (4.3)	4 (3.5)	2 (8.3)	(2)	(1)	(7)	(4)	
Any psychiatric professional	15 (10.9)	12 (10.5)	3 (12.5)	(10)	(7)	(19)	(16)	27 (15)
Psychiatric social worker	2 (1.5)	2 (1.8)	0 (0)	(1)	(0)	(5)	(1)	
Counsellor	11 (8.0)	9 (7.9)	2 (8.3)	(2)	(3)	(4)	(6)	

	Study sample			Singleton *et al* (1998)[143]				Brooker *et al* (2008) [71]
Service	**Number who used service (%) n=138**	**Male n=114**	**Female n=24**	**Male remand (%) n=1249**	**Male sentenced (%) n=892**	**Female remand (%) n=183**	**Female sentenced (%) n=491**	**Offenders on probation caseload in Nottinghamshire and Derbyshire (%) n=183**
Drugs worker	22 (15.9)	20 (17.5)	2 (8.3)					
Alcohol service	23 (16.7)	19 (16.7)	4 (16.7)					
A&E	47 (34.1)	41 (36.0)	6 (25.0)					72 (39) (including walk-in centre)
Acute hospital in-patient	25 (18.1)	20 (17.5)	5 (20.8)					25 (14)
Hospital out-patient	33 (23.9)	25 (21.9)	8 (33.3)					49 (27)
STI clinic	15 (10.9)	15 (13.2)	0 (0)					
Other (physio 4, walk in centre 1)	5 (3.6)	4 (3.5) (3 (2.6) physio)	1 (4.2) (Physio)					
Ever admitted to a psychiatric unit	12 (8.7)	10 (8.8)	2 (8.3)					

Most offenders (89.1% (82.7% - 93.8%)) were registered with a GP. This included all female offenders and 86.8% of male offenders indicating that GP registration may be an issue for males.

120 (87.0%) offenders had accessed some sort of health service in the 12 months prior to their order as seen in Table 29. The most accessed services were GP (65.9%), dentist (39.9%) and Accident and Emergency departments (A&E) (31.4%).

Nearly two thirds had visited a GP (for any issue) in the year before their order. A direct population comparison is not available but the GP patient survey for the year 2011/2012 reported that 72% of patients had seen or spoken to their GP in the last six months [201] so levels are similar, however, there is no comparison with need.

Just over a third had visited an Accident and Emergency department (A&E). Across England in the year 2010/11 there were approximately 21.4 million attendances at accident and emergency (A&E) and on average, a person attends A&E once every 5 years, however rates of attendance are higher for people during the first and last five years of life [202]. Although this is not a direct comparison, it does indicate that offenders with court orders are using A&E more than the general population. This figure is in line with findings by Brooker *et al* who reported that 39% of offenders in Nottinghamshire and Derbyshire Probation Trusts had visited A&E or a walk in Centre at least once in the 12 months prior to interview [71].

25 (18.1%) had had at least one inpatient episode for physical health issues and 33 (23.9%) had had at least one outpatient appointment (10 of these had also been inpatients). Again similar levels were reported by Brooker *et al* [71].

Two fifths of offenders had been to the dentist in the year before their order. This was less than Brooker *et al* who reported 55% in Derbyshire and Nottinghamshire [71]. However, their study sample included offenders released from prison on licence so may have had access to a dentist there. This compares to NHS England data that report that in the general population in England (survey between January and March 2012), 60% of adults tried to obtain an appointment with an NHS dentist in the previous two years with a

success rate of 95% [203]. This suggests that access to dental care may be an issue.

30 (21.7%) had been to the optician which was similar to Brooker *et al* who reported 26% [71].

Nearly a quarter of male offenders (22.8%) and just over two fifths (41.7%) of female offenders had visited a GP for mental health problems. Singleton *et al* reported a similar difference in male and female prisoners, with male remand and male sentenced prisons reporting 14% and 15% respectively, and female remand and female sentenced reporting 28% and 31% accessing their GP for mental health problems in the year prior to custody [143].

13 (9.4%) had seen a psychiatrist, 1 (0.7%) a psychotherapist and 6 (4.3%) a Community Psychiatric Nurse (CPN). This represented 15 unique individuals (10.9% (6.2%-17.3%)) which is similar to that reported by Brooker *et al* [71] for a probation population and Singleton *et al* [143] in prisoners. In addition nine (6.5%) offenders had received help from a counsellor.

12 (8.7%) had ever been admitted to a psychiatric hospital or ward and none had stayed longer than six months. Five of these were aged 16 years or under (youngest aged 13 years) when they were first admitted. Six of the 15 had only been admitted once, five twice and one five times.

22 (15.0%) had received help from a drug worker and 23 (16.7%) from an alcohol service (including 8 who had accessed both services) and one had also attended Alcoholics Anonymous. 15 (10.9%) had accessed a sexual health clinic in the previous year and all of these offenders were male.

There was a large disparity between those offenders identified in the study with health problems relating to mental health, alcohol or drugs and those which identified the issue themselves and those who received help from health services for their problems. This is demonstrated in Table 30.

Table 30 Service use and modifiable problems in year prior to order

Modifiable health problem	Number with problem identified in study (%) n=137	Number who identified this as a health issue n (%)	Number with issue who received help with this prior to order (specific service or general service excluding A&E) n (%)	Number with issue who did not receive help prior to Court Order. (UNMET NEED) n (%)	Number without issue identified in study who received help with this prior to order (specific service or general service) n (%)
AUDIT 16+	56 (40.9)	6 (10.9)	15 (27.3)	41 (73.2)	7 (8.5)
MH diagnosis on CIS-R or positive psychosis screen	76 (55.5)	27 (37.5)	28 (38.9)	48 (63.2)	13 (20.0)
A/B drug use in last 4 weeks (excl cannabis)	33 (24.1)	3 (9.1)	16 (48.5)	17 (51.5)	7 (6.7)
Any drug use in last 4 weeks	63 (46.0)	3 (4.8)	21 (33.3)	42 (66.7)	2 (2.7)

Of the 55 offenders who scored 16 or more on AUDIT, only six identified alcohol as a long term health problem and only 15 had received help from services in the year before their order. Seven scored less than 16 on AUDIT yet had received help from services for alcohol. Just over a third of those who scored positive on CIS-R or psychosis screening identified their mental health as a long term health issue and a similar number had received help from services. Around half of people who had taken class A or B drugs (excluding cannabis) in the previous four weeks to interview had received help from services but only three identified their drug use as a long term health problem.

Only a third who had taken any drugs (including cannabis) in the last four weeks had received any treatment in the past year.

What was striking about these results was that over half of the offenders identified as having a problem did not access any sort of service related to that need in the year prior to their Court Order, thus demonstrating an unmet need or problem with accessing services.

5.10 Summary

This chapter has addressed the research questions that relate to describing the population of people with court orders in relation to their social demographics, health related problems and access to services and where possible compared them with both prisoner and general populations.

This population is a relatively young population with much higher levels of problems when compared to the general population. These included social problems such as split families, insecure accommodation or homelessness, unemployment, low educational attainment and problems in childhood (as assessed by numbers who had been in Local Authority care). There were high levels of alcohol use, drug use, smoking and common mental health problems, and unmet needs were identified as many offenders with problems identified in the survey had not accessed the relevant services.

The study population was similar to the prison population in relation to these social and key health problems. However, that fact that these offenders are in the community and dispersed (unlike the prison population) provides a challenge to co-ordinating services and interventions.

It was also shown how these health and social indicators clustered in this population, demonstrating complexity and presenting a greater level of challenge to both probation services and health services. Health literacy was also low so needs to be considered when planning services.

6. Quantitative Follow-up Results

6.1 Introduction

This chapter presents the results from the quantitative study at follow-up. It firstly considers the entire sample, examines the numbers who had a successful outcome to their court order and explores some of the key health and social determinants of health that are associated with offenders completing their court order without breaching their order or being convicted of further crimes. It then describes the follow-up process, numbers excluded from follow up and those lost to follow up and the reasons. It then examines the results from the offenders who did complete the follow up questionnaire and presents the analysis from these paired data.

6.2 Factors associated with successful court order outcome

The flow diagram of the whole study has been presented previously in Figure 10. 24 out of 137 offenders in the study (17.5%) did not meet the requirements of their order (such as attending specified sessions) so were held in breach of their order. Just over a quarter (27.0%) committed further offences during their order. Seven (5.1%) offenders both breached their order and were convicted of further offences during their order. The result of breaching or further offences included resentencing, additional requirements, time added to current order or a custodial sentence. In total 83 out of 137 (60.6% (51.2%-68.8%)) completed their probation (or at time of follow up if court order was greater than one year) without breaching their order or committing further offences and this was the definition used in this analysis as a 'successful completion of Court Order.'

Table 31 Odds ratio results of logistic regression models on successful Court Order outcome

	Model 1 – crude odds ratios (OR)		Model 2 – adjusted OR for OGRS	
Variable	**Crude OR (CI)**	**Crude p value**	**Adjusted OR (CI)**	**Adjusted p value**
Not homeless	2.88 (1.15 – 7.23)	0.025	2.02 (0.71-5.72)	0.185
Not been in LA care	1.89 (0.81 – 4.41)	0.143	0.78 (0.26-2.32)	0.654
At least Grade C GCSE or equivalent	0.97 (0.47-1.94)	0.928	1.46 (0.62-3.40)	0.692
Married or living with current partner	2.01 (0.88-4.60)	0.099	1.46 (0.54-3.92)	0.458
Current work or education	2.12 (0.93 – 4.85)	0.074	1.15 (0.42-3.14)	0.790
Not have AUDIT score 16+	1.52 (0.76-3.06)	0.237	1.51 (0.66 – 3.47)	0.328
Not have AUDIT score 20+	2.19 (1.05-4.56)	0.036	1.53 (0.64-3.66)	0.345
No mental health problem	1.46 (0.73-2.93)	0.285	1.07 (0.46-2.48)	0.871
No A/B drug use (excl cannabis) in last 4 weeks	4.50 (1.95-10.37)	< 0.001	3.20 (1.22-8.38)	0.018
Not used drugs in last 4 weeks	3.62 (1.76-7.44)	< 0.001	1.11 (0.75-4.18)	0.193
Adequate health literacy	1.80 (0.90-3.60)	0.096	1.22 (0.54-2.77)	0.635

Table 31 shows the results of the logistic regression. Model 1 gives the crude odds ratios which were then adjusted for OGRS (Offender Group Reconviction Scale) in model 2.

In model 2, the only factor that remained significant was not using class A and B drugs (excluding cannabis). Offenders who take class A/B drugs (excluding cannabis) have over three times the odds of breaching or committing further offences while on a Court Order than offenders who do not take these drugs, p = 0.018. This suggests that in addition to an offender's OGRS score which is based on age, gender and previous conviction history, drug use should be considered when considering an offender's risk of re-offending or ability to complete order requirements, and sentence plans adjusted accordingly.

This analysis also does not take into account those offenders who received interventions for their various problems as it just looks at possible predictors from the beginning of the court order. The next section does look at the impact of interventions or help received from health services during the court order.

6.3 Follow-up

65 out of 138 (47.1%) completed a follow-up interview. 30 participants were excluded and 43 were lost to follow up and the reasons for this are shown in Figure 10. Therefore, 108 offenders were eligible for follow-up and of these 65 (60.2%) completed the follow-up interview.

Table 32 Comparison of offenders followed-up and those lost to follow-up

		Follow-up (n=65)		Did not follow-up (n=73 or 72)		P value
Variable	**Values**	**N**	**%**	**N**	**%**	
Gender	Male	56	86.2	58	79.5	
	Female	9	13.8	15	20.5	0.300
Ethnic group	White British/Irish/Other	59	90.8	63	86.3	
	Black Caribbean	1	1.5	0	0	
	Black or Black British: African	1	1.5	3	4.1	0.649
	Black or Black British: Other	0	0	2	2.7	
	Asian or Asian British: Indian	0	0	1	1.4	
	Mixed White and Black: Caribbean	2	3.1	2	2.7	
	Other	2	3.1	2	2.7	
Age	<25	11	16.9	16	21.9	
	25-34	15	23.1	30	41.1	
	35-44	22	33.8	16	21.9	0.116
	45-54	14	21.5	10	13.7	
	≥55	3	4.6	1	1.4	
Probation office	Isle of Wight	7	10.8	7	9.6	
	Portsmouth	17	26.2	9	12.3	0.099
	Southampton	41	63.1	57	78.1	
Type of court order	Community order	50	76.9	55	75.3	0.828
	Suspended Sentence Order	15	23.1	18	24.7	
Tier of offender	1	13	20.0	14	19.2	
	2	17	26.2	21	28.8	0.443
	3	34	52.3	33	45.2	
	4	1	1.5	5	6.8	
Number of requirements	1	24	36.9	27	37.0	
	2	31	47.7	33	45.2	0.552
	3	7	10.8	12	16.4	
	4	3	4.6	1	1.4	
Type of offence	Violence	8	12.3	5	6.8	
	Sex offence	2	3.1	0	0	0.463
	Robbery	0	0	1	1.4	
	Burglary	2	3.1	2	2.7	
	Theft and handling	6	9.2	17	23.3	
	Fraud and forgery	2	3.1	4	5.5	
	Criminal damage	3	4.6	2	2.7	
	Indictable motoring offences	0	0	1	1.4	
	Other indictable offences	4	6.2	5	6.8	
	Summary motoring offences	7	10.8	8	11.0	
	Other summary offences	26	40.0	24	32.9	
	Drugs	5	7.7	4	5.5	
Health-related modifiable risk factors at baseline	Alcohol AUDIT 8+	46	70.8	46	63.9	0.392
	Alcohol AUDIT 16+	29	44.6	26	36.1	0.311
	Any drug in past 4 weeks	23	35.4	40	55.6	0.018
	A/B drug excluding cannabis in the last 4 weeks	11	16.9	22	30.6	0.062
	Current smoker	46	70.8	59	80.8	0.167
	Mental health problem (CIS-R or Psychosis screen)	29	44.6	43	59.7	0.077

Demographics and health-related modifiable factors were compared between offenders who did or did not complete the follow-up interview (Table 32). The only statistically significant difference between the two groups (highlighted) was in taking any drug in the last four weeks at baseline, with those who had taken any drug in the last four weeks at baseline less likely to complete a follow-up interview (p=0.018). This trend continued with those taking class A or B drugs but excluding cannabis but this difference was not significant (p=0.062). This is not surprising as drug use was shown as a risk factor for breaching a Court Order or reoffending.

6.4 Paired data

The following section examines the paired data obtained on 65 offenders who completed the follow-up questionnaire. It explores interventions received and changes during the Court Order.

6.4.1 Individual characteristics and wider determinants of health

6.4.1.1 Marital status

One offender changed marital status and divorced. The others remained the same.

6.4.1.2 Accommodation

Table 33 Accommodation at baseline and follow-up

		Accommodation at follow-up							Total
		Not homeless				Homeless			
Baseline accommodation		Own home	Rented self-contained accommodation	Rented bedsit or room with share amenities	Staying in someone else's home (family or partner)	Hostel or other temporary accommodation	Living on the streets	Staying in someone else's home	
Not homeless	Own home	6	2	1	0	0	0	0	9
	Rented self-contained accommodation	0	23	1	1	0	0	0	25
	Rented bedsit or room with shared amenities	0	3	3	0	0	2	1	9
	Staying in someone else's home (family or partner)	0	2	0	4	0	0	2	8
Homeless	Hostel or other temporary accommodation	0	2	1	0	2	0	0	5
	Probation hostel	0	0	0	0	1	0	0	1
	Staying in someone else's home	0	3	1	2	0	0	2	8
	Total	6	35	7	7	3	2	5	65

Nearly half (46.2%) had changed residence, five (7.7%) had become homeless (shaded red on table), including two now living on the streets, five (7.7%) remained homeless (shaded orange on table) and nine (13.9) were previously homeless now had accommodation (shaded green on table).

6.4.1.3 Employment

Table 34 Employment status at baseline and follow-up

		Employment status at follow-up							Total
		Not working			Working or education				
Baseline employment status		Unemployed seeking work	Not working due to health reasons	Full time carer	About to start work	Full time work	Part time work	Full time education	
Not working	Unemployed seeking work	16	6	0	1	4	3	0	30
	Not working due to health reasons	0	14	0	0	1	0	0	15
	Not working as bringing up family	0	1	0	0	0	0	0	1
	Full time carer	0	0	1	0	0	0	0	1
Working or education	Full time work	1				6			7
	Part time work	2				3	3		8
	Full time education		1					2	3
	Total	19	22	1	1	14	6	2	65

There was a small net improvement of employment status for offenders. Nine (13.9%) offenders had moved from not working into work and three (4.6%) had been working part time at baseline and were now working full time (green shading on table). Four (6.2%) offenders who had been in work or education at baseline were now not working (shaded in red on table).

However, nearly half (43.1%) had not worked at all since the first interview and two has had some intermittent work but were currently unemployed. A third of offenders were not working because of sickness or disability (33.8%). This highlights that lack of employment is still a major issue for many at the end of their Court Order.

6.4.2 Modifiable health problems

6.4.2.1 Alcohol

Table 35 AUDIT group at baseline and follow-up

	Audit Group at follow-up				
AUDIT Group baseline	**0-7**	**8-15**	**16-19**	**20+**	**Total**
0-7	14	4	1	0	19
8-15	6	10	1	0	17
16-19	1	5	2	1	9
20+	5	4	3	8	20
Total	26	23	7	9	65

Over the duration of their court order, 20 (30.8 %) offenders did not change AUDIT score group (orange shading on Table 35). 14 were already in the 0-7 group at baseline. 24 (36.9%) were in a lower group so had improved their drinking habits (shaded green) and seven had increased AUDIT group (shaded red).

6.4.2.1.1 Access to alcohol interventions during Court Order

Overall, 18 offenders (27.7%) accessed an alcohol service during their order. Nine of these offenders (50.0%) did not access this service in the year before their order and nine continued to access services. Five offenders reported accessing alcohol services before their court order but not during it.

Of the 18 offenders who accessed alcohol services during their order, three did as part of an alcohol treatment, and three as a specified activity.

Out of the 18 who did access alcohol services during their Court Order, only one offender had an increase in AUDIT score between baseline and follow-up. Two offenders maintained a score between 0-7, and 10 offenders had moved down at least one AUDIT group so represented a clinically important change.

Of the 47 who did not access alcohol services during their order, 15 scored 16 or more at baseline, indicating harmful levels of drinking so these offenders may have benefitted from an alcohol referral but did not receive one, although nine of these also reduced their AUDIT score grouping at follow-up.

Considering those 29 offenders who scored 16 or more at baseline, eight out of 12 (66.7%) who accessed alcohol services improved AUDIT group but this was not significant (p=0.67) when compared to the nine out of 15 (60.0%) who improved AUDIT group but did not report accessing alcohol services.

6.4.2.1.2 Alcohol treatment as part of a Court Order

There are two options for alcohol treatment available to the courts. The first is an alcohol treatment order which is targeted at offenders assessed as alcohol dependent and consists of community-based, care planned treatment. The second is as a specified activity which aims to deliver structured brief advice or more extended brief intervention to specifically address alcohol-related offending behaviour [162].

Three offenders had an alcohol treatment order. One recorded a reduction in AUDIT score from 35 to six. The second recorded a reduction from 37 to eight and the other saw a reduction from 30 to 25 (although they remained in the same AUDIT grouping). All three said that the treatment order helped them. One explained that

> "It gave me someone independent to talk to. A form of counselling. I got a lot more out of it than I thought."

Another said that as a result he was

> "Going in the right direction. Don't drink. Doing some carpentry and volunteer work."

Three offenders received alcohol as a specified activity by the courts and the views expressed about how helpful this part of their Court Order varied. The first reduced from a score of 31 to a score of 6, the second saw a reduction from 22 to 16 and the third a small, but not clinically significant, reduction from 40 to 39. The first offender (AUDIT reduced from 31 to 6) did not find the activity helpful. They said

"Had to do the course, I don't think it helped. Stopped drinking by myself the week after the course had finished."

The second offender (AUDIT reduced from 22 to 16) found the specified activity helpful as it

"Made me realise about the amount I was drinking."

The third (who's AUDIT score had only reduced from 40 to 39) did not think that it had helped them. They said

"I didn't like the group work but the one to one sessions were helpful."

6.4.2.2 Drugs

Table 36 Drug usage in four weeks before interview at baseline and follow-up

	Follow-up usage in 4 weeks prior to interview			
Baseline usage in 4 weeks prior to interview	**Class A or B drugs (excluding cannabis)**	**Cannabis and/or other drugs**	**No drugs**	**Total**
Class A or B drugs (excluding cannabis)	6	3	2	11
Cannabis and/or other drugs	1	5	6	12
No drugs taken	2	0	40	42
Total	9	8	48	65

These results suggest a small improvement with eight offenders ceasing drug taking and three not taking Class A or B drugs (shaded green). Two offenders had relapsed and one had increased drug use to include class A/B drugs (shaded red).

6.4.2.2.1 Access to drug interventions

In total, 11 offenders reported using a drug service during their Court Order. Of these, four were on drug treatment orders and three were referred by probation staff. Four offenders who reported using the drug service during their order also reported using the service in the year prior to their order.

In total only nine out of 23 offenders who reported using any drug at baseline accessed drug services (the other two did not report drug use at baseline and one of these was already in the drug service). This means that there were potentially 14 offenders who could have benefited from drug services during their order (one of these had accessed drug services prior to their order). Four of these reported using class A drugs at baseline.

6.4.2.2.2 Drug rehabilitation requirement

A drug rehabilitation requirement (DRR) is an option for the courts in sentencing as part of a Community Order or Suspended Sentence Order. The amount and intensity of the drug treatment can be tailored to the individual needs of the offender. DRRs can be given when the offender is dependent or has the propensity to take illegal drugs, the ability for the offender to benefit from the DRR is demonstrated and the offender shows willingness to comply with the requirement [162].

Four of the offenders received a DRR as part of their sentence. Three of these offenders reported taking one or more of opiates, crack, cocaine, amphetamine or ketamine at baseline and one reported using cannabis only. All four offenders showed an improvement at follow-up. The offender who reported only cannabis use at baseline reported no drug use at all at follow up. The offender who reported cocaine and cannabis use at baseline reported no drug use at follow-up. The third offender had reduced from using cocaine, amphetamine, ketamine and cannabis at baseline was only using cannabis at follow-up. The final offender showed a reduction in their use of heroin and crack from using 14 out of 28 days at baseline to only 2 out of 28 days at follow up.

All four offenders reported that their DRR helped them. One said it

> "Gave me something to focus on and gave me the opportunity to work."

Another said that it helped because they

> "Have now stopped taking drugs."

Three other offenders were referred to drug services by probation staff (interestingly one of these offenders did not report drug use at baseline)

One offender who was also on a DRR was referred by probation staff to a health trainer for help with drug use and lifestyle.

6.4.2.3 Mental health

Table 37 CIS-R score of sample at baseline and follow-up

	CIS-R score group at follow-up			
CIS-R score group at baseline	**0 - 11**	**12 - 17**	**18+**	**Total**
0-11	31	6	3	40
12-17	4	2	3	9
18+	5	3	8	16
Total	40	11	14	65

Table 38 CIS-R primary diagnosis of sample at baseline and follow-up

Baseline	Follow-up										Total
Primary diagnosis CIS-R in hierarchical order from most severe to no diagnosis	**Severe depression**	**Moderate depression**	**Mild depression**	**Panic disorder**	**General anxiety disorder (GAD)**	**Mixed anxiety and depression**	**OCD**	**Mild GAD**	**Mild neurosis**	**No diagnosis**	
Severe depression		4	1	1	1			1			8
Moderate depression		1	1							2	4
Mild depression		1								1	2
Panic disorder				1							1
General anxiety disorder (GAD)	1							1		1	3
Mixed anxiety and depression											0
OCD										1	1
Mild GAD		1							1		2
Mild neurosis		1							1	3	5
No diagnosis		2			1	1			4	31	39
Total	1	10	2	2	2	1	0	2	6	39	65

The median CIS-R total score for the follow-up sample was 7.0 (IQR = 0–16.5), lower than at baseline for the paired data with a median of 9.0 (IQR = 3.0–17.5). However, to assess a change in mental health, both CIS-R score by group and by primary diagnosis was compared (Table 37 and Table 38).

12 offenders showed greater distress than at baseline as their grouping increased (shaded red on table) and 12 showed an improvement in grouping with nine now not demonstrating distress (shaded green).

A similar pattern was seen when comparing primary diagnosis. 19 (29.3%) improved mental health status (shaded green), three (4.6%) had the same primary diagnosis (shaded orange) and 12 (18.5%) a worse a mental health diagnosis.

6.4.2.3.1 Access to mental health services

Table 39 shows the reported service use for mental health related problems during the Court Order and the number of offenders that started using the services during their order.

Just over a third (33.9%) of the follow-up group reported that they had received help for mental health during their order and the majority of this help was from a GP.

13 out of 19 (68.4%) offenders with a mental health problem at baseline who reported accessing mental health services during their Court Order improved their CIS-R primary diagnosis compared to five out of 15 (33.3%) offenders who did not seek help. Therefore, those offenders with a baseline mental health diagnosis who accessed any sort of mental health support (including GP) during their order were more likely to have an improved or no diagnosis at follow-up ($p = 0.042$) than those who did not access any services.

6.4.2.4 Smoking

46 out of 65 (70.8%) reported smoking at baseline and 48/65 (73.8%) reported smoking at follow-up. One offender gave up smoking during their order as they had a heart condition. Three offenders who reported not smoking at baseline were smoking at follow-up.

Only three (4.6%) offenders reported any help with trying to give up smoking although 15 reported trying to give up during their order. Another offender had nicotine patches from GP and did give up but relapsed. A second attended 'Quitters' and a hypnotherapy group at work and a third tried acupuncture and managed to cut down.

6.4.3 Service use

6.4.3.1 Overall use of health services

Table 39 Service use in year before, and during order

Service	Number who used service prior to order (%). n=65	Number who used service during order (%). n=65	Number who accessed services during order but did not before (new access) (%) n=65	Proportion of new access of all access during order (%)
GP (all problems)	47 (72.3)	49 (75.4)	12 (18.5)	12/49 (24.5)
GP (Mental health problems only)	20 (30.8)	21 (32.3)	12 (18.5) (7 had been to GP before order but not for mental health issues)	12/21 (57.1)
Dentist	28 (43.1)	28 (43.1)	15 (23.1)	15/28 (53.6)
Optician	16 (24.6)	20 (30.8)	9 (13.9)	9/20 (45.0)
Psychiatrist	7 (10.8)	1 (1.5)	0 (0)	0 (0)
Psychotherapist	0 (0)	1 (1.5)	1(1.5)	1/1 (100)
CPN	3 (4.6)	5 (7.7)	3 (4.6)	3/5 (60.0)
Any mental health professional	7 (10.8)	6 (9.2)	1(1.5)	1/6 (16.7)
Psychiatric social worker	0 (0)	1 (1.5)	1(1.5)	1/1 (100)
Counsellor	3 (4.6)	6 (9.2)	6 (9.2)	6/6 (100)
Drugs worker	6 (9.2)	11 (16.2)	7 (10.8)	7/11 (63.6)
Alcohol service	14 (22)	18 (27.7)	9 (13.9)	9/18 (50.0)
A&E	23 (35)	17 (26.2)	3 (4.6)	3/17 (17.7)
Acute hospital in-patient	14 (22)	9 (13.9)	5 (7.7)	5/9 (55.6)
Hospital out-patient	20 (31)	16 (24.6)	7 (10.8)	7/16 (43.8)
STI clinic	8 (12.3)	6 (9.2)	4 (6.2)	4/6 (66.7)

Table 40 Referrals by probation staff to health services

Reason for referral	Service
Alcohol and general lifestyle advice	Alcoholics Anonymous Health Trainer
Alcohol and lifestyle advice for diabetes	Alcohol service Health Trainer
Child abuse counselling	Counsellor Health Trainer
Childhood abuse, counselling, GP to change medication	GP Counsellor
Healthy lifestyle advise and options	Health Trainer
Back to mental health team	CPN
Anger management	Counsellor
Alcohol	Alcohol service
Pains in chest	GP
Drugs and lifestyle advice	Health trainer
To start getting fit	Health trainer
Alcohol and general well-being	GP Health Trainer
GP regarding isolation and mental health (GP then referred to community mental health team) health trainer for isolation	GP Health Trainer
Relationship problems	Women's wisdom service
Cannabis use	Health Trainer
Had stopped taking medication for bipolar disorder	GP
Drug addiction	Drug worker Health Trainer
Alcohol and drugs	Drug worker Alcohol service
'Steps to wellbeing' course suggested due emotional state following a friend committing suicide	Steps to wellbeing course
Drugs	Drug worker
Counselling as mental health fluctuates	Counsellor
Manage depression	GP
Mental health	GP (but did not taken this up)
Housing	Health Trainer

Table 39 shows the number of offenders who have accessed health services during their order and compares this to the baseline figure. It also shows the number of offenders who accessed a service during their order but did not access that service in the year before their order (new access). The number of new offenders accessing a service could be indicative of the Court Order process enabling access. 63.6% and 50.0% of offenders who accessed drug and alcohol services respectively during their order had not accessed these services before their order.

Offenders were also asked if anyone within the probation service had referred them or recommended that they access any health services. 24 (36.9%) offenders received such a referral and the types of referrals are shown in Table 40. The referrals or recommendations were made for services such as drug and alcohol services, mental health, GP and the Health Yrainer service. This demonstrates the important role probation staff have in enabling offenders to access services.

6.4.3.2 Health Trainers

Health Trainers were a service available in Hampshire Probation Trust. Although Health Trainers are available in the community, this particular service is only available to offenders supervised by Hampshire Probation Trust.

18 out of 65 (27.7%) offenders reported seeing a Health Trainer during their order. The issues were varied but 15 (83.3%) thought that the service had helped them and 11 (61.1%) reported that things had improved as a result of seeing a Health Trainer.

The issues dealt with included lifestyle advice including gym membership (seven), help with housing issues (three), financial or benefit problems (three), drugs (two), smoking, diabetes, finding a GP and child abuse. All those that used the service would recommend it.

Table 41 Use of Health Trainer service by offenders and their views of the service.

No. of sess-ions	Issues dealt with	Improvements made	Health Trainer helped me with the specific problem(s) that I had	By seeing a Health Trainer, things have improved	I would recommend the Health Trainer service	How do you think the Health Trainer Service could be improved?
12	Helping me to stay in my flat and appeal against eviction order. Health Trainer came to court, accompanied me to view new flat and helped with tenancy papers.	I get confused so it has been really helpful to have someone there who knows what's going on	Strongly agree	Strongly agree	Strongly agree	No - they are doing everything they can
10	Gave me all the information I needed about diabetes and controlling it. Informal chat where things could come out, it was good that he had been through the system himself.	Diabetes (type II) under control to the point where the doctor has stopped the metformin medication.	Strongly agree	Strongly agree	Strongly agree	I don't think so, I had a very good working relationship with the health trainer
8	Exercise, eating healthily, money management, having somebody else to talk to who had had a similar experience.	Contacted the people I owed money to sort out debts, now exercising more (walking) and eating better	Strongly agree	Strongly agree	Strongly agree	No - it worked very well

No. of sess-ions	Issues dealt with	Improvements made	Health Trainer helped me with the specific problem(s) that I had	By seeing a Health Trainer, things have improved	I would recommend the Health Trainer service	How do you think the Health Trainer Service could be improved?
6	Healthy lifestyle, motivation, nutrition and healthy eating.	Helped me quite a lot, made me find out about other activities like fishing and football. Set me on right path on what I wanted to do	Strongly agree	Strongly agree	Strongly agree	No - worked well for me
5	Smart cities card, well-being - how I was and how I was getting on	A little bit	Strongly agree	Agree	Strongly agree	No
4	Stop injecting drugs and engage with drug service, general chit chat, referred to CAB for help with a benefit tribunal	Not really as not ready to stop taking drugs, helpful to talk, won tribunal	Agree	Disagree	Agree	No - very good but I was not ready to stop taking drugs
3	To help finding housing more recently to talk about finding a gym membership	Helped to get on to housing register and to get housed (not working at the time), gave information on gym for when working - will follow up	Agree	Agree	Agree	Happy with the service, good to have someone to talk to

No. of sess-ions	Issues dealt with	Improvements made	Health Trainer helped me with the specific problem(s) that I had	By seeing a Health Trainer, things have improved	I would recommend the Health Trainer service	How do you think the Health Trainer Service could be improved?
3	Debt Relief order	Not yet - still ongoing	Undecided	Undecided	Agree	Making sure that they keep in contact with you if you leave a message as have been waiting 2 months
2	Food plan, what was good and what was bad food	Yes, changes what I eat - eating the good food	Strongly agree	Strongly agree	Strongly agree	no
2	Can't remember, general chat about where to get help about abuse as a child	No as no further action taken	Strongly agree	Disagree	Strongly agree	no
1	General chat about health and where I wanted to be	Changed lifestyle and stopped amphetamines and more exercise	Strongly agree	Agree	Strongly agree	They could be involved in running an exercise session rather than just talking about things
1	Cannabis	Stopped smoking/ cannabis	Agree	Agree	Agree	Friendly and well informed

No. of sess-ions	Issues dealt with	Improvements made	Health Trainer helped me with the specific problem(s) that I had	By seeing a Health Trainer, things have improved	I would recommend the Health Trainer service	How do you think the Health Trainer Service could be improved?
1	Housing advise	Advice was useful	Agree	Agree	Agree	
1	Gave information, residential activities week		Agree	Undecided	Strongly agree	Perfect - lots of options available
1	Smoking	Made me think	Strongly agree	Undecided	Agree	Good presentation, chlamydia test good idea
1	Free access to gyms and swimming pool but not eligible as on carers allowance and not income support	None	Disagree	Disagree	Strongly agree	No, as didn't have much contact
1	Nothing - just told me the sort of things he could help with but I didn't follow it up	None	Undecided	Disagree	Agree	No
1	Finding a GP as new to the area	Recommended a GP and registered.	Strongly agree	Agree	Agree	

6.5 Summary

This chapter has addressed the research questions regarding feasibility of follow-up in this population, information on change during the Court Order and understanding of the sort of interventions received by offenders.

It is feasible to follow-up this population if it is done before they finish their Court Orders. Having a researcher based in a probation office would be the best way to do this to both build relationships with the staff and be available when the offenders attend for other appointments and it is best to link interviews with other appointments in the probation office.

Class A/B drug use was shown to be a significant factor in predicting the outcome of a Court Order even when controlling for the probability of reoffending in one year (the OGRS). This suggests that addressing drug use should be a significant factor in any sentence planning and rehabilitation.

There were improvements for some in accommodation and employment but these were not widespread throughout the sample. This is of concern as these are known risk factors for reoffending [5] and highlights that more assistance is needed in these areas.

There was an overall improvement in alcohol use within the group and positive feedback about Alcohol Treatment Orders. Change in drug use and mental health was less clear with some individuals improving and others staying the same or deteriorating. Improvement in mental health was associated with accessing services, showing the importance of treatment.

Overall not everyone who has a need identified accessed services, so further work is needed to identify these offenders in probation services and signpost or refer onto the appropriate services.

7. Qualitative Results

7.1 Introduction

This chapter sets out the qualitative work which is a thematic analysis of in-depth interviews undertaken with offenders and examines the results through the lens of Maslow's hierarchy of needs [172].

The quantitative work in this study has identified that multiple health and social problems exist in this offender population and understanding from an offender's point of view how this clustering comes about and the barriers they face in trying to meet basic needs may go some way to help design interventions that provide this basic platform from which other challenges can be addressed.

7.2 Offenders interviewed

Table 42 Characteristics of the qualitative interview sample

Variable	Values	n (%)
Gender	Male	24 (82.8)
	Female	5 (17.2)
Ethnic group	White British/Irish/Other	27 (93.1)
	Black Caribbean	1 (3.4)
	Black or Black British: Other	1 (3.4)
Age	<25	3 (10.3)
	25-34	7 (24.1)
	35-44	11 (37.9)
	45-54	8 (27.6)
Probation office	Isle of Wight	2 (6.9)
	Portsmouth	13 (44.8)
	Southampton	14 (48.3)
Type of Court Order	Community order	19 (65.5)
	Suspended Sentence Order	10 (34.5)
Tier of offender	1	1 (3.4)
	2	10 (34.5)
	3	17 (58.6)
	4	1 (3.4)
Number of requirements	1	7 (24.1)
	2	16 (55.2)
	3	4 (13.8)
	4	2 (6.9)
Type of offence	Violence	3 (10.3)
	Sex offence	2 (6.9)
	Burglary	1 (3.4)
	Theft and handling	2 (6.9)
	Criminal damage	1 (3.4)
	Summary motoring offences	3 (10.3)
	Other summary offences	15 (51.7)
	Drugs	2 (6.9)

Table 43 Needs identified at baseline

Variable	Values	n (%)
Health-related modifiable factors	Alcohol AUDIT 16+	16 (55.2)
	A/B drug excluding cannabis in the last 4 weeks	8 (27.6)
	Current smoker	25 (86.2)
	Mental health problem (CIS-R or Psychosis screen)	20 (69.0)
Multiple health-related modifiable factors	0 factors	2 (6.9)
	1 factor	3 (10.3)
	2 factors	10 (34.5)
	3 factors	10 (34.5)
	4 factors	4 (13.8)
Factors of social disadvantage	Homeless	7 (24.1)
	Not working	25 (86.2)
	Ever in care as a child	6 (20.7)
	No GCSE grade C	15 (51.7)
Multiple factors of social disadvantage	0 factors	1 (3.5)
	1 factor	8 (27.6)
	2 factors	16 (55.2)
	3 factors	3 (10.3)
	4 factors	1 (3.5)

Table 42 displays the demographic characteristics of the sample and Table 43 shows the number of offenders with identified needs at baseline in the quantitative part of the study. The aim was to interview a maximum variety sample so offenders with different characteristics and different problems were recruited.

28 of the 29 offenders interviewed were all nearing the end, or had reached the end of their Court Order. In this study those offenders who had been sent to prison during their order were excluded from follow-up so those interviewed were offenders who mostly had a successful outcome from their probation experience. However, this gives us the opportunity to gain an understanding from their narratives about the challenges they have faced and their future aspirations.

All 29 offenders were part of the quantitative study. 28 of these were part of the follow up study. The other one was excluded from follow-up as she had breached her original order which was then revoked by the courts and she was sentenced to a curfew (identified by DNF in the code in brackets). However, she was contacted through another offender and as she had not completed her order she was interviewed to add a different perspective. The code in brackets after quotes used relates to the offender's study identification number, whether they were male or female (M or F), age at baseline, type of court order (C for community order and S for suspended sentence) and tier level assigned by the Probation Service (1 - 4).

7.3 Physiological needs

Physiological needs encompass the basic needs of human existence and include food, drink and shelter to provide warmth and rest. Lack of work or the ability to work meant income was limited so basic needs could not always be realised. The two key areas within this that participants spoke about were income and homelessness.

7.3.1 Income

The relationship between poor income and health is well established [204]. A lack of money means that people are unable to purchase goods and services that maintain or improve health and prevents people from participating in social activities to enhance their life, and can leave them feeling that they are less worthy in society than the better-off [204]. If income is restricted then it is hard to meet basic needs (at the bottom of Maslow's hierarchy). Participants explained how the lack of money was associated with problems meeting basic needs which in turn were associated with substance use, mental health problems and offending.

7.3.1.1 Impact of limited money

Unemployment was a common factor and many participants spoke about money problems and the impact it had on them. In some cases it was related to material needs such as housing "I can't afford the rent because we've got to pay the top up." This meant going into alternative accommodation which was

not suitable but “if I didn't take it, I'll have nowhere to live because everybody wants huge deposits and references” (1019 M 45 C 2).

Lack of resources limits the offenders’ ability to meet their proximal and distal goals and means that “boredom is a big factor” (1075 M 37 S 2) because “it’s not as if I’ve got the money to go out and do activities” (1075 M 37 S 2). This then perpetuates the cycle of substance use and offending “because I'm left to twiddle my thumbs and ... start taking drugs and drink, just to get through the day, really” (1067 M 33 C 2).

There was an element of despair that without money, basic needs such as warmth and money could not be met with the only options being to “sit here, put my cap out and hope someone will go by and drop me some money without asking…… or shoplifting.” (1075 M 37 S 2)

The impact on mental health caused by basic needs not being met was also apparent with participants who had symptoms of depression and “worry around money” because “money is always a problem” (1062 F 20 C 3).

7.3.1.2 Problems with benefits

Most of the offenders interviewed were not working and were in receipt of benefits. They described not only the problems associated with limited income but the additional problems caused relating to how these were paid and how the decisions about them were made, including fitness to work assessments. They described the impact that reductions had on their ability to maintain stability, for example, delays in payment putting them into rent arrears with the result being that “I got evicted” (1063 F 34 C 3 DNF). The tone that ran through was that the system was not responsive to their needs and there was no understanding about the impact of decisions had on their ability to function. A wheelchair-bound participant was not able to attend his assessment as it was on the second floor of a building with no lift:

> “I mean the only hard bit is trying to get your benefits sorted... I mean I’ve been waiting for a year now and they like send me for a medical: but we can’t do the medical. Well, when are you going to see me? Well, we’ll send it back to the social and they don’t want to know - it’s like that’s the hard bit” (1069 M 47 S 2 and wheelchair-bound).

7.3.2 Homelessness

Many of the participants had experienced homelessness during their lives and some still were homeless. Lack of shelter is often as a result of other problems such as alcohol or other drug use, violence, or relationship breakdown; conversely the loss of shelter may lead to substance use and offending behaviour.

Many described homelessness as a catalyst for the development of other problems including problematic drug or alcohol use and consequent contact with the criminal justice system as "everything just went downhill again" (1063 F 34 C 3 DNF). It was often described as part of the tenuous nature of their lives, without much in the way of buffer or safety net. For example moving in with a new partner meant giving up your own house, "so when it all hit the fan I was homeless again" (1042 M 51 C 2) resulting in a lapse back to alcohol, drug taking and "the worst year of my life; terrible, because I got into trouble with the Old Bill more times than anything." (1042 M 51 C 2).

"To not worry about having to have somewhere to sleep, I was taking amphetamines to stay awake all night" (1001 M29 C 3), and then this had a knock on effect in terms of involvement with the Criminal Justice System as "I'd keep breaking into derelict buildings just to like have a roof over my head like if it was raining and things…Well, I got arrested for it" (1001 M29 C 3).

However, the factors around homelessness are complex and multifactorial and at times circular. Rather than homelessness being the first episode in a downward spiral of events, others described how "I was homeless because drink got me there" (1089 M 37 C 2). "Drinking too much… Too many loud parties, too many visits by the police, so I lost my accommodation" (1022 M 40 C 3).

The explanations given for the association of substance misuse with homelessness were two-fold. First it was described as a coping mechanism "to get through the day" (1089 M 37 C 2) or to "block it all out" (1001 M29 C 3) or the recognition that they had "lost everything… all I had was the drugs" (3010 M 46 C 3). Second, it was explained that the hostel environment itself was the catalyst for their drug and alcohol problems because "there was too many

addicts in there really" (1075 M 37 S 2) or "more bottles of alcohol there than there is people" (1066 M35 S 3).

There was also a sense of frustration and failure that the hostel environment had led to relapse as "all my good work was gone; that made me feel terrible… It's easy to give up the drink; the hard bit is staying off it, so I failed." (1067 M 33 C 2)

Another association that arose was that "homelessness is a factor that sort of goes hand in hand with depression in your life" (1075 M 37 S 2). The impact on mental health was described as "the feeling of it all. It would be nice to go out of a front door instead of a zip door" (1067 M 33 C 2).

7.3.2.1 Accommodation is vital to move up Maslow's hierarchy

A lack of basic needs such as shelter means that other problems such as addictions and mental health problems arise, reducing a person's capacity to move up Maslow's hierarchy. However, there was also a desire to move out of hostels in order to remedy addiction problems particularly because in hostels you can "smell the alcohol" (1067 M 33 C 2)" and "everybody in the hostel takes drugs" and to have their own accommodation "would help my drug use, 'cause and I don't need that" (3010 M 46 C 3).

Those who had made the move into their own accommodation also highlighted the importance of the right type of accommodation, away from associates as a factor in their recovery and a new start as it enabled them to turn "my back on all like my druggie mates and criminal mates" (1064 M 41 S 3).

7.3.3 A precarious life risks returning to basic need deficiency

Individuals can move down Maslow's hierarchy in response to adverse life events. In this population, a clear theme that emerged was the precariousness of these individuals' existence and a lack of any sort of safety net. In many cases a loss of one of the basic needs or a single incident caused a downward spiral of events which led to onto further problems and offending and may go some way to explain the clustering of modifiable health problems and social disadvantage observed in this population. The initial problems faced by the offenders varied but the result was the same and meant that they had unmet

needs at the lower levels of the hierarchy and associated substance use and/or mental health problems:

> "I bust my wrist, I'm a bricklayer by trade and I couldn't work, and because I couldn't work, I didn't have nowhere to live, so I had to go in a hostel then I just ended up using again in the hostel." (1064 M 41 S 3)

> "Breaking up with my ex a few years ago and her death not long after; I kind of spiralled into depression and alcoholism… I was about to be evicted from my residence. I had nowhere to go and I was having some arguments with my ex-partner as well as some family issues and not being able to find a job to pay rent for anywhere I could find. These places don't accept benefits any more….. I got into a, a very dark place… that night I was seriously considering suicide… Just before I was going to do it the police came in and arrested me and carted me away." (1084 M 20 C 3)

7.4 Safety needs

Safety needs encompass economic safety, physical safety, security, and freedom from fear. The impact of a lack of economic safety (income instability) has already been discussed. What became clear in the interviews was that many offenders also did not feel safe in other ways. Often this was related to where they were living and being attacked physically, or experiencing mental health problems due to the anxiety caused by not living in a safe place.

Many described abuse and other adverse experiences in childhood and how not being safe as a child continued to have an impact on them today, and had led to other problems in adulthood.

7.4.1 The need for safe accommodation

Hostel accommodation often does not provide a safe environment as "there's trouble in there every single day" and there is a need to have "your prison head on" if you are trying to stay clean and keep away from criminal acquaintances

“because otherwise people just think you’re a fucking idiot and they'll just, just try and take advantage of you, one way or another” (1064 M 41 S 3).

Another described being on the receiving end of violence in a hostel:

> “He come over and started attacking me and he stamped on my head about three or four times. I don't remember it because I was knocked unconscious.” (1067 M 33 C 2)

Often hostel accommodation was the only option available “because I couldn't work, I didn't have nowhere to live, so I had to go in a hostel” (1064 M 41 S 3) and there was a feeling of being trapped and frustrated at being unable to find an alternative.

Hostels were not the only places participants did not feel safe. Even in self-contained accommodation, neighbours’ behaviour caused anxiety and worry:

> “One of my neighbours just wanted to create hell for every resident that was in there by throwing parties all through the week... I had to get out of there... I hear the fire door going, that means someone’s coming up the stairs, well who can that be, you know. I was hearing all this and it’s not good if you’re paranoid because you’re wondering who is coming through or coming up and it’s a horrible feeling and it was just so wrong for me” (3002 M 42 S 2).

This highlights how the physical need for shelter also encompasses the need for safety otherwise an offender may not be able to address other problems such as addiction, mental health problems and offending behaviour.

7.4.2 The impact of childhood experiences and abuse

Several of the participants described childhoods that breached the UN convention on the rights of the child [205]. Safety in childhood is a fundamental right and these participants described how traumatic childhood events and abuse had an impact on their health and behaviour as adults, in some cases contributing to an ongoing inability to feel safe in some situations.

One participant explained how abuse and not being safe in childhood had left him isolated and afraid to go out as an adult:

> "My father abused all of us… I hope to be like fitting in society you know, actually going places and not feel threatened when I go into some shops.... not to sit indoors like a hermit…. Because of what's happened to me. I keep thinking everybody knows. You know they don't but it's just the way they look at you" (1088 M 49 S 3).

There was also an example of how severe bullying as a child contributed to violence in adulthood as "I snap and I lose myself… I'd got into a fight with a kid that had bullied me and I finally snapped... I kicked the daylights out of him and I almost didn't stop until my friend came along and just cracked me on the back of the head" (1084 M 20 C 3).

Another participant associated the onset of her bipolar disorder to her abusive childhood:

> "I went into care at 13... Well my mum is an alcoholic and a drug user, so obviously growing up was quite hard, never had any food, always got a beating every now and then and random men coming in and out the house and it took social services years to pick up on it" (1062 F 20 C 3).

A chaotic childhood, early exposure to drug and alcohol use, family breakdown, neglect and abuse has been reported in prison populations previously [6, 191]. This population was similar with reports of sexual and physical abuse common rather than exceptional. Participants were not asked directly about their childhood, yet many told of their experiences in the context of explaining their offending behaviour or health problems. Often substance use, including smoking, started during teenage or pre-teenage years.

An unsafe and troubled childhood is not the only route into substance use but is clearly a risk factor. Amongst those who had experienced adverse childhood events, two clear themes emerged:

1. A coping or survival mechanism whereby participants began to exhibit risk taking or offending behaviour as a means to cope with or try to forget their childhood situation or the memories associated with it.

2. Learnt behaviours where participants described learning from being exposed to the behaviours of their parents or guardians, or being directly influenced or encouraged to start taking drugs or smoking from those people who had a duty of care for them as a child.

7.4.2.1 Coping or survival mechanism

The impact of physical and sexual abuse in childhood can last long into adulthood. As a result of being abused in care, a participant explained "it's fucked my head up… All I've done is just take drugs, whatever, just so I don't have to think about it" (1064 M 41 S 3). A tendency to turn to substances in order to cope with or "block out the pain from my childhood and other things" (1067 M 33 C 2) was common.

Substance use often started at a young age (12 or 13) in victims of abuse as a way "to escape" the violence, even recognising that "drugs isn't the answer to problems but it delays them; it's running away again really, you know, I'm good at doing that, I've done that all my life" (1075 M 37 S 2).

There was also recognition of a downward spiral leading from childhood abuse to substance use and offending behaviour:

> "The reason I got into drinking ... the only thing I remember from my dad was the beatings….He broke my nose, he threw me into a bath and broke my collarbone… And by the time I was 12 I went to a children's home because I was that wayward and then I started drinking… it's just like a mask, when things start going wrong, go and get drunk for the next five days… So you're drinking and you get brave and try and deal with all your problems while you're drunk and end up in prison" (1049 M 42 C 3).

Adverse childhood events are not just about physical and sexual abuse, but also include significant events such as the loss of a parent highlighting the

need for support for broader emotional support. A participant described the death of his mother when he was 15 as the trigger for his drug use:

> "My mum was ill and she wasn't in the hospice just yet, she was at home and I started taking heroin then… I was taken into care and then she died while I was in care and then it just spiralled out of control from that moment on… I didn't really care whether I lived or died; so I was drinking, I was just out of control really. Taking anything I could get my hands on… I know why I started taking it and that was to, it does block out pain and it does make you forget." (3002 M 42 S 2)

7.4.2.2 Learnt behaviours

Adverse childhood events also include those that affect children indirectly through their environment. Many participants described their upbringing in an environment "with alcohol around me most of my life because on my mum's side of the family they are all big drinkers" (1022 M 40 C 3).

Participants appeared quite matter of fact about their upbringing as they had assumed that their experiences were normal and therefore, that was what they expected in their adult life:

> "I grew up with smoking; my mum smoked, my dad smoked, my sister smoked, everybody smokes, don't they?.. My mum was an alcoholic, my dad was an alcoholic; my mum used to beat my dad up, my dad used to beat my mum up and it went like that" (1082 M 45 S 3).

There was also a belief that substance use was a learnt behaviour and recognition of parental influence because "I learned it all from my dad, you see; my dad used to drink all the time" (1066 M 35 S3). In respect to general behaviour a participant explained, "I've always known how to be bad, never known how to be good" but recognised that this can lead to "consequences like going to prison." (1062 F 20 C 3).

Others described being directly influenced or encouraged to start taking drugs or smoking by those people who had a duty of care for them as a child.

> "My mum gave me my first roll-up. She was drunk and she give me a roll-up when I was 9 and then I just like carried on smoking" (1083 M 22 C 3).

> "I was in a children's home. There was a social worker I used to go and do bent prescriptions with him; he used to come and get me to do the prescriptions and pay me, so then I just ended up taking drugs for him. He got caught in the end… he got arrested and I had to go and register myself as an addict …and I've just been taking them ever since" (1064 M 41 S 3).

The narratives suggest instances where people describe a lack of agency around their behaviour, associated with unhelpful early life experiences. These individuals may need specific support to enable them to revise their view on what is 'normal' and develop new life trajectories.

7.5 'Belongingness and love' needs

The next level of Maslow's hierarchy is described as 'belongingness and love needs'. Maslow describes this as a 'need to love and be loved', and having a sense of belonging to and acceptance within a social group. Often, participants described the role of close relationships with partners or family and how these have supported them through difficult times and how these people were "quite militant about not giving up on me" (1001 M 29 C 3).

Partners were described as pivotal in a successful completion of a Court Order and dealing with substance use. One participant explained:

> "I think if it weren't for my wife I would have carried on drinking and everything else and been in more trouble." (1042 M 51 C 2)

Partners became a motivating factor for participants and there was a determination to overcome problems for them, rather than just themselves because "I don't want her to see me fall off the wagon, so it helps me stay on the wagon. And I think that's what helps me a lot… obviously I don't want to let myself down but I don't want to let other people down as well" (1049 M 42 C 3). This may demonstrate a move towards self-actualisation and being

concerned with others rather than just self. However, it may also represent an insufficient internalised sense of self, such that the priorities of others are given greater weight.

This was also evident in participants who had children. They described fulfilling love needs for a baby as a motivator for change or "a bit of a kick up the arse" which gave him "something to live for these days and before I only had to worry about me" (1001 M 29 C 3). This was not just about being on the receiving end of support and love but being able to give this to another, enhancing one's own sense of worth when concern shifts from individual needs towards the needs of others:

> "Watching my daughter being born, it just turned my life around, you know. I just thought all this getting into trouble and taking drugs has got to stop and I just wanted to change for, for her you know. I didn't want a life like that. I wanted to change." (3002 M 42 S 2)

Partners were not the only people who could provide that support for the participants. One offender described the vital importance of support from his sister, particularly following the death of his mother, and without that support he "would have just gone, killed myself by now because I was very close to my mother." (1088 M 49 S 3). This was in complete contrast to another participant who preferred to seek support from professionals because of a severe mental health problem. "My family couldn't understand it, they saw I was a lunatic… they don't really understand it" (1016 F 30 S 3). However, an inability to recognise need for support outside a professional network could be a manifestation of her mental health issues and demonstrate how mental illness is an important factor and possible barrier to moving toward self-actualisation. Sadly, a few months after the interview, this participant died of a suspected overdose.

In cases where participants did not have close family support, friends were sometimes able to meet this need. Often this was with people who were going through similar experiences, because when "we both get to the point where we could do with a beer and we just – we sit and have a chat about it and go over and knock some golf balls about" and together this enables them to "focus our attention on something else" (1024 M 35 S 3).

Recognising the need and value of support from others was a common theme in this group who had completed or nearly completed their Court Order. Close relationships and social support is not so common in offenders who continue to reoffend [175]. This was demonstrated by one participant who had no support network and admitted "I've had lots of mates that I've driven away" (1041 M 47 C 4). He did not have a positive outlook about the future and admitted that he would probably reoffend.

Some that didn't have such strong networks recognised that there was an unmet need for a relationship because "when you get to my sort of age you need companionship" and if "you were on your own majority of the time, you would get depressed after a while – and frustrated" (1019 M 45 C 2).

Although most of the examples were about the positive impact of friends and family, there was recognition that some friends were not a good influence and there was a need to stop associating with them "because I don't want to end up back on the drink with him… apart from that, we haven't got a friendship really, it's just been drinking buddies" (1022 M 40 C 3).

7.6 Esteem needs

Moving further up Maslow's hierarchy are esteem needs and the need of an individual to feel that they have accomplished something, feel pleased and proud of themselves and have a sense of worth. Many offenders had not experienced this before and had arrived at the beginning of their order with a sense of failure. Key people within probation or drug and alcohol services played a pivotal role in ensuring offenders had a sense of achievement as they progressed through their Court Order. It was often described by the participants that they "instilled confidence in me" (1001 M 29 C 3) because "they've got faith in you" (1016 F 30 S 3) and enabled them to feel "better about myself" (1049 M 42 C 3). In a similar way that participants were motivated by not wanting to let their partners down, this was apparent when they had good relationships with professionals because "he made me believe that I was better than that. So I didn't want to let him down either" (1001 M 29 C 3).

Meeting esteem needs clearly contributed to a successful outcome but it may be that improving self-esteem in this group also enabled them to tackle some of the problems such as substance use that caused them to lack a basic need such as housing. Perhaps in this population, esteem needs may be an enabler for some of the basic needs.

7.7 Self-actualisation

Once other needs are met then there is the chance to strive towards self-actualisation, a desire to realise personal potential and concern for others. To reduce recidivism then an important part of this is to enable offenders to progress through Maslow's hierarchy to a point where they can develop and aspire to future plans that do not include offending.

7.7.1 Future plans

Most interviewees had a positive view of the future. They had plans and aspirations in place which demonstrated projective agency. These ranged from wanting to obtain further qualifications, "be around to see my kids have kids" (1060 M 33 C 3) to starting their own business such as "a little café" (1042 M 51 C 2) or "my own business doing patios and driveways" (1001 M 29 C 3).

Some also demonstrated an aspiration towards Maslow's notion of self-actualisation as they demonstrated an interest in or desire to help others "and put something back into the community" (1067 M 33 C 2).

This sort of aspiration was also found in offenders who have desisted [175] as they often expressed a desire to use their past to try and help others from repeating the same mistakes. However, it might be that the interview process gave the participants an opportunity to feel empowered to think about the future and exercise a projective form of agency which may be subtly different to actually being in a position to see these aspirations through.

7.7.2 The start of a law-abiding trajectory

Most of the offenders interviewed were very clear they would not offend in the future. They felt that many of their problems or needs had been addressed or they had been given the skills to deal with issues that may arrive in the future.

They often described their life now as being quite different from before their Court Order, which was similar to the findings in the Liverpool desistance study [175] where ex-offenders described their previous criminal life as 'not the real me.'

> "I am not the person I used to be, no two fucking ways, there's no way I am" (1064 M 41 S 3).

Many participants did have realistic goals and they were striving towards being "a regular person" doing "what regular people do" (1024 M 35 S 3). For some what they considered to be normal had been modified over the period of their court order. A participant with alcohol dependence who was now abstinent said "I've been living my life without drink now and I think it's normal" (1049 M 42 C 3).

The recognition that their life before was different or 'not normal' highlighted that some sort of change had occurred during their court order. Some things they planned for could be described as basic needs such as accommodation, employment and building relationships with family showing that they now recognised the importance of these needs and had a plan to address them:

> "Just to live in a more sort of a, more normal sort of way of life, working and just going out and doing what normal people do." (1089 M 37 C 2)

However, not all the participants could envisage a different future for themselves without offending. A homeless participant did not have future plans and it was evident that clearly basic needs were still not being met, reducing his opportunities for progression:

> "I just take day to day as it comes… If I get nicked for drugs on me or alcohol I get sent back to prison. The way I look at it, it's a roof over my head and 3 meals a day, that's more than what I've got out here... If I'm

> still home this winter I will go and commit crime just to put myself back in prison… I know it sounds crazy but I'm better off in prison. What have I got out here? Nothing. A family that don't give a shit, very few friends: I don't have no contact with my kids so, you know, I've just got me to worry about, you know. I can't even survive." (1075 M 37 S 2)

Another participant was quite different from the others. He did have basic needs such as accommodation fulfilled but did not seem to have a need for social networks or support and did not convey any ambition to cease drug taking:

> "It's like saying, a lot of people want to hear you are going to give up drugs and that, there's no point in me saying, because I'm not ready to" (1041 M 47 C 4).

He could only see his life continuing as it currently did with drugs and offending and did not take responsibility for his actions explaining:

> "It's just the way I'm wired, I think. If there is an opportunity, I'll take it. And I take drugs." (1041 M 47 C 4)

Although this was a divergent case within this study sample, it helps validate the result, and fits with the findings in the Liverpool desistence study [175]. A common characteristic of persistent offenders was complacency about their ongoing situation and an acceptance that life would not improve, and offending would continue to be part of their lives. Marauna *et al* [175] described this as a syndrome where offenders felt 'doomed to deviance.'

This then provides a challenge to probation services as how to effect change in individuals such as this. Although in this study sample, this was a deviant case, this may be a common trait in persistent offenders who reoffend before completing their Court Order.

7.8 The role of the Court Order and staff as a safety net, restoring the basic needs as a platform towards self-actualisation and reduced recidivism.

The needs of offenders have been discussed in relation to Maslow's hierarchy and addressing these in order to strive towards self-actualisation and reduced recidivism. However, it is important to note the enablers within this process. Participants described both the process of their court order and the support they had from staff within probation services as being instrumental in their successful court order outcome.

There was acknowledgement that without offending and having the court order as a safety net, the result could have been dire:

> "If I hadn't have got into trouble and got probation and alcohol services, I'd probably still be drinking in excess of 18 cans a day… It's that simple; I could still be drinking 18 cans of Tennent's Super a day or whatever – or I could be actually dead. So, I'm not, I'm here to tell the tale.' (1024 M 35 S 3)

> "I know you have to do something to get probation, but I'm glad I got probation in a way because [Offender Manager] has been brilliant, you know, I would have just committed suicide." (1088 M 49 S 3)

It was a commonly expressed that participants did not know "whether I could have got the help unless I'd actually gone – got arrested and gone through that process" (1001 M 29 C3) so suggesting that some services are not easy to access.

Participants described how their court order and the support received in probation and associated services enabled them to meet basic needs such as "sorting my benefits out" (1024 M35 S 3), "food vouchers" (1042 M51 C 2) and help with sorting bills out as "I was at the point of just giving up the flat" (1089 M 37 C 2) with the overwhelming consensus that it "helped me enormously." (1042 M51 C 2)

The role of probation staff building self-esteem has previously been discussed but there were also examples of how participants had got help with building a social network:

> "I was spending a lot of time on my own, so I was referred to Healthy Living and I worked with a Health Trainer… Being on probation… it's branched out more things for me and a sort of a social network that I have… I've got some pretty positive things out of probation." (1089 M37 C 2)

Participants often talked positively about their Offender Managers and the vital role staff played in supporting them so highlighting the value of individual support and having time to do that. It was that they "listened to me" (1062 F 20 C 3) and that "he has got a lot of time for people, it's not just a job for him" (1042 M 51 C 2) and the fact that they "are always interested in how you're doing… how you're coping" (1084 M 20 C 3).

Most of the participants in the study had been given supervision or specific activities as part of their order. One participant reflected on how he had previously been given stand-alone unpaid work which he referred to as "slave labour" with "no one there to worry about how the hell you're feeling, have you got any needs and things like that… they don't want to know, have anything to do with you" so he had not received the help he needed to address basic needs whereas the supervision order was "the best thing that's ever happened to me" (1042 M 51 C 2).

This highlights that stand alone unpaid work may not be effective in reducing recidivism as offenders may often have basic needs that they are not being given the opportunity to address.

7.9 Offending and health

It has been clear that many participants live a precarious life without any sort of safety net which has often lead to a downward spiral of increased unmet needs, substance use and offending. Participants clearly recognised when their offending was linked to substance use and was always "while I was under the influence of alcohol or drugs" (1089 M 37 C 2). With alcohol use, it was often persistent offenders that explained their offending was always "drink

related" because "every time I've been in trouble, I've always had a drink" (1024 M 35 S 3). One participant added "I don't think I've ever been in trouble sober" (1022 M 40 C 3) so highlighting the importance of alcohol interventions both at point of arrest and further upstream.

Some participants explained that alcohol "causes chaos" (1041 M 47 C 4) and "made me aggressive" and a dislike of authority meant that when "the police tried doing something I kicked them." (1076 F 26 C 2). The main reasons for this were because alcohol "just clouds your judgement" (1049 M 42 C 3) and results in being "not in charge of my faculties" (1073 M 27 S 3). A similar pattern was seen with other drug use:

> "When I'm speeding I'm a bit more confident. Then I lose my inhibitions and that" (1041 M 47 C 4).

Drug use also meant that money was obtained through "robbery" (1064 M 41 S 3), "shoplifting, obviously stuff to sell, for money for drugs" (1063 F 34 C 3) and "burglaries, fraud, shoplifting anyway I could get money basically" (1075 M 37 S 2). Or growing cannabis because they were "sick and tired of getting ripped off buying it off the street" (1067 M 33 C 2).

Those that had addressed their substance use recognised that without substances "I think different, I act different, I am different, there's no two ways about it." (1064 M 41 S 3) so linking back to the desistance story where those who have stopped offending describe themselves as being 'a different person now.'

Mental ill health also meant that a participant's "offence was influenced by my mental state" as he "was in a very low place" and "seriously considering suicide" when "the police came in and arrested me and carted me away" (1084 M 20 C 3). Another explain that she only offended "when I'm on an episode" (1062 F 20 C 3) and another recognised that her "mental health had completely deteriorated" by which she implied her paranoia meant she "hit [the victim] for no reason" (1016 F 30 S 3).

Another described how adverse childhood events including severe neglect and sexual abuse contributed to her shoplifting and described it as her survival mechanism:

> "My mum was always drinking and stuff like that and we didn't have no food in the house… I used to go to the shop and nick a tin of soup or something to eat….. I think it's because it's a survival thing, that now that when times are hard, the survival thing kicks in... I started off being raped by my babysitter at six years old and then throughout my childhood, my father, my stepfather, my sister's father – and it went on to a lot of people that come through the house, as I said, through parties and stuff. So it was a continuous abuse… So, sometimes…. when I'm hard up or things are not going right or I've got bills to pay… I just spontaneously take things without realising, really" (1068 F 49 C 2).

In addition to the obvious links between alcohol, drugs and offending, the relationship between living on the streets and offending was described from two perspectives. The first was about offending to obtain money "because when you're on the streets you need money all the time. You need food, you can't store food or nothing, you have to - when you want to eat, you have to eat; how are you going to get your food if you ain't got no money for food?" (3010 M46 C3). The other was because "I was homeless and I had nowhere to stay I'd keep breaking into derelict buildings just to like have a roof over my head" (1001 M 29 C 3). In both these examples, offences were being committed to meet a basic need.

7.10 Summary

Using Maslow's hierarchy of needs to examine how offenders talked about their health and the wider determinants of health in terms of a successful probation can give us insight into how material deprivation, homelessness and childhood experiences have contributed to problems with mental ill health and addiction alongside offending behaviour.

There were many examples of how vulnerable this population can be. Often a participant's narrative told of how a loss of one of the basic needs or a single incident led onto further problems and a downward spiral. This may go some way to explain why there was significant clustering of modifiable health problems with indicators of social deprivation. The explanations as to why

health, the determinants of health, and offending behaviour are associated help us to understand why this clustering is seen in offending populations.

A Court Order with support in probation services can enable some offenders to halt this downward spiral, meet basic needs and start on a trajectory towards a law-abiding life. However, this does suggest that probation services are acting as a safety net and if the overall goal of reducing crime is to be realised then much more needs to be accomplished in tackling the causes of social deprivation, ensuring people can have their basic and psychological needs met.

8. Discussion and Conclusion

8.1 Key findings

The results have shown that this population of offenders with Court Orders living in the community are more likely to have a higher prevalence of alcohol problems drug use, mental health problems and smoking than the general population as well as issues that relate to the wider determinants of health and Maslow's basic needs including unemployment, insecure housing and homelessness, low educational attainment and adverse childhood events. Clustering shows the complexity of problems that some offenders face. The qualitative data also suggests that offenders' lives are precarious, lack any form of safety net so a single problem or adverse life event can trigger a downward spiral resulting in multiple problems and offending.

This section discusses these challenges to probation services, health services and the wider public health community. It then moves on to take a more upstream public health view which considers the adverse childhood events experiences by this cohort and linking with studies of childhood risk factors to understand offending as a an example of cumulative disadvantage across the early life course and suggests targets for interventions.

8.2 Offenders with court orders – a 'wicked' problem requiring a co-ordinated multi-agency approach

8.2.1 A 'wicked' problem

A 'wicked' problem is one that is highly resistant to resolution and requires a reassessment of some of the traditional ways of working and recognises there are no quick fixes or simple solutions [206].

Perhaps the multiple problems faced by these offenders are not so surprising. Recent evidence has shown the onset of multi-morbidity to occur 10-15 years earlier in people living in the most deprived areas compared to most affluent [207] and clustering of risk behaviours in people of low socio-economic status [199]. This, alongside the absence of a safety net has left many with deficiencies in Maslow's basic human needs alongside substance use and

mental health problems. In recent years, austerity measures have disproportionately disadvantaged those in the lower socio-economic groups [208] while funding for local council run or commissioned public health services has been reduced [209].

Reducing social disadvantage, reducing health inequalities and reducing offending are all wicked problems as they are so multi-faceted. Yet, all these problems are intertwined within the probation population so trying to address any of these areas in isolation is likely to be unsuccessful.

8.2.2 The challenge of influencing policy and practice

This thesis has presented evidence to try and understand the size of the challenge within the probation population so there can no longer be inaction because of a lack of information. The next stage is to present the results back to the probation service so it can inform their service delivery plans. In addition it will be important to also present the results to the local reducing re-offending groups (Hampshire, Portsmouth and Southampton) so they can have a better understanding of the magnitude and complexity of problems faced by offenders with Court Orders. These groups are multi-agency so provide the appropriate forum to discuss the research and will have access to other data such as current local offending and reoffending rates that will also be needed to inform decisions on how services are configured. However, the challenge is then to decide what additional research or interventions may be needed, how these can be evaluated, and how they can be financially supported. The wider view must be considered and this piece of research forms just one part.

Clinical Commissioning Groups (CCGs) are responsible for the provision of healthcare to offenders in the community but concern has been raised that they do not understand this remit [125]. Combined with the changes in probation services also means that CCGs are not co-terminus with National Probation Teams or Community Rehabilitation Companies [125]. The Revolving Doors Agency in conjunction with the Home Office and Public Health England has published 'Rebalancing Act' [210] as a resource for Directors of Public Health, Police and Crime Commissioners, the police service, health and justice commissioners, service providers and users. It calls for all stakeholders

to work together in partnership to address the issues with a multi-agency approach.

There is certainly a need for a holistic approach that is based around an individual offender's current needs. 'Rebalancing Act' advocates the use of jointly commissioned integrated care pathways which cross disciplinary and organisational boundaries. However, with budgets currently fragmented across organisations with differing priorities this can be a challenge. Co-location of health and other services in a 'one-stop shop' would also be ideal but with limitations in the available estate, often difficult to achieve.

Probation is the organisation which is common to all offenders so some sort of jointly funded service within probation that can assess needs, place them in some priority order and organise a care plan with different providers may actually be a better option. This approach could draw on the experience of managing multi-morbidity where it is proposed that generalist clinicians provide personalised and comprehensive continuity of care within the health service [207]. Prior to the reorganisation and privatisation of probation services, Health Trainers provided a service in probation that often helped offenders navigate through other services, but funding for this service locally has ceased. In addition Offender Managers often played part of that role and this qualitative study showed this part of their work was highly valued by offenders.

The other challenge is to identify people at risk of offending. The qualitative work again pointed to offenders not knowing how to access services and their Court Order being their safety net and entry point to the support they needed. Inadequate health literacy may play a part and services need to recognise this and ensure that information provided is clear and check that it has been understood. Again 'Rebalancing Act' identifies points upstream of offending such as the Troubled Families Programme, Truancy, Youth Offending, Liaison and Diversion, Drug and Alcohol Services, and unemployment (Job Centres) as opportunities for early intervention. However, some sort of co-ordinated approach and liaison between services is needed to maximise opportunities.

8.3 Public health needs to venture further upstream

'Rebalancing Act' focusses on current offenders and those, a little upstream at risk of offending but already displaying multiple risk factors. Therefore there is a need for public health to paddle further upstream if we are really to address the antecedent determinants of offending.

This research highlighted the widespread abuse and neglect that many offenders had experienced in childhood alongside numbers of offenders who had been in Local Authority care.

It is recognised that 'looked after' children have poor health and are among the most vulnerable in society. Their issues feature prominently in the United Nations Convention on the Rights of the Child [205]. A fifth of the study sample had experience of Local Authority care.

Looked-after children are between four and five times more likely to self-harm in adulthood, are also at five-fold increased risk of all childhood mental, emotional and behavioural problems, and six to seven times more likely to have conduct disorders. They also have high levels of risk-taking behaviours such as smoking, and alcohol and drug misuse [211-216].

Based on 2015 data, of the 26,330 former care leavers aged 19, 20 or 21, 39% were not in education, employment or training (NEET) [185]. It is difficult to provide a population comparator for this but the NEET rates for ages 19-24 in England from January to March 2015 was 14.7% [217].

In 2014, nearly half of looked after children had emotional and behavioural health that was either borderline (13%) or cause for concern (37%) based on the Strength and Difficulties Questionnaire [187]. A higher proportion of boys (40%) than girls (33%) had scores that indicated cause for concern with their emotional health and this was apparent at all ages [187].

Only 12% of looked after children achieved five or more GCSEs at A*- C including English and maths compared to 52% of children who are not looked after. Two thirds of looked after children had a special educational need (SEN) which consisted of 29% with a statement of SEN and 38% without a statement. These figures are more than three times higher than the general population (including both looked after and non-looked after children). In 2014, 18% of all

children had a SEN which consisted of nearly 3% with a statement and 15% without a statement [187].

This description of outcomes for looked after children looks very similar to the profile of offenders in this study and of prisoners [143]. Therefore, this does demonstrate that looked after children should be a target for interventions that improve their educational and health outcomes and this may also reduce offending.

Thinking about this from a public health perspective, there is a need to address the reasons that children are at risk or enter the care system as it is not necessarily the care system in itself but the multiple factors that have resulted in a child needing care. A recent systematic review [218] examined the risk factors associated with children entering care both for mothers and for children. For mothers there was evidence of an association with socio-economic status, benefit receipt, single parenthood, ethnicity, young age, disability, smoking in pregnancy, mental illness, alcohol misuse and learning difficulties. For children, there was evidence of association with low birth weight and prematurity, disability, injuries and attendance at Accident and Emergency departments. However, none of these risk factors were well defined, and research using longitudinal data sets is still needed to identify more specific risk factors associated with children entering care and to combine risk factors in a cumulative risk model [218]. However, these do suggest that deprivation and low social economic status are root causes and in times of austerity and cuts to benefits it is hard to see how outcomes for looked after children or those at risk of being taken into care will improve.

The Chief Medical Officer's Annual Report in 2012 had a chapter focussed on looked-after children and young people [219]. It concluded that further evidence was needed on effective interventions as well as the key areas identified by children and young people themselves which included a need for love, a sense of belonging, emotional and practical support, access to professional who can listen and be relied upon and an improvement to the process of leaving care and ongoing help and support.

My research with offenders suggests that adverse events in childhood are not just limited to those who entered the care system. Recent studies have highlighted the importance of early life experiences to people's health

throughout the life course [220] and therefore may begin to explain some of the clustering of problems we see in offender populations. Those who have multiple adverse childhood experiences tend to have more physical and mental health problems as adults and a greater premature mortality than those who do not have these experiences [221].

Studies have identified a set of adverse childhood experiences (ACEs) and these include: growing up in a household with someone who is depressed, mentally ill, a substance abuser or has been incarcerated in the criminal justice system; exposure to child abuse or neglect or domestic violence and losing a parent through divorce, separation or death [222].

Bellis *et al* conducted a retrospective study on a UK population on the impact of ACEs on adult health behaviours, health outcomes and criminal justice outcomes. Even controlling for deprivation, an increased number of ACEs were associated with higher prevalence of both having been hit and hitting someone else in the last 12 months, having spent one or more nights in prison or police station in the last 12 months, prevalence of heavy drinking, drug use, unemployment (including long term sickness) and low mental wellbeing. Additionally, having four or more ACEs was strongly associated with higher adult deprivation [223]. Many of these outcomes become ACEs for the next generation so it is possible to see how social movement is inhibited and these traits become passed down through families.

The Cambridge study for delinquent development for risk factors in childhood took a prospective approach to identify both risk and protective factors in youth offending [224]. High 'troublesomeness', a convicted parent and high daring were important risk factors for delinquency whereas those factors that protect against some of the risk factors included high intelligence, high school attainment and high parental interest in educational attainment protected against poor child rearing, good parental supervision protected against high dishonesty and high family income protected against a convicted parent.

It is important to note that ACEs are not an exhaustive list of childhood adversities. For example, high levels of inter-parental conflict at home, independent of parental separation or divorce are strongly associated with an increased risk of child behavioural problems and academic problems in adolescence, and adverse health outcomes and relationship difficulties in later

adult hood [225]. Also low family income is strongly associated with language difficulties in childhood which goes onto predict academic failure, unemployment, mental health and behavioural problems in adulthood [226].

Clearly this present a strong argument for action on inequalities on a national and local scale to reduce deprivation and child poverty but also suggests that targeted interventions that help disadvantaged parents provide safe and supported childhoods may be beneficial.

The Early Intervention Foundation (EIF) was set up as in independent charity in 2013 to increase the availability of effective early intervention for families who need it the most [227]. Most of their work has focussed on the effectiveness of early intervention programmes. Their work has found few examples of interventions with good evidence of preventing childhood adversity from happening in the first place. They have highlighted the importance of maternal mental health screening during pregnancy and early childhood and identified the Family Foundations programme which was developed in the USA [228]. This has good evidence of reducing couple conflict when offered to couples during the third trimester of the mother's first pregnancy. Two randomised control trials showed reductions in parental conflict in the first year after the programme, alongside improvements in children's behaviour at ages three and seven [229-231].

In the UK, we have the Health Child Programme 0 to 19 let by health visitors (0-5) and school nurses (5-19). It provides place-based services and woks in partnership with education and other providers. This is a universal programme which aims to give every child the good stat they need to lay the foundations of a healthy life. A key part of this programme is to identify families that are in need of additional support and children who are at risk of poor outcomes [232].

Another key intervention is the Troubled Families programme. This works with families who have multiple complex problems such as domestic abuse, physical and mental health problems, crime, unemployment and debt. It provides families with a key worker who works with the whole family on a range of issues. The latest annual report of the Troubled Families Programme (2017-18) reports good progress but the full evaluation is still ongoing [233].

The challenge is to ensure that these programmes reach all of those who have a need. An evidence base in the UK on interventions to improve outcomes for vulnerable children and families facing adversity is developing but a real change in outcomes will only be achieved if there is a sustained commitment to improving this evidence base and implement those interventions that are shown to work [228].

8.4 Strengths of the research

The main strength of this research is that is that it fills a gap in the knowledge base about health and social needs in offenders with Court Orders. Often in policy papers the needs and problems faced by community offenders are extrapolated from research done in prisoners. A mixed methods approach has combined a wealth of quantitative results, follow up data with predictors of reoffending and a rich explanatory qualitative data.

Additionally the whole research was based on a need identified by Hampshire Probation Trust staff for more information about the health problems that their offenders faced. I built strong relationships with staff at Hampshire Probation Trust. I presented the research to the Executive Team and gained their support. I also met with the operations managers at the different sites, had a lead senior offender manager allocated as lead for the project and presented to offender managers in the different teams. Although it took time to build the relationships, they have underpinned the success of the project, particularly when faced with challenges following the reorganisation of probation services.

In addition this was the first time that a cohort of offenders with Court Orders had been followed up in a face-to-face interview outside of any specific treatment service. It demonstrated that given the right strategies for recruitment and follow-up, it is feasible to conduct research with this population and ensure researcher safety.

The sample interviewed was representative and the validated tools used in the quantitative questionnaire have meant that the results presented have good validity and 95% confidence intervals added precision to the estimates. The study size was large enough to achieve this.

8.5 Limitations of the research

The study was not powered to detect change from baseline so the follow up results were meant to be exploratory and inform any future work rather than demonstrate real change in response to any services or interventions received. Additionally, I did not test any specific intervention. Results were related to the whole Court Order process and general access to services.

Recruitment was pragmatic and although the sample was representative of the eligible population, only some demographic characteristics were compared and it only represented 9% of the total population. Additionally, there may have been volunteer bias. It may have been that those offenders with multiple and complex issues may have been less likely to take part as it was an additional task so this may actually have reduced the prevalence estimate.

The number of females in the study was very small. Results in some cases were split by gender as previous research in prisoners suggested differences. However, small numbers meant wide confidence intervals so differences were not observed. Women may well have different needs to men but in order to assess this, a larger sample would be needed.

There was a great deal of attrition with offenders agreeing to interview then not arriving. 28 offenders agreed an appointment for a baseline interview but did not attend. With hindsight, it may have been better to base the research in a single probation office so I could have been based in a single location and may have had more opportunity to interview offenders opportunistically rather than having to make appointments.

Both the quantitative and qualitative parts to the study were biased at follow-up as they only represented those offenders who were coming to the end of their Court Order. Those who had been sent to prison before completion were excluded and although this was appropriate for the quantitative study as the exposure was the Court order period, they may have added a different dimension to the qualitative results.

With all qualitative research it is important to consider the role of the researcher on the participants. I had already built a rapport with the participants as they all had completed the follow-up survey prior to the in-

depth interview. One of the striking themes that emerged was positive view of the future most participants had and belief that they would not reoffend. It is possible that this type of interview, along with a positive participant-researcher relationship, empowered the participants to project that sort of agency whereas in another situation they might not feel so confident about their future.

This study was carried out in one area of the country so may not be generalisable. Different issue may be seen in other areas such as London with different ethnic mix and levels of deprivation.

8.6 Implications for future research

This thesis and the results it presents are just one piece in the jigsaw to understand and improve the health of offenders on Court Orders and contribute towards reducing offending. How these results will be discussed and disseminated locally has already been discussed along with the challenges of implementing services. I also plan to publish the results and will aim to do this in a journal which is read by Local Authority Directors of Public Health and their workforce such as the Journal of Public Health.

In addition, further research could also be considered. The offenders in this study have already given consent for follow up with routine health data and recidivism (though the Police National Computer) so this would provide an opportunity to gain further insights into health service use and any reoffending patterns.

For further research could be conducted around risk factors, interventions and recidivism could be obtained but this would require a larger cohort of community offenders and followed up long term.

Further research is needed to evaluate any new way of working or interventions to ensure they not only deliver improved outcomes but can be considered value for money.

Additionally, a systematic way of identifying those at risk of offending needs to be developed and evaluated. This could provide a safety net of services or

interventions which can be offered either before or at first contact with the criminal justice system and these interventions evaluated.

Finally, a public health approach to reduce offending must include further research around ACEs and early childhood adversity and those protective factors that improve life chances of at risk children. This has been identified as a large research gap by the Early Intervention Foundation. They identified three areas for further research [228]:

- Longitudinal work to understand how risk factor interact, the mechanisms via which adversity lead to poor outcome, and which factors protect children exposed to adversity.
- The development of screening tools which will support the identification of children at risk, and those who have already experienced adversity.
- Evaluations of both programmes and practices designed to prevent abuse and neglect or support children who have been exposed to adversity.

Research around the evidence for interventions is important as 75 interventions were identified for ages 0-5 years but only a quarter of these could be classed as having good evidence of improving child outcomes [228].

8.7 Personal reflections and learning

This PhD has enabled me to undergo a personal learning journey as well as collecting and analysing the data presented in this thesis. There were two main areas of learning for me. The first was the additional skills I have gained to allow me to become a better researcher. I was able to attend courses which addressed specific gaps in my knowledge. These included an advanced epidemiology and statistics short course at the London School of Hygiene and Tropical Medicine and comprehensive training in qualitative methods by attending a qualitative methods MSc module at the University of Southampton and further courses at the National Centre for Social Research (NatCen). The qualitative courses were of particular interest to me as I had always felt more comfortable with quantitative research and analysis. They gave me the confidence to design and complete the in-depth interviews and it was some of

the worked examples that we had completed on the NatCen courses that I referred back to when starting the analysis of the qualitative data.

Navigating the ethics approval system was quite a challenge. With no previous experience of the ethics process negotiating the online systems took a great deal of time. The nature of my study meant that it was unclear which ethics approval was needed. It was clear that NOMS approval was required but NHS approval was unclear as I was not recruiting NHS patients nor collecting data at any NHS sites.

I found conflicting guidance given on both the Integrated Research Application System (IRAS) site and NHS Information Centre website. It was also unclear as to whether I needed National Information Governance Board for Health and Social Care (NIGB) approval and few people had experience of this in the department. The Ministry of Justice Information was also misleading. It was only by contacting the ethics committees directly I was able to resolve my queries and realised that I did not need additional approval.

My learning from this is that if I am unsure about the correct procedure, to contact the relevant ethics committees directly before attempting to fill in the forms as this would save time.

The second area is more about the experiences I had carrying out the research and the softer skills I was able to develop.

There were a few occasions during my research where I had concerns about the offender I was interviewing. The ethics process ensured that I had an agreed protocol of what to do in this situation and that proved to be invaluable. Each time when I addressed the issue with the offender, they were happy for me to share the information they had disclosed during the interview with either an offender manager or a health trainer and they were able to get the additional support they needed. Examples included disclosing suicidal intentions and hunger where the offender had not eaten for a few days because of a lack of money.

I built good relationships with probation staff and this allowed me to understand better how the probation system worked and some of the challenges they faced. This gave me some of the context and background of

some of the initiatives or interventions given to offenders so made me more confident when speaking to offenders about their experiences.

The importance of building good relationships was demonstrated when I returned from maternity leave in November 2014. The CRCs had been established and operated separately from the NPS. This meant that accessing data about the offenders in my study became problematic and at one point it looked like I would have to reapply to the new organisations for ethics approval to continue my research. Fortunately, the Directors had previously been Directors at Hampshire Probation Trust so were aware of the research and once I had written to them with my original approval letter and an explanation that I was no longer recruiting offenders, I just needed access to data, they were able to agree to this. However, the process took several months and became a manual task to extract information held on the probation information systems about each offender in my study rather than just being able to receive a download with the information I needed.

I also think that during this whole process I was able to improve my listening skills. During the qualitative interviews I had to actively listen and not offer my own opinion (which is quite hard for a natural extrovert!) However, by listening hard and not interrupting, the participants were able to expand on their own thinking and give me a huge amount of data to work with.

8.8 Conclusion

In summary, this thesis represents a significant expansion of the knowledge of the prevalence of key health and social disadvantage indicators associated with offending in the Court Order population. The results have highlighted that these factors often cluster in individuals in this population and tackling these multiple factors is a 'wicked' challenge.

Many in this population have experienced risk factors from early on in childhood such as deprivation, unstable family life, low educational attainment and experiences of local authority care which have led to an accumulation of problems over the life course.

This is a vulnerable population, who often live quite a precarious life without any sort of safety net and it only takes one aspect to go wrong and problems

begin to spiral out of control resulting in relationship breakdown, substance use and offending. Support during a Court Order supervised by probation services has the potential to help an individual and go some way to help reduce social and health inequalities.

A multi-faceted and multi-agency approach is the only way to tackle the current issues in offenders and options need to be considered for co-ordinating the management of multiple complex problems from within probation.

Appendix 1 Search strategy – key concepts

Probation

	MeSH/Thesaurus/Index Terms (not applicable for Web of Science)			
Text Terms	Medline	Embase	PsychInfo/PsycExtra	CINALH
Probation* Court order* Community supervision Community correction* Community order* Community sentence* Non custodial sentence* Non custodial punishment*	Criminals	Probation	Probation	Probation

Mental Health

Text Terms	**MeSH/Thesaurus/Index Terms (not applicable for Web of Science)**				
	Medline	**Embase**	**PsycInfo**	**CINALH**	**Cochrane**
Mental health Mental disorder* Suicid* Psychological need* Self esteem Self harm Mental illness*	Mental disorders Psychiatry Mental health services	Mental Disease Psychological and psychiatric procedures	Psychological Needs Mental Disorders Mentally ill offenders Mental health	Mental health Mental disorders	Suicide Mental Disorders

Drugs

Text Terms	MeSH/Thesaurus/Index Terms (not applicable for Web of Science)				
	Medline	**Embase**	**PsycInfo**	**CINALH**	**Cochrane**
Drug* Substance*	Drug users exp amphetamine-related disorders/ or exp cocaine-related disorders/ or exp drug overdose/ or exp inhalant abuse/ or exp marijuana abuse/ or exp opioid-related disorders/ or exp phencyclidine abuse/ or exp psychoses, substance-induced/ or exp substance abuse, intravenous/ or exp substance withdrawal syndrome/	Substance Abuse Drug dependence Illicit drug Withdrawal syndrome	Drug Usage Drug Addiction Drug dependency	Intravenous drug users Inhalant abuse Substance abuse, intravenous Drug rehabilitation programs	Drug Users Substance-Related Disorders

Alcohol

Text Terms	MeSH/Thesaurus/Index Terms (not applicable for Web of Science)				
	Medline	**Embase**	**PsycInfo**	**CINALH**	**Cochrane**
Alcohol*	Alcohol related disorders (includes Alcoholism, alcohol induced disorders, alcoholic intoxication, binge drinking) Drinking behaviour Alcoholics anonymous Alcoholic beverages	Alcohol abuse (includes alcohol use disorder, binge drinking, drunken driving) Alcoholism Alcohol consumption Alcoholics anonymous Alcohol psychosis Alcohol intoxication Alcohol liver disease Alcohol rehabilitation program Alcoholic beverage Alcohol rapid test Alcohol withdrawal	Alcohol drinking patterns Alcohol rehabilitation Alcohol withdrawal	Alcohol drinking Alcohol related disorders	Drug Users Substance-Related Disorders

Learning disabilities

Text Terms	MeSH/Thesaurus/Index Terms (not applicable for Web of Science)				
	Medline	**Embase**	**PsycInfo**	**CINALH**	**Cochrane**
learning disab* learning disorder* intellectual impairment* Intellectual disabilit*	Learning disorders Intellectual disability	Learning disorder Intellectual impairment	Learning disorders Intellectual development disorder	Intellectual disability Learning disorders	

Health literacy

Text Terms	MeSH/Thesaurus/Index Terms (not applicable for Web of Science)			
	Medline	**Embase**	**PsycInfo/ PsycExtra**	**CINALH**
Literacy Numeracy Reading Arithmetic WRAT Wide Range achievement REALM Rapid estimate of adult TOFHLA Test of functional health MART Medical achievement reading test NVS Newest vital sign	Health literacy	Health literacy	Health literacy Literacy	Literacy

Appendix 2 Example of assessment of quality and data extraction for included studies

Bibliographic Details 0. Author, title, year, year of study	**Akhurst *et al* (1995) [58]. Dying for help: Offenders at risk of suicide. Study period December 1993 – March 1994.**	**Brooker *et al* (2008) [71] A Health needs assessment of offenders on probation caseloads in Nottinghamshire and Derbyshire. Study period 2007**
Purpose 1. What are the aims of the study? 2. If the paper is part of a wider study, what are its aims?	1. To assess the prevalence of deliberate self-harm among offenders serving community sentences. 2. To assess the prevalence of factors (including deliberate self-harm) that are indicative of high suicide risk among offenders serving community based sentences 3. To compare rates of disclosure of deliberate self-harm among the Probation Service caseload with the rates perceived by offenders' Probation Officers.	1. To examine and compare the healthcare needs of an urban probation population and a rural probation population. 2. To investigate the extent to which both of these populations are addressing their healthcare needs and accessing requisite services.
Key Findings 3. What are the key findings of the study? (Of relevance to review)	**Self-reported by Probationers (n=238):** 71 (30.5%) (60 (28%) of males, 11(44%) females) respondents admitted one or more incidents of self-harm, of which 72% were believed by the offender to be a serious attempt to end their own life. A further 3% had considered hurting themselves. Of those who reported having considered self-harming, 93% went on to injury themselves. From the additional questionnaires (n=51) Of those offenders assessed as having a mental health problem, 86.5% also reported self-harm. 26/51 (51%0 had an alcohol problem A larger proportion of self-harmers (73.5%) than non-self-harmers (41%) had alcohol related problems as determined by	Out of the sample of 183, 150 (82.0%) male, 31 (16.9% female (2 not recorded) **Sexual health**: 86.9% had never been treated for an STI 5% had been diagnosed with hepatitis and 27% had been vaccinated **Mental Health** 50 (27.3%) had ever been in contact with a mental health service with the most prevalent condition reported being some kind of depression (18) Mean mental health scores on the SF36 were significantly lower than the general population for both men (71.73 compared to 88.08) and women (57.03 compared to 70.05) **Smoking:** 152 (83%) were smokers

	the AUDIT questionnaire (risk ratio, 1.7) Seen by a psychiatrist: 72 (31.5%) 66 (32%) males 6 (32%) females Admitted to a psychiatric hospital 21 (30% of 72) **Reported by Probation Officers n=175):** Reported incidence of self-harm: 46 (26.5%) Believed serious suicide attempts: 19 (41% of 46) Alcohol problems: 38 (21.5%) Other substance misuse: 25 (14.5%) Mental Health problems: 15 (8.5%)	**Drugs and Alcohol:** 44% were at risk of alcohol abuse 39% were at risk of substance abuse **General Health:** From the SF36, offender health is significantly poorer than the general population for role limitation (physical and emotional), social function and general health perception, the physical component and mental component scores. The SF36 component scores for the whole offender sample are significantly worse than those obtained in the general population for the manual workers' social class Female offender SF36 scores are significantly worse than male offender SF36 scores. The most frequently reported aspects of health that cause significant problems were around mental health (17%), smoking (10%), muscoskeletal (9%) and respiratory (8%) **Access to Services:** 164 (90%) had access some kind of services in the last 12 months. The most accessed were family doctor (80%), dentist (55%) and A&E/NHS walk-in Centre (39%) Only 15.5% reported they had experience problems in accessing healthcare services., 33% gave no response and 54% said they had no problems. 33.3% made suggestions on how services might be improved. The most suggestions were for improving accessibility (flexible appointments etc) and improve dental services
Evaluative Summary 4. What are the strengths and	An older study which claims to be the first study of deliberate self-harm in the probation population. Only 51 probationers out	

weaknesses of the study and theory, policy and practice implications?	of a possible 1600 completed all the questionnaires so there is some question over how representative the sample was. Attempts were made to validate the main survey. The sample was biased towards those on supervision as opposed to community service orders.	
The Study 5. What type of study is this? 6. What was the intervention? 7. What was the comparison intervention? 8. Is there sufficient detail given of the nature of the intervention and the comparison intervention? 9. What is the relationship of the study to the area of the topic review?	Quantitative observational study. Cross-sectional study characterising the probationers in West Yorkshire. Relevant to review area as focuses on mental health problems in probationers.	Quantitative observational study. Cross-sectional design. (Qualitative element considered separately in appendix 4)
Setting 10. Within what geographical and care setting was the study carried out?	Kirklees and Calderdale, two of the management division of the West Yorkshire Probation Service, and the same geographical area covered by West Yorkshire Health Authority (as it was in 1994)	Probation service in Nottinghamshire and Derbyshire.
Sample 11. What was the source population? 12. What were the inclusion criteria? 13. What were the exclusion criteria? 14. How was the sample selected? 15. If more than one group of subjects, how many groups were there, and how many people were in	Offenders aged 18 years and over, serving community based sentences and those supervised post-release from custody. The offenders that received and returned a filled in questionnaire was 238 out of a possible total of 1600. 213 (89.5%) male 25 (10.5%) female The age distribution of those who returned the questionnaires was similar to that of the probation service caseload generally	The probation staff distributed the questionnaires to their clients. This was not a random sample but it was requested that a reasonable mix of clients form each tier and a good geographical spread with the aim to distribute 100 surveys in each of the two counties. The overall response rate was 80.1% with 183 surveys returned. This is a sample of approximately 6467 offenders managed in the community at the time. Out of the sample of 183, 150 (82.0%) male, 31 (16.9% female (2 not recorded)

each group? 16. How were subjects allocated to the groups? 17. What was the size of the study sample, and of any separate groups? 18. Is the achieved sample size sufficient for the study aims and to warrant the conclusions drawn? 19. Is information provided on loss to follow up? 20. Is the sample appropriate to the aims of the study? 21. What are the key sample characteristics, in relation to the topic area being reviewed?	but no other comparison was made between those who responded to the questionnaire and those who did not. The sample was biased towards those on supervision (27.1% responded) as only 8% of those on community service orders responded.	131 (71.6%) were on community orders and 24 (23.0%) were on licence from prison.
Ethics 22. Was Ethical Committee approval obtained? 23. Was informed consent obtained from participants of the study? 24. Have ethical issues been adequately addressed?	Ethics approval was not stated. Respondent were assured of confidentiality rather than anonymity in respect to their responses so to allow the case reference numbers (identifiers) to be included on the questionnaires so other information held on the offenders could be included in the final analysis.	Ethics approval was obtained from the university of Lincoln (CCAWI Ethics Committee) and the Chief Probation Officers in Nottingham and Derbyshire as offenders are a vulnerable group and health, particularly mental health, is a sensitive subject. The authors stated that project confidentiality was adhered to at all times. Participants were invited to take part in the research via their probation officer and were informed fully of the purpose of the research. They were given an information sheet about the project and asked to sign a consent form.
Comparable Groups 25. If there was more than one group was analysed, were the groups comparable before the	In the analysis the characteristics of the self-harmers were compared with the non-self-harmers. This was an appropriate way to examine risk factors for self-	Probationers were compared from one rural (Derbyshire) and one urban area (Nottinghamshire)

intervention? In what respects were they comparable and in what were they not? 26. How were important confounding variables controlled (e.g. matching, randomisation, in the analysis stage)? 27. Was this control adequate to justify the author's conclusions? 28. Were there other important confounding variables controlled for in the study design or analyses and what were they? 29. Did the authors take these into account in their interpretation of the findings?	harming.	
Outcome Measurement 30. What were the outcome criteria? 31. What outcome measures were used? 32. Are the measures appropriate, given the outcome criteria? 33. What other (e.g. process, cost) measures are used? 34. Are the measures well validated? 35. Are the measures of known responsive to change? 36. Whose perspective do the outcome measures address (professional, service, user, carer)?	The primary outcome criteria were the proportion of probationers who reported deliberate self-harming behaviour and consideration of self-harm. In addition other characteristics and demographics of the probationers were collected. In addition, 51 respondents also completed General Health Questionnaire and an AUDIT questionnaire which relate to mental health and alcohol misuse respectively so the additional needs of the self-harmers could be characterised. There was no discussion on why only a sample of the respondents was given these further questionnaires. Interviews were conducted on a random sample (10) of respondents to ascertain the validity of the questionnaire and if it had been properly understood and interpreted by them	The outcome measures were: • Healthcare needs • Access to healthcare These were measured using the ASHNO tool (ASsessment of the Health Needs of Offenders) which combined the following: • Quality of life measured using the Short Form Health survey (SF-36) • Alcohol problems measured by the CAGE Questionnaire • Substance abuse using UNCOPE (six item tool) • Access to healthcare measured by a number of questionnaires aiming to elicit the frequency with which offender's used a range of health services.

37. Is there a sufficient breath of perspective? 38. Are the outcome criteria useful/appropriate within routine practice? 39. Are the outcome measures useful/appropriate within routine practice?	appropriately. Probation officers also completed a questionnaire on the probationers who responded and the responses were matched. This ensured that both the perspectives of the probationers and the probation officers were considered. Mental health problems were assessed by the probation officer and the general health questionnaire and those who reported having seen a psychiatrist.	SF36, CAGE and UNCOPE are validated tools however, CAGE may not be suitable for psychopathic offenders as it is reliant on honesty and focuses on guilt. These measure the perspective of the offenders and gives good breadth to cover a wide range of health issues and problems. The tool is attached in the appendix so could be used by other researchers.
Time Scale of Measurement 40. What was the length of follow-up and at what time points was outcome measurement made? 41. Is this period of follow-up sufficient to see the desired effects?	N/A	N/A
Implications 42. To what setting are the study findings generalisable? (For example, is the setting typical or representative of care settings and in what respects?) 43. To what population are the study's findings generalisable? 44. Is the conclusion justified given the conduct of the study (For example, sampling procedure; measures of outcome used and results achieved?) 45. What are the implications for policy?	This study will have implications for offenders on probation throughout the country although demographics so actual prevalence may vary. The conclusions are justified from the results and highlight the need for further training of probation officers and close working relationships with health services. This study took place in the context of Health of the Nation (1991) where one of the key targets was to reduce suicide rates. Implications are that offenders on probation are a very vulnerable group in relation to mental health problems, self-harm and suicide. Therefore, they need to be identified and targeted for interventions.	Some differences were noted between the two counties which highlights the need for local health needs assessment and results may not be directly comparable. Within the limits of the study, the conclusions are justified.

46. What are the implications for service practice?		
Conclusion	There was a very high incidence of deliberate self-harm amongst probationers. Female offenders were more than twice as likely to have considered self-harm and one and a half times more likely to actually injury themselves than their male peers. The profile of many offenders comprises of a cluster of problems commonly associated with self-harm and suicide victims. Mental health is a key area of concern among probationers. They have come into the criminal justice system as a result of unlawful behaviour but they bring with them a range of problems that are the proper concern of those responsible for health care generally and mental health care in particular. The probation service works with many offenders who have many difficulties and multiple problems in the community so to have a greater, more lasting impact, probation staff need to be able to harness health resources to much better effect in work with individual offenders.	• The prevalence of mental health problems is similar amongst community managed offenders as that found in prisons • The problems of alcohol/drug misuse and suicide amongst offenders in the community exceed those of the prison population. • Recently-released offenders constitute a particularly vulnerable group in terms of substance misuse and mortality. • Community managed offenders have disproportionately greater health needs than the general population but have less opportunity to access the healthcare services to support them.
Overall quality good/acceptable/low	Acceptable	Good

Appendix 3 Participant information leaflets

Information about the Research (Structured Questionnaire)

Study Title: The Health of People with Court Orders Supervised by Probation Services: An exploratory study.

We would like to invite you to take part in our research study. Before you decide we would like you to understand why the research is being done and what it would involve for you. One of the researchers will go through this information sheet with you and answer any questions you have. This should take about 10 minutes and you can talk to others about the study if you wish.

Please ask us if there is anything that is not clear.

Who is organising and funding the research?

The University of Southampton is leading the research. The Chief Investigator is Emma Richards and this study will form part of her PhD qualification.

The study was designed from results from an earlier study that interviewed Probation and NHS staff and has the support of Hampshire Probation Trust. However, Hampshire Probation Trust staff will only receive the final results and not any individual information.

The funding for this study has come from Solent NHS Trust and the University of Southampton.

What is the purpose of the study?

The aim is to find out health problems faced by people with a Court Order who are supervised by the Probation Services. We are specifically interested in mental health problems, drug and alcohol use and if people can understand information about their health (health literacy). We would like to find out if these health problems get better or worse whilst people are supervised by Probation Services and if the services, treatment or help they receive during this time have improved any health problems.

This will help us make recommendations to the NHS and Probation Services about how the probation period might best be used to identify and help those people with these types of health problems.

Not much research has been carried out with people supervised by probation services so part of this study will be to find out what are the best ways to carry out studies and if people are willing to take part.

Why have I been invited?

We are inviting all adults over 18 who have just started a new Court Order and are being supervised by Probation Services at this office.

Do I have to take part?

It is up to you to decide to join the study. We will describe the study and go through this information sheet. If you agree to take part, we will then ask you to sign a consent form. You are free to change your mind and not take part at any time, without giving a reason. This will not affect your probation supervision in any way.

What will happen to me if I take part?

Taking part will involve a face-to-face interview with a researcher which will take between 45 minutes to one hour. They will ask you questions about yourself and your health and wellbeing. Then there will be a second interview which will take between 30 – 45 minutes just before your supervision finishes or after 12 months, whichever is sooner so we can see if there have been any changes to your health and to find out if you have used any health services during this time. If for some reason you are sent to prison after the first interview we will not be able to interview you for a second time but will still use your initial data in the study.

We will also be interviewing up 30 people in this study in more depth about their own views and experiences of health problems. If you are invited to do this then we will give you more information about this interview and you can decided it you would like to take part.

What will I have to do?

At each of the interviews you will be asked a series of questions about yourself, how you are feeling and your health. This will also include questions about how much alcohol you drink and if you have ever taken drugs. We ask that you give honest answers to the questions.

We will also ask you for contact details so we can arrange the next interview.

We will ask you if we can check your records with the probation service so we can have information about your offense, the type of order you have received and information relating to your health. We will also ask you if we can check the

Police National Computer so we can record any offences recorded during the probation time and up to 3 years after your Court Order has finished.

We will also ask you if we can check your medical records that are held by the NHS Information Centre so we can see if you have received any relevant treatments or services either during your Court Order supervision or afterwards. This will include information about any time you have been to a hospital as an outpatient (including A & E) or if you have stayed for one night or more.

We will also ask you if you would be interested in taking part in another part of study which will give you the opportunity to talk in more depth about your experiences of your health and health services. We only need about 30 people to do this and if you agree we may ask you to do this when we complete the second interview of the main study.

Expenses and payments

The interviews will take place at the probation office and can be held either before or after another appointment. Once the interview is finished, you will receive a £10 shopping voucher to thank you for taking part. You will receive this shopping voucher after the first interview and after the second follow-up interview.

What are the possible benefits of taking part?

You will be helping us to understand the health problems faced by people with a court order so the Probation Service and NHS can plan services to help them.

Will my taking part in the study be kept confidential?

Yes. None of the answers you give to the questions will be shared with anybody else. The only people who will see the individual results will be the researchers from the University of Southampton. Hampshire Probation Trust will only receive a summary of the results and nobody will be identified.

The information will be collected by the researchers and stored on a secure computer server at the University. Only the researchers will have access to this. Information that can identify a person (name, age, date of birth, address etc) will be removed and kept separately. Each person who takes part will be given a number which will replace the identifiable information so only the researchers will be able to match the information with a specific person**.** The information held on the computer server will be retained for at maximum of ten years before being deleted.

Any paper records will be kept locked away at the University of Southampton or a secure storage facility and only the researchers will have access. The paper records will be retained for at maximum of ten years before being disposed of securely.

All information (data) will be kept in line with the Data Protection Act 1998.

All the answers given to the specific questions in the interview will be treated in confidence. However, if a participant did give additional information, then the researchers are required to break that confidence by law. Information will be disclosed and confidentiality breached in the following circumstances:

- When information given by you concerns the abuse, harm or neglect of a child or when we have reason to believe that a child is being abuse, harmed or neglected.
- If by keeping confidential you or another person is likely to suffer serious injury
- If the Police have a court order for specific information relating to you
- We are obliged to pass information to the relevant authorities if the information relates to the Prevention of Terrorism Act (1990).
- If you disclose information relating to an offence either committed or planned.
- If you give us any information that relates to unprofessional activity

If any of these circumstances apply every effort will be made to inform you of a disclosure and to encourage you to take the appropriate steps yourself but this information would be passed on to an offender manager at Hampshire Probation and the appropriate authorities.

What will happen if I don't want to carry on with the study?

If you decide you do not want to carry on with the study we will only use the information we have collected from you up to that point. We will not ask you for any more information.

What if there is a problem?

If you have a problem about any part of this study, you should speak to one of the researchers who will do their best to answer your questions or speak to Emma Richards on 02380 794775 or 07799 861406. If you remain unhappy and wish to complain formally, you can do this by contacting:

Dr Martina Prude,
Head of Research Governance,
University of Southampton,
Research Governance Office,
George Thomas Building 37, Room 4055,
Highfield,
Southampton, SO17 1BJ.
Phone 023 8059 5058 or email m.a.prude@soton.ac.uk.

What will happen to the results of the research study?

A summary of the findings will be available to any person who takes part in the study if they would like to receive this. No person will be identified in any report or publication.

Who has reviewed the study?

All research is looked at by independent groups of people, called the Research Ethics Committees, to protect your interests. This study has been reviewed by the East of England – Essex Research Ethics Committee and the National Offender Management Service (NOMS) ethics committee and they have agreed that it can go ahead.

Information about the Research (In-depth Interviews)

Study Title: The Health of People with Court Orders Supervised by Probation Services: An exploratory study.

We would like to invite you to take part in another part of our research study – the in-depth interview. Before you decide we would like you to understand why the research is being done and what it would involve for you. One of the researchers will go through this information sheet with you and answer any questions you have. This should take about 10 minutes and you can talk to others about the study if you wish.

Please ask us if there is anything that is not clear.

Who is organising and funding the research?

The University of Southampton is leading the research. The Chief Investigator is Emma Richards and this study will form part of her PhD qualification.

The study was designed from results from an earlier study that interviewed Probation and NHS staff and has the support of Hampshire Probation Trust. However, Hampshire Probation Trust staff will only receive the final results and not any individual information.

The funding for this study has come from Solent NHS Trust and the University of Southampton.

What is the purpose of the study?

The aim is to find out health problems faced by people with a Court Order who are supervised by the Probation Services. We are specifically interested in mental health problems, drug and alcohol use and if people can understand information about their health (health literacy). We would like to find out if these health problems get better or worse whilst people are supervised by Probation Services and if the services, treatment or help they receive during this time have helped.

This will help us make recommendations to the NHS and Probation Services about how the probation period might best be used to identify and help those people with these types of health problems.

Not much research has been carried out with people supervised by probation services so part of this study will be to find out what are the best ways to carry out studies and if people are willing to take part.

Why have I been invited?

We are inviting up to 30 adults over 18 who are taking part in the main study. This is so we can explore some of your responses in depth and give you the chance to tell us about your experiences with health services.

We would like to get a wide range of views so we are asking a variety of different people from the study.

Do I have to take part?

It is up to you to take part in this part of the study. We will describe what will happen and go through this information sheet. If you agree to take part, we will then ask you to sign a consent form. You are free to change your mind and not take part at any time, without giving a reason. This will not affect your probation supervision in any way.

What will happen to me if I take part?

Taking part will involve a face-to-face interview with a researcher which will take between 45 minutes to one hour.

This interview will be audio recorded and then everything will be written down exactly as it was said. All the in-depth interviews held with people will be recorded like this and then all the main themes will be identified. **Some direct quotes will be used to explain some of the themes. However, we will never disclose who said what.**

What will I have to do?

At the interviews you will be asked some questions about yourself, how you are feeling, your health and your experience of any health services that may have used during the time you were being supervised by probation services. You will also be asked about how easy or difficult it has been to get help for any health problems.

We ask that you give honest answers to the questions.

Expenses and payments

The interviews will take place at the probation office and can be held either before or after another appointment. **Once the interview is finished, you will receive a £10 shopping voucher to thank you for taking part.**

What are the possible benefits of taking part?

You will be helping us to understand the health problems faced by people with a court order so the Probation Service and NHS can plan services to help them.

Will my taking part in the study be kept confidential?

Yes. None of the answers you give to the questions will be shared with anybody else. The only people who will see the individual results will be the researchers from the University of Southampton. Hampshire Probation Trust will only receive a summary of what has been said and nobody will be identified.

The information will be collected by the researchers and stored on a secure computer server at the University. Only the researchers will have access to this. Information that can identify a person (name, age, date of birth, address etc) will be removed and kept separately. Each person who takes part will be given a number which will replace the identifiable information so only the researchers will be able to match the information with a specific person.

Any paper records and audio tapes will be kept locked away at the University of Southampton or a secure storage facility and only the researchers will have access. **The paper records and audio recording will be retained for a maximum of ten years before being disposed of securely.**

All information (data) will be kept in line with the Data Protection Act 1998.

All the answers given to the specific questions in the interview will be treated in confidence. However, if a participant did give additional information, then the researchers are required to break that confidence by law. Information will be disclosed and confidentiality breached in the following circumstances:

- When information given by you concerns the abuse, harm or neglect of a child or when we have reason to believe that a child is being abuse, harmed or neglected.
- If by keeping confidential you or another person is likely to suffer serious injury
- If the Police have a court order for specific information relating to you
- We are obliged to pass information to the relevant authorities if the information relates to the Prevention of Terrorism Act (1990).
- If you disclose information relating to an offence either committed or planned.
- **If you give us any information that relates to unprofessional activity**

If any of these circumstances apply every effort will be made to inform you of a disclosure and to encourage you to take the appropriate steps yourself **but this information would be passed on to an offender manager at Hampshire Probation and the appropriate authorities.**

What will happen if I don't want to carry on with the study?

If you decide you do not want to carry on with the study we will only use the information we have collected from you up to that point. We will not ask you for any more information.

What if there is a problem?

If you have a problem about any part of this study, you should speak to one of the researchers who will do their best to answer your questions or speak to Emma Richards on 02380 794775). If you remain unhappy and wish to complain formally, you can do this by contacting:

Dr Martina Prude,
Head of Research Governance,
University of Southampton,
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Highfield,
Southampton, SO17 1BJ.
Phone 023 8059 5058 or email m.a.prude@soton.ac.uk.

What will happen to the results of the research study?

A summary of the findings will be available to any person who takes part in the study if they would like to receive this. We hope to publish the results and present a report to Hampshire Probation Trust. No person will be identified in any report or publication.

Who has reviewed the study?

All research is looked at by independent groups of people, called the Research Ethics Committee, to protect your interests. This study has been reviewed by the East of England - Essex Research Ethics Committee and the National Offender Management Service (NOMS) Ethics Committee and they have agreed that it can go ahead.

Appendix 4 Consent forms

UNIVERSITY OF Southampton

CONSENT FORM

The Health of People with Court Orders Supervised by Probation Services: An exploratory study. Structured Interview

Name of researchers: Emma Richards, Julie Parkes, Dina Gojkovic, Kate Lees
Study Ref No: 8246

If you would like to participate in the structured interview, please complete this consent form and return to the project investigator, Emma Richards.

	Please initial to confirm
1. I confirm that I have read and understood the information sheet dated 22/11/2011 for the above study.	
2. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.	
3. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason or legal rights being affected.	
4. I agree to participate in the structured interview and I understand that my responses to the questions will be written down and entered onto a database but personal identifiable information will not be recorded on the database but kept separately and locked away.	
5. I have been informed that, while information gained during the study may be shared with Hampshire Probation Trust and published, I will not be identified and my personal results will not be divulged.	
6. I agree to be contacted for the follow-up interview.	
7. I understand that I may also be asked to take part in a further in-depth interview and agree to be contacted about his. I understand that I do not need to decide if I want to take part in this until I have been asked and have received more information.	
8. I understand and agree that the researchers can ask for information relating to me held on the Police National Computer both for now and in the future (1 year and 3 years after my sentence finishes) for follow-up.	
9. I understand and agree that the researchers can ask for information relating to my sentence, offences and health assessment from Hampshire Probation information systems including CRAMS and OAsys.	
10. I agree to my offender manager being contacted by the researchers for the sole purpose of finding out when my appointments are so a follow-up interview can be arranged either before or after this.	
11. I understand and agree that information held and maintained by The Health & Social Care Information Centre can be used to help contact me or provide information about my health status and health service use for the purpose of this study both now and in the future for follow-up.	

12. I agree to take part in the above research study.	

_____	___/___/_____	_____
Name of Participant	Date	Signature
_____	___/___/_____	_____
Name of Researcher	Date	Signature

Thank you for your participation.

UNIVERSITY OF Southampton

CONSENT FORM

The Health of People with Court Orders Supervised by Probation Services: An exploratory study.

In-depth Interview

Name of researchers: Emma Richards, Julie Parkes
Study Ref No: 8246

If you would like to participate in the in-depth interview, please complete this consent form and return to the project investigator, Emma Richards.

	Please initial to confirm
1. I confirm that I have read and understand the information sheet dated 22/11/2011 for the above study.	
2. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.	
3. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason or legal rights being affected.	
4. I agree to participate in the in-depth interview and I understand that this interview will be audio-recorded and that these recordings will be destroyed once the interviews have been transcribed and checked.	
5. I have been informed that, while information gained during the study may be shared with Hampshire Probation Trust and published, I will not be identified and my own results will not be divulged.	
6. I agree that direct quotes from my interview may be used and published but these will be anonymised so I will not be identified.	
7. I agree to take part in the above research study	

_____	___/___/_____	_____
Name of Participant	Date	Signature
_____	___/___/_____	_____
Name of Researcher	Date	Signature

Thank you for your participation.

Appendix 5 Form for collecting participant contact details

Improving the Health of People with Court Orders Supervised by Probation Services: An exploratory study.

Participant Confidential Information for Study

ID	
First Name(s)	
Surname	
Date of Birth	
Address	
Postcode	
Is this address permanent or temporary?	
Contact number(s)	
What is the best way to contact you to arrange for the follow-up interviews? Telephone/email/letter/through another person?	
Name of Offender Manager (for contact for follow-up only)	

Appendix 6 Scoring of the CIS-R

The revised Clinical Interview Schedule (CIS-R) (Lewis et al., 1992, obtained through personal communication)

Summary:
The revised clinical interview schedule (CIS-R) is a fully structured assessment, suitable for trained social survey interviewers and does not require any expert knowledge on the part of the interviewers. As such, it can also be administered using personal computers in which the subjects self-complete the questionnaire (Lewis 1994). The interview schedule establishes the nature and severity of neurotic symptoms experienced over the previous 7 days and identifies the presence of neurosis. The CIS-R elicits responses to 14 areas of symptoms including depression, anxiety, sleep and fatigue. It can be used to generate a total score, analogous to the single continuum approach, as well as diagnostic categories according to ICD-10 criteria.

The CIS-R has been widely used in the UK. In 1993 the Office of Population Censuses and Surveys (OPCS) included it into the OPCS Psychiatric Morbidity Survey, a household survey on 10,000 individuals representative of the UK population (Jenkins et al., 1997).

Validation:
Lewis et al (1992) reported on two reliability studies of the revised Clinical Interview Schedule (CIS-R). Both were conducted in primary health care clinics; one in London and the other in Santiago, Chile. In both studies, psychiatrically trained interviewer(s) were compared with lay interviewer(s). Estimates of the reliability of the CIS-R compared favourably with the results of studies of other standardized interviews. In addition, the lay interviewers were as reliable as the psychiatrists and did not show any bias in their use of the CIS-R. Confirmatory factor analysis models were also used to estimate the reliabilities of the CIS-R and self-administered questionnaires which indicated that traditional measures of reliability are probably overestimates.

Items:
The interview begins with general questions to establish an overall picture of health, appetite and physical activity. The main body of the CIS-R contains 14 sections, each designed to detect the presence and severity of a specific neurotic symptom. These are:

somatic symptoms, health worries, panic, compulsions,

obsessions, phobias, irritability, worry, anxiety, concentration,

*fatigue, sleep, depression, and depressive thoughts**

** Please note, the depressive thoughts section is only carried out if the depression score is >0*

A final section establishes the overall effect of these neurotic symptoms and provides a diagnostic summary indicating the primary diagnosis and, where appropriate, secondary diagnosis.

Scoring:
Each of the main sections consists of a series of questions designed to score a particular type of neurotic symptom which, with the exception of depressive

thoughts, may range in severity between 0 and 4. The section on depressive thoughts scores between 0 and 5. Each section contributes towards the total score. Thus the total possible score for the CIS-R is 57. Symptoms with scores of 2 or more should be considered significant and a total score of 12 or more indicates a clinically significant level of distress.

Together with the questions concerning appetite, some sections also contribute towards the scoring of three indicators; DEPCRIT1, DEPCRIT2, & DEPCRIT3. These indicators are used to record the occurrence of those symptoms that correspond to an ICD10-F32 diagnosis of a depressive episode.

Details of the variables produced and scoring for each section are given below.

Precursor

This section consists of general questions regarding age, sex, appetite, and physical health in which the following variables are created:

AGE age last birthday

SEX 1=male, 2=female

WTCHANGE 1=loss of appetite
2=loss/increase of appetite and unintentional weight loss/gain
3=loss of appetite & significant weight loss of at least 7lbs
4=gain in weight of at least 7lbs and increase in appetite

GP_YEAR 0=None (number of visits to GP in previous year)
1=1or 2 times
2=3 to 5 times
3=6 to 10 times
4 =More than 10 times

DISABLE 1=yes – long-standing illness/disability
2=no

ILLNESS 1=Diabetes
2=Asthma
3=Arthritis
4=Heart disease
5=High blood pressure
6=Lung disease
7=More than one of the above
8=None of the above

This section also asks and records severity of the following physical symptoms in past seven days:

SOMA1(nausea), SOMA2(stomach ache), SOMA3(bowels), SOMA4(limb aches), SOMA5(headaches), SOMA6(chest pains), SOMA7(breathlessness), SOMA8(cough)

Each symptom scores 0 to 3 for severity (0=None, 1=Mild, 2=Moderate, 3=Severe). A total score, SOMA, is calculated by summing SOMA1 to SOMA8 (range 0 to 24)

Somatic Symptoms
A series of questions which computes two variables; one for the presence of aches/pains or bodily discomfort (SOMATIC - range 0 to 4) and one for the duration of ache/pain or bodily discomfort (SOMATIC_DUR – 0,1,2,3,4 or 5).

SOMATIC scores +1 if consistent during the past week (>3 days)
+1 if consistent and for at least 3hrs in any day in last week
+1 if consistent and unpleasant
+1 if consistent and bothersome during 'interesting' activity

SOMATIC_DUR 0 no problem recorded
1 if present for < 2 weeks
2 if present for 2 weeks to 6 months
3 if present for 6 months to 1 year
4 if present for 1 to 2 years
5 if present >2 years

Fatigue
A series of questions which computes two variables; one for the presence of fatigue defined as tiredness or lack of energy (FATIGUE - range 0 to 4) and one for the duration of the fatigue (FATIG_DUR – 0,1,2,3,4 or 5).

FATIGUE scores +1 if consistent during the past week (>3 days)
+1 if consistent and for at least 3hrs in any day in last week
+1 if consistent and difficult to get motivated
+1 if consistent and bothersome during 'enjoyable' activity

FATIG_DUR 0 if no problem recorded
1 if present for < 2 weeks
2 if present for 2 weeks to 6 months
3 if present for 6 months to 1 year
4 if present for 1 to 2 years
5 if present >2 years

Concentration & Forgetfulness
A series of questions which computes three variables; one for problems with concentration and/or memory (CONC - range 0 to 4), one for the duration of concentration problems (CONC_DUR – 0,1, 2,3,4 or 5) and one for duration of forgetfulness problems (FORGET_DUR – 0,1,2,3,4,or 5).

CONC scores +1 if problem is consistent during the past week (>3 days)
+1 if concentration is poor for any length of time
+1 if consistently interrupts daily activities
+1 if important information forgotten

CONC_DUR scores 0 if no problem recorded
1 if present for < 2 weeks
2 if present for 2 weeks to 6 months
3 if present for 6 months to 1 year
4 if present for 1 to 2 years
5 if present >2 years

FORGET_DUR 0 if no problem recorded

1 if present for < 2 weeks
2 if present for 2 weeks to 6 months
3 if present for 6 months to 1 year
4 if present for 1 to 2 years
5 if present >2 years

Sleep problems

A series of questions which computes four variables; one for to rate the extent of any sleep problem, too much or too little (SLEEP - range 0 to 4), one for the duration of sleep problems (SLEEP_DUR - range 0 to 5), one for type of problem (SLEEPCH – 0,1, 2 or 3) and one for the cause of the problem (SLEEPCS – 1,2,3,4,5 or 6)

SLEEP scores +1 if problem is consistent during the past week (>3 days)
+1 if problem persisted for at least 15 mins on any night
+1 if problem persisted for more than 1hr on any night
+1 if problem occurred for > 3hrs on at least 4 nights

SLEEP_DUR 0 no problem recorded
1 if present for < 2 weeks
2 if present for 2 weeks to 6 months
3 if present for 6 months to 1 year
4 if present for 1 to 2 years
5 if present >2 years

SLEEPCH 0 if no sleep problem recorded
1 if early morning rising and sleep deprivation (SLEEP>0)
2 if no early morning rising but sleep deprivation (SLEEP>0)
3 if >3hrs longer that usual on at least 4 days in past week

SLEEPCS 1 Noises (babies crying, busy roads etc)
2 Shift work or late nights
3 Pain or illness
4 Worries
5 Reason not known
6 Other

Irritability

A series of questions which computes two variables; one for feelings or irritability, anger or short-tempered (IRRIT - range 0 to 4) and one for the duration of these feelings (IRRIT_DUR – 0,1,2,3,4 or 5).

IRRIT scores +1 if consistent during the past week (>3 days)
+1 if feeling lasted >1hr in any day during past week
+1 if shouted or felt like shouting
+1 if lost temper without reason

IRRIT_DUR 0 no problem recorded
1 if present for < 2 weeks
2 if present for 2 weeks to 6 months
3 if present for 6 months to 1 year
4 if present for 1 to 2 years

5 if present >2 years

Worry about physical health

A series of questions which computes two variables; one for concern over health or future health (HYPO - range 0 to 4) and one for the duration of this concern (HYPO_DUR – 0,1,2,3,4 or 5).

HYPO scores +1 if consistent during the past week (>3 days)
+1 if considered excessive
+1 if considered unpleasant
+1 if difficult to stop worrying

HYPO_DUR 0 no problem recorded
1 if present for < 2 weeks
2 if present for 2 weeks to 6 months
3 if present for 6 months to 1 year
4 if present for 1 to 2 years
5 if present >2 years

Depression

A series of questions which computes three variables; one for level of depression (DEPR - range 0 to 4), one for the duration of depression symptoms (DEPR_DUR – 0,1, 2,3,4 or 6) and one for reason for depression (DEPCON – 0,1,2,3,4,5,6,7,8 or 9).

DEPR scores +1 if less/no enjoyment with life during the past week
+1 if depressed for >3day in past week
+1 if depressed for >3hr in any day of past week
+1 if unable to be cheered up

DEPR_DUR 0 if no problem recorded
1 if present for < 2 weeks
2 if present for 2 weeks to 6 months
3 if present for 6 months to 1 year
4 if present for 1 to 2 years
5 if present for 2 to 5 years
6 if present for more than 5 years

Please note: CIS-R script altered for CoBalT study to include extra category of >5 years

DEPCON 0 if no problem recorded
1 Family members, including spouse or partner
2 Relationships with friends or people at work
3 Housing
4 Money or bills
5 Your own physical health, including pregnancy
6 Your own mental health
7 Work or lack of work (including studying)
8 Legal difficulties
9 Political issues or the news

Depressive Ideas

This section is executed only if the depression score is greater than 0. It contains a series of questions which computes five variables; one for depressive thoughts (DEPTHTS - range 0 to 5), one for timing of these feelings (DVM – 0,1 or 2), one for libido (LIBID – 0 or 1), one for agitation level (PSYCHMOT – 0,1,2 or 3) and one for suicidal thoughts (SUICID – range 0 to 4)

DEPTHTS scores +1 if feelings of needless guilt

+1 if feelings of low self-esteem
+1 if feelings of hopelessness
+1 if felt that life not worth living
+1 if thought seriously about suicide

DVM 0 depressive thoughts similar morning/evening
1 depressive thoughts worse in morning
2 depressive thoughts worse in evening

LIBIDO 0 no effects on sex life
1 decreased interest in sex

PSYCHMOT 0 No effect
1 Slowed down
2 More agitated
3 More agitated but also slowed down

SUICID scores +1 feelings of hopelessness
+1 felt life not worth living
+1 suicidal thoughts
+1 considered suicide method

Worry

A series of questions which computes four variables; one for level of worry (WORRY - range 0 to 4), one for the duration of these feelings (WORRY_DUR – 0,1, 2,3,4 or 5).The main cause of worry is also stored (WORRYCON1) – 1,2,3,4,5,6,7 or 9).

WORRY scores +1 if worry persists for >3days in past week
+1 if excessively worried
+1 if worry was unpleasant
+1 if worried >3hrs in any day

WORRY_DUR 0 if no problem recorded
1 if present for < 2 weeks
2 if present for 2 weeks to 6 months
3 if present for 6 months to 1 year
4 if present for 1 to 2 years
5 if present >2 years

WORRYCON1 1 Family members, including spouse or partner
2 Relationships with friends or people at work
3 Housing
4 Money or bills
5 Your own physical health, including pregnancy
6 Your own mental health
7 Work or lack of work (including studying)
8 Legal difficulties
9 Political issues or the news

Anxiety

A series of questions which computes three variables; one for level of anxiety (ANX - range 0 to 4), one for the duration of anxiety (ANX_DUR – 0,1, 2,3,4 or 5) and one to indicate presence of specific fear (PHOBIAS_FLAG – 0 or 1).

ANX scores +1 if anxious for >3days in past week
+1 if causes feeling of unpleasantness
+1 if causes physical symptoms

+1 if anxious >3hrs in any day

ANX_DUR
0 if no problem recorded
1 if present for < 2 weeks
2 if present for 2 weeks to 6 months
3 if present for 6 months to 1 year
4 if present for 1 to 2 years
5 if present >2 years

PHOBIAS_FLAG
0 Only general anxiety
1 Specific fear

Phobias

A series of questions which computes three variables; one for level of phobia (PHOBIAS - range 0 to 4), one for the duration of the phobia (PHOBIAS_DUR – 0,1, 2,3,4 or 5) and one to indicate the type of phobia (PHOBIAS_TYPE – 0,1,2,3 or 4).

PHOBIAS scores
+1 if anxious for >3days in past week
+1 if causes physical symptoms
+1 if avoidance action taken for at least 1day
+1 if avoidance action taken for more than 3days

PHOBIAS_DUR
0 if no problem recorded
1 if present for < 2 weeks
2 if present for 2 weeks to 6 months
3 if present for 6 months to 1 year
4 if present for 1 to 2 years
5 if present >2 years

PHOBIAS_TYPE0 other
1 outside comfort zone
2 self awareness
3 blood
4 insects/spaces

Panic

A series of questions which computes five variables; one for level of panic (PANIC - range 0 to 4), one for the duration of the panic (PANIC_DUR – 0,1, 2,3,4 or 5), one to indicate if attacks are sudden and severe (PAN4 – 1 or 2), one to indicate the if panic is always caused by a specific situation (PAN5 – 1 or 2), and one, PANSYTOT, to indicate the number of physical symptoms that occur during an attack (range 0 to 13).

PANIC scores
+1 if panic occurred once in past week
+1 if panic occurred more than once in past week
+1 if panic attack lasted longer than 10 mins
+1 if panic attack was very unpleasant

PANIC_DUR
0 if no problem recorded
1 if present for < 2 weeks
2 if present for 2 weeks to 6 months
3 if present for 6 months to 1 year

4 if present for 1 to 2 years
5 if present >2 years

PAN4 1 attacks not sudden and severe
2 attacks are sudden and severe

PAN5 1 panic attack not always caused by specific situations
2 panic attack always caused by specific situation

PANSYTOT range 0 to 13 to indicate the number of symptoms occurring during attack

The variables PANSYM_A to PANSYM_M record whether of not the following physical symptoms that occur during an attack (0=not present, 1=present):

rapid heartbeat, sweaty/clammy hands, trembling or shaking,

breathing difficulties, choking sensation, chest pain/discomfort,

nausea, lightheadedness, detached, loss of control, fear of dying,

tingling/numbness, hot flushes/chills

Compulsions

A series of questions which computes six variables; one for level of compulsion (COMP - range 0 to 4), one for the duration of the compulsion (COMP_DUR – 0,1, 2,3,4 or 5).

COMP scores +1 if repeating actions >3 days in past week
+1 if attempted to stop
+1 if action is upsetting
+1 if an action was repeated more than twice

COMP_DUR 0 if no problem recorded
1 if present for < 2 weeks
2 if present for 2 weeks to 6 months
3 if present for 6 months to 1 year
4 if present for 1 to 2 years
5 if present >2 years

Obsessions

A series of questions which computes two variables; one for the presence of obsessive thoughts (OBSESS – range 0 to 4) and one for the duration of these thoughts (OBSESS_DUR – 0,1,2,3,4 or 5).

OBSESS scores +1 if consistent during the past week (>3 days)
+1 if tried to stop
+1 if they are upsetting
+1 lasted for at least 15 mins

OBSESS_DUR 0 no problem recorded
1 if present for < 2 weeks
2 if present for 2 weeks to 6 months
3 if present for 6 months to 1 year
4 if present for 1 to 2 years
5 if present >2 years

Depression criteria symptoms
The primary and secondary symptoms that contribute towards a depressive episode according to ICD10 criteria are shown below. The number of symptoms reported are stored in the variables DEPCRIT1 (primary symptoms) and DEPCRIT2 (secondary symptoms) and are used to determine a diagnosis of depression. A depressive episode is diagnosed if:

- the patient displays at least **2** of the **Primary** symptoms

and

- at least **4** of the **Primary and Secondary** symptoms together

and

- symptoms must have been present for at least **2 weeks**.

A depressive episode is considered **moderate** if two primary symptoms are present and the number of primary and secondary symptoms together is at least 6, and **severe** if all three primary symptoms are present and the number of primary and secondary symptoms together is at least 8, and.

A count of the number of somatic symptoms is also stored in DEPCRIT3 to allow the diagnosis of a depressive episode with somatic symptoms.

Primary Symptoms

depressed mood for most of the day, almost every day
loss of enjoyment for most of the day, almost every day
decreased energy or increased fatigue

Secondary Symptoms

low self esteem
unreasonable feelings of guilt
serious suicidal thoughts
lack of concentration
change in psychomotor activity
sleep disturbance
change in appetite (up/down) with corresponding weight change

Somatic Symptoms

loss of appetite
weight loss >7lb
waking up more than 2 hours earlier than usual
less/lack of enjoyment
unable to cheer up with pleasurable activities
depression worse in morning
decreased libido
change in psychomotor activity

Overall Effects
This section is activated if the score for any symptom is at least 2. It first of all creates a new variable, IMPAIR, as a measure of the overall effects of the symptom(s) on daily activity. IMPAIR is scored as follows:

IMPAIR 1 no effect
2 made things more difficult
3 stopped 1 activity
4 stopped more than 1 activity

It then combines this with the results of all previous sections to determine a primary diagnosis (DIAG1) and, if applicable, a secondary diagnosis (DIAG2) in accordance with ICD-10 criteria of the following common mental disorders:

Depression (mild, moderate and severe), panic disorder, general anxiety disorder (GAD), agoraphobia, social phobia, specific phobia, mixed anxiety and depression, obsessive compulsive disorder (OCD), mild GAD, and mild neurosis

Diagnosis is assigned in a hierarchal order starting first with depressive disorders (severe, moderate or mild) through to mild neurosis. Diagnostic criteria and the corresponding value of DIAG1 and DIAG2 are summarised below.

Condition	Value	Criteria
Depression: severe moderate mild	 12 11 10	Please see ***Depression criteria symptoms*** above
Panic disorder	9	Panic score is at least 3 and the attacks were sudden and severe
GAD	8	Anxiety score is at least 2 and physical symptoms such as sweating, racing heart etc are present during an attack, and total CIS-R score must be at least 20.
Agoraphobia	7	Phobia score is at least 2, the type of fear reported concerns open spaces, crowded rooms or travelling alone on public transport, and these situations are avoided
Social phobia	6	Phobia score is at least 2, the type of fear reported concerns being observed by other people or eating or speaking in front of strangers, and these situations are avoided
Specific phobia	5	Phobia score is at least 2, the type of fear reported is not agoraphobia or social phobia(e.g. insects, blood, enclosed spaces), and these situations are avoided
Mixed anxiety and depression	4	Total CIS-R score is at least 20 and symptoms does not match any of the conditions above
OCD	3	Compulsion score is 4 and person is unable to stop repeating the action to such an extent that it has detrimental effect on daily activity ***or*** The sum of the obsession score and compulsion score is at least 6 and person is unable to stop repeating the action/thought to such an extent that it has detrimental effect on daily activity
Mild GAD	2	Anxiety score is at least 2 and physical symptoms such as sweating, racing heart etc are present during an attack but CIS-R score is less than 20 and symptoms do not match any of the conditions above
Mild neurosis	1	Total CIS-R score is at least 12 but symptoms reported do not match any of the conditions above

Cut off points: Diagnostic condition needs to be present for at least the previous 2 weeks.
Symptoms with scores of 2 or more should be considered significant.
Total score of 12 or more indicates a clinically significant level of distress.

Recall period: Significant symptoms need to be present within the last 7 days.

Appendix 7 Baseline survey form

The Health of People with Court Orders Supervised by Probation Services: An exploratory study.

Structured Questionnaire – Baseline

ID			
Probation Office	1. IoW ☐ 2. Portsmouth ☐ 3. Southampton ☐		
Date of Interview			
Age			
Gender	1. Male ☐ 2. Female ☐		
Ethnic Group	1. White British	☐	
	2. White Irish	☐	
	3. White Other	☐	
	4. Black Caribbean	☐	
	5. Black African	☐	
	6. Black Other	☐	
	7. Indian	☐	
	8. Pakistani	☐	
	9. Bangladeshi	☐	
	10. Mixed White and Black Caribbean	☐	
	11. Mixed White and Black African	☐	
	12. Mixed White and Asian	☐	
	13. Mixed other	☐	
	14. None of these	☐	
Country of birth	……		

Marital status	1. Married	☐
	2. Living as a couple with partner	☐
	3. Single	☐
	4. Widowed	☐
	5. Divorced	☐
	6. Separated	☐
Current residence	1. Own home	☐
	2. Rented self-contained accommodation	☐
	3. Rented bedsit or room with shared amenities	☐
	4. Hostel or other temporary accommodation	☐
	5. Probation hostel	☐
	6. Living on the streets	☐
	7. Staying in someone else's home	☐
	8. Other: (please state)	☐
How long have you been living there?	1. 1 week or less	☐
	2. 1 month or less	☐
	3. 3 months or less	☐
	4. 6 months or less	☐
	5. 1 year or less	☐
	6. Over 1 year	☐
Who do you live with?	1. On own	☐
	2. With partner	☐
	3. With parents	☐
	4. With other adult relations	☐
	5. With friends	☐
	6. With dependent children only	☐
	7. Other (please state)	☐
Have children or step children under 18?	1. Yes ☐ 2. No ☐	
Have children over 18?	1. Yes ☐ How many? _____ 2. No ☐	
How many biological children do you have under 18?	1. 1 Child	☐
	2. 2 Children	☐
	3. 3 Children	☐
	4. 4 Children	☐
	5. 5 Children	☐
	6. 6 Children	☐
	7. 7 Children	☐
	8. 8 Children	☐
	9. 9 Children	☐
	10. 10 Children or more	☐
How many partners have you had these	1. 1 Partner	☐
	2. 2 Partners	☐

children with	3. 3 Partners	☐
	4. 4 Partners	☐
	5. 5 Partners	☐
	6. 6 Partners	☐
	7. 7 Partners	☐
	8. 8 Partners	☐
	9. 9 Partners	☐
	10. 10 Partners or more	☐
How many step children do you have under 18?	1. 1 Child	☐
	2. 2 Children	☐
	3. 3 Children	☐
	4. 4 Children	☐
	5. 5 Children	☐
	6. 6 Children	☐
	7. 7 Children	☐
	8. 8 Children	☐
	9. 9 Children	☐
	10. 10 Children or more	☐
Do you live with their children?	1. No children living with them	☐
	2. Live with at least 1 of their children	☐
	3. Live with all their children	☐
If 1 or 2 then where do the children live?	1. Spouse/partner	☐
	2. Former spouse/partner	☐
	3. Other relatives	☐
	4. Foster parents	☐
	5. Children's home/in care	☐
	6. Looking after themselves	☐
	7. Missing	☐
	8. Other	☐
	9. Don't know	☐
Where do the children live?	1. Spouse/partner	☐
	2. Former spouse/partner	☐
	3. Other relatives	☐
	4. Foster parents	☐
	5. Children's home/in care	☐
	6. Looking after themselves	☐
	7. Missing	☐
	8. Other	☐
	9. Don't know	☐

Where do the children live?	1. Spouse/partner	☐
	2. Former spouse/partner	☐
	3. Other relatives	☐
	4. Foster parents	☐
	5. Children's home/in care	☐
	6. Looking after themselves	☐
	7. Missing	☐
	8. Other	☐
	9. Don't know	☐
Where do the children live?	1. Spouse/partner	☐
	2. Former spouse/partner	☐
	3. Other relatives	☐
	4. Foster parents	☐
	5. Children's home/in care	☐
	6. Looking after themselves	☐
	7. Missing	☐
	8. Other	☐
	9. Don't know	☐
Where do the children live?	1. Spouse/partner	☐
	2. Former spouse/partner	☐
	3. Other relatives	☐
	4. Foster parents	☐
	5. Children's home/in care	☐
	6. Looking after themselves	☐
	7. Missing	☐
	8. Other	☐
	9. Don't know	☐
Where do the children live?	1. Spouse/partner	☐
	2. Former spouse/partner	☐
	3. Other relatives	☐
	4. Foster parents	☐
	5. Children's home/in care	☐
	6. Looking after themselves	☐
	7. Missing	☐
	8. Other	☐
	9. Don't know	☐
Where do the children live?	1. Spouse/partner	☐
	2. Former spouse/partner	☐
	3. Other relatives	☐
	4. Foster parents	☐
	5. Children's home/in care	☐
	6. Looking after themselves	☐
	7. Missing	☐
	8. Other	☐
	9. Don't know	☐

Paid work/education before order?	1. Yes – full time	☐
	2. Yes – part time	☐
	3. No	☐
	4. Full time education	☐
If yes ask if they do any paid work/education now?	1. Yes - same job	☐
	2. Yes – different job	☐
	3. No – lost or left job because of order	☐
	4. No lost/left job other reason	☐
	5. Yes – same education	☐
	6. No – left education because of order	☐
	7. No – left education for other reason	☐
Employment status now?	1. Unemployed seeking work	☐
	2. Unemployed, not seeking work	☐
	3. Retired	☐
	4. Waiting to take up job/education/training	☐
	5. Full time education	☐
	6. Long term sick	☐
	7. Not working as bringing up family	☐
	8. Full time work	☐
	9. Part time work	☐
	10. Other	☐
If unemployed, how long have you been unemployed?	1. Less than 4 weeks	☐
	2. Less than 3 months	☐
	3. Less than 6 months	☐
	4. Less than 1 year	☐
	5. Less than 2 years	☐
	6. Less than 5 years	☐
	7. Less than 10 years	☐
	8. 10 years or more	☐
	9. Never worked	☐
	10. Currently employed	☐
Ever had paid job other than casual or holiday work?	1. Yes	☐
	2. No	☐
Year left last paid job (20XX)	……..	
Month left last paid job	……..	

Up to age of 16 who did you live with most of the time?	1. Both parents	☐
	2. One parent	☐
	3. One parent and a step-parent	☐
	4. A step parent only	☐
	5. Adopted parents	☐
	6. Grandparent(s)	☐
	7. Other relatives	☐
	8. Foster parents	☐
	9. In an institution	☐
	10. Other	☐
Ever been in Local Authority care?	1. Yes	☐
	2. No	☐
	3. N/A foreign national	☐
How many times taken into care?	……	
Longest period spent in care	0. Never in care	☐
	1. < 1 week	☐
	2. < 1 month	☐
	3. < 3 months	☐
	4. < 6 months	☐
	5. < 1 year	☐
	6. < 2 years	☐
	7. < 5 years	☐
	8. 5 years or more	☐
	9. Don't know	☐
Why taken into care	0. Never in care	☐
	1. Criminal offence	☐
	2. Family problems	☐
	3. Truancy	☐
	4. Parents couldn't control	☐
	5. Physical/sexual abuse	☐
	6. Don't know	☐
	7. Other	☐
Age finished school/6th form	……	
Attended special school?	1. Yes	☐
	2. No	☐
Type of special school	0. Did not attend a special school	☐
	1. School for disruptive children	☐
	2. Home office approved school/borstal	☐
	3. School for learning disabilities/difficulties	☐
	4. School for physically disabled	☐
	5. Other special school	☐
If attended mainstream school, did have a	1. Yes	☐
	2. No	☐

statement at school?		
Ever had on the job training or been an apprentice?	1. On job training	☐
	2. Apprentice	☐
	3. No	☐
Type of training scheme	1. Youth opportunity Programme (YOPs), Youth Training Scheme (YTS), Modern Apprenticeship	☐
	2. Training Opportunity Programme	☐
	3. Community industry programme	☐
	4. Training in forces	☐
	5. Employment Training	☐
	6. NACRO Scheme	☐
	7. Any other training or employment scheme	☐
	8. Foreign training scheme	☐
	9. None	☐
Any qualifications?	1. Yes	☐
	2. No	☐
Highest qualification	1. University Degree	☐
	2. Teaching qualification or HNC/HND/BETEC higher	☐
	3. A or A/S levels/SCE higher or ONC/OND/BETEC/City and Guilds Advanced Final Level, NVQ 4	☐
	4. O Level or GCSE (A-C) or CSE Grade 1or City & Guilds Craft/Ord level, NVQ 3	☐
	5. CSE grades 2-5, O level D&E, GCSE grades D-G), NVQ 1-2	☐
	6. CSE or GCSE ungraded	☐
	7. Other qualifications	☐
	8. No qualifications	☐
SELF-ASSESSMENT OF CURRENT HEALTH	1. Very good	☐
	2. Good	☐
	3. Fair	☐
	4. Bad	☐
	5. Very bad	☐
REPORTED LONG-STANDING ILLNESS	1. Yes	☐
	2. No	☐
DESCRIPTION OF LONG-STANDING HEALTH PROBLEMS	……..	
Registered with a GP?	1. Yes	☐
	2. No	☐

In the year before this court order have you had help from any of the following people or services? **What was the reason for this** INTERVIWER PLEASE TICK BOX AND WRITE IN REASON	**GP** **……**	☐
	Dentist **……**	☐
	Optician **……**	☐
	Psychiatrist **……**	☐
	Psychotherapist **……**	☐
	Community Psychiatric Nurse (CPN) **……**	☐
	Psychiatric social worker **……**	☐
	Counsellor **……**	☐
	Psychologist **……**	☐
	Drug worker **……**	☐
	Alcohol service **……**	☐
	GUM or STI clinic **……**	☐
	A&E hospital staff **……**	☐
	Hospital in-patient (acute hospital) **……**	☐
	Hospital out-patient (acute hospital) **……**	☐
	Other person **(Please state) ……**	☐
Have you ever been admitted to a psychiatric hospital/ward?	1. Yes	☐
	2. No	☐
If yes - how many times?	……	
Were you in a psychiatric hospital for more than 6 months?	1. Yes	☐
	2. No	☐
What age were you when you were first admitted to a	……years old	

psychiatric hospital?		
Do you smoke cigarettes or tobacco now?	1. Yes	☐
	2. No	☐
If no, have you ever smoke cigarettes or tobacco?	1. Yes, regularly	☐
	2. Yes occasionally	☐
	3. No	☐
If yes, how many cigarettes do you smoke a day?	……..	
How difficult do you find it not to smoke?	1. Very easy	☐
	2. Fairly easy	☐
	3. Fairly difficult	☐
	4. Very difficult	☐
Would you like to give up smoking?	1. Yes	☐
	2. No	☐
Have you ever tried to give up smoking? If so when?	1. Yes	☐ ……
	2. No	☐
How long is it between waking up in the morning to your first cigarette?	1. less than 5 minutes	☐
	2. 5 to 14 mins	☐
	3. 15 to 29 mins	☐
	4. 30 mins but less than 1 hour	☐
	5. 1 hr but less than 2 hrs	☐
	6. 2 hours or more	☐
At what age did you start to smoke regularly?	1. Never smoked cigarettes regularly	☐
	2. Under 10	☐
	3. 10-14	☐
	4. 15-19	☐
	5. 20-24	☐
	6. 25 or over	☐

NVS UK Questions

INSTRUCTIONS: HAND LABEL TO RESPONDENT AND GIVE THEM A MINUTE OR SO TO READ IT – THIS IS NOT TIMED, SO GIVE THEM AS LONG AS THEY NEED.

READ OUT: This part of the survey will look at health information on food packaging. This showcard gives you the kind of information you might find on the back of a container of ice cream that you just bought at the supermarket.

I need to you look at this showcard, and then I'm going to ask you to answer some questions. Please have a good read of the information. Let me know when you are finished and we'll move on to the questions.

DO NOT ANSWER ANY QUERIES ABOUT THE INFORMATION ON THE LABEL.

WHEN RESPONDENT IS READY, READ OUT:

READ OUT: I'm going to ask you to answer some questions related to the nutritional information that is on this label. The answers to all the questions can be worked out using the information on the showcard I just gave you.

Don't worry if you can't answer all the questions. Some of them are designed to be difficult so not everyone will get them all correct. Please take as much time as you need to answer each question. I can repeat any question you didn't understand.

IF RESPONDENT APPEARS TO BE STRUGGLING, SAY "Would you like me to repeat the question?"

IF RESPONDENT IS REALLY STRUGGLING TO ANSWER, SAY "Ok, don't worry if you can't answer this question, some of them are designed to be much harder than others. Let's try the next one".

RESPONDENTS ARE ALLOWED TO GO BACK AND CHANGE AN ANSWER IF THEY REALISE AT ANY POINT BEFORE THE END OF THE SECTION THAT THEY HAVE MADE A MISTAKE – BUT DO NOT TELL THEM THIS UNLESS THEY REQUEST TO CHANGE AN ANSWER.

QNVS1 How many calories (kcal) will you eat if you eat the whole container?

PLEASE READ OUT 'KCAL' AS WELL AS CALORIES, BUT NOT 'KILOCALORIES'.
DO NOT READ OUT ANSWER OPTIONS

1. 1,000 KCAL	☐
2. 1,000 CALORIES	☐
3. Any other answer	☐
4. Don't know	☐
5. Refused	☐

QNVS2 If you are advised to eat no more than 60 grams of carbohydrate for dessert, what is the maximum amount of ice cream you could have?

DO NOT READ OUT ANSWER OPTIONS

1. Two servings (or anything up to 2 servings)	☐
2. Half the container (or any amount up to half the container)	☐
3. 200 ml (or any amount up to 200 ml).	☐
4. Any other answer	☐
5. Don't know	☐
6. Refused	☐

QNVS3. Imagine that your doctor advises you to reduce the amount of saturated fat in your diet. You usually have 42 g of saturated fat each day, some of which comes from one serving of ice cream. If you stop eating ice cream, how many grams of saturated fat would you be eating each day?

DO NOT READ OUT ANSWER OPTIONS

1. 33 g	☐
2. Any other answer	☐
3. Don't know	☐
4. Refused	☐

QNVS4 If you usually eat 2500 calories each day, what percentage of your daily calorie (kcal) intake will you get if you eat one serving of ice cream?

PLEASE READ OUT 'KCAL' AS WELL AS CALORIES, BUT NOT 'KILOCALORIES'

DO NOT READ OUT ANSWER OPTIONS

1. 1/10 (one tenth)	☐
2. 10%	☐
3. Any other answer	☐
4. Don't know	☐
5. Refused	☐

QNVS5 READ OUT: Imagine that you are allergic to the following substances: penicillin, peanuts, latex gloves, and bee stings.

Is it safe for you to eat this ice cream?

DO NOT READ OUT ANSWER OPTIONS

1. Yes	☐
2. No	☐ ASK QNVS6 BELOW
3. Don't know	☐
4. Refused	☐

ASK IF 'NO' AT QNVS5

QNVS6. **Why not?**

DO NOT READ OUT ANSWER OPTIONS

1. Because it contains peanut oil/peanuts/nuts	☐
2. Because you might have an allergic reaction	☐ ASK QNVS7 BELOW
3. Any other answer	☐
4. Don't know	☐
5. Refused	☐

ASK IF CODE B AT QNVS6:

QNVS7. Why would you have an allergic reaction?

DO NOT READ OUT ANSWER OPTIONS

1. Because it contains peanut oil/peanuts/nuts	☐
2. Any other answer	☐
3. Don't know	☐
4. Refused	☐

SCORING:

Question	Marks	Score
1	A or B = 1 Any other answer = 0	
2	A or B or C = 1 Any other answer = 0	
3	A = 1 Any other answer = 0	
4	A or B = 1 Any other answer = 0	
5	B=1 Any other answer = 0	
6	A = 1 B = 0 BUT SUBJECT DIRECTED TO Q7 Any other answer = 0	
7	A = 1 Any other answer = 0	
TOTAL	MAXIMUM SCORE 6	

The Quick Test

Introduction:

In this part of the interview I am going to show you some pictures and read out some words. When I say a word I would like you to point to the picture which you think the word fits best.

Some of the words will be easy, others will be more difficult. If I read a word that you don't know, just tell me that you don't know and I will move on to another word.

(Interviewer – need to discourage guessing – they need to say don't know if they really don't know but less confident participants need to be encouraged to say their response if they think they know the answer)

INTERVIEWER: GO THROUGH THE EXAMPLES WITH THE RESPONDENT.

Here are some examples:

The first word is:

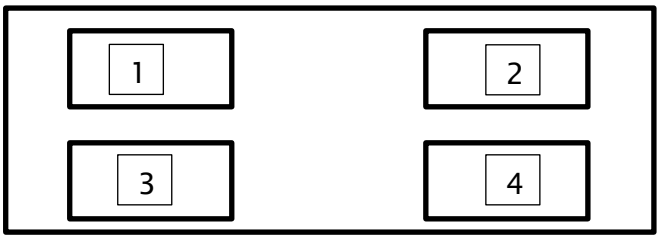
	Correct answer	**Number of picture that respondent indicates**
Belt	**4**	
Dancing	**1**	
Traffic	**4**	
Whistle	**4**	

INTERVIEWER: IS RESPONDENT READY TO START?

If not then use the following examples:

	Correct answer	**Number of picture that respondent indicates**
Fence	**3**	
Drink	**2**	

INTERVIEWER: NOTE SCORING WILL BEGIN AT THE NEXT WORD.
Continue until you have 6 consecutive wrong answers (picture numbers as below)



We will now begin:

Score		Correct answer	Number of picture that respondent indicates	Correct? Tick if correct.
7	Wreck	3		☐
8	Music	1		☐
9	Medicine	2		☐
10	Gun	4		☐
11	Pepper	2		☐
12	Racing	3		☐
13	Salt	2		☐
14	Woman	1		☐
15	Sugar	2		☐
16	Track	3		☐
17	School	4		☐
18	Partner	1		☐
19	Couples	1		☐
20	Rail	3		☐
21	Respectful	4		☐
22	Betting	3		☐
23	Daring	3		☐
24	Stadium	3		☐
25	Pedestrian	4		☐
26	Graceful	1		☐
27	Fluid	2		☐
28	Solution	2		☐
29	Discipline	4		☐
30	Bleachers	3		☐
31	Crystallized	2		☐
32	Turntable	1		☐
33	Saccharin	2		☐
34	Immature	4		☐
35	Cordiality	1		☐
36	Velocity	3		☐
37	Decisive	4		☐
38	Laceration	3		☐
39	Foliage	3		☐
40	Imperative	4		☐
41	Intimacy	1		☐
42	Concoction	2		☐
43	Conviviality	1		☐
44	Chevrons	4		☐
45	Condiment	2		☐
46	Cacophony	3		☐
47	Miscible	2		☐

48	**Imbibe**	**2**		☐
49	**Amicable**	**1**		☐
50	**Pungent**	**2**		☐

INTERVIEWER: THESE TWO WORDS CAN BE USED AFTER A RESPONDENT HAS ANSERED 6 CONSECUTIVE WORDS INCORRECTLY AND BEOFRE MOVING ON TO THE NEXT SECTION:

	Correct answer	**Number of picture that respondent indicates**	**Correct? Tick if correct.**
Stir	**2**		☐
Crash	**3**		☐

Definitions (if you need them!)

Bleachers (3) - Often unroofed outdoor grandstands for seating spectators.

Conviviality (1) – having to do with good company. Dancing

Cacophony (3) – dissonant combination of sounds. Sounds of skidding as suggested by picture 3

Miscible (2) – capable of being mixed with something

Imbibe (2) – to drink

Amicable (1) – friendly with food will

Pungent (2) – affecting sense of smell or taste in a penetrating way

AUDIT - The Alcohol Use Disorders Identification Test: Interview Version

Read questions as written. Record answers carefully. Begin the AUDIT by saying **"Now I am going to ask you some questions about your use of alcoholic beverages during this past year."** Explain what is meant by "alcoholic beverages" by using local examples of beer, wine, vodka, etc. Code answers in terms of "standard drinks".

Place the correct answer (score) number in the box at the right.

1. How often do you have a drink containing alcohol?

1. (0) Never [Skip to Qs 9-10]	☐	
2. (1) Monthly or less	☐	
3. (2) 2 to 4 times a month	☐	
4. (3) 2 to 3 times a week	☐	
5. (4) 4 or more times a week	☐	

2. How many drinks containing alcohol do you have on a typical day when you are drinking? (Researcher please work out number of units)

1. (0) 1 or 2	☐	
2. (1) 3 or 4	☐	
3. (2) 5 or 6	☐	
4. (3) 7, 8, or 9	☐	
5. (4) 10 or more	☐	

3. How often do you have six or more drinks on one occasion? (this means 6 or more units)

1. (0) Never	☐	
2. (1) Less than monthly	☐	
3. (2) Monthly	☐	
4. (3) Weekly	☐	
5. (4) Daily or almost daily	☐	

Skip to Questions 9 and 10 if Total Score for Questions 2 and 3 = 0

4. How often during the last year have you found that you were not able to stop drinking once you had started?

1. (0) Never	☐	
2. (1) Less than monthly	☐	
3. (2) Monthly	☐	
4. (3) Weekly	☐	
5. (4) Daily or almost daily	☐	

5. How often during the last year have you failed to do what was normally expected from you because of drinking?

1. (0) Never	☐
2. (1) Less than monthly	☐
3. (2) Monthly	☐
4. (3) Weekly	☐
5. (4) Daily or almost daily	☐

6. How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?

1. (0) Never	☐
2. (1) Less than monthly	☐
3. (2) Monthly	☐
4. (3) Weekly	☐
5. (4) Daily or almost daily	☐

7. How often during the last year have you had a feeling of guilt or remorse (or felt sorry) after drinking?

1. (0) Never	☐
2. (1) Less than monthly	☐
3. (2) Monthly	☐
4. (3) Weekly	☐
5. (4) Daily or almost daily	☐

8. How often during the last year have you been unable to remember what happened the night before because you had been drinking?

1. (0) Never	☐
2. (1) Less than monthly	☐
3. (2) Monthly	☐
4. (3) Weekly	☐
5. (4) Daily or almost daily	☐

9. Have you or someone else been injured as a result of your drinking?

1. (0) No	☐
2. (2) Yes, but not in the last year	☐
3. (4) Yes, during the last year	☐

10. Has a relative or friend or a doctor or another health worker been concerned about your drinking or suggested you cut down?

1. (0) No	☐
2. (2) Yes, but not in the last year	☐
3. (4) Yes, during the last year	☐

Record total of specific items here:

Treatment Outcome Profile

How to complete the TOP:
• Timeline – invite the participant to recall the number of days in each of the past four weeks on which they did something – for example, the number of days they used heroin. You then add these to create a total for the past four weeks in the blue NDTMS box
• Yes and no – a simple tick for yes or no, then a "Y" or "N" in the blue NDTMS box
• Rating scale – a 20-point scale from poor to good. Together with the client, mark the scale in an appropriate place and then write the equivalent score in the blue NDTMS box.
You should aim to ask and complete every question. Do not leave any of the blue boxes blank. Enter "NA" if the client refuses to answer a question or, after prompting, cannot recall.

Say: I am now going to ask you about alcohol and drug use and then how you feel about your own health. I just wanted to say again that anything you tell me about this will be kept confidential and not shared with anyone else.

Alcohol units' converter:

Drink	%ABV	Units
Pint ordinary strength lager, beer or cider	3.5	2
Pint strong lager, beer or cider	5	3
440ml can ordinary strength lager	3.5	1.5
440ml can strong lager, beer or cider	5	2
440ml can super strength lager or cider	9	4
1 litre bottle ordinary strength cider	5	5
1 litre bottle strong cider	9	9

Drink	%ABV	Units
Glass of wine (175ml)	12	2
Large glass of wine (250ml)	12	3
Bottle of wine (750ml)	12	9
Single measure of spirits (25ml)	40	1
Bottle of spirits (750ml)	40	30
275ml bottle alcopops	5	1.5

Section 1: Substance use

Record the average amount on a using day and number of days substances used in each of past four weeks

	Average		Week 4		Week 3		Week 2		Week 1		Total	
a Alcohol		units/day		0–7		0–7		0–7		0–7		0–28
b Opiates		g/day		0–7		0–7		0–7		0–7		0–28
c Crack		g/day		0–7		0–7		0–7		0–7		0–28
d Cocaine		g/day		0–7		0–7		0–7		0–7		0–28
e Amphetamines		g/day		0–7		0–7		0–7		0–7		0–28
f Cannabis		spliff/day		0–7		0–7		0–7		0–7		0–28
g Other problem substance?		g/day		0–7		0–7		0–7		0–7		0–28

Name.....

How old were you when you first started drinking alcohol regularly?

_____

How old were you when you first started regularly taking drugs? _____

What drug was this? _____

Section 2: Injecting risk behaviour

Record number of days client injected non-prescribed drugs in past four weeks (if no, enter zero and go to section 3)

	Week 4	Week 3	Week 2	Week 1	Total
a Injected	0–7	0–7	0–7	0–7	0–28
b Inject with needle or syringe used by someone else?	Yes ☐ No ☐				Enter 'Y' if any yes, otherwise 'N'
c Inject using a spoon, water or filter used by someone else?	Yes ☐ No ☐				

If not injected in past 4 days:

Have you ever injected drugs? (Note: illicit drug use only) 1. Yes ☐
2. No ☐

Have you ever injected with a needle or syringe used by someone else?
1. Yes ☐
2. No ☐

Have you ever injected using a spoon, water or filter used by someone else?
1. Yes ☐
2. No ☐

How old were you when you first injected? _____

For any drug use:

Have you ever received any treatment help or advice because you were using drugs?
1. Yes ☐
2. No ☐
Who was that from?

1. **GP or family doctor or other practice staff** ☐
2. **Community drug team** ☐
3. **Hospital (outpatient and/or inpatient)** ☐
4. **Residential rehab unit** ☐
5. **Other (specify)** _____ ☐

Section 4: Health and social functioning (Please use NA only if information is not disclosed or not answered.)

a Client's rating of psychological health status (anxiety, depression and problem emotions and feelings)

Poor 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 **Good** ( ) 0–20

Record days worked and at college or school for the past four weeks

	Week 4	Week 3	Week 2	Week 1	Total
b Days paid work	( ) 0–7	( ) 0–7	( ) 0–7	( ) 0–7	( ) 0–28
c Days attended college or school	( ) 0–7	( ) 0–7	( ) 0–7	( ) 0–7	( ) 0–28

d Client's rating of physical health status (extent of physical symptoms and bothered by illness)

Poor 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 **Good** ( ) 0–20

Record accommodation items for the past four weeks

e Acute housing problem Yes ☐ No ☐ ( ) Enter 'Y' or 'N'

f At risk of eviction Yes ☐ No ☐ ( ) Enter 'Y' or 'N'

g Client's rating of overall quality of life (e.g. able to enjoy life, gets on well with family and partner)

Poor 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 **Good** ( ) 0–20

TOP v1.1 August 2008

Psychosis Screening Questionnaire

Say: I am now going to ask you some questions about your mental and emotional health.

1. Over the past year, have there been times when you felt very happy indeed without a break for days on end?	1. Yes	☐
	2. Unsure	☐
	3. No	☐
1a. If yes, Was there an obvious reason for this?	1. Yes	☐
	2. Unsure	☐
	3. No	☐
1b. Did your relatives or friends think it was strange or complain about it?	1. Yes	☐
	2. Unsure	☐
	3. No	☐
2. Over the past year, have you ever felt that your thoughts were directly interfered with or controlled by some outside force or person?	1. Yes	☐
	2. Unsure	☐
	3. No	☐
2a. If yes, Did this come about in a way that many people would find hard to believe, for instance, through telepathy?	1. Yes	☐
	2. Unsure	☐
	3. No	☐
3. Over the past year, have there been times when you felt that people were against you?	1. Yes	☐
	2. Unsure	☐
	3. No	☐
3a. If yes, Have there been times when you felt that people were deliberately acting to harm you or your interests?	1. Yes	☐
	2. Unsure	☐
	3. No	☐
3b. Have there been times when you felt that a group of people were plotting to cause you serious harm or injury?	1. Yes	☐
	2. Unsure	☐
	3. No	☐
4. Over the past year, have there been times when you felt that something strange was going on?	1. Yes	☐
	2. Unsure	☐
	3. No	☐
4a. If yes, Did you feel it was so strange that other people would find it very hard to believe?	1. Yes	☐
	2. Unsure	☐
	3. No	☐
5. Over the past year, have there	1. Yes	☐

been times when you heard or saw things that other people couldn't?	2. Unsure	☐
	3. No	☐
5a. If yes, Did you at any time hear voices saying quite a few words or sentences when there was no one around that might account for it?	1. Yes	☐
	2. Unsure	☐
	3. No	☐

NEUROSIS SECTION-CISR

Appetite and Weight

I would now like to ask you a few questions about your eating habits and weight.

Q18

Have you noticed a marked loss in your appetite in the past month?

1. Yes	☐
2. No	☐

Q19

Have you lost any weight in the past month?

1. Yes	☐ Go to Q19a
2. No/Don't know	☐ Go to Q20

Q19a

If yes,

Were you trying to lose weight or on a diet?

1. Yes	☐ Go to Q20
2. No	☐ Go to Q19b

Q19b

If no,

Did you lose half a stone or more, or did you lose less than this? (Half a stone or 7 lbs or 3 1/4 Kg)

1. Lost half a stone or more	☐
2. Lost less than half a stone	☐

Q20

Have you ever been diagnosed as having anorexia?

1. Yes	☐
2. No	☐

Q21

If didn't lose weight in past month (so if Q19 = No):

Have you noticed a marked increase in your appetite in the past month?

1. Yes	☐
2. No	☐

Q22
If didn't lose weight in past month (so if Q19 = No) (if did lose weight go to Q23):
Have you gained weight in the past month?
Do not include weight gain due to pregnancy

1. Yes	☐
2. No/Don’t know	☐

Q23
Have you ever suffered from bulimia or binge eating?

1. Yes	☐
2. No	☐

CISR: Section A - Somatic Symptoms

The next group of questions is about any physical discomfort you may have suffered recently. I will then go on and ask about how you have been feeling lately, whether you have been depressed or worried or anxious or have any obsessive thoughts or suffer from phobias. Each is a different type of feeling and is asked about separately and each section follows a similar pattern.

A1
Have you had any sort of ache or pain in the past month?

1. Yes	☐ Go to A3
2. No	☐ Go to A2

A2
If no:
During the past month have you been troubled by any sort of discomfort, for example, headache or indigestion?

1. Yes	☐ Go to A3
2. No	☐ Go to B1

A3
If yes to aches/pains or discomfort in past month:

Was this ache or pain/discomfort brought on or made worse because you were feeling low, anxious or stressed?
IF RESPONDENT HAS MORE THAN ONE PAIN/DISCOMFORT, REFER TO ANY OF THEM

1. Yes	☐ Go to A4
2. No	☐ Go to B1

A4
If aches/discomfort made worse because of stress:

In the past seven days, including last (DAY A WEEK AGO), on how many days have you noticed the ache or pain/discomfort?
IF THE RESPONDENT GIVES A RANGE THEN PLEASE CODE THE LOWER

1. 4 days or more	☐ Go to A5	**1**
2. 1 to 3 days	☐ Go to A5	
3. None	☐ Go to B1	

A5
If aches/discomfort made worse because of stress AND at least one day of pain/discomfort in past week

In total, did the ache or pain/discomfort last for more than 3 hours on any day in the past week?

1. Yes	☐ Go to A6	**1**
2. No	☐ Go to A6	

A6
If aches/discomfort made worse because of stress AND at least one day of pain/discomfort in past week:

In the past week, has the ache or pain/discomfort been...
RUNNING PROMPT

1. Very unpleasant	☐ Go to A7	**1**
2. A little unpleasant	☐ Go to A7	
3. Not unpleasant?	☐ Go to A7	

A7
If aches/discomfort made worse because of stress AND at least one day of pain/discomfort in past week:

Has the ache or pain/discomfort bothered you when you were doing something interesting in the past week?

1. Yes	☐ Go to A8	**1**
2. No/has not done anything interesting	☐ Go to A8	

A8
If aches/discomfort made worse because of stress AND at least one day of pain/discomfort in past week:

How long have you been feeling this ache or pain/discomfort as you have just described?
SHOW CARD S

1. Less than 2 weeks	☐
2. 2 weeks but less than 6 months	☐
3. 6 months but less than 1 year	☐
4. 1 year but less than 2 years	☐
5. 2 years or more	☐

Total Somatic Symptoms Score (out of 4)	

CISR: Section B – Fatigue

B1
Have you noticed that you've been getting tired in the past month?

1. Yes	☐ Go to B3
2. No	☐ Go to B2

B2
If no tiredness in past month:

During the past month, have you felt you've been lacking in energy?

1. Yes	☐ Go to B3
2. No	☐ Go to C1

B3
If tired or lacking energy in past month:

Do you know why you have been feeling tired/lacking in energy?

1. Yes	☐ Go to B3a
2. No	☐ Go to B4

B3a
If tired or lacking energy in past month AND knows why tired

What is the main reason? Can you choose from this card?
SHOW CARD 3

1. Problems with sleep	☐ Go to B4
2. Medication	☐ Go to B4
3. Physical illness	☐ Go to B4
4. Working too hard	☐ Go to B4
5. Stress, worry or other psychological reason	☐ Go to B4
6. Physical exercise	☐ **Go to C1**
7. Other	☐ Go to B4

B4
If tired or lacking energy in past month AND tiredness not due to exercise:

INTERVIEWER, PLEASE USE RESPONDENT'S OWN WORDS IF POSSIBLE
In the past seven days, including last (DAY A WEEK AGO) on how many days have you felt
tired/lacking in energy?

1. 4 days or more	☐ Go to B5	**1**
2. 1 to 3 days	☐ Go to B5	

3. None	☐ Go to C1	

B5
If tired or lacking energy in past month AND tiredness not due to exercise AND at least one day of tiredness in past week

INTERVIEWER, PLEASE USE RESPONDENT'S OWN WORDS IF POSSIBLE
Have you felt tired/lacking in energy for more than 3 hours in total on any day in the past week?
EXCLUDE TIME SPENT SLEEPING

1. Yes	☐	**1**
2. No	☐	

B6
If tired or lacking energy in past month AND tiredness not due to exercise AND at least one day of tiredness in past week

Have you felt so tired/lacking in energy that you've had to push yourself to get things done during the past week?

1. Yes, on at least one occasion	☐	**1**
2. No	☐	

B7
If tired or lacking energy in past month AND tiredness not due to exercise AND at least one day of tiredness in past week

INTERVIEWER, PLEASE USE RESPONDENT'S OWN WORDS IF POSSIBLE
Have you felt tired/lacking in energy when doing things that you enjoy during the past week?

1. Yes, at least once	☐ Go to B9	**1**
2. No	☐ Go to B8	
3. Spontaneous: Does not enjoy anything	☐ Go to B8	

B8
If tired or lacking energy in past month AND tiredness not due to exercise AND at least one day of tiredness in past week AND not tired doing enjoyable things or does not enjoy anything

INTERVIEWER, PLEASE USE RESPONDENT'S OWN WORDS IF POSSIBLE
Have you in the past week felt tired/lacking in energy when doing things that you used to enjoy?

1. Yes	☐	**1**
2. No	☐	

B9

If tired or lacking energy in past month AND tiredness not due to exercise AND at least one day of tiredness in past week

INTERVIEWER, PLEASE USE RESPONDENT'S OWN WORDS IF POSSIBLE

How long have you been feeling tired/lacking in energy in the way you have just described?

SHOW CARD S

1. Less than 2 weeks	☐
2. 2 weeks but less than 6 months	☐
3. 6 months but less than 1 year	☐
4. 1 year but less than 2 years	☐
5. 2 years or more	☐

Total Fatigue Score (out of 4)	

CISR Section C - Concentration and Forgetfulness

C1
In the past month, have you had any problems in concentrating on what you are doing?

1. Yes, problems concentrating	☐
2. No	☐

C2
Have you noticed any problems with forgetting things in the past month?

1. Yes	☐	
2. No	☐	If No to both C1 and C2 go to D1

C4
If problems concentrating AND/OR forgets things in past month:

Since last (DAY A WEEK AGO), on how many days have you noticed problems with your concentration/memory?

1. 4 days or more	☐	**1**
2. 1 to 3 days	☐	
3. None	☐ Go to D1	

C5
If problems concentrating (C1 = yes) AND at least one day of memory/concentration problems in past week (C4= 4 days or more OR 1 to 3 days)

In the past week could you concentrate on a TV programme, read a newspaper article or talk to someone without your mind wandering?

1. Yes	☐	
2. No/not always	☐	**1**

C6
If problems concentrating (C1 = yes) AND at least one day of memory/concentration problems in past week (C4= 4 days or more OR 1 to 3 days).

In the past week, have these problems with your concentration actually stopped you from getting on with things you used to do or would like to do?

1. Yes	☐	**1**
2. No	☐	

C7
If forgets things in past month (C2 = yes) AND at least one day of memory/concentration problems in past week (C4= 4 days or more OR 1 to 3 days).

(Earlier you said you have been forgetting things.)
Have you forgotten anything important in the past seven days?

1. Yes	☐	**1**
2. No	☐	

C8
If problems concentrating or forgets things in past month AND at least one day of memory/concentration problems in past week (C1= yes OR C2= yes) AND (C4= 4 days or more OR 1 to 3 days)

How long have you been having the problems with your concentration /memory as you have described?
SHOW CARD S

1. Less than 2 weeks	☐
2. 2 weeks but less than 6 months	☐
3. 6 months but less than 1 year	☐
4. 1 year but less than 2 years	☐
5. 2 years or more	☐

Total Concentration and Forgetfulness Score (out of 4)	

CISR Section D - Sleep Problems

D1
In the past month, have you been having problems with trying to get to sleep or with getting back to sleep if you woke up or were woken up?

1. Yes	☐ Go to D3
2. No	☐ Go to D2

D2
If no problems getting (back) to sleep in past month:
Has sleeping more than you usually do been a problem for you in the past month?

1. Yes	☐ Go to D3
2. No	☐ Go to E1

D3
If had problems with sleeping in past month:
On how many of the past seven nights did you have problems with your sleep?

1. 4 nights or more	☐ Go to D4	**1**
2. 1 to 3 nights	☐ Go to D4	
3. None	☐ Go to E1	

D4
If had problems with sleeping in past month AND at least one night of sleep problems in past week:
Do you know why you are having problems with your sleep?

1. Yes	☐ Go to D4a
2. No	☐ Go to D5 if D1 = yes. Go to D8 if D2 =Yes

D4a
If had problems with sleeping (either getting to sleep or sleeping more) in past month AND at least one night of sleep problems in past week AND knows why having sleep problems

Can you look at this card and tell me the main reason for these problems?
SHOW CARD 4

1. Noise	☐
2. Shift work/too busy to sleep	☐
3. Illness/discomfort	☐
4. Worry/thinking	☐
5. Needing to go to the toilet	☐
6. Having to do something (e.g. look after baby)	☐
7. Tired	☐

8. Medication	☐
9. Other	☐

Go to D5 if D1 = yes. Go to D8 if D2 =Yes

D5
If had problems getting (back) to sleep (D1=yes) AND at least one night of sleep problems in past week (D3 = 4 nights or more OR 1-3 nights).

Thinking about the night you had the least sleep in the past week, how long did you spend trying to get to sleep? (If you woke up or were woken up I want you to allow a quarter of an hour to get back to sleep). Only include time spent trying to get to sleep.

1. Less than 1/4 hour	☐ Go to E1	
2. At least 1/4 hr but less than 1 hour	☐ Go to D7	**1**
3. At least 1 hour but less than 3 hours	☐ Go to D7	**1**
4. 3 hours or more	☐ Go to D6	**1**

D6
If had problems getting (back) to sleep in past month AND at least one night of sleep problems in past week AND spent 3 hours or more trying

In the past week, on how many nights did you spend 3 or more hours trying to get to sleep?

1. 4 nights or more	☐ Go to D7	**1**
2. 1 to 3 nights	☐ Go to D7	
3. None	☐ Go to D7	

D7
If had problems getting (back) to sleep in past month AND at least one night of sleep problems in past week AND spent 15 minutes or more trying.

Do you wake more than two hours earlier than you need to and then find you can't get back to sleep?

1. Yes	☐ Go to D10
2. No	☐ Go to D10

D10
If had problems getting (back) to sleep in past month AND at least one night of sleep problems in past week AND spent 15 minutes or more trying.

How long have you had these problems with your sleep as you have described? SHOW CARD S

1. Less than 2 weeks	☐
2. 2 weeks but less than 6 months	☐

3. 6 months but less than 1 year	☐
4. 1 year but less than 2 years	☐
5. 2 years or more	☐

D8

If slept more than usual in past month (D2 = yes) AND had at least one night of sleep problems in past week.

Thinking about the night you slept the longest in the past week, how much longer did you sleep compared with how long you normally sleep for?

1. Less than 1/4 hour	☐ Go to E1	
2. At least 1/4 hour but less than 1 hour	☐ Go to D10	**1**
3. At least 1 hour but less than 3 hours	☐ Go to D10	**1**
4. 3 hours or more	☐ Go to D9	**1**

D9

If slept more than usual in past month (D2 = yes) AND had at least one night of sleep problems in past week AND slept 3 hours (or more) longer than usual.

In the past week, on how many nights did you sleep for more than 3 hours longer than you usually do?

1. 4 nights or more	☐	**1**
2. 1 to 3 nights	☐	
3. None	☐	

D10

If slept more than usual in past month (D2 = yes) AND had at least one night of sleep problems in past week AND slept 15 minutes (or more) longer than usual.

How long have you had these problems with your sleep as you have described?
SHOW CARD S

1. Less than 2 weeks	☐
2. 2 weeks but less than 6 months	☐
3. 6 months but less than 1 year	☐
4. 1 year but less than 2 years	☐
5. 2 years or more	☐

Total Sleep Problems Score (out of 3)	

Section E – Irritability

E1
Many people become irritable or short tempered at times, though they may not show it.
Have you felt irritable or short tempered with those around you in the past month?

1. Yes/no more than usual	☐ Go to E2
2. No	☐ Go to F1

E2
If felt irritable or short tempered in past month:

During the past month did you get short tempered or angry over things which now seem trivial when you look back on them?

1. Yes	☐
2. No	☐

E3
If felt irritable or short tempered in past month:

Since last (DAY A WEEK AGO), on how many days have you felt irritable or short tempered/angry?

1. 4 days or more	☐ Go to E4	**1**
2. 1 to 3 days	☐ Got to E4	
3. None	☐ Go to F1	

E4
If felt irritable or short tempered in past month AND at least one day of irritability in past week

What sort of things made you irritable or short tempered/angry in the past week?
CODE VERBATIM

E5
If felt irritable or short tempered in past month AND at least one day of irritability in past week

In total, have you felt irritable or short tempered/angry for more than one hour (on any day in the past week)?

1. Yes	☐	**1**
2. No	☐	

E6
If felt irritable or short tempered in past month AND at least one day of irritability in past week

During the past week, have you felt so irritable or short tempered/angry that you have wanted to shout at someone, even if you haven't actually shouted?

1. Yes	☐	**1**
2. No	☐	

E7
If felt irritable or short tempered in past month AND at least one day of irritability in past week

In the past seven days, have you had arguments, rows or quarrels or lost your temper with anyone?

1. Yes	☐ Go to E7a
2. No	☐ Go to E10

E7a
If felt irritable or short tempered in past month AND at least one day of irritability in past week AND had quarrel/lost temper in past week

Did this happen once or more than once (in the past week)?

1. Once	☐ Go to E8
2. More than once	☐ Go to E9

E8
If felt irritable or short tempered in past month AND at least one day of irritability in past week AND had quarrel/lost temper in past week AND had quarrel/lost temper once

Do you think this was justified?

1. Yes, justified	☐ Go to E10	
2. No, not justified	☐ Go to E10	**1**

E9
If felt irritable or short tempered in past month AND at least one day of irritability in past week AND had quarrel/lost temper in past week AND had quarrel/lost temper once:

Do you think this was justified on every occasion?

1. Yes	☐ Go to E10	
2. No, at least one was unjustified	☐ Go to E10	**1**

E10
If felt irritable or short tempered in past month AND at least one day of irritability in past week:

How long have you been feeling irritable or short tempered/angry as you have described?
SHOW CARD S

1. Less than 2 weeks	☐
2. 2 weeks but less than 6 months	☐
3. 6 months but less than 1 year	☐
4. 1 year but less than 2 years	☐
5. 2 years or more	☐

Total Irritability Score (out of 4)	

CISR: Section F - Worry about Physical Health

F1
Many people get concerned about their physical health. In the past month, have you been at all worried about your physical health?
INCLUDE WOMEN WHO ARE WORRIED ABOUT THEIR PREGNANCY

1. Yes, worried	☐ Go to F3
2. No	☐ Go to F2

F2Route
INTERVIEWER:
HAS INFORMANT MENTIONED A PHYSICAL HEALTH PROBLEM WHEN ASKED EARLIER IN INTERVIEW (PAGE 8 OF BOOKLET)

(1) Yes, has mentioned a physical health problem	☐
(2) No physical health problem	☐ Go to F2

F2
If not worried about physical health AND no health problem:

During the past month, did you find yourself worrying that you might have a serious physical illness?

1. Yes	☐ Go to F3
2. No	☐ Go to G1

F3
If worried about physical health or serious physical illness in past month:

Thinking about the past seven days, including last (DAY A WEEK AGO), on how many days have you found yourself worrying about your physical health/that you might have a serious illness?

(1) 4 days or more	☐ Go to F4	**1**
(2) 1 to 3 days	☐ Go to F4	
(3) None	☐ Go to G1	

F4
If worried about physical health or serious physical illness in past month AND at least one day of worry in past week:

In your opinion, have you been worrying too much in view of your actual health?

1. Yes	☐	**1**
2. No	☐	

F5
If worried about physical health or serious physical illness in past month AND at least one day of worry in past week:

In the past week, has this worrying been...
RUNNING PROMPT...

1. very unpleasant	☐	**1**
2. a little unpleasant	☐	
3. or not unpleasant?	☐	

F6
If worried about physical health or serious physical illness in past month AND at least one day of worry in past week:

In the past week, have you been able to take your mind off your health worries at least once, by doing something else?

1. Yes	☐	
2. No, could not be distracted once	☐	**1**

F7
If worried about physical health or serious physical illness in past month AND at least one day of worry in past week:

How long have you been worrying about your physical health in the way you described?

SHOW CARD S

1. Less than 2 weeks	☐
2. 2 weeks but less than 6 months	☐
3. 6 months but less than 1 year	☐
4. 1 year but less than 2 years	☐
5. 2 years or more	☐

Total Worry about Physical Health Score (out of 4)	

CISR: Section G - Depression

G1
Almost everyone becomes sad, miserable or depressed at times.
Have you had a spell of feeling sad, miserable or depressed in the past month?

1. Yes	☐
2. No	☐

G2
During the past month, have you been able to enjoy or take an interest in things as much as you usually do?

1. Yes	☐ If G1=No and G2=yes Go to I1
2. No/no enjoyment or interest	☐ If G1 = yes got to G4

G4
If sad/depressed in past month (G1 = Yes):

USE INFORMANT'S OWN WORDS IF POSSIBLE
In the past week have you had a spell of feeling sad, miserable or depressed?

1. Yes	☐
2. No	☐ If G2 = yes go to I1. If G2 = no Go to G5

G5
If unable to enjoy things in past month (G2 = No)

USE INFORMANT'S OWN WORDS IF POSSIBLE
In the past week have you been able to enjoy or take an interest in things as much as usual?

1. Yes	☐	
2. No /no enjoyment or interest	☐	**1**

G6
If sad/depressed or unable to enjoy things, in past week:

Since last (DAY A WEEK AGO) on how many days have you felt depressed/unable to take interest in things?

1. 4 days or more	☐	**1**
2. 1 to 3 days	☐	
3. None	☐	

G7
If sad/depressed or unable to enjoy things, in past week:

Have you felt depressed/unable to take interest in things for more than 3 hours in total (on any day in the past week)?

1. Yes	☐	**1**
2. No	☐	

G9
If sad/depressed or unable to enjoy things, in past week:

In the past week when you felt sad, miserable or depressed/unable to enjoy or take an interest in things, did you ever become happier when something nice happened, or when you were in company?

1. Yes, at least once	☐	
2. No	☐	**1**

G10
If sad/depressed or unable to enjoy things, in past week:

How long have you been feeling sad, miserable or depressed/unable to enjoy or take an interest in things as you have described?
SHOW CARD S

1. Less than 2 weeks	☐
2. 2 weeks but less than 6 months	☐
3. 6 months but less than 1 year	☐
4. 1 year but less than 2 years	☐
5. 2 years or more	☐

Total Depression Score (out of 4)	

IF SCORE = 0 THEN GOTO SECTION I AND MISS OUT H.

CISR: Section H - Depressive Ideas

ONLY COMPLETE SECTION IF DEPRESSION SCORE IS > 0

H1
I would now like to ask you about when you have been feeling depressed/unable to enjoy or take an interest in things.

In the past week, was this worse in the morning or in the evening, or did this make no difference?
PROMPT AS NECESSARY

(1) in the morning	☐
(2) in the evening	☐
(3) no difference/other	☐

H2
ASK OR USE SHOWCARD 6

Many people find that feeling depressed/unable to take an interest in things can affect their interest in sex.
Over the past month, do you think your interest in sex has
RUNNING PROMPT

1. increased	☐
2. decreased	☐
3. has it stayed the same?	☐
4. Spontaneous - Not applicable	☐

H3a
When you have felt depressed/unable to take an interest in things in the past seven days
... have you been so restless that you couldn't sit still?

1. Yes	☐
2. No	☐

H3b
..... have you been doing things more slowly, for example, walking more slowly?

1. Yes	☐
2. No	☐

H3c
....have you been less talkative than normal?

1. Yes	☐
2. No	☐

H4

Now, thinking about the past seven days have you on at least one occasion felt guilty or blamed yourself when things went wrong when it hasn't been your fault?

1. Yes, at least once	☐	**1**
2. No	☐	

H5

During the past week, have you been feeling you are not as good as other people?

1. Yes	☐	**1**
2. No	☐	

H6

Have you felt hopeless at all during the past seven days, for instance about your future?

1. Yes	☐	**1**
2. No	☐	

H10

Thank you for answering those questions on how you have been feeling. I would now like to ask you a few questions about worrying

Total Depressive Ideas Score (out of 3)	

CISR: Section I – Worry

I1
(The next few questions are about worrying.) In the past month, did you find yourself worrying more than you needed to about things?

1. Yes, worrying	☐ Go to I6
2. No/concerned	☐ Go to I2

I2
If I1 = No
Have you had any worries at all in the past month?

1. Yes	☐ Go to I6
2. No	☐ Go to J1

I6Intro
If (I1 = Yes) OR (I2 = Yes)
For the next few questions, I want you to think about worries you have had other than those about your physical health.

I6
On how many of the past seven days have you been worrying about things (other than your physical health)?

1. 4 days or more	☐ Go to I7	**1**
2. 1 to 3 days	☐ Go to I7	
3. None	☐ Go to J1 but if G4=yes OR G5 = Yes, go to I11	

I7
If (I1 = Yes) OR (I2 = Yes) AND worrying for 1 day or more

In your opinion, have you been worrying too much in view of your circumstances?
REFER TO WORRIES OTHER THAN THOSE ABOUT PHYSICAL HEALTH

1. Yes	☐	**1**
2. No	☐	

I8
If (I1 = Yes) OR (I2 = Yes) AND worrying for 1 day or more

In the past week, has this worrying been:
REFER TO WORRIES OTHER THAN THOSE ABOUT PHYSICAL HEALTH
RUNNING PROMPT

1. very unpleasant	☐	**1**
2. a little unpleasant	☐	

3. or not unpleasant?	☐	

I9

If (I1 = Yes) OR (I2 = Yes) AND worrying for 1 day or more

Have you worried for more than 3 hours in total on any one of the past seven days?
REFER TO WORRIES OTHER THAN THOSE ABOUT PHYSICAL HEALTH

1. Yes	☐	**1**
2. No	☐	

I10

If (I1 = Yes) OR (I2 = Yes) AND worrying for 1 day or more

How long have you been worrying about things in the way you have described?
SHOW CARD S

1. Less than 2 weeks	☐
2. 2 weeks but less than 6 months	☐
3. 6 months but less than 1 year	☐
4. 1 year but less than 2 years	☐
5. 2 years or more	☐

I11Reason

If G4 = yes OR G5 = yes OR I1 = yes OR I2 = yes

Can you look at this card and tell me what sorts of things have been making you worried or depressed?
SHOW CARD 7
CODE ALL THAT APPLY - DON'T KNOW=99

(1) Members of the family	☐
(2) Relationship with spouse/partner	☐
(3) Relationships with friends	☐
(4) Housing	☐
(5) Money/bills	☐
(6) Own physical health (inc. pregnancy)	☐
(7) Own mental health	☐
(8) Work or lack of work	☐
(9) Legal difficulties	☐
(10) Political issues/the news	☐
(11) Other	☐
(99) Don't know/no main thing	☐

I12 Main Reason

If G4 = yes OR G5 = yes OR I1 = yes OR I2 = yes

What was the main thing you have been worried or depressed about?
CARD 7

(1) Members of the family	☐
(2) Relationship with spouse/partner	☐
(3) Relationships with friends	☐
(4) Housing	☐
(5) Money/bills	☐
(6) Own physical health (inc. pregnancy)	☐
(7) Own mental health	☐
(8) Work or lack of work	☐
(9) Legal difficulties	☐
(10) Political issues/the news	☐
(11) Other	☐
(99) Don't know/no main thing	☐

Total Worry Score (out of 4)	

CISR: Section J - Anxiety

J1
Have you been feeling anxious or nervous in the past month?

1. Yes, anxious or nervous	☐ Go to J3
2. No	☐ Go to J2

J2
If J1 = No
In the past month, did you ever find your muscles felt tense or that you couldn't relax?

1. Yes	☐
2. No	☐

J3
Some people have phobias; they get nervous or uncomfortable about specific things or situations when there is no real danger. For instance they may get extremely anxious when in confined spaces, or they may have a fear of heights. Others become nervous at the sight of things like blood or spiders.

In the past month have you felt anxious, nervous or tense about any specific things when there was no real danger?

1. Yes	☐
2. No	☐

J4
INTERVIEWER PLEASE WORK OUT

If J1 = yes Or J2 = yes AND J3 = yes	1. Phobia plus anxiety	☐ Go to J5
If J1 = yes Or J2 = yes AND J3 = no	2. Anxiety only	☐ Go to J7
If J1 = no AND J2 = no	3. Not anxious or tense in past month	☐ Go to K1

J5
If J4 = 1 phobia plus anxiety

In the past month, when you felt anxious/nervous/tense, was this always brought on by the phobia about some specific situation or thing or did you sometimes feel generally anxious/nervous/tense?

(1) Always brought on by phobia	☐
(2) Sometimes generally anxious	☐

J6

If J4 = 1 phobia plus anxiety AND J5 = 2 sometimes generally anxious

The next questions are concerned with general anxiety/nervousness/tension only.
I will ask you about the anxiety which is brought on by the phobia about specific things or situations later.
On how many of the past seven days have you felt generally anxious/nervous/tense?

(1) 4 days or more	☐ Go to J8	**1**
(2) 1 to 3 days	☐ Go to J8	
(3) None	☐ Go to K1	

J7
If J4 = 2 anxiety only
On how many of the past seven days have you felt generally anxious/nervous/tense?

(1) 4 days or more	☐ Go to J8	**1**
(2) 1 to 3 days	☐ Go to J8	
(3) None	☐ Go to K1	

J8
If (J6 = 1 OR 2) OR (J7 = 1 OR 2)

In the past week, has your anxiety/nervousness/tension been:
RUNNING PROMPT

(1) ...very unpleasant	☐	**1**
(2) ...a little unpleasant	☐	
(3) ...or not unpleasant?	☐	

J9
If (J6 = 1 OR 2) OR (J7 = 1 OR 2)

In the past week, when you've been anxious/nervous/tense, have you had any of the symptoms shown on this card?
SHOW CARD 8

1. Yes	☐ Go to J9A
2. No	☐ Go to J10

J9A
If (J6 = 1 OR 2) OR (J7 = 1 OR 2) AND J9 = yes

Which of these symptoms did you have when you felt anxious/nervous/tense? CODE ALL THAT APPLY. **SHOW CARD 8**

(1) Heart racing or pounding	☐	One or more of these symptoms score **1**
(2) Hands sweating or shaking	☐	
(3) Feeling dizzy	☐	
(4) Difficulty getting your breath	☐	
(5) Butterflies in stomach	☐	
(6) Dry mouth	☐	
(7) Nausea or feeling as though you wanted to vomit	☐	

J10

If (J6 = 1 OR 2) OR (J7 = 1 OR 2)

Have you felt anxious/nervous/tense for more than 3 hours in total on any one of the past seven days?

1. Yes	☐	**1**
2. No	☐	

J11
If (J6 = 1 OR 2) OR (J7 = 1 OR 2)

How long have you had these feelings of general anxiety/nervousness/tension as you described?

SHOW CARD S

(1) less than 2 weeks	☐
(2) 2 weeks but less than 6 months	☐
(3) 6 months but less than 1 year	☐
(4) 1 year but less than 2 years	☐
(5) 2 years or more	☐

Total Anxiety Score (out of 4)	

CIS-R: Section K - Phobias

K1
INTERVIEWER PLEASE ENTER INFORMATION

1. Mentioned phobia at J3 (J3=1)	☐ Go to K3
2. No phobia at J3 (J3=2)	☐ Go to K2

K2
If K1 = 2 (no phobia at J3)
Sometimes people avoid a specific situation or thing because they have a phobia about it.
In the past month, have you avoided any situation or thing because it would have made you feel nervous or anxious, even though there was no real danger?

1. Yes	☐ Go to K3
2. No	☐ Go to L1

K3
If K1 = 1 (phobia at J3) OR K2 = 1 (yes)
Thinking about the phobias you mentioned, can you look at this card and tell me which of the situations or things listed made you anxious/nervous/tense in the past month?
SHOW CARD 9
CODE ALL THAT APPLY

(1) Crowds or public places	☐
(2) Enclosed spaces	☐
(3) Social situations	☐
(4) Sight of blood or injury	☐
(5) Specific single cause	☐
(6) Other (SPECIFY BELOW in XK3)	☐

XK3
SPECIFY OTHER

……
…….

K4
If K1 = 1 (phobia at J3) (NB if K2 = yes then go to K7)
In the past seven days, how many times have you felt nervous or anxious about (SITUATION(S)/THING(S))?

(1) 4 days or more	☐ Go to K5	**1**
(2) 1 to 3 days	☐ Go to K5	
(3) None	☐ Go to K6	

K5

If K1 = 1 (phobia at J3) AND K4 = 1 OR 2 (4 days or more OR 1 to 3 days)
In the past week, on those occasions when you felt anxious/nervous/tense did you have any of the symptoms on this card?
SHOW CARD 8

1. Yes	☐ Go to K5A
2. No	☐ Go to K6

K5A
If K1 = 1 (phobia at J3) AND K4 = 1 OR 2 (4 days or more OR 1 to 3 days) AND K5 = yes
Which of these symptoms did you have when you felt anxious/nervous/tense?
SHOW CARD 8

(1) Heart racing or pounding	☐	One or more of these symptoms score **1**
(2) Hands sweating or shaking	☐	
(3) Feeling dizzy	☐	
(4) Difficulty getting your breath	☐	
(5) Butterflies in stomach	☐	
(6) Dry mouth	☐	
(7) Nausea or feeling as though you wanted to vomit	☐	

K6
If K1 = 1 (phobia at J3)
In the past week, have you avoided any situation or thing because it would have made you feel anxious/nervous/tense even though there was no real danger?

1. Yes	☐ Go to K7	**1**
2. No	☐ Go to K8 if appropriate	

K7
If K6 = yes OR K2 = yes
How many times have your avoided such situations or things in the past seven days?

(1) 4 days or more	☐	**1**
(2) 1 to 3 days	☐	
(3) None	☐	

K8
If K4 = 1 OR 2 (4 days or more OR 1 to 3 days) OR K7 = 1 OR 2 (4 days or more OR 1 to 3 days)
How long have you been having these feelings about these situations/things as you have just described?
SHOW CARD S

(1) less than 2 weeks	☐
(2) 2 weeks but less than 6 months	☐
(3) 6 months but less than 1 year	☐
(4) 1 year but less than 2 years	☐
(5) 2 years or more	☐

Total Phobia Score (out of 4)	

CISR: Section L - Panic

L1
If mentioned anxiety or phobias (if not go to M1)
Thinking about the past month, did your anxiety or tension ever get so bad that you got in a panic, for instance make you feel that you might collapse or lose control unless you did something about it?

1. Yes	☐	
2. No	☐ Go to M1	

L2
If L1 = yes
How often has this happened in the past week?

(1) Once	☐ Go to L3	**1**
(2) More than once	☐ Go to L3	**1**
(3) Not at all	☐ Go to M1	

L3
If L1 = yes AND L2 = once or more than once

In the past week, have these feelings of panic been:
RUNNING PROMPT

(1) a little uncomfortable or unpleasant	☐	
(2) or have they been very unpleasant or unbearable?	☐	**1**

L4
If L1 = yes AND L2 = once or more than once

Did this panic/the worst of these panics last for longer than 10 minutes?

1. Yes	☐	**1**
2. No	☐	

L5
If L1 = yes AND L2 = once or more than once

Are you relatively free of anxiety between these panics?

1. Yes	☐
2. No	☐

L6
If L1 = yes AND L2 = once or more than once AND mentioned phobias at J3 or K2

Is this panic always brought on by (phobias described in section K)?

1. Yes	☐
2. No	☐

L7
If L1 = yes AND L2 = once or more than once

How long have you been having these feelings of panic as you have described?
SHOW CARD S

1. Less than 2 weeks	☐
2. 2 weeks but less than 6 months	☐
3. 6 months but less than 1 year	☐
4. 1 year but less than 2 years	☐
5. 2 years or more	☐

Total Panic Score (out of 3)	

CISR: Section M – Compulsions

M1
In the past month, did you find that you kept on doing things over and over again when you knew you had already done them? For example, making your bed or washing your hands over and over again?

1. Yes	☐ Go to M2
2. No	☐ Go to N1

M2
If M1 = Yes

On how many days in the past week did you find yourself doing things over again that you had already done?

(1) 4 days or more	☐ Go to M3	**1**
(2) 1 to 3 days	☐ Go to M3	
(3) None	☐ Go to	

M3
If M1 = yes AND M2 = 1 to 3 days OR 4 days or more
Since last (DAY A WEEK AGO) what sorts of things have you done over and over again?

Specify: ……
……
……

M4
If M1 = yes AND M2 = 1 to 3 days OR 4 days or more

During the past week, have you tried to stop yourself repeating (BEHAVIOUR)/doing any of these things over again?
(NOTE: Compulsion(s) mentioned at M3)

1. Yes	☐	**1**
2. No	☐	

M5
If M1 = yes AND M2 = 1 to 3 days OR 4 days or more

Has repeating (BEHAVIOUR)/doing any of these things over again made you upset or annoyed with yourself in the past week?

(NOTE: Compulsion(s) mentioned at M3)

1. Yes , upset or annoyed	☐	**1**
2. No, not at all	☐	

M6

If M1 = yes AND M2 = 1 to 3 days OR 4 days or more

INTERVIEWER: IS MORE THAN ONE THING REPEATED AT M3

1. Yes	☐ Go to M6A
2. No	☐ Go to M7

M6A
If M1 = yes AND M2 = 1 to 3 days OR 4 days or more AND M6 = yes

Thinking about the past week, which of the things you mentioned did you repeat the most times?

Specify: ……
……
……
……

M7
If M1 = yes AND M2 = 1 to 3 days OR 4 days or more

Since last (DAY A WEEK AGO), how many times did you repeat (BEHAVIOUR) when you had already done it?

(1) 3 or more repeats	☐	**1**
(2) 2 repeats	☐	
(3) 1 repeat	☐	

M8
If M1 = yes AND M2 = 1 to 3 days OR 4 days or more

How long have you been repeating (BEHAVIOUR)/any of the things you mentioned in the way which you have described?
SHOW CARD S

1. Less than 2 weeks	☐
2. 2 weeks but less than 6 months	☐
3. 6 months but less than 1 year	☐
4. 1 year but less than 2 years	☐
5. 2 years or more	☐

Total Compulsions Score (out of 4)	

CISR: Section N - Obsessions

N1
In the past month did you have any thoughts or ideas over and over again that you found unpleasant and would prefer not to think about, that still kept on coming into your mind? For example, constantly thinking about death.

1. Yes	☐ Go to N2
2. No	☐ Go to O1

N2
If N1 = yes
Can I check, is this the same thought or idea over and over again or are you worrying about a problem or something in general?

(1) Same thought	☐ Go to N3
(2) Worrying in general	☐ Go to O1 (Check: This worry should be recorded in Section I (I1 and I2)- please amend that section if needed)

N3
If N1 = yes AND N2 = same thought

What are these unpleasant thoughts or ideas that keep coming into your mind?
RECORD VERBATIM
DO NOT PROBE
DO NOT PRESS FOR AN ANSWER

……
……
……
……
……
……

N4
If N1 = yes AND N2 = same thought

Since last (DAY A WEEK AGO), on how many days have you had these unpleasant thoughts?

(1) 4 days or more	☐ Go to N5	**1**
(2) 1 to 3 days	☐ Go to N5	
(3) None	☐ Go to O1	

N5
If N1 = yes AND N2 = same thought AND N4 = 4 days or more OR 1 to 3 days

During the past week, have you tried to stop yourself thinking any of these thoughts?

1. Yes	☐	**1**
2. No	☐	

N6
If N1 = yes AND N2 = same thought AND N4 = 4 days or more OR 1 to 3 days

Have you become upset or annoyed with yourself when you have had these thoughts in the past week?

1. Yes, upset or annoyed	☐	**1**
2. Not at all	☐	

N7
If N1 = yes AND N2 = same thought AND N4 = 4 days or more OR 1 to 3 days

In the past week, was the longest episode of having such thoughts?
RUNNING PROMPT

(1) a quarter of an hour or longer	☐	**1**
(2) or was it less than this?	☐	

N8
If N1 = yes AND N2 = same thought AND N4 = 4 days or more OR 1 to 3 days

How long have you been having these thoughts in the way which you have just described?
SHOW CARD S

1. Less than 2 weeks	☐
2. 2 weeks but less than 6 months	☐
3. 6 months but less than 1 year	☐
4. 1 year but less than 2 years	☐
5. 2 years or more	☐

Total Obsessions Score (out of 4)	

CISR: Section O - Overall Effects

If any of the section scores are 2 or more then complete this section. If not then go to next section.

O1
Now I would like to ask you how all of these things that you have told me about have affected you overall.
In the past week, has the way you have been feeling ever actually stopped you from getting on with things you used to do or would like to do?

1. Yes	☐ Go to O1A
2. No	☐ Go to O1B

O1A
If O1 = yes
In the past week, has the way you have been feeling stopped you doing things once or more than once?

(1) Once	☐ Go to DSH1
(2) More than once	☐ Go to DSH1

O1B
If O1 = no
Has the way you have been feeling made things more difficult even though you have got everything done?

1. Yes	☐
2. No	☐

DELIBERATE SELF-HARM

DSH Introduction

There may be times in everyone's life when they become very miserable and depressed and may feel like taking drastic action because of these feelings.

DSH1

Have you ever cut, burnt or hit yourself?

1. Yes	☐ Go to DSH1a
2. No	☐ Go to DSH2

DSH1a

If DSH1 = Yes

How many times in the past year?

……..

DSH2

Have you ever taken an overdose of tablets or medication or tried to kill yourself in any other way?

1. Yes	☐ Go to DSH2a
2. No	☐ Go to SF12 section

DSH2a

If DSH2 = Yes

How many times in the past year?

……..

Appendix 8 Follow-up survey form

The Health of People with Court Orders Supervised by Probation Services: An exploratory study.

Study Questionnaire - Follow-up

ID		
Probation Office	4. IoW ☐ 5. Portsmouth ☐ 6. Southampton ☐	
Date of Interview		
Has marital status changed since last interview?	3. Yes	☐
	4. No	☐
If yes: ask for current marital status	1. Married	☐
	2. Living as a couple with partner	☐
	3. Single	☐
	4. Widowed	☐
	5. Divorced	☐
	6. Separated	☐
Has residence changed since last interview?	9. Yes	☐
	10. No	☐
If yes: ask for current residence	1. Own home	☐
	2. Rented self-contained accommodation	☐
	3. Rented bedsit or room with shared amenities	☐
	4. Hostel or other temporary accommodation	☐
	5. Probation hostel	☐
	6. Living on the streets	☐
	7. Staying in someone else's home	☐
	8. Other: (please state)	☐
How long have you been living there?	7. 1 week or less	☐
	8. 1 month or less	☐
	9. 3 months or less	☐
	10. 6 months or less	☐
	11. 1 year or less	☐
	12. Over 1 year	☐

Who do you live with?	8. On own	☐
	9. With partner	☐
	10. With parents	☐
	11. With other adult relations	☐
	12. With friends	☐
	13. With dependent children only	☐
	14. Other (please state)	☐
Do you have any paid work now?	8. Yes - same job as at last interview	☐
	9. Yes – different job	☐
	10. No – lost or left job because of order	☐
	11. No lost/left job other reason	☐
	12. No work since last interview	☐
	13. Intermittent work	☐
	14. Other (state)	☐
Employment status now	11. Unemployed seeking work	☐
	12. Unemployed, not seeking work	☐
	13. Retired	☐
	14. Waiting to take up job/education/training	☐
	15. Full time education	☐
	16. Long term sick	☐
	17. Not working as bringing up family	☐
	18. Full time work	☐
	19. Part time work	☐
	20. Other	☐
SELF-ASSESSMENT OF CURRENT HEALTH	6. Very good	☐
	7. Good	☐
	8. Fair	☐
	9. Bad	☐
	10. Very bad	☐
Registered with a GP?	3. Yes	☐
	4. No	☐
Treatment Order? (check prior to interview)	1. Drug Treatment	☐
	2. Alcohol Treatment	☐
	3. Mental Health	☐
If yes, have you managed to comply with the order and attended the sessions required?	1. Yes	☐
	2. No	☐
If no, why? Specify		

Has the treatment order helped you?	1. Yes	☐
	2. No	☐
Why? Or why not?		
Has anyone in the probation service referred you to or suggested you see someone about a health issue (including drugs, alcohol, mental or physical health)?	1. Yes Reason for referral:	☐ _____ _____
	2. No	☐
If yes, who did they say you should see? (tick all that apply)	**GP**	☐
	Dentist	☐
	Optician	☐
	Psychiatrist	☐
	Psychotherapist	☐
	Community Psychiatric Nurse (CPN)	☐
	Psychiatric social worker	☐
	Counsellor	☐
	Psychologist	☐
	Drug worker	☐
	Alcohol service	☐
	Health Trainer	☐
	Other person (Please state) ……..	☐
	Other person (Please state) ……..	☐

During this court order have you had help from any of the following people or services? (not including any Treatment Order requirement) (tick all that apply <u>and record how many times and for what reason)</u>	**GP** (reason) ……	☐ No. of times ……
	Dentist (reason) ……	☐ No. of times ……
	Optician (reason) ……	☐ No. of times ……
	Psychiatrist (reason) ……	☐ No. of times ……
	Psychotherapist (reason) ……	☐ No. of times ……
	Community Psychiatric Nurse (CPN) (reason) ……	☐ No. of times ……
	Psychiatric social worker (reason) ……	☐ No. of times ……
	Counsellor (reason) ……	☐ No. of times ……
	Psychologist (reason) ……	☐ No. of times ……
	Drug worker (reason) ……	☐ No. of times ……
	Alcohol service (reason) ……	☐ No. of times ……
	Smoking cessation service (reason) ……	☐ No. of times ……
	GUM Clinic (reason) ……	☐ No. of times ……
	Health Trainer (reason) ……	☐ No. of times ……
	A&E hospital staff (reason) ……	☐ No. of times ……
	Hospital in-patient (acute hospital) (reason) ……	☐ No. of times ……

	Hospital outpatient appointment (acute hospital) (reason) **…… ……**	☐ No. of times ……
	Psychiatric Hospital in-patient (reason) **…… ……**	☐ No. of times ……
	Other person/service (reason) **(Please state) ……**	☐ No. of times ……
	Other person/service (reason) **(Please state) ……**	☐ No. of times ……
If participant has seen a Health trainer: **How many times did you see a health trainer?**		
What things did they help you with?	(code verbatim)	
What improvement have you made as a result of the session(s) with a health trainer?	(code verbatim)	
With regards to your experience of health trainers, to what extent do you agree with the following statements:	The health trainer helped me with the specific problem or problems that I had: 1. Strongly Agree ☐ 2. Agree ☐ 3. Undecided ☐ 4. Disagree ☐ 5. Strongly Disagree ☐	

	As a result of seeing a health trainer, things have improved 1. Strongly Agree ☐ 2. Agree ☐ 3. Undecided ☐ 4. Disagree ☐ 5. Strongly Disagree ☐ I would recommend the health trainer service to someone who had similar problems to me: 1. Strongly Agree ☐ 2. Agree ☐ 3. Undecided ☐ 4. Disagree ☐ 5. Strongly Disagree ☐ How do you think the health trainer service could be improved? (code verbatim)	
Have you attended any sessions or courses run by probation that have dealt with any aspect of health or wellbeing?	1. Yes	☐
	2. No	☐
	If yes, please state	
How helpful was this course for you?	1. Very helpful 2. Helpful 3. Neither helpful or	☐ ☐ ☐

	unhelpful 4. Not helpful 5. Very unhelpful	☐ ☐
	The course helped me with the specific problem or problems that I had: 1. Strongly Agree ☐ 2. Agree ☐ 3. Undecided ☐ 4. Disagree ☐ 5. Strongly Disagree ☐ As a result of attending the course, things have improved 1. Strongly Agree ☐ 2. Agree ☐ 3. Undecided ☐ 4. Disagree ☐ 5. Strongly Disagree ☐ I would recommend the course to someone who had similar problems to me: 1. Strongly Agree ☐ 2. Agree ☐ 3. Undecided ☐ 4. Disagree ☐ 5. Strongly Disagree ☐ How do you think the course could be improved? (code verbatim)	
Any other health service contact not mentioned above? Interviewer- use this space to record any additional information about health contacts (NHS, private of 3rd		

sector) that does not fit in to boxes above		
Have you had any health problems that you needed help with during the order, but did not get help?	1. Yes ☐ What was this? _____ 2. No ☐	
If yes, why could you not get help with this?	(code verbatim)	
Are there any health – related services you would have liked help to access during the court order? **Why?**	(code verbatim) (code verbatim)	
Are there any health services that should be available in the Probation Office for people with a court order?	(code verbatim)	
Do you smoke cigarettes or tobacco now?	1. Yes 2. No	☐ ☐
If yes, how many do you smoke a day?	……..	
Would you like to give up smoking?	1. Yes 2. No	☐ ☐
Have you tried to give up smoking during	3. Yes	☐ ……. ….

this Court Order? If so when?		Help received? From whom? …….
	4. No	☐

AUDIT - The Alcohol Use Disorders Identification Test: Interview Version

Read questions as written. Record answers carefully. Begin the AUDIT by saying “Now I am going to ask you some questions about your use of alcoholic beverages during this past year.” Explain what is meant by “alcoholic beverages” by using local examples of beer, wine, vodka, etc. Code answers in terms of “standard drinks”.

Place the correct answer (score) number in the box at the right.

1. How often do you have a drink containing alcohol?

6. (0) Never [Skip to Qs 9-10]	☐
7. (1) Monthly or less	☐
8. (2) 2 to 4 times a month	☐
9. (3) 2 to 3 times a week	☐
10. (4) 4 or more times a week	☐

2. How many drinks containing alcohol do you have on a typical day when you are drinking?

6. (0) 1 or 2	☐
7. (1) 3 or 4	☐
8. (2) 5 or 6	☐
9. (3) 7, 8, or 9	☐
10. (4) 10 or more	☐

3. How often do you have six or more drinks on one occasion?

6. (0) Never	☐
7. (1) Less than monthly	☐
8. (2) Monthly	☐
9. (3) Weekly	☐
10. (4) Daily or almost daily	☐

Skip to Questions 9 and 10 if Total Score for Questions 2 and 3 = 0

4. How often during the last year have you found that you were not able to stop drinking once you had started?

6. (0) Never	☐
7. (1) Less than monthly	☐
8. (2) Monthly	☐
9. (3) Weekly	☐
10. (4) Daily or almost daily	☐

5. How often during the last year have you failed to do what was normally expected from you because of drinking?

6. (0) Never	☐
7. (1) Less than monthly	☐
8. (2) Monthly	☐
9. (3) Weekly	☐
10. (4) Daily or almost daily	☐

6. How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?

6. (0) Never	☐
7. (1) Less than monthly	☐
8. (2) Monthly	☐
9. (3) Weekly	☐
10. (4) Daily or almost daily	☐

7. How often during the last year have you had a feeling of guilt or remorse after drinking?

6. (0) Never	☐
7. (1) Less than monthly	☐
8. (2) Monthly	☐
9. (3) Weekly	☐
10. (4) Daily or almost daily	☐

8. How often during the last year have you been unable to remember what happened the night before because you had been drinking?

6. (0) Never	☐
7. (1) Less than monthly	☐
8. (2) Monthly	☐
9. (3) Weekly	☐
10. (4) Daily or almost daily	☐

9. Have you or someone else been injured as a result of your drinking?

4. (0) No	☐
5. (2) Yes, but not in the last year	☐
6. (4) Yes, during the last year	☐

10. Has a relative or friend or a doctor or another health worker been concerned about your drinking or suggested you cut down?

4. (0) No	☐
5. (2) Yes, but not in the last year	☐
6. (4) Yes, during the last year	☐

Record total of specific items here:

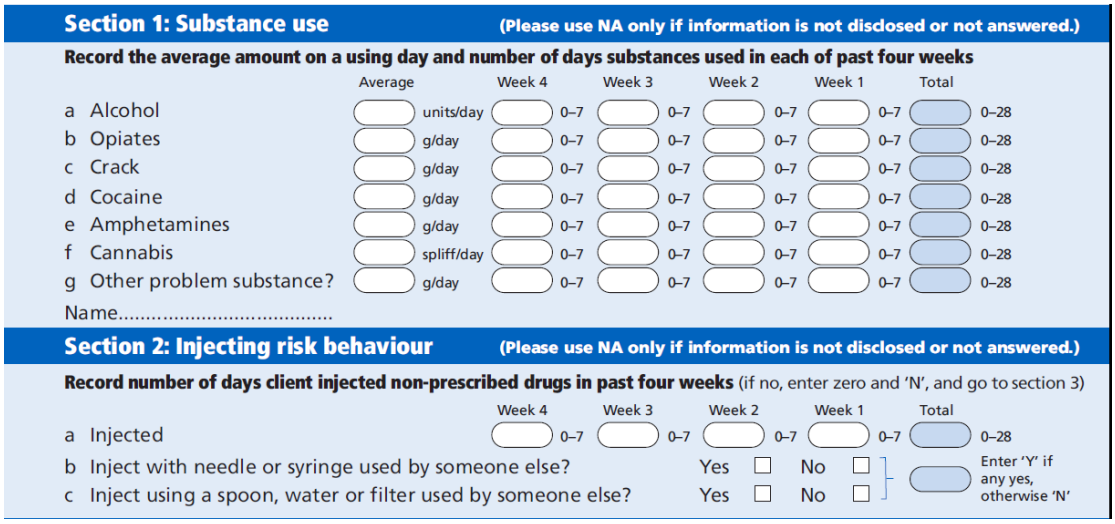
Treatment Outcome Profile

How to complete the TOP:
• Timeline – invite the participant to recall the number of days in each of the past four weeks on which they did something – for example, the number of days they used heroin. You then add these to create a total for the past four weeks in the blue NDTMS box
• Yes and no – a simple tick for yes or no, then a “Y” or “N” in the blue NDTMS box
• Rating scale – a 20-point scale from poor to good. Together with the client, mark the scale in an appropriate place and then write the equivalent score in the blue NDTMS box.
You should aim to ask and complete every question. Do not leave any of the blue boxes blank. Enter “NA” if the client refuses to answer a question or, after prompting, cannot recall.

Alcohol units’ converter:

Drink	%ABV	Units
Pint ordinary strength lager, beer or cider	3.5	2
Pint strong lager, beer or cider	5	3
440ml can ordinary strength lager	3.5	1.5
440ml can strong lager, beer or cider	5	2
440ml can super strength lager or cider	9	4
1 litre bottle ordinary strength cider	5	5
1 litre bottle strong cider	9	9

Drink	%ABV	Units
Glass of wine (175ml)	12	2
Large glass of wine (250ml)	12	3
Bottle of wine (750ml)	12	9
Single measure of spirits (25ml)	40	1
Bottle of spirits (750ml)	40	30
275ml bottle alcopops	5	1.5



Section 1: Substance use (Please use NA only if information is not disclosed or not answered.)

Record the average amount on a using day and number of days substances used in each of past four weeks

	Average	Week 4	Week 3	Week 2	Week 1	Total
a Alcohol	units/day	0–7	0–7	0–7	0–7	0–28
b Opiates	g/day	0–7	0–7	0–7	0–7	0–28
c Crack	g/day	0–7	0–7	0–7	0–7	0–28
d Cocaine	g/day	0–7	0–7	0–7	0–7	0–28
e Amphetamines	g/day	0–7	0–7	0–7	0–7	0–28
f Cannabis	spliff/day	0–7	0–7	0–7	0–7	0–28
g Other problem substance?	g/day	0–7	0–7	0–7	0–7	0–28

Name.....

Section 2: Injecting risk behaviour (Please use NA only if information is not disclosed or not answered.)

Record number of days client injected non-prescribed drugs in past four weeks (if no, enter zero and ‘N’, and go to section 3)

	Week 4	Week 3	Week 2	Week 1	Total
a Injected	0–7	0–7	0–7	0–7	0–28
b Inject with needle or syringe used by someone else?	Yes ☐ No ☐				Enter ‘Y’ if any yes, otherwise ‘N’
c Inject using a spoon, water or filter used by someone else?	Yes ☐ No ☐				

Section 4: Health and social functioning (Please use NA only if information is not disclosed or not answered.)

a Client's rating of psychological health status (anxiety, depression and problem emotions and feelings)

Poor 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 **Good** ( ) 0–20

Record days worked and at college or school for the past four weeks

	Week 4	Week 3	Week 2	Week 1	Total
b Days paid work	( ) 0–7	( ) 0–7	( ) 0–7	( ) 0–7	( ) 0–28
c Days attended college or school	( ) 0–7	( ) 0–7	( ) 0–7	( ) 0–7	( ) 0–28

d Client's rating of physical health status (extent of physical symptoms and bothered by illness)

Poor 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 **Good** ( ) 0–20

Record accommodation items for the past four weeks

e Acute housing problem Yes ☐ No ☐ ( ) Enter 'Y' or 'N'

f At risk of eviction Yes ☐ No ☐ ( ) Enter 'Y' or 'N'

g Client's rating of overall quality of life (e.g. able to enjoy life, gets on well with family and partner)

Poor 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 **Good** ( ) 0–20

NEUROSIS SECTION-CISR

Appetite and Weight

I would now like to ask you a few questions about your eating habits and weight.

Q18

Have you noticed a marked loss in your appetite in the past month?

1. Yes	☐
2. No	☐

Q19

Have you lost any weight in the past month?

1. Yes	☐ Go to Q19a
2. No/Don't know	☐ Go to Q20

Q19a

If yes,

Were you trying to lose weight or on a diet?

1. Yes	☐ Go to Q20
2. No	☐ Go to Q19b

Q19b

If no,

Did you lose half a stone or more, or did you lose less than this? (Half a stone or 7 lbs or 3 1/4 Kg)

1. Lost half a stone or more	☐
2. Lost less than half a stone	☐

Q20

Have you ever been diagnosed as having anorexia?

1. Yes	☐
2. No	☐

Q21

If didn't lose weight in past month (so if Q19 = No):

Have you noticed a marked increase in your appetite in the past month?

1. Yes	☐
2. No	☐

Q22
If didn't lose weight in past month (so if Q19 = No) (if did lose weight go to Q23):
Have you gained weight in the past month?
Do not include weight gain due to pregnancy

1. Yes	☐
2. No/Don’t know	☐

Q23
Have you ever suffered from bulimia or binge eating?

1. Yes	☐
2. No	☐

CISR: Section A - Somatic Symptoms

The next group of questions is about any physical discomfort you may have suffered recently. I will then go on and ask about how you have been feeling lately, whether you have been depressed or worried or anxious or have any obsessive thoughts or suffer from phobias. Each is a different type of feeling and is asked about separately and each section follows a similar pattern.

A1
Have you had any sort of ache or pain in the past month?

1. Yes	☐ Go to A3
2. No	☐ Go to A2

A2
If no:
During the past month have you been troubled by any sort of discomfort, for example, headache or indigestion?

1. Yes	☐ Go to A3
2. No	☐ Go to B1

A3
If yes to aches/pains or discomfort in past month:

Was this ache or pain/discomfort brought on or made worse because you were feeling low, anxious or stressed?
IF RESPONDENT HAS MORE THAN ONE PAIN/DISCOMFORT, REFER TO ANY OF THEM

1. Yes	☐ Go to A4
2. No	☐ Go to B1

A4
If aches/discomfort made worse because of stress:

In the past seven days, including last (DAY A WEEK AGO), on how many days have you noticed the ache or pain/discomfort?
IF THE RESPONDENT GIVES A RANGE THEN PLEASE CODE THE LOWER

1. 4 days or more	☐ Go to A5	**1**
2. 1 to 3 days	☐ Go to A5	
3. None	☐ Go to B1	

A5
If aches/discomfort made worse because of stress AND at least one day of pain/discomfort in past week

In total, did the ache or pain/discomfort last for more than 3 hours on any day in the past week?

1. Yes	☐ Go to A6	**1**
2. No	☐ Go to A6	

A6
If aches/discomfort made worse because of stress AND at least one day of pain/discomfort in past week:

In the past week, has the ache or pain/discomfort been...
RUNNING PROMPT

1. Very unpleasant	☐ Go to A7	**1**
2. A little unpleasant	☐ Go to A7	
3. Not unpleasant?	☐ Go to A7	

A7
If aches/discomfort made worse because of stress AND at least one day of pain/discomfort in past week:

Has the ache or pain/discomfort bothered you when you were doing something interesting in the past week?

1. Yes	☐ Go to A8	**1**
2. No/has not done anything interesting	☐ Go to A8	

A8
If aches/discomfort made worse because of stress AND at least one day of pain/discomfort in past week:

How long have you been feeling this ache or pain/discomfort as you have just described?
SHOW CARD S

1. Less than 2 weeks	☐
2. 2 weeks but less than 6 months	☐
3. 6 months but less than 1 year	☐
4. 1 year but less than 2 years	☐
5. 2 years or more	☐

Total Somatic Symptoms Score (out of 4)	

CISR: Section B – Fatigue

B1
Have you noticed that you've been getting tired in the past month?

1. Yes	☐ Go to B3
2. No	☐ Go to B2

B2
If no tiredness in past month:

During the past month, have you felt you've been lacking in energy?

1. Yes	☐ Go to B3
2. No	☐ Go to C1

B3
If tired or lacking energy in past month:

Do you know why you have been feeling tired/lacking in energy?

1. Yes	☐ Go to B3a
2. No	☐ Go to B4

B3a
If tired or lacking energy in past month AND knows why tired

What is the main reason? Can you choose from this card?
SHOW CARD 3

1. Problems with sleep	☐ Go to B4
2. Medication	☐ Go to B4
3. Physical illness	☐ Go to B4
4. Working too hard	☐ Go to B4
5. Stress, worry or other psychological reason	☐ Go to B4
6. Physical exercise	☐ **Go to C1**
7. Other	☐ Go to B4

B4
If tired or lacking energy in past month AND tiredness not due to exercise:

INTERVIEWER, PLEASE USE RESPONDENT'S OWN WORDS IF POSSIBLE
In the past seven days, including last (DAY A WEEK AGO) on how many days have you felt
tired/lacking in energy?

1. 4 days or more	☐ Go to B5	**1**
2. 1 to 3 days	☐ Go to B5	
3. None	☐ Go to C1	

B5

If tired or lacking energy in past month AND tiredness not due to exercise AND at least one day of tiredness in past week

INTERVIEWER, PLEASE USE RESPONDENT'S OWN WORDS IF POSSIBLE
Have you felt tired/lacking in energy for more than 3 hours in total on any day in the past week?
EXCLUDE TIME SPENT SLEEPING

1. Yes	☐	**1**
2. No	☐	

B6
If tired or lacking energy in past month AND tiredness not due to exercise AND at least one day of tiredness in past week

Have you felt so tired/lacking in energy that you've had to push yourself to get things done during the past week?

1. Yes, on at least one occasion	☐	**1**
2. No	☐	

B7
If tired or lacking energy in past month AND tiredness not due to exercise AND at least one day of tiredness in past week

INTERVIEWER, PLEASE USE RESPONDENT'S OWN WORDS IF POSSIBLE
Have you felt tired/lacking in energy when doing things that you enjoy during the past week?

1. Yes, at least once	☐ Go to B9	**1**
2. No	☐ Go to B8	
3. Spontaneous: Does not enjoy anything	☐ Go to B8	

B8
If tired or lacking energy in past month AND tiredness not due to exercise AND at least one day of tiredness in past week AND not tired doing enjoyable things or does not enjoy anything

INTERVIEWER, PLEASE USE RESPONDENT'S OWN WORDS IF POSSIBLE
Have you in the past week felt tired/lacking in energy when doing things that you used to enjoy?

1. Yes	☐	**1**
2. No	☐	

B9
If tired or lacking energy in past month AND tiredness not due to exercise AND at least one day of tiredness in past week

INTERVIEWER, PLEASE USE RESPONDENT'S OWN WORDS IF POSSIBLE

How long have you been feeling tired/lacking in energy in the way you have just described?

SHOW CARD S

1. Less than 2 weeks	☐
2. 2 weeks but less than 6 months	☐
3. 6 months but less than 1 year	☐
4. 1 year but less than 2 years	☐
5. 2 years or more	☐

Total Fatigue Score (out of 4)	

CISR Section C - Concentration and Forgetfulness

C1
In the past month, have you had any problems in concentrating on what you are doing?

1. Yes, problems concentrating	☐
2. No	☐

C2
Have you noticed any problems with forgetting things in the past month?

1. Yes	☐	
2. No	☐	If No to both C1 and C2 go to D1

C4
If problems concentrating AND/OR forgets things in past month:

Since last (DAY A WEEK AGO), on how many days have you noticed problems with your
concentration/memory?

1. 4 days or more	☐	**1**
2. 1 to 3 days	☐	
3. None	☐ Go to D1	

C5
If problems concentrating (C1 = yes) AND at least one day of memory/concentration problems in past week (C4= 4 days or more OR 1 to 3 days)

In the past week could you concentrate on a TV programme, read a newspaper article or talk to someone without your mind wandering?

1. Yes	☐	
2. No/not always	☐	**1**

C6
If problems concentrating (C1 = yes) AND at least one day of memory/concentration problems in past week (C4= 4 days or more OR 1 to 3 days).

In the past week, have these problems with your concentration actually stopped you from getting on with things you used to do or would like to do?

1. Yes	☐	**1**
2. No	☐	

C7

If forgets things in past month (C2 = yes) AND at least one day of memory/concentration problems in past week (C4= 4 days or more OR 1 to 3 days).

(Earlier you said you have been forgetting things.)
Have you forgotten anything important in the past seven days?

1. Yes	☐	**1**
2. No	☐	

C8
If problems concentrating or forgets things in past month AND at least one day of memory/concentration problems in past week (C1= yes OR C2= yes) AND (C4= 4 days or more OR 1 to 3 days)

How long have you been having the problems with your concentration /memory as you have described?
SHOW CARD S

1. Less than 2 weeks	☐
2. 2 weeks but less than 6 months	☐
3. 6 months but less than 1 year	☐
4. 1 year but less than 2 years	☐
5. 2 years or more	☐

Total Concentration and Forgetfulness Score (out of 4)	

CISR Section D - Sleep Problems

D1
In the past month, have you been having problems with trying to get to sleep or with getting back to sleep if you woke up or were woken up?

1. Yes	☐ Go to D3
2. No	☐ Go to D2

D2
If no problems getting (back) to sleep in past month:
Has sleeping more than you usually do been a problem for you in the past month?

1. Yes	☐ Go to D3
2. No	☐ Go to E1

D3
If had problems with sleeping in past month:
On how many of the past seven nights did you have problems with your sleep?

1. 4 nights or more	☐ Go to D4	**1**
2. 1 to 3 nights	☐ Go to D4	
3. None	☐ Go to E1	

D4
If had problems with sleeping in past month AND at least one night of sleep problems in past week:
Do you know why you are having problems with your sleep?

1. Yes	☐ Go to D4a
2. No	☐ Go to D5 if D1 = yes. Go to D8 if D2 =Yes

D4a
If had problems with sleeping (either getting to sleep or sleeping more) in past month AND at least one night of sleep problems in past week AND knows why having sleep problems
Can you look at this card and tell me the main reason for these problems?
SHOW CARD 4

1. Noise	☐
2. Shift work/too busy to sleep	☐
3. Illness/discomfort	☐
4. Worry/thinking	☐
5. Needing to go to the toilet	☐
6. Having to do something (e.g. look after baby)	☐
7. Tired	☐
8. Medication	☐
9. Other	☐

Go to D5 if D1 = yes. Go to D8 if D2 =Yes

D5
If had problems getting (back) to sleep (D1=yes) AND at least one night of sleep problems in past week (D3 = 4 nights or more OR 1-3 nights).

Thinking about the night you had the least sleep in the past week, how long did you spend trying to get to sleep? (If you woke up or were woken up I want you to allow a quarter of an hour to get back to sleep). Only include time spent trying to get to sleep.

1. Less than 1/4 hour	☐ Go to E1	
2. At least 1/4 hr but less than 1 hour	☐ Go to D7	**1**
3. At least 1 hour but less than 3 hours	☐ Go to D7	**1**
4. 3 hours or more	☐ Go to D6	**1**

D6
If had problems getting (back) to sleep in past month AND at least one night of sleep problems in past week AND spent 3 hours or more trying

In the past week, on how many nights did you spend 3 or more hours trying to get to sleep?

1. 4 nights or more	☐ Go to D7	**1**
2. 1 to 3 nights	☐ Go to D7	
3. None	☐ Go to D7	

D7
If had problems getting (back) to sleep in past month AND at least one night of sleep problems in past week AND spent 15 minutes or more trying.

Do you wake more than two hours earlier than you need to and then find you can't get back to sleep?

1. Yes	☐ Go to D10
2. No	☐ Go to D10

D10
If had problems getting (back) to sleep in past month AND at least one night of sleep problems in past week AND spent 15 minutes or more trying.

How long have you had these problems with your sleep as you have described?
SHOW CARD S

1. Less than 2 weeks	☐
2. 2 weeks but less than 6 months	☐
3. 6 months but less than 1 year	☐
4. 1 year but less than 2 years	☐
5. 2 years or more	☐

D8

If slept more than usual in past month (D2 = yes) AND had at least one night of sleep problems in past week.

Thinking about the night you slept the longest in the past week, how much longer did you sleep compared with how long you normally sleep for?

1. Less than 1/4 hour	☐ Go to E1	
2. At least 1/4 hour but less than 1 hour	☐ Go to D10	**1**
3. At least 1 hour but less than 3 hours	☐ Go to D10	**1**
4. 3 hours or more	☐ Go to D9	**1**

D9
If slept more than usual in past month (D2 = yes) AND had at least one night of sleep problems in past week AND slept 3 hours (or more) longer than usual.

In the past week, on how many nights did you sleep for more than 3 hours longer than you usually do?

1. 4 nights or more	☐	**1**
2. 1 to 3 nights	☐	
3. None	☐	

D10
If slept more than usual in past month (D2 = yes) AND had at least one night of sleep problems in past week AND slept 15 minutes (or more) longer than usual.

How long have you had these problems with your sleep as you have described?
SHOW CARD S

1. Less than 2 weeks	☐
2. 2 weeks but less than 6 months	☐
3. 6 months but less than 1 year	☐
4. 1 year but less than 2 years	☐
5. 2 years or more	☐

Total Sleep Problems Score (out of 3)	

Section E – Irritability

E1
Many people become irritable or short tempered at times, though they may not show it.
Have you felt irritable or short tempered with those around you in the past month?

1. Yes/no more than usual	☐ Go to E2
2. No	☐ Go to F1

E2
If felt irritable or short tempered in past month:

During the past month did you get short tempered or angry over things which now seem trivial when you look back on them?

1. Yes	☐
2. No	☐

E3
If felt irritable or short tempered in past month:

Since last (DAY A WEEK AGO), on how many days have you felt irritable or short tempered/angry?

1. 4 days or more	☐ Go to E4	**1**
2. 1 to 3 days	☐ Got to E4	
3. None	☐ Go to F1	

E4
If felt irritable or short tempered in past month AND at least one day of irritability in past week

What sort of things made you irritable or short tempered/angry in the past week?
CODE VERBATIM

E5
If felt irritable or short tempered in past month AND at least one day of irritability in past week
In total, have you felt irritable or short tempered/angry for more than one hour (on any day in the past week)?

1. Yes	☐	**1**	
2. No	☐		

E6
If felt irritable or short tempered in past month AND at least one day of irritability in past week

During the past week, have you felt so irritable or short tempered/angry that you have wanted to shout at someone, even if you haven't actually shouted?

1. Yes	☐	**1**
2. No	☐	

E7
If felt irritable or short tempered in past month AND at least one day of irritability in past week

In the past seven days, have you had arguments, rows or quarrels or lost your temper with anyone?

1. Yes	☐ Go to E7a
2. No	☐ Go to E10

E7a
If felt irritable or short tempered in past month AND at least one day of irritability in past week AND had quarrel/lost temper in past week

Did this happen once or more than once (in the past week)?

1. Once	☐ Go to E8
2. More than once	☐ Go to E9

E8
If felt irritable or short tempered in past month AND at least one day of irritability in past week AND had quarrel/lost temper in past week AND had quarrel/lost temper once

Do you think this was justified?

1. Yes, justified	☐ Go to E10	
2. No, not justified	☐ Go to E10	**1**

E9
If felt irritable or short tempered in past month AND at least one day of irritability in past week AND had quarrel/lost temper in past week AND had quarrel/lost temper once:

Do you think this was justified on every occasion?

1. Yes	☐ Go to E10	
2. No, at least one was unjustified	☐ Go to E10	**1**

E10
If felt irritable or short tempered in past month AND at least one day of irritability in past week:

How long have you been feeling irritable or short tempered/angry as you have described?
SHOW CARD S

1. Less than 2 weeks	☐
2. 2 weeks but less than 6 months	☐
3. 6 months but less than 1 year	☐
4. 1 year but less than 2 years	☐
5. 2 years or more	☐

Total Irritability Score (out of 4)	

CISR: Section F - Worry about Physical Health

F1
Many people get concerned about their physical health. In the past month, have you been at all worried about your physical health?
INCLUDE WOMEN WHO ARE WORRIED ABOUT THEIR PREGNANCY

1. Yes, worried	☐ Go to F3
2. No	☐ Go to F2

F2Route
INTERVIEWER:
HAS INFORMANT MENTIONED A PHYSICAL HEALTH PROBLEM WHEN ASKED EARLIER IN INTERVIEW (PAGE 8 OF BOOKLET)

(1) Yes, has mentioned a physical health problem	☐
(2) No physical health problem	☐ Go to F2

F2
If not worried about physical health AND no health problem:

During the past month, did you find yourself worrying that you might have a serious physical illness?

1. Yes	☐ Go to F3
2. No	☐ Go to G1

F3
If worried about physical health or serious physical illness in past month:

Thinking about the past seven days, including last (DAY A WEEK AGO), on how many days have you found yourself worrying about your physical health/that you might have a serious illness?

(1) 4 days or more	☐ Go to F4	**1**
(2) 1 to 3 days	☐ Go to F4	
(3) None	☐ Go to G1	

F4
If worried about physical health or serious physical illness in past month AND at least one day of worry in past week:

In your opinion, have you been worrying too much in view of your actual health?

1. Yes	☐	**1**
2. No	☐	

F5

If worried about physical health or serious physical illness in past month AND at least one day of worry in past week:

In the past week, has this worrying been...
RUNNING PROMPT...

1. very unpleasant	☐	**1**
2. a little unpleasant	☐	
3. or not unpleasant?	☐	

F6
If worried about physical health or serious physical illness in past month AND at least one day of worry in past week:

In the past week, have you been able to take your mind off your health worries at least once, by doing something else?

1. Yes	☐	
2. No, could not be distracted once	☐	**1**

F7
If worried about physical health or serious physical illness in past month AND at least one day of worry in past week:

How long have you been worrying about your physical health in the way you described?

SHOW CARD S

1. Less than 2 weeks	☐
2. 2 weeks but less than 6 months	☐
3. 6 months but less than 1 year	☐
4. 1 year but less than 2 years	☐
5. 2 years or more	☐

Total Worry about Physical Health Score (out of 4)	

CISR: Section G - Depression

G1
Almost everyone becomes sad, miserable or depressed at times.
Have you had a spell of feeling sad, miserable or depressed in the past month?

1. Yes	☐
2. No	☐

G2
During the past month, have you been able to enjoy or take an interest in things as much as you usually do?

1. Yes	☐ If G1=No and G2=yes Go to I1
2. No/no enjoyment or interest	☐ If G1 = yes got to G4

G4
If sad/depressed in past month (G1 = Yes):

USE INFORMANT'S OWN WORDS IF POSSIBLE
In the past week have you had a spell of feeling sad, miserable or depressed?

1. Yes	☐
2. No	☐ If G2 = yes go to I1. If G2 = no Go to G5

G5
If unable to enjoy things in past month (G2 = No)

USE INFORMANT'S OWN WORDS IF POSSIBLE
In the past week have you been able to enjoy or take an interest in things as much as usual?

1. Yes	☐	
2. No /no enjoyment or interest	☐	**1**

G6
If sad/depressed or unable to enjoy things, in past week:

Since last (DAY A WEEK AGO) on how many days have you felt depressed/unable to take interest in things?

1. 4 days or more	☐	**1**
2. 1 to 3 days	☐	
3. None	☐	

G7
If sad/depressed or unable to enjoy things, in past week:

Have you felt depressed/unable to take interest in things for more than 3 hours in total (on any day in the past week)?

1. Yes	☐	**1**
2. No	☐	

G9
If sad/depressed or unable to enjoy things, in past week:

In the past week when you felt sad, miserable or depressed/unable to enjoy or take an interest in things, did you ever become happier when something nice happened, or when you were in company?

1. Yes, at least once	☐	
2. No	☐	**1**

G10
If sad/depressed or unable to enjoy things, in past week:

How long have you been feeling sad, miserable or depressed/unable to enjoy or take an interest in things as you have described?
SHOW CARD S

1. Less than 2 weeks	☐
2. 2 weeks but less than 6 months	☐
3. 6 months but less than 1 year	☐
4. 1 year but less than 2 years	☐
5. 2 years or more	☐

Total Depression Score (out of 4)	

IF SCORE = 0 THEN GOTO SECTION I AND MISS OUT H.

CISR: Section H - Depressive Ideas

ONLY COMPLETE SECTION IF DEPRESSION SCORE IS > 0

H1
I would now like to ask you about when you have been feeling depressed/unable to enjoy or take an interest in things.

In the past week, was this worse in the morning or in the evening, or did this make no difference?
PROMPT AS NECESSARY

(1) in the morning	☐
(2) in the evening	☐
(3) no difference/other	☐

H2
ASK OR USE SHOWCARD 6

Many people find that feeling depressed/unable to take an interest in things can affect their interest in sex.
Over the past month, do you think your interest in sex has
RUNNING PROMPT

1. increased	☐
2. decreased	☐
3. has it stayed the same?	☐
4. Spontaneous - Not applicable	☐

H3a
When you have felt depressed/unable to take an interest in things in the past seven days

... Have you been so restless that you couldn't sit still?

1. Yes	☐
2. No	☐

H3b
..... Have you been doing things more slowly, for example, walking more slowly?

1. Yes	☐
2. No	☐

H3c
....have you been less talkative than normal?

1. Yes	☐

2. No	☐	

H4

Now, thinking about the past seven days have you on at least one occasion felt guilty or blamed yourself when things went wrong when it hasn't been your fault?

1. Yes, at least once	☐	**1**
2. No	☐	

H5

During the past week, have you been feeling you are not as good as other people?

1. Yes	☐	**1**
2. No	☐	

H6

Have you felt hopeless at all during the past seven days, for instance about your future?

1. Yes	☐	**1**
2. No	☐	

H10

Thank you for answering those questions on how you have been feeling. I would now like to ask you a few questions about worrying

Total Depressive Ideas Score (out of 3)	

CISR: Section I – Worry

I1
(The next few questions are about worrying.) In the past month, did you find yourself worrying more than you needed to about things?

1. Yes, worrying	☐ Go to I6
2. No/concerned	☐ Go to I2

I2
If I1 = No Have you had any worries at all in the past month?

1. Yes	☐ Go to I6
2. No	☐ Go to J1

I6Intro
If (I1 = Yes) OR (I2 = Yes)
For the next few questions, I want you to think about worries you have had other than those about your physical health.

I6
On how many of the past seven days have you been worrying about things (other than your physical health)?

1. 4 days or more	☐ Go to I7	**1**
2. 1 to 3 days	☐ Go to I7	
3. None	☐ Go to J1 but if G4=yes OR G5 = Yes, go to I11	

I7
If (I1 = Yes) OR (I2 = Yes) AND worrying for 1 day or more

In your opinion, have you been worrying too much in view of your circumstances?
REFER TO WORRIES OTHER THAN THOSE ABOUT PHYSICAL HEALTH

1. Yes	☐	**1**
2. No	☐	

I8
If (I1 = Yes) OR (I2 = Yes) AND worrying for 1 day or more

In the past week, has this worrying been:
REFER TO WORRIES OTHER THAN THOSE ABOUT PHYSICAL HEALTH
RUNNING PROMPT

1. very unpleasant	☐	**1**
2. a little unpleasant	☐	
3. or not unpleasant?	☐	

I9
If (I1 = Yes) OR (I2 = Yes) AND worrying for 1 day or more

Have you worried for more than 3 hours in total on any one of the past seven days?
REFER TO WORRIES OTHER THAN THOSE ABOUT PHYSICAL HEALTH

1. Yes	☐	**1**
2. No	☐	

I10
If (I1 = Yes) OR (I2 = Yes) AND worrying for 1 day or more

How long have you been worrying about things in the way you have described?
SHOW CARD S

1. Less than 2 weeks	☐
2. 2 weeks but less than 6 months	☐
3. 6 months but less than 1 year	☐
4. 1 year but less than 2 years	☐
5. 2 years or more	☐

I11Reason
If G4 = yes OR G5 = yes OR I1 = yes OR I2 = yes

Can you look at this card and tell me what sorts of things have been making you worried or depressed?
SHOW CARD 7
CODE ALL THAT APPLY - DON'T KNOW=99

(1) Members of the family	☐
(2) Relationship with spouse/partner	☐
(3) Relationships with friends	☐
(4) Housing	☐
(5) Money/bills	☐
(6) Own physical health (inc. pregnancy)	☐
(7) Own mental health	☐
(8) Work or lack of work	☐
(9) Legal difficulties	☐
(10) Political issues/the news	☐
(11) Other	☐
(99) Don't know/no main thing	☐

I12 Main Reason

If G4 = yes OR G5 = yes OR I1 = yes OR I2 = yes

What was the main thing you have been worried or depressed about?
CARD 7

(1) Members of the family	☐
(2) Relationship with spouse/partner	☐
(3) Relationships with friends	☐
(4) Housing	☐
(5) Money/bills	☐
(6) Own physical health (inc. pregnancy)	☐
(7) Own mental health	☐
(8) Work or lack of work	☐
(9) Legal difficulties	☐
(10) Political issues/the news	☐
(11) Other	☐
(99) Don't know/no main thing	☐

Total Worry Score (out of 4)	

CISR: Section J - Anxiety

J1
Have you been feeling anxious or nervous in the past month?

1. Yes, anxious or nervous	☐ Go to J3
2. No	☐ Go to J2

J2
If J1 = No
In the past month, did you ever find your muscles felt tense or that you couldn't relax?

1. Yes	☐
2. No	☐

J3
Some people have phobias; they get nervous or uncomfortable about specific things or situations when there is no real danger. For instance they may get extremely anxious when in confined spaces, or they may have a fear of heights. Others become nervous at the sight of things like blood or spiders.

In the past month have you felt anxious, nervous or tense about any specific things when there was no real danger?

1. Yes	☐
2. No	☐

J4
INTERVIEWER PLEASE WORK OUT

If J1 = yes Or J2 = yes AND J3 = yes	1. Phobia plus anxiety	☐ Go to J5
If J1 = yes Or J2 = yes AND J3 = no	2. Anxiety only	☐ Go to J7
If J1 = no AND J2 = no	3. Not anxious or tense in past month	☐ Go to K1

J5
If J4 = 1 phobia plus anxiety

In the past month, when you felt anxious/nervous/tense, was this always brought on by the phobia about some specific situation or thing or did you sometimes feel generally anxious/nervous/tense?

(1) Always brought on by phobia	☐
(2) Sometimes generally anxious	☐

J6
If J4 = 1 phobia plus anxiety AND J5 = 2 sometimes generally anxious

The next questions are concerned with general anxiety/nervousness/tension only.
I will ask you about the anxiety which is brought on by the phobia about specific things or situations later.
On how many of the past seven days have you felt generally anxious/nervous/tense?

(1) 4 days or more	☐ Go to J8	**1**
(2) 1 to 3 days	☐ Go to J8	
(3) None	☐ Go to K1	

J7
If J4 = 2 anxiety only
On how many of the past seven days have you felt generally anxious/nervous/tense?

(1) 4 days or more	☐ Go to J8	**1**
(2) 1 to 3 days	☐ Go to J8	
(3) None	☐ Go to K1	

J8
If (J6 = 1 OR 2) OR (J7 = 1 OR 2)

In the past week, has your anxiety/nervousness/tension been:
RUNNING PROMPT

(1) ...very unpleasant	☐	**1**
(2) ...a little unpleasant	☐	
(3) ...or not unpleasant?	☐	

J9
If (J6 = 1 OR 2) OR (J7 = 1 OR 2)

In the past week, when you've been anxious/nervous/tense, have you had any of the symptoms shown on this card?
SHOW CARD 8

1. Yes	☐ Go to J9A
2. No	☐ Go to J10

J9A
If (J6 = 1 OR 2) OR (J7 = 1 OR 2) AND J9 = yes

Which of these symptoms did you have when you felt anxious/nervous/tense? CODE ALL THAT APPLY. **SHOW CARD 8**

(1) Heart racing or pounding	☐	One or more of these symptoms score **1**
(2) Hands sweating or shaking	☐	
(3) Feeling dizzy	☐	
(4) Difficulty getting your breath	☐	
(5) Butterflies in stomach	☐	
(6) Dry mouth	☐	
(7) Nausea or feeling as though you wanted to vomit	☐	

J10

If (J6 = 1 OR 2) OR (J7 = 1 OR 2)

Have you felt anxious/nervous/tense for more than 3 hours in total on any one of the past seven days?

1. Yes	☐	**1**
2. No	☐	

J11
If (J6 = 1 OR 2) OR (J7 = 1 OR 2)

How long have you had these feelings of general anxiety/nervousness/tension as you described?

SHOW CARD S

(1) less than 2 weeks	☐
(2) 2 weeks but less than 6 months	☐
(3) 6 months but less than 1 year	☐
(4) 1 year but less than 2 years	☐
(5) 2 years or more	☐

Total Anxiety Score (out of 4)	

CIS-R: Section K - Phobias

K1
INTERVIEWER PLEASE ENTER INFORMATION

1. Mentioned phobia at J3 (J3=1)	☐ Go to K3
2. No phobia at J3 (J3=2)	☐ Go to K2

K2
If K1 = 2 (no phobia at J3)
Sometimes people avoid a specific situation or thing because they have a phobia about it.
In the past month, have you avoided any situation or thing because it would have made you feel nervous or anxious, even though there was no real danger?

1. Yes	☐ Go to K3
2. No	☐ Go to L1

K3
If K1 = 1 (phobia at J3) OR K2 = 1 (yes)
Thinking about the phobias you mentioned, can you look at this card and tell me which of the situations or things listed made you anxious/nervous/tense in the past month?
SHOW CARD 9
CODE ALL THAT APPLY

(1) Crowds or public places	☐
(2) Enclosed spaces	☐
(3) Social situations	☐
(4) Sight of blood or injury	☐
(5) Specific single cause	☐
(6) Other (SPECIFY BELOW in XK3)	☐

XK3
SPECIFY OTHER

……
…….

K4
If K1 = 1 (phobia at J3) (NB if K2 = yes then go to K7)
In the past seven days, how many times have you felt nervous or anxious about (SITUATION(S)/THING(S))?

(1) 4 days or more	☐ Go to K5	**1**
(2) 1 to 3 days	☐ Go to K5	
(3) None	☐ Go to K6	

K5

If K1 = 1 (phobia at J3) AND K4 = 1 OR 2 (4 days or more OR 1 to 3 days)
In the past week, on those occasions when you felt anxious/nervous/tense did you have any of the symptoms on this card?
SHOW CARD 8

1. Yes	☐ Go to K5A
2. No	☐ Go to K6

K5A
If K1 = 1 (phobia at J3) AND K4 = 1 OR 2 (4 days or more OR 1 to 3 days) AND K5 = yes
Which of these symptoms did you have when you felt anxious/nervous/tense?
SHOW CARD 8

(1) Heart racing or pounding	☐	One or more of these symptoms score **1**
(2) Hands sweating or shaking	☐	
(3) Feeling dizzy	☐	
(4) Difficulty getting your breath	☐	
(5) Butterflies in stomach	☐	
(6) Dry mouth	☐	
(7) Nausea or feeling as though you wanted to vomit	☐	

K6
If K1 = 1 (phobia at J3)
In the past week, have you avoided any situation or thing because it would have made you feel anxious/nervous/tense even though there was no real danger?

1. Yes	☐ Go to K7	**1**
2. No	☐ Go to K8 if appropriate	

K7
If K6 = yes OR K2 = yes
How many times have your avoided such situations or things in the past seven days?

(1) 4 days or more	☐	**1**
(2) 1 to 3 days	☐	
(3) None	☐	

K8
If K4 = 1 OR 2 (4 days or more OR 1 to 3 days) OR K7 = 1 OR 2 (4 days or more OR 1 to 3 days)
How long have you been having these feelings about these situations/things as you have just described?
SHOW CARD S

(1) less than 2 weeks	☐
(2) 2 weeks but less than 6 months	☐
(3) 6 months but less than 1 year	☐
(4) 1 year but less than 2 years	☐
(5) 2 years or more	☐

Total Phobia Score (out of 4)	

CISR: Section L - Panic

L1
If mentioned anxiety or phobias (if not go to M1)
Thinking about the past month, did your anxiety or tension ever get so bad that you got in a panic, for instance make you feel that you might collapse or lose control unless you did something about it?

1. Yes	☐	
2. No	☐ Go to M1	

L2
If L1 = yes
How often has this happened in the past week?

(1) Once	☐ Go to L3	**1**
(2) More than once	☐ Go to L3	**1**
(3) Not at all	☐ Go to M1	

L3
If L1 = yes AND L2 = once or more than once

In the past week, have these feelings of panic been:
RUNNING PROMPT

(1) a little uncomfortable or unpleasant	☐	
(2) or have they been very unpleasant or unbearable?	☐	**1**

L4
If L1 = yes AND L2 = once or more than once

Did this panic/the worst of these panics last for longer than 10 minutes?

1. Yes	☐	**1**
2. No	☐	

L5
If L1 = yes AND L2 = once or more than once

Are you relatively free of anxiety between these panics?

1. Yes	☐
2. No	☐

L6
If L1 = yes AND L2 = once or more than once AND mentioned phobias at J3 or K2

Is this panic always brought on by (phobias described in section K)?

1. Yes	☐
2. No	☐

L7
If L1 = yes AND L2 = once or more than once

How long have you been having these feelings of panic as you have described?
SHOW CARD S

1. Less than 2 weeks	☐
2. 2 weeks but less than 6 months	☐
3. 6 months but less than 1 year	☐
4. 1 year but less than 2 years	☐
5. 2 years or more	☐

Total Panic Score (out of 3)	

CISR: Section M – Compulsions

M1
In the past month, did you find that you kept on doing things over and over again when you knew you had already done them? For example, making your bed or washing your hands over and over again?

1. Yes	☐ Go to M2
2. No	☐ Go to N1

M2
If M1 = Yes

On how many days in the past week did you find yourself doing things over again that you had already done?

(1) 4 days or more	☐ Go to M3	**1**
(2) 1 to 3 days	☐ Go to M3	
(3) None	☐ Go to	

M3
If M1 = yes AND M2 = 1 to 3 days OR 4 days or more
Since last (DAY A WEEK AGO) what sorts of things have you done over and over again?

Specify: ……
……
……
……

M4
If M1 = yes AND M2 = 1 to 3 days OR 4 days or more

During the past week, have you tried to stop yourself repeating (BEHAVIOUR)/doing any of these things over again?
(NOTE: Compulsion(s) mentioned at M3)

1. Yes	☐	**1**
2. No	☐	

M5
If M1 = yes AND M2 = 1 to 3 days OR 4 days or more

Has repeating (BEHAVIOUR)/doing any of these things over again made you upset or annoyed with yourself in the past week?

(NOTE: Compulsion(s) mentioned at M3)

1. Yes , upset or annoyed	☐	**1**
2. No, not at all	☐	

M6

If M1 = yes AND M2 = 1 to 3 days OR 4 days or more

INTERVIEWER: IS MORE THAN ONE THING REPEATED AT M3

1. Yes	☐ Go to M6A
2. No	☐ Go to M7

M6A
If M1 = yes AND M2 = 1 to 3 days OR 4 days or more AND M6 = yes

Thinking about the past week, which of the things you mentioned did you repeat the most times?

Specify: ……
……
……
……

M7
If M1 = yes AND M2 = 1 to 3 days OR 4 days or more

Since last (DAY A WEEK AGO), how many times did you repeat (BEHAVIOUR) when you had already done it?

(1) 3 or more repeats	☐	**1**
(2) 2 repeats	☐	
(3) 1 repeat	☐	

M8
If M1 = yes AND M2 = 1 to 3 days OR 4 days or more

How long have you been repeating (BEHAVIOUR)/any of the things you mentioned in the way which you have described?
SHOW CARD S

1. Less than 2 weeks	☐
2. 2 weeks but less than 6 months	☐
3. 6 months but less than 1 year	☐
4. 1 year but less than 2 years	☐
5. 2 years or more	☐

Total Compulsions Score (out of 4)	

CISR: Section N - Obsessions

N1
In the past month did you have any thoughts or ideas over and over again that you found unpleasant and would prefer not to think about, that still kept on coming into your mind? For example, constantly thinking about death.

1. Yes	☐ Go to N2
2. No	☐ Go to O1

N2
If N1 = yes
Can I check, is this the same thought or idea over and over again or are you worrying about a problem or something in general?

(1) Same thought	☐ Go to N3
(2) Worrying in general	☐ Go to O1 (Check: This worry should be recorded in Section I (I1 and I2)- please amend that section if needed)

N3
If N1 = yes AND N2 = Same thought

What are these unpleasant thoughts or ideas that keep coming into your mind?
RECORD VERBATIM
DO NOT PROBE
DO NOT PRESS FOR AN ANSWER

……
……
……
……
……
……

N4
If N1 = yes AND N2 = Same thought

Since last (DAY A WEEK AGO), on how many days have you had these unpleasant thoughts?

(1) 4 days or more	☐ Go to N5	**1**
(2) 1 to 3 days	☐ Go to N5	
(3) None	☐ Go to O1	

N5
If N1 = yes AND N2 = same thought AND N4 = 4 days or more OR 1 to 3 days

During the past week, have you tried to stop yourself thinking any of these thoughts?

1. Yes	☐	**1**
2. No	☐	

N6
If N1 = yes AND N2 = same thought AND N4 = 4 days or more OR 1 to 3 days

Have you become upset or annoyed with yourself when you have had these thoughts in the past week?

1. Yes, upset or annoyed	☐	**1**
2. Not at all	☐	

N7
If N1 = yes AND N2 = same thought AND N4 = 4 days or more OR 1 to 3 days

In the past week, was the longest episode of having such thoughts?
RUNNING PROMPT

(1) a quarter of an hour or longer	☐	**1**
(2) or was it less than this?	☐	

N8
If N1 = yes AND N2 = Same thought AND N4 = 4 days or more OR 1 to 3 days

How long have you been having these thoughts in the way which you have just described?
SHOW CARD S

1. Less than 2 weeks	☐
2. 2 weeks but less than 6 months	☐
3. 6 months but less than 1 year	☐
4. 1 year but less than 2 years	☐
5. 2 years or more	☐

Total Obsessions Score (out of 4)	

CISR:Section O - Overall Effects

If any of the section scores are 2 or more then complete this section. If not then go to next section.

O1
Now I would like to ask you how all of these things that you have told me about have affected you overall.
In the past week, has the way you have been feeling ever actually stopped you from getting on with things you used to do or would like to do?

1. Yes	☐ Go to O1A
2. No	☐ Go to O1B

O1A
If O1 = yes
In the past week, has the way you have been feeling stopped you doing things once or more than once?

(1) Once	☐ Go to DSH1
(2) More than once	☐ Go to DSH1

O1B
If O1 = no
Has the way you have been feeling made things more difficult even though you have got everything done?

1. Yes	☐
2. No	☐

Appendix 9 Topic guide for qualitative interviews

In-depth Interview Guide - Improving the Health of People with Court Orders Supervised by Probation Services: An exploratory study.

This guide sets out the key questions that will be asked as part of the in-depth interview with Probationers. It gives an outline of the topics to be covered, with suggested questions.

Introduction

- Ensure understanding of information sheet and completion of consent form.
    - The interview will be audio recorded.
    - This will then be transcribed and anonymised before analysis takes place.
- Would you like to review the transcript?
- Would you like to receive the final report?
- We are interested in your experiences and views. There are no wrong answers so please feel able to speak your mind freely.
- Any further questions?

Further Prompts

Can you explain further?
What can we do about it?
Can you give an example?
What can be done about it?
Would you like to share more regarding that matter?
What may have caused this?
Is there anything else?

Questions

Perceptions of health problems

- Tell me about your general health
    - How long had this/these problems?
    - When did this start?
    - Where did you go for help?
    - Did that help? What works for you?
- Have you ever been ill?
    - How long had this/these problems?
    - When did this start?
    - Where did you go for help?
    - Did that help? What works for you?
- Do you think that your alcohol/drug use affects your health and wellbeing?
- Do you think there is a link between your health problems and this offence?

Experiences and perceived impact of health-related interventions received whilst on probation

- Have you had any contact with health services either through probation or directly?
    - (GPs, hospital, drop in centres, health trainers, – relate to answers given in quantitative follow-up interview)
    - For health trainers – why did you access this service?
    - How did you access this service?
- What were your expectations?
- What happened? Did you get the help you needed?
    - Why was that?
- What would you say to the NHS/Probation about the services your received?
    - How could they be improved?

If had mental health, alcohol or drug problems but no treatment order:

Would it have been helpful if treatment for health problems had been included in your sentence/court order?

- Why?/Why not

Perceived impact of treatment order (information about treatment orders, gathered during baseline interview in cohort study)

If had treatment order as part of Court Order:

- What were your expectations of your treatment order?
- Has it helped?
    - How or why not?
    - Should this have been part of your court order?

Facilitators and barriers to improving health and accessing health services

- Have there been occasions when you have needed help for a health problem but have been unable to get it?
    - What happened? What did you do?
- Who or what would make it easier for you to get help with a health problem?
- Can you think of a time when getting help for a health problem seemed easy?
    - Why was this?

Addressing health needs after leaving probation

- How will you manage any health issues after leaving probation?
- (If used services in probation) Will you continue with this service? Or where will you go for help?

Appendix 10 Example of data summary and display – homelessness

ID		Summary of coding	Themes
1001	M 29 C 3	Homeless just happened - no fault attached. Although is related to a work contract falling through. (Something here about living in a vulnerable way so only takes one thing to go wrong or for one job not to work out and everything collapses 'gone from having everything to nothing'). Describes being homeless as the source of all his problems. Homelessness led to drug use (to stay awake so not sleep on streets and to block it all out), led to offence (breaking into derelict buildings) which led to probation and DRR. Struggled to get help as young, single and male - but the system didn't want to know. Recognised that the drug use was changing him as had previously had a drug problem. Homeless healthcare team got him a room in shared house so didn't have to go into a hostel as it was a high risk environment for drugs use. Doesn't like the tower block where he now lives with his girlfriend - says he is 'tainted'. Some people use drugs at university and college but can knock it on the head – homeless people tend to have nothing so need to find something to block it all out and that tends to be alcohol and drugs.	Fatalistic view - homelessness just happens - 'life led me to be homeless' - Fragility of life - one things goes wrong then spirals out of control. People at college or university can take drugs without too many problems and then stop – homeless people tend to find something to block it all out. Homelessness causes other problems. Difficult to get help when male and single. Need for good accommodation not just any accommodation. Was put into a room in shared house to avoid going into high risk environment of hostel.
1016	F 30 S 3	No data	
1019	M 45 C 2	Has claustrophobia and panic attacks and managed to move out of a small flat to a larger one but is having to move again as his rent benefit is capped and he can't afford to top it up. Describes the landlord as 'greedy'. Doesn't want to move to new flat in that area of town but feels there is no other option - nicer places need huge deposits, references and guarantors etc. Is concerned that it is smaller so may suffer from claustrophobia again but has a I'll just try it attitude - no strategies for	Need for good accommodation not just any accommodation. Problems with affording good accommodation. Difficult to get help as needed a deposit.

		coping. Hasn't thought about it. Other option is to go homeless to try and get council housing - more worried about what will happen to all his stuff rather than practicalities of homelessness. Difficult to get help to find housing as what is needed is money for deposits - had to sort it himself.	
1022	M 40 C 3	Now has own accommodation but lived in hostels for a while. Getting accommodation was vital for his recovery and being able to move on. Described being 'tied' to hostels. Having to attend sessions at the hostel but was trying to be a mother's chemo sessions. Became homeless when he lost his council flat due to unsociable behaviour - loud parties, visits from police and housing officer - smoking spiffs. Was in a variety of hostels - some better than others. Better when housed in small groups. Kept himself to himself. First got into heroin when living in a hostel, reached a low point in life and tried it and became addicted.	Getting accommodation vital for recovery. Started drug use in a hostel. Fragility of life - one things goes wrong then spirals out of control. Homelessness causes other problems. Being around other addicts/alcoholics in the hostel environment leads to personal use.
1024	M 35 S 3	No data	
1041	M 47 C 4	No data	

1042	M 51 C 2	Struggled with mental health issues when he lost his home when his wife defaulted on a loan. Felt that no one cared or wanted to help described the judge in court as 'obnoxious, nasty person' who 'treated everybody like dirt'. Felt he was hard done-by. He couldn't cope so walked off. Had a previous experience of homelessness when 6 years ago split up with partner so had to move out and was homeless. (Fragility of situation - only takes 1 thing to start spiralling out of control) Slept on mate's couch, took more drugs, more drink, more offending, couldn't work, and it got 'worse and worse and worse'. 'the worst year of my life' Lack of safety net and resilience. Had already borrowed form Mum so couldn't borrow anymore and she didn't want to know him. Lots of praise for the council who helped to rehome them - once evicted they were put in a B&B for 6 weeks then in The Roberts Centre which is for families who are evicted. Great example of how services can support people. 3 weeks later got lovely flat. Said he would give an award to city council and Roberts centre for how he was treated, kept him informed, loaned money to pay for storage, removals 'I could never be any happier'.	Link between mental health and homelessness. Fragility of life - one things goes wrong then spirals out of control. Homelessness causes other problems. Need for good accommodation not just any accommodation. Good support from council (wife disabled) so demonstrates services can work well.
1049	M 42 C 3	No data	
1055	M 36 C 2	No data	
1059	M 35 C 3	No data	
1060	M 33 C 3	No data	
1062	F 20 C 3	No data	
1063	F 34 C 3 DNF	Problems with benefits meant housing benefit stopped so got into arrears and then evicted. Everything has now gone downhill again and she is living in a tent, relapsed drug use. (Fragility of situation - one issues starts of spiral of more problems). Problems of needing a deposit to rent a place. Impact of homelessness on health - asthma worse, chest infection as out in all weathers. Some positives - eating better as eats at Centre Point (describes as an amazing place), drug use has now decreased	Evicted through benefit issues. Fragility of life - one things goes wrong then spirals out of control. Homelessness causes other problems. Problems with affording good accommodation. Difficult to get help as needed a deposit. Fatalistic view - everything

		as can't afford to use. Was initially upset when evicted but has a fatalistic view 'everything happens for a reason' - now glad she is out of there - too many bad memories and now away from other drug users/associates so has managed to get on a script and reduce drug use.	happens for a reason.
1064	M 41 S 3	Fragility of situation again - bust wrist led to loss of job as bricklayer, lost flat, back in hostel ending up using drugs again. As using drugs within 2 weeks of being back in a hostel. Was told he couldn't work in the hostel even though he had all his tools. Describes there being trouble every day at Patrick House. Another time he was homeless and in a hostel because a job was delayed. Then kept getting arrested 'you get blamed for nothing' and if you try and stay out of trouble - still need your 'prison head' or people take advantage so difficult to get away from crime. Has been waiting to get a flat out of town centre - which has made a lot of difference as managed to turn his back on criminal and drug mates. But is now stressed he will loose it. (Fragility again).	Fragility of life - one things goes wrong then spirals out of control. Difficult not to offend in hostels. Being around other addicts/alcoholics in the hostel environment leads to personal use. Need for good accommodation not just any accommodation.
1066	M 35 S 3	Recognises that in order to stop drinking needs to move accommodation because there are ' more bottles of alcohol there than there is people'. Demonstrates the effect of living environment on alcohol misuse.	Being around other addicts/alcoholics in the hostel environment leads to personal use.

1067	M 33 C 2	Difficult to get away from offending and violence whilst staying in a hostel. Was viciously attacked, offenders sent to court then was attacked by the perpetrator's cousin while in a hostel. He was then arrested for being horrible to the police. The cousin was then evicted but hostel staff did nothing. He also got head-butted in the hostel during a fight - ended up at A&E. Got evicted from the hostel because he was drunk and thought someone was going through his pockets so he punched them. Now lives in a tent. Hostel caused relapse of drinking - he could 'smell the alcohol' and after only 4 days had relapsed. Felt a failure - hard bit is staying off alcohol and environment doesn't help. Wants to have his own place and be sober but needs own place to do this. Homelessness has affected physical and mental health - not being able to wash properly and general feeling ' would be nice to go out of a front door instead of a zip door'	Fragility of life - one things goes wrong then spirals out of control. Being around other addicts/alcoholics in the hostel environment leads to personal use. Difficult not to offend in hostels.
1068	F 49 C 2	No data	
1069	M 47 S 2	No data	
1073	M 27 S 3	No data	

1075	M 37 S 2	Relapsed into drug use when moved into a hostel as there were 'too many addicts in there really'. Difficult to stay clean around other addicts influence (the wrong crowd) that along with boredom. Currently living in a tent. Evicted from room in shared house for letting someone else sleep on floor. Insecure housing as no tenancy agreement or deposit so evicted straight away and no come back. Struggling to get housing as no deposit. Has been referred to a rent deposit linking scheme which provides a bond - a guarantee to cover deposit but as not a cash transaction many landlords don't like it so limited availability - long waiting list and other people with priority circumstances. Described as a 'waiting game'. Praise for Centre Point Staff and facilities they offer - washing, shower, locker, information, meals Monday to Friday. A problem as it is not open at weekends so has to beg on streets for money for food. Is happy to be arrested for begging as would get a free meal and cup of coffee. If he was sent back to prison they would be 'doing me a favour' with roof over head and 3 meals a day. If winter comes he will commit crime just to go to prison and get a roof over his head 'a sorry state of affairs to look at, but that's how it is.' Boredom is an issue when homeless which can lead to more drug taking. Associates homelessness with depression - if he had a better way of life then depression would be better. When came out of prison, was clean and had help from probation with housing - got into a hostel - but had too many addicts so relapsed. He also had a job so resented paying supported housing fees when he didn't get any support. Lack of housing opportunities and job opportunities for over 25s.	Being around other addicts/alcoholics in the hostel environment leads to personal use. Difficult to get help as needed a deposit. Link between mental health and homelessness. Will commit crime to go to prison to get food and a roof over his head. Difficult to get help when male and single and over 25.
1076	F26 C 2	No data	
1082	M45 S 3	No data	
1083	M 22 C 3	No data	
1084	M 20 C 3	To do	

1088	M 49 S 3	No data	
1089	M 37 C 2	To do	
1097	M 39 C 1	No data	
3002	M 42 S2	Importance of having a good place to live - had a flat where neighbours created hell so had to get out of it. Had support from probation and health trainer to move. Now has a nice quiet flat - gets 'good energy' from where he lives.	Need for good accommodation not just any accommodation.
3010	M 46 C 3	Split up with wife, lost job, was homeless – all he had was drugs. Went to Two Saints to get housed but because he abused his landlord they wouldn't help. However, the court then ordered him to go to Two Saints and suddenly they all wanted to help. If it wasn't for the court then he could have been on the streets – he would have been very vulnerable and would have offended again as on the streets you need money all the time – you need food, but can't store food, if you've not got any money then how else can you get food? Being older struggles with the rules and regulations of living in a hostel – set times for meals etc. Moving out of the hostel would help him stop taking drugs as everyone in the hostel takes drugs.	Spiral - Split up with wife, lost job, was homeless – all he had was drugs. Couldn't get a hostel place until ordered by court. Vulnerable on streets – need money for food, nowhere to store food – likely end up offending. Hostel environment no good if stopping drugs as everyone takes them.

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