

# An Economic Evaluation of Restorative Justice

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Why me?

Transforming lives through  
Restorative Justice



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## 2. Executive summary

An economic evaluation was conducted comparing Restorative Justice interventions for victims of crime and offenders with the conventional justice system. The research analysed the economic impacts of Restorative Justice interventions, including impacts on reoffending and direct benefits to victims. It was not possible to model direct benefits to offenders due to evidence gaps. This research comprises a contemporary, holistic, and generalisable economic evaluation of Restorative Justice, to inform evidence-based commissioning of Restorative Justice that will improve funding of, and access to, Restorative Justice interventions.

Around a quarter of proven offenders are proven to reoffend within a year, with an average of three to four proven reoffences per reoffender. For theft, this rises to half of proven offenders reoffending within a year, with four-to-six proven reoffences per reoffender (UK Government Database, n.d.). But these statistics represent only a subset of reoffending. This cohort commit a substantially higher number of reoffences that do not have a proven outcome, so do not appear within Government reoffending statistics. In 2016 the total economic and social costs of crime were estimated to be £59 billion (Heeks et al., 2018), with reoffending in the first year of follow-up accounting for £18 billion (Newton et al., 2019).

The number of proven offenders has fallen from 650,000 to 350,000 over a ten-year period, due to the proportion of crime with a proven outcome falling (UK Government Database, n.d.). Yet the 89,000 offenders that reoffend in the first year, represent around 15% of total offenders. If this were increased to include all individuals previously sentenced, this proportion would rise further. Short term reoffending accounts for a substantial portion of the total impact of crime. Breaking the cycle of reoffending is key to improving the lives of offenders and victims, both the minority whose crimes have a proven outcome and the majority who do not receive any form of justice.

Though research has demonstrated that direct Restorative Justice interventions reduce reoffending (Strang et al., 2013), there have been few economic evaluations of these interventions with high-quality research designs. Previous economic evaluations have been impactful but are limited by the fact that they are predominantly trial based and have become outdated (Furman, 2012; Matrix Evidence, 2009; Shapland et al., 2008). This economic evaluation includes a cost-social benefit model that combines published evidence with contemporary data. It provides a framework for the economic evaluation of Restorative Justice that has the flexibility to model a range of scenarios and can be updated to incorporate new evidence.

This economic evaluation analysed the impacts for Restorative Justice interventions for adults and young people in England and Wales using 2021 costs. It focused on Restorative Justice delivered post-sentence. It had a two-year time horizon. The model was developed by adapting the Manning Cost Benefit Tool (Manning et al., 2019), which is a published and validated model for analysing the economic impact of services targeted at reducing crime.

The impact of Restorative Justice on reoffending was modelled using the Strang 2013 meta-analysis (Strang et al., 2013) and UK Government datasets. The study was informed by an international sample of high-quality experimental studies on the impact of Restorative Justice (McGarrell & Hipple, 2007; Shapland et al., 2008; Strang et al., 1998).

An advisory board of researchers and Restorative Justice stakeholders provided strategic oversight of the research. The economic model, and report, were the subject of a rigorous audit by an economist (Joseph Whitaker, Symmetron) who was independent of the research team.

In the model 8% of referrals to a Restorative Justice service resulted in direct Restorative Justice interventions and 19% resulted in indirect Restorative Justice interventions. The cost of the Restorative Justice pathway was £285 per referral and £3,394 per direct Restorative Justice intervention. Each direct Restorative Justice intervention was responsible for reducing average reoffences in the first year from 27 to 19. Overall, the cost-social benefit ratio of Restorative Justice was £14 per £1 invested. The direct return on investment for the Criminal Justice System was £4 per £1 invested. This is before accounting for the broader benefits of Restorative Justice in improving perceptions of justice amongst victims and society.

A sensitivity analysis found that results were robust to uncertainty relating to inputs and assumptions. Under a scenario which combined multiple pessimistic assumptions, the cost-social

benefit ratio was £4 per £1 invested, with a direct return to the Criminal Justice System of just over £1 per £1 invested.

It was not possible to robustly model the total expected benefits as a result of increasing access to Restorative Justice, because accurate data were unavailable on the current uptake of Restorative Justice amongst this cohort in England and Wales. Nevertheless, for illustrative purposes, an increase in Restorative Justice referrals, for the cohort included in this research, from 15% of eligible cases to 40% of eligible cases would be associated with a £5 million investment and total benefits of £76 million, with benefits to the Criminal Justice System of £22 million implying a net saving of £17 million.

The results of this research show that Restorative Justice can reduce reoffending, save money and help victims to recover. They add to the strong evidence base which demonstrates that increasing access to Restorative Justice should be a policy priority for national and local decision makers. The report concludes with recommendations for national policymakers, local decision-makers, and researchers on how to harness the potential benefits of Restorative Justice and advance the collective understanding of the value of Restorative Justice.

## 3. Introduction

### 3.1 Restorative Justice

Restorative Justice allows people affected by crime to communicate with the person responsible. This is often achieved via a face-to-face meeting.

Restorative Justice provides an opportunity to discuss what happened and explore how people have been affected. Victims can explain how it has impacted them, ask questions and give the offender the opportunity to respond, seek assurances that it won't happen again, and have a say in how the harm can be repaired. This is what many people affected by crime want, which is why 85% of victims who participate in Restorative Justice are satisfied with the experience (Shapland et al., 2007). There is also strong evidence to suggest that Restorative Justice can reduce reoffending, as it helps people who have committed crimes to recognise the harm they have caused (Strang et al., 2013).

Around a quarter of proven offenders are proven to reoffend within a year, with an average of three to four proven reoffences per reoffender. For theft, this rises to half of proven offenders reoffending within a year, with four-to-six proven reoffences per reoffender (UK Government Database, n.d.). But these statistics represent only a subset of reoffending, with this cohort committing a substantially higher number of reoffences that do not have a proven outcome, so do not appear within Government statistics. Home Office research estimated that in 2016 the total economic and social costs of reoffending in the first year of follow-up was £18 billion (Newton et al., 2019). Imprisonment as a result of reoffending also has a substantial impact on offenders themselves and their families. Interventions that help to break the cycle of reoffending have the potential to result in economic benefits that exceed their costs, as well as helping to enhance the welfare of some of the worst off in society.

Restorative practice incorporates a broader family of interventions associated with the same principles as Restorative Justice. Restorative interventions can be used to address conflict in schools, families, the workplace or other settings outside of the justice system. This research focuses on Restorative Justice in relation to crime.

## 4. Expert input

An advisory board provided strategic oversight of the research throughout, to ensure that the approach was methodologically robust, relevant to practice and informed by the best available evidence. Members of the advisory board are listed below.

- **Jon Franklin:** Chief Economist, Pro-Bono Economics
- **Professor Joanna Shapland:** Edward Bramley Professor of Criminal Justice at the University of Sheffield
- **Lisa Allam:** Commissioning and Contracts Manager, Office of the Police and Crime Commissioner, Hampshire and the Isle of Wight

A number of other individuals were consulted on aspects of the research, including Restorative Justice practitioners, Restorative Justice commissioners, academics, former police officers and a Government economist.



## 5. Review methods

### 5.1 Overview

We reviewed relevant research to inform the development of the economic model. The literature review had two objectives:

- To ensure that the model built on insights from previous attempts to evaluate the economic impact of Restorative Justice.
- To ensure that the model made use of the best available evidence.

The review was conducted using internet search engines and the following databases: Restorative Justice Council, What works in Policing, Gov.uk (College of Policing, n.d.; Restorative Justice Council, n.d.; UK Government Database, n.d.). The review results were supplemented by engaging with relevant stakeholders.

Data were provided by three police force areas, one youth offending service and one independent Restorative Justice provider. Henceforth these are referred to as:

- Police Force Area 1
- Police Force Area 2
- Police Force Area 3
- Youth Offending Service 1
- Restorative Justice Provider 1

## 6. Review results

### 6.1 Existing economic evaluations of Restorative Justice

The majority of economic evaluations of Restorative Justice focus on Restorative Justice as a supplement to conventional justice or Restorative Justice as a substitute for conventional justice. These two approaches focus on different potential benefits of Restorative Justice (Appendix, Section 13.7).

There are a number of methodological limitations associated with existing economic evaluations of Restorative Justice. There are only a couple of studies that draw on treatment effects from high-quality studies with a low risk of bias (Matrix Evidence, 2009; Shapland et al., 2008). A large proportion of studies have severe limitations in the methods applied to estimate the impact of Restorative Justice on reoffending, and the costs of conventional justice (Macdonald et al., 2017). Many of the studies are old, and the assumptions made may no longer be relevant. Studies apply very limited use of sensitivity analysis, meaning that the reader is not provided with clarity as to the robustness of findings to different assumptions. An overarching theme is that many of the studies take the form of policy reports, and there are limited peer-reviewed published studies on the economic impact of Restorative Justice.

### 6.2 Input reviews

#### 6.2.1 Cost of delivering Restorative Justice

There exist a range of studies that include estimates for the cost of delivering Restorative Justice interventions. There is considerable debate regarding what constitutes a Restorative Justice intervention and associated variation in practice. This is reflected in the variation in estimates of the cost of delivering Restorative Justice interventions. The review yielded estimates from economic evaluations of Restorative Justice, rates quoted by providers for delivering individual Restorative Justice interventions, and average costs estimated by providers. In the majority of studies, the costs per case range from around £250 to £1,000 per case. The Shapland report (Shapland et al., 2008) is an exception, in which the cost per case ranges from £2,500 to £10,000, depending on the scheme. This is partly due to a more comprehensive costing methodology and partly a result of the schemes included within the study having more extensive resourcing than other Restorative Justice schemes. See Appendix for further details (Section 13.6).

#### 6.2.2 Impact of Restorative Justice on reoffending

The review found a range of studies estimating the impact of Restorative Justice on reoffending with wide variation in the quality of their methodologies. The review focused specifically on meta-analyses of studies with high quality methodologies, in order to target the best available evidence. We found limited studies that met these criteria. The Strang 2013 study was found to be the most robust and most closely aligned with our research question (Strang et al., 2013).

## 7. Economic evaluation methods

This section outlines the methods used to evaluate the economic impacts of Restorative Justice. It is descriptive and not prescriptive: it aims to characterise the way in which Restorative Justice interventions are implemented in the published literature and current practice; it should not be interpreted as guidelines for how Restorative Justice interventions should be implemented for individual cases. This analysis attempts to capture all impacts of Restorative Justice interventions on offenders, victims, the state, and society. We needed to prioritise due to resource constraints and data availability, so focused attention on the economic impacts we anticipated being the largest and most direct and which were supported by the strongest evidence.

### 7.1 Model conceptualisation

We reviewed existing economic evaluations of Restorative Justice interventions, and this informed the conceptualisation of the economic model (Matrix Evidence, 2009; Shapland et al., 2008). This economic evaluation built on previous economic evaluations. It incorporated newer evidence and aimed to yield results that were more robust and generalisable.

### 7.2 Model type

The model followed a decision tree structure, as evidence of the long-term impact of Restorative Justice interventions on reoffending were not available in a format that could support development of a Markov model. The model focused on a hypothetical Restorative Justice service providing Restorative Justice interventions to a cohort of offenders for a defined time period. Further information on the approach taken is provided in the Appendix (Section 13.1).

### 7.3 Model structure

The model was separated into one-year periods. Each victim-offender grouping, (henceforth termed a 'case') entered either the conventional justice arm or the Restorative Justice arm (which consists of the conventional justice pathway, supplemented by a Restorative Justice intervention).

Each case in the Restorative Justice arm enters the Restorative Justice pathway in the first year. The pathway had a number of stages:

- **Referral:** this is where the Restorative Justice service received a request to deliver Restorative Justice to a particular case. It can come from the victim or the offender, or a service working with the victim or offender.
- **Assessment:** this is where the Restorative Justice service established whether the case is suitable for a Restorative Justice intervention and gains consent from the victim and offender. In practice, this stage can comprise of a range of different visits, phone calls and/or emails.
- **Intervention:** this is where the victim and offender received a Restorative Justice intervention. This can either be direct (the victim and offender meet) or indirect (the victim and offender do not meet).

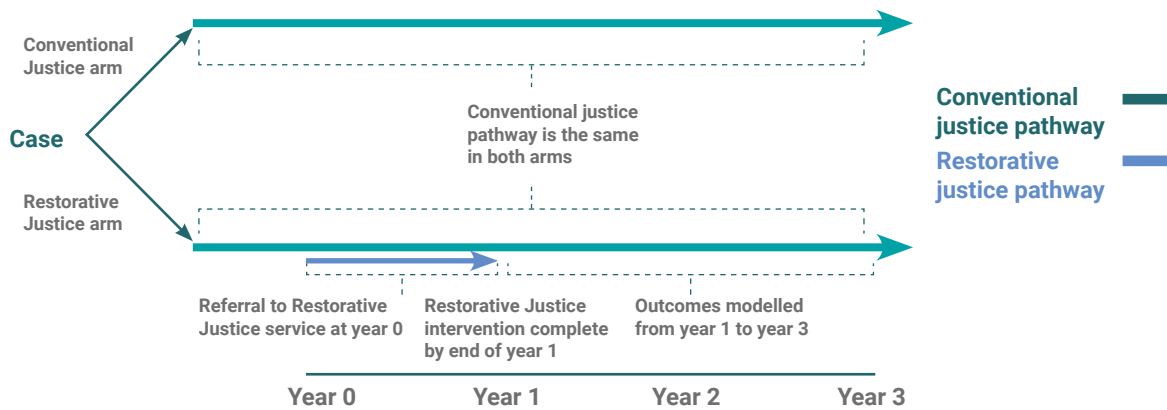
Some cases drop out from the pathway at the 'Referral' and 'Assessment and Consent' stages. These cases were associated with some cost and may or may not be associated with a modest benefit.

Where a case progresses to a Restorative Justice intervention, this was associated with costs, and benefits.

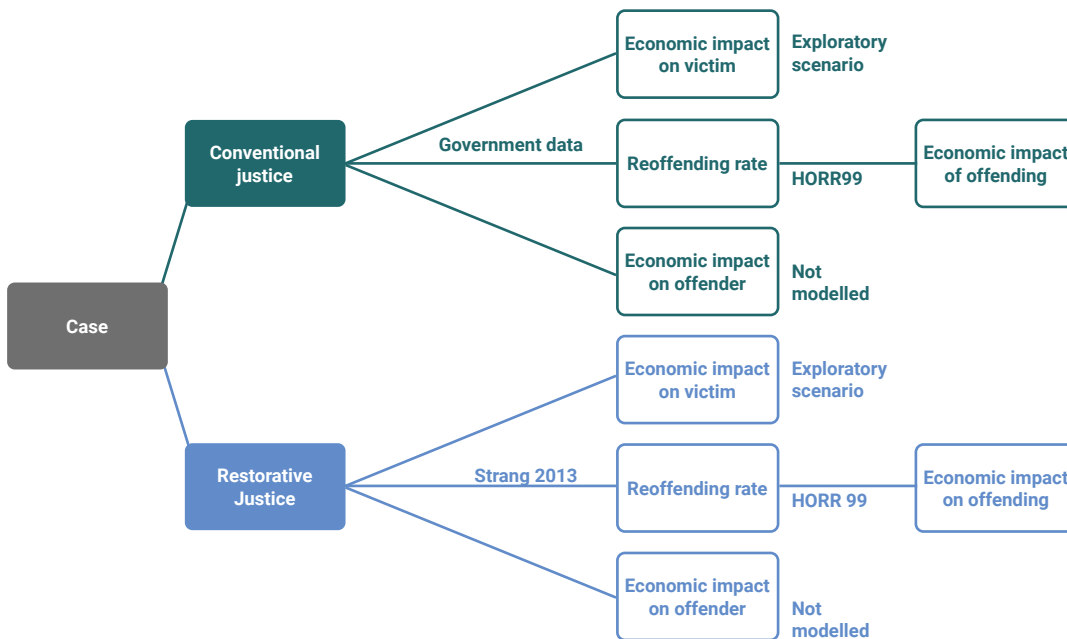
Following the intervention, each case may be associated with a number of potential outcomes. These include direct impacts on the wellbeing of the victim, the direct impacts on the wellbeing of the offender and the likelihood that the offender reoffends, and the associated impacts of reoffending. These are described sequentially, in the following sections. These outcomes were applied from the second year of the model onwards.

A schematic diagram illustrating the workings of the model is included below (Figure 1, Figure 2).

**Figure 1: Schematic of the impacts of the conventional justice and Restorative Justice Pathways**



**Figure 2: Schematic of the impacts of the conventional justice and Restorative Justice Pathways**



### 7.4 Perspective

In the base case, the analysis was conducted from a societal perspective, meaning that the total impact of the victim and perpetrator passing through the justice process was taken into account. This included:

- The impact on the index victim’s wellbeing (scenario only, see Section 7.7.1)
- The impact on Government spending
- The impact on future victims’ wellbeing (if the offender reoffends)
- The impact on wider society (if the offender reoffends)

A Government perspective was used within sensitivity analysis, focusing only on the impact of Restorative Justice on criminal justice spending.

## 7.5 Time horizon

The Strang 2013 study analysed reoffending over a time horizon of two years (Strang et al., 2013). The Government reports reoffending data for England and Wales using a one-year time horizon.

We did not find any research looking at the impact of Restorative Justice on reoffending over a time horizon longer than two years. Most previous economic evaluations have therefore focused on a one, or two, year time horizon. There is evidence to suggest that benefits for victims persist over longer timeframes. For example, Sherman et al. (2015) reference a study in which victims participating in Restorative Justice have statistically lower levels of anxiety, anger and bitterness after ten years (Sherman et al., 2015).

Some economic evaluations have attempted to model a longer time horizon. For example, the Matrix Evidence report (Matrix Evidence, 2009) modelled a 25-year time horizon, from when a hypothetical offender is aged 25, to when they reach 50 years of age. They achieved this by assuming that the reduction in reoffending observed after one year, continued throughout the offender's lifetime. This is a very optimistic assumption, and it seems much more plausible that the offending rate of offenders who participate in a Restorative Justice intervention would converge on the offending rate of those that do not, over the course of the offender's lifetime. This is because the impact of all social interventions is likely to decay over time, as the emotional impact of the intervention diminishes, and more recent events become relatively more important drivers of behaviour.

We analysed reoffending over a one-year time horizon in the base case; longer time horizons were tested as part of sensitivity analysis.

## 7.6 Year and discounting

The model uses 2021 costs, with costs inflated where necessary. Costs and benefits were discounted at a rate of 3.5%, in line with the Treasury Green Book (HM Treasury, 2022). The analysis makes use of the most contemporary available data.

## 7.7 Population

This section defines the population of interest, informed by availability of evidence and relevance to current practice. In some instances, data was used from studies in which the definition of the population varied from the population defined in this section. This limitation is discussed in detail within Section 9.1.

### 7.7.1 Victims

There is a high degree of variation among victims eligible for a Restorative Justice intervention with very few common characteristics between them, other than that they have all been harmed.

It is typical for a victim engaged in a Restorative Justice intervention to be the primary victim of the crime, both within the evidence and within current practice. For example, if the crime is an assault, the victim engaging in Restorative Justice would usually be the individual assaulted. However, it is also relatively common for the victim to be part of a group of people impacted by a crime, or a relative of the victim (also known as secondary victims). For the purposes of this analysis, this was not assumed to impact cost and there is not evidence to suggest a difference in effectiveness, so a distinction was not made between primary and secondary victims.

### 7.7.2 Offenders

Key characteristics of offenders include their age, the type of index offence and their index sentence. The Government publish very limited data on the offenders that access Restorative Justice and the accuracy and comprehensiveness of these data are poor (Why me?, 2021). We therefore focused on other data sources. Equipose between groups was assumed where there was insufficient evidence to establish whether inputs were effect modifiers. So, for example, because no evidence was found to suggest Restorative Justice is more (or less) effective for women than for men, this is what was assumed in the model.

Young offenders follow a different conventional justice pathway to adult offenders. This impacts the cost of the justice pathway for these individuals. There is limited evidence of different outcomes being achieved by young offenders, compared with adult offenders, following Restorative Justice.

Table 1 presents the ages of offenders for Restorative Justice cases from Police Force Area 2. It shows that the ages of offenders referred for Restorative Justice vary substantially, with an average of approximately 31 and a wide age distribution. These data align with the data in Table 2, for Police Force Area 3 (with an average age of 34). These data are approximately aligned with national data on the average age of the prison population (Gov.uk, 2022). This research characterises the differences in delivering Restorative Justice interventions to adults and young people, by modelling a cohort with a weighted sample of the two groups.

**Table 1: Offender age of Restorative Justice cases at Police Force Area 2, 2021**

Offender age	Number of cases
Under 11	1%
11-20	43%
21-30	15%
31-40	14%
41-50	7%
51-60	13%
61-70	3%
71-80	2%
80+	0%
<b>Total</b>	<b>100% (283)</b>

**Notes:** a limitation of this data is that it includes disputes and crimes that do not lead to a criminal sentence so are outside of the scope of this study. This means, there may be some misalignment.

**Table 2: Offender age of Restorative Justice cases at Police Force Area 3, 2021**

Offender age	Number of cases
Under 12	1%
13-17	6%
18-24	12%
25-34	42%
35-44	24%
45-54	12%
55-64	2%
65-74	1%
75+	1%

**Notes:** a limitation of this data is that it includes disputes and crimes that do not lead to a criminal sentence so are outside of the scope of this study. This means, there may be some misalignment.

The index offence is the offence that an offender is charged with, prior to a referral to a Restorative Justice service. There are some crimes that are not considered suitable for Restorative Justice, with policies varying across different Restorative Justice services. This mainly includes crimes without a known victim, and offender-led referrals for sexual and domestic abuse.

It was challenging to robustly analyse the mix of offence types and sentences of those accessing Restorative Justice interventions. Table 3 presents data on index offence type for Police Force Area 2 and Police Force Area 3. It provides some evidence to suggest that those committing more serious crime types, particularly violent and sexual crimes, are more likely to be referred for a Restorative Justice intervention. Those committing theft offences were substantially underrepresented within these police force areas.

**Table 3: Percentage of Restorative Justice cases by index offence group (no.), 2021**

Offence Type	Police Force Area 2 Referrals	Police Force Area 3 Referrals	All proven crime nationally
Violence against the person	50% (113)	54% (299)	51% (75,090)
Sexual offences	29% (65)	1% (8)	2% (3,244)
Robbery	1% (2)	5% (27)	2% (2,866)
Theft offences	9% (21)	15% (82)	21% (30,378)
Criminal damage and arson	11% (24)	19% (105)	25% (36,431)
Other	–	6% (29)	–
<b>Total</b>	<b>100% (225)</b>	<b>100% (550)</b>	<b>100% (148,010)</b>

**Notes:** Includes only the crime types included within the scope of this study. The third column is for adults only, but this is unlikely to substantially bias the comparison as differences in offence type between adults and youths, are modest. **Source:** Table 4: Total number of crimes committed, PRCs and resultant multipliers, [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/732110/the-economic-and-social-costs-of-crime-horr99.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/732110/the-economic-and-social-costs-of-crime-horr99.pdf), Table Q1.3 – “Proven Offenders” in the Criminal Justice System, <https://www.gov.uk/government/statistics/criminal-justice-system-statistics-quarterly-march-2021>

Expert opinion was mixed as to whether there is a systematic relationship between crime type and the cost of delivering a Restorative Justice intervention. Some said that more serious crimes are associated with higher costs, whilst others said that there is not a clear relationship.

The Shapland Report tests whether there were significant differences in reductions in reoffending, linked to baseline characteristics, index offence type and the stage in the conventional justice process at which the Restorative Justice intervention was delivered (Shapland et al., 2008). It found no significant differences between these subgroups. It is possible that the lack of statistical significance is a result of the trials not having adequate statistical power to detect whether there are statistically significant differences.

The Strang 2013 meta-analysis includes subgroup analyses, including on index offence type and whether Restorative Justice was used as a supplement, or substitute, to conventional justice (Strang et al., 2013). Restorative Justice was found to be associated with statistically significant reductions in reoffending in some subgroups but not others. For example, the study claims that Restorative Justice was more effective for violent crimes. Whilst this may suggest these inputs are effect modifiers, it is insufficient evidence because these results could have occurred at random. Subgrouping the data means reducing the statistical power of the analysis, so it is expected that some results may no longer be statistically significant.

These studies did not include domestic abuse and sexual offences. Experts advised that historically these cases were generally considered to be inappropriate for Restorative Justice interventions. Over time, practice has evolved and now many services will receive any referral provided that it is initiated by the victim, or their supporters. For this study, it is assumed that Restorative Justice is as effective within this group as for other index offence types, though this is an area of uncertainty.

Further research as to which factors impact the effectiveness of Restorative Justice interventions would help to improve the accuracy of attempts to model the economic impact of Restorative Justice interventions.

## 7.8 Intervention: Restorative Justice

### 7.8.1 What is Restorative Justice?

Restorative Justice interventions can either be direct (where the victim and offender meet) or indirect (where the victim and offender do not meet but contact between them is facilitated by an independent practitioner).

Within the Shapland Report (Shapland et al., 2008), and a number of other sources (College of Policing, n.d.; Criminal Justice Alliance, 2017), direct Restorative Justice interventions are separated into Restorative Justice conferencing and mediation. The distinction between a Restorative Justice conference and mediation is not consistently understood and there is variation in the language used. The distinction can relate to the attendees, the facilitator or to the structure of the meeting. Direct mediation is defined as a meeting with only the victim, offender and facilitator. A Restorative Justice conference is defined as a meeting that may include a larger number of people including:

- Professionals working with the offender: e.g. probation officers
- Professionals working with the victim: e.g. victim's services workers
- Supporters of the offender: e.g. family, friends, appropriate adults
- Supporters of the victim: e.g. family, friends
- Representatives of the community: community leaders, neighbours, etc.

Also, a Restorative Justice Conference, as defined within the Justice Research Consortium (JRC) trials, has a particular structure and script that contains a forward-looking component (Shapland et al., 2008).

There is evidence to suggest that mediation may not be associated with the same benefits as Restorative Justice Conferencing. The Shapland report found that Restorative Justice conferences were associated with a statistically significant reduction in reoffending (Shapland et al., 2008). It did not find that mediation was associated with a statistically significant reduction in reoffending. There is the potential for confounding, as the trials that included mediation were delivered by different organisations, in different areas, for a different cohort. A Danish study of mediation also did not find that it was associated with a statistically significant reduction in reoffending (Kyvsgaard, 2016). This supports the hypothesis that mediation may not be associated with the same benefits as Restorative Justice conferencing, though again there is a substantial risk of confounding. A further study is being conducted to compare mediation with conferencing (Strang et al., 2016). This will have helpful implications for modelling the economic impact of Restorative Justice interventions, as well as policymaking and practice.

Experts expressed the view that the distinction between conferences and other direct Restorative Justice interventions is somewhat artificial, with attendance at direct Restorative Justice interventions more dependent on the context of each case than the design of the Restorative Justice scheme and the structure of the meetings tailored to the needs of the participants.

Given the current uncertainty surrounding which direct Restorative Justice interventions are associated with reductions in reoffending, all direct Restorative Justice interventions were analysed as a class. In order for an intervention to meet this definition, at least one encounter must occur between the offender, victim and at least one facilitator. Experts advised that if the victim and offender do not know each other, they generally only meet once as part of a direct Restorative Justice intervention. If they know each other, there may be multiple meetings.

Indirect Restorative Justice interventions also vary considerably. Shuttling is where a facilitator relays messages back and forth between the victim and offender. It is a relatively intensive indirect Restorative Justice intervention. Another indirect intervention is supporting the offender to send a letter of explanation/apology, though its effectiveness is disputed. On the advice of experts, we assumed indirect Restorative Justice interventions must include two-way communication between the victim and offender.

Experts advised that in general, direct Restorative Justice interventions are offered where possible and indirect Restorative Justice interventions are used as the next best alternative. This could be because one party does not consent to a face-to-face meeting, or a face-to-face meeting is too logistically challenging. Of offenders participating in the JRC study, 71% said they would prefer



direct contact with the victim (Shapland et al., 2007). The Shapland report did not find a statistically significant relationship between indirect Restorative Justice and reoffending (Shapland et al., 2008). Data provided by Police Force Area 3 suggested that the benefits of indirect Restorative Justice interventions, in terms of victim wellbeing and reoffending, were lower than the benefits of direct Restorative Justice. The data show that 27% of offenders showed reduced motivation to offend following only direct Restorative Justice interventions, compared with 10% of offenders following only indirect Restorative Justice interventions (there was a 26% reduction for those participating in direct and indirect Restorative Justice interventions)(Greater Manchester’s Restorative Justice service: Evaluation of the Mobilisation Period and the First Year of Service Delivery, 2020). This can be interpreted as suggesting that the relative risk for the effectiveness of indirect Restorative Justice compared to direct Restorative Justice interventions is 0.37.

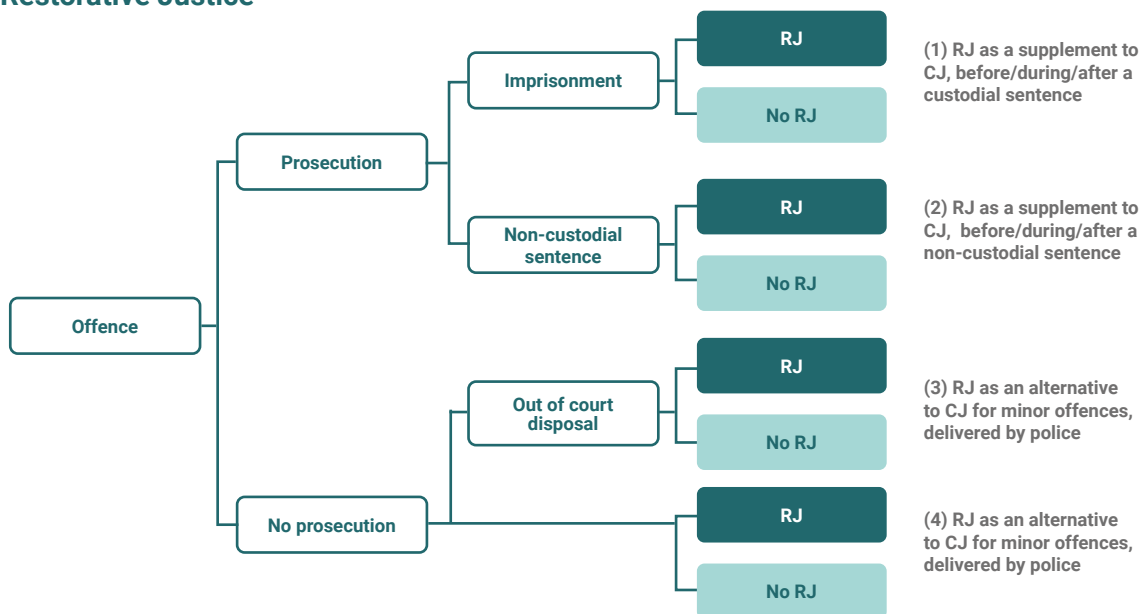
There was not sufficient evidence to demonstrate that indirect Restorative Justice interventions reduce reoffending, so this is what was assumed in the base case. A scenario was implemented in which the effectiveness of an indirect Restorative Justice intervention was assumed to be 37% of a direct Restorative Justice intervention in terms of reductions in reoffending.

### 7.8.2 The Restorative Justice pathway: how do people receive a Restorative Justice intervention?

This research assumed that Restorative Justice is initiated via a referral, or receipt of consent from one party within the case, which can be made at various points within the conventional justice process (Figure 3). Referrals could be made by the victim, the offender or a range of agencies working with the victim or offender. Once a referral was made, an assessment was conducted to determine whether the case is suitable, and consent was sought from both the victim and the offender.

In some studies, Restorative Justice is used as a substitute for all, or some, of the conventional justice pathway. In these instances, the offender is diverted from the conventional justice pathway once they enter the Restorative Justice pathway. This tends to be for those that have committed less serious crimes. In other studies, Restorative Justice is used to supplement conventional justice. In these studies, offenders’ and victims’ progression through the conventional justice process is not impacted by their participation in the Restorative Justice pathway. This analysis focuses on Restorative Justice as a supplement to conventional justice, which corresponds with Branch 1 and Branch 2 in Figure 3. These are offenders who have accepted responsibility for committing serious crimes and are participating in a Restorative Justice intervention as a complement to the conventional justice pathway. Whilst it is also possible for individuals to participate in a Restorative Justice intervention when they have not accepted responsibility (including where there is insufficient evidence), these cases are associated with complications because of the possibility that incriminating information is shared during the intervention. These individuals were excluded from the Shapland trials for this reason and thus are also excluded from this analysis (Shapland et al., 2004).

**Figure 3: Map of the conventional justice pathway, with different points for referral to Restorative Justice**

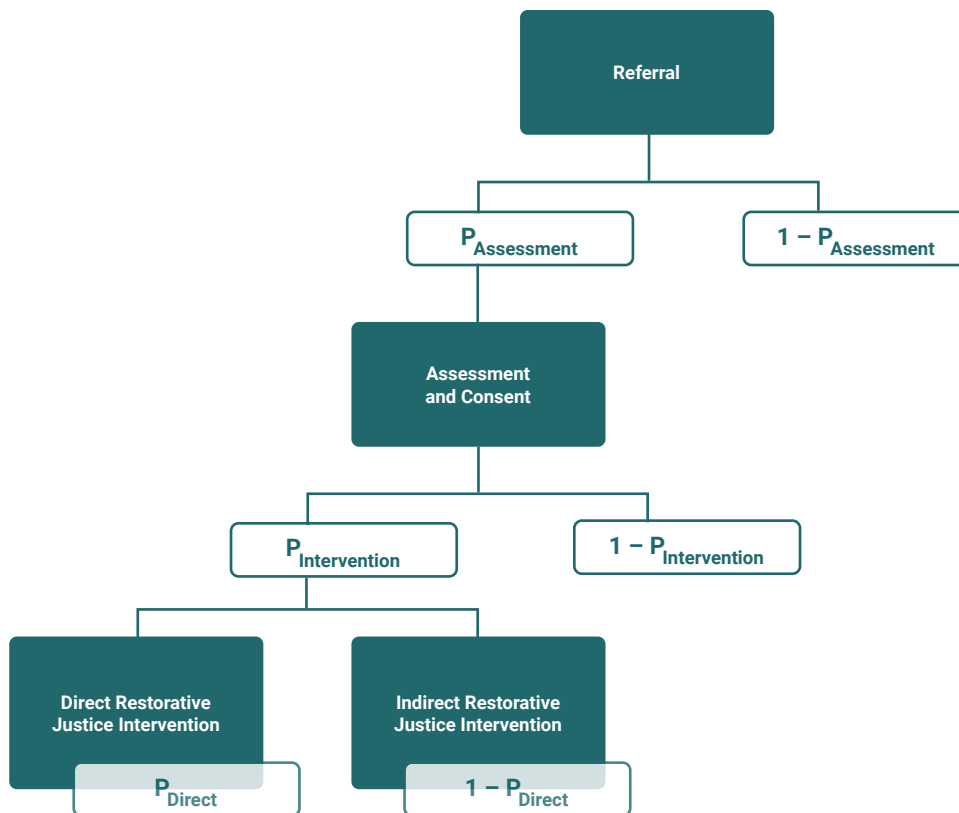


Experts advised that for the majority of relevant cases, the entire Restorative Justice pathway is administered by a specialist Restorative Justice service, from receiving a referral to facilitating a Restorative Justice intervention. This can either be a specific team within the public sector or outsourced to a third party. Generally Restorative Justice services in England and Wales cover specific police force areas. They have a range of other duties including promoting the use of Restorative Justice and training professionals to work in partnership with them, as well as facilitating individual Restorative Justice interventions. There are also a number of national organisations who provide Restorative Justice interventions under specific circumstances, regardless of locality.

### 7.8.2.1 Restorative Justice referral process

Once a Restorative Justice service has received a referral, they must assess whether a case is suitable, and secure consent from the victim and offender, prior to facilitating a Restorative Justice intervention. For this cohort of more serious cases who access Restorative Justice post sentence, the majority of referrals are self-referrals by the victim, with a substantial minority from the Probation Service or the Prisons Service. The Restorative Justice service must determine whether a direct Restorative Justice intervention is possible, or whether an indirect Restorative Justice intervention is more appropriate. Within the economic model, this was referred to as the Assessment and Consent stage. A diagram showing how these are applied is given in Figure 4 and rates of attrition are given in Table 4. The data on rates of attrition varied widely. This is likely to be due to poor data quality, low samples sizes and lack of comparability across Restorative Justice services.

**Figure 4: Rate of attrition as cases progress through the Restorative Justice pathway**



**Table 4: Rates of attrition during the Restorative Justice pathway**

Source	Cases that drop out at referral stage	Cases that drop out at consent and assessment stage	Cases that receive an indirect intervention	Cases that receive a direct intervention
Police Force Area 1 (Expert opinion)	20%	20%	15%	45%
Police Force Area 2 (Data, not on file), 2021	41%	40%	6%	13%
Police Force Area 3 (Data on file)*, 2021	n/a**	33.4%	8.2%	58.4%
Provider 1 (Data on file), multiple years	46%	46%	6%	2%
Pathfinder study, 2014-2015 (Kirby & Jacobson, 2015)	79%**	n/a	12%	9%
Shapland JRC Phase 1, 2001-2003 (Shapland et al., 2006)	n/a***	65%	0%	35%
Shapland JRC Phase 2, 2001-2003 (Shapland et al., 2006)	n/a**	71%	0%	29%

**Note:** these figures are exploratory and should be used with caution. \*Estimated by comparing referrals to interventions over a two-year period, meaning estimates should be used with caution. \*\*Referral and assessment stage combined. \*\*\*These studies followed a different model, where offenders were proactively identified at different stages in the criminal justice process. These figures are a weighted average across the included JRC trials.

### 7.8.3 Restorative Justice for young offenders

Restorative Justice interventions are available for young offenders via a separate system. Whilst the intervention is similar, and the evidence regarding its benefits are generally pooled, the pathway is different.

Restorative Justice for young people who have offended in England and Wales is generally coordinated, and delivered, by a dedicated member of staff situated within a youth offending service. Youth offending services attempt to contact all or at least a majority of victims to offer them access to Restorative Justice.

Experts said that the in-house Restorative Justice delivery model implemented within youth offending services is associated with substantial efficiencies. This is because the referrer, the Restorative Justice service and the professionals working with the offender are all in the same organisation, facilitating efficient communication and circumventing information sharing issues. The cost of delivering Restorative Justice was reduced by 50% within sensitivity analysis. This accounted for uncertainty regarding potentially lower costs of delivering Restorative Justice within a youth offending setting.

**Table 5: Rates of attrition within a youth offending service, 2021**

Source	Consenting victims who received an indirect intervention	Consenting victims who received a direct intervention
Youth Offending Service 1 (data on file)	45%	15%

## 7.9 Comparator: conventional justice

As discussed in Section 7.3, different offenders can enter the Restorative Justice pathway at different points in the conventional justice pathway. The group of offenders included in this research have committed serious crimes and are following a defined conventional justice pathway.

For these offenders, Restorative Justice interventions are a supplement to conventional justice, not a substitute for conventional justice. There are no services or interactions that these offenders or victims forgo, as a result of receiving a Restorative Justice intervention it also has no impact on parole processes or license conditions.

As such, there was no requirement to model the conventional justice process in relation to the index offence in this case, as this is not impacted by the presence of Restorative Justice.

Likewise, if an offender reoffends, their path through the Criminal Justice System is not impacted by the fact that they previously participated in a Restorative Justice intervention. Their participation in Restorative Justice may impact their likelihood to reoffend, but not what happens in the event that they reoffend.

## 7.10 Outcomes

### 7.10.1 Impact of Restorative Justice on reoffending

#### 7.10.1.1 Baseline reoffending rates

Baseline reoffending rates vary depending on the index offence. Restorative Justice interventions are targeted at crimes for which there is an identifiable victim, so this research also focused on this subgroup. Data on reoffending rates were taken from Government datasets (Table 6).

**Table 6: Home Office data on rates of reoffending, 2019-2020**

Crime	Adults			Youths		
	Proportion of offenders who reoffend	Average number of reoffences per offender	Number of offenders*	Proportion of offenders who reoffend	Average number of reoffences per offender	Size of group
Violence against the person	26.6%	3.36	35,263	29.4%	3.97	2,503
Sexual	11.5%	2.7	5,219	10.4%	2.43	289
Robbery	24.2%	2.55	2,423	37.6%	3.42	1,150
Theft	47.8%	5.02	47,819	41.1%	4.13	3,196
Criminal damage and arson	22%	3.37	1,614	37.3%	3.86	346

**Source:** Table A4a: Adult proven reoffending data, by index offence (annual average), <https://www.gov.uk/government/statistics/proven-reoffending-statistics-january-to-march-2020>, Table A4b: Juvenile proven reoffending data, by index offence (annual average), <https://www.gov.uk/government/statistics/proven-reoffending-statistics-january-to-march-2020/proven-reoffending-statistics-january-to-march-2020>

#### 7.10.1.2 Types of reoffence

There is a strong serial correlation between offence types (Table 7 and Table 8). For example, an individual whose index offence is violence against the person, is more likely to commit another violence against the person offence than individuals who have committed other index offences. This demonstrates the importance of modelling the expected reoffence types, conditional on index offence type.

**Table 7: Proven reoffences committed in the one-year follow-up period, by index offence group and reoffence group (2019 - 2020), (numbers in brackets), Adults (numbers of offences).**

Index offence/ Reoffence*	Total number of offenders	Violence against the person	Sexual	Robbery	Theft	Criminal damage and arson	Drug	Possession of weapons	Public order	Miscellaneous crimes against society	Fraud	Summary non-motoring	Summary motoring	Other	Total
All adult offenders	354,531	0.097 (34,331)	0.003 (1,068)	0.005 (1,599)	0.293 (103,903)	0.003 (1,075)	0.003 (1,075)	0.020 (7,128)	0.060 (21,278)	0.039 (13,714)	0.018 (6,419)	0.214 (75,983)	0.101 (35,675)	0.006 (1,955)	0.934 (331,223)
Violence against the person	35,263	0.264 (9,296)	0.004 (127)	0.003 (118)	0.110 (3,884)	0.005 (173)	0.005 (173)	0.020 (713)	0.051 (1,802)	0.027 (936)	0.009 (304)	0.281 (9,894)	0.065 (2,281)	0.008 (290)	0.893 (31,497)
Sexual	5,219	0.027 (141)	0.034 (180)	0.001 (5)	0.015 (80)	0.001 (5)	0.001 (5)	0.003 (16)	0.136 (708)	0.007 (38)	0.001 (6)	0.057 (297)	0.014 (74)	0.004 (23)	0.312 (1,627)
Robbery	2,423	0.057 (138)	0.001 (3)	0.026 (64)	0.149 (360)	0.002 (6)	0.002 (6)	0.033 (80)	0.020 (49)	0.026 (63)	0.025 (60)	0.127 (307)	0.079 (191)	0.001 (3)	0.618 (1,498)
Theft	47,819	0.088 (4,188)	0.002 (114)	0.013 (604)	1.452 (69,440)	0.004 (187)	0.004 (187)	0.037 (1,788)	0.069 (3,303)	0.105 (5,025)	0.067 (3,195)	0.325 (15,527)	0.110 (5,249)	0.011 (515)	2.400 (114,743)
Criminal damage and arson	1,614	0.089 (143)	0.002 (4)	0.003 (5)	0.160 (259)	0.016 (26)	0.016 (26)	0.024 (38)	0.042 (67)	0.035 (56)	0.011 (18)	0.247 (399)	0.074 (119)	0.006 (9)	0.740 (1,195)
Total eligible cohort	92,338	0.151 (13,906)	0.005 (428)	0.009 (796)	0.802 (74,023)	0.004 (397)	0.004 (397)	0.029 (2,635)	0.064 (5,929)	0.066 (6,118)	0.039 (3,583)	0.286 (26,424)	0.086 (7,914)	0.030 (2,795)	5.218 (481,783)

**Source:** rates are calculated, Table B4: Proven reoffences committed in the one-year follow-up period, by index offence group and reoffence group (Apr 2019 to Mar 2020), <https://www.gov.uk/government/statistics/proven-reoffending-statistics-january-to-march-2020>

**Notes:** \*An offender enters the cohort if they were released from custody, received a non-custodial conviction at court or received a reprimand or warning'.

**Table 8: Rates of reoffending divided by index offence type and reoffence type, (2019 - 2020), (numbers in brackets), Youths (numbers of offences).**

Index offence/ Reoffence*	Total number of offenders	Violence against the person	Sexual	Robbery	Theft	Criminal damage and arson	Drug	Possession of weapons	Public order	Miscellaneous crimes against society	Fraud	Summary non-motoring	Summary motoring	Other	Total
All juvenile offenders	20,695	0.112 (2,309)	0.002 (49)	0.049 (1,022)	0.203 (4,191)	0.009 (192)	0.159 (3,282)	0.074 (1,532)	0.068 (1,413)	0.038 (794)	0.023 (483)	0.373 (7,721)	0.132 (2,738)	0.005 (104)	1.248 (25,830)
Violence against the person	2,503	0.218 (546)	0.003 (8)	0.031 (78)	0.138 (345)	0.009 (23)	0.092 (230)	0.062 (154)	0.065 (162)	0.030 (76)	0.012 (29)	0.429 (1,074)	0.072 (181)	0.006 (15)	1.167 (2,921)
Sexual	289	0.007 (2)	0.014 (4)	0.000 (0)	0.028 (8)	0.000 (0)	0.024 (7)	0.007 (2)	0.035 (10)	0.007 (2)	0.003 (1)	0.128 (37)	0.000 (0)	0.000 (0)	0.253 (73)
Robbery	1,150	0.077 (88)	0.002 (2)	0.179 (206)	0.181 (208)	0.003 (4)	0.217 (249)	0.117 (135)	0.067 (77)	0.029 (33)	0.039 (45)	0.226 (260)	0.146 (168)	0.003 (3)	1.285 (1,478)
Theft	3,196	0.103 (330)	0.004 (14)	0.072 (231)	0.543 (1,736)	0.010 (33)	0.132 (423)	0.067 (214)	0.073 (232)	0.050 (159)	0.043 (137)	0.390 (1,245)	0.207 (663)	0.004 (12)	1.699 (5,429)
Criminal damage and arson	346	0.090 (31)	0 (0)	0.049 (17)	0.327 (113)	0.069 (24)	0.072 (25)	0.055 (19)	0.040 (14)	0.029 (10)	0.017 (6)	0.590 (204)	0.072 (25)	0.029 (10)	1.439 (498)
Total eligible cohort	7,484	0.133 (997)	<del>0.004</del> (28)	0.071 (532)	0.322 (2,410)	0.011 (84)	0.125 (934)	0.070 (524)	0.066 (495)	0.037 (280)	0.029 (218)	0.377 (2,820)	0.139 (1,037)	0.019 (144)	4.841 (36,229)

**Source:** Table B4: Proven reoffences committed in the one-year follow-up period, by index offence group and reoffence group (Apr 2019 to Mar 2020), <https://www.gov.uk/government/statistics/proven-reoffending-statistics-january-to-march-2020>

**Notes:** \*'An offender enters the cohort if they were released from custody, received a non-custodial conviction at court or received a reprimand or warning'.

### 7.10.1.3 Reoffending reduction measured based on convictions

The Strang 2013 study includes a meta-analysis of the impact of Restorative Justice on the number of reconvictions during a two-year follow up period (Table 29)(Strang et al., 2013). The study presents the difference in the rate of reoffending between cases assigned to conventional justice and cases assigned to a Restorative Justice intervention, as a supplement to conventional justice. Data are not presented on reoffending divided by index offence, index disposal or age group, as they are presented as aggregated. The results are presented as a standard mean difference. The method used to convert this to an odds ratio, and apply it within the economic model, are presented in the Appendix (Section 10.3).

**Table 9: Transformation of recidivism reduction estimates to estimate the risk of reoffending**

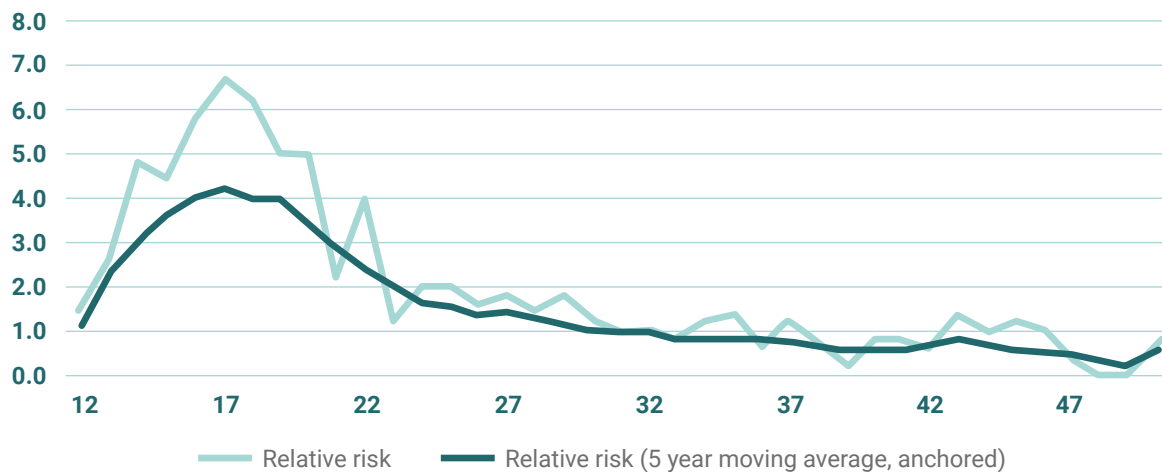
Theme	Input	Value	Source
Strang 2013, Restorative Justice as a supplement only	Standard mean difference	-0.193	(Strang et al., 2013)
	Log odds ratio	-0.350	Calculated using Cochrane Formula Higgins & Green, 2011)
	Odds ratio	0.705	Calculated

**Note:** the reoffending rate implemented in this table is pooled across offence types for illustrative purposes. In the context of the economic model, the method was applied to each index offence type separately.

### 7.10.1.4 Long term reoffending

There is substantial anecdotal evidence that the effects of Restorative Justice on reoffending can be long-lasting. This research found limited data to support this. The RISE experiments in Australia present statistically significant survey data gathered 10 years after participation, showing that offenders were pleased to have taken part in Restorative Justice intervention, they were less angry and less bitter (Sherman et al., 2015). Trials measuring the impact of Restorative Justice on reoffending were generally a maximum of 2 years long. Longer impacts on reoffending were tested as part of the scenario analysis. Research shows that reoffending behaviour rises rapidly to around age 18, then gradually reduces as individuals age (Farrington et al., 2009). This was accounted for by applying an age multiplier, using a 5-year moving average, anchored at age 31. This is the average age for the RJ service of Police Force Area 2 and is approximately aligned with the age of the prison population, a reasonable proxy for the relevant cohort.

**Figure 5: Change in frequency of offending as offenders age**



**Source:** (Farrington et al., 2009)

### 7.10.1.5 Reoffending multipliers to convert proven reoffences into offences

Only a subset of crimes lead to a proven outcome. Some crimes are not reported, others are reported but do not result in a charge, conviction, or other proven outcome. This means that data on the number of proven reoffences need to be scaled up to account for crimes that are not proven (Pro Bono Economics, 2019). The fact that not all crimes are proven means that the impact of an intervention in reducing total crime is a multiple of its impact in reducing proven crime. The method used to account for this is explained in the Appendix (Section 13.2).

## 7.10.2 Impact of reoffences

### 7.10.2.1 Cost of reoffences

The economic impact of offences was estimated by the Home Office and published in the Economic and Social Costs of Crime 2018 (Heeks et al., 2018). This report includes estimates of the impact of crime on the welfare of victims, which is a major improvement on previous editions. One limitation of the estimates is that they do not include the impact of offending and sentencing on offender wellbeing. A substantial benefit of reducing reoffending is sparing an offender the emotional trauma of imprisonment. The exclusion of these impacts to the offender, means that the Home Office's estimates of the economic costs of crime are conservative.

These estimates were used to estimate the benefits of each crime avoided. Thus, for the purposes of this analysis it was assumed that the cost of reoffences is the same as the cost of offences in general. These data are presented in Table 10, divided by offence type.

The Economic and Social Costs of Crime report only includes crime that relates to individual victims, it does not include 'crimes against society' such as motoring and drug offences. These crimes are low cost, so excluding them is likely to have a small impact.

The cost estimates are highly skewed. Homicide is associated with an economic cost of £3,217,740 and there are a very small number of homicides each year (Table 28). Fraud and cybercrime are associated with high volumes and lower average economic costs. Estimates on the impact of Restorative Justice in reducing reoffending apply to reoffending as a whole. Data are not available to establish whether Restorative Justice is more likely to reduce some specific crime types than others. The combination of this uncertainty, and the skewed distribution of costs associated with different crime types, creates the potential for highly uncertain estimates of the economic impact of Restorative Justice interventions. This research therefore adopted a trimmed mean cost of reoffending, by excluding homicide, fraud and cybercrime from estimates of the mean cost of reoffending. This is the approach recommended by the Pro Bono Economics methodology note (Pro Bono Economics, 2019).



**Table 10: Economic and social costs of crime in the Home Office Economic and Social Costs of Crime Report, 2018,**

Offence type	2015/16 costs				2021 costs			
	Anticipation	Consequence	Response	Total unit cost	Anticipation	Consequence	Response	Total unit cost
Homicide	£61,070	£2,343,730	£812,940	£3,217,740	£69,491	£2,666,921	£925,041	£3,661,453
Violence with Injury	£340	£11,220	£2,500	£14,060	£387	£12,767	£2,845	£15,999
Violence without Injury	£120	£3,760	£2,060	£5,940	£137	£4,278	£2,344	£6,759
Rape	£980	£31,440	£6,940	£39,360	£1,115	£35,775	£7,897	£44,788
Other sexual offences	£160	£5,220	£1,150	£6,530	£182	£5,940	£1,309	£7,430
Robbery	£330	£6,310	£4,680	£11,320	£376	£7,180	£5,325	£12,881
Domestic burglary	£710	£3,410	£1,800	£5,920	£808	£3,880	£2,048	£6,736
Theft of Vehicle	£1,730	£4,660	£3,900	£10,290	£1,969	£5,303	£4,438	£11,709
Theft from Vehicle	£110	£590	£180	£880	£125	£671	£205	£1,001
Theft from Person	£20	£920	£430	£1,370	£125	£1,047	£489	£1,661
Criminal damage – arson	£330	£3,110	£4,980	£8,420	£376	£3,539	£5,667	£9,581
Criminal damage – other	£60	£770	£500	£1,330	£68	£876	£569	£1,513
Fraud	£220	£830	£230	£1,280	£250	£944	£262	£1,457
Cybercrime	£290	£260	£0	£550	£330	£296	£0	£626
Commercial robbery	£2,300	£8,020	£4,680	£15,000	£2,617	£9,126	£5,325	£17,069
Commercial burglary	£8,030	£4,650	£2,770	£15,450	£9,137	£5,291	£3,152	£17,580
Commercial theft	£220	£510	£240	£970	£250	£580	£273	£1,104
Theft of commercial vehicle	£5,920	£25,360	£3,900	£35,180	£6,736	£28,857	£4,438	£40,031
Theft from commercial vehicle	£240	£1,460	£180	£1,880	£273	£1,661	£205	£2,139
Commercial criminal damage – arson	£1,830	£4,100	£4,980	£10,910	£2,082	£4,666	£5,667	£12,415
Commercial criminal damage – other	£320	£590	£500	£1,410	£364	£671	£569	£1,604

Source: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/732110/the-economic-and-social-costs-of-crime-horr99.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/732110/the-economic-and-social-costs-of-crime-horr99.pdf)

### 7.10.2.2 Impact of reduced reoffending on offenders

Arguably, the individuals who stand to benefit most from reduced reoffending are offenders themselves. If Restorative Justice interventions help offenders to avoid reoffending, they benefit by being able to work and be free to live independently. Yet the impact of offending, and the consequences of offending, on offenders themselves is not discussed within the Home Office Economic and Social Costs of Crime (Heeks et al., 2018).

There are some methodological challenges when attempting to model the impact of an intervention on offenders themselves (Further discussion in section 7.10.5).

Nevertheless, for offenders who have completed their sentence and are living in the community there are two possible futures, reoffending or living independently, productively and within the law. It seems uncontroversial that if offenders achieve the latter, they will be substantially better off, that this is good for society and that it is something that the Government should value, including within economic evaluations. This can be thought of as comparable to smoking cessation campaign, in which an intervention is funded to dissuade an individual from smoking because it will benefit their wellbeing (Virtanen et al., 2017).

### 7.10.3 Direct impact of Restorative Justice on victims

#### 7.10.3.1 Impact of Restorative Justice on victim's wellbeing

There is a wealth of evidence that when victims are asked about their experience of Restorative Justice, they say that it has benefited them (Shapland et al., 2007; Strang et al., 2013). A number of different studies present survey data that demonstrates benefits across a range of different domains. Victims say they blame themselves less, value receiving a sincere apology and have reduced desire for revenge (Strang et al., 2013). Victims report statistically significant reductions in anxiety, anger, and bitterness, when surveyed ten years after participation (Sherman et al., 2015).

However, there were a number of challenges in attempting to incorporate these data within an economic evaluation. There are two options for formally incorporating these data which were explored and found not to be possible in this instance. These are described in the Appendix (Section 13.4). Instead, a pragmatic method was used to incorporate direct benefits to victims within an exploratory scenario.

The Home Office Economic and Social Costs of Crime report includes estimates of the impact of crime on victims' wellbeing (Table 11)(Heeks et al., 2018). Note that this estimate is the level of harm experienced by the victim over their lifetime. It is reasonable to assume that these costs estimate the upper bound of any direct benefit of Restorative Justice for victims. It will be rare for Restorative Justice interventions to leave victims better off than before they became a victim of crime. Therefore, we conducted an exploratory scenario where Restorative Justice was assumed to provide victims with a direct benefit that is an assumed fraction (20%) of the overall welfare loss as a result of being a victim of crime. This method helps to give a rough understanding of the scale of the economic impact of benefits to the index victim relative to the economic impacts of Restorative Justice via reducing reoffending. It has several limitations, which are discussed in the limitations section.

Experts advised that victims could benefit from receiving support at the referral or assessment stage, even if they do not progress to participating in a Restorative Justice intervention. We were not able to access sufficient data to substantiate this claim. For victims who reach the assessment stage, the support received is likely to be comparable to making contact with a victim support service. The assessment stage can therefore be thought of as a substitute to contacting a victim support service. The Economic and Social Costs of Crime report makes clear that only a small portion of victims of crime receive support from victim support services (Heeks et al., 2018). This means the extent of the cost saving to victim support services as a result of the presence of Restorative Justice, is unclear. A scenario was therefore conducted in which the cost of the assessment stage was removed, to test the assumption that the cost of conducting this activity is cancelled out by the benefits of avoiding the need to support victims via other services.

**Table 11: Home office estimates of the impact of crimes on victim welfare, 2018 (2015 - 2016 costs)**

Crime type	Victim wellbeing impact	
	2015 – 2016 costs	2021 costs
Violence with Injury	£8,240	£9,376
Violence without Injury	£2,810	£3,197
Rape	£24,390	£27,753
Other sexual offences	£3,700	£4,210
Robbery	£3,590	£4,085
Domestic burglary	£1,190	£1,354
Theft of Vehicle	£270	£307
Theft from Vehicle	£140	£159
Theft from Person	£410	£467
Criminal damage – arson	£980	£1,115
Criminal damage – other	£270	£307
Commercial robbery	£4,170	£4,745
Commercial burglary	£510	£580
Commercial theft	£0	£0
Theft of commercial vehicle	£360	£410
Theft from commercial vehicle	£100	£114
Commercial criminal damage – arson	£1,010	£1,149
Commercial criminal damage – other	£60	£68

**Source:** [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/954485/the-economic-and-social-costs-of-crime-horr99.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/954485/the-economic-and-social-costs-of-crime-horr99.pdf)

#### 7.10.4 Direct impact of Restorative Justice on offenders

There is substantial evidence that participating in Restorative Justice interventions directly benefits offender wellbeing (Sherman et al., 2015). Incorporating this within economic evaluation is theoretically and methodologically challenging.

For some, punishing offenders is one of the aims of the justice system so the benefit of an intervention that improves offender wellbeing is uncertain. Further, whilst evidence suggests that offenders benefit from participating in Restorative Justice interventions, one of the stated aims of these interventions is to allow offenders to share the emotional trauma of the victims and to feel shame for their actions (Sherman & Strang, 2007). To try to measure the impact of a Restorative Justice intervention in terms of an increase in offender wellbeing may be an inappropriate way of synthesising the complex emotional impact of offender participation.

It was not possible to include the direct benefits of Restorative Justice for offenders within this research because adequate data were not available, and the appropriate approach was unclear. How best to account for the direct impact of Restorative Justice on offenders is an important area for future research.

### 7.10.5 Restorative Justice as an outcome

This research focuses on Restorative Justice as an intervention which has an instrumental value in improving the outcomes achieved by victim, offender, Government, and society. However, some argue that achieving Restorative Justice is also an outcome, and thus Restorative Justice has intrinsic benefits (Sherman & Strang, 2007). These can be both at the individual level and the societal level.

At the individual level, victims engaged in the conventional justice process point to a feeling of not being involved in the justice process, having unanswered questions about the crime and wanting to move on (Sherman & Strang, 2007). The negative impact of these factors is distinct from the impact of the crime on their wellbeing.

Likewise, communities have a desire for justice to be done and to be seen to be done, which may or may not be adequately met by the conventional justice system (Sherman & Strang, 2007).

Trying to measure the inherent value of justice robustly is highly challenging and we were not able to find relevant data that could be used within this research, or an established methodology for doing so. Even modelling exploratory scenarios would be highly speculative. For this reason, intrinsic benefits of Restorative Justice were not included within the analysis. It is for decision makers to weigh the economic impact of Restorative Justice alongside other impacts that cannot be evaluated within an economic framework.

## 7.11 Costs of Restorative Justice

There are a number of different possible methods for estimating the costs associated with Restorative Justice. Resource constraints and lack of data made it challenging to estimate the cost of delivering Restorative Justice robustly. The different methods explored and the justification for the chosen method are presented in the Appendix (Section 10.4).

### 7.11.1 Cost of delivering Restorative Justice interventions

Resource use estimates at the different stages in the Restorative Justice pathway were provided by Restorative Justice services (Table 12). These were subject to substantial uncertainty because costs vary between cases and the number of cases that progress to a direct Restorative Justice intervention in a year is often relatively low for each Restorative Justice service.

**Table 12: Direct cost per case for Restorative Justice provider, Restorative Justice service costs only**

Source	Referral	Assessment	Direct Restorative Justice	Indirect Restorative Justice
Police Force Area 1 (Data on file)	45 minutes	1,100 hours*	No data	No data
Police Force Area 2 (Data not on file)	45 minutes	7 hours	79 hours	19 hours
Provider 1 (Data on file)	30 minutes	7 hours	No data	28 hours
Youth Offending Team 1 (expert opinion)	30 minutes	7 hours	10 hours	No data
Pathfinder** (Kirby & Jacobson, 2015)	30 minutes	7 hours	123 hours	68 hours

**Note:** These figures are exploratory and should be used with caution. \*This estimate is skewed by a small number of cases with exceptionally high resource use. It was not possible to fully establish the robustness of this estimate. \*\*Total estimates are given (including direct and indirect), no further breakdown is reported. This estimate approximates apportioning this total according to the stages in the Restorative Justice pathway.

Base case estimates are presented in Table 13, informed by expert opinion on which resource use estimates are likely to be most representative of current practice. These estimates are subject to substantial uncertainty and there is substantial variation between cases. In particular, a number of agencies spent disproportionate time and resources on a small number of highly complex cases that often remained open for several years.

For this cohort, experts advised that most referrals are self-referrals by the victim. Further, for the majority of cases, input from other stakeholders is limited to the prison service, or probation service, facilitating contact with the offender. However, this can vary, with some cases involving more substantial input from other stakeholders.

In the base case, it was assumed that the majority of input relates to the Restorative Justice service. A scenario was implemented with the cost of the Restorative Justice process increased 50%, to account for this uncertainty.

**Table 13: Base case resource use estimates for the Restorative Justice pathway**

Source	Inputs	Notes
Referral	45 minutes of Restorative Justice worker/volunteer time.	Restorative Justice worker time informed by data and expert opinion. Most referrals for this cohort are self-referrals by the victim.
Assessment and confirmation of consent of potential participants	15 minutes of police constable time. 7 hours Restorative Justice worker/volunteer time. 1 prison visit.	Police constable time to help locate the other party, informed by expert opinion. Restorative Justice worker time.
Direct Restorative Justice	79 hours of Restorative Justice worker time.	Informed by Police Force Area 2 data.
Indirect Restorative Justice	19 hours of Restorative Justice worker time.	Informed by Police Force Area 2 data.
Additional costs	Restorative Justice manager time is 20% of Restorative Justice worker time, at every stage.	Informed by expert opinion.

The base case resource use estimates (Table 13) were combined with unit costs from published sources (Table 14), to model the costs of each stage of the Restorative Justice pathway (Table 15).

**Table 14: Unit costs of inputs to the Restorative Justice pathway**

Item	Cost	Year	2021 cost	Notes	Source
1 hour Restorative Justice worker	£13	2021	£13	£8.91 national minimum wage and 44% additional oncosts.	(Gov.uk, n.d.) (ASFB: Accounting Services for Businesses, n.d.)
1 hour Restorative Justice Manager	£29	2009	£37	Based on a case manager/Youth Offending Team practitioner salary	(Brookes et al., 2013)
1 hour police constable	£59	2017	£66		(The National Police Chiefs' Council, 2019)
1 hour Probation officer time	£29	2009	£37		(Brookes et al., 2013)
1 hour prison officer time	£29	2009	£37	Assumed to align with probation officer/YOT Team practitioner, given similarity in salaries.	(Brookes et al., 2013)

**Table 15: Cost estimates for the Restorative Justice pathway**

Stage in the process	Bottom-up costs (base case)
Referral	£15
Assessment	£158
Direct Restorative Justice	£1,592
Indirect Restorative Justice	£373

### 7.11.2 Costs of promoting Restorative Justice interventions

Restorative Justice services spend a substantial amount of time and money promoting Restorative Justice to police forces, and other agencies, in order to increase referrals. It would be preferable to include these costs within this analysis, as this work is a necessary part of delivering Restorative Justice interventions. Data was not available on the marginal cost of generating an additional referral to a Restorative Justice service. Therefore, these costs have been excluded. An exploratory scenario was implemented in which the overall cost of delivering Restorative Justice was increased by 100% to account for the cost of conducting Restorative Justice training and raising awareness of Restorative Justice.

### 7.11.3 Victim and offender costs

Victims and offenders themselves incur modest costs in order to engage in Restorative Justice interventions. In the Shapland report, this is estimated to be £2.94 for offenders and £7.47 for victims (Shapland et al., 2008). These costs are subject to considerable uncertainty. The fact they are small relative to the cost of delivering the intervention itself, means excluding them did not have material consequences for the results of the analysis.

## 7.12 Analysis

### 7.12.1 Base case analysis

The primary results were calculated as the cost-social benefit ratio of investment in Restorative Justice interventions.

The costs and benefits were broken down by stakeholder (Criminal Justice System, Government, society), to indicate which stakeholders have the greatest incentive to invest in Restorative Justice interventions.

A cost-effectiveness analysis was conducted for a cohort of cases, presenting the numbers of each offence type avoided when a defined cohort are referred to a Restorative Justice service.

**Table 16: Base case inputs**

Variable	Base case assumption
Index offence mix	Government data for 2021 on all proven offences within the following categories: violence against the person, sexual offences, robbery, theft and criminal damage and arson.
Proportion of referrals where the offender is an adult	60%
Starting age	31
Proportion of interventions that are direct	31%
Proportion of victim harm that is mitigated by Restorative Justice	0%
Effectiveness of indirect Restorative Justice, as a fraction of the effectiveness of direct Restorative Justice	0%
Years for which Restorative Justice reduces reoffending	1
Cost year	2021
Perspective	Societal

### 7.12.2 Population level results

Results were scaled from the level of an individual case, to estimate the total impact of a defined percentage increase to the uptake of Restorative Justice in England and Wales (Equation 1). This was informed by the number of relevant convictions in a given year (Table 17).

#### Equation 1: calculating total potential social value (cost-social benefit ratio)

*Total benefit = (Total eligible population – current uptake) x cost-social benefit ratio of Restorative Justice interventions*

**Table 17: Annual convictions by crime type, 2021**

Offence group	Number of cases with proven outcomes
Violence against the person	51% (75,090)
Sexual offences	2% (3,244)
Robbery	2% (2,866)
Theft offences	21% (30,378)
Criminal damage and Arson	25% (36,431)

**Source:** Table Q1.3 – “Proven Offenders” in the Criminal Justice System by offence group and outcome, 12 months ending June 2020 to 12 months ending June 2021(1), <https://www.gov.uk/government/statistics/criminal-justice-system-statistics-quarterly-june-2021>

### 7.12.3 Sensitivity analysis

A sensitivity analysis was conducted to test the sensitivity of the model results to changes in the inputs. The sensitivity analysis was conducted in relation to the cost-social benefit ratio only. Results are presented in a tornado plot. A subgroup analysis was conducted to understand how the benefits of Restorative Justice interventions vary for different types of offenders.

Key sensitivity analyses included:

- Inclusion of direct benefits of Restorative Justice Interventions for victims
- Different cost estimates for delivering Restorative Justice interventions or the Restorative Justice pathway as a whole
- Upper and lower estimates for the rate of attrition
- Increased the time horizon
- Inclusion of the cost of activities targeted at increased referrals to Restorative Justice services
- Upper and lower estimates for the baseline reoffending rate
- Upper and lower estimates for the economic impact of reoffending
- Upper and lower estimates for the age of the starting cohort
- Upper and lower estimates for the assumed effectiveness of indirect Restorative Justice
- Assessment stage assumed to have no cost

Subgroup analyses included:

- Index offence type

A pessimistic scenario is presented which combines a number of sensitivity analyses to give a lower bound estimate for the economic impact of the Restorative Justice intervention modelled.

Assumptions include:

- Multiplier 2 reduced by 50%
- Cost of the RJ pathway increased by 50%
- Rate of attrition increased by 10%



## 8. Results

### 8.1 Base case

#### 8.1.1 Crime avoided

In the base case, we assumed that Restorative Justice only reduced reoffending during the second year of the model. Rates of reoffending are presented below (Table 18).

**Table 18: Modelled reoffending rates in year 2, in the base case**

Offence group	Offence type	Control	Restorative Justice	Reduction
Violence	Violence with injury	2.81	2.74	0.07
	Violence without injury	1.29	1.26	0.03
Sexual offences	Rape	0.03	0.03	0.00
	Other sexual offences	1.39	1.35	0.03
Robbery	Robbery	1.19	1.16	0.03
	Commercial robbery	5.87	5.72	0.15
Theft	Domestic burglary	0.13	0.13	0.00
	Commercial burglary	3.48	3.39	0.09
	Theft of vehicle	6.41	6.25	0.16
	Theft of commercial vehicle	0.00	0.00	0.00
	Theft from vehicle	0.08	0.08	0.00
	Theft from commercial vehicle	0.63	0.62	0.02
	Theft from person	2.62	2.56	0.07
	Commercial theft	0.12	0.11	0.00
Criminal damage	Criminal damage arson	0.12	0.11	0.00
	Commercial criminal damage – arson	0.82	0.80	0.02
	Criminal damage other	0.00	0.00	0.00
	Commercial criminal damage – other	0.36	0.35	0.01

#### 8.1.2 Cost-benefit ratio for Restorative Justice

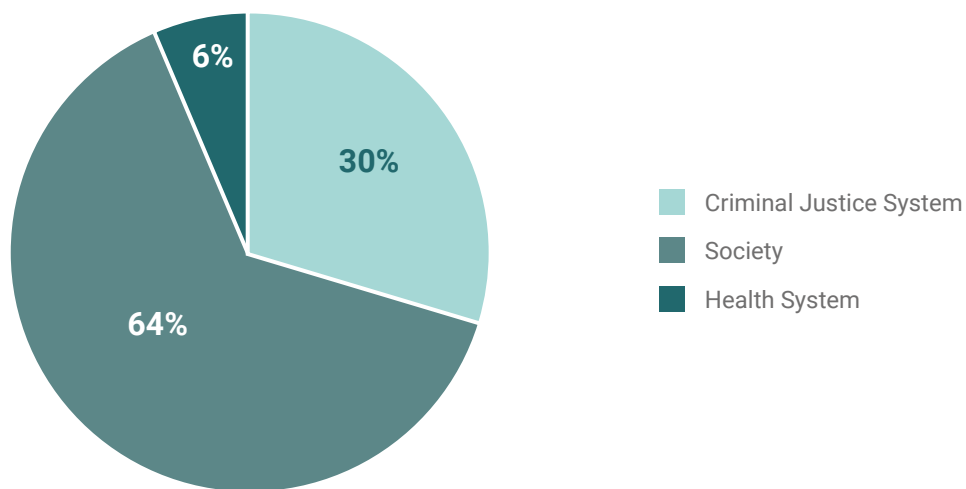
The modelled cost-social benefit ratio in the base case was £14 per £1 invested (Table 19). The total cost of delivering a direct Restorative Justice intervention was £3,394. The financial return on investment for the Criminal Justice System was £4 per £1 invested. The cost per crime avoided was £420, with eight crimes avoided per direct Restorative Justice intervention and 0.68 offences avoided per referral.

**Table 19: Base case estimates of the cost-social benefit ratio of Restorative Justice**

Total cost per referral	Total cost per direct Restorative Justice intervention	Total benefit per referral	Total benefit per Restorative Justice intervention	Cost-benefit ratio (societal)	Cost-benefit ratio (Criminal Justice System)
£284.73	£3,394.25	£4,092.42	£48,785.53	£14.37	£4.23

The Criminal Justice System was responsible for all of the costs and received 30% of the benefits (Figure 6).

**Figure 6: Total benefits by stakeholder**



### 8.1.3. Results for a cohort of 100 cases referred

Results are presented for a typical cohort of 100 cases referred to a Restorative Justice service. As can be seen in Table 20, this would be heavily weighted towards violence against the person, theft, and criminal damage and arson. Ten direct Restorative Justice interventions would take place, resulting in 74 reoffences being avoided, with a gross benefit of £409,242 and a net benefit of £380,957 when costs were accounted for.

**Table 20: Results for a cohort of 100 cases referred**

Offence type	No. of cases referred	No. of direct interventions delivered	Total cost	No. of total reoffences avoided	Total benefit
Violence against the person	50.73	4.26	£14,444	20.9	£169,276
Sexual	2.19	0.18	£624	0.63	£4,846
Robbery	1.94	0.16	£553	0.96	£7,828
Theft	20.52	1.72	£5,843	32.00	£153,331
Criminal damage and arson	24.61	2.06	£7,007	13.28	£73,916
<b>Total</b>	<b>100.00</b>	<b>8.39</b>	<b>£28,473</b>	<b>74.25</b>	<b>£409,242</b>

### 8.1.4 Population level results

There are approximately 148,000 eligible crimes with proven outcomes each year, with 74,000 people sentenced for eligible crimes in 2021 (UK Government Database, n.d.). This is down from 194,000 in 2011, as the proportion of crimes with a proven outcome has fallen.

Some of these cases are unsuitable for a Restorative Justice intervention. The exact size of the eligible cohort, and proportion of the cohort currently referred for a Restorative Justice intervention, are both unknown due to gaps in national data collection.

For illustrative purposes, an increase in Restorative Justice referrals, for the cohort included in this research, from 15% of eligible crimes to 40% of eligible crimes would be associated with a £5.3 million investment and £75.7 million of social benefit Table 21. The model suggests that this would save the Criminal Justice System £17 million.

**Table 21: Modelled benefit of expanding referrals for Restorative Justice interventions in England and Wales**

Offence type	No. of cases referred	No. of direct interventions delivered (indirect)	Total cost	No. of total reoffences avoided	Total benefit	Total benefit to the Criminal Justice System
15% of eligible cases referred	11,100	931 (2,073)	£3,160,503	7,524	£45,425,896	£13,364,024
40% of eligible cases referred	29,600	2,483 (5,527)	£8,428,009	20,065	£121,135,721	£35,637,396
Difference	18,500	1,552 (3,454)	£5,267,506	12,541	£75,709,825	£22,273,372

It is challenging to establish the time frame over which the Criminal Justice System would achieve a positive return on investment because the Economic and Social Costs of Crime report does not report estimates by year and the costs of serious crimes can accrue over a long timeframe as the offenders spends a number of years in prison and then on probation. Nevertheless, given that it generally takes less than a year for a case to be sentenced and that the average sentence length is one and a half years it is reasonable to assume that the majority of benefits would be accrued within a five-year period.

### 8.2 Sensitivity and scenario analysis

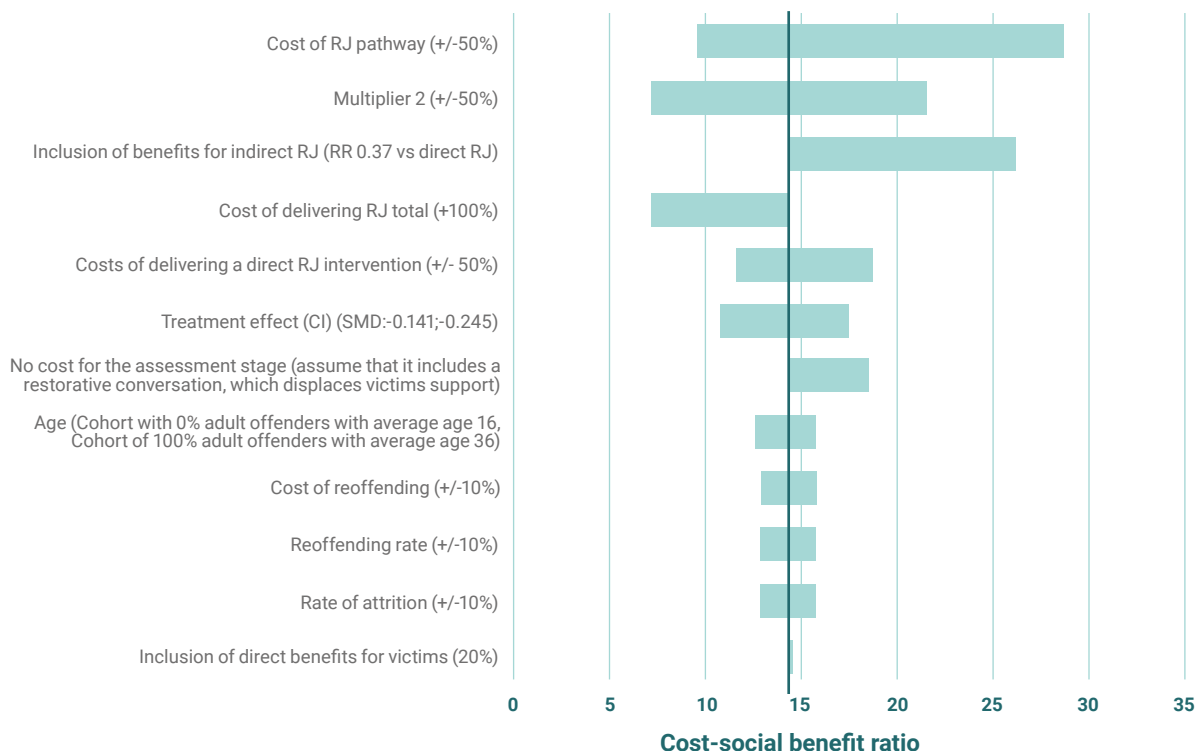
Key areas of uncertainty were tested by conducting a sensitivity analysis. The results of the sensitivity analysis are presented in Table 22 and Figure 7. The scenarios associated with the largest change in the results were where the costs of delivering the Restorative Justice pathway were subject to an increase, or decrease, of 50%. Increasing the assumed effectiveness of indirect Restorative Justice, from 0% to 37% of the effectiveness of Direct restorative Justice, increased the cost-social benefit ratio to £26.

Including direct benefits to the index victim, only increased the cost-social benefit from £14.37 to £14.58.

**Table 22: Sensitivity analysis**

No.	Analysis	Lower estimate	Base case	Upper estimate
1	Inclusion of direct benefits for victims (20%)	£14.37	£14.37	£14.58
2	Rate of attrition (+/-10%)	£12.91	£14.37	£15.72
3	Reoffending rate (+/- 10%)	£12.94	£14.37	£15.81
4	Cost of reoffending (+/-10 %)	£12.94	£14.37	£15.81
5	Age (Cohort with 0% adult offenders with average age 16, Cohort of 100% adult offenders with average age 36)	£12.69	£14.37	£15.79
6	No cost for the assessment stage (assume that it includes a restorative conversation, which displaces victims support)	£14.37	£14.37	£18.59
7	Treatment effect (CI) (SMD: -0.141; -0.245)	£10.98	£14.37	£17.46
8	Costs of delivering a direct RJ intervention (+/-50%)	£11.64	£14.37	£18.78
9	Cost of delivering RJ total (+100%)	£7.19	£14.37	£14.37
10	Inclusion of benefits for indirect RJ (RR 0.37 vs direct RJ)	£14.37	£14.37	£26.21
11	Multiplier 2 (+/-50%)	£7.19	£14.37	£21.56
12	Cost of the RJ pathway (+/-50%)	£9.58	£14.37	£28.75

**Figure 7: Tornado diagram displaying sensitivity and scenario analysis (£)**



### 8.2.1 Extended time horizon

An exploratory scenario was conducted in which Restorative Justice continued to reduce reoffending over a five-year period. The results are presented in Table 23. When Restorative Justice was assumed to reduce reoffending over a longer time period, this was associated with substantial benefits (Table 24). Rates of reoffending reduced each year, so the benefit of each additional year of reduced reoffending is marginally decreasing. The trend over time is uneven, as a result of the data presented in Table 5.

**Table 23: Modelled reoffending rates with an extended time horizon**

Reoffence	Reoffending rate							
	Control				Treatment			
	Year 2	Year 3	Year 4	Year 5	Year 2	Year 3	Year 4	Year 5
Violence with injury	2.81	2.86	2.71	2.81	2.74	2.86	2.71	2.81
Violence without injury	1.29	1.32	1.25	1.30	1.26	1.32	1.25	1.30
Rape	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Other sexual offences	1.39	1.41	1.34	1.39	1.35	1.41	1.34	1.39
Robbery	1.19	1.21	1.15	1.19	1.16	1.21	1.15	1.19
Domestic burglary	5.87	5.98	5.66	5.88	5.72	5.98	5.66	5.88
Theft of vehicle	0.13	0.14	0.13	0.13	0.13	0.14	0.13	0.13
Theft from vehicle	3.48	3.54	3.35	3.48	3.39	3.54	3.35	3.48
Theft from person	6.41	6.53	6.18	6.41	6.25	6.53	6.18	6.41
Criminal damage arson	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Criminal damage other	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
Commercial robbery	0.63	0.64	0.61	0.63	0.62	0.64	0.61	0.63
Commercial burglary	2.62	2.67	2.53	2.63	2.56	2.67	2.53	2.63
Commercial theft	0.12	0.12	0.11	0.12	0.11	0.12	0.11	0.12
Theft of commercial vehicle	0.12	0.12	0.11	0.12	0.11	0.12	0.11	0.12
Theft from commercial vehicle	0.82	0.84	0.80	0.83	0.80	0.84	0.80	0.83
Commercial criminal damage–arson	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Commercial criminal damage–other	0.36	0.36	0.34	0.36	0.35	0.36	0.34	0.36

**Table 24: cost-social benefit ratio with an extended time horizon**

Years that Restorative Justice reduces reoffending	Cost-social benefit ratio
One year (base case)	£14.37
Two years	£29.02
Three years	£42.88
Four years	£57.27

### 8.3 Subgroup analysis

Results from a subgroup analysis of different index offence types are included in Table 25. The cost-social benefit ratio was greatest for theft and robbery. This is because the rate of reoffending is highest for offenders who commit these crimes.

Index offence type	Cost-social benefit ratio
Violence against the person	£11.72
Sexual	£7.77
Robbery	£14.17
Theft	£26.24
Criminal damage and arson	£10.55

### 8.4 Pessimistic scenario

In a scenario in which Multiplier 2 was reduced by 50%, attrition was increased by 10% and the cost of the RJ pathway was increased by 50%, the cost-social benefit ratio was £4.30 per £1 invested. The direct return to the Criminal Justice System was £1.27 per £1 invested.

**Table 26: Pessimistic scenario estimates of the cost-social benefit ratio of Restorative Justice**

Total cost per referral	Total cost per direct Restorative Justice intervention	Total benefit per referral	Total benefit per Restorative Justice intervention	Cost-social benefit ratio (societal)	Cost-benefit ratio (Criminal Justice System)
£346.65	£5,668.57	£1,491.69	£24,392.77	£4.30	£1.27

## 9. Discussion

This research presents the first economic model of the economic impact of Restorative Justice, involving adults or youths, who have committed proven offences in England and Wales. It substantially advances understanding of the economic impact of Restorative Justice, including the key drivers of the economic impact of Restorative Justice. It also highlights key areas for future research. It provides a framework for conducting economic evaluations of Restorative Justice, and other preventative criminal justice interventions, for future research.

This research demonstrates substantial economic benefits of investing in Restorative Justice. The modelled cost-social benefit ratio in the base case of £14 per £1 invested, is substantial. The evidence underpinning this estimate, namely a meta-analysis of a program of randomised control trials (Strang et al., 2013), is strong compared with the evidence related to other criminal justice interventions. This research strengthens the economic case for investment in Restorative Justice. When the strong economic case is combined with the social and moral case for investment, it becomes clear that investing in Restorative Justice should be a policy priority for decision makers at all levels of Government.

The estimated cost-social benefit ratio exceeds the estimates in the Shapland report of a cost-social benefit ratio of £8 per £1 invested for the JRC schemes (Shapland et al., 2008). The cost per intervention was at the lower end of the range of estimates in the Shapland report, (£3,372 compared with £2,984 to £5,963 [inflated from 2005 to 2021]) (Shapland et al., 2008). The estimated financial savings were somewhat higher (£53,485 compared with £44,969 [inflated from 2005 to 2021]) (Shapland et al., 2008). One contributing factor is that the scope of the Home Office estimates for the economic cost of crime have been expanded to include victim wellbeing (Heeks et al., 2018). This yielded increased estimates of the economic benefit of reducing crime. A further consideration is that the estimates of the cost-social benefit ratio for the JRC trials in the Shapland report were limited to the subset of offence types included within these trials. This study included cases with a mix of index offence types that matches the mix of proven offences in England and Wales.

Several areas of uncertainty were tested in a sensitivity analysis.

The cost of delivering Restorative Justice, from referral to intervention, was the most important source of uncertainty. The confidence interval implemented for this estimate was large (+/- 50%). This reflects data analysed, and expert opinion, which both suggested the costs of delivering Restorative Justice interventions is varied and uncertain. One of the challenges was that a large number of stakeholders can contribute to a Restorative Justice pathway and there is a lack of data on resource use by these stakeholders. A further challenge is that Restorative Justice services conduct a range of work, including training and raising awareness of Restorative Justice, that is not linked to individual Restorative Justice cases. This is challenging to account for within an economic model constructed at the individual case level. Nevertheless, these activities are an integral part of running a Restorative Justice service and are thus one component of the cost of delivering Restorative Justice. The cost-social benefit ratio of Restorative Justice remained substantial (£11 per £1), even when the cost of delivering Restorative Justice was increased by 50%, suggesting results were robust to this uncertainty. Further research on the costs of delivering Restorative Justice interventions would help to reduce this uncertainty.

Whether, and to what extent, indirect Restorative Justice interventions reduce reoffending was an important driver of their cost-social benefit ratio. All Restorative Justice services that were consulted, deliver more indirect Restorative Justice interventions than direct Restorative Justice interventions. These interventions generally occur because a Restorative Justice intervention was not possible, due to the preference of the victim, the preference of the offender or logistical challenges. The Shapland report did not find a statistically significant relationship between indirect Restorative Justice interventions and reoffending. Further, there are reasons to believe these interventions are less effective, including that in the Shapland trials 66% of victims and 91% of offenders said it was important to speak directly (Shapland et al., 2006).

The longevity of the impact of Restorative Justice interventions on reoffending was also an important area of uncertainty. In the base case it was assumed that reoffending was only reduced for one year, which is a conservative assumption. It is likely that the reoffending rate for offenders engaging in Restorative Justice would gradually converge on the reoffending rate of those not

engaging in Restorative Justice over time (Sherman et al., 2015). There is some evidence that suggests the benefits for victims of Restorative Justice persist over the long term. Greater evidence is needed of the benefits of Restorative Justice over the long term.

The inclusion of a hypothetical assumed direct benefit for victims resulted in an unexpectedly small increase in the cost-social benefit ratio. Whilst there is substantial data showing that Restorative Justice interventions benefit victims, as has previously been discussed, it is not of a form that can be valued or incorporated within an economic evaluation. This makes this exploratory scenario highly uncertain. This scenario utilised the estimates from the Economic and Social costs of Crime report on the impacts of different offence types on victims (Heeks et al., 2018). There are a number of reasons that this could result in an underestimation of these benefits. The first is that Restorative Justice services support victims of proven crimes, not all crimes, and further they may be targeting a subset of proven crimes with a higher impact on the victim. This would mean that the estimates used for the harm caused to the victim, and thus the potential direct benefit of Restorative Justice to the victim, would be an underestimate. Also, it is possible that the offender has committed multiple crimes against the victim. This would further suggest that these results are an underestimate. There is a need for improved data on the direct benefits of Restorative Justice for victims, using methods that support economic evaluation of these benefits (see Section 11).

The sensitivity analysis results represent the sensitivity of the results to uncertainty about the true value of the inputs. We cannot model the cost-effectiveness of Restorative Justice exactly, but we can say that, given a set of assumptions, it is anticipated to fall within a certain range. The results of the sensitivity analysis can help to inform future research. For example, the cost-social benefit ratio for Restorative Justice could fall between the upper and lower confidence interval. A large confidence interval indicates an important subject for future research.

Within this analysis, the sensitivity analysis results have an additional meaning. Some inputs, such as the rate of attrition within the Restorative Justice pathway or the cost of delivering Restorative Justice, are variables that can be influenced. The research suggests that investing to improve key inputs could be associated with substantially higher return on investment. In particular, an efficient Restorative Justice pathway with high numbers of cases engaging in direct Restorative Justice interventions, low attrition and reduced fixed costs would be associated with a substantially higher return on investment.

## 9.1 Limitations

There are a number of limitations associated with the methodology of this economic evaluation. These are a result of the limitations of the evidence base, complexity of the subject matter and the resource limitations of the research project.

The most important limitation is that this research synthesises a range of different sources of data and evidence. There is a high degree of misalignment between the scope of these sources, meaning a substantial risk of bias. This is unavoidable, given the nature of the available evidence. For example, the mix of index offence types differs between sources (Heeks et al., 2018; Strang et al., 2013). Where possible, expert opinion has been used to validate whether imbalances in these characteristics are likely to bias the results. They have advised that they do not believe this is the case. Further research on the determinants of when Restorative Justice interventions are most effective, would improve the validity of this analysis.

There is a lack of data on the long-term impact of Restorative Justice interventions on reoffending. Studies on the impact of Restorative Justice on reoffending mostly focus on one to two years following the Restorative Justice intervention being delivered (Shapland et al., 2008; Strang et al., 2013). There is very limited evidence on the impact of Restorative Justice on reoffending in the long term. This research assumes no reduction in recidivism after two years. This is a conservative assumption, as Restorative Justice may be associated with further benefits after two years, that are not captured within this economic evaluation.

There are a number of gaps in the evidence on the benefits of Restorative Justice. The best available evidence on the impact of Restorative Justice interventions on reoffending is relatively old (Shapland et al., 2008; Strang et al., 2013) and there are few contemporary studies with high quality research designs and a low risk of bias. There is a lack of studies measuring the impact of Restorative Justice interventions on offenders in a way that could be implemented within



an economic evaluation. There is also a lack of high-quality studies measuring the impact of Restorative Justice at a system level or a locality level.

The relationship between proven reoffences and total reoffences is highly uncertain. If proven reoffences represent a small fraction of total reoffences, the return on investment of Restorative Justice interventions increases, all else being equal. It is unlikely that additional research would be able to substantially reduce uncertainty in this area. This is because the majority of total reoffences are almost by definition unattributable.

It should be noted that compared to the evidence base for other interventions targeted at reducing reoffending, the evidence on the benefits of Restorative Justice is well developed (Sherman & Strang, 2007). Nevertheless, improvements to the Restorative Justice evidence base in these areas would strengthen analysis of the economic impact of Restorative Justice.

## 10. Conclusion

Restorative Justice was found to be associated with a substantial cost-social benefit ratio and direct return on investment to the Criminal Justice System. Investing in Restorative Justice should be a policy priority for decision makers at all levels of Government. Whilst the existing evidence is substantial, there are a number of areas in which additional research is important in order to advance policy maker's understanding of the value of Restorative Justice and how to harness this value to improve outcomes for victims, offenders and society as a whole.

# 11. Recommendations

## 11.1 Recommendations for future research

1. This research was inhibited by the fragmented, partial, and siloed nature of data relating to delivery and outcomes of Restorative Justice interventions. Improved national data collection should be a priority, based on a shared definition of key metrics, including level of investment, number of referrals, number of direct Restorative Justice interventions, number of indirect Restorative Justice interventions, reoffending rate, victim wellbeing and offender wellbeing.
2. Further research is needed to establish validated measures of victim and offender wellbeing. Preferably these should be based on a scale and questionnaire that already has widespread use such as the EQ HWB or ONS 4 EQ-5D, 2021; Office for National Statistics, 2018). This would enable researchers, commissioners, and policymakers to evaluate different Restorative Justice schemes and compare Restorative Justice to other victims' services, and other public services more generally.
3. Any updates to the Economic and Social Costs of Crime 2018 report (Heeks et al., 2018), or other Government research on the economic impact of crime, should include the impact of crime, and the subsequent justice process, on offenders. In many instances, it is offenders who benefit most from interventions to reduce reoffending. It is vital that this is taken into account when valuing these interventions.
4. Further research could help to better understand the necessary conditions for Restorative Justice to be effective. The best available evidence of the benefits of Restorative Justice relate to the JRC Restorative Justice conference which is a very clearly defined intervention. In practice, Restorative Justice interventions vary substantially on a case-by-case basis. Further research is needed to understand whether this spectrum of Restorative Justice interventions is associated with the same benefits.
5. The evidence base is not well developed in relation to some crimes for which Restorative Justice is becoming commonly used. These include sexual offences, domestic abuse and hate crime. Expanding the evidence base into these areas would help to inform policy making and practice.

## 11.2 Recommendations for policymakers

This research synthesises, and adds to, the substantial evidence base demonstrating that increasing access to Restorative Justice interventions benefits victims, offenders, the state and society. Increasing access to Restorative Justice should be a policy priority within the Criminal Justice System. This can be achieved by implementing the following recommendations.

1. The right to be given information about and access to Restorative Justice should be enshrined within the primary legislation of the Victims Bill. This legislative right should end existing blanket bans on Restorative Justice provision for specific types of cases, so that all victims of crime are able to decide whether to engage with Restorative Justice.
2. The Ministry of Justice should develop a monitoring and evaluation framework to improve access to Restorative Justice interventions across England and Wales. This should include robust measures of victim well-being, offender wellbeing, and recidivism.
  - a. This framework would help to hold organisations accountable for upholding their statutory duties and safeguarding victims' rights.
  - b. The framework would provide primary evidence of the impact of Restorative Justice, furthering understanding of its social and economic impact.
3. The Victims' Commissioner should be given national oversight of reporting to hold the Government, and other organisations, to account for delivering against their statutory duties in relation to Restorative Justice.
4. The Ministry of Justice should introduce a ringfenced Restorative Justice budget, separate from the Victims' Grant to Police and Crime Commissioners and mayoral areas. This would

ensure financial sustainability for Restorative Justice services and equal access for victims and offenders nationally.

5. A National Action Plan on Restorative Justice would improve national coordination and oversight of provision for victims and offenders. We recommend that the plan should be championed by a dedicated Minister. They would be responsible for oversight of the implementation of the plan and for reporting on the progress of the plan annually in Parliament, with the support of a dedicated team within the Ministry of Justice.
6. It is strongly recommended that the Government, and research funding bodies, invest in research to further understand the social and economic impacts of Restorative Justice. This should align with the themes detailed in this report.

### 11.3 Recommendations for Police and Crime Commissioners

1. We recommend that you use the model produced by this research to understand the return on investment in Restorative Justice in your area. Share the model with staff or external providers responsible for Restorative Justice delivery, establish an action plan to ensure consistent data collection and analysis to understand and improve return on investment.
2. Review your current spending on your local Restorative Justice service and seek to understand if the budget is sufficient to support facilitation of face-to-face interventions between victims and offenders of crimes post-sentence. These cases can be complex and resource intensive, but the potential economic benefits are large. Allocate additional budget if required.
3. When commissioning external services, consider introducing a minimum of five-year contracts with the option to extend for your restorative service. This will ensure that the restorative service is able to properly embed and can take on more complex cases which take longer to facilitate but can have a considerable economic benefit.
4. It is recommended that HMPPS implement a monitoring and evaluation framework for Restorative Justice across the secure estate and for probation services.
5. In the absence of a national evaluation framework for Restorative Justice, invest in local monitoring and evaluation systems. This should include measuring victim and offender wellbeing. We recommend using the ONS 4 demographic data collection as standard.
6. Ensure compliance with Public Sector Equality Duty and Victim Code of Practice.
7. Engage with Why me?'s annual Valuing Victims reports and consider an annual review of [The Why me? 10 PCC asks](#) in order to monitor your progress on Restorative Justice.

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## 13. Appendix

### 13.1 Modelling approach

The model was developed in Microsoft Excel as a decision tree with a two-year time horizon. The delivery of a Restorative Justice intervention was modelled over a one-year period, with the impact of the intervention modelled over a further one-year period. Extended time horizons were tested as part of sensitivity analysis. Deterministic sensitivity analysis and subgroup analysis were used to test the importance of key assumptions.

The Manning Cost Benefit Tool is a validated and publicly available economic model for evaluating the economic impact of services targeted at reducing crime (Manning et al., 2019). Version 5.7 was last updated in July 2019. This model was adapted to fit the research question of this analysis. Using an existing economic model as a starting point had a number of advantages. First, the model was developed independently and has been reviewed, so was likely to be robust. Second, the model has been used to evaluate other interventions, thus using the model increased the likelihood that the findings of this research are comparable with other, similar research. Finally, adapting a model required less time than developing a model de novo, thus saving researcher time that was invested in other aspects of the research.

Key additions that were made as part of the adaptation include:

- Additional functionality to incorporate the reduction in reoffending associated with a Restorative Justice intervention, taken from the Strang 2013 study (Strang et al., 2013)
- Additional functionality to allow flexibility in inputting the costs of delivering Restorative Justice
- Additional functionality to conduct sensitivity analysis
- Additional functionality to model additional impacts of Restorative Justice, particularly on victim wellbeing

### 13.2 Reoffending multipliers

The formulae for calculating the multipliers that connect proven reoffending with total reoffending are detailed below.

This research adopted a methodology outlined in a paper published by Pro-Bono Economics, for linking reductions in proven crime to estimated costs of overall crime (including crimes that are not reported or proven). The equation for estimating the economic impact of reducing reoffending is presented below (Equation 2).

#### Equation 2: Method for linking reductions in reoffending to estimates of the total cost of crime

1.  $B = \sum_{i=1}^n RR_i \times M1_i \times M2_i$
2. Charged crime x conviction ratio (M2) + other proven outcomes = total reported crime
3. Total reported crime x reporting rate (M1) = total crime

Where, for each type of crime (i),

RR is the reduction in reoffending

M1 is the ratio of crimes to reported crimes

M2 is the ratio of reported crimes to proven crimes

#### 13.2.1 M1: the ratio of crimes to reported crimes

Table 10 presents the ratio of crimes to reported crimes. There is wide variation, with almost all 'Homicides' being reported, but only a small fraction (<10%) of 'Other Sexual Offences', reported to the police.

**Table 27: Crime multipliers by crime type, 2018**

Crime	Estimated total	Multiplier of reported to total crime
Homicide	570	1
Violence with injury	1,104,930	2.6
Violence without injury	852,900	1.5
Rape	121,750	3.4
Other sexual offences	1,137,320	16.5
Domestic Burglary	695,000	3.6
Theft of vehicle	68,000	0.8
Theft from vehicle	574,110	2.6
Theft from the person	459,240	5.9
Criminal damage – arson	22,600	1
Criminal damage – other	1,007,160	2
Commercial robbery	102,570	1
Commercial burglary	310,700	1
Commercial theft	8,400	1

**Source:** Table 4: Total number of crimes committed, PRCs and resultant multipliers, [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/732110/the-economic-and-social-costs-of-crime-horr99.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/732110/the-economic-and-social-costs-of-crime-horr99.pdf)

### 13.2.2 Multiplier 2: Ratio of reported crimes to proven crimes

Proven crimes include convictions and a number of other crime outcomes that constitute proven crimes but do not require a conviction, such as out of court disposals. This is set out in Equation 3. The number of cases resulting in each outcome, by offence type, is given in Table 28. Multiplier 2 is calculated for each offence type, in the bottom row of the table.

#### Equation 3: calculating M2, the ratio of reported crimes to proven crimes.

1.  $M2 = \text{proven reoffences} / \text{police recorded crime}$
2.  $M2 = (\text{number of cases charged} \times \text{conviction ratio}) + \text{other proven outcomes}$
3.  $\text{Other proven outcomes} = \text{Out-of-court (formal)} + \text{Out-of-court (informal)} + \text{Taken into consideration} + \text{Warning} + \text{Penalty notice}$

The estimates for Multiplier 2 were validated by estimating the implied proportion of total crime that would be committed by reoffenders. In general, the results were plausible. For thefts, the modelled values for Multiplier 2 implied that the majority of ‘thefts from the person’ committed are by reoffenders in their first year. This seemed implausibly high. A thorough investigation was conducted, which yielded the following findings:

- The total number of police recorded crimes varies modestly year-on-year, without a clear trend. The same is true at the offence group level, but with much more substantial variation year-on-year.
- The number of proven offences, and therefore the proportion of offences proven, is falling substantially year-on-year.
- The fact that the components of M2 vary over time implies that M2 is not consistent over time.
- Time lapses between a crime occurring, being reported, and being proven. This means that estimates for these variables from annual Government data sets are not aligned, because a crime could occur in one year but be proven in the next year and thus be reported in two separate annual returns.



- This method assumes that the proportion of crimes that are proven is the same as the proportion of reoffences that are proven. It may be that reoffences are more likely to be proven, because they are committed by individuals known to the Criminal Justice System.
- The Pro Bono Economics note calculated a multiplier of 15.1 pooled across all crime types, excluding fraud and crimes against society. This is largely aligned with the offences included within this analysis. (Pro Bono Economics, 2019).
- A multiplier of 19.1 for thefts implies that approximately 5% of thefts reported to the police result in a proven outcome. This estimate is plausible given the high proportion of thefts that are not investigated.

Overall, there is a mixed picture as to whether the Multiplier 2 estimate for theft offences is plausible. What is clear is that it is subject to substantial uncertainty. Multiplier 2 was varied in sensitivity analysis (+/- 50%) to account for this uncertainty.

**Table 28: Number of crimes by type and sentence type, 2020-2021**

	Violence against the person	Sexual	Robbery	Theft	Criminal damage and Arson
Charged/Summoned	5.2%	2.9%	6.6%	4.2%	4.3%
Taken into consideration	0.0%	0.0%	0.0%	0.1%	0.0%
Out-of-court(formal)	1.1%	0.3%	0.2%	0.3%	1.2%
Out-of-court(informal)	1.8%	0.3%	0.3%	0.9%	2.1%
Prosecution prevented or not in the public interest	2.1%	2.1%	0.1%	0.3%	0.9%
Evidential difficulties (suspect identified; victim supports action)	17.4%	13.7%	6.6%	5.0%	7.4%
Evidential difficulties (victim does not support action)	41.5%	33.2%	20.4%	8.1%	16.8%
Investigation complete - no suspect identified	13.5%	13.2%	39.4%	71.4%	58.4%
Action undertaken by another body/agency	2.2%	2.7%	0.1%	0.1%	0.3%
Further investigation to support formal action not in the public interest	0.9%	1.2%	0.1%	0.5%	0.5%
Diversionary, educational or intervention activity, resulting from the crime report, has been undertaken and it is not in the public interest to take any further action	0.7%	0.4%	0.1%	0.1%	0.3%
Not yet assigned an outcome	13.5%	30.2%	26.1%	9.0%	7.7%
<b>Conviction Ratio (%)*</b>	<b>71.6%</b>	<b>55.5%</b>	<b>62.9%</b>	<b>83.0%</b>	<b>67.6%</b>
<b>M2</b>	<b>13.10</b>	<b>32.26</b>	<b>15.81</b>	<b>19.02</b>	<b>14.66</b>

**Source:** Q1.3, <https://www.gov.uk/government/statistics/police-recorded-crime-open-data-tables> **Notes:** the source states that the conviction ratio is calculated based on the number of crimes charged and number of convictions in a given time period, these numbers do not necessarily relate to the same data, as some crimes will take a long period to progress from a charge to a conviction. This should be interpreted as a limitation to the accuracy of the data, but there is no reason to believe that it will bias the data.

### 13.3 Modelling the impact of Restorative Justice on reoffending

As summarised previously, the impact of Restorative Justice on reoffending was taken from the Strang 2013 study (Strang et al., 2013).

Note that these are cases assigned to a Restorative Justice intervention and includes cases that dropped out before receiving a Restorative Justice intervention, but not cases where one party did not consent or where they were assessed as ineligible. Experts advised that even if a case does not progress to a Restorative Justice intervention, there may be some benefit with Restorative Justice services making contact with the victim or offender. The Strang 2013 meta-analysis includes all cases assessed as eligible for a Restorative Justice intervention, not merely those that have completed one. By accounting for any reduction in reoffending for the subset of offenders that dropped out of the process, the study provides a conservative estimate of the impact of Restorative Justice participation on reoffending.

The Strang 2013 study is a high-quality source of evidence because it is a meta-analysis that only includes studies with rigorous methodologies, collected using a systematic search (Strang et al., 2013). It also employs an appropriate method for synthesising the effects across the included studies.

There is a high level of heterogeneity among the studies included in Strang 2013 regarding the definition of the intervention and control, the offender characteristics, the victim characteristics, the positioning within the conventional justice pathway and the region in which the studies took place (Strang et al., 2013). This is associated with benefits and limitations. The variation between the studies can be interpreted as yielding estimates with a high level of generalisability. This means that the study results could be interpreted as relevant to a wide range of Restorative Justice services in a wide range of settings. Further, even within individual Restorative Justice services there is a high level of heterogeneity in the individuals referred to the service and the intervention they received.

From a modelling perspective, it was challenging to align the inclusion criteria of the studies within Strang 2013, with some of the other available sources (Strang et al., 2013). For example, the mix of different index offence types included within the Strang 2013 meta-analysis is determined by the inclusion criteria of the studies and may not be representative of the index offence types committed by offenders eligible for, or able to access, Restorative Justice in a given year in England and Wales. This is just one example of the challenges and limitations of combining multiple sources within an economic evaluation, with definitions of Restorative Justice that are not necessarily aligned.

**Table 29: Strang 2013 meta-analysis of studies assessing the reduction in frequency of reoffending associated with Restorative Justice when delivered as a supplement or substitute to conventional justice, 2 years follow up.**

Group	Study	Offence	Jurisdiction	Population	Standard mean difference	p-value
Substitute	JPP	Property	Australia	Youth	0.137	0.283
Substitute	JVC	Violence	Australia	Youth	-0.279	0.126
<b>Substitute</b>	<b>Subgroup</b>				<b>-0.051</b>	<b>0.807</b>
Supplement	NFW	Juvenile	UK	Youth	-0.276	0.048
Supplement	TVP	Violence	UK	Adults	-0.144	0.488
Supplement	LOR	Violence	UK	Adults	-0.044	0.838
Supplement	IND	Juvenile	USA	Youth	-0.2	0.005
Supplement	NCP	Property	UK	Adults	-0.201	0.426
Supplement	LOB	Property	UK	Adults	-0.105	0.497
Supplement	NCA	Violence	UK	Adults	-0.333	0.273
Supplement	TVC	Violence	UK	Adults	-0.247	0.326
<b>Supplement</b>	<b>Subgroup</b>				<b>-0.193</b>	<b>0.000</b>
<b>Overall</b>	<b>Overall</b>				<b>-0.185</b>	<b>0.000</b>

**Source:** (Strang et al., 2013), **Notes:** A key for the study abbreviations is included in the appendix

A method taken from the Cochrane Handbook was applied to transform the standard mean difference from the all-studies estimate from Strang 2013, into a log-odds ratio and then an odds ratio (Table 30) (Higgins & Green, 2011). This odds ratio, 0.715, aligned with the pooled odds ratio reported in the fourth Shapland report for the JRC trials (Shapland et al., 2008). Close alignment is expected given that the JRC trials within Shapland are a subgroup of trials included within Strang 2013. This was slightly higher than the estimate in Strang 2013 that is restricted to studies that use Restorative Justice as a supplement to convention justice (odds ratio of 0.705). This input was tested within the scenario analysis.

**Table 30: Transformation of recidivism reduction estimates to estimate the risk of reoffending**

Theme	Input	Value	Source
Strang 2013, all studies	Standard mean difference	-0.185	Strang et al., 2013)
	Log odds ratio	-0.336	Calculated using Cochrane Formula (Higgins & Green, 2011)
	Odds ratio	0.715	Calculated
Strang 2013, Restorative Justice as a supplement only	Standard mean difference	-0.193	(Strang et al., 2013)
	Log odds ratio	-0.350	Calculated using Cochrane Formula Higgins & Green, 2011)
	Odds ratio	0.705	Calculated
Shapland report	Odds ratio	0.715	(Shapland et al., 2008)

**Note:** the reoffending rate implemented in this table is pooled across offence types for illustrative purposes. In the context of the economic model, the method was applied to each index offence type separately.

## 13.4 Incorporating victim wellbeing within economic analyses

There are two options for formally incorporating measures of the direct impact of Restorative Justice on victim wellbeing, into an economic evaluation.

The first option would be to assign a monetary value to these benefits.

The transformation of Quality Adjusted Life Years (QALYs) onto the net benefit scale using a standard cost-effectiveness ratio is an example of transforming a measure of welfare onto a monetary scale (McCabe et al., 2008). We are not aware of any data on the direct benefits of Restorative Justice for victims that have been transformed onto a monetary scale. Achieving this was beyond the scope of this research. To do so would require the calculation of the marginal cost of victims' services in meeting the needs of victims (Lomas et al., 2019) or a universal measure of the Government's willingness to pay for victims' outcomes. There is not a universally agreed scale for measuring the effectiveness of victims' services, which is a methodological challenge for implementing this approach.

Angel et al. measure the impact of Restorative Justice interventions on Post Traumatic Stress Symptoms (PTSS)(Angel et al., 2014). The study uses data from the Shapland report (Shapland et al., 2007). This could potentially be converted onto a monetary scale indirectly, using two possible methods. One option is to map the PTSS symptoms (measured using Impact of Events (Revised) Scale (IESI) onto a health-related quality of life (HRQoL) scale. We were not able to find any suitable mapping algorithms to achieve this. The second option would be to benchmark the benefits of Restorative Justice interventions in tackling PTSS, against another intervention, such as Cognitive Behavioural Therapy (CBT). Again, we were not able to find any comparisons of the effectiveness of Restorative Justice interventions and CBT, or any studies that measure the benefits of CBT for individuals with PTSS, using the IESI scale.

The second option would be to present results as a ratio between victim wellbeing benefits and costs, sometimes called a 'cost-effectiveness' approach.

This is also challenging. It requires accounting for all victim welfare benefits on a single scale, when there is no consensus on what the scale would be, and any scale chosen is likely to provide only a partial representation of the overall benefits of Restorative Justice for victim wellbeing. There is no consistency in the survey design across studies, so it is challenging to synthesise data on victim wellbeing benefits across studies. This poses a limitation for the generalisation of any findings in relation to the direct benefits of Restorative Justice. Finally, victim welfare benefits tend to be presented on binary <sup>1</sup>, or ordinal <sup>2</sup>, scales and it is challenging to present a ratio of costs and effects using these scales.

## 13.5 Estimating the cost of Restorative Justice

There are three possible approaches to estimating the cost of Restorative Justice: 'top down', 'bottom up' and 'market research'.

### 13.5.1 Top down

Adopting a 'top down' approach means estimating the total cost of delivering Restorative Justice interventions and total number of Restorative Justice interventions delivered within a particular locality, then dividing the former by the latter.

### 13.5.2 Bottom up

A 'bottom up' approach requires taking a 'dip sample' of Restorative Justice cases, tracking all their contacts with a Restorative Justice service, then assigning a cost to each of these contacts. Some additional work is required to apportion any fixed costs, or overheads, such as facilities and management costs.

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1 e.g. Percentage of victims who received a letter of apology (Shapland et al., 2007).

2 (e.g. 'Thinking about what happened at the conference itself, would you say you were: Very satisfied, Quite satisfied...') (Strang et al., 2013)

### 13.5.3 Market research

A 'market research' approach requires collecting data from a sample of Restorative Justice services on the price they would charge to provide a Restorative Justice intervention to a typical case or group of cases.

### 13.5.4 Options appraisal for costing Restorative Justice

There were a number of challenges with a 'top down' approach. We were not able to access the required data and they are not routinely published. Experts advised that contracts that Police and Crime Commissioners agree with Restorative Justice services rarely specify a defined capacity, or a defined number of staff, and data on either of these measures of activity are rarely published. Instead, contracts tend to specify a requirement to provide Restorative Justice interventions for a defined locality, known as a capitated payment. The Why me? report series, Valuing Victims, presents data on Restorative Justice activity and spend, accessed via a Freedom of Information (FOI) request from the Ministry of Justice (Why me?, 2021). The Valuing Victims Report makes clear that issues with missing data and poor data quality mean that these data cannot be relied upon for analyses.

A 'market research' approach was also challenging. As stated above, Restorative Justice interventions are mostly commissioned for defined localities, not on a case-by-case, or block purchase (fixed quantity) basis. We did receive some estimates for providing Restorative Justice interventions on a case-by-case basis. These estimates varied substantially (from £250 to £1,150) (data on file), and it was not clear exactly how the interventions, or eligible cases, were defined so it was challenging to determine the relevance of these estimates to this analysis.

For these reasons, this research primarily used 'bottom up' estimates of the cost of delivering Restorative Justice interventions. Other cost estimates were used within sensitivity analysis.

Estimates of the time taken to perform different steps of the Restorative Justice process were collated using data and expert insight provided those involved in managing Restorative Justice services. Expert insight from the Restorative Justice Coordinator at Why me?, and others, was used to supplement the data and incorporate additional costs borne by the Restorative Justice service (Why me?), the referrer, and other agencies.

## 13.6 Strang Trials

**Table 31: abbreviations for the studies included in Strang 2013**

Abbreviation	Study name
JVC	Juvenile Violent Crime, Canberra, Australia,
JPP	Juvenile Property Crime, Canberra, Australia,
IND	Indianapolis juvenile crime, USA
LOR	London Robbery (street crime), UK
LOB	London Burglary, UK,
TVP	Thames Valley Prison, UK assault cases,
TVC	Thames Valley Community sentence, UK, assaults
NFW	Northumbria Final Warning for juveniles, UK
NCP/NCA	Northumbria Court Property crime, UK/ Northumbria Court Assault,

**Table 32: Frequency of index offence type for the trials included in the Strang 2013 meta-analysis (%)**

	JVC	JPP	IND	LOR	LOB	TVP	TVC	NFW	NCP/ NCA	Total
Violence against the person	50 (77%)	0 (0%)	115 (25%)	0 (0%)	0 (0%)	31 (27%)	50 (77%)	78 (38%)	44 (41%)	26%
Sexual	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0%
Robbery	3 (4.6%)	1 (1%)	0 (0%)	95 (90%)	0 (0%)	73 (64%)	1 (2%)	3 (1%)	0 (0%)	12%
Theft	0 (0%)	103 (81%)	247 (54%)	11 (10%)	186 (100%)	0 (0%)	0 (0%)	54 (26%)	50 (47%)	45%
Criminal damage and arson	11 (17%)	23 (18%)	41 (9%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	59 (29%)	11 (10%)	10%
Drug	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0%
Possession of weapons	1 (15%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0%
Public order	0 (0%)	0 (0%)	32 (7%)	0 (0%)	0 (0%)	2 (2%)	11 (17%)	0 (0%)	0 (0%)	3%
Miscellaneous crimes against society	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0%
Fraud	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0%
Summary non-motoring	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0%
Summary motoring	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0%
Other	0 (0%)	0 (0%)	24 (5%)	0 (0%)	0 (0%)	8 (7%)	3 (5%)	8 (4%)	2 (2%)	3%
Missing	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	3,914 (2%)	0 (0%)	0%
<b>Total</b>	<b>65 (100%)</b>	<b>127 (100%)</b>	<b>459 (100%)</b>	<b>106 (100%)</b>	<b>186 (100%)</b>	<b>114 (100%)</b>	<b>65 (100%)</b>	<b>206 (100%)</b>	<b>107 (100%)</b>	<b>100%</b>

## 13.7 Costs and resource use review

**Table 33: Cost and resource use review summary table**

Study - Surrey evaluation (Mackie et al., 2014)	
<b>Description (PICOS)</b>	
<p><b>Population:</b> young offenders under 18 (35% under 16); 25% male offenders; not serious offences with theft and handling, and violence most common; control group constructed from pre-court and court convictions 2009-11.</p> <p><b>Comparator:</b> alternative to youth caution, youth conditional caution or prosecution (respectively).</p> <p><b>Intervention:</b> Youth Restorative Intervention; conferencing, direct or indirect mediation; pre-court disposal.</p> <p><b>Outcome:</b> 91% victim satisfaction with involvement; reduction in first time entrants (from 394 in 2010-11 to 189 in 2012-13); lower reoffending rates in intervention group (27%) than control group (33%) with 18% reduction.</p> <p><b>Study Design:</b> YRI run by Surrey Police and Surrey County Council's Youth Support Service; default assignment to YRI, control group constructed from historic data.</p>	
<b>Method</b>	
<p><b>Data source:</b> Surrey Police and Surrey Youth Service; Overheads data taken from the 2014 Subjective Analysis Return.</p> <p><b>Youth Restorative Intervention:</b> cost to police (who manage 38% of cases) and the Youth Service (who support 62% of cases) using a sample of 50 cases. Number of hours spent per individual per case multiplied by salary per hour (mid-point of the pay bands of salaries with working hours 35 hours per week, for 45 weeks per year), plus 'overheads' including national insurance and pensions, and non-staffing costs, to estimate an average unit cost of £297.</p> <p><b>Reparation:</b> Surrey Youth Service estimates reparation activity takes average 4 hours to oversee, and 30 minutes in staff administration time produces £132 per case but estimates only uptake of half yielding £66 per case.</p> <p>These two costs were summed.</p>	
<b>Estimate</b>	
<p><b>Original estimate</b> Cost to administer per offender: £360.</p>	<p><b>Inflated to 2021</b> Cost per offender: £418.</p>
<b>Assessment of relevance</b>	
<p><b>Strengths</b> Randomly sampled 50 cases to estimate time taken. Data on direct costs were supplied directly from the scheme. Costs were estimated from a scheme undertaken in the UK relatively recently.</p> <p><b>Limitations</b> Sample only included youth offenders with offence type restrictions. Lacking comprehensive lists of costs - details of specific overhead costs not given and estimates for these were not specific to the scheme. No clear data on numbers taking up 'reparation activity' - assumption of half is relied upon in final cost calculations.</p> <p><b>Applicability</b> <b>Medium</b> - reasonably comprehensive inclusion of most costs with most supplied directly from scheme. Specificity to youth offenders and restricted offence types reduces external validity.</p>	



## Study - University of Birmingham evaluation (Macdonald et al., 2017)

### Description (PICOS)

**Population:** 287 cases; anti-social behaviour and neighbourhood disputes cases amongst social housing tenants.

**Intervention:** face-to-face Restorative Justice conference; referral to 'the Restorative Justice specialist team' then housing officers, PCs or PCSOs to manage conference.

**Comparator:** case closed/ civil intervention for ASB; comparison with case records relating to 'standard' anti-social behaviour of same time period; dataset includes 897 cases from 2010-16.

**Outcome:** reduction in repeat disputes in 83% of cases (of only 74 cases for which data was collected); in 93% of cases both parties satisfied after conference; quicker process with comparator cases taking 117 days vs 27 for Restorative Justice cases.

**Study Design:** Birmingham Social Housing Partnership managed Restorative Justice project; Phase 1 compared costs of Restorative Justice conferences for agencies involved. Phase 2 explored the experiences of participants; control group constructed from previous data.

### Method

**Data source:** quantitative data provided by West Midlands Police and Restorative Justice Project partners via distributed questionnaire.

Preparation (including visits to victim and offenders) estimated to take between 5 and 15 hours per case; estimated hours multiplied by salary per hour.

Attendance at conference estimated to take 2 hours; estimated hours multiplied by salary per hour (see costs breakdown); 15 cases had joint facilitators and model assumes therefore attendance costs were increased.

Follow-up with both parties estimated to take between 1 and 7 hours; estimated hours multiplied by salary per hour (see costs breakdown).

Training costs - estimated time 3 days; multiplied by salary per hour for each staff role (see breakdown); conservatively estimate training is valid for 10 cases.

Total costs - total cost per case multiplied by 287 cases, with additional costs for co-facilitators; for lowest, median and highest cost parameters.

### Estimate

#### Original estimate

Lowest complexity cases: £240 per case.

Median estimate: £382 per case.

Highest estimate: £515 per case.

#### Inflated to 2021

Lowest estimate: £268 per case.

Median estimate: £427 per case.

Highest estimate: £574 per case.

### Assessment of relevance

#### Strengths

Financial costs and time data costs were supplied directly from partners of the scheme. Large variations in preparation and follow-up times (due to varied complexity of cases) mitigated by identifying upper and lower limits. Cost estimates were from a scheme undertaken in the UK relatively recently.

#### Limitations

Lacking comprehensive list of costs, with indirect costs (such as heating, desk space and meeting rooms) not included. Training costs were estimated to be 'valid' for 10 cases. Data gathered detailing time and financial costs for Restorative Justice cases from open ended questionnaire - produced large variety and no indication of accuracy; responses from partner housing associations was patchy due to varying involvement in the project. Police report used to estimate costs of Restorative Justice used matched sample of only 13 Restorative Justice and 13 anti-social behaviour cases; the larger sample is assumed to be random, but this is not certain. Sample only included anti-social behaviour cases and so the costing estimates are limited in their application to other offence types.

#### Applicability

**Low** - reasonably comprehensive inclusion of most costs with most supplied directly from scheme, but data is of unknown accuracy and collected using flawed methods. Producing 'low/medium/high' parameters may go some way to mitigating this, but the effect is unknown. Specificity to anti-social behaviour cases reduces external validity.

## Shapland 2008 (three schemes reported separately) (Shapland et al., 2008)



Study - Connect	
<b>Description (PICOS)</b>	
<p><b>Population:</b> 50 cases of completed RJ; adult offenders from magistrates' courts cases between conviction and sentence, some referrals from victims and Crown court cases; offences range from assaults (34%), burglary (24%), theft/taking a vehicle (10%), and criminal damage (8%).</p> <p><b>Intervention:</b> indirect mediation/ direct mediation/ conferencing; additional not diversionary.</p> <p><b>Comparator:</b> matched characteristics control group from Magistrates' Court cases.</p> <p><b>Outcome:</b> control group reconvicted more (not significant); no significant frequency of reconviction; RJ group higher severity of reconviction but not significant; no significant reconviction in terms of costs but direct control more cost savings and indirect RJ group more cost savings.</p> <p><b>Study Design:</b> Inner London; individual matching process to generate control group using Magistrates' Court records.</p>	
<b>Method</b>	
<p><b>Data source:</b> NACRO and the National Probation Service in London.</p> <p>Costs calculated for both the 12 month start-up and 14 month running phases (and adjusted to 2005/6 levels), including - a cost per month, a cost per referred case, a cost per case in which the offender agreed to restorative justice, and a cost per completed case.</p> <p>Direct costs included employed staff, travel costs, operating office premises, training and running RJ conferencing.; Indirect costs included steering costs and costs for liaison with other agencies (calculated number of meetings, length of meetings and national salary scales for those involved).</p> <p>Indirect mediation cases took an average of 6.5 hours, 22 hours for family group conference cases and 19.5 for direct mediation cases.</p>	
<b>Estimate</b>	
<p><b>Original estimate</b></p> <p>Start-up phase: Cost per case referred: £4,447, cost per case with RJ completed: £9,530.</p> <p>Running phase: Cost per case referred: £1,360, cost per case with RJ completed: £4,351.</p> <p>Direct mediation average £8,739 per case and indirect mediation £2,832 per case.</p>	<p><b>Inflated to 2021</b></p> <p>Start-up phase cost per completed case: £15,866. Running phase cost per completed case: £6,667.</p>
<b>Assessment of relevance</b>	
<p><b>Strengths</b></p> <p>Broad range of offence types included. Comprehensive list of costs included in cost estimations, considering both direct and indirect costs, and most data was collected directly from the service (NACRO)</p> <p>Time spent per case was routinely measured and this data was used in final cost calculations. Cost estimates from scheme undertaken in the UK.</p> <p><b>Limitations</b></p> <p>Cases not randomly sampled</p> <p>Some indirect costs estimated from external sources (including building costs from average standard central London public sector rent). Age of study makes the cost estimates less applicable to current estimates.</p> <p><b>Applicability</b></p> <p><b>Medium</b> - comprehensive inclusion of direct and indirect costs in start up and running phases, taken from the scheme (excluding only one cost) and consistently measured throughout. Broad range of offence types increases external validity. Age of study may reduce.</p>	

## Study - REMEDI

### Description (PICOS)

**Population:** 132 cases; adult cases community sentences during resettlement and prison pre-release and during long sentence with most offence types violence (22%), burglary (20%) and theft and handling (19%); youth final warning cases, referral orders and youth justice sentences with most offence types theft and handling (29%), violence (23%) and criminal damage (22%), burglaries (11%).

**Intervention:** indirect mediation and direct mediation; additional not diversionary.

**Comparator:** matched characteristics control group using previous records.

**Outcome:** no significant reconviction rates (but adult indirect and youth direct RJ reconvicted more); no significant frequency of reconviction; RJ group higher severity of reconviction for adults and control group for youth but neither significant; no significant difference in reconviction in terms of cost but control more cost savings except in youth indirect.

**Study Design:** South Yorkshire (Sheffield and Doncaster); Matched control group to each individual offender in the restorative justice group.

### Method

**Data source:** REMEDI scheme accounts.

Costs calculated for both the 10 month start-up and 8 month running phases (and adjusted to 2005/6 levels), including - a cost per month, a cost per referred case, a cost per case in which the offender agreed to restorative justice, and a cost per completed case.

Direct costs included REMEDI staff, travel costs, REMEDI operating office premises, training and running RJ conferencing; Indirect costs - central steering group costs and costs for liaison with other agencies (calculated number of meetings, length of meetings and national salary scales for those involved).

Costs split for adult offenders and youth offenders (different workers were used for adult and youth cases).

### Estimate

#### Original estimate

Start-up phase (Adult/Youth):

Cost per case referred: £596/£312, cost per RJ completed case: £9,143/£1,726.

Running phase (Adult/Youth):

Cost per case referred: £221/£324, cost per completed RJ case: £2,908/£1,944.

#### Inflated to 2021

Cost per completed RJ case: £4,666/ £3,088.

### Assessment of relevance

#### Strengths

Broad range of offence types for both adult and youth cases included

Comprehensive list of costs included in cost estimations, considering both direct and indirect costs, and data was collected directly from REMEDI

Cost estimates from scheme undertaken in the UK.

#### Limitations

Cases not randomly sampled

Age of study makes the cost estimates less applicable for current estimates. Youth service was largely victim impact work and not mediation, impacting the gap in costs between the cost per case referred and cost per RJ case.

#### Applicability

**Medium** - comprehensive inclusion of direct and indirect costs in start up and running phases, taken from the scheme. Inclusion of youth victim impact work with RJ may have increased costings to unknown level. Broad range of offence types increases external validity. Age of study may reduce.

## Study - JRC London

### Description (PICOS)

**Population:** 106 adult attempted/ robbery and theft cases and 186 adult burglary of a dwelling cases; cases being tried at Crown court.

**Intervention:** RJ conferences; post-guilty plea and pre-sentence; additional not diversionary.

**Comparator:** no RJC pre-sentence; tried at Crown Court.

**Outcome:** significantly greater cost reduction in terms of reconvictions for burglary cases but not for robbery cases; no significant differences between intervention and control group for rates of recidivism, severity of reconviction, and frequency of reconviction.

**Study Design:** random control trials with cases randomly allocated to either conference or control group; two-year follow-up period.

### Method

**Data source:** the Metropolitan Police.

Costs calculated for both the 10 month start-up and 14 month running phases (and adjusted to 2005/6 levels), including - a cost per month, a cost per referred case, a cost per case in which the offender agreed to restorative justice, a cost per completed case (in start-up phase) and a cost per randomised case (in running phase).

Direct costs - employed staff, travel costs, operating office premises, training and running RJ conferencing; Indirect costs - steering costs and costs for liaison with other agencies (calculated number of meetings, length of meetings and national salary scales for those involved).

Data were not available for cost per completed RJ conference in the running phase, so costs were estimated for an experimental group using data available for time spent on cases. The estimates were 13 hours per randomly assigned case, 17 hours for cases taken to conference, and 22 hours for victim absent conferences.

### Estimate

#### Original estimate

Start-up phase: Cost per case referred: £1,902, cost per completed RJ case: £5,949.

Running phase: Cost per case referred: £1,221, cost per randomly assigned case: £3,797.

#### Inflated to 2021

Start-up cost per completed case: £9,896, running cost per completed conference: £7,798.

### Assessment of relevance

#### Strengths

Cases randomly assigned

Details of case progress and attrition rates were measured

Cost estimations considered both direct and indirect costs, and data was collected directly from the scheme. Cost estimates from scheme undertaken in the UK

Costs could be split down into individual RCTs, as time estimates available.

#### Limitations

Age of study makes the cost estimates less applicable for current estimates. Sample only included robbery/ burglary cases (costing estimates are limited in their application to other offence types)

Differences between start-up and running phases (types of cases, geographical area, and activities of the scheme) create difficulties in comparing the overall costs

Some indirect costs not obtainable - costs of the scheme directors and accurate costs of travel and refreshments for facilitators

Experimental model created a data gap for 'cost per randomised case' in the start-up phase and 'cases in which restorative justice was completed' in the running phase

Estimates for 'cases in which RJ was completed' data gaps based on data on time spent per case, but these were only available from 60% of cases on scheme's database.

#### Applicability

**High** - comprehensive inclusion of direct and most indirect costs in start up and running phases, taken from the scheme, and consistent measurement of case progress/attrition. Data gap for 'completed RJ cases' reduces usability, although it has been estimated by other methods. Accuracy of this method may be compromised by low availability of data (60%). Changes to the scheme activities during running phase may affect accuracy, and specific offence types and age of study reduces external validity.

## Study - JCR Thames Valley

### Description (PICOS)

**Population:** 114 adult offenders in prison and within 12 months of release, and 65 adult offenders given a community sentence at the magistrates' court; violent offence types including common assault and ABH.

**Intervention:** RJ conferences in prison post-release and pre- and post-sentence period on probation for the community sentences; additional not diversionary.

**Comparator:** no RJC in prison or on probation; community sentence at Magistrates Court

**Outcome:** statistically significant reductions in number of offences committed for both intervention and control groups for prison population; no significant differences between intervention and control group for costs of reconviction, rates of recidivism, severity of reconviction, and frequency of reconviction.

**Study Design:** randomised control trials with cases randomly allocated to either conference or control group; two-year follow-up period.

### Method

**Data source:** the National Probation Service Thames Valley.

Costs calculated for both the 16 month start-up and 14 month running phases (and adjusted to 2005/6 levels), including - a cost per month, a cost per referred case, a cost per case in which the offender agreed to restorative justice, a cost per completed case (in start-up phase) and a cost per randomised case (in running phase).

Direct costs - employed staff (probation officers; community mediators; prison officers), travel costs, operating office premises (leased by probation service), training and running RJ conferencing (in prisons or community venues); Indirect costs - bimonthly steering costs and costs for liaison with other agencies (calculated number of meetings, length of meetings and national salary scales for those involved).

### Estimate

#### Original estimate

Start-up costs: Cost per case referred: £952, cost per case RJ completed: £6,188.

Running phase: Cost per case referred: £333, cost per randomly assigned case: £2,831.

#### Inflated to 2021

Start-up cost per completed case: £10,184.

### Assessment of relevance

#### Strengths

Cases randomly assigned

Cost estimations considered both direct and indirect costs, and data was collected directly from the scheme. Cost estimates from scheme undertaken in the UK.

#### Limitations

Costs could not be split down into individual RCTs, as time estimates not available. Age of study makes the cost estimates less applicable for current estimates. Sample only included violence offences (costing estimates are limited in their application to other offence types).

No data collected on number of cases worked on by each type of facilitator at each stage. Significant expansion of the scheme during the running phase took considerable extra work - may have had an impact on running phase costs. Experimental model created a data gap for 'cost per randomised case' in the start-up phase and 'cases in which restorative justice was completed' in the running phase.

#### Applicability

**Medium** - comprehensive inclusion of direct and indirect costs in start up and running phases, taken from the scheme. Accuracy of these may be compromised by changes to the scheme activities during running phase. Specific offence types and age of study reduces external validity. Data gap for completed RJ cases significantly reduces usability of data for the aims of our research.

## Study - JRC Northumbria

### Description (PICOS)

**Population:** 206 youth offenders given final warning and 107 adult cases from Magistrates Court; property and violent offences.

**Intervention:** diversion to a police caution with RJC for youth; post guilty plea and pre-sentence for adults.

**Comparator:** diversionary proposal to caution with no RJC for youth; no RJC pre-sentence and sentencing in Magistrates Court for adults.

**Outcome:** statistically significant reductions in recidivism and severity of reconviction for adult property offenders; no significant reductions in frequency of reconviction or reconvictions in terms of cost.

**Study Design:** random control trials with cases randomly allocated to either conference or control group; control group was established during the running of the scheme; two year follow-up period.

### Method

**Data source:** Northumbria Police

Costs calculated for both the 18 month start-up and 14 month running phases (and adjusted to 2005/6 levels), including - a cost per month, a cost per referred case, a cost per case in which the offender agreed to restorative justice, a cost per completed case (in start-up phase) and a cost per randomised case (in running phase).

Cost for each randomised case in the running phase - calculated ratio of the cost per completed RJ cases to the cost per randomised case for London and applied to the 27 adult caution cases (which were not originally randomised).

Direct costs - employed staff (police officer facilitators and inspector/chief inspector managers; research and admin staff), travel costs, operating office premises and running RJ conferencing (in police stations); Indirect costs - steering costs and costs for liaison with other agencies (calculated number of meetings, length of meetings and national salary scales for those involved).

### Estimate

#### Original estimate

Start-up phase: Cost per case referred: £1,467, cost per RJ completed case £5,755.

Running phase: Cost per case referred: £557, cost per randomly assigned case: £1,898.

#### Inflated to 2021

Start-up cost per completed case (from adjusted to 2005/06 levels) - £9,555.

### Assessment of relevance

#### Strengths

Cases randomly assigned

Cost estimations considered both direct and indirect costs, and data was collected directly from the scheme. Cost estimates from a UK scheme. Both adult and youth cases included.

#### Limitations

The age of the study makes the cost estimates less applicable for current estimates. Sample only included violence and property offences (costing estimates are limited in their application to other offence types). Additional (not randomised) scheme for adult cautions continued during part of the running phase - estimated ratio to determine how many cases 'could have been completed' in the same time period in cost terms. Experimental model created a data gap for 'cost per randomised case' in the start-up phase and 'cases in which restorative justice was completed' in the running phase. Differences between start-up and running phases (geographical expansion) create difficulties in comparing the overall costs. Costs could not be split down into individual RCTs, as time estimates not available.

#### Applicability

**Medium** - comprehensive inclusion of direct and indirect costs in start up and running phases, taken from the scheme. Accuracy of these may be compromised by changes to the scheme activities during running phase. Inclusion of adult caution scheme have increased costings to unknown level; estimates used to counter this but with unknown accuracy. Specific offence types and age of study reduces external validity. Data gap for 'completed RJ cases' reduces usability significantly for the aims of our research.

Study - Matrix evidence (Matrix Evidence, 2009)	
<b>Description (PICOS)</b>	
<p><b>Population:</b> young adult offenders (18-24) sentenced in a Magistrate's court for a non-violent offence.</p> <p><b>Intervention:</b> diversion from community orders to pre-court RJ conferencing schemes.</p> <p><b>Comparator:</b> community sentences given at Magistrate's Court.</p> <p><b>Outcome:</b> produced cost analysis of RJ triage scheme; schemes analysed produced net cost savings to society through public sector costs avoided and reduced victim costs.</p> <p><b>Study Design:</b> economic analysis of alternative interventions for young adult offenders, including RJ schemes; costs analysed using secondary data.</p>	
<b>Method</b>	
<p><b>Data source:</b> London Criminal Justice Board and Shapland et al. (2008).</p> <p>Calculated costs of police triage service (police officers decide if intervention was needed/beneficial) - unit cost (2008/9) £315; start-up costs per offender agreed to diversion intervention £208 and running costs £1,258.</p> <p>Total RJ conferencing scheme costs per cohort offender - made up of triage costs per cohort offender (£205) and conferencing costs per offender (£645).</p>	
<b>Estimate</b>	
<b>Original estimate</b>	<b>Inflated to 2021</b>
Total RJ conferencing scheme cost per offender: £850.	Cost per offender: £1,088.
<b>Assessment of relevance</b>	
<p><b>Strengths</b> Cost estimates from scheme undertaken in the UK.</p> <p><b>Weaknesses</b> Cases not randomly sampled. No comprehensive list of costs and estimates taken from Shapland et al. (2008) rather than directly from the scheme. Sample only included youth offenders (costing estimates are limited in their application to adults)</p> <p>Age of study makes the cost estimates less applicable for current estimates. Sample only included non-violence offences (costing estimates are limited in their application to other offence types).</p>	
Study - Coventry Restorative Justice service (Restorative Justice Coventry, n.d.)	
<b>Description (PICOS)</b>	
This estimate is a charge quoted on the provider's website.	
<b>Method</b>	
Data source: Restorative Justice Coventry.	
<b>Estimate</b>	
Individual fee: £225; Organisation fee: £200 per case (£5,000 per 25 cases).	
<b>Assessment of relevance</b>	
<p><b>Strengths</b> The fact this estimate is a currently quoted charge limits the potential for bias.</p> <p><b>Limitations</b> Fee may relate to less complex cases than those focused on in our research Estimate that the fees actually only amount to 35% of the actual cost of processing a typical case. Only the costs of one agency, the Restorative Justice service, area included within this estimate.</p> <p><b>Applicability</b> <b>Low</b> - no list of costs available and indicate fees do not account of full costs of processing cases.</p>	

## Study - Institute for Criminal Policy Research Evaluation (Kirby & Jacobson, 2015)

### Description (PICOS)

**Population:** 55 pre-sentence RJ conferences and 38 alternative RJ activities; serious acquisitive and violent cases.

**Intervention:** additional not diversionary; pre-sentence restorative justice to victims and offenders in ten Crown Courts in England and Wales.

**Comparator:** standard Crown Court processes.

**Outcome:** evaluation of scheme, including numbers of cases processed per site, rates of attrition, and qualitative data on victim and offender experiences.

**Study Design:** evaluation of a pre-sentence restorative justice pathfinder programme.

### Method

**Data source:** Restorative Solutions/Victim Support.

Estimate the total number of hours that each of the statutory agencies committed to the project over the six-month period of October 2014 to March 2015 (to support the delivery of the project, once it was up and running).

Data presented for number of hours committed to delivery of pathfinder by local statutory partners for each role and area separately. Averages of these taken in order to find an average value for hours per case.

### Estimate

Average of 110 hours per case of project manager time, plus 6 hours per case from police, prison service, CPS and court staff combined. These are underestimates as additional supervision time of the project manager, and volunteer time, are referred to but not reported.

### Assessment of relevance

#### Strengths

Cost estimates from scheme undertaken in the UK and relatively recently.

#### Limitations

Cases not randomly sampled

Cost of RJ scheme not presented

Number of staff hours per case presented but costs of this not included. Project managers estimated these hours, rather than collecting data directly from statutory agencies involved; Excludes project set-up time.

#### Applicability

**Low** - no estimate of costs, and consideration of cost factors only includes time spent per case, for which the data is estimated rather than collected.

## 13.8 Existing economic evaluations of Restorative Justice

Existing economic evaluations predominantly fall into two groups.

The first group of studies posit Restorative Justice as a substitute for conventional justice, used as a catch-all term to describe the pathway of a typical victim offender grouping from identification to completion of the offender's punishment. These studies evaluate whether Restorative Justice as a process is a cost-effective alternative to conventional justice, by comparing the costs of each pathway (Macdonald et al., 2017; Matrix Evidence, 2009).

The second group of studies posit Restorative Justice as a supplement to conventional justice. These evaluate whether the costs of delivering Restorative Justice interventions are offset by the benefits in terms of reduced reoffending (Mackie et al., 2014; Shapland et al., 2008).

Both approaches are implicitly targeting different groups of offenders. Studies positing Restorative Justice as an alternative to conventional justice focus on those who committed less serious offences, as within the current justice system, Restorative Justice is only likely to be considered an adequate substitute for conventional justice in these cases. Studies positing Restorative Justice as a supplement to conventional justice generally focus on more serious offenders. Those who commit serious offences have a greater likelihood of committing a serious offence in the future than those who commit minor offences, and these offences have a greater adverse impact on victims. The potential benefit of reducing reoffending by an offender in this group is therefore greater.

**Table 34: Results of literature review of studies estimating the impact of Restorative Justice on reoffending**

Study - CONNECT (Shapland et al., 2008)
<b>Description (PICOS)</b>
<p><b>Population:</b> 50 cases of completed RJ; adult offenders from magistrates' courts cases between conviction and sentence, some referrals from victims and Crown Court cases; offences range from assaults (34%), burglary (24%), theft/taking a vehicle (10%), and criminal damage (8%).</p> <p><b>Intervention:</b> indirect mediation/ direct mediation/ conferencing; additional not diversionary.</p> <p><b>Comparator:</b> matched characteristics control group from Magistrates' Court cases.</p> <p><b>Outcome:</b> control group reconvicted more (not significant); no significant frequency of reconviction; RJ group higher severity of reconviction but not significant; no significant reconviction in terms of costs but direct control more cost savings and indirect RJ group more cost savings.</p> <p><b>Study Design:</b> inner London; individual matching process to generate control group using Magistrates' Court records.</p>
<b>Method</b>
<p>Economic benefit calculated based on decreased reconviction following RJ - is the benefit from decreased reoffending greater or less than the cost of running the scheme.</p> <p>Cost of convictions of offenders was considered, looking at convictions in the two years prior to the instant offence and in the two years from experiencing restorative justice (the RJ period).</p> <p>Three methods to calculate this including: 1) calculate cost savings using only the RJ group by subtracting offending in the RJ period from offending in the two years before the instant offence (uses offenders as their own controls in terms of offending); 2) calculate difference in total cost of offending in the RJ period between RJ group and control group by subtracting RJ group from control group (uses the control group as the control); 3) calculate cost saving difference between RJ and control group, by subtracting cost saving of control from RJ. Cost-social benefit ratio calculated by dividing method 3 value by cost of whole site.</p>
<b>Estimate</b>
Negative cost-social benefit ratio of £2.23 for every £1 spent.
<b>Assessment of relevance</b>
<b>Medium</b> - comprehensive methods of analysis, but with variation between net cost estimates. Estimates include comprehensive inclusion of costs, taken from a broad sample, and reconviction rates taken directly from the scheme. Age of study may reduce applicability.



## Study - REMEDI (Shapland et al., 2008)

### Description (PICOS)

**Population:** 132 cases; adult cases community sentences during resettlement and prison pre-release and during long sentence with predominantly the following offence types: violence (22%), burglary (20%) and theft and handling (19%); youth final warning cases, referral orders and youth justice sentences with predominantly the following offence types: theft and handling (29%), violence (23%) and criminal damage (22%), burglaries (11%)

**Intervention:** indirect mediation and direct mediation; additional not diversionary.

**Comparator:** matched characteristics control group using previous records.

**Outcome:** no significant reconviction rates (but adult indirect and youth direct RJ reconvicted more); no significant frequency of reconviction; RJ group higher severity of reconviction for adults and control group for youth but neither significant; no significant difference in reconviction in terms of cost but control more cost savings except in youth indirect.

**Study Design:** South Yorkshire (Sheffield and Doncaster); Matched control group to each individual offender in the restorative justice group.

### Method

Economic benefit calculated based on decreased reconviction following RJ - is the benefit from decreased reoffending greater or less than the cost of running the scheme.

Cost of convictions of offenders was considered, looking at convictions in the two years prior to the instant offence and in the two years from experiencing restorative justice (the RJ period).

Three methods to calculate this including - 1) calculate cost savings using only the RJ group by subtracting offending in the RJ period from offending in the two years before the instant offence (uses offenders as their own controls in terms of offending); 2) calculate difference in total cost of offending in the RJ period between RJ group and control group by subtracting RJ group from control group (uses the control group as the control); 3) calculate cost saving difference between RJ and control group, by subtracting cost saving of control from RJ.

Cost-social benefit ratio calculated by dividing method 3 value by cost of whole site.

### Estimate

Negative cost-social benefit ratio of £8.32 for every £1 spent.

### Assessment of relevance

**Medium** - comprehensive methods of analysis, but with large variation between estimates produced. Estimates include comprehensive inclusion of costs, taken from a broad sample, although missing data presents issues for cost calculations. Reconviction rates taken directly from scheme. Age of study may reduce applicability.

## Study - JRC London (Shapland et al., 2008)

### Description (PICOS)

**Population:** 106 adult attempted/ robbery and theft cases and 186 adult burglary of a dwelling cases; cases being tried at Crown court.

**Intervention:** RJ conferences; post-guilty plea and pre-sentence; additional not diversionary.

**Comparator:** no RJC pre-sentence; tried at Crown Court.

**Outcome:** significantly greater cost reduction in terms of reconvictions for burglary cases but not for robbery cases; no significant differences between intervention and control group for rates of recidivism, severity of reconviction, and frequency of reconviction.

**Study Design:** random control trials - cases randomly allocated to either conference or control group; two-year follow-up period.

### Method

Economic benefit calculated based on decreased reconviction following RJ - is the benefit from decreased reoffending greater or less than the cost of running the scheme.

Cost of convictions of offenders was considered, looking at convictions in the two years prior to the instant offence and in the two years from experiencing restorative justice (the RJ period).

Three methods to calculate this including - 1) calculate cost savings using only the RJ group by subtracting offending in the RJ period from offending in the two years before the instant offence (uses offenders as their own controls in terms of offending); 2) calculate difference in total cost of offending in the RJ period between RJ group and control group by subtracting RJ group from control group (uses the control group as the control); 3) calculate cost saving difference between RJ and control group, by subtracting cost saving of control from RJ. Cost-social benefit ratio calculated by dividing method 3 value by cost of whole site.

### Estimate

Cost-social benefit ratio £9.75 for every £1 spent.

### Assessment of relevance

**High** - comprehensive methods of analysis. Estimates include comprehensive inclusion of costs. Costs and reconviction rates taken directly from scheme. Age of study and restrictions to sample may reduce applicability.

## Study - JRC Thames Valley (Shapland et al., 2008)

### Description (PICOS)

**Population:** 114 adult offenders in prison and within 12 months of release, and 65 adult offenders given a community sentence at the magistrates' court; violent offence types including common assault and ABH.

**Intervention:** RJ conferences in prison post-release and pre- and post-sentence period on probation for the community sentences; additional not diversionary.

**Comparator:** no RJ conferences in prison or on probation; community sentence at Magistrates Court.

**Outcome:** statistically significant reductions in number of offences committed for both intervention and control groups for prison population; no significant differences between intervention and control group for reconviction in terms of costs, rates of recidivism, severity of reconviction, and frequency of reconviction.

**Study Design:** random control trials with cases randomly allocated to either conference or control group; two-year follow-up period.

### Method

Economic benefit calculated based on decreased reconviction following RJ - is the benefit from decreased reoffending greater or less than the cost of running the scheme.

Cost of convictions of offenders was considered, looking at convictions in the two years prior to the instant offence and in the two years from experiencing RJ (the RJ period).

Three methods to calculate this including - 1) calculate cost savings using only the RJ group by subtracting offending in the RJ period from offending in the two years before the instant offence (uses offenders as their own controls in terms of offending); 2) calculate difference in total cost of offending in the RJ period between RJ group and control group by subtracting RJ group from control group (uses the control group as the control); 3) calculate cost saving difference between RJ and control group, by subtracting cost saving of control from RJ

Cost-social benefit ratio calculated by dividing the results of Method 3 value by cost of whole site.

### Estimate

Cost-social benefit ratio of £1.27 per £1 invested.

### Assessment of relevance

**High** - comprehensive methods of analysis. Estimates include comprehensive inclusion of costs, but some costs data taken from other schemes. Reconviction rates taken directly from scheme. Age of study and restrictions to sample may reduce applicability.

## Study - JRC Northumbria (Shapland et al., 2008)

### Description (PICOS)

**Population:** 206 youth offenders given final warning and 107 adult cases from Magistrates Court; property and violent offences.

**Intervention:** diversion to a police caution with RJ for youth; post guilty plea and pre-sentence for adults.

**Comparator:** diversionary proposal to caution with no RJ for youth; no RJ pre-sentence and sentencing in Magistrates Court for adults.

**Outcome:** statistically significant reductions in recidivism and severity of reconviction for adult property offenders; no significant reductions in frequency of reconviction or reconvictions in terms of cost.

**Study Design:** random control trials - cases randomly allocated to either conference or control group; control group was established during the running of the scheme; two-year follow-up period.

### Method

Economic benefit calculated based on decreased reconviction following RJ - is the benefit from decreased reoffending greater or less than the cost of running the scheme.

Cost of convictions of offenders was considered, looking at convictions in the two years prior to the instant offence and in the two years from experiencing restorative justice (the RJ period).

Three methods to calculate this including - 1) calculate cost savings using only the RJ group by subtracting offending in the RJ period from offending in the two years before the instant offence (uses offenders as their own controls in terms of offending); 2) calculate difference in total cost of offending in the RJ period between RJ group and control group by subtracting RJ group from control group (uses the control group as the control); 3) calculate cost saving difference between RJ and control group, by subtracting cost saving of control from RJ. Cost-social benefit ratio calculated by dividing method 3 value by cost of whole site.

### Estimate

Cost-social benefit ratio of £0.59 per £1 spent.

### Assessment of relevance

**High** - comprehensive methods of analysis, but with large variation between estimates and both cost saving and net cost estimates produced. Estimates include comprehensive inclusion of costs, but some costs data taken from other schemes. Recidivism rates taken directly from the scheme. Age of study and restrictions to offence types in sample may reduce applicability.

## Study - Surrey evaluation (Mackie et al., 2014)

### Description (PICOS)

**Population:** young offenders under 18 (35% under 16); 25% male offenders; not serious offences with theft and handling and violence most common; control group constructed from pre-court and court convictions 2009-11.

**Intervention:** Youth Restorative Intervention; conferencing, direct or indirect mediation; pre-court disposal.

**Comparator:** Alternative to youth caution, youth conditional caution and prosecution.

**Outcome:** 91% victim satisfaction with involvement; reduction in first time entrants (from 394 in 2010-11 to 189 in 2012-13); lower reoffending rates in intervention group (27%) than control group (33%) with 18% reduction.

**Study Design:** YRI run by Surrey Police and Surrey County Council's Youth Support Service; default assignment to YRI, control group constructed from previous data.

### Method

Costs calculated for administering the comparator interventions (youth cautions) compared with administering YRI - £600 and £360 respectively, with a saving of £240.

The 6% reduction in reoffending from the intervention is used to estimate reduced costs to public spending.

Future costs to courts, police and the Youth Service: £50.

Future costs to the NHS: £30.

Future loss of tax and increases in benefit payments: £360.

Victim social costs: £200.

Reduced future costs to public spending and cost of administering standard youth cautions comparator gives total estimated cost saving £1,240 per offender, divided by £360 cost of intervention to reach cost-social benefit ratio figure.

### Estimate

Cost-social benefit ratio of £3.41 for every £1 spent.

### Assessment of relevance

**Medium** - reasonably comprehensive method of analysis. Estimate includes cost data and reconviction estimates taken directly from the scheme. Consider a wide range of economic benefits. However, cost factors considered were limited and specificity to youth offenders/offence types reduces external validity.

## Study - University of Birmingham (Macdonald et al., 2017)

### Description (PICOS)

**Population:** 287 cases; anti-social behaviour and neighbourhood disputes cases amongst social housing tenants.

**Intervention:** face-to-face RJ conference; referral to 'the RJ specialist team' then housing officers, PCs or PCSOs to manage conference.

**Comparator:** case closed/ civil intervention for ASB; comparison with case records relating to 'standard' anti-social behaviour of same time period; dataset includes 897 cases from 2010-16.

**Outcome:** reduction in repeat disputes in 83% of cases (of only 74 cases for which data was collected); in 93% of cases both parties satisfied after conference; quicker process with comparator cases taking 117 days vs 27 for RJ cases.

**Study Design:** Birmingham Social Housing Partnership managed RJ project; Phase 1 compared costs of RJ conferences for agencies involved. Phase 2 explored the experiences of participants; control group constructed from previous data.

### Method

Comparison of restorative justice conference and pre-2014 anti-social behaviour cases; Provided a basic standard model of anti-social behaviour case costs.

Data provided by the West Midlands Police for a matched sample of 13 completed cases, separated the cases into high, medium and low complexity.

Mean cost of antisocial behaviour cases provided, and mean cost of RJ cases provided. 'RJ as a proportion' calculated by dividing mean cost of RJ by mean cost of ASB cases - 0.046 (high), 0.202 (medium), 0.129 (low), 0.1(all).

Cost-social benefit ratio calculated by dividing ASB cost by RJ cost.

### Estimate

Mean cost-social benefit ratio of £9.95 for every £1 spent.

With a range from £21.60 to £4.95.

High complexity cases - £21.60

Medium complexity cases - £4.95

Low complexity cases - £7.75

### Assessment of relevance

**Low** - reasonably comprehensive inclusion of most direct costs collected directly from scheme, but from a small sample size. Does not consider reoffending rates or any wider economic benefits. Specificity to anti-social behaviour cases reduces external validity.

Study - Matrix evidence (Matrix Evidence, 2009)
<b>Description (PICOS)</b>
<p><b>Population:</b> young adult offenders (18-24) sentenced in a Magistrate's court for a non-violent offence.</p> <p><b>Intervention:</b> diversion from community orders to pre-court RJ conferencing schemes.</p> <p><b>Comparator:</b> community sentences given at Magistrate's Court.</p> <p><b>Outcome:</b> produced cost analysis of RJ triage scheme; schemes analysed produced net cost savings to society through public sector costs avoided and reduced victim costs.</p> <p><b>Study Design:</b> economic analysis of alternative interventions for young adult offenders, including RJ schemes; costs analysed using secondary data.</p>
<b>Method</b>
<p>Estimate comprises the cost of diversion, the cost savings associated with not providing the standard sentence and the change in the cost of offending during and post sentence.</p> <p>Cost of RJ conferencing (£725) subtracted from cost savings associated with no sentencing procedures and reductions in reoffending (£7,765 per offender), to calculate net benefit per offender (£7,040).</p> <p>Cost-social benefit ratio figure calculated by dividing cost savings by cost of RJ conferencing.</p>
<b>Estimate</b>
Cost-social benefit ratio of £10.71 for every £1 spent.
<b>Assessment of relevance</b>
<b>Low</b> - lack of comprehensive list of costs of scheme or of criminal justice procedure savings. Inclusion of youth offenders for non-violent offence types only and age of study reduces external validity. Extrapolate the reduction in reoffending from the Shapland report to 25 years.

Study - Restorative Justice business case (Shewan, 2010)
<b>Description (PICOS)</b>
<p><b>Population:</b> young offenders (under 18) with low-level antisocial and 'nuisance' offences; cases processed in a range of UK police forces.</p> <p><b>Intervention:</b> diversion from standard youth justice procedures including reprimand and custody to RJ conferencing.</p> <p><b>Comparator:</b> youth justice standard processes including reprimand and custody.</p> <p><b>Outcome:</b> produced cost analysis of RJ conferencing schemes, showing net cost savings through reductions in police staff time.</p> <p><b>Study Design:</b> evaluation of RJ including reoffending, victim satisfaction, value for money and public confidence; data taken from 33 police forces and 8 forces in the 'Youth Restorative Disposal' pilot scheme.</p>
<b>Method</b>
<p>A number of examples from various police areas were used to demonstrate cost savings, collected from an ACPO survey. Most used the cost of police time to calculate the costs of RJ cases in comparison to costs of standard procedures.</p> <p>Hertfordshire - average 36 mins per RJ case, totalling £16, compared to 5 hours and 38 mins for standard reprimand, totalling £150. Saving estimated as £134.</p> <p>Cheshire - average 1 hour per RJ case, totalling £20, compared to 8 hours and 44 mins for detainee. Saving estimated at £157.</p> <p>North Wales - cost of undertaking 100 RJ cases totalled £112,861. One repeat ASB case totals 234 hours of police team at cost of £7,188, with RJ case taking 4.83 hours at cost of £1,129. Saving estimated at £6,059.</p>
<b>Estimate</b>
<p>Cost-social benefit ratio £7.18 for every £1 spent.      Cheshire: £7.77.</p> <p>Hertfordshire: £8.39.      North Wales: £5.37.</p>
<b>Assessment of relevance</b>
<b>Low</b> - inconsistent and limited consideration of costs, producing large variation in cost saving estimates. Inclusion of youth offenders for 'low level' offence types only and age of study reduces external validity.

## Study - Furman 2012 (Furman, 2012)

### Description (PICOS)

**Population:** adult offenders (196 RJ and 1,786 conventional justice (CJ) cases) in Massachusetts, including property crimes, substance-related charges, theft/attempted theft charges, and assault/crimes against persons.

**Intervention:** alternative and diversion RJ procedures, sample from Communities for Restorative Justice 2000-9 data.

**Comparator:** 'traditional' criminal justice procedures, sample from 2008 Males Release Cohort data.

**Outcome:** produced cost analysis of RJ, showing net cost savings through reductions in reoffending.

**Study Design:** cost-effectiveness analysis/economic evaluation of RJ using recidivism rates as 'effectiveness' variable; Massachusetts, US.

### Method

Document review and five semi-structured interviews, used to gather data about costs incurred from RJ and traditional criminal justice interventions.

Costs included personnel, facilities, equipment and materials and required client inputs. Estimated at \$305 per RJ case and \$1,258 per CJ case.

The following formula was used to calculate cost-effectiveness using rates of recidivism, where there was a 16% recidivism rate for RJ and 39% for CJ.

$RJ = \$305 \text{ (per case)} / 84\% \text{ (over 9 years)} = 305 / 84 = 3.631$

$CJ = \$1,259 \text{ (per case)} / 61\% \text{ (2008)} = 1,259 / 61 = 20.640$ .

Cost-social benefit ratio figure calculated by dividing cost savings by cost of RJ intervention.

### Estimate

Cost-social benefit ratio of \$3.13 per \$1 spent.

### Assessment of relevance

**Low** - Comprehensive inclusion of direct and indirect costs collected directly from the schemes, and from a large sample and broad range of offence types. However, inclusion of this data is patchy in cost per case estimates, and it is unclear why some factors are excluded. Recidivism rates are not measured consistently between the control and intervention groups.

Data is taken from a scheme operating outside the UK, significantly reducing applicability.



## Study - Soppitt and Irving 2011(Soppitt & Irving, 2011)

### Description (PICOS)

**Population:** 190 young offenders (age 10-17); Newcastle Youth Offending Team; offences include theft and handling stolen goods; public order; criminal damage; and violence against the person.

**Intervention:** 'Triage' diversion of first-time entrants into CJ, including into RJ procedures.

**Comparator:** standard criminal justice procedures including reprimand and final warnings in YOTs.

**Outcome:** produced Cost-social benefit ratio analysis and estimate, showing cost savings of future offences based on reoffending rates.

**Study Design:** economic analysis of RJ triage scheme based on reoffending ratio between RJ and CJ; Newcastle upon Tyne.

### Method

Quantitative data related to the various costs, including cost in anticipation, cost as a consequence of crime, and cost in response to the crime for theft and criminal damage offence types only.

The British Crime Survey estimates that financial figures are misleading and so costs are multiplied by a factor of three to account for the unrecorded crime.

Cost for theft estimates at £583 and criminal damage £822, producing average of £703.

Reoffending rates for Triage RJ (8.9%) and reprimands (29.5%), used to produce reoffending ratio of 1:3.3.

Ratio used to estimate costs of £702 for Triage and £2,318 for CJ.

Cost-social benefit ratio figure calculated by dividing cost savings by cost of RJ.

### Estimate

Cost-social benefit ratio of £2.30 per £1 spent.

### Assessment of relevance

**Low** - Lack of detail on cost factors included in calculations, and cost data is secondary. Lack of detail on estimate for unrecorded crime. Reconviction estimates are specific to intervention and taken from scheme but does not consider wider economic benefits of these. Specificity to youth offenders and limited offence types reduces external validity.