Department of Justice

Problem Solving Justice - The Economic Impact of Enhanced Combination Orders (ECOs)

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Ulster University Economic Policy Centre

Gareth Hetherington, Katie Victor & Andrew Park
Table of Contents

1. Introduction ........................................................................................................................................3
   1.1 Background ..................................................................................................................................3
   1.2 The Context of Problem-Solving Justice ....................................................................................3
   1.3 The Background of ECOs ...........................................................................................................5
   1.4 Purpose of the economic impact assessment of ECOs ...............................................................6
2. Methodology ........................................................................................................................................7
3. Literature review .................................................................................................................................9
4. The Quantitative Economic Impact ...............................................................................................12
   4.1 Costs ..........................................................................................................................................12
       Unit cost of an ECO ......................................................................................................................12
       Unit cost of a short-term custodial sentence .................................................................................13
       Cost of an ECO roll-out ...............................................................................................................13
       Summary: costs and volumes ......................................................................................................15
   4.2 Benefits ......................................................................................................................................16
       Impact on re-offending rates ........................................................................................................16
       The reduced cost of crime ...........................................................................................................17
       The value of (unpaid) Community Service ................................................................................19
       The fiscal impact of ECOs ...........................................................................................................20
       Summary of benefits ....................................................................................................................23
   4.3 Net Economic Benefit ................................................................................................................23
5. The Qualitative Impacts ...................................................................................................................24
   5.1 Breaking the cycle of reoffending ...............................................................................................24
   5.2 Intergenerational effects .............................................................................................................25
   5.3 Impacts on offenders’ families and children ..............................................................................26
   5.4 Improved wellbeing in communities and society .....................................................................28
   5.5 Other factors to consider in ECO rollout ..................................................................................29
6. Conclusions ........................................................................................................................................31
Annex A: Literature review findings .................................................................................................32
Problem Solving Justice – ECOs
Economic Impact Assessment

1. Introduction

1.1 Background

1. The Ulster University Economic Policy Centre (UUEPC) met with senior staff from the Department of Justice (DoJ) in May 2017 to discuss ways in which the UUEPC could bring an economic perspective to the work of the Department.

2. At that time, DoJ was developing five Problem-Solving Justice pilot projects across Northern Ireland (NI), in order to address the root cause of offending behaviour and reduce harmful behaviour\(^1\). DoJ was keen to explore ways in which the whole costs and wider economic impact of the five pilots could be assessed as part of the final evaluation of the projects.

3. As part of the UUEPC’s sponsorship agreement with the Department of Finance (DoF), a scoping study was completed in November 2017. This investigated the feasibility of undertaking economic impact assessments of the five Problem-Solving Justice pilot programmes.

4. The scoping study determined that an economic impact assessment could only be completed on the Enhanced Combination Orders (ECOs) pilot at this time. It was identified that extending the scope to the other pilots would not be possible due to data limitations\(^2\).

1.2 The Context of Problem-Solving Justice

5. The draft Programme for Government 2016-2021\(^3\) (henceforth referred to as PfG) marks a step-change in policy-making, away from a focus on outputs and what the Government produces, towards outcomes and the effect on citizens of Government interventions.

6. Within PfG, DoJ was tasked with leading on delivery of Outcome 7 (*We have a safe community where we respect the law and each other*). Key issues in addressing this

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\(^1\) NI Direct, *Problem Solving Justice NI*. Available from [www.nidirect.gov.uk](http://www.nidirect.gov.uk)

\(^2\) PBNI / NISRA published an evaluation in December 2017 of the first 18 months of the pilot; this is available from [www.pbni.org.uk](http://www.pbni.org.uk). It should, however, be noted that (as of November 2018) the ECO is still available for use as a sentencing mechanism within the pilot areas.

\(^3\) The Executive Office (TEO), *Programme for Government Framework – Working Draft*. In the absence of a functioning NI Assembly, TEO published (in June 2018) the *Outcomes Delivery Plan for 2018/19*. This provides further detail on each outcome, how outcomes will be progressed, and how success will be measured. Both documents are available from [www.executiveoffice-ni.gov.uk](http://www.executiveoffice-ni.gov.uk)
outcome are identified as: reducing crime; reducing reoffending; improving the efficiency of the justice system; and promoting reconciliation and respect.

7. DoJ’s Problem-Solving Justice, which aims to identify and tackle underlying factors contributing to offending, underpins the approach to addressing this outcome. This is in contrast to the traditional approach taken by the Criminal Justice System, which typically focused on the consequences, rather than causes, of offending.

8. This preventative approach requires all agencies (PSNI, Courts, Prison Services, Education, Health etc.) and Government Departments to work collaboratively across intervention activity. As such, although the Problem-Solving Justice pilots are diverse in nature, they share the following common features.

- A focus on identification of solutions to the root cause of criminal behaviour, rather than simply on punishment of that behaviour.
- Recognition that such solutions are not solely justice-based and can only be successfully delivered through truly collaborative multi-agency working.
- An effort to reduce the number of victims through change in behaviour of potential offenders, towards becoming productive members of society.

9. ECOs are one of the four Problem-Solving Justice pilots that focus on individuals who have committed offences, in order to reduce their likelihood of reoffending. Consequently, tracking of reoffending rates represents a key indicator of success for this outcome.

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5 The other three Problem-Solving Justice Initiatives that focus on reoffending are: Substance Misuse Courts (SMCs); Family Drug and Alcohol Courts (FDACs); and the Domestic Violence Perpetrator Programme. The fifth pilot project is Support Hubs, which are designed to help vulnerable people access the right support, at the right time, from the right organisation in their area to help prevent them from becoming involved in criminal activities.
As of January 2019, these pilots are at various stages of implementation and completion.
1.3 The Background of ECOs

10. As at May 2015, 88% of prison sentences were for 12 months or less\(^6\). Evidence would indicate that short custodial sentences are less effective than community sentences in addressing offending behaviours and have relatively high rates of reoffending; for example, amongst the 2015/16 cohort, reoffending for those sentenced to a short prison term was found to be almost 54%\(^7\).

11. An ECO represents an alternative to a short prison sentence\(^8\), operated through the Probation Board (PBNI) as a sentencing option for judges in pilot areas\(^9\). The focus of ECOs is on rehabilitation, reparation and restorative practice and desistance, in addition to addressing any confounding issues the offenders may have\(^10\).

12. An ECO requires offenders to have contact with Probation Officers in order to review compliance, with supervision usually lasting between 12 months to 3 years\(^11\). As part of the restorative approach, offenders are also required to:
   - complete unpaid work within local communities;
   - participate in victim-focused work (and a restorative intervention if possible);
   - undergo psychological assessment and any resulting treatment intervention; and
   - undertake intensive Probation Officer-led, offending-focused work\(^12\).

13. This multi-disciplinary approach and personal plan for each offender, with support services, is a key distinguishing factor of the ECO, as compared to a traditional Combination Order. Further, PSNI has worked closely with PBNI and the courts to ensure appropriate uptake of ECOs within the pilot areas.

14. Pilots began in October 2015\(^13\) and, to May 2017, 156 ECOs had been issued, 118 of which were issued between October 2015 and December 2016.

15. In December 2017, an independent evaluation of the ECO pilot programme was published, covering the first 18 months of operation to March 2017. This evaluation,

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\(^7\) Data supplied by NISRA / DoJ.

\(^8\) This is defined as a prison sentence of 12 months or less.

\(^9\) The two pilot court divisions were: Ards; and Armagh & South Down.


\(^11\) Technical notes on ECOs provided by DoJ.

\(^12\) PBNI / NISRA, *Evaluation of the Enhanced Combination Order Pilot*. Available from [www.pbn.org.uk](http://www.pbn.org.uk)

\(^13\) As of January 2019, ECOs remain available as a sentencing mechanism in the pilot areas.
in addition to the consultations undertaken, points to an improvement in outcomes for victims, offenders and the community\textsuperscript{14}.

16. The evaluation considered aspects of the ECO operation (e.g. lengths of Orders and Community Service Sentences) and outcomes (e.g. on reoffending) and, as such, compiled a significant dataset, which has been used to inform this study on the economic impact of ECOs.

1.4 Purpose of the economic impact assessment of ECOs

17. The aim of this economic impact study on the ECOs pilot programme is to quantify both the economic costs and benefits and, thus, the programme’s \textit{net economic impact}.

18. This study will also consider a wide range of additional factors, including the impact on the victim and changes in behaviour of the perpetrator, using reoffending rates and other outcome variables. As such, this study will also consider the wider implications of the programme on NI.

\textsuperscript{14}PBNI / NISRA, \textit{Evaluation of the Enhanced Combination Order Pilot}. Available from \url{www.pbni.org.uk}
2. Methodology

1. This section sets out an overview of the methodology the UUEPC has used to undertake the economic impact study of the ECO pilot programme, which has been running in the two court areas of Armagh & South Down and Ards since October 2015.

2. The aim of the economic impact assessment is to determine the net economic benefit (positive or negative) associated with implementing the ECO pilot programme. This **net economic impact compares the additional costs associated with the pilot interventions against the benefits achieved through a reduction in crime.**

   - **Costs.** This study considers the costs associated with the running and implementation of the ECO pilot programme and, importantly, the extent to which those costs are additional. Consideration is also given to the extent to which ECOs could be mainstreamed throughout NI and the additional costs of this\(^{15}\) are explored. Further, baseline costs for short-term custodial sentences are reviewed in order to determine the net gains (savings) ECOs represent, over and above the current judicial practice.

   - **Outcome Improvements.** The interim evaluation\(^{16}\) identified that the pilot has delivered improved outcomes in terms of reduced reoffending rates\(^{17}\) for those completing the order. The updated reoffending rate\(^{18}\) is further considered in this

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\(^{15}\) It should be noted that mainstreaming costs presented are high-level estimates for the purpose of this economic impact assessment only; as such, in the event of ECO rollout, further costing work would need to be undertaken by PBNI.


\(^{17}\) The following factors should be considered when interpreting the reoffending rates cited in the interim evaluation of the ECO pilot:

   - Firstly, they are based on a small number of those who completed the ECO at least 6 months prior to March 2017; n=52. As such, this sample may not be representative of the entire cohort.
   - Secondly, the reoffending rate was considered over a period of just six months post-ECO and the comparator was the offending rate for the cohort over the six months prior to ECO sentencing. A period of six months is shorter than the norm, which is usually 12 months.
   - Thirdly, the evaluation notes that three of the 52 offenders in the sample were in custody for the full 6 months prior to their ECO sentence. Consequently, it is not possible to separate the effects of their time in prison from the impact of the ECO, nor is the pre-ECO truly reflective of the baseline offending rate for the cohort.
   - Finally, it is expected that offending across the population group will reduce following conviction for an offence; as such, it may be misleading to state that reoffending was reduced by c.40% where the comparator is pre- and post-sentence. A more appropriate comparator is the reoffending rate for those given short-term custodial sentences, as this would be the pathway for ECO offenders, were ECOs not available.

\(^{18}\) This updated reoffending rate uses a different methodology to that in the original evaluation document and also provides comparison of rates for those completing an ECO with a matched sample of those released from a short-term custodial sentence.
study in relation to the impact on the cost of crime to the wider economy and the resulting net gains.

- **Quantitative benefits.** These will be considered in terms of cost savings and wider economic benefits as follows.

  - **Cost savings** overlap with the outcome improvements and relate specifically to reduced costs of further crime (through reduced reoffending rates) and associated statutory interventions (e.g. police, prisons, courts, probation services, etc.)\(^\text{19}\).

  - **Wider economic benefits** include the value of the Community Service, other placements and reparation-based activity completed during the ECO. In addition, replacing a life of crime with a life of productive activity, through job acquisition, will deliver economic benefits in terms of both additional earnings and net Treasury contributions.

- **Qualitative benefits.** A number of further qualitative benefits are explored in the study, through desk-based research. Such benefits include:

  - breaking the cycle of offending from one generation to the next; and
  - the population having a greater feeling of safety.

\(^{18\text{ cont'd}}\) NISRA / DoJ, *Reoffending analysis for participants sentenced to an Enhanced Combination Order (October 2015 to December 2016)*, Northern Ireland Data Lab Bulletin 36/2018.

\(^{19}\) The potential impact of ECOs on Legal Aid costs is not included in this economic impact assessment as: (1) data are not publicly available for Legal Aid by disposal type; and (2) any effects on total public expenditure on Legal Aid are likely to be marginal at best.
3. Literature review

1. The table below sets out the literature the UUEPC gathered on ECOs and ECO-type programmes from around the world. This literature sets out good practice guidelines in the use of these programmes and highlights the various impacts of such programmes.

Table 1: Summary of literature related to ECOs

<table>
<thead>
<tr>
<th>Disposal Type</th>
<th>% Male</th>
<th>Most common offence types</th>
<th>Reoffending Modal ACE</th>
<th>1-yr rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community Service Order</td>
<td>90</td>
<td>28% violence against the person 19% theft</td>
<td>48% low</td>
<td>23.5%</td>
</tr>
<tr>
<td>Probation Order</td>
<td>85</td>
<td>27% violence against the person 25% motoring offences</td>
<td>48% medium</td>
<td>24.4%</td>
</tr>
<tr>
<td>Combination Order</td>
<td>96</td>
<td>27% violence against the person 20% motoring offences</td>
<td>49% medium</td>
<td>34.0%</td>
</tr>
<tr>
<td>Short-term custodial sentence</td>
<td>-</td>
<td>24% motoring offences 22% violence against the person</td>
<td>-</td>
<td>40.2%</td>
</tr>
</tbody>
</table>

- The consultation set out the role and scope of existing community sentences and aimed to assess the extent of room for further improvement in relation to adult offenders
- Under Community Service Orders (CSOs), offenders must undertake between 40 and 240 hours of community service within a 12-month period
- A Probation Order (PO) is issued for between 6 and 36 months and may carry a number of restrictions including curfews, activity requirements, and treatment requirements
- Combination Orders (COs) combine CSOs and POs and may be given to those convicted of an imprisonable offence. A CO’s probation must be for between 12 and 36 months; community service for 40 to 100 hours
- Short-term custodial sentences (STCSs) is for those offences that are most serious
  - Sentencing to immediate custody accounted for just 5% of all 2006 court disposals

- The cost per prisoner place (at publication) stood at £77,831 per year and community disposals were all under £4,500; however, these figures should not be directly compared
- Those subject to CSOs and COs completed over 140,000 hours of unpaid work in 2009/10, equating to a monetary value of over £830,000 (based on £5.93 NMW)
Problem Solving Justice – ECOs
Economic Impact Assessment


**Purpose and Context:**
- The paper provides comparative analysis of the one-year reoffending rate for those sentenced to an ECO and a matched sample of those released from short-term prison sentences during 2015/16

**Key Findings:**
- Between October 2015 and December 2016, 118 people were given an Enhanced Combination Order; a matched comparison sample was generated from 776 offenders released from custody. Through the match sampling process 108 were matched to 585 individuals
- The one-year proven reoffending rate for offenders sentenced to ECOs was 41.7% and was 43.6% for the matched sample; however, the difference was not statistically significant at the 95% confidence level
- On average, those sentenced to ECOs committed 1.6 crimes compared to 2.0 on average for the matched sample; however, the difference was not significant.


**Commissioned by Make Justice Work**

**Purpose and Context:**
- The purpose of the research was to evidence the economic benefits of Intensive Alternatives to Custody (IAC orders) as compared with short-term custodial sentences
  - IAC orders include intense supervision and requirements such as unpaid work, curfews, mandatory structured activity and enrolment in accredited programmes

**Key Findings:**
- The average 12-month cost of an IAC order was £4,000 to £7,000 per offender, compared to the average short-term custodial sentence cost of £13,900 per offender
- In the most robust scenario, the IAC order could generate nearly £27m in cost savings in Manchester, and £500m in cost savings across the UK over five years
  - Approximately 45% of these savings (£12.5m) are due to reduced victim costs and 36% (£9.8m) due to reduced intervention costs
- The reoffending rate following IAC orders in Manchester was estimated at 21.4%, compared to 45% following release from a short-term custodial sentence
- It also found that the reoffending rates of those also decreased to 21.4%, compared to 45% to those who were given a short-term custodial sentence.
Problem Solving Justice – ECOs
Economic Impact Assessment


**Purpose and Context:**
- During 2015/16, a total of 2,676 new Probation, Community Service, and Combination Orders were made at court requiring PBNI supervision
  - This statistical brief considers the proportion of these where breach proceedings were initiated within one year

**Key Findings:**
- Of new orders in 2015/16, 26% (691) were breached within one year
  - 31% of Community Service Orders (half of which were within 18 weeks of issue)
  - 30% of Combination Orders (half of which were within 17 weeks of issue)
  - 19% of Probation Orders (half of which were within 23 weeks of issue)
- There was no significant difference in breach rates by gender
- Breach rates decreased progressively with the offender’s age, from 37% overall for those aged under 20 to 11% for those aged 40 and over
- Breach rates were positively correlated with the offender’s Assessment, Case Management and Evaluation System (ACE) likelihood of reoffending score, from 16% for those with low ACE scores to 35% for those with high ACE scores


**Purpose and Context:**
- PBNI commissioned the evaluation to assess whether ECOs had been successful

**Key Findings:**
- Data analysed: administrative data; information from interviews & focus groups
- At March 2017, 136 offenders had been subject to an ECO: 13 were complete, 12 were revoked and 111 were ongoing
- Average cost was estimated at £9,000 per ECO per annum and average duration was 20 months
- Offending decreased from 57.7% in the 6 months prior to sentencing to 17.3% in the 6 months post-ECO completion*. 37 participants reoffended during the pilot.
- Community service sentenced averaged 85 hours per ECO, equivalent to a total of £87k
- The evaluation also contains other information on the ECOs issued with data by gender, crime, age, court, etc.
- Policy recommendations, particularly in relation to resource considerations, were outlined

* See note 17 (p.7) of this document for discussion on interpreting these figures
4. The Quantitative Economic Impact

1. The aim of this economic impact assessment is to determine the net economic benefit (positive or negative) associated with the ECO programme. This net economic benefit compares the additional costs associated with the pilot interventions against the benefits achieved through a reduction in crime.

2. As detailed in Section 2 (Methodology), quantitative costs and benefits associated with both the pilot and potential roll-out are considered in order to identify the estimated net economic impact of the ECO programme.

4.1 Costs

3. In order to draw conclusions on the impact of ECOs, consideration must be given to both costs of ECOs and costs of an appropriate comparator. As ECOs are an alternative to a short-term custodial sentence, the identified comparator is the cost of a short-term prison sentence (i.e. lasting 12 months or less).

4. As such, the quantitative costs are categorised as follows:
   - Unit cost of an ECO;
   - Unit cost of a short-term custodial sentence;
   - Cost of an ECO roll-out across NI (where appropriate to replace custodial sentences).

Unit cost of an ECO

5. The ECO evaluation, completed by NISRA, calculated the cost of an average ECO at £9,000 per year\(^2\). However, it is important to compare the cost of an ECO on the same basis as its comparator, a short-term prison sentence, i.e. on a unit cost basis rather than annual cost.

6. At the time of the evaluation, the majority (133 of 136) of ECOs issued had a duration of 12 to 36 months, with a mean of 20.1 months. This translates to an average cost per ECO of approximately £15,075.

Unit cost of a short-term custodial sentence

7. The average annual cost per prison place in 2017/18 was £55,300\(^{21}\). However, given the fixed cost nature of the Prison Service, a reduction of one prisoner will not deliver savings of £55,300. Consequently, the marginal cost per prisoner place should be identified.

8. When dealing with a small reduction in prisoner numbers (such as in a pilot), the only savings which could be achieved are likely to be restricted to reduced Prison Officer staffing costs. Based on a ratio of 0.21 Prison Officers per prisoner place and an average Prison Officer cost of £40,700, the annual marginal cost per prisoner place is £8,547\(^{22,23}\).

9. The average short-term prison sentence passed in NI for convictions equivalent to those eligible for participation on an ECO is 3 to 6 months\(^{24}\) in 2017. However the majority of prisoners are released from prison following completion of only 50% of their sentence; and therefore the average length of time served is 55 days or just under 2 months.

10. Taking this information together, the marginal cost of a short-term prison sentence is £1,288.

Cost of an ECO roll-out

11. There are three high-level considerations in terms of the full roll-out of ECOs across NI:
   - the impact on the unit cost of an ECO – economies of scale are likely to be achievable;
   - the impact on the unit cost of a short-term custodial sentence; and
   - the typical volume of activity anticipated.

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\(^{22}\) These figures have been based on 2015 data for male establishments in England and Wales (available from [www.parliament.uk](http://www.parliament.uk) last accessed 21 January 2019).

\(^{23}\) In practice, it may not be possible to achieve such savings within the short term. Reduction in Prison Officer numbers would be via reduction in recruitment as a result of closing accommodation; this would only be feasible if there were a significant decrease in prisoner numbers within certain categories of prisoner over a sustained period of time.

\(^{24}\) Using figures based on those individuals who went onto a custodial sentence in 2017. Sourced from DoJ.
The impact on the unit cost of the ECO

12. It is likely that a larger scale roll-out of the ECO programme could achieve some economies of scale; however, based on the information currently available, it is not possible to estimate the magnitude of the economies that would be achieved. An assumption of a 10% reduction in unit costs would, though, be considered prudent. This would result in a roll-out scenario unit cost of an ECO of approximately £13,568.

13. It is important to recognise that any full-scale roll-out could have initial cost implications in terms of realigning skill sets, for example, additional Probation Officers, PBNI Psychologists, Community Service Officers and other specialist programme delivery staff, along with fewer Prison Officer staff in the longer run. These costs have not been estimated in this analysis.

The impact on the marginal cost of a short-term custodial sentence

14. As noted above, given the fixed nature of costs within the Prison Service, a small reduction in the prison population is unlikely to deliver significant cost reductions in the short term. However, in the longer term and on a larger scale, the potential to increase the cost savings associated with lower prisoner numbers is likely to increase.

15. Over the very long term, all costs are variable and so, technically, it is possible that the entire cost of a prison place (£8,333) could be saved. However, it is unlikely that this scenario would materialise purely as a result of the ECO programme. As such, it is assumed that the long-term cost saving from ECO roll-out would be halfway between the entire cost saving and the short-term cost saving identified above (£1,288).

16. Therefore, a longer-term cost saving associated with a custodial sentence is estimated at approximately £3,523.

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26 Those given a short-term custodial sentence spend, on average, 55 days in prison. As such, the full cost of a prison place has been calculated on a pro-rata basis.
Problem Solving Justice – ECOs
Economic Impact Assessment

*Typical volume of activity anticipated*\(^{27}\)

17. The number of short-term custodial sentences decreased in pilot areas by 16.4% between 2014/15 and 2016/17\(^{28}\), compared to a decrease of 7.6% over the same period in non-pilot areas. This implies a 9% switch from short-term custodial sentences to ECOs over the period.

18. However, this 9% implied switch does not account for the range of initiatives ongoing in NI to reduce offending, reoffending, the use of short-term custodial sentences and other factors that may impact on the judiciary decision to impose an ECO. As such, it may be preferable to estimate ECO roll-out volumes based on the proportion of cases sentenced to ECOs in pilot areas.

19. In 2016, **20% of cases** in pilot areas received an ECO sentence\(^{29}\); if all courts in 2016 had access to this sentencing mechanism, an extra 463 ECOs would have been expected. On this basis, **it is expected that 563 ECOs would be issued annually under roll-out**.

**Summary: costs and volumes**

20. Table 2 provides a summary of the costing information provided in this section.

**Table 2: Expected costs and volumes in ECO roll out**

<table>
<thead>
<tr>
<th>ECO participants</th>
<th>ECO cost per offender</th>
<th>Saving per short term custodial sentence</th>
<th>Total net cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pilot</td>
<td>156</td>
<td>£15,075</td>
<td>£1,288</td>
</tr>
<tr>
<td>Full roll-out</td>
<td>563</td>
<td>£13,568</td>
<td>£3,523</td>
</tr>
</tbody>
</table>

Notes:

Pilot figures are based on the period October 2015 to May 2017; full roll-out figures are annualised estimates. See Section 4.1 (*Typical volume of activity anticipated*) for methodology on calculation of expected ECO participants.

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\(^{27}\) The PBNI / NISRA evaluation notes that a total of 28 judges were involved in the pre-sentence report request stage and 22 at sentencing; however, of the 136 ECOs issued, 60% were imposed by just six judges. The reason for this is not known but may be because: (a) ECOs were favoured by those judges; (b) the distribution of cases seen by each of the judges differed; and or (c) the volume of cases seen by each judge was not consistent. Consequently, it would not be appropriate to estimate the distribution of ECOs if the pilot were rolled out across NI.

\(^{28}\) Data were provided for 12-month periods beginning in October and ending in September; i.e. 2014/15 relates to the period October 2014 to September 2015. Source: DoJ bespoke request.

\(^{29}\) Bespoke data request fulfilled by DoJ.
4.2 Benefits

21. This sub-section considers the quantifiable benefits associated with the introduction of ECOs across NI. As noted in Section 2, this incorporates both cost savings and wider economic benefits. The following elements are considered.

- Impact on re-offending rates
- The reduced cost of crime
- The value of (unpaid) Community Service completed by offenders
- The fiscal impact following transition of offenders from criminal activity into productive employment

Impact on re-offending rates

22. Given the relatively small scale of the pilot, comparing re-offending rates against a baseline re-offending rate presents statistical challenges. This is set out in greater detail in the Methodology section of this report.

23. Although the PBNI / NISRA evaluation of ECOs identified a reduction of approximately 40% in the offending rate for those sentenced to ECOs, there are challenges in using this figure to benchmark against other sentencing options.

24. As more data have since become available, NISRA has identified that the proven reoffending rate for those sentenced to an ECO during 2015/16 was 41.7%, as compared with the rate of 43.6% in a matched sample of those released from a short-term custodial sentence. Based on this estimate, the reduction in reoffending as a result of ECOs is 1.9 percentage points (pp). This difference is not statistically significant and may therefore be a result of chance.

25. Where the matched sample is not used and a comparison made between the entire cohorts, the reduction in reoffending as a result of ECOs is estimated at 7.5pp.

30 These challenges are highlighted at footnote 18 on page 7 of this report.
31 The proven reoffending rate denominator is the number of offenders who were given a non-custodial sentence at court, a diversionary disposal or who were released from custody within the given time period. The numerator is the number within that cohort who committed a further offence in NI within 1 year of the baseline date, where the offence was prosecuted via the PSNI, was not a breach offence and a court conviction or diversionary disposal was imposed.
32 Based on the ECO cohort October 2015 to December 2016
33 NISRA / DoJ, Reoffending analysis for participants sentenced to an Enhanced Combination Order (October 2015 to December 2016), Northern Ireland Data Lab Bulletin 36/2018.
34 Bespoke information provided by DoJ based on the annual reoffending rates publication, April 2015 to March 2016
However, this difference is also not statistically significant and may too be a result of chance.

26. In the absence of further data, this report uses the two versions of the reduction in reoffending as upper and lower bounds.

The reduced cost of crime

27. The Home Office conducted analysis on the economic and social costs of crime, ranging from measures taken to avoid crime, to costs of maintaining the criminal justice system, and the costs to the victims of crime. In order to translate this into an NI-specific set of costs, UUEPC combined these data with information from the Oxford Economics report on the Cost of Crime in NI from 2007, inflating all costs into 2017/18 prices.

28. As the possession of weapons is not normally recorded as a crime, the cost is not routinely recorded. However, UUEPC utilised data from a briefing report using English data to calculate an NI cost for this category of crime.

29. Finally, UUEPC inflated the unit cost of police activity to reflect a higher cost of policing in NI and incorporated NI’s cost per prison place. All other unit costs were directly incorporated from the Home Office research to the UUEPC model.

30. Table 3 details the cost per crime, both by the nature of the cost incurred and by the type of crime committed; the list of crimes is consistent with those committed by offenders sentenced to an ECO.

31. In the absence of data on the profile of crimes for those who reoffend, it has been assumed that the crime profile of reoffending remains consistent with the initial offence.

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37 This inflation was based on data provided to UUEPC by DoJ.

38 UUEPC (for Department of Finance) 2016, *Cost of Division: A benchmark of performance and expenditure*. 
Table 3: Unit cost per crime typically committed by those on an ECO

<table>
<thead>
<tr>
<th>Crime Type</th>
<th>Anticipation costs</th>
<th>Stolen / damaged property costs</th>
<th>Physical / emotional costs</th>
<th>Output loss</th>
<th>Victim services</th>
<th>Health / ambulance costs</th>
<th>Response costs</th>
<th>Total Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Violence against another person</td>
<td>£174</td>
<td>£0</td>
<td>£4,166</td>
<td>£1,022</td>
<td>£6</td>
<td>£438</td>
<td>£4,184</td>
<td>£9,990</td>
</tr>
<tr>
<td>Drugs</td>
<td>£1,565</td>
<td>£0</td>
<td>£44,215</td>
<td>£15,350</td>
<td>£0</td>
<td>£647</td>
<td>£25,601</td>
<td>£87,378</td>
</tr>
<tr>
<td>Motoring</td>
<td>£0</td>
<td>£0</td>
<td>£28,269</td>
<td>£8,033</td>
<td>£0</td>
<td>£0</td>
<td>£128,215</td>
<td>£164,517</td>
</tr>
<tr>
<td>Theft</td>
<td>£643</td>
<td>£1,986</td>
<td>£1,100</td>
<td>£385</td>
<td>£0</td>
<td>£474</td>
<td>£3,838</td>
<td>£8,427</td>
</tr>
<tr>
<td>Criminal Damage</td>
<td>£164</td>
<td>£853</td>
<td>£627</td>
<td>£196</td>
<td>£2</td>
<td>£177</td>
<td>£3,511</td>
<td>£5,530</td>
</tr>
<tr>
<td>Public Order</td>
<td>£0</td>
<td>£0</td>
<td>£0</td>
<td>£0</td>
<td>£0</td>
<td>£78</td>
<td>£52,774</td>
<td>£52,852</td>
</tr>
<tr>
<td>Burglary</td>
<td>£7,452</td>
<td>£14,695</td>
<td>£12,491</td>
<td>£4,618</td>
<td>£0</td>
<td>£3,989</td>
<td>£36,800</td>
<td>£80,045</td>
</tr>
<tr>
<td>Possession of Weapons</td>
<td>£0</td>
<td>£0</td>
<td>£0</td>
<td>£0</td>
<td>£0</td>
<td>£0</td>
<td>£61,397</td>
<td>£61,397</td>
</tr>
<tr>
<td>Sexual</td>
<td>£132</td>
<td>£0</td>
<td>£3,060</td>
<td>£926</td>
<td>£8</td>
<td>£323</td>
<td>£2,071</td>
<td>£6,520</td>
</tr>
<tr>
<td>Fraud</td>
<td>£191</td>
<td>£433</td>
<td>£173</td>
<td>£52</td>
<td>£0</td>
<td>£61</td>
<td>£380</td>
<td>£1,290</td>
</tr>
<tr>
<td>Robbery</td>
<td>£283</td>
<td>£884</td>
<td>£3,081</td>
<td>£790</td>
<td>£9</td>
<td>£652</td>
<td>£7,462</td>
<td>£13,160</td>
</tr>
<tr>
<td>Other</td>
<td>£0</td>
<td>£0</td>
<td>£38,761</td>
<td>£10,693</td>
<td>£2,673</td>
<td>£4,678</td>
<td>£0</td>
<td>£56,805</td>
</tr>
</tbody>
</table>

Source: Home Office research, Oxford Economics, Houses of Parliament & UUEPC analysis
Problem Solving Justice – ECOs
Economic Impact Assessment

32. Using the component unit costs shown in Table 3 and data on the offences for which an ECO was handed down over the first 18 months of the pilot, UUEPC has calculated the **average cost per crime in NI for the typical ECO participant as £53,650**.

33. In consultation with PBNI, it became apparent that in many instances, the offender will have committed multiple offences. Consequently, the true cost of the criminal behaviour will be greater than this ‘single’ unit cost.

34. Based on the 2015/16 cohort of those sentenced to an ECO, it is assumed that each ECO offender has committed an average of **1.6 crimes**\(^{39}\), resulting in an average cost per crime of **£85,840** (i.e. £53,650 x 1.6).

35. On the basis of a 1.9pp to 7.5pp reduction in re-offending, the following reductions in the cost of crime are estimated.

### Table 4: Estimated annual reduction in the cost of crime

<table>
<thead>
<tr>
<th>ECO participants</th>
<th>Reduction in no. of reoffenders</th>
<th>Cost of crime per offender</th>
<th>Reduction in cost of crime</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pilot</td>
<td>156</td>
<td>£85,840</td>
<td>£257,520 to £1,030,080</td>
</tr>
<tr>
<td>Full roll-out</td>
<td>563</td>
<td>£85,840</td>
<td>£944,240 to £3,605,280</td>
</tr>
</tbody>
</table>

The value of (unpaid) Community Service

36. During the first 18 months of the pilot, a total of 11,585 hours of Community Service had been sentenced through 136 ECOs, with an average length of approximately 85 hours per offender\(^{40}\). This activity would not have been carried out if the ECO had not been an available sentence and the offender had instead received a custodial sentence.

37. The value of this unpaid work is shown in Table 5, which assumes continuity in sentences including an average of 85 hours of Community Service.

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Table 5: Estimated annual value of Community Service

<table>
<thead>
<tr>
<th>ECO participants</th>
<th>Total hours sentenced</th>
<th>Estimated value of Community Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pilot</td>
<td>156</td>
<td>13,260</td>
</tr>
<tr>
<td>Full roll-out</td>
<td>563</td>
<td>47,855</td>
</tr>
</tbody>
</table>

Notes:
Pilot figures are based on the period October 2015 to May 2017; full roll-out figures are annualised estimates. See Section 4.1 (Typical volume of activity anticipated) for methodology on calculation of expected ECO participants.
Total hours sentenced are based on an average of 85 hours per offender.
Estimated value is based on National Living Wage hourly rate of £8.21 per hour (from Apr 2019)

38. The completion of work-related activity has further, qualitative benefits; these are explored in more detail in Section 5.

The fiscal impact of ECOs

39. A crucial element of rehabilitative programmes relates to the transitioning of offenders away from participation in the shadow economy into legal, productive activity.

40. The mean age of those sentenced to an ECO was 28 years old and the average duration of sentence was 20 months. As such, the average age of offenders at completion was approximately 30 years old for the ECO pilot. As State Pension age is now 67 years old, the average remaining working life for this group is 37 years.

41. Of the 136 participants in the evaluation cohort, five obtained employment during the ECO. Furthermore, offenders in employment (who would most likely have lost their jobs if imprisoned) may be able to retain employment over the period of the sentence. Given the newness of this sentencing mechanism, longitudinal data are not available on the duration of employment or average earnings for this group. Further, due to small numbers, employment outcome statistics for this cohort to date are not robust.

42. Limited data exist on employment and earnings outcomes for ex-offenders in general; however, in a study of working age offenders in England and Wales⁴¹ (following

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Problem Solving Justice – ECOs
Economic Impact Assessment

cautions, conviction or release from prison in 2003/04), only c.20% of the cohort spent the entirety of the subsequent nine years in P45 employment\textsuperscript{42,43}.

43. This research also identified that the median P14 income\textsuperscript{44} of offenders one year after release from a short-term custodial sentence was £5,300\textsuperscript{45}. This rose to £11,300 per annum in the eighth year following release. In contrast, for those who completed a community sentence, median P14 income was £7,400 in the first year, rising to £13,900 in the eighth year.

44. If these average earnings figures are applied to the average ECO participant, it would be expected that gross post-ECO lifetime earnings would total £337,140\textsuperscript{46} and Income Tax & National Insurance contributions would sum to £37,575\textsuperscript{47}, both in present value terms\textsuperscript{48}. However, if those ECO participants had instead received a short-term custodial sentence, their total gross present value earnings would be £272,701 and Treasury receipts just £19,854.

45. Following completion of an ECO, the average additional government revenue over the ex-offender’s working lifetime is then £17,721 via Income Tax and National Insurance (Table 6).

46. While important to note that the average post-sentence lifetime earnings would likely be higher for those completing an ECO than a short-term prison sentence, the additional earnings do not directly translate to an increase in GVA\textsuperscript{49}. As such, in

\begin{itemize}
\item \textsuperscript{42} P45 employment does not include self-employment or cash-in-hand jobs.
\item \textsuperscript{43} Given the small numbers involved in the ECO pilot and that their employment outcomes have not been tracked over a period of time, analysis in this section has been based on the England / Wales outcomes data.
\item \textsuperscript{44} This relates to gross income derived from P14 forms sent to HMRC by employers (and or information obtained from benefits data) and does not include income from self-employment or cash-in-hand jobs. This is not a complete data source as HMRC is only required to be notified via P14 if earnings were above the Lower Earnings Limit. It also includes income for part-year and part-time work. While only 20% of ex-offenders remained in work over the full 9 years, the data set includes the zero earnings periods for the other 80% of ex-offenders. Finally, this data source will not exclude the effects of further offending behaviour, i.e. for those ex-offenders who reoffend, the period(s) of zero earnings and reduced future earnings will be reflected in the average figures for the cohort.
\item \textsuperscript{45} UUEPC has inflated the nominal P14 income using the Seasonally Adjusted Average Weekly Earnings (excluding bonuses and arrears) statistics from ONS, taking 2017/18 as the base year.
\item \textsuperscript{46} In 2017/18 prices, assuming real annual wage growth of 2% per year from year 9 to 37 following ECO completion. This assumes ECO outcomes regarding employment would be comparable to those receiving a community sentence.
\item \textsuperscript{47} This assumes a constant annual PAYE personal allowance of £11,850 and lower tax rate of 20%; and an annual primary threshold of £8,424 and National Insurance rate of 12%.
\item \textsuperscript{48} There is a “time value” associated with money, the essential principle being that it is preferable to have money now, rather than having money in the future. Discounting income flows into \textit{present value} terms is how this time value is taken into account. The discount rate used is 3.5%, consistent with HM Treasury’s Green Book guidance.
\item \textsuperscript{49} Due to e.g. reduced transfer income (social security) and spending outside NI.
\end{itemize}
calculation of the net economic impact of ECOs, only the impact via income tax and National Insurance contributions has been included.

Table 6: Present value average lifetime fiscal impact of ECOs

<table>
<thead>
<tr>
<th>ECO participants</th>
<th>Average additional tax revenue Per person</th>
<th>In total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pilot</td>
<td>£17,721</td>
<td>£2,764,476</td>
</tr>
<tr>
<td>Full roll-out</td>
<td>£17,721</td>
<td>£9,976,923</td>
</tr>
</tbody>
</table>

Notes:
Pilot figures are based on the period October 2015 to May 2017; full roll-out figures are annualised estimates. See Section 4.1 (Typical volume of activity anticipated) for methodology on calculation of expected ECO participants.

The fiscal impact of social security payments

47. Linked to the fiscal impact of ECO’s, it is also appropriate to acknowledge the potential savings from reduced social security payments to those serving prison sentences. In making a determination on the likely scale of this impact the following factors are relevant:

- Consideration would need to be given to the impact on the entire household’s benefit income if the offender were to go to prison. In some instances benefits paid could be reduced and in other cases increased.
- Some benefits can continue for a short period while the offender is in prison (e.g. the housing element of Universal Credit continues for up to 6 months).
- There are also costs associated with processing changes in circumstances for claimants (e.g. an offender not maintaining a lease on social housing accommodation, which could be quite significant).
- Data is not available to make a robust assessment of the changes in social security payments.

48. Given the average short-term custodial sentence for offences equivalent to those being referred to ECOs is just 55 days, the impact is likely to be negligible and in the absence of more data, not possible to estimate at this time.
Problem Solving Justice – ECOs
Economic Impact Assessment

Summary of benefits

49. Table 7 provides a summary of the estimated benefits associated with the introduction of ECOs.

Table 7: Summary of ECO benefits

<table>
<thead>
<tr>
<th>Category / description</th>
<th>Pilot</th>
<th>Full roll-out, annualised</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduced cost of crime (-1.9pp reoffending)</td>
<td>£257,520</td>
<td>£944,240</td>
</tr>
<tr>
<td>Reduced cost of crime (-7.5pp reoffending)</td>
<td>£1,030,080</td>
<td>£3,605,280</td>
</tr>
<tr>
<td>Monetary value of Community Service</td>
<td>£108,865</td>
<td>£392,890</td>
</tr>
<tr>
<td>Additional government revenue</td>
<td>£2,764,476</td>
<td>£9,976,923</td>
</tr>
<tr>
<td><strong>Total (lower bound)</strong></td>
<td><strong>£3,130,861</strong></td>
<td><strong>£11,314,053</strong></td>
</tr>
<tr>
<td><strong>Total (upper bound)</strong></td>
<td><strong>£3,903,421</strong></td>
<td><strong>£13,975,093</strong></td>
</tr>
</tbody>
</table>

4.3 Net Economic Benefit

50. While in the short term, ECOs are relatively expensive to run on a per person basis, they have potential to generate significant benefit over the longer run.

51. Table 8 draws together the quantitative information from Sections 4.1 and 4.2.

Table 8: Expected additional costs, benefits and net impact of ECO roll-out

<table>
<thead>
<tr>
<th>Category / description</th>
<th>Monetary impact of roll-out*</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECO running cost</td>
<td>(£7,638,784)</td>
</tr>
<tr>
<td>Reduced prison costs</td>
<td>£1,983,449</td>
</tr>
<tr>
<td>Reduced cost of crime (lower estimate)</td>
<td>£944,240</td>
</tr>
<tr>
<td>Reduced cost of crime (upper estimate)</td>
<td>£3,605,280</td>
</tr>
<tr>
<td>Value added from Community Service</td>
<td>£392,890</td>
</tr>
<tr>
<td>Additional tax and National Insurance revenue (PV)</td>
<td>£9,976,923</td>
</tr>
<tr>
<td><strong>Net benefit (lower estimate)</strong></td>
<td><strong>£5,658,718</strong></td>
</tr>
<tr>
<td><strong>Net benefit (upper estimate)</strong></td>
<td><strong>£8,319,758</strong></td>
</tr>
</tbody>
</table>

Notes:
* Based on a roll-out volume of 563 ECOs per year, the costs and benefits detailed are over the duration of the ECO and the recipient’s lifetime.

52. In the event of roll out, it is expected (based on the assumptions detailed in Sections 4.1 and 4.2) that ECOs would have a net economic benefit of between £5.7m and £8.3m per year. While a very positive outcome, it should be noted that this is unlikely to significantly affect the budget available under the NI block grant.

53. In addition to the monetary benefits outlined in this section, it is important to recognise that significant intangible benefits are also feasible. These are explored in Section 5.
5. The Qualitative Impacts

1. This section of the report examines the qualitative impacts that ECOs may have. This focuses on the impact on reoffending, intergenerational transmission of offending behaviour, improvements in wellbeing of offenders’ families (and specifically on their children), and improvements in wellbeing in the wider community.

2. This section is based on the literature summarised in Appendix B.

5.1 Breaking the cycle of reoffending

3. Proven reoffending rates are specifically considered in Section 4 as part of the costs that may be avoided as a result of ECO rollout. However, these figures are likely to underestimate the true extent of offending behaviour, as they represent only those detected crimes that are prosecuted within an 18-month period following sentencing.

4. In prevention of reoffending, prisoners indicated that family support (40%) and being able to see their children (36%) were important factors. This was supported by the Farmer Review (2017), which found a 39% reduction in the reoffending rate for prisoners who received regular visits versus those who did not.

5. Evidence would indicate that commitment to family roles can encourage offenders to develop more pro-social identities, while emotional attachments to family can influence the offender to make more positive choices.

6. Despite the importance of maintaining these family relationships, imprisonment puts them under significant strain, with around 45% of prisoners losing contact with family and 22% of married prisoners separating or divorcing.

7. Offenders sentenced to ECOs, rather than short-term prison sentences, may therefore be expected to have a lower rate of reoffending as ECOs facilitate the ongoing maintenance of family contact. ECOs would also be expected to assist prisoners in building positive identities through the psychological interventions and accredited programmes undertaken.

8. Those offenders who are imprisoned but who are engaged as ‘staff’ report a higher level of life satisfaction and develop a pro-social attitude framed around helping others. ECOs may replicate this ethos through offenders’ requirement to participate in community service, victim-focussed work and restorative interventions where possible. However, NISRA’s evaluation of ECOs noted that a very small number of victims had registered to participate in restorative engagement; this could hinder the level of success that is feasible for ECOs in this regard.
9. Evidence strongly suggests that reoffending is less likely where the offender enters legitimate employment post-sentence. ECOs include the completion of accredited programmes, community service, victim-focussed work, and employment support via the Community & Voluntary Sector. As such, the likelihood of finding employment post-sentence is expected to increase as a result of the improved skills and experience.

10. Of the 136 participants in the evaluation cohort, five obtained employment during the ECO. Furthermore, offenders in employment (who would most likely have lost their jobs if imprisoned) may be able to retain employment over the period of the sentence. Given ECOs represent a new sentencing mechanism, longitudinal data are not currently available to make a more robust conclusion on employment outcomes. Moving forward this data should be collated to allow for more detailed evaluation.

5.2 Intergenerational effects

11. It is widely accepted in the literature that children (and, in particular, boys) who grow up in families engaged in criminal behaviour are more likely to engage in criminal activity themselves; this link is especially strong between fathers and sons. For example, one study found that 63% of males with convicted fathers had convictions themselves, compared with 33% of those whose fathers did not have convictions.

12. This linkage is hypothesised to be partly as a result of the parents’ role modelling, via social learning theory (children mimicking parents’ actions) and differential association theory (where children learn that incentives to break the law are greater than those to be law-abiding).

13. Intergenerational transmission of offending behaviour is therefore strongly dependent on the frequency and continuation of contact between criminal fathers and sons. As such, ECOs may impact offenders’ children in a positive way, if they are successful in changing the offending behaviour of the parent.

14. Multiple additional underlying factors in intergenerational transmission of offending behaviour are identified, which often overlap with cycles of deprivation. For example:
   - **familial environment**, including 5+ children, single / teenage parents, otherwise disrupted family lives, parental substance abuse, poor supervision, inter-parental violence or neglect / abuse;
   - **wider circumstances**, such as poverty, poor housing and living in the worst neighbourhoods; and
   - **characteristics / behaviour of the child**, such as high levels of daring or risk-taking behaviour and educational disengagement.
15. When the above factors are reversed, they have the effect of protecting against the intergenerational transmission of criminal behaviour. ECOs are of benefit in this regard – as noted in Section 5.1, post-sentence employment prospects may be improved by not having a custodial sentence and a number of offenders in the pilot gained paid employment during their sentence.

16. Besemer et al. (2017) note that intergenerational transmission is much stronger in the US, which has a punitive focus, than in Denmark and Sweden, which have a preventative and rehabilitative focus.

17. A number of researchers, consequently, make the policy recommendation to target those criminal parents for prevention and intervention programmes, and to include all potential parents. Others suggest that convicted parents receive specific education around parenting.

18. As part of the ECO sentence, offenders may be required to participate in programmes specific to improving family life. At the time of the interim evaluation, just over half of participants were reported to need support with parenting and or family issues. As such, it is expected that with improved parenting styles, risk factors for offenders’ children will decrease.

19. Other researchers’ recommendations go a step further and identify that the use of imprisonment in sentencing be reduced in favour of a multi-disciplinary, whole-family approach to rehabilitation. Such recommendations are consistent with the rehabilitative and preventative ethos of ECOs.

5.3 Impacts on offenders’ families and children

20. Imprisonment carries a range of unintended negative consequences for the offender’s family and any children. These may be categorised into the following effect types.
   - Physical health
   - Mental health
   - Finances
   - Communication

21. Physical health of family members may decline due to stress-related conditions (most commonly affecting the heart, lungs, digestive and endocrine systems). It may also decline where the prisoner was the primary carer or acted as a barrier to neglect / abuse.

22. Mental health of family members may also decline, and diagnoses tend to be highest during the period of imprisonment. This may be a result of stress, stigma (and
resulting deterioration in relationships), disenfranchised grief, and escalation of substance use. For example, a survey of prisoners’ wives identified that 63% experienced a deterioration in social activity and 57% in their relationships with friends and neighbours.

23. Family finances may deteriorate due to a potential loss of income from the offender and due to increased expenses (around visitation, legal costs and sending money to the prisoner). A survey of prisoners’ wives identified that 63% experienced a deterioration in their financial situation. As such, families have an increased risk of being in poverty and experiencing a loss of goods or housing.

24. Families may experience issues in communication, for example, trying to be strong for others, less communication with the offender and difficulties in visitations. Children in particular may not be given appropriate explanations of their parent’s absence and may experience the sentence as abandonment.

25. Children may also be negatively affected by parental imprisonment based on the nature of the parent’s offence, the information communicated, relational dynamics with the offender and care arrangements prior to, during and post-sentencing.

26. Children of prisoners have double the normal risk of developing behavioural issues and may suffer a range of effects including:

- anxiety, fear and hypervigilance;
- sadness, depression and social withdrawal;
- low self-esteem and sexualised behaviour;
- guilt;
- anger and aggression;
- regression; and
- truancy, disruptive classroom behaviour and poor educational performance.

27. Furthermore, children experience an increased risk of abuse or neglect during parental imprisonment (due to either a move to new primary carer or increased stress and responsibility for the remaining parent / carer). During such periods, children often live in benefit-led homes with caregivers that often find it difficult to cope, which increases declines in children’s health and self-worth. Each of these factors in turn increases the child’s risk of becoming an offender themselves.

28. Approximately 200,000 children in England and Wales had a parent in prison at some point during 2009. Comparatively, at any one time in NI, 1,300 children are affected by a family member in prison.\(^{50}\)

\(^{50}\) Information provided by NIPS.
29. As ECOs represent an alternative to a custodial sentence, many of the effects of imprisonment will be directly avoided by those offenders’ partners, children and wider families.

30. In addition, the nature of the multi-disciplinary approach employed as part of the ECO sentence is designed to improve the offender’s relationships, family life, parenting techniques, self-identification and employability. As such, where ECOs are successfully deployed, it would be expected to find impacts of conviction on offenders’ families are reduced.

31. As a final point, it should be recognised that, for some families, imprisonment represents an escape from an abusive environment. As such, it is crucial for those involved in issuing and implementing ECOs to work with families in order to avoid such deleterious effects.

5.4 Improved wellbeing in communities and society

32. Fear of crime can have significant effects within local areas, including for example:
   - a fractured sense of community / neighbourhood;
   - development of “no-go” areas;
   - incidence of crime becoming concentrated amongst the economically disadvantaged (the wealthy can afford to move / take precautionary measures);
   - reduced appeal of rehabilitative and non-punitive criminal justice policy; and
   - development of an environment ripe for vigilante justice and undermined legitimacy of the CJS.

33. However, the relationship between crime committed and the perception of crime, or fear of crime, is not direct. Rather, crime rates need to fall substantially to improve the average perception of crime in a given area.

34. As such, while community sentences are typically associated with a lower rate of reoffending, this may not translate to reduced fear of crime and improved community well-being.

35. However, a key cause of fear of crime is how threatening the local environment appears via graffiti, litter, loitering, etc. As such, since ECOs require offenders to carry out community service work, they may contribute to improved local environments in this regard and consequent improvement in community well-being.

36. Where ECOs are issued, offenders’ families are not subject to the (often) negative effects of imprisonment. As such, children in those families are not subject to
associated risk factors for anti-social behaviour, which is a key factor in street disorder and incivility. Over the longer term, this reduced propensity for anti-social behaviour may reduce fear of crime in those neighbourhoods.

37. In the scenario that the increased use of ECOs reduces the number of custodial sentences issued$^{51}$, savings could be made as outlined in Section 4. It may be feasible for NI to retain these savings and redistribute the expenditure into further crime prevention and community safety initiatives. Consequently, ECOs may also indirectly improve wellbeing in local communities.

38. In addition to wellbeing improvements, where communities feel secure and their fear of crime is lower, further economic benefits may be realised, such as increased investment and employment.

5.5 Other factors to consider in ECO rollout

39. ECOs are an intensive form of sentencing mechanism and NISRA’s interim evaluation notes the difficulty some offenders experienced in getting places in community service teams. Therefore consideration would need to be given to appropriate levels of staff resources in the event of a wider rollout.

40. Such increases in resources may be facilitated through redeployment of existing staff; however, particularly where specialisms exist, resources may be “sticky”. Consequently, consideration should be given to resource availability, staff training needs and system bottlenecks, prior to rollout.

41. Involvement of the Community and Voluntary Sector in delivery of ECOs brings a variety of benefits, such as ability to deliver increased service offering, innovation and flexibility associated with service delivery by the sector and, potentially, involvement of the local community in offender rehabilitation.

42. In order to maximise the benefits of rollout for the Public Sector as a whole, consideration should be given to the specific contracting mechanisms used with the Community and Voluntary sector.

43. For example, payment-by-results mechanisms may better assist in meeting PfG outcomes than a contract based purely on quantity of service delivered. However, it can be difficult to get agreement on trigger points for payment when considering a truly outcomes-based contract. Further, grant-based awards may provide increased

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$^{51}$ It should, however, be noted that sentences introduced as explicit alternatives to custody have generally failed to act as like-for-like replacements of prison sentences in England and Wales, i.e. the number of custodial sentences has not decreased by a proportionate amount following the introduction of alternatives to custodial sentences in England and Wales (Mills, 2011).
flexibility to those organisations but may be detrimental to efforts around improving resilience.

44. Details of the contracting methods utilised in the ECO pilots has not been provided; it has therefore not been possible to provide commentary on the expected impact. However, in the event of rollout, cross-departmental cooperation (e.g. with DfC and DoF\textsuperscript{52}) could help to smooth the rollout process, whilst maximising benefits to the public purse.

\textsuperscript{52} DfC for example have undertaken extensive work on improving resilience within the Voluntary, Community and Social Enterprise sectors; DoF has abundant resources on e.g. grant guidance and procurement exercises and has carried out some work to investigate alternative funding models.
6. Conclusions

1. Enhanced Combination Orders (ECOs) are a form of intensive, community-based sentence introduced in selected areas from October 2015 as an alternative to short-term custodial sentences. An interim evaluation carried out by NISRA identified significant benefits and suggested ECOs represented excellent value for money.

2. This assessment considers the economic impact of ECOs and the net economic benefit if they were to be rolled out to all court districts in NI.

3. **In summary, this impact assessment identifies an expected net benefit of £5.7m to £8.3m per year in the event of rollout.**

4. This is derived from the difference in running costs of ECOs (as compared to short-term prison sentences), expected changes to the rate of proven reoffending and associated costs of crime, the monetary value of unpaid work carried out as part of the sentence, and the additional tax impacts of improved employment prospects.

5. In addition to the quantitative benefits, ECOs may be expected to transform the lives of offenders’ families and, in particular, the life-chances of their children via reduced probabilities of entering poverty and intergenerational offending cycles.

6. Finally, the wider community may experience benefits as a result of improvements to the local environment as integral elements of ECOs, or over the longer term through reduced propensity for anti-social behaviour.
Annex A: Literature review findings

1. This annex sets out the information reviewed by UUEPC to inform assumptions in the economic impact study.

Table 9: Literature review on crime

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**Key Findings**

- The report was commissioned to evaluate the impact of the North Justice Liverpool Community Justice (NLCJC) on reoffending rates and efficiencies.
- The study sampled 1,444 offenders from 1 January 2007 to 31 December 2009 and used comparators (selected from various other courts in England and Wales), matching 814 to the NLCJC sample.
- The results showed:
  - No statistically significant difference in reoffending rates or number of re-offences (41.3%, 1.38 for NLCJC; 37.6%, 1.31 for comparator).
  - Statistically significant difference in breach rates of court orders, with those in the NLCJC more likely than comparators (23.6% versus 16.6% for comparator).
  - Further sensitivity analysis was conducted based on gender, age, etc. but none of these were found to be statistically significant.
  - The NLCJC court process (from offence to conviction) was conducted faster on average, in 61 days compared 73 days, but this was not statistically significant.
  - On average the NLCJC processed fewer hearings per case (2.2 per case compared to 2.7 per case in comparator).
  - On average, more guilty pleas were entered earlier in the NLCJC (64% compared to 43% for comparator).
- This research highlighted that the court was not any more effective in reducing reoffending rates than traditional courts, but it showed some evidence that the NLCJC was more efficient than other courts.
**Problem Solving Justice – ECOs**

**Economic Impact Assessment**

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**Department of Justice (2010). ‘Cost of crime in Northern Ireland’ DoJ Research and Statistical Series, Report 1.**

**Key Findings**

- Using data from the financial year of 2006/7, Oxford Economics estimated the total cost and the unit cost per crime using crime data gathered from the NI Crime Survey.
  - The results show:
    - The total cost of crime to NI for the financial year 2006/7 was £2.9bn.
    - The cost of violence against an individual was £131m in NI.
    - Sexual offences cost NI £331m.
    - Domestic burglary cost NI £28m.
    - Robbery cost NI £60m.
    - A full breakdown of costs by crime type as well as by element (health, output loss, etc.) can be found on pages 31 and 33.
- This paper also outlines the specific costs by crime to specific governmental departments, with a full breakdown on pages 75 to 79.

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**Key Findings:**

- This research was used to increase understanding of restorative justice, and its relevance to police, using examples from Belgium and NI.
- Several restorative justice programmes have been running in Belgium and have been considered very successful. One key component is that the police are considered vital first responders and the gatekeepers to restorative justice.
- However, this research also highlighted many felt the police lack neutrality due to their association with authority and the general distrust in some communities.
- Restorative justice has been running in NI through the youth conferencing programme. The police (PSNI) are key to the programme’s success, as they act as the vital first responders.
- In 2010, of the 9,400 youth offenders referred to the Public Prosecution Service (PPS), 35% were prosecuted, 28% were referred to police for a caution and 7% were referred to the youth conference. As much as a third had ‘no prosecution’ with no further action.
Key Findings:

- The Aston project was used to identify young people who become involved in crime and intervene before this becomes an issue.
- The review conducted one-to-one interviews to gauge the impact of the programme from a young person’s and the wider agency’s perspectives. Additionally, the authors reviewed research and documents related to the problem-solving initiative.
- The research found that the project had a clear and positive impact on young people’s lives, as well as the wider Gloucestershire community.
- However, the research also identified areas for improvement (e.g. the impacts were not always clearly outlined) and suggested a method based on a traffic light system to grade need (i.e. red means significant problems). This was aimed at giving a measurable metric with which to grade success.

Table 10: Literature review on reoffending, intergenerational transmission of offending behaviour and the fear of crime


Key Findings:

- On average, children with criminal parents were at significantly higher risk for criminal behaviour compared with non-offenders’ children
- Theories on reasons underlying intergenerational transmission:
  - Social learning theory and differential association theory (parents teach through actions and motivations to break, rather than follow, the law are learned to a greater extent) where parents role-model undesirable behaviour
  - A criminogenic environment (multiple risk factors, e.g. poverty, disrupted family lives, single / teenage parenting, deprived neighbourhoods)
  - Increased monitoring by statutory bodies leads to increased detection and potential officer bias
  - Labelling effects and self-fulfilling prophecies
  - Genetic factors (inherited characteristics that increase likelihood of criminality)
  - Educational disinvestment (e.g. through dropping out of school or disengaging)
- Intergenerational transmission is much stronger in the US, which has a punitive focus, compared with Denmark and Sweden, which have a rehabilitative focus
### Key Findings:

- **Anti-social behaviour peaks in adolescence; therefore need to consider those whose behaviour persists from adolescence into adulthood**

- **Children of sporadically or chronically convicted fathers have a higher offending rate but there is no significant difference between those groups**

- **Father and son trajectories are similar but not predictive of offending type**

- “Family-based prevention programmes such as parent education and parent management training (Farrington and Welsh, 2007; Kazdin, 1997) could be offered to all fathers with a conviction, regardless of how many convictions they have.”

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### Key Findings:

- **Several studies (e.g. CSDD and Pittsburgh Youth Study) show unequivocally that having a delinquent parent increases the risk of becoming delinquent**

- **Offspring risk factors are associated with numerous other familial risk factors, e.g. parental substance abuse, broken homes, abuse, poor supervision, inter-parental violence and large family size.**

- **Other cited risk factors are: hereditary and labelling (but if this were the case, the same risk would be expected from pre- and post-birth offending and this study’s findings did not support this theory)**

- **Continued post-birth parental offending led to a higher risk of offspring offending but the reasons behind this are not quantified or certain**
## Key Findings:

- **Consequences of the fear of crime include:**
  - A fractured sense of community / neighbourhood
  - Development of “no-go” areas
  - Incidence of crime becoming concentrated amongst economically disadvantaged (wealthy can afford to move / take precautionary measures)
  - Reduced appeal of rehabilitative and non-punitive criminal justice policy
  - Seeding of an environment ripe for vigilante justice & undermined legitimacy of the CJS

- **Factors influencing the fear of crime include:**
  - Extent of vulnerability (e.g. elderly, women, poor and ethnic minorities)
  - Environment (may be threatening e.g. graffiti, litter, loitering etc., or may demonstrate a fractured community)
  - Knowledge / experience of crime
  - Media representation of crime
  - Confidence in the police and CJS
  - Perception of personal risk

- **Policy suggestions:**
  - Improve the appearance of the environment – make it less intimidating, run-down, etc.
  - Improve community views of police / CJS authorities


**Key Findings:**

- NI is relatively non-punitive (as measured by the ratio of people with custodial sentences to people convicted)
  - NI’s ratio is 0.032; equal to Denmark & lower than Norway (0.222) and Sweden (0.040)
  - NI does not have consistently low levels of crime – intentional homicide, rape, robbery and burglary are around median or higher ranked across countries

Key Findings:

- Reasons for the fear of crime may be past experiences in certain areas / regions, perceived street disorders and incivilities, and demographic factors.
- There is not a direct relationship between crime and the fear of crime.
- Even when crime rates significantly decrease, fear of crime typically does not fall by the same amount.
- Crime rates need to fall substantially to improve the mean perception around fear of crime.


Key Findings:

- Families of prisoners are most likely to experience stress-related physical health disorders of the heart, lungs, digestive, and endocrine systems prior to and during incarceration of a family member.
- Mental health diagnoses for family members were highest during the incarceration.
- Risk for foster placement among prisoners’ children increases during incarceration – alternative living arrangements or other factors may be at play.
- Children’s educational performance (maths and reading scores) were higher before incarceration than during.
- Families experience a drop in use of economic social services during (& possibly after) incarceration.
- Family mental health is an issue (stress, loneliness & isolation, escalation of substance abuse, mental health disorders and children’s mental health).
- Family finances are difficult (loss of income from the prisoner, having a new head of household and potential for burdening, loss of goods / housing through sale to make ends meet, additional costs of incarceration through visitation travel costs etc).
- Family communication is strained (e.g. holding back information and being strong for others, conflict with the prisoner and difficulties in resolving them, decreased quantity of communication with the prisoner, emotional and physical distance particularly an issue in disciplining and bonding with children, but in some cases openness / honesty improved).
- Family physical health typically suffers (due to stress-related conditions, due to age / disability particularly where the prisoner was the primary carer, changes to physical activity and access to medical care potentially due to increased workload, and potentially due to abuse or neglect where the prisoner was a barrier or buffer to it happening).

Key Findings:
- Stable marriages and strong familial relationships reduce the risk of reoffending but incarceration places those relationships under significant stress
- 45% of inmates lose contact with family
- 22% of married inmates separate or divorce
- Financial impact on families – may be loss of primary income source or child support benefits; may be increased cost of childcare (due to increased need to work / longer hours and to enable prison visits)
- Stigma to family, guilty by association, is a stressor
- Disenfranchised grief – loss of person to prison generates same response as bereavement but experience cannot be openly acknowledged expressed or supported due to social norms. This is especially prevalent amongst the children of prisoners
- Gaudin & Sutphin (1993): the extent to which a child is affected by parental incarceration depends on (1) age at separation and level of disruption from arrest; (2) health of the family and sentence length; (3) familiarity / comfort with (new) primary caregiver, availability of support networks, occurrence / consequences of previous separation experiences; nature of parent’s crime; and degree of experienced stigma
- Children’s emotional consequences: fear, guilt, sadness, anger, anxiety, low self-esteem, depression, social withdrawal, aggression, hypervigilance, sexualised behaviour, disruptive classroom behaviour and deterioration in academic performance
- There is an increased risk for children of abuse / neglect during the period of parental incarceration (due to either move to new primary carer or increased stress & responsibility for remaining parent / carer)


Key Findings:
- 39% reduction in the reoffending rate for prisoners who received regular visits versus those who did not
- Good family work is key to rehabilitation and the prisoner forging a new identity as a good role model / caring partner / reliable provider (via legal means)

Key Findings:
- Findings: high concentration of criminality within families – 8% of families included 43% of all arrested persons, with an average of 5 arrests per family within the Pittsburgh study
- All types of arrested relatives (not just parents) predicted a boy’s delinquency; the strongest relationship was between fathers and boys
- Intergenerational transmission of offending behaviour is part of a larger cycle of deprivation and antisocial behaviour
- Relevant policy implication is to target criminal parents for prevention / intervention programmes (and potentially target all potential parents even pre-parenthood)


Key Findings:
- Intergenerational transmission of offending may be mediated by family, socio-economic and individual risk factors
- Key risk factors: convictions of parents (up to 10 years old); large family size (5+ children); poor parental supervision; high daring / risk-taking behaviour; low school attainment; poor housing and disrupted family (usually loss of father)


Key Findings:
- Parental criminal activity increases the likelihood of offspring criminal activity but incarceration specifically (versus more generally conviction) may not impact the risk factor. Incarceration was found to have an independent negative effect on offspring in contact with mental health services
- It may instead be the action of physically removing and incarcerating parents, and the subsequent exclusion experienced, that leads to children’s antisocial and criminal behaviour

**Key Findings:**

- Protective factors against intergenerational transmission of criminal behaviour include: above-average intelligence; easy temperament / pro-social attitude; close relationship with at least 1 parent; clear parental supervision; strong bonds with school; non-offending peers; a non-disadvantaged neighbourhood environment
- Prisoners engaged as staff experienced less stigma, higher life satisfaction and frame a positive, pro-social identity through helping others – such attitudes may also be transmitted to offspring


**Key Findings:**

- A person’s position in the social space strongly influences the amount and nature of information on crime to which the person is exposed. This may include direct experience, indirect experience / interpersonal communication, and media.
- Factors that mediate are individual attitudes and interests, i.e. there will be selective perception


**Key Findings:**

- Paternal influence is strong with respect to criminality, and especially so for male children.
- 63% of study males with convicted fathers were themselves convicted (compared to 33% of those whose fathers had not been convicted)
- Children whose fathers were more prolific in their offending had a higher chance of becoming persistent or prolific offenders themselves
- Criminal fathers had higher likelihood of being alcoholic, aggressive, punitive & absent. Parental conflict was likely
- Several reasons for intergenerational transmission of criminal behaviour

Key Findings:
- There can be significant barriers to children visiting imprisoned parents, which may decrease likelihood of visitation (for children or caregivers)
- Increased likelihood of families moving into poverty / worsening poverty due to possible loss of income and increased expenses (via childcare or prisoner)
- The effect on young children is mainly anxiety
- The effect on older children (pre-teen) is mainly difficulty with learning, anger, defiance and emotional issues (such as bedwetting and bullying)
- The effect on adolescents is mainly with regard to education, anger, antisocial behaviour and substance use
- During periods of incarceration, children often live in benefit-led homes with caregivers that often find it difficult to cope, which increases declines in children’s health and self-worth. Poor health and low self-worth increase the likelihood of later offending


Key Findings:
- Maintaining family ties makes re-integration and prisoner employment more likely post-sentence. This reduces risk of reoffending
- 45% of prisoners lose contact with family during the period of incarceration
- Children of prisoners have: 3x the risk of having antisocial behaviour and 2x the risk of developing behavioural problems


Key Findings:
- Resources can be an issue for those implementing Community Orders or Suspended Sentence Orders, and that is crucial in effectiveness / meeting offenders’ needs
- Positives of Community Orders: they are flexible there is ability to offer standardised elements
- Drawbacks to Community Orders: some of the requirements are not available in all areas / regions; rigorous enforcement is required
Problem Solving Justice – ECOs
Economic Impact Assessment


Key Findings:
- Short-term custody is associated with higher rates of proven reoffending than community sentences
- Supervision requirements and programme requirements within community sentences were associated with reduced reoffending; however, significance was limited to certain interaction effects
- Combinations of components found to be very effective in community sentences were curfew + supervision + activity + unpaid work


Key Findings:
- More widespread use of effective community sentences would allow reduced prison usage and consequent reinvestment of resources into local communities to cut offending
- Sentences introduced as explicit alternatives to custody have failed to act as like-for-like replacements for prison sentences


Key Findings:
- As at October 2016 [Note – source of figures not stated]:
  - NI: population = 1.8m, prison population = 1,841, no. prisons = 3
  - Sc: population = 5.4m, prison population = 7,775, no. prisons = 15
  - E/W: population = 58m, prison population = 87,000, no. prisons = 116

Key Findings:
- Criminal fathers are more likely to be alcoholic, aggressive, punitive, absent and in conflict with a probably aggressive wife
- Sons of criminal fathers are no more likely to live in the worst neighbourhoods or be worse treated by their mothers (than sons of non-criminal fathers)
- Factors promoting criminality were more frequent amongst criminal father environments and factors mitigating criminality were found in approximately equal frequency (balance tipped towards increased probability of offspring criminality)


Key Findings:
- Unintended consequences of imprisonment are: (1) social disorganisation of communities; (2) reduced job opportunities for offenders; (3) diversion of funds from other key policy areas; (4) psychological and financial burdens on families
- Effects on male prisoners’ wives:
  - 63% experienced deterioration in their financial situation
  - 81% experienced some deterioration in their work
  - 46% experienced deterioration in their attitude towards marriage and future plans
  - 63% experienced deterioration in social activity
  - 60% experienced deterioration in their relationship with the in-laws
  - 57% experienced deterioration in their relationships with friends and neighbours
- Loss of income compounded by increased expenses
- Imprisonment can cause home moves and health problems
- For some, imprisonment represents an escape from an abusive environment
- Children can suffer a range of effects such as depression, hyperactivity, aggressive behaviour, withdrawal, regression, sleep problems, eating problems, running away, truancy, and poor educational performance
- Direct effects of imprisonment (i.e. rather than conviction in general): feelings of separation and loss, which may be experienced as abandonment (depending how the child is informed); identification with and imitation of the parent’s behaviour; fear for the parent’s welfare / how they are being treated
- Knock-on effects of imprisonment: multiple changes in care; carers’ distress (and potential ineptitude); impact of incomplete truths told to protect children can backfire; stigma / bullying / teasing
Problem Solving Justice – ECOs
Economic Impact Assessment


**Key Findings:**
- Sources of maladjustment for children due to incarceration of a parent:
  - Social stigma / lack of support network
  - Lack of honest & developmentally sensitive explanation
  - Lack of dependable & intimate contact with the parent
  - Visitation may be distressing / scary for children
  - Changes to caregiving arrangements
  - Reduced quality of care
  - Difficulties in reintegration of the prisoner to home life, following release
- However, incarceration may be beneficial to the child if the parent was particularly antisocial, violent or disruptive in the house


**Key Findings:**
- Parental antisocial behaviour is strongly linked to offspring antisocial behaviour where parental contact is frequent but continued contact is essential


**Key Findings:**
- Families experience emotional distress from the absence of loved ones due to incarceration
- Experience stigma & guilt by association
- Increased responsibilities for non-incarcerated partner
- Financial strain due to reduced income and increased expense
- Effects on babies are especially disruptive if the prisoner is the mother
- Children experience stigma, half-truths & lies, mental health issues and difficulties with visitations
- Imprisonment can be positive where e.g. the prisoner was negatively impacting home life (e.g. domestic violence)
Key Findings:

- The extent to which children / families are affected by imprisonment & the impact vary according to:
  - The nature of the offence and pre-prison variables / difficulties
  - Relational dynamics (including quality of the relationship, pre-prison residential status and level / type of in-prison contact)
  - Care arrangements (pre-, during and post-prison)
  - Wider support systems / socioeconomic structures
- Recommendations made include reduced use of imprisonment as a sentence and adoption of a multi-disciplinary, whole-family approach to rehabilitation
- Issues for family include disenfranchised grief
- Family contact during imprisonment associated with reduced reoffending
- Commitment to family roles post-prison can help offenders develop pro-social identities and emotional attachments to family can influence the choices they make, both of which are involved in reduced risk of reoffending. Prisoners who reintegrate successfully may also label themselves differently as "normal people" as opposed to "criminals" – can be a self-fulfilling prophecy
- However, reintegration to family life can be fraught, often goes badly – e.g. due to differing expectations, difficulties adjusting to new roles / responsibilities again, or difficulties in the relationships

Key Findings:

- Approximately 200,000 children in England and Wales had a parent in prison at some point during 2009
- 40% of prisoners felt family support was important to prevent reoffending
- 36% of prisoners felt being able to see their children was important to prevent reoffending