Cambridgeshire Integrated Offender Management Scheme

Performance Report: September 2012 cohort

June 2013

Executive Summary

The aim of the report was to answer two questions
1. What were the initial performance results for the first cohort of the Integrated Offender Management scheme (IOM) offenders using the new performance framework
2. What were the limitations of the methodology and areas for improvement

This report answers both those questions in full. The document is broken down into two parts for the ease of the reader.

Key findings – Performance measures

This report examines convictions for a cohort of offenders on the Integrated Offender Management (IOM) scheme in a specified monitoring period, and compares them with a baseline period.

Overall the measures indicate a reduction in offending in the monitoring period for this cohort of offenders. 73% reduced both the rate and severity of offending. 6% of offenders reduced either their rate or their severity of offending but not both. A reduction in offending for the entire cohort at the same point in time is unlikely, as with all schemes of this type.

The three measures examined revealed that for the cohort
1. Twenty-four members (47%) did not re-offend during the six month sampling period
2. Thirty-nine members (76%) demonstrated a reduction in their rate of offending
3. Forty-one members (80%) showed a reduction in their severity score

Key Findings - Methodology

Collecting the data every six months was time consuming and could be more effectively carried out.

The changes adopted during this trial achieved a more robust methodology. For example, extending the baseline period from one to four years gave a more accurate picture of individuals offending history. Also agreement to include of more detailed offending within the monitoring period produced a more accurate reflection of ongoing offending.

Concerns still exist about the length of the monitoring period, and whether a significant number of offenders could be missed from all performance analysis.

Recommendations

The data collection should be part of the running of the scheme itself, as collecting in batches is time consuming.

The analysis and performance reports should remain on a sixth monthly cycle until such time as a full review of the scheme to undertaken.

The good performance of this cohort should be disseminated throughout the Partnerships in the County.

Further analysis factoring in length of time on the scheme and the level of engagement with the scheme might provide greater understanding on effectiveness.

In relation to the methodology a full set of recommendations are contained with section 4.3. In brief;

- Data collection of convictions by crime category/ type – agreement between Peterborough and Cambridgeshire should be reached to enable cohesive reporting.

- Theft and handling offences should be included in all monitoring data collection

- Although Cambridgeshire and Peterborough worked together to produce analysis, separate reports were provided. A joint report for Cambridgeshire and Peterborough would provide a better overview of the entire scheme.

- The concern exists that the monitoring period is too short to account for offending frequency.

- An additional review of those 9 individuals who have shown an increase in both offending rate and severity should be conducted to understand this change.

1. Introduction
The Research and Performance team, Cambridgeshire County Council was commissioned to produce the first Integrated Offender Management performance report under the new agreed performance framework. Five measures were agreed within the framework, however only the first three are reported within this document.

The purpose of this paper is twofold. Firstly, it provides an initial report on the performance measures to the Integrated Offender Management (IOM) strategic group and the Community Safety Partnerships. Secondly, tests the methodology of the performance framework and provide feedback as to the resources required to continue to produce this document and recommendations for improvement in the future.

This report excludes the Peterborough data at this time. In the production of this report there has been close working between the two authorities. A joint methodology for data collection has been agreed. Currently a separate report is available for the Peterborough cohort.

2.1 Methodology
On the 1st working day of September 2012 a monitoring cohort of individuals who were living in the community on that date, was selected from all offenders on the IOM scheme. The proven offending behaviour, as measured by convictions, was used to assess the performance of the scheme. There were three key questions included within this section:

- **Measure 1 – Do they offend during the six months monitoring period?**
- **Measure 2 – Has there been a reduction in the frequency of their offending?**
- **Measure 3 - Has there been a reduction in severity of offending?**

An additional two measures were agreed as indicators of the effectiveness of the IOM pathways away from offending;

- **Measure 4 – Average score per pathway (from the social functioning outcome tool)**
- **Measure 5 – Average change per offender – i.e. the percentage of those who have improved.**

Measures 4 and 5, are not covered in this analysis. The baseline data was not available from the administrators of the scheme at the time of writing.

The IOM coordinator provided the cohort – those that were in the community on 1st September 2012 – to the Research & Performance team. Colleagues from Cambridgeshire Constabulary Central Intelligence Bureau secured a print from the police national computer (PNC) for the entire cohort. Baseline and the follow-up 2012 monitoring period data were collected from the PNC prints. Further conviction data was collected to provide a profile of the cohort. Baseline data covered convictions obtained in the four year period prior to their adoption on the scheme. For a small number of individuals their offending history prior to the scheme was shorter.

The baseline data were used to calculate a '6 month' offending rate for each individual. A comparison could then be made with the 2012 monitoring period. The

2012 monitoring period was from 1st September 2012 to 28th February 2013. All offences excluding breeches were recorded by crime category.

Quality checks were carried out on a random subset of the monitoring cohort to ensure the accuracy of the data extraction. Analysis was carried out in Excel to profile the cohort, to answer the performance measures, and additional analysis was conducted to provide district information and context and great understanding of the measures.

Using an adapted Youth Justice Board[1] seriousness score for severity each offender was given an adjusted baseline score and 2012 monitoring period score which was used to calculate any change in the severity of offending. This score was higher for serious offences such as serious violence, dwelling burglary and robbery and lower for theft, criminal damage and less serious violence (See appendix 1 for full list). This methodology was used as it was based on a robust national score and provided a simple and easily applied approach to the available data.

3. Analysis Findings

3.1 Cohort overview
The cohort used for this monitoring consisted of 51 eligible Cambridgeshire (excluding Peterborough) offenders, all of whom were living in the community on the 1st of September 2012. The average age was 30 years; and the majority (88%) were male.

The average number of months between first and last convictions within this cohort was 165 months (nearly 14 years), with 377 months (31 years) being the longest duration and 8 months being the shortest.

The average amount of time from adoption date of this cohort, up to 1st March 2013 is 20 months (611 days), with 85 months (2586 days) the longest time and 7 months (207 days) the shortest (see Figure1).

This cohort had an average of 26 convictions, with 71 being the most; and 3 the least. Offences recorded on PNC amounted to 3380 for all 51 offenders, with an average of 66 offences, a maximum of 193, and a minimum of 10.

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[1] http://www.justice.gov.uk/youth-justice/assessment/asset-young-offender-assessment-profile

Figure 1: *Months from adoption to monitoring end date (01/03/2013) for Cambridgeshire IOM September 2012 cohort*
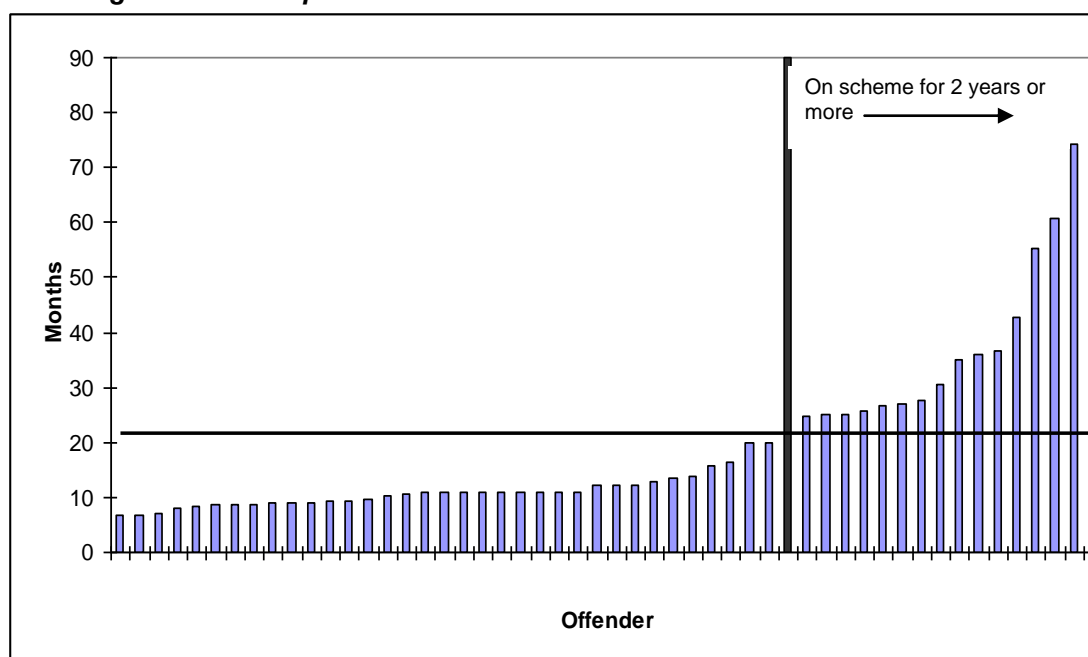
District Breakdown

Within Cambridgeshire there are five Community Safety Partnerships, each has set its own priorities to tackle. The matrix for assessing offender's suitability for the scheme reflects the local priorities. Therefore offenders' behaviour and main offence type can vary between districts. The number of offenders on the scheme at any one time from each district fluctuates. Below is a breakdown of the area of residence.

Table 1: Number of offenders within the cohort by area of residence

District	Cambridge city	East Cambs	Fenland	Huntingdonshire	South cambs	Grand Total
Total	11	6	11	18	5	51

Detailed analysis at district level is not appropriate due to the small numbers. However, Table 2 provides a guide as to the proportion of offences by offence type for each district for the baseline period. The data shows as expected a high proportion of serious acquisitive crime (SAC) and theft and handling offences in each district. As previously stated there are variations between districts based on priorities and offender behaviors.

Table 2: Proportion of offences committed by offenders broken down by district of residence.

District	Cambridge City	East Cambs	Fenland	Huntingdonshire	South Cambs	Grand Total
SAC offences	20%	16%	22%	22%	11%	19%
Violent Crime	10%	7%	8%	19%	14%	13%
Criminal Damage	2%	6%	5%	12%	8%	7%
Theft	47%	38%	26%	25%	56%	37%
Drug offences	10%	12%	8%	3%	5%	7%
Other	11%	21%	30%	19%	6%	17%
All	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

3.2 Performance Measures

Measure 1 – Do they offend during the six months monitoring period?

Twenty-four members of the cohort (47%) did not re-offend during the six month sampling period and 27 members (53%) did.

Note: Ten members of the cohort (20%) have not re-offended since their adoption compared with 41 (80%) who did. Of these ten, the duration since their adoption to the monitoring date ranged from 8.4 months (256 days) to 12.2 months (372 days).

This raises some important questions in how does offending behaviour change, what are the most important times/ factors. 1: Offenders are more sensitive to the influence of IOM in the first six months 2: whether it is something about what IOM do in the first six or so months; or 3: are these offenders early career offenders that are more susceptible to the influence of IOM.

Measure 2 – Has there been a reduction in the frequency of their offending, comparing the adjusted baseline period to the monitoring period?

Thirty-nine members of the sample (76%) demonstrated a reduction in their rate of offending, Two members showed no change, ten exhibited an increase (see figure 2).

There was an average reduction across the cohort of 0.5 offences/6 months, during the 2012 monitoring period when compared to the baseline period.

For those that offending decreased, the average rate of their offences for the baseline period was 2.0 offences/6months which decreased to 0.7 offences/6months. An average decrease of 1.3 offences/ 6months per offender.

For those that offending increased within the sampling period the average rate of offending in the baseline period was 1.4 offences/6 months and this increased to 3.8 offences/ 6 months. An average increase of 2.4 offences / 6 months.

Comparing the two groups we see that the group whose rate increased actually started with lower rates than the group that decreased.

Figure 2*: Rate of offending per offender in the baseline and 2012 monitoring period*
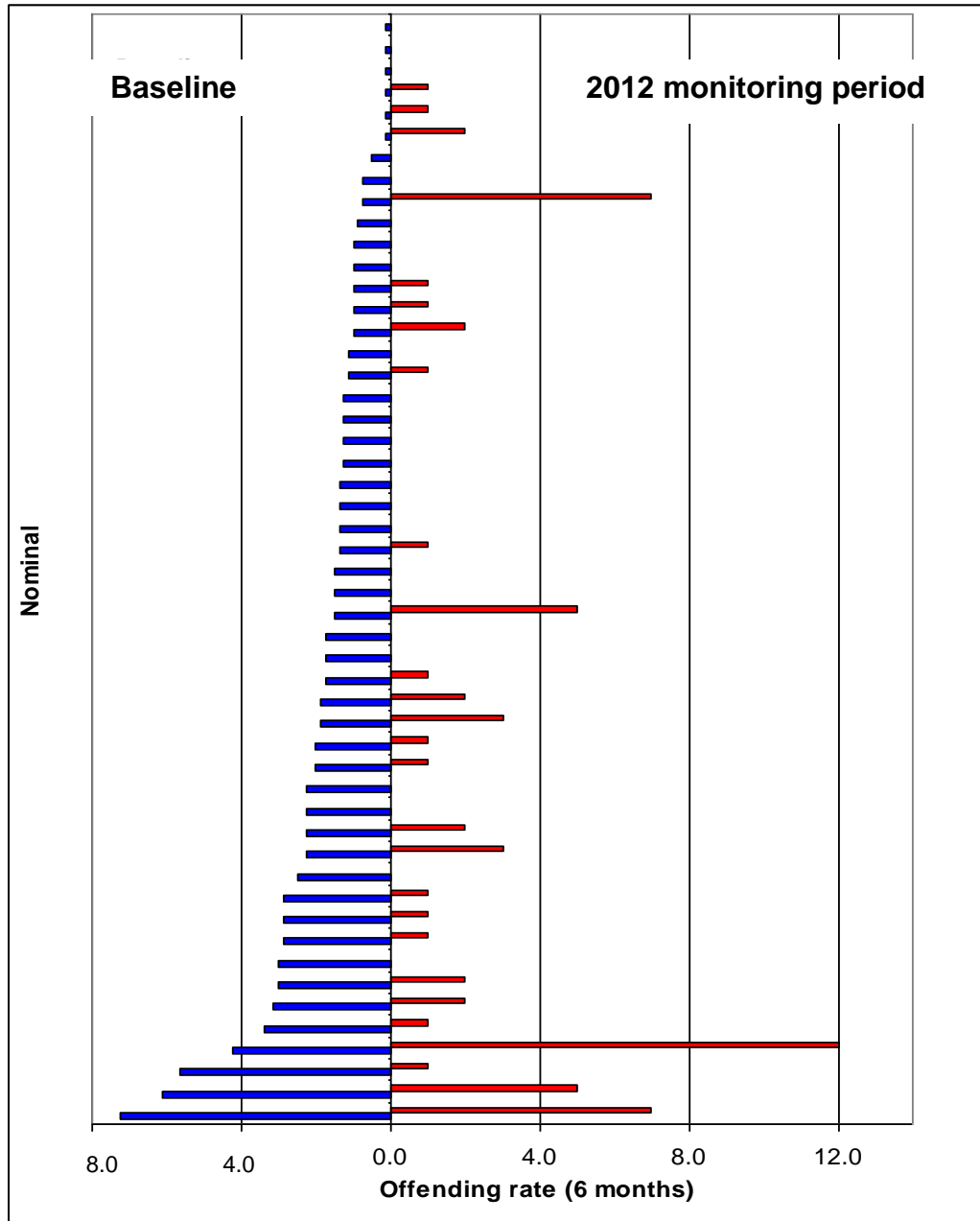

Measure 3 - Has there been a reduction in severity of offending, comparing the adjusted baseline period to the monitoring period?

Using an adapted Youth Justice Board score for severity each offender was given an adjusted baseline score and 2012 monitoring period score which was used to calculate any change in the severity of offending. This score was higher for serious offences such as serious violence, dwelling burglary and robbery and lower for theft, criminal damage and less serious violence (See appendix 1 for full list). This methodology was used as it was based on a robust national score and provided a simple and easily applied approach to the available data.

Figure 3: Severity score for offences in the baseline and 2012 monitoring period
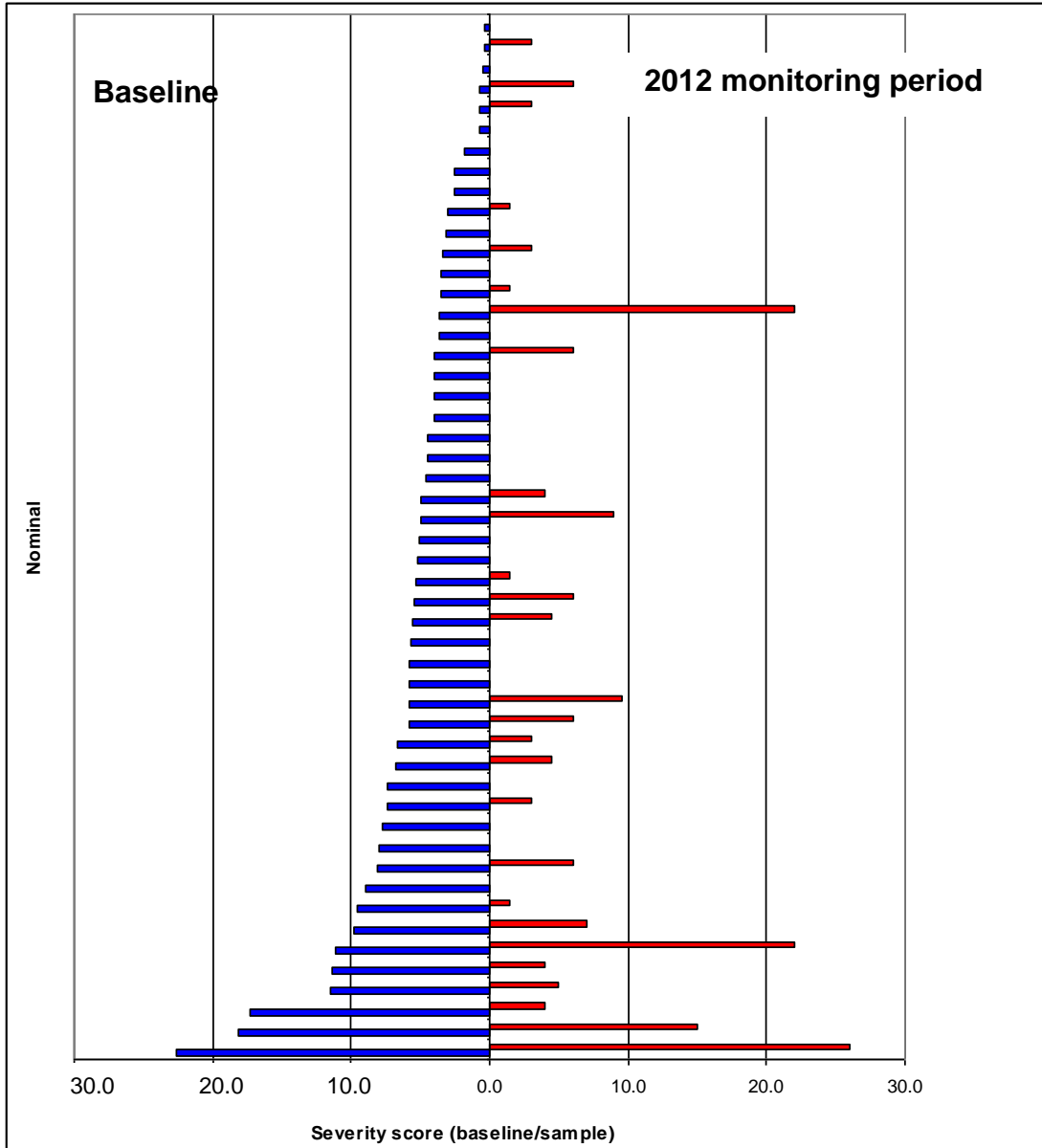
Table 3: Rate of offences committed in the baseline period and the 2012 monitoring period by offence type

Offences	Baseline rate (6months adjusted)	2012 monitoring period
SAC offences	18.1	6.0
Violent Crime	12.4	5.0
Sexual Crime	0.0	0.0
Criminal Damage	7.0	4.0
Theft	34.6	27.0
Drug offences	6.4	1.0
Other	16.3	25.0

The average severity score during the baseline period was 5.4 (6 month standardized) with the maximum severity score was 22.25 and the minimum was 0.4.

The average severity score during the monitoring period was 2.9, therefore the average severity score across all offenders reduced by 46% between the baseline and the monitoring period.

The severity score increased for nine individuals (17.6%) from the baseline, one individual showed no change and the remaining 41 (80%) showed a reduction. (ranging from 0.3 to 12.4 points).

What is interesting to note, is that not all offenders have a predominantly acquisitive crime offending history. However, the scheme was initially designed to tackle the offending behaviour of prolific acquisitive criminals. This may be due to the fact that the matrix for inclusion onto the scheme includes data other than proven offending through conviction data. It would be worth further investigation to establish how effective the scheme is for offenders who predominantly commit non-acquisitive crime. (see table 4)

Table 4: Number of offenders that had a predominance of acquisitive crimes, or 'other' crimes on their conviction record.

Period	Predominant crime type committed by offender	
	All Acquisitive	*'Other'*
Baseline	27	24
Monitoring	36	15

Notes:
1. Severity was not accounted for
2. All acquisitive crime in this table includes theft and handling

3.3 Summary

Based on the above methodology;

- 37 of the 51 (73%) showed a reduction in both offending rates and severity score when compared to the baseline period.
- 9 of the 51 (18%) showed an increase in both offending rates and severity score.
- 2 of the 51 (4%) showed a decrease in offending rate, but an increase in severity score
- 1 of the 51 (2%) showed an increase in offending rate, but a decrease in severity score.

(These numbers add up to 49 instead of 51 because two offenders showed no change in one or other of the indicators).

4. Performance Framework
The Research and Performance team estimate that it has taken 10 working days to produce the report. This includes the historical data collection for the baseline, data collection for the 2012 monitoring period, analysis and completion of the report. This represents only the time taken for the Cambridgeshire cohort and not the entire IOM cohort.

4.1 Methodology issues

The following is a list of caveats/issues that need to be taken into account when designing the indicators. They may have an impact on the robustness of the analysis and report. Where possible, steps were taken to mitigate the impact.

Selection of cohort
- The lengths of time offenders have been on the scheme varied. This might impact their offending behaviour. This is not taken into account in the analysis.
- There is a possibility that by only using a sample cohort that are living in the community at specified dates that some offenders on the scheme may never be included in any monitoring period. The risk with this is, monitoring shows the effectiveness of the IOM only for offenders for which it is working and not the overall effectiveness of the scheme. This could not be tackled within this first analysis but future reports should check for this. These individuals could be included in a separate analysis at a later date.

Baseline data
- All baseline data needed collecting for the analysis as it did not appear to have been recorded systematically by the administrators of the scheme.
- The baseline was redefined at the beginning of the data collection process after a trial identified that one year was too short a period of time to access offending behaviour for prolific offenders that spend time in custody. Therefore the baseline period was extended to include all convictions in the four years prior to the adoption onto the scheme were included.

Monitoring periods
- There are two concerns regarding the statistical sensitivity of the monitoring period.
  - The monitoring period of six months may be too short to account for offending frequency.
  - Examining only some of offenders, and limiting cohort size, may not provide a representative sample.
- Further a concern had been raised that individuals within the 2012 cohort might spend a significant amount of time in prison during the monitoring period. Review of the cohort revealed that for those individuals who were convicted within the 2012 monitoring period, the sentence did not significantly affect the overall findings for the group.

Calculation of severity
- Agreement had not been reached in the performance framework as to the severity score. It had been suggested that the 3PLEM model be used. Upon investigation this model did not seem the best fit for the purpose of this report, or the timescales that the reported needed to be completed by. Subsequently, the Youth Justice Board score (outlined above) was informally agreed.
- Breeches were not included in the analysis for either baseline data or the follow-up 2012 monitoring period.
- Overall severity is calculated using a score of 1.5 for 'other' offences. 'Other' offences include public order offences, driving offences and other more minor offences that do not fall into the other categories. This is an average score applied to all recorded 'other' offences in both periods (baseline and 2012 monitoring). As the proportion of 'other' offences within the 2012 monitoring period increased compared to the baseline it was felt to be the most appropriate way to calculate severity.

Unknown offending
- Proven offending/ re-offending does not take into consideration any offending that has not have received a conviction, but might have been committed.

General issues
- There is no comparison or control group to compare the reduction of offending for IOM clients. This was outside of the scope of this report, but might have provided a valuable insight into the relative effectiveness of this scheme compared to other initiatives or no intervention.
- There has been recognition that a balance between robust analysis and what is practical needs to be reached.

4.2 Resource implications

Currently it is unclear who will take this work forward in the future. The Research and Performance team do not have a current service level agreement that includes this work. Further there are more appropriate ways of collecting the data. Peterborough CSP currently collects some of this data in house within their IOM team. For Cambridgeshire offenders this is not currently done for either the baseline or ongoing performance data.

4.3 Recommendations

The following are list of recommendations for discussion about how best to take the IOM performance monitoring forward.

- Data collection can be time consuming particularly in batches. It would be more time efficient to collect the information on a continual basis. Suggestions for the future would be:
  - Data collection on a monthly basis for all members of scheme by the IOM team. This would also enable the performance report to be completed in a more timely fashion.
  - Data collection of convictions by crime category/ type – agreement between Peterborough and Cambridgeshire should be reached to enable cohesive reporting.
  - Theft and handling offences should be included in all monitoring data collection
- Monitoring period –The concern exists that the monitoring period is too short to account for offending frequency. A review of the frequency of court appearance dates could be conducted; this may provide a more appropriate time period for the monitoring to be based upon, this would improving statistical sensitivity and would allow a more robust analysis to be carried out.
- Although Cambridgeshire and Peterborough worked together to produce analysis, separate reports were provided. A joint report for Cambridgeshire and Peterborough would provide a better overview of the entire scheme.
- Once a methodology has been agreed following discussion of this report, the IOM teams can take on their own ongoing performance reporting.
- An additional review of those 9 individuals who have shown an increase in both offending rate and severity should be conducted to understand this change. Monitoring of this sort in the future might enable more robust challenge of individuals who do not appear to be improving whilst on the scheme.

Appendix 1: Adapted severity score based on Youth Justice Board[2]

Type	Score of seriousness*	Comments
SAC offences		
Dwelling Burglary	6	
Distraction burglary	6	
Commercial Burglary	4	
Personal Robbery	6	
Commercial Robbery	6	
Vehicle Crime	4	most theft of is 4, aggravated add 1
Violent Crime		Racial aggravated add 1
Homicide	8	
Most serious violence	7	GBH, ABH, wounding with intent
Assaults less serious	4	Assault, battery
Sexual Crime		
Serious sexual Offences	8	
other sexual offences	5	
Criminal Damage		
Criminal Damage (excl arson)	2	
Arson	5	endangering life add 1
Theft		
Shoplifting	3	
Theft of pedal cycle	3	
Theft and handling	3	
Drug offences		
Supply	5	
Possession	3	
Other	1.5	Mainly Public order and Driving offences

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[2] Based on ACPO scale

About the Cambridgeshire County Council Research and Performance Team

The Research and Performance Team is the central research and information section of Cambridgeshire County Council. We use a variety of information about the people and economy of Cambridgeshire to help plan services for the county. The Research and Performance Team also supports a range of other partner agencies and partnerships.

Subjects covered by the Research and Performance Team include:

- Consultations and Surveys
- Crime and Community Safety
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- Data Visualisation
- Economy and The Labour Market
- Health
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