

# A HEALTH NEEDS ASSESSMENT OF OFFENDERS ON PROBATION CASELOADS IN NOTTINGHAMSHIRE AND DERBYSHIRE

## REPORT OF A PILOT STUDY

**Professor Charlie Brooker**, Criminal Justice and Mental Health, CCAWI, University of Lincoln

**Clare Fox**, Research Assistant, Criminal Justice and Mental Health, CCAWI, University of Lincoln

**Paul Barrett**, Visiting Research Fellow, University of Lincoln and Nurse Consultant, Lincolnshire Partnership Foundation Trust

**Linda Syson-Nibbs**, Public Health Nurse Consultant, Derbyshire Primary Care Trust

April, 2008



# ACKNOWLEDGEMENTS

We are extremely grateful to the probation officers who administered the assessments and to the clients themselves who agreed to participate. In addition, we extend our thanks to Rosemary Plang and Helen Kane (in Derbyshire and Nottinghamshire respectively) who helped us to organise the work within their organisations. The analysis was improved considerably by Tony Arthur's (School of Nursing, University of Nottingham) learned advice. Finally, we would like to acknowledge Carl Finch and Diane Smith, at East Midlands CSIP, who commissioned the study and who have been most supportive throughout.

An electronic version of this report can be downloaded from the Criminal Justice and Mental health website at the University of Lincoln at the following link:

<http://auth.lincoln.ac.uk/cjmh>

If you have any comments or queries regarding the report please contact Professor Charlie Brooker at: [cbrooker@lincoln.ac.uk](mailto:cbrooker@lincoln.ac.uk)

Design and Layout: Anisa Mustafa (CCAWI)

# CONTENTS

Executive Summary	6
Background	8
Offenders and Health	10
Aims of Research	16
Method	16
Ethical Issues	18
Results	
1) Analysis of the structured assessment tools	19
2) Offenders Access to Healthcare	44
3) Offender Managers' View of Healthcare	48
Discussion	55
Conclusion	58
References	59
Appendices 1 - 5	63




## LIST OF FIGURES

1. Number of requirements
2. Proportion of offenders for whom CAGE identified a risk of alcohol abuse or dependence
3. Proportion of offenders for whom UNCOPE identified a risk of substance abuse
4. Comparison of offender and general population SF36 scores
5. Changes to SF36 scores by offender age groups
6. Order type by risk
7. Sexual health by risk
8. Smoking by risk
9. Mental health by risk
10. Alcohol abuse by risk
11. Substance abuse by risk
12. Frequency with which offenders accessed services in the last 12 months

## LIST OF TABLES

1. Summary of the characteristics of the offender populations
2. Breakdown of “other” requirements
3. Number of requirements per order
4. Summary of Sexual health, Mental health and Smoking among Nottinghamshire and Derbyshire offender samples and the total sample
5. Reported mental health diagnosis
6. Comparison of SF36 dimension and component scores for offenders and the general population
7. SF36 dimension and component scores by gender for offender sample and



general population

8. Comparison of Physical and Mental Component Summary scores for offender sample and general population “manual” social class
9. SF36 dimension and component scores for offender age groups.
10. SF36 dimension and component scores for each tier.
11. SF36 dimension and component scores by order type.
12. SF36 dimension and component scores for smokers and non-smokers in the offender sample.
13. SF36 dimension and component scores for offenders who had been seen formally by a mental health service and those who hadn’t.
14. SF36 dimension and component scores categorised by risk of alcohol abuse or dependence.
15. Comparison of CAGE scores by offenders and the general population.
16. SF36 dimension and component scores categorised by risk of substance abuse.
17. SF36 dimension and component scores for offenders who were identified by CAGE and UNCOPE as being at risk of alcohol and/or substance abuse.
18. Offenders’ self perceived greatest health problems.
19. Number of offenders accessing each service.
20. Frequency with which offenders in Nottinghamshire and Derbyshire accessed services with in the last 12 months.
21. Comparison of SF36 dimension and component scores of those accessing a mental health service 7 times or more in the last 12 months, those who stated they had been seen formally by a mental health services and those who had no access with any mental health service.
22. SF36 dimension and component scores for offenders accessing A&E/NHS Walk-in Centre in the last 12 months.
23. Hospital Day Case reason.
24. Inpatient hospital stay reason.
25. Proportion of offenders who experienced difficulties accessing or registering with services
26. Offenders’ suggestions for service improvements.



# EXECUTIVE SUMMARY

## Background

This study was commissioned by the Care Services Improvement Partnership (CSIP) in the East Midlands to investigate the health needs of a sample group offenders managed by The Nottinghamshire and Derbyshire Probation Services.

## Literature Review

There is a wealth of research around the health of prisoners, but very little relating to the health of offenders in the community even though the National Probation Service manages over 175,000 offenders in the community; over twice the number of prisoners. Prison healthcare has improved in recent years, however it is likely that the poor health of prisoners does not suddenly remit on release and may even get worse. Department of Health policy guidance has suggested that offenders in the community seem to have difficulty accessing health services and tend to over-use crisis services such as Accident and Emergency. The few studies that have examined the health of offenders within community settings have indicated that the health of this group is worse than that of the general population. Reviews have suggested that the health needs of offenders in the community would be similar to those of prisoners.

There are many tools that can be used for health needs assessments. The prison health-care needs assessments used methods recommended in the Toolkit for health care needs assessments (Marshall et al, 2000) and the Youth Justice Board used a combination of the SF36 and the GHQ12, among others, in their assessment of young women in Young Offender Institutes. (Douglas and Plugge, 2006)


## Method

The sample for this study was a convenience sample selected by local offender managers across the two areas and was stratified by tier of risk. Offender managers selected offenders who, before participating, gave their informed consent. This study used a combination of tools for the questionnaire and also interviews with offender managers. The questionnaire combined the SF36 (a widely used, psychometrically-based survey tool to measure physical and mental health), CAGE (a 4 question screen for alcohol problems) and UNCOPE (a 6 item screen for substance abuse) as well as questions about mental health, sexual health and access to services. The aims of the interviews were to gather further qualitative information from offender managers.

## Findings

This study had a response rate of 80%. The average age of the sample was 33, women were slightly over represented at 17% compared to 14% in the local populations and three quarters of the sample were on community orders. 83% of this sample were smokers, compared to just 22% of the general population. The smokers reported their physical health as significantly worse than the non-smokers.

44% of the sample was identified as being at risk of alcohol abuse or dependence and 39% of the sample was identified as being at risk of substance abuse. Being at risk of alcohol or substance abuse only seems to significantly affect the social function dimension of the



SF36 and the mental component summary. As with smoking, alcohol and substance abuse worsens with risk, however substance abuse is a contributing factor in determining an offender's risk.

Overall, the findings indicate that offenders' health is significantly worse than the general population and the health of female offenders is both significantly worse than their male counterparts and the general population. 27% of the sample had been seen formally by a mental health service at some point; the majority of the diagnoses reported by offenders were depression and/or anxiety. Only one of the sample reported being diagnosed with a psychosis which seems very low when compared to prisoner studies, however this might be an under-estimate related to the 'self-report' nature of this pilot study. The health profiles of those who had been seen formally by a mental health service were significantly worse than the general population for nearly all SF36 dimensions, including, interestingly, a number of the physical health dimensions.

80% of the sample said they had accessed a GP in the last 12 months and 55% said they had accessed a dentist. There was also a group of offenders accessing A&E 3 times or more in the last 12 months; their health profiles are generally worse across all dimensions. 14% of offenders reported having experienced problems accessing health services whilst 12% made unsolicited positive affirmations of satisfaction with service provision. The interviews with offender managers identified particular problems with offenders accessing dentistry and mental health services.

## Discussion

This study has shown that offenders have significantly worse health than the general population and that their health needs are different, in a number of respects, to those of prisoners. It also shows that offenders will consent to a health assessment and that this sort of assessment could be fitted into face-to-face contact with offenders on probation. The key finding to emerge from the study, perhaps, is that whilst community-based offenders seem to access healthcare at the same rate as the general population their health needs are likely to be significantly higher. Thus, supply is much lower than this needs assessment would indicate is appropriate. A much more rigorous research study should be undertaken that:

- Assesses the validity of offenders' self-report of access to health services
- Obtains a representative sample
- Examines prospectively the relationship between health status, health care and re-offending
- Estimates the cost of healthcare to community-based offenders and the possible trade-off obtained in reducing the costs of re-offending



## BACKGROUND

Across the country, the Care Services Improvement Partnership (CSIP) is responsible for a Service Level Agreement target to investigate the health needs of offenders based in the community. The East Midlands CSIP office has therefore commissioned us to undertake this project. Nottinghamshire Probation Area, focusing on Nottingham city, [mostly urban population] and Derbyshire Probation Area [largely rural population] were chosen for this investigation.

### **The Nottingham Area**

Nottingham is an area that suffers acute deprivation. Data from the 2001 Census shows that the proportion of those unemployed or permanently sick/disabled is slightly higher (by approx 2%) than the rest of England. The proportion of those of working age claiming a key benefit in Nottingham is 20%, compared to 14% in England. This is also reflected in those claiming incapacity benefits, which is 10% in Nottingham and 7% in England. The proportion of people who assessed themselves as having good general health was 65%, slightly lower than the rest of England (69%). 11% assessed themselves as not having good general health, slightly higher than the rest of England (9%). More recently, it has been found that the proportion of people in Nottingham claiming benefits due to mental health problems is significantly higher than the rest of England (APHO, 2007). There are approximately 29 senior probation officers, 140 probation officers across the county organized into 17 teams with approximately 60% in Nottingham, approximately 25% in Mansfield and approximately 15% in the more rural areas of Worksop and Newark. As at March 2007, Nottinghamshire Probation Area was supervising 5291 offenders, of whom approximately 70% were being supervised in the community (Ministry of Justice, 2007).

### **The Derbyshire Area**


Derbyshire is a more rural county, particularly the west of the region which is part of the Peak District. Derbyshire County has a population spread over a large rural geographical area that encompasses much of the 555 sq miles of the Peak District National Park. Overall the indicators of health for people in Derbyshire are similar to average when compared with those for the East Midlands and England (APHO 2007 b). There are however areas of poor health in the most deprived districts such as Bolsover and Chesterfield. The relatively prosperous appearance of rural areas as a whole masks pockets of multiple deprivation that effects substantial numbers of the rural population. Rural health inequalities are compounded by the well documented phenomena of distance decay whereby proximity to health and social care provision determines usage (Jordon et al 2004).

The area is in contrast to neighbouring Derby City that has significant deprivation and indicators of health that are worse than average when compared with England and the East Midlands. These differences are reflected in the rate of people claiming sickness benefit because of mental health problems and admission to hospital for alcohol problems which are above average in the city and below average in the county (APHO 2007 c).

Derbyshire Probation Area has 19 senior probation officers and 98 probation officers, supervising 2764 (74%) offenders in the community at March 2007 (Ministry of Justice, 2007 b).

Offenders are a disadvantaged group and it has been acknowledged that they often ex-





perience problems in accessing health services. This can lead to further social exclusion and increased risk of re-offending. Changing Ways found that “43% of adult offenders on community sentences assessed using OASys were found to have emotional wellbeing issues linked to their offending behaviour.” (East Midlands Reducing Reoffending Partnership, 2006, page 36). OASys does have a section relating to health and other considerations which asks about general health problems; however this is not used in relation to assessing risk but to assess suitability for community punishment.



# OFFENDERS AND HEALTH

*"When I consider what the needs of offenders are, I always try to always bear in mind that offenders want the same things as everyone else - health care, a job, a family, and somewhere to live. Of these issues, health is vitally important. With the high number of offenders with mental health problems, or difficulties with drugs, the contribution made by health professionals in addressing the needs of the offender population is absolutely crucial."*

*(Lord Hunt 2008)*

There is much literature about the health, particularly mental health, of prisoners (Marshall et al, 2000, Singleton et al, 1998,) but there is surprisingly little about the health needs of offenders in the community – a topic reviewed by Offender Health Care Strategies (2005). They concluded that offenders in the community would have similar needs to prisoners, mainly physical health, mental health and substance misuse needs. Lincoln University (Brooker and Sirdifield, 2007) have undertaken an evaluation of offender "Health Trainers", an initiative which gave offenders in five prisons and one probation area the role of "Health Trainer" to give advice and "sign post" to health services. One particular finding was that the Health Trainer was the first service that 45% of the Health Trainer clients had engaged with. The Offender's Healthy Living Project, lead by Lincolnshire Probation is another example of promoting healthy lifestyles among offenders in the community. Two nurses were employed in the probation offices to assess and address offender health needs. The project has shown an increase in offenders' access to health services and treatment.

## Conducting a Health Needs Assessment with Offenders

There are many tools that can be used for a health needs assessment exercise and below we review their use in the context of the healthcare of offenders more generally. Many studies have used a combination of different tools and methodologies. Douglas and Plugge (2006) used a combination of the SF-36<sup>1</sup>, GHQ12<sup>2</sup> and some questions from the Oxford Healthy Lifestyle Survey, amongst others, in their health needs assessment of young women in Young Offender Institutions. The prison healthcare needs assessments have been completed by all prisons, local health authorities and primary care trusts. The methods were based on those recommended in Toolkit for health care needs assessment in prisons (Marshall et al, 2000) which used corporate, comparative and epidemiological approaches. This included an analysis of prisoner medical records, prisoner focus groups/questionnaires, key staff interviews/questionnaires and a comparison of existing services against current standards. Other studies have used in-depth interviews with offenders and service providers (Burgess-Allen et al, 2006).

1. Short Form-36 Health Survey is a widely used, psychometrically-tested, survey tool with 36 questions to measure physical and mental health.

2. General Health Questionnaire - a quick short form with 12 questions to measure psychological wellbeing.



## Offender health (prisons)

The health of offenders has enjoyed a higher research profile over the past decade. Since the seminal report of Singleton et al (1998) a number of studies have been undertaken that have focused on the health status and health needs of the prison population including attention to specific groups such as young offenders (e.g Farrant 2001), older people (e.g Fazel et al 2004) and women (e.g Plugge et al 2006).


A significant amount of research activity has been undertaken to determine the health status of offenders within secure estates. The pioneering work of Singleton et al (1998) sampled the various sections of the prison population in England and Wales in order to estimate for psychiatric morbidity. The study revealed that around 90% of prisoners had at least one mental disorder (including alcohol abuse and drug dependency). Some findings of note was the prevalence of personality disorder with 78% of male remand prisoners, 64% of male sentenced prisoners and 50% of female remand and sentenced prisoners meeting diagnostic criteria in clinical interview. Neurotic disorders were found amongst 59% of male and 76% of female remand prisoners and amongst 40% of male and 63% of female sentenced prisoners. Important findings were that 12-15 % of sentenced prisoners have 4 or 5 co- occurring mental disorders. That there are higher prevalence rates for mental disorder amongst older people, women and ethnic minority groups. Incidence rates for at least one episode of self harming behaviour were around 30% in the prison population

Drug dependency was identified in 43% of male and 52% of female remand prisoners and in 34% of male sentenced and 36% of female sentenced prisoners.

An updated review of literature pertaining to mental health and prisoners included a consideration of epidemiology (Brooker et al 2007). This concluded that studies of prevalence could vary according to the assessments employed and the period over which prevalence is measured. However all the studies included in the review confirm that the incidence of mental disorder is grossly over-represented in prisoners compared to that found in the general population.

## Probation health

Very little is known about offenders' health profile and needs in community settings. At the end of September 2007 there were 80,855 people in custody in England and Wales (Ministry of Justice 2007a) compared to 175,416 offenders being managed in the community by the National Probation Service (Ministry of Justice 2007b). Thus, the offender population comprises of much more than those who are in custody. If offender health is to be effectively addressed the focus needs to shift to access to offender healthcare rather than just healthcare for prisoners (CSIP 2006). It is likely that the poor health of prisoners does not suddenly remit on release and might even get worse. Policy drivers backed by considerable investment have generally improved prison healthcare (Department of Health 2007, HM Chief Inspector of Prisons 2008). In addition the disciplining of life and reduced access to alcohol and drugs prison might afford a protective factor for many offenders. However in the community many offenders seem to have difficulty accessing mainstream health services. These offenders tend to over-use crisis services such as Accident and Emergency Centres but enjoy little in the way of preventative healthcare or health promotion (Department of Health 2007).



The contention that offenders have poor status has relied largely on anecdotal evidence, educated speculation and extrapolating the aforementioned findings from prison settings into the community (Williamson 2006). For example Nadkarni et al (2000) were not aware of any studies of mental health morbidity amongst residents of probation and bail hostels but suggest that comparisons with remand prisoners would indicate higher levels of pathology than the general population. These lack of data has not gone entirely unnoticed; for example Solomons and Rutherford (2007) point to the paucity of information on the mental health needs of people serving community sentences.


By way of confirmation a literature search of principal databases by the authors yielded little research that was specific to the health of offenders within community settings. Other articles referred to this subject but in a way that was coincidental to the primary aims of the respective studies. The data that was found is reviewed below:

Mair and May's (1997) comprehensive interviewing of a sample of 1213 people on probation caseloads included questions relating to health status. 49% of the sample reported having or expecting to have a health problem lasting at least 6 months. The authors contrast this with figures from the general population. For example 46% of male probationers between 16-44 years of age reported long term illness or a disability compared to 26% in a matched age group within the general population. The investigators do exercise caution since the comparison group was based on more objective definitions of ill health elicited by a comprehensive health survey (Bennett et al 1995). However, despite this, they conclude that there is clear evidence of a higher incidence of self-reported health problems in probationers that are similar to the high rates amongst prisoners and that both offender groups self-reported health problems exceed those found in the general population. Mair and May's work is also useful in that it includes attention to physical as well as psychological health. Indeed in the overall probation sample the proportion reporting musculoskeletal problems (18%) and respiratory problems (15%) slightly exceed those reporting mental disorders (14%).

Freeman (2003) study used Short Form 36 Health Survey (SF-36) alongside other measures to evaluate outcomes for drug dependent offenders in an Australian court-mandated treatment programme. Participants' pre-programme scores were significantly lower on all but one (physical functioning) of the health dimensions. Lower scores indicate poorer health and again the study populations' health was worse contrasted to that in the general Australian population.

A similar study of 60 United States offenders in a drug court probation programme was undertaken by Hagedorn and Willenbring (2003). They found lower SF36 physical component summary and mental component summary scores that denoted worse subjective health than the general population. The sample group of offenders also reported high levels of anxiety and depressive symptomology that were further confirmed by structured clinical interviews with 15 of the participants.

Hatfield et al (2004) undertook a 12 month cohort study of 467 individuals in probation approved premises. Staff members reported that 25.1 % of the offenders had a known psychiatric diagnosis, 34.3% had drug misuse and 30.6 % had alcohol abuse problems. A sub sampling of 157 individuals who staff identified with mental health problems revealed depression, substance misuse, overactive, disruptive or aggressive behaviour and relationships were significant problems as indicated by Health of the Nation Outcome Scores (HoNOS). The authors concluded that the high rates of mental disorder accorded with those found in other areas of the criminal justice system.



Dolan et al's (1999) study of the health needs of younger offenders identified that 19% had significant medical problems, 42% had a history of substance misuse and 7% experienced mental health problems needing further treatment. These rates are echoed by The Healthcare Commission's review of 50 inspections of Youth Offending Teams (2006). The commission cited that its own inspection programme had identified that 18% of young offenders had physical health needs, 44% had mental health needs and 42% had substance misuse needs.

Chitsabesan et al (2006) undertook a cross-sectional survey using a needs assessment measure (Salford Needs Assessment for Adolescents) of 301 young offenders (mean age = 15.7 years) 150 of whom were living in the community and 151 in custody. This survey was part of a larger study of service provision and throughcare. The investigation indicated that mental health needs did not differ significantly between the young offenders in custody and those in the community. However alcohol and drug misuse needs were higher in the community sample. The easier access to these substances outside of custody might account for this difference.


A study using tracking methods relied upon objective data such as contact with local mental health services, forms of treatment and staff coding the complexity of need rather than subjective measures (Keene et al 2003). The researchers identified that 13.6 % of the total probation population were in contact with the local mental health trust with the proportion higher amongst female offenders (19.6%). The study revealed disjuncture between mental health problems and contact with service. Only 53% of offenders who probation officers had assessed as having poor mental health were in contact with mental health services. Perhaps even more remarkable were another 445 clients who had not been assessed by probation staff as having mental health problems but who had contact with the local mental health trust.

The variance in these figures concerning the prevalence and profile of health problems amongst community managed offenders might largely be attributed to the same factors that have confounded attempts to review prison studies (Brooker et al 2007). Usage of differing criteria and assessment instruments will reap remarkably different figures. For example recent statistics using OASys indicate that an even higher proportion of 49% of individuals being supervised by the London Probation Service have mental health concerns (London Probation 2007). Despite the difficulties inherent in making effective comparisons all the studies indicate that the physical and psychological pathology of community-managed offenders exceeds that found in the general population and should give rise to concern.

## **Why should we be concerned?**

The prevalence of health problems amongst community-managed offenders should give significant cause for concern to policy makers and those commissioning or developing services.

Firstly health problems are implicated in the extraordinarily high mortality of offenders living in the community. Sattar (2001) used Home Office and Prison records as well as death certificates to explore mortality rates amongst offenders. This revealed that community offenders are four times more likely to die than the general male population a rate that is twice as high as that of imprisoned offenders. Drugs and alcohol were related to around 46% of deaths of community offenders. Half of offender deaths occurred within 12 weeks



of release. Factors implicated in this are easier access to drugs and alcohol, lower tolerance to drugs, bingeing and increased opportunity for high risk behaviours.

Williamson (2006) argues that recently released prisoners are a highly vulnerable group in terms of poor physical and mental health. He attributes this to them losing the protective factors of incarceration. The most recent Chief Inspector of Prisons Annual Report (2008) identified that most inspections had highlighted that resettlement pathways for healthcare were weak. There certainly appears to be a disjuncture between the health care afforded to prisoners and that for offenders being managed in community settings.

Secondly there are clear linkages between poor health and criminal behaviour. Skeem & Loudon (2006) conducted a review of relevant literature and concluded that offenders with serious mental illness are twice as likely to fail in community supervision as those without mental illness. Reoffending rates also positively correlate with poor health status (Social Exclusion Unit 2002) and mentally disordered offenders who are out of contact with services can be particularly at risk of reoffending (Social Exclusion Unit 2004).

Thirdly many of these studies provide further evidence that offenders within the community are a socially excluded group. Not only do they suffer worse health they also experience difficulty in accessing the requisite services to help to meet their needs (Social Exclusion Unit 2002, Department of Health 2007). It seems that service users on probation cannot, or sometimes will not, engage with services through conventional arrangements. Skeem and Loudon's (2006) review of relevant research around community- managed offenders demonstrated that mentally disordered offenders receiving community supervision are frequently failed by services that are not geared towards the needs of this population. Vaughan & Stevenson (2002) conducted a survey which found that mentally disordered offenders were disenchanted with mental health services and were unlikely to seek help themselves.

The Health Care Commission's (2006) review of 50 Youth Offending Teams found that there were still difficulties in younger offenders accessing Child and Adolescent Mental Health Services. Healthcare workers in YOTs became involved in providing healthcare themselves on the basis of what they could offer rather than helping young offenders to access healthcare they needed. The study by Chitsabesan et al (2006) also revealed that high levels of identified needs amongst young offenders were often unmet.



## Conclusions from Studies

These studies lead us to make a number of tentative conclusions: -

- That the prevalence of mental health problems appears to be similar amongst community managed offenders as that found in prisons
- That problems of alcohol/drug misuse and suicidality amongst offenders in the community exceed those of the prison population.
- That recently-released offenders constitute a particularly vulnerable group in terms of substance misuse and mortality.
- That community managed offenders have disproportionately greater health needs than the general population but have less opportunity to access the healthcare services to support them.





## AIMS OF THE RESEARCH

- To examine and compare the healthcare needs of an urban probation population and a rural probation population.
- To investigate the extent to which both of these populations are addressing their healthcare needs and accessing requisite services.

## METHOD

The Development of the Structured Health Needs Assessment Tool – ASHNO (ASsessment of the Health Needs of Offenders)

The Short Form Health survey ( SF-36)

The SF-36 measures health related quality of life outcomes. It comprises 36 items that are scored in eight scales; physical function, role limitations due to physical problems, bodily pain, general health perception, mental health, role limitations due to emotional problems, social functioning and energy/vitality. Responses to questions in each scale are combined to give a metric score of 0-100 with higher scoring denoting better health. Two summary measures -physical component summary and mental component summary are aggregates derived from the 8 scales.

The SF-36 has been extensively used for health-related research around the world and versions exist in some 40 languages (Ware 2002). It is suited to being self-administered, via computer software or a trained interviewer (Ware 2000) The SF-36 has been well validated and achieves substantial test retest reliability and construct validity (Brazier et al 1992). An annotated bibliography (Shiely et al 1996) supports the use of SF-36 as a valid and reliable instrument. Population norms for the SF-36 scales enable researchers to make accurate comparisons with the general population. In the United Kingdom the norms are generally those derived from the Oxford Healthy Life Survey (Jenkinson et al 1996).

The SF-36 has been used to measure the health profile of offenders in both community (Freeman 2003, Hagedorn and Willenbring 2003) and prison (Plugge and Fitzpatrick 2005, Douglas & Plugge 2006, Plugge et al 2006) settings. The investigators in all these studies reported no particular problems with the SF-36 as an instrument for assessing offender health. Plugge and Fitzpatrick (2005) suggest that offenders may need help with completing questionnaires because of lower literacy rates. All of the studies also used population based norms to allow suitable comparisons.





## **CAGE**

The CAGE has been widely used as a screen for alcohol problems since its inception in the 1980's (Ewing 1984). The CAGE comprises 4 questions with yes or no answers. Two positive answers indicates alcohol abuse or dependence. The CAGE has been used with offenders (Birmingham et al 1996, Brooke et al 1998 Baltieri and Andrade 2008) The CAGE might not be ideal for use with offenders as it is reliant on honesty and focuses on guilt; a qualities noted by their absence in psychopathic offenders (Hoffmann et al 2003).

## **UNCOPE**

The UNCOPE is a six item tool that can be used in interview or questionnaire formats to screen for substance (alcohol and / or drug) abuse or dependence (Hoffmann 2007). The UNCOPE has high specificity (83%) and sensitivity (85%) (Hoffmann et al 2003). It has been applied to offender populations (Hoffmann et al 2003, Campbell et al 2005, Urofsky et al 2007).

## **Access to Healthcare**

A number of questions were designed that were aimed to elicit the frequency with which offender's used of a range of health services. In addition, a number of open questions were included that focused on health care access more generally.

See Appendix 1 for a full version of ASHNO.

## **Data Collection**

Data were collected in different ways in the two patches whilst this was not ideal the method of data collection had to fit into the organisational structures of both probation services. In Nottinghamshire questionnaires were distributed to clients across four areas (Nottingham, Newark, Worksop and Mansfield) we requested that a reasonable mix of clients from each tier of risk were included (see Appendix 2). In Derbyshire, the data collection procedure was left in the hands of the Assistant Director of Probation [RP] but again we asked for a geographical spread and an attempt to sample tiers of risk evenly. In both Nottinghamshire and Derbyshire we aimed for 100 offenders in each patch.

Additionally, in Derbyshire, semi-structured interviews were undertaken with a number of probation officers (n=5) by LSN which aimed to elicit information concerning a range of health issues for probation staff (Appendix 3 for Interview Guide).

## **Data Coding and Analysis**

Data were entered onto a computer database and data analysis was undertaken using the statistical analysis software SPSS version 14. Dr T Arthur, a statistician at the University of Nottingham, advised on aspects of the analysis.



## Analysis of qualitative data

There were two main sources of qualitative data:

- a. The open questions for offenders in the health needs assessment tool (ASHNO);
- b. The semi-structured interviews undertaken in Derbyshire with probation officers:

The semi structured interviews were conducted with four experienced offender managers using an interview an interviews schedule constructed in the light of informal discussions with offender managers. The aims of the interviews was to gather qualitative information to further inform the relationship between health and offending behaviour, access to health services and identify areas requiring service improvement. Each interview lasted approximately one hour. Responses were recorded in writing contemporaneously. The interviews were analysed thematically using the framework of the interview schedule. The final report was shared with the interviewees for accuracy and final verification.

## ETHICAL ISSUES

Prior ethical approval was obtained from the University of Lincoln (CCAWI Local 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. Due to the nature of this project confidentiality was adhered to at all times. Participants were invited to take part via their probation officer and were informed fully of the purpose of the research. They were provided with an information sheet about the project and then asked to sign a consent form (See Appendix 4).



# RESULTS

## 1. ANALYSIS OF THE STRUCTURED ASSESSMENT TOOLS

### Response

There was an overall return rate of 80.1%, a total of 183 were returned within the time-frames.

### The staff sample

Staff administering the questionnaire ranged from Probation Service Officers and Offender Manager Probation Service Officers as well as Probation Officers and Offender Managers, including Trainees, Community Service staff, Drugs Workers and Basic Skills tutors. The age range of staff was 21-65 and there were more females than males.

There was a range of experience recorded among the staff from only a few months to over 20 years in the service. Similarly their knowledge of health matters ranged from 0 to 8. Those staff who rated their health knowledge at 5 or above were asked to describe how they acquired their knowledge. Some had been previously employed in health related occupations or completed formal education with a health component such as psychology and biology degrees or A levels. Others reported that they had undertaken in-house or external training courses. Some indicated little formal education around health matters but said that they had acquired their knowledge more experientially through their contact with offenders, colleagues or through their own personal experience.

### The offender sample

#### Age, Gender, Risk<sup>3</sup> and Order Type

The results are given in Table 1. The mean age overall was 33 (30.7 in Nottinghamshire and 35.5 in Derbyshire). Unsurprisingly, there were more male than female participants, however there was a slight over representation of women in the sample (17%) compared to the proportion in the local probation population (around 14%).

An even split across all 4 tiers of risk was originally aimed for, however tier 1 is a slightly smaller sample – this may be because they were mostly unpaid work orders, which is often group work away from the probation office, hence the difficulty in accessing the offenders

3. The tiering framework is part of the National Offender Management Model. The allocation of a tier is based on the OASys assessment (assessment of risk and need). Tier 1 is a low risk of re-offending and a low risk to harm, tier 2 is a low-medium risk, tier 3 is a medium to high risk and tier 4 is high or very high risk.

individually on site.

Three quarters of the offenders were on community orders, which includes stand alone unpaid work, community orders with supervision and any number of additional requirements and also suspended sentences.

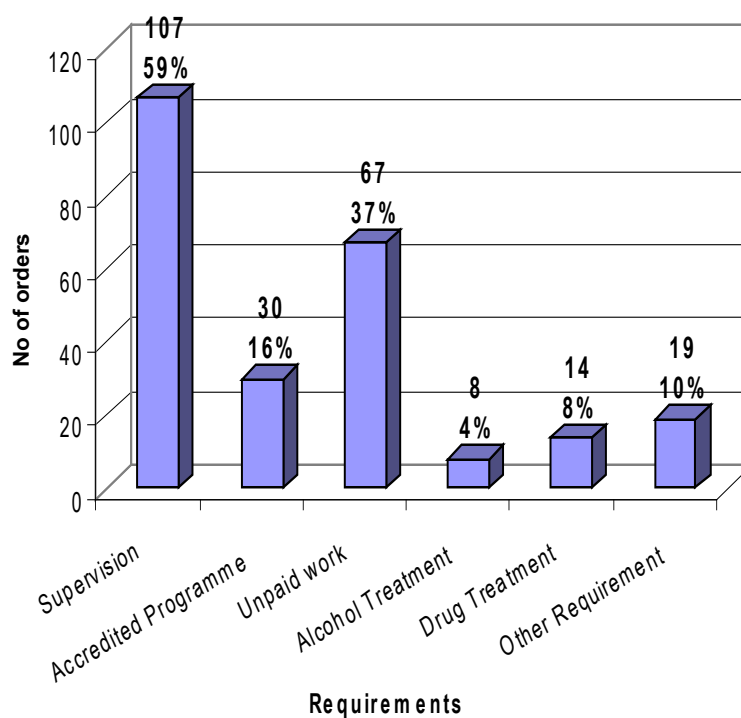
**Table 1 Summary of the characteristics of the offender populations by county**

		Area				Total	
		Nottinghamshire		Derbyshire			
		n	%	n	%	n	%
Age	18-24	28	29.2%	14	16.1%	42	23.0%
	25-34	34	35.4%	27	31.0%	61	33.3%
	35-44	19	19.8%	19	21.8%	38	20.8%
	45-54	9	9.4%	12	13.8%	21	11.5%
	55-64	2	2.0%	7	8.0%	9	4.9%
Sex	Male	78	81.3%	72	82.7%	150	82.0%
	Female	18	18.8%	13	14.9%	31	16.9%
Risk	Tier 1	19	19.8%	12	13.8%	31	16.9%
	Tier 2	32	33.3%	15	17.2%	47	25.7%
	Tier 3	22	22.9%	26	29.9%	48	26.2%
	Tier 4	22	22.9%	22	25.3%	44	24.0%
Order Type	Licence	21	21.9%	21	24.1%	42	23.0%
	Community Order	69	71.9%	62	71.3%	131	71.6%

## Requirements and Order length

Offenders can have any number of 12 different requirements attached to their order. It is also possible to have stand-alone unpaid work orders in which they have to complete the specified hour's unpaid work. The most common requirements attached to an order were supervision, accredited programme and unpaid work (Figure 1). The offenders in the sample had various combinations of requirements (Table 2).

**Figure 1**      **Number of requirements**



Of the 19 “other” requirements, there were a number of different types:

**Table 2: Breakdown of “other” requirements**

	Curfew	EFE	Non Contact	MH treatment	Residence	Attend Pals	Employment officer x4 appts	Drug test Req	Basic Skills	Exclusion	Specified activity
N	5	3	2	2	1	1	1	1	1	1	1
%	3	2	1	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5

The offenders in the sample had various combinations of requirements (table 2). Half of offenders had one requirement and over a third had two or more, which reflects the national picture (Ministry of Justice, 2007b).

**Table 3: Number of requirements per order**

	1 requirement	2 requirements	3 requirements	4 requirements
N	89	43	18	4
%	49	23	10	2

The length of community orders ranged from 2 months to 36 months and unpaid work hours ranged from 65 hours to 300 hours. Licences ranged from 3 months to life.

## Sexual Health, Mental Health and Smoking

**Table 4: Summary of Sexual Health, Mental health and Smoking by county**

		Area				Total	
		Nottinghamshire		Derbyshire		n	%
		n	%	n	%	n	%
<b>Sexual Health</b>							
Ever been treated for an STI?	Yes	8	8.3%	16	18.4%	24	13.1%
	No	88	91.7%	71	81.6%	159	86.9%
Ever been diagnosed with:	Hep A	2	2.1%	0	0%	2	1.0%
	Hep B	0	0%	1	1.1%	1	0.5%
	Hep C	1	1.0%	4	4.6%	5	2.7%
	Hep B & C	1	1.0%	0	0%	1	0.5%
Ever been vaccinated against:	Hep A	1	1.0%	3	3.4%	4	2.2%
	Hep B	12	12.5%	10	11.5%	22	12.0%
	Hep A & B	5	5.2%	18	20.7%	23	12.6%
Sexual health problem now?	Yes	0	0%	1	1.1%	1	0.5%
	No	93	96.9%	84	96.6%	177	96.7%
<b>Mental Health</b>							
Been seen formally by a mental health service?	Yes	22	22.9%	28	32.2%	50	27.3%
	No	73	76.0%	59	67.8%	132	72.1%
<b>Smoking</b>							
Do you smoke?	Yes	81	84.4%	71	81.6%	152	83.1%
	No	15	15.6%	16	18.4%	31	16.9%

The majority of offenders (86.9%) had never been treated for an STI, however, 10% more offenders in Derbyshire than in Nottinghamshire had been treated. 5% of the total sample had been diagnosed with Hepatitis and 27% had been vaccinated. Only 1 offender said they might have a sexual health problem now.

83% of the sample are smokers who smoke from 2 to 60 cigarettes a day or 0.25oz to 0.5oz a day. The mean number of cigarettes smoked per day was 16. Proportionately, Derbyshire has slightly fewer smokers (81.6%) than Nottinghamshire (84.4%).

Derbyshire has a higher proportion of offenders who have been seen formally at some point by a mental health service. Overall, more than a quarter of the sample (n=50) have had some formal contact with a mental health service. 31/181 have been given a formal diagnosis at some point

The predominant reported mental health diagnosis was depression with 13 individuals

recoding this as their diagnosis whilst a further 5 indicated that they had depression with anxiety (Table 5). Other diagnoses were relatively infrequent in particular personality disorder (n=2). This seems remarkably low given the over representation of personality disorder within the offender population with an epidemiological study suggesting rates amongst prisoners exceed 50% (Singleton et al 1998) .Of course there may be disparities between reported and formal diagnosis. It is also important to consider that 38% of those who had seen mental health services failed to indicate any diagnosis.

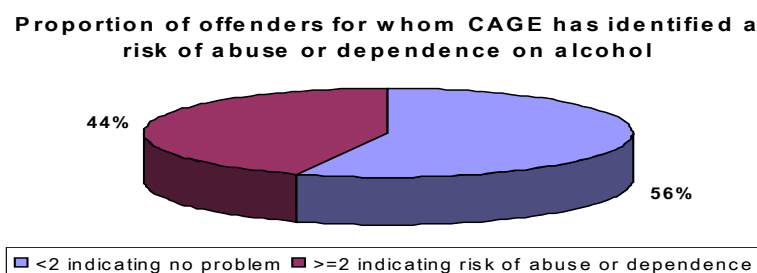
**Table 5: Reported mental health diagnoses**

Reported Diagnosis	Number
Depression	13
Depression and Anxiety	5
Personality Disorder	2
Self Harm	1
Psychosis	1
Anxiety	1
Post Traumatic Stress Disorder	1
Bipolar Disorder	1
Kleptomania	1
Alcohol	1
Alcohol and Cannabis Abuse	1
Not known/ unspecified	3
<b>Total</b>	<b>31</b>

## Alcohol - CAGE

The CAGE screening tool is used for identifying a risk of alcohol abuse. If a respondent scores 2 or more positive answers out of a possible 4, this indicates that there is a risk. Nearly half of offenders scored 2 or more. 49% of offenders in Derbyshire and 40% of offenders in Nottinghamshire were assessed as being at risk of abuse or dependence on alcohol.

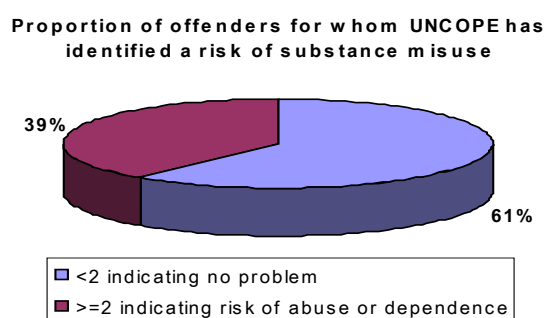
**Figure 2: Proportion of offenders for whom CAGE identified a risk of alcohol abuse or dependence**



## Drugs - UNCOPE

This screening tool is used to identify substance misuse. As with CAGE, if respondents score 2 or more positive answers out of 6, they are at risk of substance abuse. 39% of the sample was identified as being at risk of substance abuse. In Derbyshire this figure was 35%, and in Nottinghamshire, 42% of offenders were identified as being at risk of substance abuse.

**Figure 3: Proportion of offenders for whom UNCOPE has identified a risk of substance abuse**



## The SF36 Picture

This section presents the offender SF36 scores for each of the 8 dimensions and the Physical and Mental Component Summary scores of the sample. The offender scores are compared to the general population derived from the Oxford Health Lifestyle Survey (Jenkinson et al, 1999). The study then examines a series of risk factors in relation to the offender SF-36 scores such as age, smoking, mental illness and risk of drug abuse and



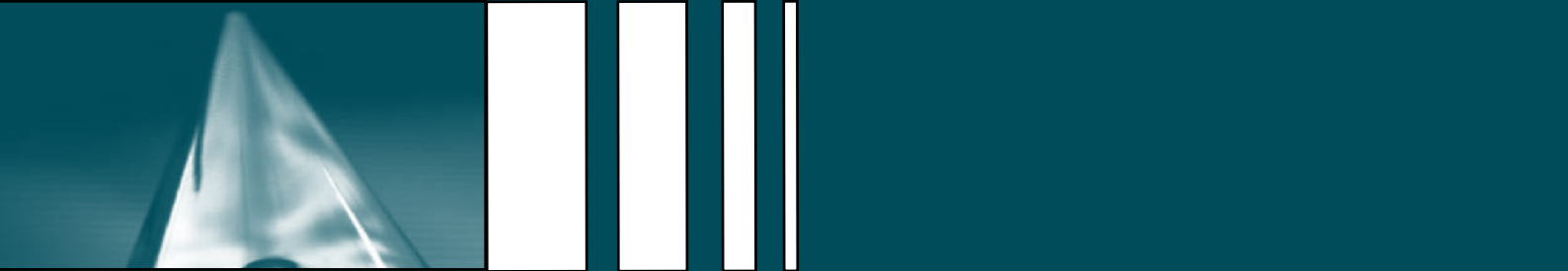
**Table 6** Comparison of SF36 dimension and component scores for offenders and the general population

	Nottinghamshire	Derbyshire	Total Offender Sample	General Population
	Mean (SD)	Mean (SD)	Mean (SD) (95% CI)	Mean (SD)
Physical Function	83.37 (26.75)	85.86 (22.75)	84.56 (24.66) (80.92-88.20)	87.99 (19.65)
Role Limitation - Physical	81.45 (27.64)	79.07 (29.06)	80.32* (28.27) (76.17-84.46)	87.17 (22.01)
Role Limitation - Emotional	76.15 (28.52)	78.14 (30.73)	77.09* (29.52) (72.74-81.44)	85.75 (21.18)
Social Function	75.13 (27.77)	75.00 (28.70)	75.07* (28.14) (70.95-79.18)	82.77 (23.24)
Mental Health	68.59 (22.33)	70.44 (21.39)	69.47 (21.85) (66.28-72.67)	71.92 (18.15)
Energy and Vitality	59.58 (24.03)	57.41 (25.90)	58.54 (24.90) (54.90-62.19)	58.04 (19.60)
Pain	77.08 (28.20)	73.13 (30.84)	75.20 (29.47) (70.88-79.52)	78.80 (23.01)
General Health Perception	64.29 (25.81)	63.88 (24.67)	64.10* (25.21) (60.42-67.77)	71.06 (20.43)
Physical Component Summary	47.34 (13.17)	46.52 (12.74)	46.95* (12.94) (45.04-48.86)	50.00 (10.00)
Mental Component Summary	46.60 (12.36)	46.93 (12.71)	46.75* (12.49) (44.91-48.60)	50.00 (10.00)

\*  $p \leq 0.05$

problem drinking. There is very little difference between the dimensions for Nottinghamshire and Derbyshire (Table 6). The biggest difference (3.95) is for the Pain dimension in which Nottinghamshire offenders score themselves slightly higher (77.08) than those in Derbyshire (73.13). However this is not a significance difference.

**Figure 4: Comparison of offender and general population SF36 scores**



Comparison of offender and general population SF36 dimension scores

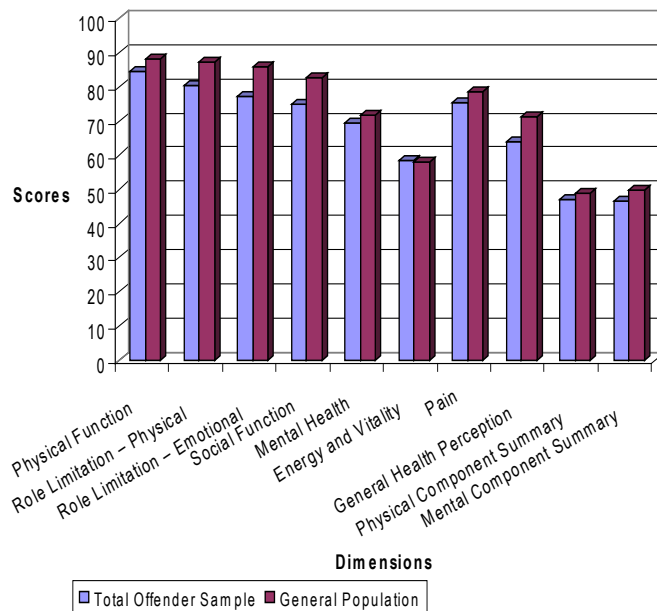


Table 6 shows offender health is significantly poorer than the general population in certain domains: role limitation (physical, and emotional), social function and general health perception. There are also significant differences between the physical and mental component summary scores.

## Gender

Table 7 demonstrates that women assess their health to be significantly worse than women in the general population on nearly every dimension of the SF-36. Male offender's health is also often significantly worse than male general population scores. In addition, separate analysis, shows that female offender SF-36 scores are significantly worse than male offender scores.

Further analysis in Table 8 (page 24) shows that SF-36 component scores for the whole offender sample are significantly worse than those obtained in the general population for social class manual workers.



**Table 7 Comparison of SF36 scores by gender for offender sample and general population**

Dimensions	Men		Women		Total	
	Offender Sample	General Population	Offender Sample	General Population	Offender Sample	General Population
	Mean (SD) (95%CI)	Mean (SD)	Mean (SD) (95%CI)	Mean (SD)	Mean (SD) (95%CI)	Mean (SD)
Physical Function	86.60 (23.45) (82.54-90.24)	89.76 (18.78)	73.33* (29.52) (62.15-83.67)	86.66 (20.15)	84.56 (24.66) (80.92-88.20)	87.99 (19.65)
Role Limitation - Physical	81.84 (27.56) (77.37-86.40)	89.01 (21.09)	71.46* (31.04) (59.32-83.35)	85.83 (22.52)	80.32 (28.27) (76.17-84.46)*	87.17 (22.01)
Role Limitation - Emotional	79.17* (28.55) (74.65-83.97)	88.08 (19.91)	65.80* (32.99) (53.26-78.35)	84.07 (21.79)	77.09 (29.52) (72.74-81.44)*	85.75 (21.18)
Social Function	77.58* (27.34) (73.40-82.21)	84.71 (22.56)	61.25* (29.06) (49.96-72.45)	81.33 (23.62)	75.07 (28.14) (70.95-79.18)*	82.77 (23.24)
Mental Health	71.73* (20.74) (68.33-75.13)	88.08 (19.91)	57.03* (23.07) (47.01-64.71)	70.05 (18.65)	69.47 (21.85) (66.28-72.67)	71.92 (18.15)
Energy and Vitality	60.91 (24.34) (56.99-64.98)	60.81 (18.93)	45.32* (23.41) (35.24-53.39)	55.91 (19.85)	58.54 (24.90) (54.90-62.19)	58.04 (19.60)
Pain	77.18 (28.50) (72.21-81.53)	81.25 (22.21)	63.70* (32.35) (50.45-75.22)	76.97 (23.44)	75.20 (29.47) (70.88-79.52)	78.80 (23.01)
General Health Perception	66.12* (24.52) (62.23-70.26)	70.86 (20.29)	53.81* (27.12) (41.35-61.34)	71.28 (20.54)	64.10 (25.21) (60.42-67.77)*	71.06 (20.43)
Physical Component Summary	47.74* (12.23) (45.74-49.73)	51.09 (9.48)	42.50* (15.85) (36.47-48.53)	49.10 (10.31)	46.95 (12.94) (45.04-48.88)*	50.00 (10.00)
Mental Component Summary	47.98* (12.13) (46.00-49.96)	51.27 (9.25)	39.82* (12.36) (35.11-44.52)	48.94 (10.46)	46.75 (12.49) (44.91-48.60)*	50.00 (10.00)

\*  $p \leq 0.05$

Further analysis in Table 8 shows that SF-36 component scores for the whole offender sample are significantly worse than those obtained in the general population for social class manual workers.

**Table 8** Comparison of Physical and Mental Component Summary scores for offender sample and general population “manual” social class

	Nottinghamshire Mean (SD)	Derbyshire Mean (SD)	Total Offender Sample Mean (SD) (95% CI)	General Population Social Class “Manual” Mean (SD)
Physical Component Summary	47.34  (13.17)	46.52  (12.74)	46.95*  (12.94) (45.04-48.88)	48.93  (10.74)
Mental Component Summary	46.60  (12.36)	46.93  (12.71)	46.75*  (12.49) (44.91-48.60)	49.93  (10.38)

\*  $p \leq 0.05$

## Age

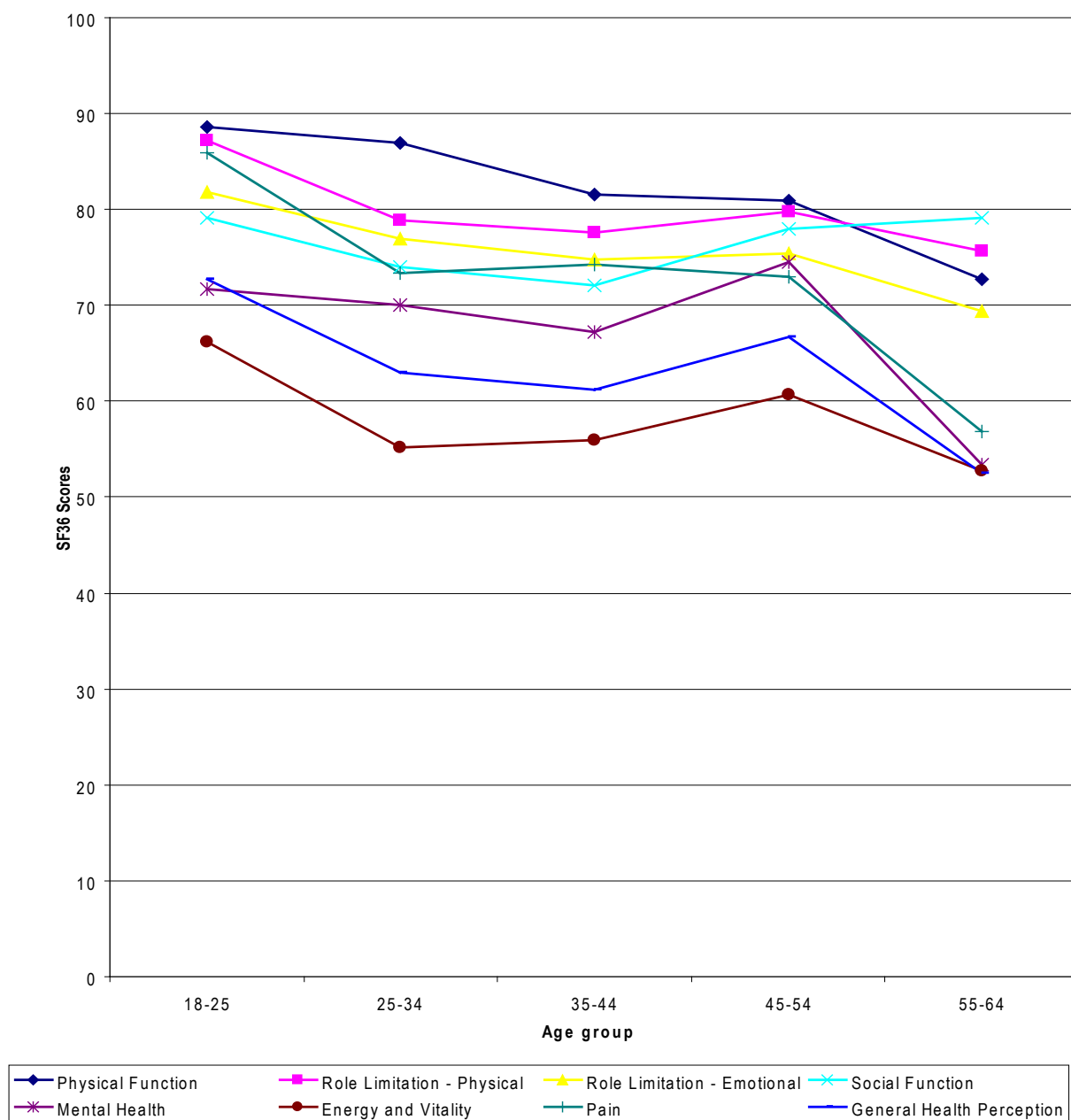
**Table 9** SF36 dimension and component scores for offender age groups

Dimensions	18-25 Mean (SD)	25-34 Mean (SD)	35-44 Mean (SD)	45-54 Mean (SD)	55-64 Mean (SD)	Significance	Total Mean (SD)
Physical Function	88.65 (22.19)	86.97 (19.31)	81.58 (29.13)	80.95 (29.82)	72.78 (29.38)	0.305	84.56 (24.66)
Role Limitation - Physical	87.19 (24.76)	78.90 (29.76)	77.63 (26.10)	79.76 (29.64)	75.69 (22.85)	0.514	80.32 (28.27)
Role Limitation - Emotional	81.87 (24.01)	76.98 (30.10)	74.78 (32.85)	75.40 (34.51)	69.44 (32.81)	0.759	77.09 (29.52)
Social Function	79.17 (26.14)	73.96 (28.59)	72.04 (28.83)	77.98 (28.20)	79.17 (32.48)	0.777	75.07 (28.14)
Mental Health	71.71 (18.88)	70.10 (21.40)	67.26 (22.16)	74.48 (23.03)	53.33 (24.08)	0.131	69.47 (21.85)
Energy and Vitality	66.22 (20.46)	55.16 (26.73)	55.92 (23.42)	60.71 (23.94)	52.78 (28.63)	0.180	58.54 (24.90)
Pain	85.91 (19.41)	73.33 (29.81)	74.27 (30.58)	73.02 (34.17)	56.79 (34.00)	0.048*	75.20 (29.47)
General Health Perception	72.69 (19.97)	62.98 (24.96)	61.23 (26.89)	66.67 (25.15)	52.44 (36.26)	0.113	64.10 (25.21)
Physical Component Summary	50.82 (9.24)	46.88 (11.96)	46.03 (14.04)	45.27 (15.31)	42.17 (15.85)	0.244	46.95 (12.94)
Mental Component Summary	48.85 (9.00)	46.02 (12.61)	45.45 (15.34)	49.04 (13.27)	43.27 (12.74)	0.757	46.75 (12.49)

\*  $p \leq 0.05$

Changes to the offender health profile by age are only statistically significant for the pain dimension ( $p \leq 0.05$ ).

**Figure 5: Changes to SF36 scores by offender age groups**



## Risk

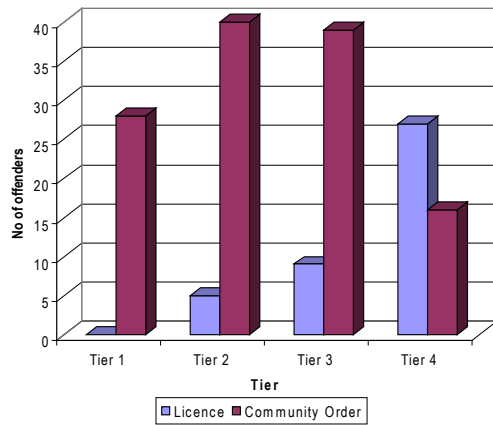
Table 10 shows each of the dimension and component scores by tier (tier 4 is the highest level of risk). There is no obvious pattern to the health profiles for each tier and there is no statistical significance between tiers. However, tiers 3 and 4 have slightly higher physical component summary scores than tiers 1 and 2, but tier 4 has the lowest mental component summary score.

**Table 10 SF36 dimension and component scores for each risk tier**

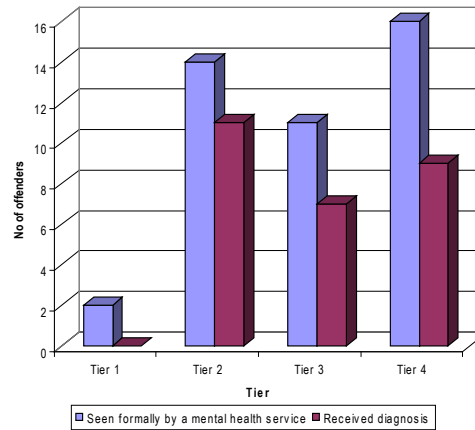
	Tier 1	Tier 2	Tier 3	Tier 4		Total
Dimensions	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Significance	Mean (SD)
Physical Function Score	81.29 (30.25)	77.34 (30.52)	90.00 (16.39)	89.55 (18.86)	0.34	84.56 (24.66)
Role Limitation - Physical Score	80.44 (33.99)	76.86 (29.14)	82.71 (25.08)	82.12 (24.76)	0.745	80.32 (28.27)
Role Limitation - Emotional Score	78.23 (32.96)	75.93 (33.63)	82.45 (23.33)	74.42 (24.76)	0.567	77.09 (29.52)
Social Function Score	82.26 (29.36)	72.83 (31.66)	76.56 (23.01)	72.16 (28.00)	0.407	75.07 (28.14)
Mental Health Score	74.45 (21.95)	69.28 (23.31)	70.92 (18.24)	66.42 (21.01)	0.433	69.47 (21.85)
Energy & Vitality Score	63.23 (27.83)	57.34 (28.01)	58.65 (19.43)	57.44 (23.28)	0.729	58.54 (24.90)
Pain Score	78.85 (33.01)	72.71 (32.43)	78.24 (24.89)	73.13 (28.40)	0.682	75.20 (29.47)
General Health Perception Score	66.90 (26.22)	65.43 (28.48)	65.39 (21.90)	62.09 (24.26)	0.855	64.10 (25.21)
Physical Component Summary	46.18 (15.32)	44.32 (15.34)	48.81 (9.88)	48.55 (10.83)	0.309	46.95 (12.94)
Mental Component Summary	49.97 (11.36)	47.20 (14.41)	47.28 (9.98)	44.51 (11.98)	0.300	46.75 (12.49)

We have examined the characteristics of the 'risk' groups more closely in the table presented in Appendix 5. The proportion of smokers increases by Tier as does risk for alcohol problems and substance misuse. Indeed, Tier 4 offenders are nearly three times more likely to have a substance misuse problem than Tiers 1 and 2. There is also a trend in the increasing likelihood of having a formal mental health problem as the risk tier gets higher. In relation to service access, Tier 4 offenders are less likely to be; registered with a GP and see a dentist. They are more likely to be accessing A&E and to state that they have problems accessing all other services. These data are presented graphically in Figures 6-11.

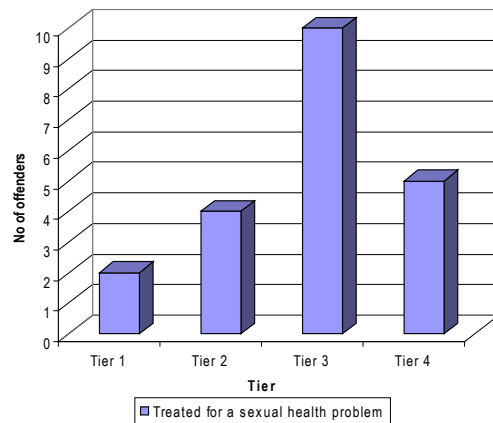
**Figure 6: Order type by risk**



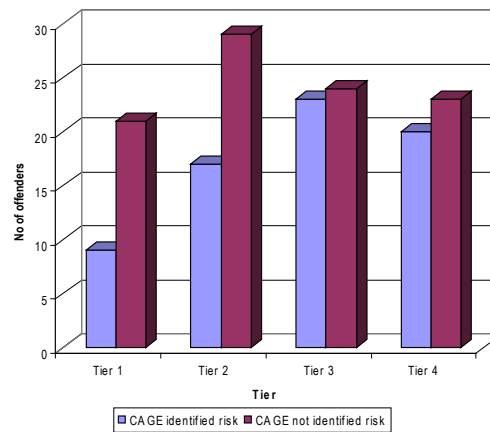
**Figure 9: Mental health by risk**



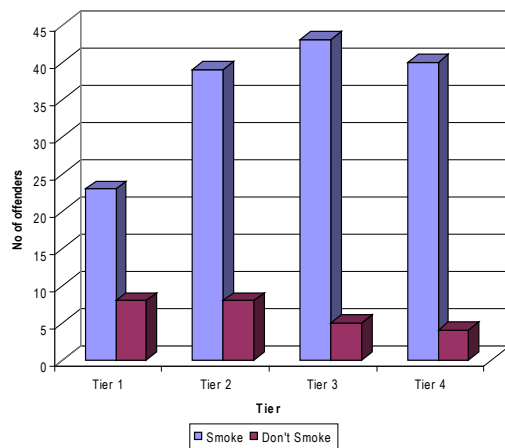
**Figure 7: Sexual health by risk**



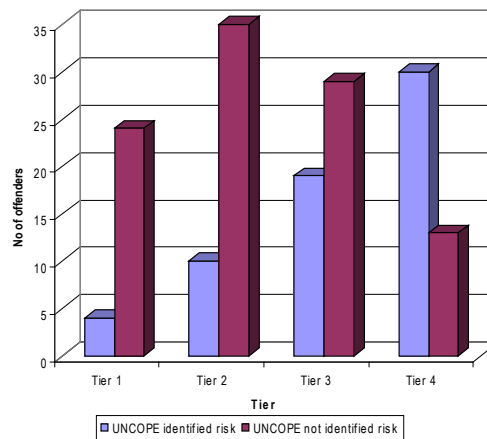
**Figure 10: Alcohol abuse by risk**



**Figure 8: Smoking by risk**



**Figure 11: Drug abuse by risk**



**Table 11** SF36 dimension and component scores by order type

	Licence	Community Order		Total
Dimensions	Mean (SD)	Mean (SD)	Significance	Mean (SD)
Physical Function	87.50 (22.93)	84.08 (24.75)	0.429	84.56 (24.66)
Role Limitation – Physical	83.23 (22.94)	80.00 (28.36)	0.508	80.32 (28.27)
Role Limitation - Emotional	76.63 (24.81)	78.58 (30.03)	0.706	77.09 (29.52)
Social Function	74.41 (27.18)	75.58 (28.10)	0.813	75.07 (28.14)
Mental Health	70.15 (18.87)	69.89 (21.68)	0.947	69.47 (21.85)
Energy and Vitality	60.73 (20.99)	57.75 (25.53)	0.498	58.54 (24.90)
Pain	78.05 (25.64)	74.36 (30.34)	0.483	75.20 (29.47)
General Health Perception	66.33 (22.00)	74.36 (30.34)	0.554	64.10 (25.21)
Physical Component Summary	48.67 (11.06)	46.49 (13.28)	0.347	46.95 (12.94)
Mental Component Summary	46.69 (11.25)	47.11 (12.61)	0.849	46.75 (12.49)

## Order type

These results show very little difference between those on licence and those on a community order. There is a slight difference in the Physical Function and Pain dimensions with those on licence scoring slightly better, however this is not statistically significant.

## Smoking

As the prevalence of smoking among the offender population is far greater than the general population, it was necessary to examine if there are any differences in dimension scores among those who smoke and those who do not. Smokers assess their health as significantly worse than those who do not smoke (Table 12). The significant variations in scores relate to: Role Limitation (Physical), Energy & Vitality and General Health Perception dimensions and subsequently the Physical Component Summary.



**Table 12: SF36 dimension and component scores for smokers and non-smokers in the offender sample**

	Yes	No		Total
Dimensions	Mean (SD)	Mean (SD)	Significance	Mean (SD)
Physical Function Score	83.81 (25.11)	88.23 (23.79)	0.369	84.56 (24.66)
Role Limitation - Physical Score	78.08 (29.42)	91.13 (18.73)	0.019*	80.32 (28.27)
Role Limitation - Emotional Score	75.96 (29.79)	82.53 (28.00)	0.261	77.09 (29.52)
Social Function Score	73.34 (29.11)	83.47 (21.26)	0.068	75.07 (28.14)
Mental Health Score	68.98 (21.59)	71.87 (23.27)	0.504	69.47 (21.85)
Energy & Vitality Score	56.62 (24.43)	67.90 (25.42)	0.021*	58.54 (24.90)
Pain Score	73.26 (30.41)	84.59 (22.53)	0.051*	75.20 (29.47)
General Health Perception Score	62.35 (25.71)	72.68 (20.87)	0.037*	64.10 (25.21)
Physical Component Summary	46.05 (13.35)	51.22 (9.87)	0.043*	46.95 (12.94)
Mental Component Summary	46.22 (12.35)	49.24 (13.08)	0.224	46.75 (12.49)

\*  $p \leq 0.05$

## Mental health

Table 13 shows that the overall health of those who have been seen formally by a mental health service is worse than those who have not been seen in such a way. The differences in dimension scores between those who have been seen formally by a mental health service at some point and those who haven't are statistically significant ( $p \leq 0.05$ ) for all dimensions except Physical Function. Interestingly, the results show that physical health seems to have been affected as well as the obvious mental health.

**Table 13: SF36 dimension and component scores for offenders who had been seen formally by a mental health service**

Dimensions	Yes (n=50) Mean (SD)	No (n=132) Mean (SD)	Significance	Total Mean (SD)
Physical Function Score	78.80 (27.45)	86.64 (23.64)	0.058	84.56 (24.66)
Role Limitation - Physical Score	72.88 (32.65)	83.03 (26.05)	0.031*	80.32 (28.27)
Role Limitation - Emotional Score	62.67 (34.10)	82.94 (25.51)	0.000*	77.09 (29.52)
Social Function Score	58.75 (30.85)	81.30 (24.53)	0.000*	75.07 (28.14)
Mental Health Score	60.24 (26.20)	72.92 (18.97)	0.000*	69.47 (21.85)
Energy & Vitality Score	49.10 (26.08)	61.91 (23.52)	0.002*	58.54 (24.90)
Pain Score	64.22 (31.77)	79.66 (27.47)	0.001*	75.20 (29.47)
General Health Perception Score	56.38 (27.48)	67.11 (23.82)	0.010*	64.10 (25.21)
Physical Component Summary	44.46 (14.38)	47.93 (12.30)	0.110	46.95 (12.94)
Mental Component Summary	40.04 (15.62)	49.38 (9.97)	0.000*	46.75 (12.49)

\*p≤0.05

## Alcohol (CAGE Scores)

There are no significant differences in SF36 scores (Table 14) for those who were at risk of dependence on alcohol and those who are not.

These CAGE scores have been broken down by gender which enables a comparison to be made with general population figures (Table 15) from the Medical Research Council National Survey of Health and Development (Ely et al, 1999), a study which looked at problems with alcoholism using CAGE. This table shows that offenders are more likely to be at risk of alcohol dependence, than the general population regardless of gender. However, the ratio of males to females at risk of alcohol dependence in the offender population is 4.6:1 but in the general population it is only 2.1:1.

**Table 14: SF36 dimension and component scores categorised by risk of alcohol abuse or dependence**

	No risk of dependence	Risk of dependence		Total
Dimensions	Mean (SD)	Mean (SD)	Significance	Mean (SD)
Physical Function Score	82.58 (28.24)	86.73 (20.06)	0.273	84.56 (24.66)
Role Limitation - Physical Score	80.11 (28.35)	80.52 (28.62)	0.925	80.32 (28.27)
Role Limitation - Emotional Score	79.55 (29.77)	74.67 (29.33)	0.281	77.09 (29.52)
Social Function Score	77.00 (26.22)	71.92 (30.96)	0.239	75.07 (28.14)
Mental Health Score	69.44 (21.76)	69.61 (22.72)	0.960	69.47 (21.85)
Energy & Vitality Score	58.80 (24.54)	58.64 (25.43)	0.966	58.54 (24.90)
Pain Score	75.44 (30.47)	74.71 (28.44)	0.870	75.20 (29.47)
General Health Perception Score	65.83 (25.95)	61.52 (24.61)	0.262	64.10 (25.21)
Physical Component Summary	46.57 (13.78)	47.29 (11.76)	0.716	46.95 (12.94)
Mental Component Summary	47.64 (12.10)	45.76 (13.17)	0.331	46.75 (12.49)

**Table 15: Comparison of CAGE scores by offenders and the general population**

CAGE Score	Male		Female	
	Offenders %	General Population %	Offenders %	General Population %
0	41.2	73.7	37.9	88.3
1	15.5	15.2	13.7	6.2
2	12.8	7.6	20.1	4.3
3	18.2	3.1	10.3	1
4	12.2	0.3	17.2	0.2

## Drugs - UNCOPE Scores

**Table 16** SF36 dimension scores categorised by risk of substance misuse

Dimensions	No risk of abuse or dependence Mean (SD)	Risk of abuse or dependence Mean (SD)	Significance	Total Mean (SD)
Physical Function Score	81.93 (27.91)	87.83 (19.36)	0.126	84.56 (24.66)
Role Limitation - Physical Score	80.73 (27.97)	78.49 (29.32)	0.611	80.32 (28.27)
Role Limitation - Emotional Score	79.63 (30.30)	72.39 (28.17)	0.116	77.09 (29.52)
Social Function Score	77.41 (27.92)	70.29 (28.45)	0.102	75.07 (28.14)
Mental Health Score	71.45 (22.25)	66.47 (20.66)	0.138	69.47 (21.85)
Energy & Vitality Score	58.36 (25.28)	57.50 (24.27)	0.822	58.54 (24.90)
Pain Score	76.25 (29.99)	72.88 (28.88)	0.461	75.20 (29.47)
General Health Perception Score	66.09 (25.75)	60.44 (24.40)	0.147	64.10 (25.21)
Physical Component Summary	46.34 (13.87)	47.40 (11.41)	0.604	46.95 (12.94)
Mental Component Summary	48.17 (12.40)	44.25 (12.55)	0.046*	46.79 (12.49)

\* $p \leq 0.05$

Offenders who are at risk of substance abuse score significantly lower on the mental health component score compared to those who are not at risk ( $p \leq 0.05$ ).

We combined those who score 2 or more on CAGE and UNCOPE [ $n=67$ ] (Table 17) then examined their SF-36 scores in relation to the total offender sample. Social Function is the only dimension for which there is statistical significance ( $p \leq 0.05$ ), however the Mental Component Summary also reaches statistical significance.

**Table 17: SF36 scores for offenders who were identified by CAGE and UNCOPE as being at risk of alcohol and substance abuse**

	Score 2+ on CAGE & UNCOPE (n=67) Mean (SD)	Total Mean (SD)	Significance
Physical Function Score	87.32 (19.72)	84.56 (24.66)	0.052
Role Limitation - Physical Score	79.81 (28.20)	80.32 (28.27)	0.757
Role Limitation - Emotional Score	75.00 (27.48)	77.09 (29.52)	0.226
Social Function Score	71.35 (29.20)	75.07 (28.14)	0.019*
Mental Health Score	68.07 (21.60)	69.47 (21.85)	0.258
Energy & Vitality Score	57.79 (24.16)	58.54 (24.90)	0.618
Pain Score	73.71 (28.26)	75.20 (29.47)	0.412
General Health Perception Score	61.31 (24.20)	64.10 (25.21)	0.065
Physical Component Summary	47.39 (11.48)	46.95 (12.94)	0.570
Mental Component Summary	45.19 (12.63)	46.79 (12.49)	0.033*

\*p≤0.05

## Perceptions of Health Problems

In order to elicit some qualitative data respondents were asked to indicate what aspect of their health was the greatest problem (Table 18). This data was coded using categories based on the ICD-10 but three additional categories were added for drug, alcohol and tobacco use respectively. These items were frequently reported and were considered as categories in their own right rather than being subsumed in other categories. Some respondents recorded that more than one aspect of their health was currently a problem and these were also included in the data set.

The most frequently reported aspects of health that caused significant problems were around mental health (17%), smoking (10%), musculoskeletal (9%) and respiratory (8%) problems (Table 18).

There were few differences between individuals within Derbyshire and Nottinghamshire. Proportionately more individuals in Derbyshire reported health problems around blood and immune system and also around skin problems. Conversely over twice as many of the Nottinghamshire sample reported musculoskeletal problems compared to those in Derbyshire.

**Table 18: Offenders' self perceived greatest health problems**

Category	Nottinghamshire (n)	Derbyshire (n)
No response, don't know , not applicable	37	23
Neoplasm	0	1
Diseases of blood, blood forming organs and immune system	1	5
Endocrine, nutritional and metabolic	3	2
Mental and behavioural	16	15
Nervous system	0	0
Eye and adnexa	4	0
Ears and mastoid process	1	0
Circulatory system	5	4
Respiratory system	7	8
Digestive system	1	4
Skin and subcutaneous tissue	1	7
Musculoskeletal and cognitive tissue	13	5
Genitourinary system	2	1
Pregnancy, childbirth and puerperium	0	1
Perinatal period	0	0
Congenital malformations, deformations and chromosomal deformities	0	0
Symptoms and signs and abnormal clinical and laboratory findings	0	0
Injury, poisoning and certain other consequences of external causes	0	0
External causes of morbidity and mortality	0	0
Factors affecting health status and contact with health services	0	0
Drug use	6	2
Alcohol use	4	6
Smoking/ tobacco	10	8
NOS, unclear.	1	1

## Access to services

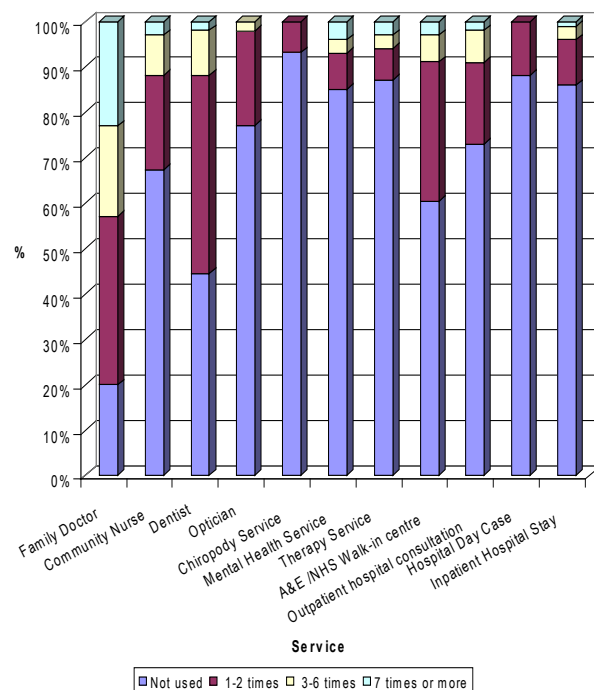
90% (n=164) of offenders had accessed some kind of service in the last 12 months. It is not possible to say whether the other 10% had not accessed any services in the last 12 months or hadn't answered the question altogether.

Table 19 shows that the most accessed services by offenders in the last 12 months are Family Doctor (80%), Dentist (55%) and A&E/NHS Walk-in Centre (39%). Figure 12 shows the frequency that offenders are accessing services.

**Table 19: Number of offenders accessing services**

Services used:	N	Percent
Family Doctor	146	80%
Dentist	101	55%
A&E /NHS Walk-in centre	72	39%
Community Nurse	59	32%
Outpatient hospital consultation	49	27%
Optician	47	26%
Mental Health Service	27	15%
Inpatient Hospital Stay	25	14%
Therapy Service	22	12%
Hospital Day Case	21	11%
Chiropody Service	12	7%

**Figure 12: Frequency with which offenders accessed services in the last 12 months**



**Table 20: Frequency with which offenders in Nottinghamshire and Derbyshire accessed services with in the last 12 months**

		Area								Total sample			
		Nottinghamshire				Derbyshire							
		1-2	3-6	7 or more	Total	1-2	3-6	7 or more	Total	1-2	3-6	7 or more	Total
Family Doctor (GP)	n	34	23	17	74	33	14	25	72	67	37	42	146
	%	35	24	18	77	38	16	29	83	37	20	23	80
Community Nurse	n	18	8	3	29	20	8	2	30	38	16	5	59
	%	19	8	3	30	23	9	2	34	21	9	3	32
Dentist	n	45	13	1	59	34	5	3	42	79	18	4	101
	%	47	23	1	61	39	6	3	48	44	10	2	55
Optician	n	21	2	-	23	22	2	-	24	43	4	-	47
	%	22	2	-	24	25	2	-	28	20	2	-	26
Chiropody Service	n	9	-	-	9	3	-	-	3	12	-	-	12
	%	9	-	-	9	3	-	-	3	7	-	-	5
Mental Health Service	n	9	2	2	13	5	4	5	14	14	6	7	27
	%	9	2	2	14	6	5	6	16	8	3	4	15
Therapy Service	n	9	-	1	10	3	5	4	12	12	5	5	22
	%	9	-	1	10	3	6	5	14	7	3	3	12
A&E /NHS Walk-in centre	n	27	6	5	38	29	4	1	34	56	10	6	72
	%	28	6	5	40	33	5	1	39	31	6	3	39
Outpatient hospital Consultation	n	18	6	2	26	14	7	2	23	32	13	4	49
	%	19	6	2	27	16	8	2	26	18	7	2	27
Hospital Day Case	n	10	-	-	10	11	-	-	11	21	-	-	21
	%	10	-	-	10	13	-	-	13	12	-	-	11
Inpatient Hospital Stay	n	10	2	1	13	8	3	1	12	18	5	2	25
	%	10	2	1	14	9	3	1	14	10	3	1	14

Table 20 shows offenders in Derbyshire seem to be accessing the GP slightly more than Nottinghamshire, 83% of Derbyshire offenders accessing a GP compared to 77% of Nottinghamshire offenders. They also seem to be accessing a GP more frequently with 29% of offenders in Derbyshire accessing a GP 7 times or more in the last 12 months compared to just 18% in Nottinghamshire. However, more offenders in Nottinghamshire (61%) have accessed a dentist in the last 12 months compared to 48% in Derbyshire.

27.5% of offenders said they had been seen formally by a mental health service (Table 4). 15% of these offenders said they had accessed a mental health service in the last 12 months, of which half (n=7) had used this service more than 7 times in the past 12 months. These 7 offenders assessed themselves as having poorer health across nearly all dimensions than those who had been seen formally by a mental health service at some time, the biggest difference being in the Social Function and General Health Perception dimensions.



**Table 21: Comparison of SF36 scores for those accessing a mental health service last 12 months by frequency of contact**

	Seen MH service 7x or more	Been seen formally by MH service	Never seen any MH service
	Mean (SD)	Mean (SD)	Mean (SD)
Physical Function Score	80.71 (29.64)	78.80 (27.45)	87.64 (22.82)
Role Limitation - Physical Score	66.07 (32.85)	72.88 (32.65)	83.77 (25.16)
Role Limitation - Emotional Score	58.33 (36.64)	62.67 (34.10)	83.40 (24.68)
Social Function Score	46.43 (30.37)	58.75 (30.85)	81.40 (24.68)
Mental Health Score	52.57 (15.57)	60.24 (26.20)	73.31 (18.94)
Energy & Vitality Score	42.86 (28.12)	49.10 (26.08)	61.84 (23.79)
Pain Score	73.02 (32.62)	64.22 (31.77)	79.66 (27.86)
General Health Perception Score	45.71 (20.09)	56.38 (27.48)	68.01 (24.05)
Physical Component Summary	45.86 (14.06)	44.46 (14.38)	48.25 (12.37)
Mental Component Summary	34.27 (10.86)	40.04 (15.62)	49.42 (10.03)

Over a third (39%) of offenders had visited A&E or an NHS Walk-in Centre at least once in the last 12 months (Table 20). This group had the same male/female split as the overall sample and were a little younger, by 2 years. Interestingly, the proportion of this group accessing a GP was higher by 13% (93%) and 25% of this group, compared to 15% of the overall sample had accessed a mental health service in the past 12 months.

There is another subgroup that is a heavy user of services. Table 22 looks at those who have accessed A&E or an NHS Walk-in Centre in the past 12 months and those who haven't. Offenders accessing this service have lower scores generally across all dimensions than the overall sample, differences ranging from 2.21 to 5.06. Those that have accessed this service 3 times or more in the last 12 months have dimension scores that are noticeably lower than the rest of the sample, suggesting much poorer health. On the other hand, those who have not accessed this service have much higher scores across all dimensions, particularly Role Limitation – Physical, Social Function and Pain.

**Table 22**      **SF36 scores for offenders accessing A&E/NHS Walk-in Centre in the last 12 months**

	Not accessed A&E/ Walk- in Centre n=111 Mean (SD)	Accessed A&E/ Walk- in Centre 3 times or more n=16 Mean (SD)	Total visiting A&E/ NHS Walk-in centre n=72 Mean (SD)	Total sample Mean (SD)
Physical Function Score	86.82 (24.56)	72.81 (27.32)	81.11 (25.15)	84.56 (24.66)
Role Limitation - Physical Score	83.66 (26.01)	60.55 (35.92)	75.26 (30.89)	80.32 (28.27)
Role Limitation - Emotional Score	78.55 (28.46)	61.98 (36.13)	74.88 (31.13)	77.09 (29.52)
Social Function Score	77.92 (26.91)	55.47 (34.45)	70.60 (29.59)	75.07 (28.14)
Mental Health Score	71.96 (21.20)	56.25 (18.62)	65.58 (22.41)	69.47 (21.85)
Energy & Vitality Score	60.45 (24.96)	46.56 (26.88)	55.56 (24.66)	58.54 (24.90)
Pain Score	77.28 (28.24)	54.17 (35.11)	70.32 (30.89)	75.20 (29.47)
General Health Perception	66.73 (25.46)	47.56 (22.95)	60.03 (24.43)	64.10 (25.21)
Physical Component Summary	48.29 (12.47)	39.10 (14.91)	44.87 (13.45)	46.95 (12.94)
Mental Component Summary	47.70 (12.52)	39.84 (12.55)	45.30 (12.39)	46.79 (12.49)

## Hospital Day and Inpatient Treatment

A total of 22 individuals indicated that they had received hospital treatment as a day case in the preceding 12 months (see Table 23); 5 of these failed to specify the reason for this. A further 10 individuals had undergone minor surgical procedures, 4 had had investigations

and 4 received an episode of emergency treatment. (One individual recorded two reasons for hospital day care)

**Table 23: Hospital day case reason**

Category	Nottinghamshire	Derbyshire
No response, don't know, not applicable	2	2
Minor surgery	6	4
Urgent treatment	3	1
Investigations	1	3
Not otherwise specified	0	1
	12 (one respondent gave 2 reasons)	11

25 people indicated that they had had one or more inpatient hospital stays (see Table 24) in the past 12 months but unfortunately over half of these respondents failed to give a specific reason or recorded their actual complaint rather than the treatment they received.

**Table 24: Inpatient Hospital Stay reason**

Category	Nottinghamshire	Derbyshire
No response, don't know, not applicable	1	1
Surgery	5	4
Medical treatment	0	0
Investigations	0	1
Alcohol / substance misuse	0	0
Mental health	0	0
Complaint listed rather than treatment	6	6
Not otherwise specified	1	0

## 2. OFFENDER'S ACCESS TO HEALTHCARE

33% (n=60) of offenders gave no response to this question and 54% (n=98) responded by saying they had had no problems accessing or registering with services.

**Table 25: Proportion of offenders who experienced difficulties accessing or registering with services**


Category	Nottinghamshire n=96	Derbyshire n=87	Total n=183
No response	30 (31%)	30 (34%)	60 (33%)
No problem affirmed	51 (53%)	47 (54%)	98 (54%)
Family doctor (GP)	6 (6%)	2 (2%)	8 (4%)
Community Nurse	0	0	0
Dentist	6 (6%)	7 (8%)	13 (7%)
Optician	0	0	0
Chiropody	0	0	0
Mental Health Service	1 (1%)	1 (1%)	2 (1%)
Therapy Service	0	0	0
Accident & emergency/ NHS Walk in Centre	0	0	0
Outpatient hospital consultation	1 (1%)	0	1 (0.5%)
Hospital day case	0	0	0
Inpatient hospital stay	0	0	0
Unclear, not otherwise specified	4 (4%)	1 (1%)	5 (3%)

A low proportion (15.5%) of the sample reported that they had experienced problems in accessing healthcare services. Of these the problems that were articulated were principally with registering with dentists (7%) and general practitioners (4%). However, only 4 people (2%) specifically reported that they were not registered with a GP.

*"Currently don't have a GP. I need details about my last GP and I can't remember who this is."*

*"Now NFA struggled to get in GP surgery"*

The problems with dentistry were wholly related to issues of obtaining an NHS dentist.



*"Still need to see dentist difficult to find NHS dentist"*

*"Dentist - lots will not take NHS & when do find they are full with waiting list"*

Only two respondents recorded that they had difficulties in accessing mental health services. One individual attributed their offending to the problems they had experienced in obtaining support from mental health services

*"Mental health - I had to commit an offence to gain access to this service..... Over a year ago I should have been able to access a mental health professional and explain to them what problems I was having. Had that occurred I probably would not have offended at all. There was very little assistance with my mental health from my employer and none at all from the NHS until after I had offended. If people have a mental health issue they should not have to commit a criminal offence to be taken seriously by the health services."*

## Offender's Suggestions for Service Improvement

The questionnaire asked respondents to make suggestions about how services might be improved. A third of respondents (n=61) made one or more suggestions. These were categorised and are annotated in Table 26.

**Table 26: Offenders' suggestions for service improvements**

CATEGORY	Nottinghamshire (n)	Derbyshire (n)
No response, Don't know, Don't care, Not Applicable	59	47
Improve investment (more pay, more staff, more money spent, more beds)	6	1
Improve efficiency( Performance management, better administration)	3	1
Improving accessibility (Flexible appointments, faster appointments, better access e.g home visits, localised services, walk in centres)	11	5
Improve substance misuse services	2	2
Improve Mental Health services	3	3
Improve dental services	2	6
Improve Social care services or voluntary services	4	0
Improve health promotion (e.g advice, help with diet, smoking)	4	2
Improve staff behaviour and attitudes	0	3
Improve links between Prison and Community services	1	0
Positive affirmation of satisfaction	7	14
Responses not otherwise specified	6	7

Given the difficulties that some offenders experienced had in accessing General Practitioners and NHS dentists a large number of the comments pertained to these services:-

*"Services could be offered in evenings and weekends ie GP appts at registered surgery"*

*"If the services were made easier to access for example a weekly walk-in service in local practices more people would inevitably try to resolve their problems."*

*"More local NHS dentists"*



*"Free dental care"*

*"More NHS dentists"*

*"Cheaper dental care"*

Although only two offenders had previously mentioned problems with accessing mental health services six individuals specifically suggested improvements in service delivery.

*"Mental health team should give benefit of the doubt..."*

*"Shorter waiting time for an appointment with psychiatrist"*

*"More day to day support with my depression"*

Issues around health promotion were raised by six people. These related to smoking cessation, weight loss and the availability of health information.

*"Help with weight loss, more advice in terms of diet."*

*"More info for younger people"*

*"Help to stop smoking."*

In some instances there were disparities between the two county samples. Although the difficulties in accessing dentists between the two samples were similar six Derbyshire respondents suggested improving access to dentists compared to only two individuals in the Nottinghamshire sample. Also four Nottinghamshire offenders commented on the need to improve Social and voluntary services and this was not mentioned by any of the Derbyshire sample. Conversely 3 individuals felt staff needed to improve their attitudes or behaviour whereas nobody in Nottinghamshire had suggested this.

Importantly there were also some very positive affirmations of satisfaction with accessing health services.

*"Fully satisfied"*

*"All OK, doing well with current services"*

*"All the services I use are good"*

*"Can't improve. Think GP service is great"*

*"All the services I use are available to me when required"*

*"I have had no problem when I have needed to access them."*

*"I get all the help I need now, it's ok as it is now."*

These affirmations comprise a third of the responses to this item and represent 12% of the total sample. Twice as many Derbyshire (N=14) as Nottinghamshire (N=7) respondents commented favourably about accessing services. Proportionately this represents a ratio of 2.3:1.



### 3. OFFENDER MANAGERS' VIEWS OF HEALTHCARE

#### **Offending Behaviour and Health**

Offender managers all acknowledged their limited understanding of health issues and emphasised that they were not trained to identify or advise on health issues. They reported that they would not actively seek out information about health from offenders unless it was overtly contributing to offending behaviour.

Offender managers described a changing shift in their role over the last decade and some suggested that there was an expectation that enforcement and targets took precedence over rehabilitation and resettlement. However it was also recognised that offender managers had to address the criminogenic needs of offenders in order to break the cycle of offending behaviour and in this context health issues did have an impact.

Managers reported that a lot of offending behaviour has its roots in family abuse and early childhood experiences this resulted in them having to manage individuals with poor life chances, poor interpersonal skills and a predisposition to anxiety and depression.

In this context offender managers reported a strong link between poor mental health and offending behaviour particularly in relation to drug and alcohol addiction, violent behaviour and sexual offending. Managers reported that mental health problems both predisposed some individuals to adopt offending behaviour and also contributed to re-offending behaviour.

#### **Drug and alcohol addiction**

Substance misuse was seen to both to arise from poor mental health and also compound existing mental health problems for example some offenders misused substances as a way of self medicating themselves against existing mental health problems typically anxiety and depression. For many with drug and alcohol problems mental health was noted to deteriorate over time resulting in offender's becoming increasingly preoccupied with themselves and their needs and at the same time increasingly emotionally detached from the needs of their family, friends and the wider community. This increased the likelihood of re-offending behaviour as individuals adopted criminal behaviour to fund their addiction with no awareness of the consequences for the victims of crime.

#### **Violence**

A relationship between mental health and violent behaviour was recognised. Some offenders could not manage situations of conflict and their own feelings of anger. This resulted in violent behaviour within the family (child or domestic abuse) and or community settings.





## **Sexual Offending**

Offender managers considered many sexual offences to result from mental health problems. These were seen as more intractable and requiring more specialist health interventions to both protect the public and rehabilitate the offender.

## **Self esteem and social anxiety**

One of the key threads of offender management is the support of offenders to adopt behaviour changes. This was reported as one of the most challenging parts of the offender managers role and one in which poor mental health had a deleterious effect. Although a range of Home Office Accredited Programmes existed to address this, poor mental health could act as a barrier to access. For example some managers reported difficulties in getting offenders to participate in accredited group programmes such as Enhanced Thinking Skills or CALM (controlling anger) because of anxiety, low self esteem and severe social anxiety in groups of more than two people. When given a choice most offenders it was suggested would prefer one to one support as opposed to participation in group programmes. It was also suggested that poor mental health had its roots in poor family and school experiences where offenders had never learnt to interact and develop positive reciprocal relationships. This social anxiety was compounded in women with poor mental health, who found participating in groups where women were in a minority an additional anxiety.

## **Health Service Most Commonly Accessed by Offenders**

The commonest services that offender managers reported offenders were most likely to access were secondary care mental health services, drug and alcohol services and general practitioner services.

## **Drug and alcohol services**

Some offenders were on drug rehabilitation programmes or alcohol treatment requirements as part of their community orders. These are provided through Derbyshire Drug and Alcohol Action Team (DAAT).

## **Secondary Care Mental Health Services**

All offender managers reported offenders using mental health services and one manager reported that this represented approximately a quarter of his caseload. Some offenders were reported to be on a mental health treatment requirement as part of their community order. These offenders were required to have contact with a named psychiatrist for example for the treatment of a pre existing mental illness such as schizophrenia. Sexual offenders might also have a treatment condition imposed.



## Primary care services

All offender managers identified general practitioners as a service accessed by offenders. Involvement of GPs however varied from the provision of sickness certificates (a requirement of the courts to confirm absence from supervision or other type of appointment due to illness) to the provision of prescriptions for methadone for those offenders on drug treatment plans. Some GPs were reported to be involved in offender health through their treatment of depression and anxiety disorders. One offender manager reported that offenders registered with one particular practice had been able to access primary care counselling services.

## Perceived Health Seeking Behaviour of Offenders

Offender managers noted that many offenders generally lived chaotic lifestyle and rarely asked for help.

## Uptake of health services

Managers were asked if in their experience offenders sought help for existing health problems. They found this a difficult question to answer. It was suggested that offenders with drug or alcohol problem rarely saw beyond their immediate addiction needs and were generally neglectful of their general health however those in recovery were far more sensitive to their general health and readily accessed everything offered.

Offenders with drug addiction problems were identified as being neglectful of their dental health and this was attributed to poor dental hygiene as well as the methadone treatment. This often resulted in an acute dental crisis such as an abscess.

Some offender managers were aware of the physical impact of drug and alcohol problems on offenders such as liver problems but presumed that the Drug and Alcohol Service staff were addressing these aspects of care or referring clients to the appropriate services.

All the offender managers were able to give examples of offenders with other health needs for example one reported an elderly sex offender with multiple long term conditions and another described an offender with asthma problems. Although offender managers work with a wide age range of clients the younger age caseload profile of some managers explained the low number of clients with known long term health conditions which tend to present in later in life.

The prevailing view from offender managers was that health issues were not core work for offender managers and they did not have the skills to identify or advise beyond sign posting to mainstream health services.

It was noted that a very small minority of health service staff who were involved in supporting offenders as part of their core work (drug and alcohol team and general practitioners with a special interest in addiction) adopted a disdainful and superior attitude, which might act as a barrier to offenders.



## **Adoption of healthy lifestyle**

Offender managers recognized that offenders faced significant barriers to adopting healthy lifestyle. The vast majority of offenders were thought to be smokers and smoking seemed to provide a moment of nirvana in a difficult life. Offender managers noticed that if offenders were in abstinence from drugs and or alcohol their cigarette consumption usually increased.

Exercise opportunities were available to some offenders in the county (for example through Turning Point). Subsidised gym membership and swimming was available in some part of the county and offenders were often encouraged by offender managers to utilise these opportunities. However uptake of exercise opportunities was dependent on an offender's state of readiness to change their behaviour.

Offender managers did not routinely enquire about healthily eating but their perception was that for many, particularly those with drug and alcohol problems, food was eaten because it is a necessity but little consideration was given to the concept of a balanced diet with fruit and vegetables. One offender manager reported his shock at how little some offenders budgeted for food (£10 per week). One manager observed that young offenders were more likely to prioritise the purchase of clothes over food. Another manager noted that offenders with an alcohol addiction might consume up to 200 units per week which would also be their main source of calories.

## **Health Services Which Offenders Had Difficulty in Accessing**


There were three services that managers reported offenders having greatest difficulties in accessing these were mental health services, cognitive behavioural therapy services and dentistry.

### **Mental Health Service**

Access to secondary mental health care services was described by one manager as "a bit of a mystery" this was primarily because probation officers did not always know what kind of mental health assessment or intervention might best benefit an offender. Understanding the different roles of the psychiatrist and psychologist was identified as a key factor in this. That said gaining access to cognitive behaviour therapy interventions and programmes was considered very hard. This was a particular issue for offenders with personality disorders in whom cognitive behavioural interventions were considered to be most helpful but the hardest to access.

All offender managers talked about the challenges of managing clients with personality disorders. Their unpredictable and sometimes volatile behaviour presented challenges for the staff but rarely could they access mental health services support in managing these offenders.

In some parts of West Derbyshire it was noted that waiting times were long and "offenders have to wait ages". Then very often referrals were "bounced back" to probation services because the offender was reported to not to have a mental health problem. Some offender



managers felt confused and did not understand the assessment criteria that were being applied. Whilst they appreciated they did not have any mental health training they felt that common sense told them that some offenders clearly had mental health problems.

## **Access to drug and alcohol treatment services**

It was noted that access to services was excellent for offenders who had been directed to services through the court system but that offenders who wished to self refer were not seen in a timely way and by the time an appointment was received the “willingness to change behaviour had gone”.

## **Access to NHS Dental services**

This was considered significant problem in all parts of Derbyshire.

## **Primary and secondary mental health services**

Offender managers identified issues relating to the quality of secondary care mental health services. Examples were given of offenders who were lost to follow up by services either because they did not keep an earlier appointment or as a result of a breakdown in communication between primary care and secondary care.


Problems with sharing of health information and needs between mental health care providers and bail hostel staff was also identified. In one example bail hostel staff were not informed by mental health staff that an offender was experiencing auditory hallucinations in the ‘handover’ leaving the bail staff with a poor understanding of his needs.

Praise was offered for the quality of the criminal justice intervention team who assessed offenders in police custody and in Foston Hall and Sudbury prisons.

One manager identified concerns regarding general practitioner skills in assessment of self-harm and suicidal risk. It was recognised that offender managers did not have the skills to undertake mental health risk assessment and were therefore reliant on those of general practitioners when a crisis situation arose. Sometimes it appeared that they too had limited skills.

## **Professional Relationship with Health Services**

Offender managers reported generally good relationship with all health and social care providers. Where probation and mental health services are co located working relationships were considered to be excellent. Managers reported that their professional relationship with local GPs was generally good but the need to ask for court reports regarding an offenders ability to engage in work related activities was a source of tension as some GPs asked for payment. Similarly requests from offenders for sickness certificates was sometimes refused and caused difficulty for managers who were trying to ensure offenders



did not have to return to provision for breach of their offender plan without legitimate reason.

## **Offending Behaviour and the Wider Determinants of Health**

Amongst the wider determinants of health housing and education were identified as the areas of greatest need.

### **Housing**

The offender managers interviewed all identified housing a significant challenge for offenders that contributed to poor mental health, “it’s our biggest nightmare”. They reported that there was not enough appropriate housing available. It was felt that local authorities bowed to NIMBYistic pressure not to provide accommodation to community or ex offenders. Contrary to government reports they believed that homelessness was under reported and many offenders ‘sofa surfed’ with friends or moved between family members. This resulted in them being continually dependent on old affiliations and friendship that reinforced offending behaviour or drug addiction.

As a consequence offenders being released from prison into the community have a number of options:

- Bail hostel
- Private rented
- Voluntary sector housing (e.g. Action Housing, Adullum Housing, P3)

Managers praised the voluntary sector contribution which was seen as the most responsive and accessible housing option. The voluntary sector agencies usually had key workers who were available to provide social support and advice that was greatly valued.

One offender manager believed that housing could be the single most important aspect of preventing re offending behaviour. An example was given of a 40 year old man whose life changed dramatically and offending behaviour ceased when he was offered stable accommodation.

### **Education and employment**

Education and health status are inextricably linked. Poor numeracy and literacy problems were “massive” according to one manager. Offenders can attend basic skills programmes and can also access literacy and numeracy assessments by basic skills tutors and gain employment support from work and learning officers. That said most offenders were reported



not to be in work and this was thought to compound poor self-esteem.

**Income**

Most offenders were reported to be reliant on incapacity or other benefits and for those with an addiction the purchase of drugs or alcohol was a priority. Many were reported to have poor financial management skills. Derbyshire County probation service is a pilot site for the *Benefits Sanctions as a Result of Breach of Community Order* probation service initiative that commenced in 2001. Under this benefits were removed for up to four weeks from offenders who breached their community order. There was a consensus view that the scheme was “disastrous” and was considered more likely to contribute rather than prevent re offending behaviour.



## DISCUSSION

This Health Needs Assessment, commissioned by East Midlands CSIP, was undertaken with a sample of offenders (n=183) on probation caseloads in Nottinghamshire and Derbyshire. A high response was achieved (91%) given that we targeted 100 offenders, across the four tiers of risk, in each county. Our sample was reasonably representative of offenders on probation caseloads in these two areas both in terms of age and gender but also numbers obtained in each risk tier although those with work orders in Tier 1 might be under-represented. We would also urge caution in the interpretation of the self-reported data that relates to health access and general health problems (for example only one respondent reported having a current sexual health problem). The assessment tool consisted of the SF-36 items, a drug misuse screening tool (UNCOPE), a problem drinking screening tool (CAGE) and a series of other questions related to health problems and access to health services. The overall needs assessment is appended to this report (see Appendix 1).

The literature review revealed that the health status of offenders being managed in the community is highly under-reported. A great deal, conversely, is known about the health of prisoners who constitute approximately half the number of those who are managed in the community (82,000 versus 175,000). The Department of Health has commented that many community-based offenders have problems with accessing mainstream health services, tend to overuse crisis services and enjoy little in the way of preventative health-care. The literature review showed variously that: offenders self-report health problems more than the general population (Mair and May, 1997); drug dependent offenders score low on the SF-36 (Freeman, 2000); those living in probation-approved premises have high levels of psychiatric morbidity, drug misuse, and alcohol problems (Hatfield et al, 2004); younger offenders have significant medical problems (Dolan et al, 1999); the mental health problems of young offenders in prison and those in the community are similarly high (Chitabesan et al, 2006); and one in five women are in contact with formal mental health services (Keene et al, 2003).

This study has produced some illuminating descriptive data. Offenders' health is significantly worse than the 'manual' social class of the general population whilst females in the offender sample have health profiles that were significantly worse than male offenders. Problem drinking is four times higher than the general population for men and eight times higher for women whilst 38% of the sample was at risk of having a significant drug problem. A high proportion of the sample smoke 83% and one in four (27%) had been seen formally by a mental health service. There was small significant group of 16 people who had by far the worse health profiles of the entire group, this sub-group; had used A&E services 3 times of more in the previous year, were heavy users of GP services and also had formal contact with mental health services. Smoking, substance misuse and problem drinking all increased with risk and those on Tiers 2-4 were far more likely than those on Tier 1 to have been formally diagnosed with a mental illness.

It is also possible to compare our data on health access with that of the general population. Only 2% of the sample had clearly indicated that they were not registered with a general practitioner. There are no accurate comparators amongst the general population and identifying the prevalence of unregistered patients is notoriously difficult. However, estimates of unregistered patients amongst the general population have been cited as being 2% (Birmingham Health & Wellbeing Partnership 2007), 2.3% (Bacon and Dent, 2001) and even as high as 6.6% (Cardiff Research Centre, 2006). These figures would indicate that community managed offenders are no less likely to be registered with GPs than the general





population.

In terms of primary care consultations figures from the 2006 General Household Survey (Office of National Statistics 2008) indicate that on average the number of GP consultations per annum were between 4 (for adults 16-44) and 5 (for adults 45-64). Whilst it is difficult to make accurate comparisons given the differences between the offender demographics and general population 77% of the sample reported consultation rates below 7 times per annum. It is therefore likely that the offender population is not markedly different from the wider community in terms of the frequency of visiting family doctors.

Over half of our sample reported that they had used a dentist at least once in the preceding 12 months. Figures from the general population demonstrate that around 50% of adults had been seen by an NHS dentist in the previous twenty four months (Information Centre for Health & Social Care 2008). However problems were identified by both offenders and probation staff in obtaining NHS dentists. These difficulties were more prevalent in one of the two counties. However this problem is not peculiar to the offender population. Registering with NHS dentists in the area covered by the study is notoriously difficult and has received coverage in the local media. The number of NHS dentists per head of population in the region is below the national average and in one of the Primary Care Trusts covered by the study is extremely low (Winterton in Hansard 2007). In view of these facts, it is likely that those on probation officer caseloads are probably accessing dentistry at about the same rate as those in the local population.


It is important to comment on community-based offenders' use of emergency services (NACRO 2007). There were 18 million A&E attendances in a population of 50.1 million in England in 2006-2007 (Department of Health 2008). This represents 36% of population. The usage of Accident and Emergency was slightly higher amongst the offender sample (39%) than in the general population. On the face of it there is little conclusive evidence here to indicate that individuals on probation service caseloads are exceptionally high users of emergency medical services. However, there are key differences between the two groups, for example, frequent A&E attenders in the general population tend to be older people and young children. Also, within the general population there might well also be multiple attenders. This is an area that requires a more rigorous research focus.

Contact with mental health services was not particularly high with only 15% of the sample having had contact with mental health services in the preceding 12 months although 27% of the sample indicated that they had been seen at some point by mental health services at some point in their lives. Only two individuals indicated experiencing any problems in accessing mental health services. Despite offenders' perceptions the offender managers had described scenarios where they considered that offenders were not followed up by mental health services.

The reason for this low level of reported difficulty is unclear. It may represent an underreporting of difficulties, particularly when one considers that 6 people were concerned enough to specifically make suggestions for improving accessibility to mental health services. It might also be that some of the offender populations' mental health problems could have been managed through self help and primary care interventions rather than the involvement of secondary care services. Lastly it could be that the offender population have low expectations about the level of service that should be offered to meet their mental health needs. Offender Managers considered that many individuals could not see beyond their substance misuse and were neglectful of their physical and mental health needs.







**However, it should be stressed that whilst access to many health services for community-based offenders seems to be equivalent to the general population our data on health status would indicate that their health needs are significantly greater than the general population. In this sense then, our assessment would indicate that there is a fundamental mismatch between need and supply.**

These are important findings and their importance is highlighted by other more widely available health indicators. For example, Sattar (2001) has shown that the death rates of community offenders are elevated by a factor of four in comparison to the general population. This is twice the rate of offenders in prison. Drugs and alcohol are implicated in nearly half of these deaths. This finding is reinforced by the recent annual report of the Chief Inspector of Prisons which highlights the disjuncture between the health care received by prisoners in a contained environment with that of offenders being managed in a community setting. Of course, community-based offenders are a highly socially excluded group in a more general sense. Not only do they suffer worse health but, as our probation officer interviews confirm, they experience extreme difficulty in accessing housing, employment and literacy training which are crucial broader determinants of health.

These probation officer interviews were extremely valuable in other ways inasmuch as they highlighted the difficult role offender managers have to play in focusing on the reduction of risk but also trying to understand where ill-health might perpetuate offending behaviour – a complex equation. Whilst there are obvious links between offending and ill-health, for example, mental illness and drug and alcohol misuse, there is little research to show that improving health status is directly associated with a reduction in re-offending. Furthermore, 'health' was rarely regarded by offenders themselves as a priority thus chaotic lives combined with the need for cigarettes, alcohol or drugs coupled with a poor diet was hardly a strong platform for the motivation required to access to health services which were on occasion described as 'disdainful', 'superior' and 'unskilled'.



## CONCLUSION

There is small literature on the health of offenders being managed in the community – it suggests that the health needs of this group are similar to prisoners. Whilst we agree that there are some similarities there are other important differences which this report has highlighted. However, this is a pilot study which has relied on offender's self-report. We believe that a larger-scale study is required to examine these issues in more depth. The health status of community-based offenders is undoubtedly poor, significantly poorer than the lowest social class in the general population. Further work is required to understand how a range of health services might be offered to this socially excluded group in a manner that will promote greater access to health care. Finally, and perhaps most importantly, we need to examine whether provision of such services reduces re-offending.



# REFERENCES

Association of Public Health Observatories (2007a) *Nottingham Health Profile*. APHO. Available at <http://www.apho.org.uk/resource/view.aspx?RID=50214> (Retrieved 1st July 2008)

Association of Public Health Observatories (2007b) *Derbyshire Health Profile*. APHO Available at <http://www.apho.org.uk/resource/view.aspx?RID=50214> (Retrieved 1st July 2008)

Association of Public Health Observatories (2007c) *Derby Health Profile*. APHO. Available at <http://www.apho.org.uk/resource/view.aspx?RID=50214> (Retrieved 1st July 2008)

Bacon S & Dent T (2001) *Health Status Report* Mid Hampshire Primary Care Trust

Baltieri D.A & Andrade A.G (2008) Alcohol and drug consumption amongst sexual offenders against females. *International Journal of Offender Therapy & Comparative Criminology*. 52 62-80

Bennett N, Dodd T, Flatley J, Freeth S, Bolling K (1995) *Health Survey for England 1993*. HMSO, London

Birmingham Health & Wellbeing Partnership (2007) *Increasing patient registrations*. Ordnance Survey. Southampton

Birmingham Health & Wellbeing Partnership (2007) *Increasing patient registrations*. Ordnance Survey. Southampton

Brazier JE, Harper R, Jones. N.M.B., O' Cathain. A, Thomas. K.J., Usherwood. T.& Westlake. L. (1992) Validating the SF-36: a new outcome measure for primary care. *British Medical Journal* 305: 160-4

Brooke D, Taylor C , Gunn J & Maden A (1998) Substance misusers remanded to prison - A treatment opportunity? *Addiction* 93. 12 1851-1856.

Brooker, C. & Sirdifield, C. (2007) *New Futures Health Trainers: An Impact Assessment*. Lincoln: University of Lincoln/CCAWI.

Brooker C, Sirdifield C, Gojkovic D (2007) *Mental health and prisoners: an updated review*. Centre for Clinical and Academic Workforce Innovation. Lincoln.

Campbell T.C, Hoffmann N.G, Hoffmann T.D & Gillaspay J.A (2005) UNCOPE: a screen for substance dependence amongst state prison inmates. *The Prison Journal* 85.1 7-17

Cardiff Research Centre (2006) *Cardiff Bay Health Survey*. Cardiff Research Centre, Cardiff.

Care Services Improvement Partnership (2006) *Health and Social Care in Criminal Justice*. Brief Factsheet. CSIP. Hyde

Chitsabesan P, Kroll. L, Bailey. S, Kenning. C, Sneider. S, Macdonald. W, Theodosiou L (2006) Mental health needs of young offenders in custody and in the community. *British Journal of Psychiatry*. 188. 534-540.

Department of Health (2006) *Our health our say: a new direction for community services*. Department of Health. London.

Department of Health (2007) *Improving Health - Supporting Justice - A Consultation Document*. A strategy for improving health and social care services for people subject to the criminal justice



system. Department of Health. London

Department of Health (2008) *Accident & Emergency Attendances 2006-2007* available at [http://www.performance.doh.gov.uk/hospitalactivity/data\\_requests/a\\_and\\_e\\_attendances.htm](http://www.performance.doh.gov.uk/hospitalactivity/data_requests/a_and_e_attendances.htm) (Retrieved 9th March 2008)

Dolan M, Holloway J & Smith C (1999) Health status of juvenile offenders. A survey of young offenders appearing before the juvenile courts. *Journal of Adolescence*, 22.1.137-44

Douglas, N. & Plugge, E. (2006) *A health needs assessment for young women in young offender institutions*. Youth Justice Board/ University of Oxford.

East Midlands Reducing Reoffending Partnership (2006) *Changing Ways: reducing re-offending by adult and young offenders in the East Midlands*. Nottingham. NOMS.

Ely, M., Hardy, R., Longford, N.T. and Wadsworth, M.E.J. (1999) Gender Differences in the Relationship between Alcohol Consumption and Drink Problems are Largely Accounted for by Body Water, *Alcohol and Alcoholism* Vol. 34, No. 6, pp. 894-902.

Ewing E.M (1984) Detecting alcoholism: the CAGE Questionnaire. *Journal of the American Medical Association*. 252 1905-1907

Farrant F (2001) *Troubled Inside: Responding to the Mental Health Needs of Young People in Prison*. Prison ReformTrust. London.

Fazel S. Hope T, O'Donnell I & Jacoby R. (2004) *Unmet treatment needs of older prisoners: a primary care survey*. *Age & Ageing* 33.4. 396-398

Freeman K (2003) Health and well-being outcomes for drug dependent offenders on the NSW Drug Court Programme. *Drug and Alcohol Review* 22 409-416

Hagedorn. H & Willenbring (2003) Psychiatric illness among drug court probationers. *The American Journal of Drug and Alcohol Abuse* 29. 40 776-788

Harris F, Hek G & Condon L (2007) Health needs of prisoners in England and Wales: the implications for prison healthcare of gender, age and ethnicity. *Health & Social Care in the Community*. 15 1 56-66,

Hatfield B, Ryan T, Pickering L, Burroughs H & Crofts R (2004) The mental health of residents of approved premises in the Greater Manchester probation area: a cohort study. *Probation Journal*. 51. 2 101-115


Healthcare Commission (2006) *Let's talk about it: a review of healthcare in the community for young people who offend*. Healthcare Commission. London.

HM Chief Inspector of Prisons for England & Wales (2008) *Annual report 06/07*

Hoffmann N.G, Hunt D.E, Rhodes W.M & Riley J (2003) UNCOPE: A brief substance dependence screen for use amongst arrestees *Journal of Drug Issues* 33. 1 29-44

Hoffmann N.G (2007) *UNCOPE*. Retrieved at [http://www.evinceassessment.com/UNCOPE\\_for\\_web.pdf](http://www.evinceassessment.com/UNCOPE_for_web.pdf) (Retrieved 16th February 2008)

Information Centre for Health & Social Care (2008) *NHS Dental Statistics for England Quarter 2: 30 September 2007*



Jenkinson. C, Layte. R, Wright. L & Coulter A (1996) *The UK SF-36 : An Analysis and Interpretation Manual*. University of Oxford. Oxford.

Jenkinson, C., Stewart-Brown, B., Peterson, S. & Paice, C. (1999) Assessment of the SF-36 version 3 in the United Kingdom. *Journal of Epidemiology & Community Health* 53. pp 46-50.

Keene. J., Janacek. J., & Howell. D (2003) Mental health patients in criminal justice populations: needs, treatment and criminal behaviour. *Criminal Behaviour & Mental Health* 13.3 168-78

London Probation (2007) *Single Equity Scheme*. National Probation Service London. London

Lord Hunt (2008) *Speech to Coventry & Warwickshire Partnership Trust and Criminal Justice Agencies*. 8th February 2008. Novotel, Coventry. <http://www.justice.gov.uk/news/sp080208a.htm> Retrieved 10.2.2008

Mair G & May. C (1997) *Offenders on Probation: A Research and Statistics Department Report*. Home Office. London

Marshall, T., Simpson, S. & Stevens, A. (2000). *Toolkit for health care needs assessment in prisons*. Birmingham: University of Birmingham

Ministry of Justice (2007a) *Population in Custody. Monthly Tables.: September 2007*. England and Wales. <http://www.justice.gov.uk/docs/population-in-custodySep07.pdf> (Retrieved 13th February 2008)

Ministry of Justice (2007b) *Probation Statistics Quarterly Brief*. July to September. England and Wales. <http://www.justice.gov.uk/docs/q3brief-probation-2007.pdf> (Retrieved 13th February 2008)

Nadkarni. R., Chipchase. B. & Fraser. K. (2000) Partnership with probation hostels: a step forward in community forensic psychiatry. *Psychiatric Bulletin*. 24. 222-224

Offender Health Care Strategies (2005) *Improving health services for offenders in the community*. Manchester: OHCS.

Office of National Statistics (2008) *General Household Survey 2006*. Available at <http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=5756> ( Retrieved 9th April 2008)

Plugge. E & Fitzpatrick R (2005) Assessing the health of women in prison: a study from the United Kingdom. *Health Care for Women International*. 26 (1) 62-68

Plugge E, Douglas E & Fitzpatrick R (2006) *The health of women in prison: study findings*. Department of Public Health, University of Oxford. Oxford.

Porporino F.J. & Motiuk L.L (1995) The prison careers of mentally disordered offenders. *Journal of Law & Psychiatry* 18 29-44

Sattar G (2001) Deaths of offenders in prison and under community supervision. *Findings* 153. Home Office. London.

Sattar G (2003) The death of offenders in England and Wales. *Crisis* 24 17-23

Shiely J.C, Byliss M.S., Tsai C, Ware J.E (1996) *SF-36 Health Survey Annotated bibliography: The First Edition* (1988-1995) The Health Institute New England Medical Center. Boston



MA.

Singleton, N., Meltzer, H., Gatward, R., Coid, J. & Deasy, D. (1998) Psychiatric morbidity amongst prisoners: summary report. Office for National Statistics. London

Skeem, J.L & Loudon J.E (2006) Toward Evidence-Based Practice for Probationers and Parolees Mandated to Mental Health Treatment *Psychiatric Services*.57, 3; p. 333-342

Social Exclusion Unit (2002) *Reducing Re-Offending by ex- prisoners*. Social Exclusion Unit. London.

Social Exclusion Unit(2004) *Social exclusion and mental health*. Office of the Deputy Prime Minister. London,

Solomons E & Rutherford M (2007) *Community Sentences Digest*. Centre for Crime & Justice Studies. London.

Vaughan P.J & Stevenson S (2002) An opinion survey of mentally disordered offender service users. *British Journal of Forensic Practice*. 4, 3, 11-20,

Urofsky R.I, Seiber E, Hoffmann NG (2007) UNCOPE: evaluation of a brief screen for detecting substance dependence among juvenile justice populations. *Journal of School Counseling* 5.17 Retrieved 16th February 2008, from <http://www.jsc.montana.edu/articles/v5n17>.

Ware J.E. (2000) SF-36 update *Spine* 25. 24 3130-3139

Ware J.E.(2002) SF-36 *Health survey Update*. Available at <http://www.sf-36.org/tools/SF36.shtml> (retrieved 12.02.2008)

Wessely, S, Akehurst R, Brow-I & MossL(1996). Deliberate self harm and the Probation Service; an overlooked public health problem? *Journal of Public Health Medicine*, 18, 2, . 129-32,

Williamson M (2006) *Improving the health and social outcomes of people recently released from prison- A perspective from primary care*. Sainsbury Centre for Mental Health. Retrieved at <http://www.phrn.nhs.uk/workstreams/primarycare/RecentlyReleased.pdf> (16th February 2008)

Winterton R (2007) *Written Answers in Hansard* available at <http://www.publications.parliament.uk/pa/cm200607/cmhansrd/cm061206/text/61206w0029.htm> (Retrieved 11th April 2008)

## Appendix 1. Health Needs Assessment Tool – ASHNO

To be self completed by the client or with their PO/OM

### Overall Health

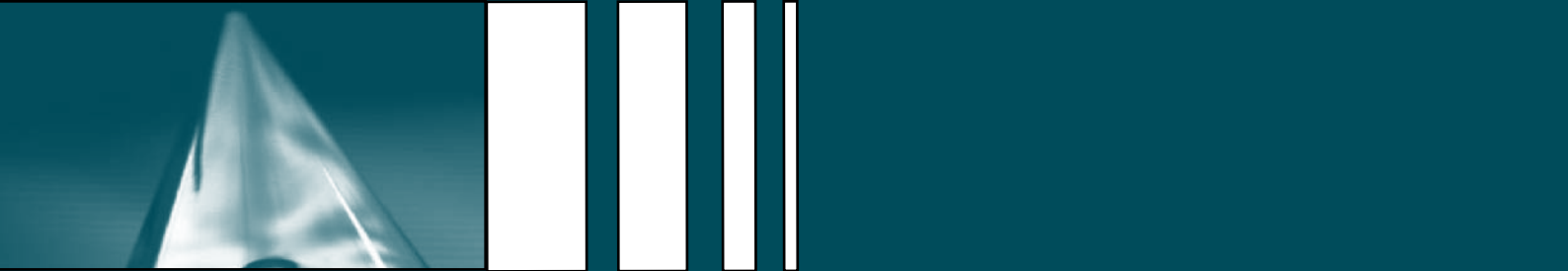
The following questions ask for your views about your health and how you feel about **life in general**. If you are unsure about how to answer any question, try and think about **your overall health** and give the best answer you can. Do not spend too much time answering, as your immediate response is likely to be the most accurate.

#### 1. In general, would you say your health is:

- Excellent ☐
- Very good ☐
- Good ☐ (please tick **one** box)
- Fair ☐
- Poor ☐

#### 2. Compared to 3 months ago, how would you rate your health in general now?

- Much better than 3 months ago ☐
- Somewhat better than 3 months ago ☐
- About the same ☐ (please tick **one** box)
- Somewhat worse than 3 months ago ☐
- Much worse than 3 months ago ☐



**3. The following questions are about activities you might do during a typical day. Does your health limit you in these activities? If so, how much?**

	Yes limited a lot	Yes limited a little	No, not limited at all
(please tick <b>one</b> box on each line)			
a) <b>Vigorous activities</b> , such as running, lifting heavy objects, participating in strenuous sports	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) <b>Moderate activities</b> , such as moving a table, pushing a vacuum	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Lifting or carrying groceries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Climbing <b>several</b> flights of stairs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Climbing <b>one</b> flight of stairs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Bending, kneeling or stooping	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Walking <b>more than a mile</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h) Walking <b>half a mile</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i) Walking <b>100 yards</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Bathing and dressing yourself	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>





**4. During the past 2 weeks, how much time have you had any of the following problems with your work or other regular daily activities as a result of your physical health?**

	All of	Most	Some	A little	None
(please tick <b>one</b> box on each line)	the	of the	of the	of the	of the
	time	time	time	time	time

a) Cut down on the <b>amount of time</b> you spent on work or other activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
---	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

b) <b>Accomplished less</b> than you would like	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

c) Were limited in the <b>kind</b> of work or other activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
---	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

d) Had difficulty performing the work or activities (eg it took more effort)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
---	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

**5. During the past 2 weeks, how much time have you had any of the following problems with your work or other regular daily activities as a result of your emotional problems (such as feeling depressed or anxious)?**

	All of	Most	Some	A little	None
(please tick <b>one</b> box on each line)	the	of the	of the	of the	of the
	time	time	time	time	time

a) Cut down on the <b>amount of time</b> you spent on work or other activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
---	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

b) <b>Accomplished less</b> than you would like	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

c) Didn't do work or other activities as carefully as usual	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

**6. During the past 2 weeks, to what extent have your physical health or emotional problems interfered with your normal social activities with family, neighbours or groups?**

- None ☐
- Slightly ☐
- Moderately ☐ (please tick **one** box)
- Quite a bit ☐
- Extremely ☐

**7. How much bodily pain have you had in the past 2 weeks?**

- None ☐
- Very mild ☐
- Mild ☐ (please tick **one** box)
- Moderate ☐
- Severe ☐
- Very severe ☐

**8. During the past 2 weeks, how much did pain interfere with your normal work (including both outside the home and housework)?**

- None at all ☐
- Slightly ☐
- Moderately ☐ (please tick **one** box)
- Quite a bit ☐
- Extremely ☐

**9. These questions are about how you feel and how things have been with you during the past 2 weeks. For each question please give one answer that comes closest to the way you have been feeling.**

(Please tick **one** box on each line)

<b>How much time during the last 2 weeks:</b>	All of the time	Most of the time	A good bit of the time	Some of the time	A little of the time	None of the time
a) Did you feel full of life?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have you been a very nervous person?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Have you felt so down in the dumps that nothing would cheer you up?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Have you felt calm and peaceful?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Did you have a lot of energy?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Have you felt down- hearted and low?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Did you feel worn out?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h) Have you been a happy person?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i) Did you feel tired?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**10. During the past 2 weeks, how much of the time has your physical health or emotional problems interfered with your social activities (like visiting friends etc)**

- All of the time ☐
- Most of the time ☐
- Some of the time ☐ (please tick **one** box)
- A little of the time ☐
- None of the time ☐

**11. How TRUE or FALSE is each of the following statements for you?**

	Definitely true	Mostly true	Not sure	Mostly false	Definitely false
(please tick <b>one</b> box on each line)					
a) I seem to get ill more easily than other people	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) I am as healthy as anybody I know	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) I expect my health to get worse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) My health is excellent	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Sexual Health

1. Have you ever been treated for a sexually transmitted disease (STI)?

Yes ☐ No ☐

2. Have you ever been diagnosed with:

Hepatitis A ☐ Hepatitis B ☐

Hepatitis C ☐ HIV or AIDS ☐

3. Have you ever been vaccinated against:

Hepatitis A ☐ Hepatitis B ☐

4. Might you have a sexual health problem now? Yes ☐ No ☐

### Smoking

1. Do you smoke cigarettes or tobacco? Yes ☐ No ☐

2. How much do you smoke a day? .....

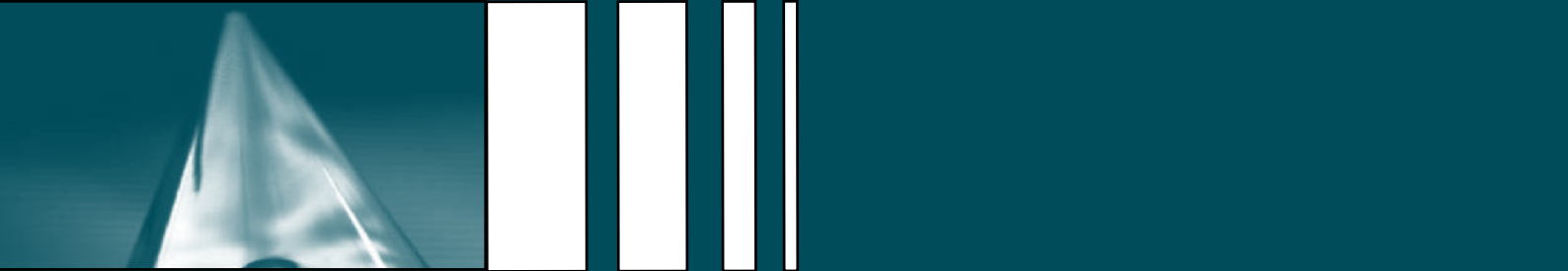
### Alcohol

1. Have you ever felt you should cut down on your drinking? Yes ☐ No ☐

2. Have people annoyed you by criticising your drinking? Yes ☐ No ☐

3. Have you ever felt bad or guilty about your drinking? Yes ☐ No ☐

4. Have you ever had a drink first thing in the morning to steady your nerves or to get rid of a hangover? Yes ☐ No ☐



### Drugs

1. Have you spent more time using drugs than you meant to?

Yes ☐ No ☐

2. Have you neglected some of your usual responsibilities because of using drugs?

Yes ☐ No ☐

3. Have you felt you wanted or needed to cut down on your drug use in the last year?

Yes ☐ No ☐

4. Has your family, or a friend, or anyone else ever told you they objected to your drug use?

Yes ☐ No ☐

5. Have you found yourself thinking a lot about using drugs?

Yes ☐ No ☐

6. Have you ever used drugs to relieve emotional discomfort, such as sadness, anger or boredom?

Yes ☐ No ☐

### Mental Health

1. Have you ever been seen formally by a mental health service?

Yes ☐ No ☐

2. Did they give you a diagnosis?

Yes ☐ No ☐

3. If so, what was it? .....



## Services

The following questions ask you about the health services that you have used.

**1. Have you used any of the following health services in the past 12 months for your own health?**

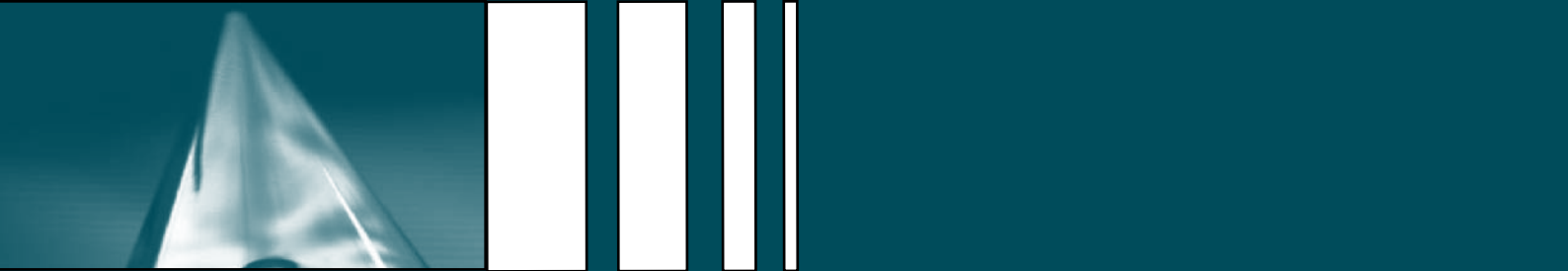
For each service that you have used, please tick **one** box to show the number of times you have used the service. **(If you have not used the service, please leave the line blank.)**

The number of times I have used the service is:

	1-2 times	3-6 times	7 or more
a) Family doctor (GP)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Community nurse e.g. practice nurse or district nurse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Dentist	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Optician	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Chiropody Service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Mental Health Service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Therapy service e.g. physiotherapist, occupational therapist, speech therapist	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Accident and Emergency department/ NHS Walk-in centre	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h) Outpatient hospital consultation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i) Hospital day case operation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please state what this was for.....

.....



j) Inpatient hospital stay

☐☐☐

Please state what this was for.....

.....

**2. Have you had any difficulty in accessing/ registering with any of these services?  
(Please explain)**

.....

.....

.....

.....

.....

### Further comments

**What aspect of your health is your greatest problem? (Please describe)**

.....

.....

.....

.....

**To meet your current health needs, in what way should services be improved?**

.....

.....

.....

.....

.....

.....

**Thank you for your time in completing this questionnaire.**





## Appendix 2. Nottinghamshire Probation sampling framework

Team	Tier 1	Tier 2	Tier 3	Tier 4	Total sample
1	14	2	0	0	16
2	0	6	5	1	12
3	0	6	6	1	13
4	0	5	4	0	9
5	0	0	0	8	8
6	0	0	0	8	8
7	2	4	5	0	11
8	0	1	2	0	3
9	0	0	0	6	6
10	4	2	2	0	8
11	0	5	5	0	10
12	3	1	2	1	7
13	0	0	0	6	6
14	0	0	3	0	3
15	3	2	2	1	8
TOTAL	26	34	36	32	128



## Appendix 3. Derbyshire Probation interview guide

### Interview schedule Offender Managers

Do you think there is a relationship between offending and health?

What kind of health services do offenders most commonly access?

There is a lot of emphasis on the public to adopt health lifestyles. What types of lifestyle issues do offenders have to deal with (diet, exercise, smoking, sexual health, alcohol, housing)?

In your experience do offenders seek help for all the health problems that they have?

Are you aware of any problems encountered by offenders in accessing health services?

Are you aware of any quality issues in relation to the health services used by offenders?

Can you describe your professional relationship with GP's, mental health services and DAAT?

EM Regional Offender Management services out to consultation on *commissioning probation services for health outcomes* – what implications will that have for offender managers?



## Appendix 4. Information and Consent Form

### Information

This project is funded by East Midlands Care Services Improvement Partnership. The aim is to examine the health care needs of a probation population and examine the extent to which they are addressing their healthcare needs and accessing services. The objectives have been approved by the Nottinghamshire Probation Service health steering group.

Results of this will be printed in publications produced by staff at the University of Lincoln, but all individuals involved will remain anonymous.

### Consent Form

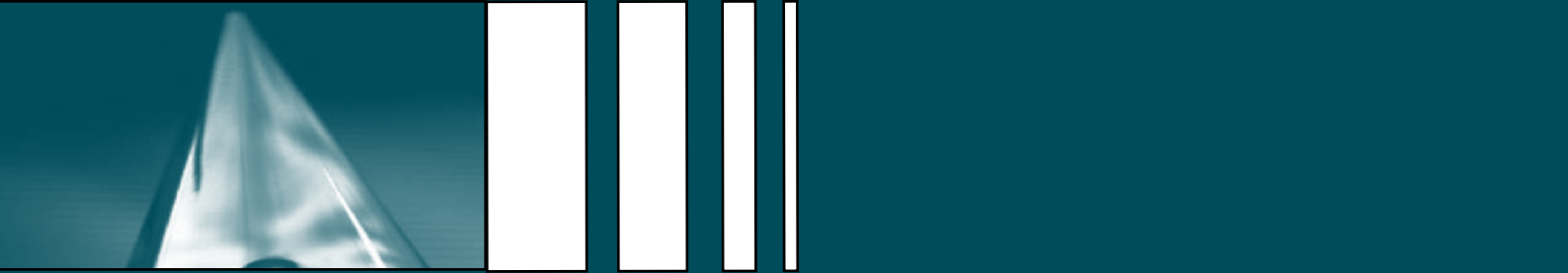
I agree to take part in the above research project. I have had the project explained to me, and I have read the information sheet. I understand that agreeing to take part means that I am willing to:

- To be interviewed by my probation officer

The information from the interviews will be held and processed for the following purpose(s):

- To inform any publications produced by staff from the University of Lincoln on the subject of the health needs of a probation population.

I understand that any information I provide is confidential, and that no information that could lead to the identification of any individual will be disclosed in any reports on the project, or to any other party. No identifiable personal data will be published.



I understand that my participation is voluntary, that I can choose not to participate in part or all of the project, and that I can withdraw at any stage of the project without being penalised or disadvantaged in any way.

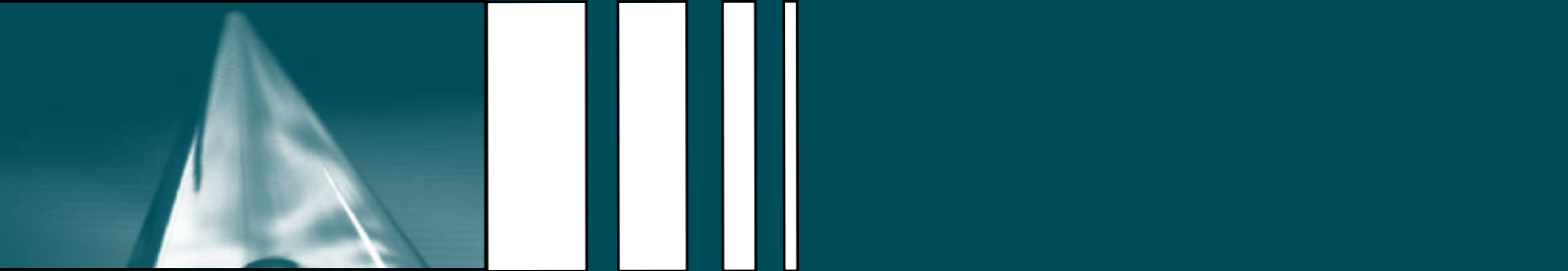
Name: .....(please print)

Signature: .....

Date: .....

## Appendix 5. Characteristics of each tier

	Tier 1 n=31		Tier 2 n=47		Tier 3 n=48		Tier 4 n=44		Total sample n=183	
	n	%	n	%	n	%	n	%	n	%
<b>Gender</b>										
Male	23	74%	34	72%	40	83%	44	100%	150	82%
Female	8	26%	13	28%	8	17%	0	0%	31	17%
<b>Order Type</b>										
Licence	0	0%	5	11%	9	19%	27	61%	42	23%
Community Order	28	90%	40	85%	39	81%	16	36%	131	72%
<b>Sexual Health</b>										
Treated for a sexual health problem	2	5%	4	9%	10	21%	5	11%	24	13%
<b>Smoking</b>										
Smoke	23	74%	39	83%	43	90%	40	91%	152	83%
Don't Smoke	8	26%	8	17%	5	10%	4	9%	31	17%
<b>Alcohol</b>										
CAGE identified risk	9	29%	17	36%	23	48%	20	45%	79	43%
CAGE not identified risk	21	68%	29	62%	24	50%	23	52%	100	55%
<b>Drugs</b>										
UNCOPE identified risk	4	13%	10	21%	19	40%	30	68%	69	38%
UNCOPE not identified risk	24	77%	35	74%	29	60%	13	30%	110	60%



Mental Health										
Seen formally by a mental health service	2	6%	14	30%	11	23%	16	36%	50	27%
Received diagnosis	0	0%	11	79%	7	64%	9	50%	31	62%
Services										
GP	25	81%	40	85%	40	83%	30	68%	146	80%
Community Nurse	12	39%	11	23%	16	33%	17	39%	59	32%
Dentist	20	65%	28	60%	26	54%	21	47%	101	55%
Mental Health Service	2	6%	7	15%	7	15%	6	14%	27	15%
A&E/NHS Walk-in	8	26%	17	36%	21	44%	15	34%	72	39%
Outpatient	8	26%	12	26%	13	27%	12	27%	49	27%
Hospital day case	5	16%	5	11%	6	13%	5	11%	21	11%
Inpatient	4	13%	9	19%	6	13%	4	9%	25	14%
Problems accessing/registering with services	3	10%	4	9%	5	10%	14	32%	29	16%





**Published by CCAWI**  
**University of Lincoln**  
**Brayford Pool**  
**Lincoln**  
**LN6 7TS**  
**Tel: 01522 837 730**  
**[www.lincoln.ac.uk/ccawi](http://www.lincoln.ac.uk/ccawi)**

