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Health screening of people in police custody—evaluation of current police screening procedures in London, UK

Iain G. McKinnon, Don Grubin


Abstract

Background: Previous research has highlighted excess health morbidity in offender populations. A small number of studies have described health problems within police custody settings. The efficacy of police screening procedures has not been evaluated. Methods: Prospective clinical interviews with custody detainees in London were conducted. Clinical findings were compared with those recorded in police health screening documentation. Results: High levels of health morbidity were observed. The sensitivity and specificity of the current screen with respect to its ability to trigger a call for a health-care professional (HCP), regardless of the reason, was 70 and 66%, respectively. Fifty-one percent of the detainees with asthma, 36% with diabetes mellitus and 40% with epilepsy were not picked up by the screen. Fewer than one-half of the detainees at risk of alcohol withdrawal syndrome had ‘alcohol’ documented on their screen, although 81% saw the HCP. The police screen missed heroin use in 28% and crack cocaine use in 68% of users. A HCP was called in 84 and 64% of the cases, respectively, for any reason. Two of the 12 detainees (17%) who described a head injury with serious-associated symptoms were detected; 9 had a HCP called for any reason. Whereas mental disturbance was detected in 79% of the detainees with serious mental illness, one-third of the detainees with a risk history of suicide and one-half of the detainees with suicidal ideation were not documented as such on the police screen. Conclusion: Given the amounts of morbidity and the need for reliable triage, improvement in the health screening procedures used by the police is needed.
Introduction

Anyone who is arrested and taken into custody in England and Wales is screened for the presence of physical or mental health problems.1,2 This screening is standardized in most police force areas and is typically carried out by a custody sergeant as part of the ‘booking in’ process, the health screening component of which can take anywhere from a few minutes to half an hour. Although newly promoted custody sergeants in London’s Metropolitan Police Service (MPS) receive some limited training on the identification of health morbidity and vulnerability among detainees, they are not clinically qualified and any screening procedures need to take this into account. Current training includes the provision of guidance on determining the condition of detainees, the importance of identifying such detainees, potential risks and hazards in the custody environment and the use of enhanced observation. Sergeants do not currently receive any training about the technical aspects of screening. Guidance on when and how to refer a detainee to a health-care professional (HCP) is also available to officers within MPS standard operating procedures (SOPs).

Custody sergeants have a statutory responsibility to ensure the welfare of the detainee and make any necessary referrals to health-care staff.1 It is not the role of the sergeants who complete this screening to investigate the alleged crimes for which the detainees have been arrested. This function is separate and is undertaken by investigating officers who receive advice on welfare issues from the custody sergeants. Information obtained during screening is not treated confidentially by the police sergeants, but may be used as part of any police investigation; that, of course, may influence a detainee’s responses to screening questions.

The screening process used by custody sergeants has been updated over time. This has included an inevitable transition from paper-based screening to computerized systems. The development process has taken place by means of review panels, but has not, as far as we are aware, relied upon clinical evidence of screening efficacy. The current screen consists of 16 questions to ask the detainee on a range of health morbidities and 12 observations that sergeants are directed to make. Based on this, the sergeant determines observation levels for the detainee while in custody and makes any necessary referrals.

Although high levels of psychiatric and physical morbidity have been reported in police custody detainees,3–7 the efficacy of police screening procedures has not been evaluated. In this study, we assessed individuals detained in police custody within London’s Metropolitan Police area in order to determine the extent to which police health screening procedures successfully identify those who require further assessment or treatment, or who need the involvement of an appropriate adult (AA) [The Police and Criminal Evidence Act (1984)1 makes provision for detainees, who are identified as being ‘mentally vulnerable’, to receive special help during interview by the police. This special help is provided by ‘appropriate adults’. Appropriate adults can be family members, social or health-care professionals, or trained volunteers. More information on appropriate adults in England and Wales can be found at the National Appropriate Adult Network’s website: http://www.appropriateadult.org.uk/].
Methods

Individuals taken into police custody at two police stations in London were invited to take part in the study. Initially a small number of detainees were seen in Wimbledon police station (South West London) to confirm the feasibility of the project, following which the remainder of the participants were recruited at Islington police station (North Central London). Ethical approval was granted by Newcastle and North Tyneside Research Ethics Committee.

In order to evaluate the efficacy of the police health screen, data obtained by researchers with respect to specific physical and mental health diagnoses were compared with the findings of the police screen on a case-by-case basis.

The specific areas of interest were determined following consultation with Forensic Physicians working in London and senior officers within the MPS custody directorate. Evidence for the presence of the following conditions was sought:

- asthma, diabetes mellitus, epilepsy and heart disease;
- gastrointestinal complaints and communicable diseases;
- injuries including significant head injuries;
- serious mental illness (SMI) (psychosis or mood disorder);
- other less serious mental health conditions;
- intellectual disability;
- problematic drug misuse and risk of withdrawal;
- risk of alcohol withdrawal syndrome (AWS); and
- active suicidal ideation.

Participants were recruited in the order in which they were brought into custody. Prior to approaching a detainee, the custody sergeant was asked whether it was considered safe for the researcher to interview the individual alone; those deemed to pose too high a risk were excluded from the study. Other exclusion criteria included individuals who lacked the capacity to consent (where no consultee was available), and those whose grasp of English was not sufficient to understand the study information. Detainees who gave written or witnessed verbal consent to take part in the study were assessed using a semi-structured clinical interview with a medically qualified psychiatrist (higher specialist trainee with experience of examining patients in custodial settings). We used an adapted Faculty of Forensic and Legal Medicine’s physical proforma, a structured clinical psychiatric history and mental state examination with the Brief Psychiatric Rating Scale (Short Form) and an assessment of intellectual disability adapted from the published literature. In addition to this intellectual disability guidance, I.M. who is a forensic learning disability psychiatrist provided training to the other research psychiatrists on the assessment of detainees with intellectual disability. Detainees were assessed for alcohol dependence based on their reported alcohol consumption and patterns of use in combination with the CAGE questionnaire; drug dependence was determined by reported history of recent drug use in concert with the Severity of Dependence Scale. Current suicidal ideation was rated using the Beck Scale for Suicide Ideation. Detainees unable to consent because of behavioural disturbance and those who lacked capacity by virtue of cognitive or intellectual disability were not interviewed, but these cases were included in the analysis of how well the police screen performed in detecting mental disorder and vulnerability. For each of the cases considered, we evaluated whether the police screen had accurately detected a health problem, the specifics of the detainee’s health problem, and whether a referral was made to the HCP or AA (or both) where appropriate.
We performed a power calculation to determine the number of detainees we would need to interview. A lack of available prevalence data on which to base our calculation led us to carry out an audit of consecutive police custody records, which has been reported previously. Given that we were interested in the rate of true positives, we employed an approach that considered the sensitivity of the sergeant’s screening procedures compared with the clinical researcher’s gold standard. Given the diversity of morbidities seen in the police custody environment, we accepted that it was unrealistic to power the study to detect such sensitivities for each individual morbidity. Therefore, in considering the most clinically important morbidity area, we judged that we would be satisfied by being able to detect sensitivity differentials in the case of detainees with significant mental health problems. In keeping with the results of the audit, we supposed a null hypothesis that the current police screen would detect 50% of those with depression or psychosis where its prevalence is 16%. With a realistic recruitment of around 240 detainees, we calculated that if the actual detection rate by sergeants exceeded 72%, we would be able to detect this difference with 80% power at and Alpha level of 5%. We deemed this to be an acceptable level of precision given the limitations of sampling in this population.

Data were analysed using the Statistical Package for Social Sciences (SPSS) Version 17.0 and Minitab Version 16.0 licensed to Newcastle University. For each area of interest, the proportion of detainees with morbidity screened positive by the police screen was compared with those detected by the clinical researcher’s interview. The latter was considered the ‘gold standard’ for the purposes of this study. The proportions detected by the police screen were analysed using exact binomial proportions and confidence intervals. A Kruskal–Wallis chi-square test was used to compare age data between groups in figure 1. Chi-square tests were used to compare characteristics between the same groups (e.g. proportions unemployed, assessed as requiring medical attention, among other factors.) Mann–Whitney U-tests were used to compare scores on the Severity of Dependence Scale for Cocaine and Heroin dependence.

Ethical Approval
Newcastle and North Tyneside Research Ethics Committee approved the study in 2008 (08/H0906/130).
Results

Data collection took place over 73 days between April 2009 and September 2010. The days were chosen in advance when researchers were free of clinical commitments and in order to cover a 7 day/week period. While researchers were present in custody, 630 detainees were potentially eligible for inclusion, of whom 237 (38%) were assessed. Figure 1 describes how these detainees progressed through the study. The mean (SD) age of the detainees we interviewed was 33 (12) years. Eighty-three percent were male. One hundred and thirty-six (58%) were white, of whom 94 (69%) were British born. Ninety-seven (42%) were black and minority ethnic of whom 29 (30%) were British born. Seventy-seven (33%) of the detainees we recruited were not able to complete all of the evaluation. Some were taken away for official procedures (such as fingerprints or meetings with solicitors) and others were released from custody. Therefore, the number of cases considered for each condition varies depending upon how many completed that particular part of our evaluation. Furthermore, some parts of the evaluation were not completed due to participant choice, lack of concentration or that part of the evaluation requiring English as a first language.

Physical conditions

We were able to ask about a history of asthma, diabetes mellitus and epilepsy in 236 detainees (data from one detainee were missing) and cardiovascular complaints, abdominal symptoms and communicable diseases in 235 detainees (data from two detainees missing). The prevalence of these conditions compared with the numbers successfully detected by the police screen is presented in table 1. In addition, six individuals had a history of stroke disease; two were detected by the screen and referred to the HCP. A HCP was asked to see two of the other four but for other indications. Two women had active gynaecological symptoms, neither of which was captured on the police screen, although one was referred to the HCP for other reasons. One hundred and fifty-five (65%) were current tobacco smokers. Ninety-seven detainees (41%) were prescribed one or more medications prior to arrest.

Injuries

Two hundred and thirty-three individuals answered our questions about injuries. Data from four detainees were missing. Of these, 36 (15%) described an injury (excluding head injuries) in the preceding 48h. Seventeen had received treatment. Fourteen of these were potentially serious injuries:

- seven were potential limb fractures, of whom four had already received treatment. Of the remaining three, one case was detected by the police screen and referred to the HCP, a HCP was called for one but for another reason, and one was missed;
- four were facial injuries, of which two had already received treatment. A HCP was not called for the other two cases; and
- three detainees had stab wounds, two of whom had received treatment. The other case was not detected by the police screen, but the HCP was called for another indication.

Head injury

We inquired about recent head injury from 233 detainees. Twenty (9%) reported a head injury in the preceding week. Of these, 12 had experienced one or more of the following symptoms: loss of consciousness, diplopia, vomiting or severe headache. Five of these detainees had received definitive medical assessment either by the
ambulance service or at hospital, two of whom were identified by the police screen. Of the other seven detainees, the HCP was called for five, but none of these calls specifically related to the head injury.

Mental disorder
Detainees with mental disorder displayed a variety of presentations ranging from stable chronic conditions to florid behavioural disturbance. For the purposes of data analysis, we included the detainees in groups B and C in figure 1. This meant that data from 248 individuals were considered in all. Prevalence data along with the success rate of the police screen is presented in table 2.

No detainee was considered to reach the clinical criteria for severe depressive disorder.
The police documented a mental disturbance in 9 of the 152 detainees whom we deemed to have no mental disorder. Four of these individuals had attempted suicide in the past but only two were specifically identified as such by the police screen.

Of the 248 detainees considered, 17 were prescribed antidepressants and 8 were prescribed antipsychotic medication at the time of arrest.

Appropriate adult
Researchers considered that an AA was necessary for 28 (11%) of the 248 detainees considered above. An AA was requested by the custody sergeant in 12 (43%) of these cases (95% CI 24–63%).

For the 19 psychotic individuals, an AA was called by the sergeant for eight (42%, 95% CI 20–67%). An opinion from the HCP was sought in 10 others (37%). In the remaining case, neither the HCP nor an AA was called.

Of the eight we determined had an intellectual disability serious enough to require an AA, the police sergeant called for an AA for four individuals. In three of the other four cases, a referral to the HCP was made and an AA was recommended. One case was missed by the overall process.

One detainee with memory problems as a result of probable pseudo dementia was referred to the HCP for ‘depression’ by the police screen. The HCP, but not the police screen, recommended an AA for this case.

Suicidal ideation
Two hundred and twenty-six detainees completed the Beck Scale For Suicide Ideation (BSSI). Twenty-five (11%) had current suicidal ideation and 44 (19%) had attempted suicide in the past. The police screen identified 12 (48%) of the former group (95% CI: 28–69%), and 15 (34%) of the latter (95% CI: 20–50%).

Drugs and alcohol
Two hundred and thirty detainees completed alcohol assessments. Data from seven detainees were missing. Ninety-two (40%) had consumed alcohol in the last 48h, of whom 34 (37%) were identified by the police screen (95% CI 27–48%).

In order to determine those at risk of AWS, we inquired about drinking patterns and dependence. Forty-two detainees had consumed >14 U in the past 48h and scored two or above on the CAGE questionnaire, which we considered put them at risk of AWS. Twenty (48%) of these cases had alcohol mentioned on the police screen (95% CI 32–64%).

Two hundred and thirty-three detainees completed a drug history. Data from four detainees were missing. Detainees who had used heroin or crack cocaine in the last year were asked to complete the Severity of Dependence Scale (SDS). Twenty-five detainees (11%) were regular users of heroin and 50 (22%) were regular users of crack cocaine. The police screen detected 18 (72%) of the former (95% CI 51–88%) and 16 (32%) of the latter (95% CI 20–47%).
Mean scores (SD) on the SDS were 7.8 (4.2) for heroin and 3.7 (4.0) for cocaine. We compared the mean SDS for those detainees detected by the police screen to those who were missed. For heroin, mean SDS were 8.00 and 7.14, respectively (Mann–Whitney U 53.5, P= 0.702). For crack cocaine, mean SDS were 4.13 and 3.47, respectively (Mann–Whitney U-test 178.5, P= 0.252).

Pregnancy
Forty of the detainees we interviewed were female, of whom one was pregnant. This was not identified on the police screen. One detainee was 2 weeks postpartum and needed to express breast milk. This was duly noted by the police and appropriate arrangements made.

Referrals to the health-care professional
Of the 237 detainees we interviewed, 127 (54%) were referred to the HCP. We have reported the police screen’s ability to detect specific health conditions above. However, sergeants made referrals to the HCP for individuals regardless of whether a specific disorder was detected by the screen. The sensitivity and specificity of the current screen with respect to its ability to trigger a call for a HCP, regardless of the reason, was 70% and 66%, respectively. Table 3 shows the proportion of cases with significant morbidity referred to the HCP regardless of the reason for referral.

Comparison of groups
In order to assess the representativeness of the group we interviewed, we compared their police health screen data with that of the individuals we excluded or to whom we could not gain access (Group A, figure 1). There were no statistically significant differences in age [Kruskal–Wallis $^2$(df=3) 2.619, P =0.454], gender $^2$(df= 3) 2.123, P = 0.547], ethnicity $^2$(df= 12) 19.000, P =0.089], having been considered intoxicated by the police screen $^2$(df= 3) 3.320, P =0.345) or having SMI detected by the HCP $^2$(df=3) 1.996, P= 0.573] between the four groups.
The group we interviewed were less likely to be unemployed than any of the ‘declined’, ‘unavailable’ or ‘too violent’ groups $^2$(df =3) 9.662, P= 0.022). The ‘too violent’ group were more likely to be referred to the HCP [79% vs. 54% (95% CI for difference 5–39%)] and the ‘unavailable’ group less likely [(42% vs. 54% (95% CI for difference 2–22%)] than the interviewed group.
Discussion

As expected, we detected a considerable amount of health morbidity in a sample of police detainees. Asthma\(^{16}\), epilepsy\(^{17}\), psychosis\(^{18,19}\) and intellectual disability\(^{20}\) were overrepresented compared with the general population. The prevalence of diabetes mellitus in this study was lower than a UK community estimate.\(^{21}\) This may be due to the relatively young age of detainees. Nearly 15% had active suicidal ideation. Injuries were common. Intoxication with drugs and alcohol was also a considerable problem with respect to management in custody, given the associated risk of violence and risk of withdrawal. Levels of drug dependence were comparable with those previously reported in community addiction programme samples.\(^{13}\) Smoking rates are much higher than community estimates\(^{22}\) but lower than those within the prison estate.\(^{23}\)

We found that current police screening procedures miss substantial amounts of morbidity and risk. One-half of detainees with asthma, one-third with diabetes mellitus and two-fifths with epilepsy were missed. However, there is a clear clinical need to ensure that individuals with these conditions have ready access to their medication and a medical evaluation. Almost all of the detainees with any recent cardiovascular complaint were missed by the police screen. For all of the above conditions, there is the potential for significant deterioration within the police custody setting.

The police screen failed to detect 10 of the 12 detainees who had sustained a head injury associated with symptoms suggestive of potential head injury progression. Although nine saw a HCP called for other reasons, our data suggest that there is a systemic problem with detecting detainees with this pattern of symptoms and signs. Of the 14 others with serious injuries, 6 had not received medical attention at the time of booking in. Only one of the six was screened positive by the police.

Although 4 of the 19 (21%) individuals with psychosis were missed as having mental disorder on the police screen, all but one was referred to the HCP for either that or another reason. Post hoc evaluation suggests that the police screen missed individuals with chronic stable psychosis. This compares favourably with evaluations of screening in prison by medical officers in the 1990s.\(^{24}\)

Of the 13 detainees we evaluated as having moderate depression, 9 (69%) were detected by the police screen, but only 6 (46%) were referred for an assessment by a HCP. This suggests that the police screen and police sergeants have difficulty not only detecting significant mood disorder but also in determining an appropriate referral pathway once it is detected.

Of the eight individuals we assessed as having intellectual disability requiring an AA, two lacked the capacity to enter our study and were both appropriately detected by the police screen. Of the remaining six, the screen detected two, but three others were referred for other reasons for a HCP assessment. Although this two-stage process appears to be fairly successful, it is not clear what prompted the police sergeants to make these referrals. This raises questions about the police screen’s ability to detect the need for an AA, which has been reported previously.\(^{25}\)

Our data reinforce our previous findings that detainees who are dependent upon illicit substances are taciturn in divulging this to the police sergeant.\(^{5}\) This is especially so for those who have been using crack cocaine, only one-third of whom were detected by the police screen, although a further third were referred to the HCP for other reasons. The police screen was more successful in detecting detainees taking heroin (74%). It is likely that these detainees are more likely to divulge this information in order to obtain medication to avert withdrawal symptoms. The effect of drug withdrawal is also likely to have an impact upon a detainee’s ability to concentrate during police interview, therefore, highlighting the importance of making an appropriate referral.

We estimated that the police screen misses around one-half of detainees who are at risk of AWS. AWS is a medical emergency the potential for which should be detected this early in the detention process.

It is not the purpose of the health-care screen to accurately diagnose detainees with morbidity. Instead, the role of health screening is to identify individuals who require further assessment, without wrongly identifying
individuals who are in fact well. Our data suggest that the overall false-positive and -negative rates for the current screen in calling for the HCP are 25 and 40%, respectively. Although detainees incorrectly screened in for medical attention cause extra work for custody health-care professionals, those who are missed and in real need are potentially at considerable risk.

Limitations of the study
There were a significant number of detainees whom we were not able to recruit into the study. Difficulties we encountered were environmental (high rate of detainee turnover and lack of space in custody to carry out interviews), procedural (detainees not available, undergoing official procedures and in police interview) and participant related (the effects of current/recent intoxication, capacity and willingness to take part). Our intergroup analysis of police screening data suggests some differences between these groups. The group who declined were more likely to be unemployed. Detainees who were assessed as being too violent for us to interview were more likely to be referred to the HCP although the police screen did not attribute more mental disorder to this group. In addition, the group who were unavailable were less likely to be referred to the HCP, meaning that they were processed through custody quicker: their rapid transit through custody may explain their unavailability for recruitment.

Despite these methodological difficulties, the study involved semistructured clinical interviews with a sample of consecutive detainees who had not been purposely preselected. The time we had available to spend with participants was 20–30min at most. In order to encompass the wide range of relevant clinical data, we chose a pragmatic approach, employing a mixture of clinical interviews with short validated rating scales. The use of structured, validated interview schedules would have given psychiatric assessments more weight, but given the length of most schedules this would have been impractical in terms of the time required. Our approach to determining mental disorder and intellectual disability reflected a naturalistic method that would be employed if the researcher were carrying out the role of an on-call psychiatrist in a custodial setting. Undoubtedly, there will be morbidity that the researchers have missed. It was neither feasible nor practical to ask detainees to ask for their GP or psychiatric records. It is also possible that research participants may not wish to divulge significant morbidity for fear that the information may be used against them.

Our power calculation predicted that we would need to recruit more than 240 detainees to reveal meaningful differences between the detection rate of the police screen compared with that seen in our prior audit. This calculation considered detainees with depression or psychosis. We interviewed 237 detainees and considered data from a further 11. Data for some of the morbidities were missing in a number of these cases. This was due in part to some research interviews having to be stopped partway, as official police procedures took precedence. Despite this, within our sample 24 of the 32 detainees with depression or psychosis were picked up within our sample. This rate of 75% was >72% detection rate by the sergeant for which we had powered the study. There are no other studies of which we are aware that have employed a similar methodology. Other studies have employed an observational approach \(^3\) or have recruited pre-selected samples.\(^4,6\) One study of detainees with intellectual disability in Northern Ireland screened police custody records for evidence of intellectual disability and conducted detailed assessments on those who screened positive.\(^26\) The authors estimated a rate of intellectual disability of 1%, but this makes the assumption that the initial screening had high sensitivity and did not miss any detainees with intellectual disability.

The medical conditions we diagnosed were established by clinical evaluation based upon detainees' self-report, which may be a source of reporting bias. We were not able to verify medical histories. Furthermore, access to further medical investigations or general practice records was not feasible.

Current police screening procedures fail to identify significant amounts of physical and psychiatric morbidity. Deaths in custody have been attributed to a number of health morbidities and the effects of drugs and
alcohol.\textsuperscript{27,28} Screening is a balance between sensitivity and specificity. Failing to detect morbidity runs the risk of generating headlines, but too high a false-positive rate creates unnecessary work for officers and clinicians. We recommend that substantial changes are made to the current police screening procedures. In the light of these findings, we have revised the police screen and are in the process of evaluating a revised screening instrument in London.

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Conflicts of interest: None declared.

<table>
<thead>
<tr>
<th>Key points</th>
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<tr>
<td>Rates of health morbidity in custodial settings are higher than those seen in the general population.</td>
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<td>Fewer studies have addressed the health needs of police custody detainees, but these individuals have increased levels of morbidity and vulnerability.</td>
</tr>
<tr>
<td>The efficacy of widely used police screening procedures in England and Wales has not yet been assessed.</td>
</tr>
<tr>
<td>This study reports a range of increased health morbidities in a sample of consecutive police custody detainees.</td>
</tr>
<tr>
<td>Current police screening procedures miss large proportions of physical and psychiatric morbidity and have difficulty identifying vulnerable individuals.</td>
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<tr>
<td>This provides evidence for the need to address current police screening procedures so that detainees receive appropriate attention where required.</td>
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</table>
References

Figure 1: Flowchart describing the progression through the study of 630 detainees who met the inclusion criteria.

- **Detainees available for inclusion n=630**
  - Assessed as too violent by custody sergeant n=36
  - Declined to take part n=110
  - Not available (e.g. detainee out of cell for official procedures) n=191
  - Agreed but then released from custody n=7
  - Poor English n=22

  237 (38%) consented and interviewed

- **GROUP A n=366**
  - No research data collected from detainees. Police risk assessments compared to the interviewed group (GROUP B) to assess representativeness of sample

- **GROUP B n=237**
  - Research data compared to police screen to assess efficacy of detecting general health problems

- **GROUP C n=11**
  - Research and capacity/mental state data compared to police screen to assess efficacy of detecting mental disorder and vulnerability

- **GROUP D n=16**
  - Observations of detainee compared to police screen to assess efficacy of detecting intoxication and need for urgent treatment
### Table 1 Prevalence and police screen detection rate of physical health conditions

<table>
<thead>
<tr>
<th>Condition</th>
<th>Research interview, N (%)</th>
<th>Police screen, N</th>
<th>Proportion detected by police screen (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asthma (n=236)</td>
<td>37 (16)</td>
<td>18</td>
<td>49% (32–66%)</td>
</tr>
<tr>
<td>Diabetes mellitus (n=236)</td>
<td>12 (5)</td>
<td>8</td>
<td>67% (35–90%)</td>
</tr>
<tr>
<td>Epilepsy (n=236)</td>
<td>5 (2)</td>
<td>3</td>
<td>60% (15–95%)</td>
</tr>
<tr>
<td>Any cardiovascular complaint over the past month (n=235)</td>
<td>44 (19)</td>
<td>1</td>
<td>2% (0–12%)</td>
</tr>
<tr>
<td>Abdominal symptoms (n=235)</td>
<td>58 (25)</td>
<td>7</td>
<td>12% (5–23%)</td>
</tr>
<tr>
<td>Communicable diseases (HIV*, HBV or HCV) (n=235)</td>
<td>8 (3)</td>
<td>3</td>
<td>38% (9–76%)</td>
</tr>
</tbody>
</table>

### Table 2 Prevalence and police screen detection rate of mental disorders

<table>
<thead>
<tr>
<th>Condition: Subdivision (n=248)</th>
<th>Research interview, N (%)</th>
<th>Police screen, N</th>
<th>Proportion detected by police screen (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any mental health problem</td>
<td>96 (39)</td>
<td>50</td>
<td>52% (42–62%)</td>
</tr>
<tr>
<td>Probable psychotic disorders (PPOs)</td>
<td>19 (8)</td>
<td>15</td>
<td>79% (54–94%)</td>
</tr>
<tr>
<td>Affective psychosis by history and examination</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Affective psychosis by observation only</td>
<td>4</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Non-affective psychosis by history and examination</td>
<td>12</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Non-affective psychosis by corroborative information</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Moderate depressive disorder</td>
<td>13 (5)</td>
<td>9</td>
<td>69% (39–91%)</td>
</tr>
<tr>
<td>Intellectual disability</td>
<td>8 (3)</td>
<td>4</td>
<td>50% (16–84%)</td>
</tr>
<tr>
<td>Clinically determined at interview</td>
<td>6</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Determined by observation/corroborative information</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Possible pseudo-dementia</td>
<td>1</td>
<td>1</td>
<td>100% (3–100%)</td>
</tr>
<tr>
<td>Other disorders</td>
<td>55 (22)</td>
<td>22</td>
<td>44% (30–59%)</td>
</tr>
</tbody>
</table>
Table 3 Proportion of detainees within morbidity categories referred by the police to the custody Health Care Professional (HCP) for any reason

<table>
<thead>
<tr>
<th>Condition: Subdivision</th>
<th>Research interview, N (%)</th>
<th>HCP Called (any reason), N</th>
<th>Proportion detected by police screen (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asthma (n=236)</td>
<td>37 (16)</td>
<td>25</td>
<td>68% (50–82%)</td>
</tr>
<tr>
<td>Diabetes mellitus (n=236)</td>
<td>12 (5)</td>
<td>10</td>
<td>83% (52–98%)</td>
</tr>
<tr>
<td>Epilepsy (n=236)</td>
<td>5 (2)</td>
<td>5</td>
<td>100%</td>
</tr>
<tr>
<td>Any CVS complaint over the past month (n=235)</td>
<td>44 (19)</td>
<td>26</td>
<td>59% (43–74%)</td>
</tr>
<tr>
<td>Serious injuries (n=233)</td>
<td>14 (6)</td>
<td>8</td>
<td>57% (29–82%)</td>
</tr>
<tr>
<td>Facial</td>
<td>4</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Stab</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Head injury with associated ‘worry symptoms’ (n=233)</td>
<td>12 (5)</td>
<td>9</td>
<td>75% (43–95%)</td>
</tr>
<tr>
<td>Psychosis (n=248)</td>
<td>19 (8)</td>
<td>18</td>
<td>95% (74–100%)</td>
</tr>
<tr>
<td>Moderate depression (n=248)</td>
<td>13 (5)</td>
<td>6</td>
<td>46% (19–75%)</td>
</tr>
<tr>
<td>Current suicidal ideation (n=226)</td>
<td>25 (11)</td>
<td>21</td>
<td>84% (64–95%)</td>
</tr>
<tr>
<td>Previous suicide attempt (n=226)</td>
<td>44 (19)</td>
<td>30</td>
<td>68% (52–81%)</td>
</tr>
<tr>
<td>Users of heroin (n=230)</td>
<td>25 (11)</td>
<td>21</td>
<td>84% (64–95%)</td>
</tr>
<tr>
<td>Users of crack cocaine (n=230)</td>
<td>50 (22)</td>
<td>32</td>
<td>64% (49–77%)</td>
</tr>
<tr>
<td>At risk of AWS (n=230)</td>
<td>42 (18)</td>
<td>35</td>
<td>83% (69–93%)</td>
</tr>
</tbody>
</table>