An evaluation of the Young Person's Alcohol Intervention Programme in the Wirral: an interim report

Michela Morleo, Penny A Cook

Centre for Public Health, Research Directorate
Faculty of Health and Applied Social Sciences
Liverpool John Moores University
Kingsway House
Hatton Garden
Liverpool
L3 2AJ

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Executive summary

The Young Person's Alcohol Intervention Programme (YPAIP) was established in Wirral to provide referrals to those arrested or stopped by police for an alcohol-related offence to a local support service for young people. This is delivered through Response (established as part of the Children and Young People's Department).Representatives from Response attempt to contact individual young people and/or their parents to assess their needs and deliver appropriate interventions. The Centre for Public Health were invited to evaluate the service. This interim report presents analysis of the existing data from Police and Response.

Data records were matched between the police and Response datasets using the specific data fields (such as date of birth and gender). Analysis was carried out only on those referrals where data records could be matched, that is 365 stops (92% of the total police records) and 215 arrests (71% of the total police records). Key findings include:

- Almost two thirds (63%) of referrals resulting from stops involved a young male and three quarters (75.4%) of arrests involved a young male.
- The ages of those being stopped ranged from 12 to 19, with an average age of 15.2 years, whilst arrests were significantly more likely to be for older individuals (p<0.001; ages ranged from 13 to 17; an average age of 16.0 years). In both cases, females involved were more likely to be younger than males.
- Individuals were not necessarily stopped or arrested in their place of residence. For example, although Birkenhead was the most common place of residence for those stopped (23.2%), the highest number of stops occurred in Upton (21.6%).
- On average, there were 13.8 days between a stop and a referral being received by Response but the number of days varied widely. For arrests, there was a mean number of 4.6 days between arrest and referral received, significantly fewer than for stops (p<0.001).
- For both stops and arrests, just under half of those arrested received some form of intervention through Response. Young people not receiving an intervention included those who refused as well as those who could not be contacted (for example, due to incorrect contact details being provided).

Recommendations from the findings included:

- To consider the use of a shared database between the Police and Response to accurately link individuals' progress.
- To consider more comprehensive recording of the details surrounding attempts made to contact young people within the database.
- To assess ways in which the number of days between stops and referral being received can be reduced to being more in line with the number of days for arrest referrals, especially around periods such as Christmas (for example, due to staff leave).
- To assess how Response's possible future involvement in the police operations themselves will contribute to a reduction in time between police contact and referral, and the delivery of brief interventions.

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Acknowledgements

Further information

For further details on the intervention discussed in this report, please contact Simon Fitzpatrick Merseyside Police Wirral BCU through: simon.d.fitzpatrick@merseyside.police.uk. Alternatively, contact details for the authors are provided on the front cover of this report.

Introduction

Young people are particularly vulnerable to the negative consequences of alcohol such as violence, regretted or unprotected sex and ill-health (Crews et al. 2007; Morleo et al. 2008). Worryingly, whilst the proportion of underage drinkers may be decreasing, the amount consumed by those who do drink has more than doubled in the last 25 years (Fuller 2007). Levels of harm may be particularly acute in certain parts of the country such as the North West, where drinking patterns are known to be especially high (NWPHO 2008). Thus, the Wirral experiences one of the highest levels of alcohol-specific hospital admission both in the North West and in England overall (NWPHO 2008).

In partnership with other local stakeholders, Wirral Police aim to reduce levels of alcohol-related harm in the local areas such as the number of offences committed by young people consequent to alcohol misuse. Such aims tie in with the delivery of the children and young people related Public Service Agreements (including raising educational achievement, improving health and wellbeing, improving safety and increasing the numbers on the path to success). Hence, those arrested or stopped for an alcohol-related offence are referred to a local support service for young people known as Response (established as part of the Children and Young People's Department). Here, representatives from Response attempt to contact individual young people and/or their parents to assess their needs and deliver an appropriate intervention (Wilson 2009). In order to understand the effects of the project, the Centre for Public Health has been commissioned to evaluate the development of the Young Person's Alcohol Intervention Programme (YPAIP) known locally as 'Operation Bacchus'. As part of this evaluation, researchers have conducted an analysis of the existing data from Police and Response, which is presented in this interim report.

Methodology

Police and Response individually supplied the Centre for Public Health with their latest datasets of referrals into the Young Persons' Alcohol Intervention Programme (YPAIP). For both datasets, referrals were broken down into those achieved through police stops (for example, where underage young people may be found consuming alcohol) and those for alcohol-related arrests (for alcohol-related offences such as drunk and disorderly, breach of peace). Researchers then matched data records between the two datasets using the specific data fields of date of birth, gender, home town and referral dates. Analysis was carried out only on those referrals where data records could be matched.

Stops

Police provided data on 397 stops, whilst Response provided data on referrals from 401 stops. In total, it was possible to match 365 records (92% of the total police records) but 32 stops from the Police and 36 from Response could not be matched. Seven records could not be matched due to inputting errors affecting dates of birth (for example, individuals were recorded as having years of birth that were out of range) and for 22 records, dates of birth were missing altogether. The analysis used only those 365 records where it was possible to match entries from Response with those from the Police.

Arrests

Police provided data on 301 arrests, whilst Response provided data on referrals from 332 arrests. It was possible to match 215 records (71% of the total police records); however, 86 Police records and 117 from Response could not be matched. There were a number of barriers to data matching including:

- Four records either had no dates of birth attached or had obviously erroneous dates of birth (as for the stop data).
- The Police were not able to start recording arrests until 9 August 2008, so there are nine records from Response where the referral occurred before this date and so could not be matched.
- Police data extended into April 2009 but data from Response stop at the end of March 2009. There are an extra 30 records from the Police from April 2009.

The analysis used only those 215 records where it was possible to match entries from Response with those from the Police.

Repeat referrals

Within both sets of data (referrals resulting from stops and arrests), Response identified where data records related to those individuals who had been referred to their service through YPAIP more than once. Researchers then used dates of birth, genders, and home town to match data records to specific individuals. This provided a total of 511 referrals where individuals had only been referred once, and 41 referrals where individuals had been referred twice or more. However, for 14 data records which were classified as being repeat referrals by Response, there was only one data record present for those individuals. This is likely to be because of previous data matching procedures whereby data records were only carried through if there was a matching record from both the Police and Response (see above).
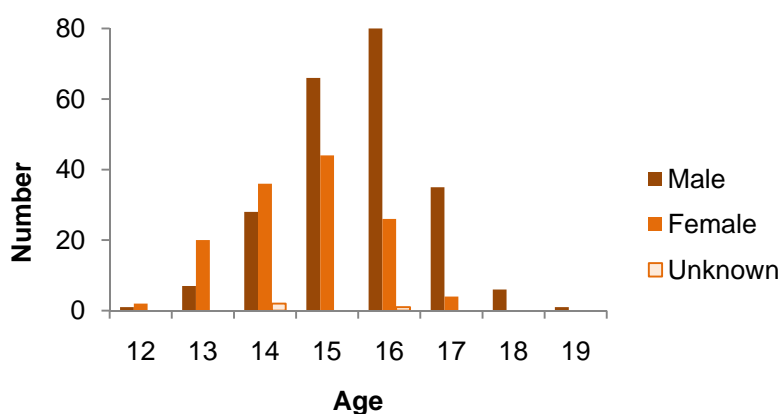
Findings

The findings are presented as: referrals resulting from police stops; referrals resulting from police arrests; a comparison between the two referral types; and repeat referrals.

Referrals resulting from police stops

In total, 230 (63.0%) of the stops involved a young male and 132 (36.2%) involved a female (for four individuals, 0.8%, gender was unknown[1]). Age at the time of stop was available for all stop records but there were six erroneous values where dates of birth provided meant that individuals were calculated as being zero years or younger. These individuals have been excluded from all subsequent age analyses. The mean age at the time of the stop was 15.2 years (standard deviation (SD) of 1.2 years). Female stops were significantly more likely to involve younger individuals (mean age of 14.6 years; SD=1.1) than male stops (15.6 years; SD=1.1; $p<0.001$; Figure 1). Ninety-nine percent of the stops involved White British individuals. Almost a quarter (23.2%) of those stopped were from Birkenhead, followed by 15.3% from Wallasey and 14.2% from Upton. A small proportion (3.3%) were from outside the Wirral.

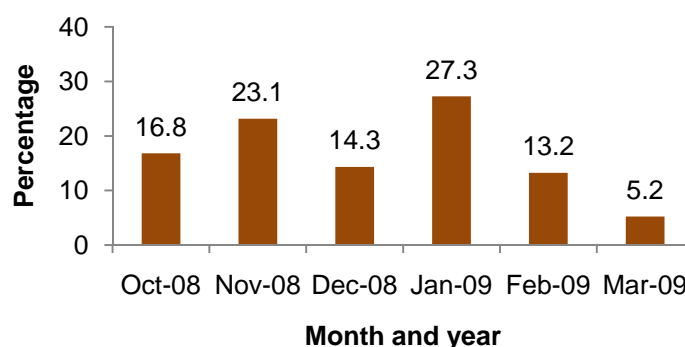**Figure 1: Number of police stops by age and gender**

Details of the stops

Police stops were first recorded in October 2008, with the latest data being available for March 2009. Erroneous values from three records were excluded from this analysis.[2] Figure 2 shows the number of stops occurring in each month since October 2008. The highest numbers occurred in November 2008 (23.1% of stops recorded) and January 2009 (27.3%).

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[1] Unknown gender refers to those stops where the gender by Response and the police differed whilst all other variables remained the same. It was therefore presumed that the individual had been correctly matched but that gender had been incorrectly entered in one of the datasets.
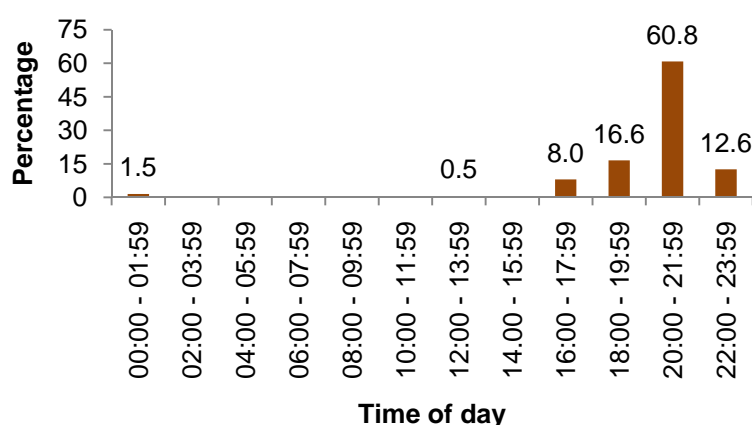[2] The dates provided for these were before the programme started in 1998, 1993 and January 2008.

Figure 2: Percentage of stops by month and year

Police recorded an approximate time or time range (such as 0-14.59PM) for each individual stop. A time range was available for 167 stops (45.6%). Because it was not possible to estimate when these stops occurred, these were excluded from subsequent time analyses. Specific times were provided for the remainder of stops (n=199; 54.4%). Most (61%) of the stops took place between 20:00 and 21:59 (Figure 3).

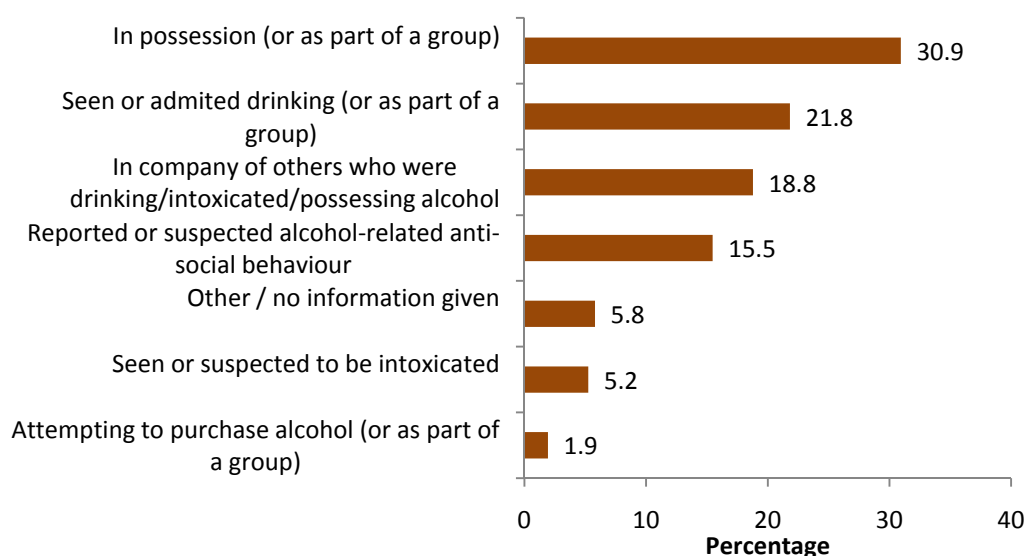**Figure 3: Time of day of stops**

Three fifths (60.4%) of stops occurred in the individual's home town. Whilst individuals stopped were most likely to live in Birkenhead (see above), the largest proportion of stops occurred in Upton (21.6%), followed by 15.6% in Birkenhead and 14.2% in Wallasey. A more detailed description was also available for the location where the stop occurred. For over two thirds of stops (70.2%), a street name was provided. The second most common location was an open space (16.7%)[3]. Females were significantly more likely to be stopped in an open space than males (24.2% compared with 12.6%; $p<0.05$) although a street was still the most common location. Individuals were also stopped in or outside an on-licensed venue (4.9%), in or outside shops (4.4%) on or by public transport locations (2.7%) and other locations (1.1%)[4].

Nearly three quarters of stops involved individuals who were in a group (71.5%; compared with 28.5% where the presence of a group was not stated). The most common reason for a stop was possession of alcohol (or being in a group possessing alcohol; 30.9%) followed by being seen or admitting drinking (or being part of a group doing so; 21.8%). Almost a sixth (15.5%) were stopped for reported or suspected involvement in anti-social behaviour (Figure 4). No significant relationships were found between age and gender of those involved.

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[3] Open space includes church grounds, park, playground, common, sports field, bowling green, wasteground and a wooded area.
[4] On-licensed venues includes pubs and restaurants. Public transport locations includes bus stops and train stations. Other locations include school, town hall, and Arrowe Park car park.
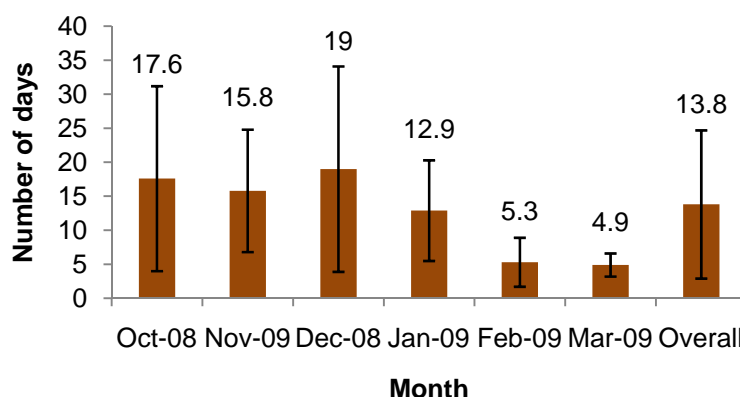
Figure 4: Reason* for stops

* Alcohol-related anti-social behaviour includes for example urination, possible involvement in a fire, causing problems to residents or shopkeepers, shouting, drunk and disorder, being aggressive and fighting. Other or no information given includes in possession of cigarettes, riding a bike in the middle of road/footpath with no lights, being seen with other youths known for alcohol consumption, in an area with high anti-social behaviour, found near alcohol. Attempting to purchase includes buying themselves, in a group attempting, asking adults.

Timings between stops and referral

On average, there are 13.8 days between a stop and a referral being received by Response; however the number of days varies widely both between individual cases (ranging from two to 50 days) and over time (Figure 5). Discussions with the police officers involved revealed that delays identified may have been due to key personnel being on leave or on training days. Nevertheless, whilst the mean number of days between a stop and a referral being received has fluctuated since October 2008, an overall decline can be seen up until March 2009 after a peak in December 2008.

Figure 5: Mean (+/- standard deviation) number of days between a police stop and a referral being received by Response*

* Time to referral differs significantly over the 7 month period (one way ANOVA, $p < 0.001$).
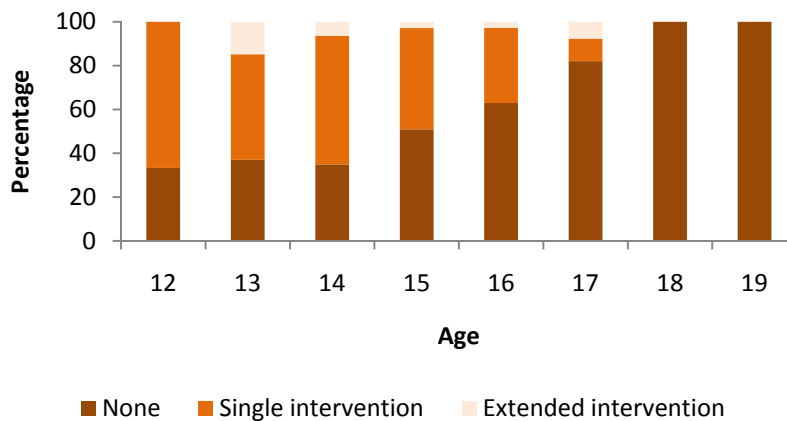
Intervention received

Type of intervention received through Response is recorded for 355 stops. Key findings showed:

- In over half of these cases (54.9%), no intervention was received. For these cases, one fifth (21.9%) were provided with an information pack instead, 5.6% had incorrect or missing contact details, 3.1% were out of the area, and 0.5% refused or missed an appointment. However, for 38.3% no reason was given and for 30.6% no letter was sent out. The latter because of reasons such as the offence not involving alcohol.

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- For two fifths of stops (40.3%), a single intervention[5] was delivered and for 4.8% an extended intervention[6] was delivered.
- Delivery of an intervention was significantly more likely in the younger categories (p<0.001). However, these figures should be used with caution because of the small numbers involved (for example, fewer than five individuals were aged 12 years).
- Where interventions did occur, individuals received an average (mean) of 1.12 sessions (SD=0.6), ranging from one to six sessions. Again, the mean number of sessions varied significantly according to age with 13 year old stops having the highest number at 1.82 sessions (SD=0.95; p<0.001) but there was no significant difference between gender.

Figure 6: Percentage receiving each intervention type for stops by age at time of stop

Files are closed once an individual involved in a stop has completed their brief intervention, has been referred onto treatment services, an intervention is refused or it is not possible to contact the individual involved. Currently, records from 346 stops are closed (94.5%), seven are pending (1.9%) and 13 are open (3.6%): of the open cases, three have received or will receive a single intervention and 10 have received or will receive an extended intervention. The earliest open case was referred to Response in November 2008.

Referrals resulting from police arrests

In total, 160 (75.4%) of the arrests involved a young male and 52 (24.2%) involved a female (for three individuals (1.4%), gender was unknown[7]). Age at the time of arrest was available for all arrest records. The mean age at the time of the arrest was 16.0 years (standard deviation (SD) of 1.1 years). As with stops, the mean of female arrests was significantly younger (mean age of 15.7 years; SD=1.3) than for male arrests (16.1 years; SD=1.1; p<0.05). Figure 7 provides a breakdown of age versus gender. Details of race or ethnicity were not available for arrests. Home towns of individuals involved were available for 203 arrests. Almost a third (31.1%) of those arrested were from Birkenhead, followed by 24.9% from Wallasey. A small proportion (2.6%) were from outside the Wirral.

Details of the arrest

Over three quarters (78.6%) of the arrests made were for drunk and disorderly offences, but other offences included breach of peace (5.1%) and public order (5.1%) offences. The highest number of arrests was made in August 2008 (34; 15.8% of arrests made) but arrests were generally spread across the time period (August 2008 to March 2009; see Figure 8).

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[5] Single interventions delivered through YPAIP include structured advice lasting a few minutes at the most. This can occur either over the phone or face-to-face (Wilson 2009).
[6] Extended interventions delivered through YPAIP are structured therapies lasting 20 to 30 minutes, and may involve more than one session (Wilson 2009.
[7] Unknown gender refers to those stops where the gender by Response and the police differed whilst all other variables remained the same. It was therefore presumed that the individual had been correctly matched but that gender had been incorrectly entered in one of the datasets.

The town where offences occurred was available for 213 arrests. Similar to the most common place of residence, over a third of offences (35.2%) occurred in Birkenhead and a quarter (24.9%) in Wallasey. For half (51.2%) of arrests, individuals offended in the towns in which they lived.

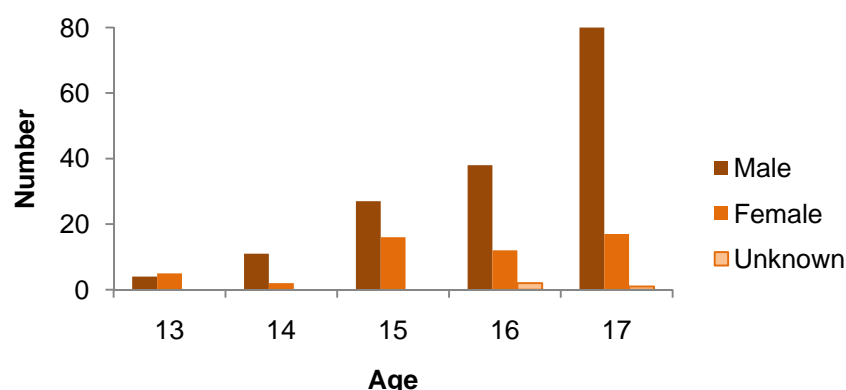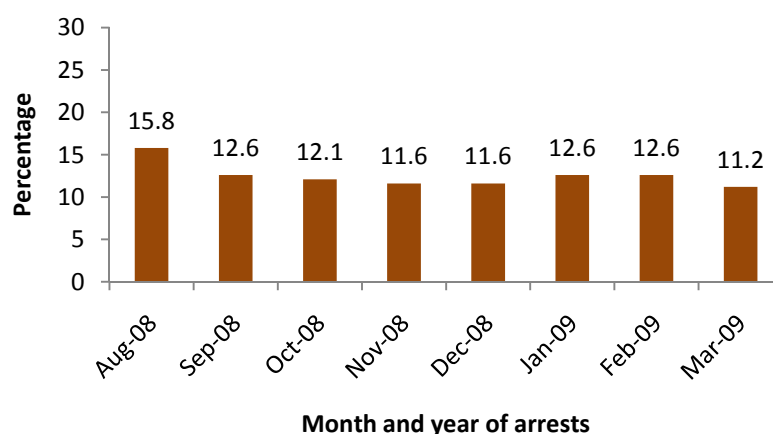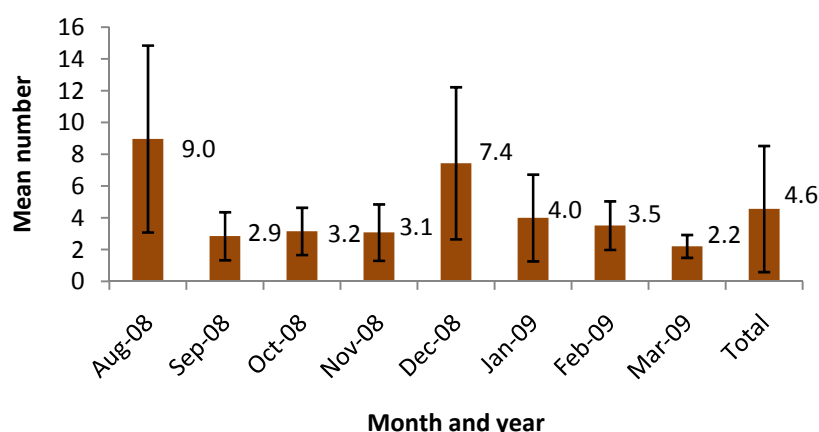**Figure 7: Number of police arrests by age and gender**

Figure 8: Percentage of arrests occurring by month and year

Timings between arrests and referral

For four individuals, the date of referral apparently preceeded the date of arrest by one day or the values entered were erroneous (where the dates entered were from 1998, before the programme started) bringing the sample for this section to 211. There was a mean number of 4.6 days (SD=4.0) between arrest and the referral being received. However, these varied significantly according to the month of arrest ($p < 0.001$; Figure 9). There are two peaks in the mean number of days: firstly when the programme first started in August 2008 (mean number of days: 9.0; SD=4.8) and secondly in December 2008 (mean number of days: 7.4; SD=4.3). As with stops, any delays identified may have been due to key personnel being on leave or on training days.
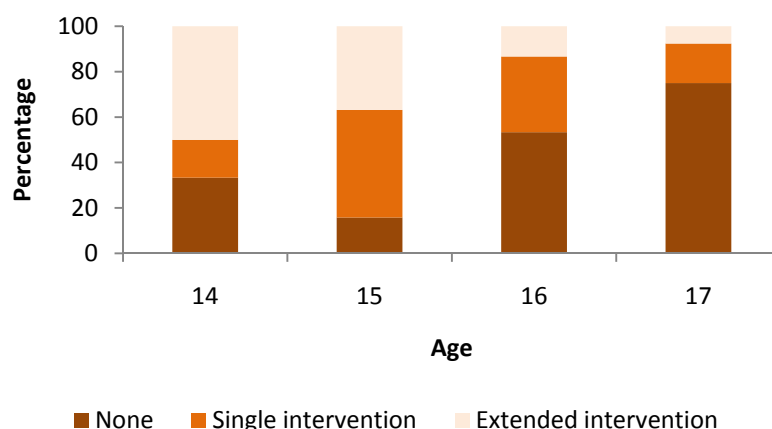
Intervention type

Type of intervention received through Response is recorded for 181 arrests:

- In over half of arrests (55.8%), no intervention was received. For these cases, 4.0% had missing or incorrect contact details, 4.0% refused or missed an appointment, 5.6% had incorrect or missing, 3.0% were provided with an information pack and 2.0% were out of the area. However, for 87.1% no reason was given.
- For one quarter (27.6%) of arrests, a single intervention was delivered and for 16.6% an extended intervention was delivered.
- Intervention type varied significantly by age, with younger individuals being more likely to receive an extended intervention (P<0.001; Figure 10). However, these figures should be used with caution because of the small numbers involved (for example, fewer than six individuals were aged 14 years).
- Where interventions did occur, individuals received an average (mean) of 1.72 sessions (SD=1.9), ranging from one to twelve sessions. The mean number of sessions varied significantly by gender as the mean number of sessions for females (2.45; SD=0.9) was nearly twice that of males (1.25; SD=0.2; P<0.01). However, there was no significant differences between age groups.

Figure 10: Intervention type for arrests by age at time of arrest

Files are closed once an individual involved in an arrest has completed their brief intervention, has been referred onto treatment services, an intervention is refused or it is not possible to make contact. Currently, records from 159 arrests are closed (79.5%), 18 are pending (8.4%) and 23 are open (10.7%). The open cases have received or will receive either a single intervention or extended intervention. The earliest open case was referred to Response in August 2008.
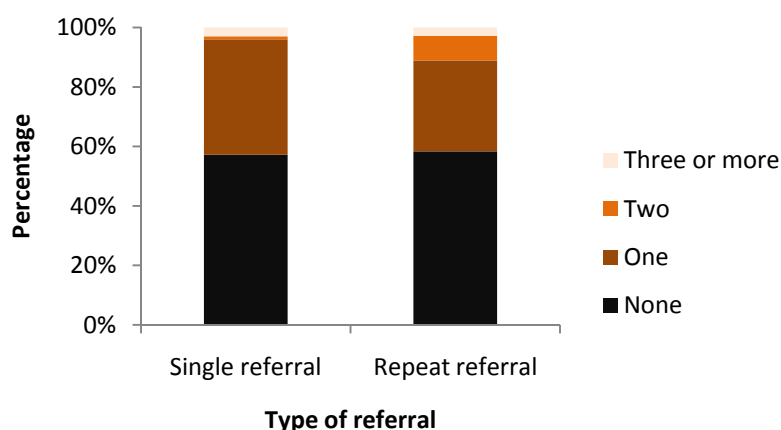
Comparing arrests with stops

When comparing records from stops with those from arrests, key differences included:

- Arrests were significantly more likely to involve males than stops. Almost three quarters of arrests (71.7%) involved a male compared with 63.0% of stops (p<0.05).
- The mean age at stop (15.2 years; SD=1.2) was significantly younger mean than at arrest (16.0 years; SD=1.1; p<0.001).
- Stops are significantly more likely to occur in the individual's home town (60.4%) than the offences leading to arrest (51.2%; p<0.05).
- The mean number of days from stop to referral received is 13.8 (SD=10.9), three times higher than the mean number of days between arrest and referral (4.6; SD=4.0; p<0.001).
- Whilst the proportions receiving no interventions from Response were very similar between referrals achieved through stops and those through arrests (54.9% and 55.8% respectively), where sessions did occur, the mean number of sessions was significantly higher for arrests (1.72; SD 1.9) than for stops (1.12; SD=0.6; p<0.001).

Repeat referrals

There are no significant differences between those who have to date only been referred once and those who have been referred more than once (repeat referrals). However, this may be due to missing data as outlined in the methodology. Further, there is no difference in terms of the intervention received from Response (none, single or extended). However, of those who receive at least one session, repeat referrals (on the latest record for their referral, where available) are significantly more likely to have two delivered compared with those who have only been referred once (p<0.01; Figure 11). The proportion receiving three or more sessions then increased for single referrals. Those who received no intervention include those for whom Response were unable to contact and those who refused an intervention. Caution should be used when interpreting these data as the numbers involved are small (only 14 repeat referrals overall had received one or more interventions).

Figure 11: The number of sessions received on the latest referral for single and repeat referrals*

Summary and recommendations

Key findings from the referrals resulting from stops

- Almost two thirds (63.0%) of referrals resulting from stops involved a young male. Their age ranged from 12 to 19, with an average age of 15.2 years. Females were more likely to be younger than males (14.6 compared with 15.6 years). A quarter (23.2%) of those stopped were from Birkenhead, followed by 15.3% from Wallasey and 14.2% from Upton.
- The highest number of stops occurred in October 2008 and January 2009, with three fifths of stops occurring between 20:00 and 21:59 (where such information was available).
- Although Birkenhead was the most common place of residence, the highest number of stops occurred in Upton (21.6%), Birkenhead (15.6%) and Wallasey (14.2%). Street names were the most common location provided, followed by open spaces (the latter

being significantly more common amongst females). Three fifths of stops (60.4%) occurred in the individual's home town.

- On average, there were 13.8 days between a stop and a referral being received by Response but the number of days varied widely. In general, the number of days declined over the period of the intervention. However, there was a peak in December 2008. This may have been due to factors such as leave being taken by those involved at that time.

- In over half of cases (54.9%), no intervention was received through Response. This not only includes those who refused an intervention but also those who could not be contacted (for example, due to incorrect contact details being provided). For two fifths (40.3%), a single intervention was delivered and for 4.8% an extended intervention was delivered.

Key findings from the referrals resulting from arrests

- Three quarters (75.4%) of the arrests involved a young male, a significantly higher proportion than those referrals achieved through stops. Age ranged from 13 to 17, with an average age of 16.0 years (with these individuals being significantly more likely to be older than those referrals achieved through stops). As with the stops data, females were more likely to be younger than males (15.7 compared with 16.1 years). Almost a third (31.1%) of those arrested were from Birkenhead, followed by 24.9% from Wallasey.

- The highest number of arrests leading to a referral occurred in August 2008 but arrests were generally evenly spread between August 2008 and March 2009.

- Similar to the most common place of residence, the highest number of arrests occurred in Birkenhead (35.2%) and Wallasey (24.9%). Half of those involved (51.2%) offended in the towns in which they lived.

- There was a mean number of 4.6 days between arrest and referral received, significantly fewer than for stops. There were two peaks in the number of days, one when the intervention first started and the second in December (a similar pattern to the stops).

- As with stops, in over half of cases (55.8%), no intervention was received through Response. This not only includes those who refused an intervention but also those who could not be contacted (for example, due to incorrect contact details being provided). For one quarter (27.6%), a single intervention was delivered and for 16.6% an extended intervention was delivered. Referrals resulting from an arrest were more likely to result in a higher number of sessions.

Recommendations for the future

- To consider the use of a shared database between the Police and Response to accurately link individuals' progress and to ensure no young people are lost within the system. Ideally, this would link data collected relating to stops and arrests. This would enable more accurate monitoring of repeat referrals. Alternatively a shared coding system could be used to link the data records.

- To improve reporting of the actual time of incidents so that resources can be adequately allocated.

- To consider more comprehensive recording of the details surrounding attempts made to contact young people within the database. This could include, for example, more accurate recording of the reasons for non-intervention and the number of phone calls made to try to establish contact. Whilst this information is currently recorded on paper, it may be useful to consider transferring the information to the database if such information is to be analysed further.

- To assess ways in which the number of days between stops and referral being received can be reduced to being more in line with the number of days for arrest referrals.

- To consider how resources can be effectively deployed over period such as Christmas to reduce the number of days until a referral is received.

- To assess how Response's possible future involvement in the police operations themselves will contribute to a reduction in time between police contact and referral, and the delivery of brief interventions.

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