



## Improving outcomes:

Research in West Mercia to inform early interventions that can respond to Adverse Childhood Experiences (ACE) and reduce contact with the criminal justice system

Just Economics

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## List of abbreviations

E&W	England and Wales
DV	Domestic Violence
ACE	Adverse Childhood Experiences
FoI	Freedom of Information
CJS	Criminal Justice System
IMD	Indices of Multiple Deprivation

# 1. Introduction

YSS is a voluntary organisation that aims to support young people, adults and families who are at risk of social exclusion in the West Mercia and Warwickshire policing district. They work with individuals with complex needs at risk of entering the criminal justice system as well as children/young people and their families.

The purpose of this research is to explore upstream interventions that prevent women and children from entering the criminal justice system.

The aims are to collate the evidence on:

1. Paths into criminal behaviour for women and children,
2. Interventions that can divert women and children from those paths,
3. Key areas of need in West Mercia and Warwickshire, and
4. Potential cost savings that preventative services might generate

The intention is for the report to inform future service development and organisational strategy.

To this end, the report is structured as follows:

**Section 2** provides an overview of the methodology

**Section 3** presents the literature on determinants of crime

**Section 4** examines data on needs in West Mercia

**Section 5** draws on the secondary literature and primary data to outline options for upstream interventions to reduce criminality among children and women

**Section 6** presents economic modelling for the recommended option

## 2. Methodology

This section provides an overview of the research methodology. The research comprised four key elements:

- Review of data for West Mercia
- Review of secondary data and literature
- Economic modelling of early interventions
- Analysis and outline of options

### West Mercia Data

We began with an analysis of data for West Mercia and Warwickshire. This included the following datasets:

- NOMS data on proven reoffending statistics<sup>1</sup>
- Department of Education statistics on children in need<sup>2</sup>
- Deprivation indicators for West Mercia

Relevant geographical data was extracted for the indicators of interest and analysed in Excel. In addition, further breakdowns of the children in need data were requested through a Freedom of Information (FoI) application.

### Secondary Data and Literature

Secondary data and literature were consulted to access information on:

- 1) Determinants of crime
- 2) Effective interventions over the life course
- 3) Return on investment for different types of intervention

This included a review of existing evaluation studies as well as the academic and policy literature on ACE, women and criminal justice, and offending/re-offending.

### Economic modelling and options analysis

The primary and secondary research were used to construct a costing model for YSS relating to the most promising intervention, the Women's Centre approach. Costings were undertaken in line with best practice guidance in the UK Treasury Green Book.

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<sup>1</sup> <https://www.gov.uk/government/collections/proven-reoffending-statistics>

<sup>2</sup> <https://explore-education-statistics.service.gov.uk/find-statistics/characteristics-of-children-in-need/2020>

### 3. Literature Review

There are three main approaches to reducing crime practiced by most countries. These are as follows<sup>3</sup>:

- 1) **Interventions to improve the life chances of children** and prevent them from embarking on a life of crime;
- 2) **Programmes and policies designed to ameliorate the social conditions and institutions** that influence offending; and
- 3) The **modification or manipulation of the physical environment, products, or systems** to reduce everyday opportunities for crime.

Whilst crime has been falling in many parts of the world, and especially Europe, since the 1980s, the reasons for this are still only partly understood and may relate in part to some of these kinds of interventions.<sup>4</sup> What is clear however, is that crime has a strong pattern of socio-economic disadvantage.

This section of the report, therefore, summarises the literature on determinants of crime. However, before doing so, we locate the analysis within the 'risk-based approach' and its critiques.

#### Understanding the risk-based approach

The approach taken in this analysis broadly falls under the framework of the risk-based approach, which has become the standard approach in criminal justice service design since the 1990s.

The key features of this framework are set out in Figure 1. It is organised around three levels of intervention:<sup>5</sup>

- 1) **Preventive:** stopping problems from developing in the first place;
- 2) **Protective:** protecting children and families with identified 'risk factors' from experiencing problems in the future; and
- 3) **Remedial/therapeutic:** intervening to address emergent problems before they become serious or persistent

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<sup>3</sup> Tonry, M. (Ed.). (2011). *The Oxford handbook of crime and criminal justice*. Oxford University Press.

<sup>4</sup> Van Dijk, J., Tseloni, A., & Farrell, G. (Eds.). (2012). *The international crime drop: New directions in research*.

<sup>5</sup> Statham, J., & Smith, M. (2010). *Issues in earlier intervention*. London: Department for Children, Schools and Families.

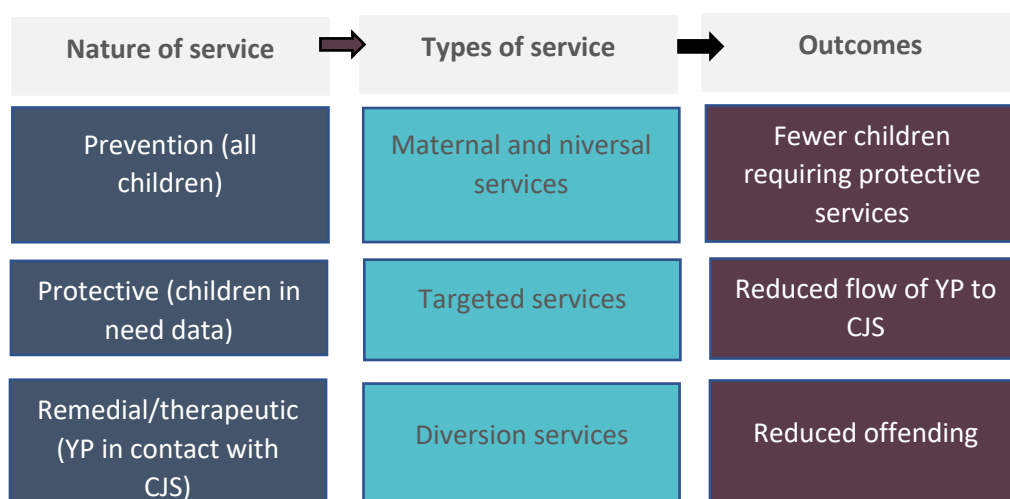


Figure 1: Theory underpinning risk identification approach

The 'Risk Factor Prevention Paradigm' prioritised the identification of 'risk factors' that predict future offending, where those might be in the psychosocial, psychological, family, school, peer, or neighbourhood domains of children's lives. Once identified, it then sought to target these factors.<sup>6</sup> It was suggested that this would increase the efficiency of public spending by channeling scarce resources towards the areas of greatest risk.

The approach has, however, been the subject of much criticism,<sup>7</sup> including the following:<sup>8</sup>

- **Predictive errors:** The analyses include sizeable predictive errors (e.g. only about one third of people who are mistreated as children will go on to mistreat their own children). The efficiency of targeting can be illusory but can also miss areas of genuine risk.
- **Stigmatisation:** Stigmatisation is very common in targeted social programmes and potential participants may distance themselves from the programme to avoid being stigmatised, thereby reducing effectiveness.
- **Undermining a strengths-based approach:** Strengths-based approaches are widely recognised as best practice. Risk-based approaches compromise this as targeting is based on an assumption of deficits.
- **Help-seeking:** The assumption that people will seek help in the first place is problematic and there is lots of evidence of lower levels of help-seeking amongst the neediest groups.

<sup>6</sup> Case, S., & Haines, K. (2013). *Understanding Youth Offending: Risk Factor Research, Policy and Practice*. Willan.

<sup>7</sup> Ibid.

<sup>8</sup> Daro, D., & Karter, C. (2019). Universal services: The foundation for effective prevention. In *Re-visioning public health approaches for protecting children* (pp. 113-126). Springer, Cham.

- **Individualism:** Risk-based approach is often anchored in a flawed assumption that the individual is responsible for their own outcomes and ignores structural factors driving poor outcomes such as poverty, housing, education and so on.

Daro and Carter<sup>9</sup>, in their research, argue that the best response to these criticisms is to provide quality services at a more universal level, ideally from an early age.

Whilst this is not usually practical for organisations such as YSS, the critique is nonetheless important and has informed this research. To this end, we argue that it is certainly valid to seek to understand the kinds of homes, institutions and communities that give children the best start in life, but this must be located within broader socio-economic factors and take account of the features of universal services and strength-based approaches that can be replicated at a smaller scale.

### Determinants of crime

In this section, we identify the main determinants of crime, including Adverse Childhood Experiences (ACE), while bearing in mind the critiques levied at risk-based approaches.

Broadly, there are four factors that can have an influence, which are:

- Personal circumstances
- Family circumstances
- Neighbourhood effects
- Peers

Due to the size of the literature which has developed in this area, we present the main findings in Table 2. This sets out the influencing factor, the elements that have been found to be important and references to support the finding. In Section 5, we provide information on interventions that have been found to be effective at intervening at different stages of the life course.

Influencing factor	Key elements	Source
Personal	<b>Personality factors:</b> Although this paper is largely focused on environmental factors that predict criminal behaviour, there are some personality factors that are more likely to lead to anti-social behaviour, particularly when combined with certain environmental factors. These include impulsiveness,	Farrington, 2005 <sup>10</sup> ; Farrington, 2015 <sup>11</sup>

<sup>9</sup> Ibid.

<sup>10</sup> Farrington, D. P. (2005). Childhood origins of antisocial behavior. *Clinical Psychology & Psychotherapy: An International Journal of Theory & Practice*, 12(3), 177-190.

<sup>11</sup> Farrington, D. P. (2015). Cross-national comparative research on criminal careers, risk factors, crime and punishment. *European Journal of Criminology*, 12(4), 386-399.



	hyperactivity, risk-taking and low empathy.	
	<b>Level of education:</b> There is a lot of evidence that education is protective for children. Those that leave school early, have low educational attainment or poor attendance are at increased risk of entering the criminal justice system. The probability of committing crimes has been found to decrease with years of education.	Groot, 2010; <sup>12</sup> Lochner, 2020; <sup>13</sup> Hjalmarsson et al. 2015 <sup>14</sup>
	<b>Substance use</b> also predicts crime. However, the relationship is bi-directional, where entering the CJS (especially prison) also increases the odds that someone will engage in substances. There is also evidence that substance abuse compounds offending behaviour.	Walters, 2014 <sup>15</sup> Herbst et al. 2014 <sup>16</sup>
	<b>Mental health:</b> There is a complex relationship between crime and mental health. High-crime neighbourhoods negatively affect people's mental health, poor mental health increases the risk of entering the CJS, and incarceration can compound existing	Underwood and Washington 2016 <sup>17</sup> Walker et al. <sup>18</sup> Barlett and Hollins, 2018 <sup>19</sup>

<sup>12</sup> Groot, W., & van den Brink, H. M. (2010). The effects of education on crime. *Applied economics*, 42(3), 279-289.

<sup>13</sup> Lochner, L. (2020). Education and crime. In *The economics of education* (pp. 109-117). Academic Press.

<sup>14</sup> Hjalmarsson, R., Holmlund, H., & Lindquist, M. J. (2015). The effect of education on criminal convictions and incarceration: Causal evidence from micro-data. *The Economic Journal*, 125(587), 1290-1326.

<sup>15</sup> Walters, G. D. (2014). Crime and substance misuse in adjudicated delinquent youth: The worst of both worlds. *Law and Human Behavior*, 38(2), 139.

<sup>16</sup> Herbst, J. H., Branscomb-Burgess, O., Gelaude, D. J., Seth, P., Parker, S., & Fogel, C. I. (2016). Risk profiles of women experiencing initial and repeat incarcerations: Implications for prevention programs. *AIDS Education and Prevention*, 28(4), 299.

<sup>17</sup> Underwood, L. A., & Washington, A. (2016). Mental illness and juvenile offenders. *International journal of environmental research and public health*, 13(2), 228.

<sup>18</sup> Walker, J., Illingworth, C., Canning, A., Garner, E., Woolley, J., Taylor, P., & Amos, T. (2014). Changes in mental state associated with prison environments: a systematic review. *Acta Psychiatrica Scandinavica*, 129(6), 427-436.

<sup>19</sup> Bartlett, A., & Hollins, S. (2018). Challenges and mental health needs of women in prison. *The British Journal of Psychiatry*, 212(3), 134-136.

	mental health problems, especially for women.	
	Children who are <b>exposed to violence</b> often experience difficulties in later life including violent behaviour as adults. This is especially the case for serious violent crimes, where perpetrators tend to have high rates of trauma, abuse, and other harmful experiences in childhood, even when controlling for other factors.	Hahn Fox et al. 2015 <sup>20</sup>
	Linked to the previous point, men who have witnessed <b>domestic violence</b> (DV) as children have been found to commit the most frequent domestic violence as adults. A recent systematic review of studies on the effects of DV found a range of negative psychological impacts and identified the need for interventions for childhood witnesses.	Murrell et al. 2007; <sup>21</sup> Lloyd 2018 <sup>22</sup> Pingley 2017 <sup>23</sup>
	<b>Income level/poverty:</b> Nuanced debate but general conclusion that exposure to poverty exacerbates other risk factors.	See full discussion below
Family	<b>Parenting style</b> refers to the attitudes, behaviours, and interaction styles that, when taken together, create an emotional context for children. Parenting approaches that have been linked to antisocial behaviour include: poor supervision, harsh/erratic discipline,	Schroader and Mowen, 2012 <sup>24</sup> Farrington, 2015

<sup>20</sup> Fox, B. H., Perez, N., Cass, E., Baglivio, M. T., & Epps, N. (2015). Trauma changes everything: Examining the relationship between adverse childhood experiences and serious, violent and chronic juvenile offenders. *Child abuse & neglect*, 46, 163-173.

<sup>21</sup> Murrell, A. R., Christoff, K. A., & Henning, K. R. (2007). Characteristics of domestic violence offenders: Associations with childhood exposure to violence. *Journal of family violence*, 22(7), 523-532.

<sup>22</sup> Lloyd, M. (2018). Domestic violence and education: Examining the impact of domestic violence on young children, children, and young people and the potential role of schools. *Frontiers in psychology*, 9, 2094.

<sup>23</sup> Pingley, T. (2017). The impact of witnessing domestic violence on children: A systematic review.

<sup>24</sup> Schroeder, R. D., & Mowen, T. J. (2014). Parenting style transitions and delinquency. *Youth & Society*, 46(2), 228-254.

	cold/rejecting attitude and low parental involvement.	
	<b>Family functioning:</b> Research consistently finds that the family is among the most important agent of socialisation for children and adolescents. Where the family functions well it can be protective of children even when exposed to other adverse experiences.	Gorman-Smith et al. 2004
	<b>Abuse and neglect:</b> One study found that maltreatment doubled the risk of engaging in crime. Children from low socio-economic backgrounds are more at risk, as are boys. Men who were abused as children were more likely to abuse children and commit more general violence.	Murrell et al. 2007; Curie and Tekin, 2006
	<b>Parent's own experiences:</b> There is considerable evidence to support intergenerational effects. Parent's own substance abuse, mental health and contact with criminal justice increase the risk of poor outcomes for children, including offending.	Adjei, 2022 Wildeman, 2020 <sup>25</sup>
Neighborhood effects	The <b>built environment</b> is generally found to be linked to crime. This ranges from crime being concentrated in a small number of 'hot spots', to poor housing quality/neighbourhood design and the existence of community violence.	Farrington, 2015 <sup>26</sup> Weisburd et al. 2012 <sup>27</sup> ; Fowler et al. 2009 <sup>28</sup>

<sup>25</sup> Wildeman, C. (2020). The intergenerational transmission of criminal justice contact. *Annual Review of Criminology*, 3, 217-244.

<sup>26</sup> Farrington, D. P. (2015). Cross-national comparative research on criminal careers, risk factors, crime and punishment. *European Journal of Criminology*, 12(4), 386-399.

<sup>27</sup> Weisburd, D. (2012). Bringing social context back into the equation: The importance of social characteristics of places in the prevention of crime. *Criminology & Pub. Pol'y*, 11, 317.

<sup>28</sup> Fowler, P. J., Tompsett, C. J., Braciszewski, J. M., Jacques-Tiura, A. J., & Baltés, B. B. (2009). Community violence: A meta-analysis on the effect of exposure and mental health outcomes of children and adolescents. *Development and psychopathology*, 21(1), 227-259.

Peer influences	It is well-documented that having <b>friends or siblings that are engaged in crime</b> increases the likelihood of engaging in criminal behaviour.	Rokven et al. <sup>29</sup>
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It is important to expand on the reference to 'income and poverty' in the Table above. Whilst research tends to show strong links between income/poverty and crime; it is not always a causal relationship. As has been pointed out, most poor people never engage in crime and crime has been decreasing but poverty has not.<sup>30 31</sup> However, the research also finds that it is highly likely that poverty exacerbates other forms of adversity. For example, an analysis of the recent UK Millenium cohort study found that children exposed to persistent poor parental mental health and poverty were at increased risk of socioemotional and behavioural problems.<sup>32</sup> In addition, poorer children are both more likely to be mistreated and to suffer more damaging effects from that experience.<sup>33</sup>

In general, there is strong evidence that factors 'stack up' to increase the risks of poor outcomes (i.e., characteristics, experiences, environments, and family situations can be understood as overlapping contingencies that affect potential life outcomes). As a result, individuals that experience multiple risk factors throughout the life-course may be more likely to engage in criminal activities.<sup>34</sup>

The UK Millenium Cohort study found that persistent poverty and/or persistent poor parental mental health affects over four in ten children. The combination of both affects one in ten children and is strongly associated with adverse child outcomes, particularly poor child mental health.

<sup>29</sup> Rokven, J. J., de Boer, G., Tolsma, J., & Ruiters, S. (2017). How friends' involvement in crime affects the risk of offending and victimization. *European journal of criminology*, 14(6), 697-719.

<sup>30</sup> Webster, C., & Kingston, S. (2014). Poverty and crime.

<sup>31</sup> Sariaslan, A., Mikkonen, J., Aaltonen, M., Hillamo, H., Martikainen, P., & Fazel, S. (2021). No causal associations between childhood family income and subsequent psychiatric disorders, substance misuse and violent crime arrests: a nationwide Finnish study of > 650 000 individuals and their siblings. *International journal of epidemiology*, 50(5), 1628-1638.

<sup>32</sup> Adjei, N. K., Schlüter, D. K., Straatmann, V. S., Melis, G., Fleming, K. M., McGovern, R., ... & Taylor-Robinson, D. C. (2022). Impact of poverty and family adversity on adolescent health: a multi-trajectory analysis using the UK Millennium Cohort Study. *The Lancet Regional Health-Europe*, 13, 100279.

<sup>33</sup> Currie, J., & Tekin, E. (2006). Does child abuse cause crime?.

<sup>34</sup> Oliveira, R. V., & Beaver, K. M. (2021). Exploring effects of psycho-bio-social risk factors on later offending. *Journal of criminal justice*, 77, 101852.

## Summary of literature findings

So far, our research has pointed towards a set of determinants that are important, widespread, and fit with the skills and remit of YSS. These are:

- Abuse and neglect
- Parental and child mental health
- Domestic violence, and
- Poverty

In the next section, we look at primary data for West Mercia to examine levels of need in each of these areas before later sections consider how an organisation like YSS might respond to that need.

## 4. Needs in West Mercia

This section sets out needs in West Mercia, providing first an overview and then considering:

- Poverty and deprivation
- Children in need data
- Youth reoffending rates

### Overview of West Mercia

West Mercia is a largely prosperous area and current economic data are strong with relatively low unemployment and above average incomes.<sup>35</sup>

Looking beyond incomes, we find that quality of life is around the UK average. Wellbeing scores are consistent with the UK average (anxiety slightly lower than UK average, but happiness also slightly lower (7.38 [WM] vs 7.71 [UK])).

However, the area does contain pockets of deprivation and disadvantage.

### Poverty and deprivation

Table 3 sets out comparisons between each of the boroughs in the West Mercia region and the UK for child poverty<sup>36</sup> and the indices of multiple deprivation (IMDs).<sup>37</sup>

Note that IMDs are a relative measure, with local bodies ranked. The higher the ranking, the more deprived the local area. Telford and Wrekin are the most deprived within West Mercia and come in at 65<sup>th</sup> out of 151 such bodies in the UK. The remaining West Mercia regions are between 97<sup>th</sup> and 110<sup>th</sup> (out of 151).

Table 3: Deprivation indicators West Mercia and Warwickshire

Indicator	Geography	Rate
Child poverty	Herefordshire	29%
	Telford and Wrekin	34%
	Shropshire	29%
	Worcester	33%
	Warwickshire	21-30%
	UK	31%

<sup>35</sup> <https://www.ons.gov.uk/peoplepopulationandcommunity/wellbeing>

<sup>36</sup> <https://www.jrf.org.uk/data>

<sup>37</sup> <https://www.gov.uk/government/statistics/english-indices-of-deprivation-2019>

Indices of multiple deprivation	Herefordshire	97th
	Telford and Wrekin	65th
	Shropshire	110 <sup>th</sup>
	Worcester	105th
	Warwickshire	103rd
	UK	Out of 151

### Children in need analysis

The data analysed in this section is collected by the Department of Education when a child is referred to a social worker.

Figures 2-5 display the results for three key measures:

- Primary reason for referral
- All factors mentioned in a referral, and
- Referring agency.

Note that, in some cases, we have collapsed categories to make the data more manageable. For example, categories such as alcohol are broken down in the data by parent, child or other adult needs. For the purposes of the analysis we have placed all of these 7 under the heading of 'Alcohol'.

#### *Primary reason for referral*

Figure 2 shows us that by far the largest 'primary' reason for referral is abuse or neglect, with this being the case in 42% of referrals. It is followed by 'family dysfunction' (17%) and 'child disability or illness' (14%).

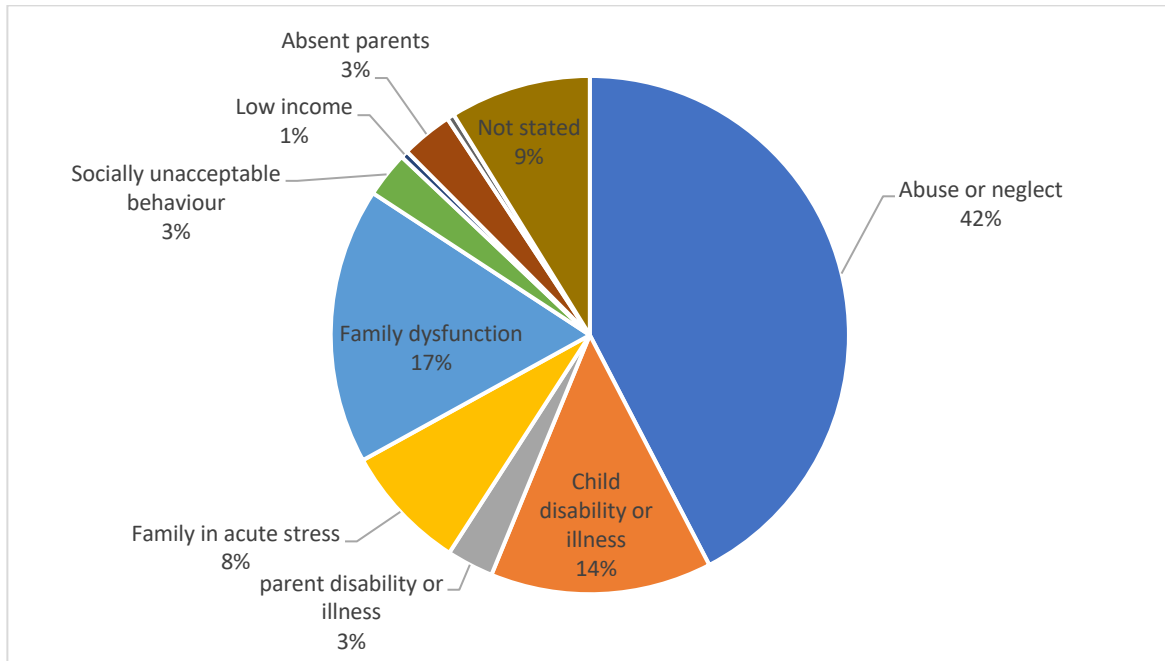


Figure 2: Source of referral by primary area of need for West Mercia

#### All factors mentioned in the referral

When we consider all factors mentioned in the referral, the most common are 'domestic violence' (20%) and 'mental health' (20%), followed by 'emotional abuse or neglect' (14%), 'alcohol' (9%), 'drugs' (9%), 'disability' (9%), and 'physical or sexual abuse' (8%).

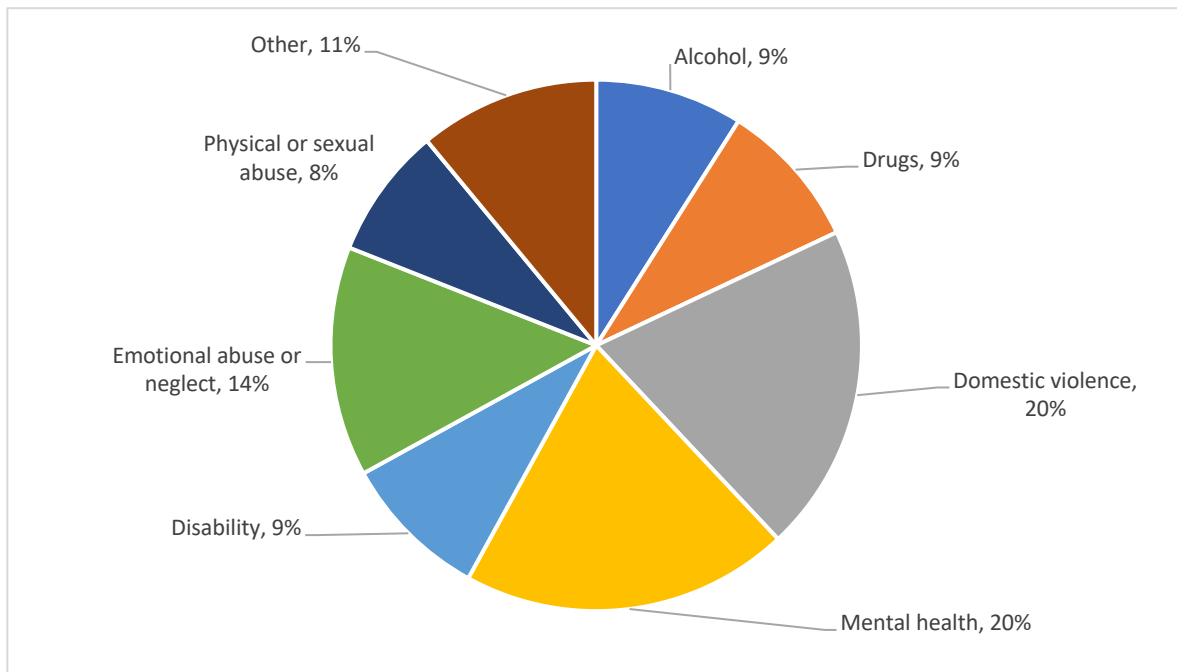


Figure 3: All factors mentioned in referrals for West Mercia



## Referring agency

The most referrals of children in need come via police (30%), which may reflect the presence of domestic violence. This is followed by health services (16%), local authority services (15%) and schools (14%).

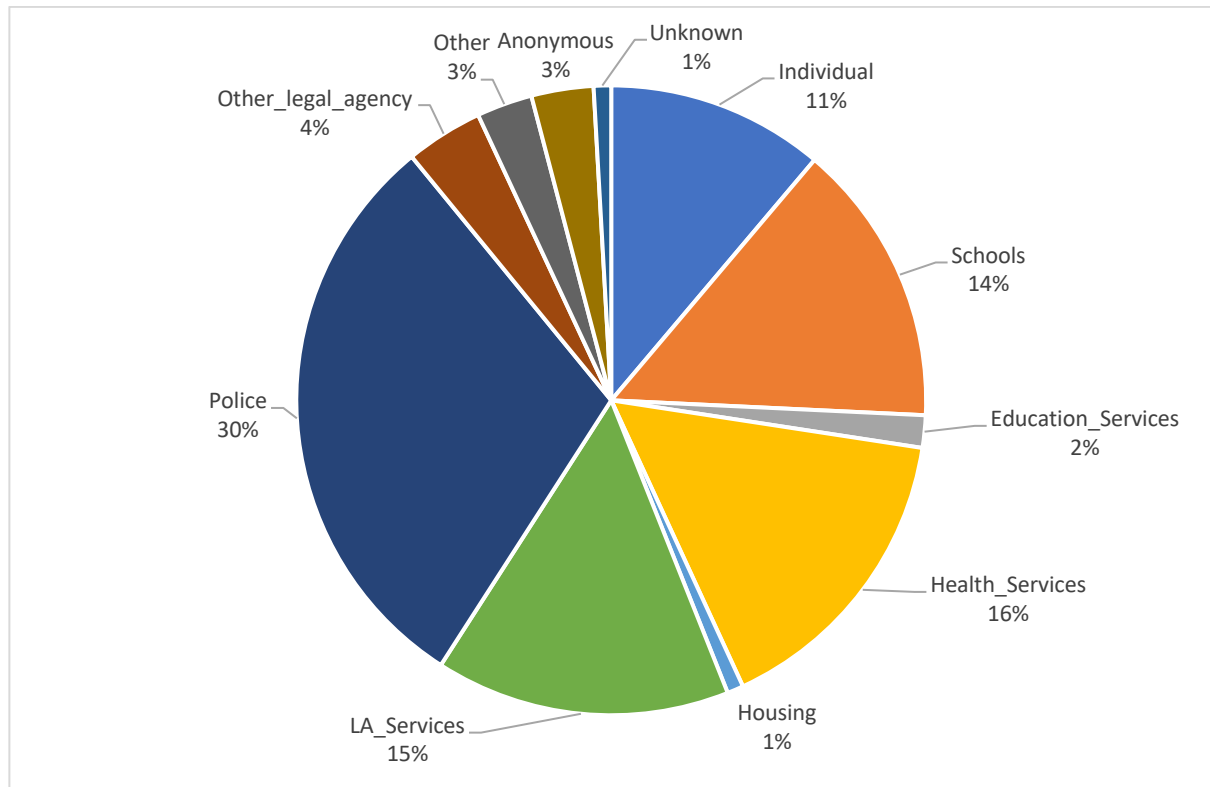


Figure 4: Referrals by referring agency for West Mercia

## Comparison to England data

Table 4 provides a comparison between each need for West Mercia as a share of all needs and England. This shows that the picture in West Mercia is largely consistent with whole of England data.

Table 4: Comparison of West Mercia needs data with England

Type of need	West Mercia as share of all	England as share of all
Alcohol	9%	8%
Drugs	9%	9%
Domestic violence	20%	20%
Mental health	20%	20%
Disability	9%	6%
Emotional abuse/neglect	14%	15%
Physical or sexual abuse	8%	7%
Other	11%	15%

## Reoffending data

Table 5 shows the youth, male and female reoffending rates for each borough compared to the West Mercia and England averages for the latest available year. Areas where the rates are elevated are highlighted in red.

As we can see, there are:

- Elevated youth rates in Shropshire and Herefordshire (Herefordshire 10-14 rate was 43.2% in 2018/19)
- Elevated male and female rates in Telford and Wrekin and Worcestershire

However, reoffending statistics are notoriously problematic to interpret, particularly for a one-off year/location. Moreover, as Shropshire and Herefordshire, in particular have low crime rates, we are likely talking about a small number of offenders. As such, it is important to treat these data with caution.

Table 5: Reoffending statistics (% reoffending)

Geography	Age breakdown	Latest available	Year	West Mercia	England and Wales
Shropshire	All	18.0	2019/20	22.6	25.8
	10 to 14	43.8	2016/17	32.0	31.8
	15 to 17	10.6	2019/20	27.6	34.1
	Female	13.0	2019/20	18.2	20.4
	Male	19.0	2019/20	21.2	26.8
Warwickshire	All	22.0	2019/20	22.6	25.8
	10 to 14	31.0	2018/19	32.0	31.8
	15 to 17	28.6	2019/20	27.6	34.1
	Female	14.8	2019/20	18.2	20.4
	Male	12.4	2019/20	21.2	26.8
Telford and Wrekin	All	23.4	2019/20	22.6	25.8
	10 to 14	15.6	2016/17	32.0	31.8
	15 to 17	17.3	2019/20	27.6	34.1
	Female	22.8	2019/20	18.2	20.4
	Male	23.6	2019/20	21.2	26.8
Worcestershire	All	26.7	2019/20	22.6	25.8
	10 to 14	18.0	2018/19	32.0	31.8
	15 to 17	35.1	2019/20	27.6	34.1
	Female	23.0	2019/20	18.2	20.4
	Male	27.0	2019/20	21.2	26.8
Herefordshire	All	23.1	2019/20	22.6	25.8
	10 to 14	28.1	2018/19	32.0	31.8
	15 to 17	46.7	2019/20	27.6	34.1
	Female	17.5	2019/20	18.2	20.4
	Male	24.0	2019/20	21.2	26.8

## Summary of West Mercia data findings

The key findings from the data are as follows:

- 'Abuse and neglect' is the main primary reason for referral in West Mercia, making up almost half of all referrals
- If we combine all forms of abuse and neglect, they make up 22% of all mentions (the largest proportion). However, these are closely followed by mental health and domestic violence, which between them make up around 40% of cases
- Rates are broadly similar to national average (i.e. no evidence of elevated need in any area)

## 5. Options for YSS

The previous section showed that the issues identified in the literature also concur with needs in West Mercia. That is, abuse and neglect, domestic violence, parental/child mental health and poverty should be key targets for any upstream interventions that seeks to improve outcomes and reduce the number of women and children entering the criminal justice system.

This section sets out the options for future service design and strategy for YSS. It considers a range of options, drawing on the academic literature for interventions/approaches that have been found to be effective, and concludes with a recommendation to take forward for economic modelling.

### Option 1: Universal approach

The benefits of universal services are well-documented.<sup>38</sup> Paid parental leave, for example, is correlated with fewer behavior problems among infants of mothers with lower levels of educational attainment.<sup>39</sup>

In the field of early intervention, universal services were popularised by the HighScope/Perry preschool intervention in the US and the Scandinavian-style child care models.

Some examples of recent interventions include a home-based intervention, the Nurse Family Partnership (NFP), and a school-based intervention, Families and Schools Together.

However, these type of interventions tend to require large resources, and to operate at least at a regional level, which may be out of scope for YSS. However, there are elements of the universal approach – namely, being strengths-based, operating in a drop-in/open and non-stigmatised way, and intervening with lower as well as high needs – that can be generalised to any future intervention.

### Option 2: Targeted interventions

There are a multitude of targeted interventions aimed at young people at risk of entering the criminal justice system or for diverting them away from custody once already in contact.

However, given the earlier discussion on predictive errors in the risks-based approach (see p.6), we recommend that these should be responsive to clear needs that have ends in themselves, rather than criminogenic risk factors alone.

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<sup>38</sup> Daro, D., & Karter, C. (2019). Universal services: The foundation for effective prevention. In *Re-visioning public health approaches for protecting children* (pp. 113-126). Springer, Cham.

<sup>39</sup> Kozak, K., Greaves, A., Waldfogel, J., Angal, J., Elliott, A. J., Fifier, W. P., & Brito, N. H. (2021). Paid maternal leave is associated with better language and socioemotional outcomes during toddlerhood. *Infancy*, 26(4), 536-550.

A key finding from the literature on targeted interventions is that good implementation of targeted approaches is as important as finding the 'right' intervention.

The interventions can be segmented into lighter touch/less expensive interventions for lower risk and more intensive/specialist for higher risk (e.g. conduct disorders).

Some examples of lower risk interventions are:

- ABC/CARE
- Headstart
- Strengthening Families Programme
- Big Brothers Big Sisters
- Stop Now and Plan

Many of these currently have limited longitudinal data. Yet to see sustainable results, they rely on effects being maintained over time.<sup>40</sup> They also suffer from stigmatization when targeted and can create barriers for groups that need them.<sup>41</sup>

For children with conduct disorders (already offending or high risk) the following have been found to be effective (Farrington, 2015):

- Functional Family Therapy,
- Multidimensional Treatment Foster Care,
- Multi Systemic Therapy

From a YSS perspective, many of these interventions are expensive and would require a lot of investment and specially trained staff to get up-and-running. Moreover, other organisations may already be delivering them in the area. It would be necessary to carry out an audit of existing services to work out if there were any gaps that targeted services such as these might meet.

### **Option 3: Maternal/family support services**

These services work on the assumption that the earlier an intervention occurs, the greater the return to society.<sup>42</sup>

They are based around family as a holistic unit by considering the needs of parents with an emphasis on identification, triage and referral. This has overlap with both universal and targeted approaches, but we treat them separately here as they work slightly differently, and do not always involve children in their delivery.

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<sup>40</sup> Waldfogel, J. (2009). Prevention and the child protection system. *The Future of Children*, 195-210.

<sup>41</sup> Newham, J. J., McLean, K., Ginja, S., Hurt, L., Molloy, C., Lingam, R., & Goldfeld, S. (2020). Brief evidence-based interventions for universal child health services: a restricted evidence assessment of the literature. *BMC public health*, 20(1), 1-16.

<sup>42</sup> Heckman, J.J. and S. Mosso (2014) The economics of human development and social mobility. *Annual Review of Economics* 6(1): 689–733.

Some examples include:

- Nurse Family Partnership
- Room to Grow (combines parenting support with direct financial support)
- New Choices (focused on substance abuse of mothers)
- Parenting programmes (e.g. Triple P, Incredible Years, Parent's Plus)
- Breaking the Cycle
- ABC/CARE

Due to YSS' expertise in working with women, interventions that build parenting skills are a promising route. Some of these can be expensive and difficult to set up (e.g. Nurse Family Partnership), but this is not always the case (e.g. parenting programmes). However, the fact that they sometimes work exclusively with parents may not be completely aligned to YSS' aims in this area.

#### **Option 4: Place-based interventions**

These are interventions that are rooted in the local economy and community. They generally operate as wider regeneration programmes that seek to reduce neighbourhood effects via improved housing, urban design, access to services, availability of employment and so on.

These types of interventions have the benefit of taking a multi-pronged approach to disadvantage. However, there is mixed evidence for effectiveness of place-based interventions, and they are difficult to design and evaluate. Due to this and the cost of establishing these programmes, we would not recommend these type of programmes for an organisation such as YSS.

#### **Option 5: Gender-sensitive/women's services**

Specialist women's services are the final option we consider. Evidence suggests that mainstream service delivery models do not address the complexity of many women's lives.<sup>43</sup> For example, there is evidence to suggest that women have different needs to men in mental health,<sup>44</sup> physical health,<sup>45</sup> criminal justice,<sup>46</sup> substance misuse,<sup>47</sup> and homelessness.<sup>48</sup> This suggests that there may be a role for specialist women's services or gender-sensitive service delivery.

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<sup>43</sup> Scott, S. and Frost, S. (2018) Why women's Centres Work [https://www.tavinstitute.org/wp-content/uploads/2019/05/Women-and-Girls-Briefing-Report-Final\\_web.pdf](https://www.tavinstitute.org/wp-content/uploads/2019/05/Women-and-Girls-Briefing-Report-Final_web.pdf)

<sup>44</sup> Comacchio, C., Antolini, G., Ruggeri, M., & Colizzi, M. (2022). Gender-oriented mental health prevention: a reappraisal. *International journal of environmental research and public health*, 19(3), 1493.

<sup>45</sup> Brittle, C., & Bird, C. E. (2007). *Literature review on effective sex-and gender-based systems/models of care*. Arlington, VA: Uncommon Insights.

<sup>46</sup> Baldwin, L., & Epstein, R. (2017). *Short but not sweet: A study of the impact of short custodial sentences on mothers & their children*. De Montfort University.

<sup>47</sup> Langan, N. P., & Pelissier, B. M. (2001). Gender differences among prisoners in drug treatment. *Journal of Substance Abuse*, 13(3), 291-301.

<sup>48</sup> Bowpitt, G., Dwyer, P., Sundin, E., & Weinstein, M. (2011). Comparing men's and women's experiences of multiple exclusion homelessness. *Social Policy and Society*, 10(4), 537-546.

In a study of Women's Centres, Duffy and Hyde found substantial improvements in mental health, relationships, work, housing, neighbourhood, money and physical health as a result of these services.<sup>49</sup>

A meta-analysis of women in recovery found that safety from assault and harassment and finding safe and supportive connections were commonly reported as crucial to the process of recovery for women with mental health issues across these studies.<sup>50</sup>

Increasingly, such services are being delivered in a partnership context (e.g. Coventry Women's Partnership, Women's Lives Leeds, Greater Manchester Women's Support Alliance, Sheffield Women and Girl's Partnership). An evaluation of the Coventry Women's Partnership found positive improvements in mental health, physical health, relationships, and finances, debt, housing and employment outcomes.<sup>51</sup>

Women's Centres also directly address the problems identified earlier with risk-based approaches in that they operate a strengths-based, non-stigmatising model. For example, a woman might become involved in an employment training course and, due to trust being built, could then disclose domestic violence or mental health, which can be sensitively and effectively managed.

Women's Centres also have the flexibility to respond to practical needs like childcare and could be a hub from which targeted early intervention, such as parenting programmes, could be delivered. Longer-term the co-location of services, including statutory services like GPs that operate in a gender-sensitive way, could be considered.

Again, housing universal and targeted interventions under one roof reduces stigma and increases the chances of reaching those that are unlikely to seek help. These services have also been identified as playing an important role in reducing female/maternal offending, which we will discuss in the more detail in the next section.

Figure 5 provides the outline of a service model for the Women's Centre approach. This would see YSS delivering gender-sensitive services and playing a co-ordinating and connecting role between partners addressing mental health, poverty and domestic violence.

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<sup>49</sup> Duffy, S., & Hyde, C. (2011). *Women at the Centre. Sheffield, The Centre for Welfare Reform.*

<sup>50</sup> Dixon, K., Fossey, E., & Petrakis, M. (2021). Safety for women when accessing mental health services: a scoping review of the link between safety and recovery. *Australian health review.*

<sup>51</sup> Lawlor, E. and Bowen, N (2020) Coventry Women's Partnership Project: a social impact study file:///C:/Users/eilis/Downloads/Cwp%20Report%20Final200520%20(3).pdf  
<https://www.justeconomics.co.uk/education-employment-and-economic-development/integrated-working-with-vulnerable-women>

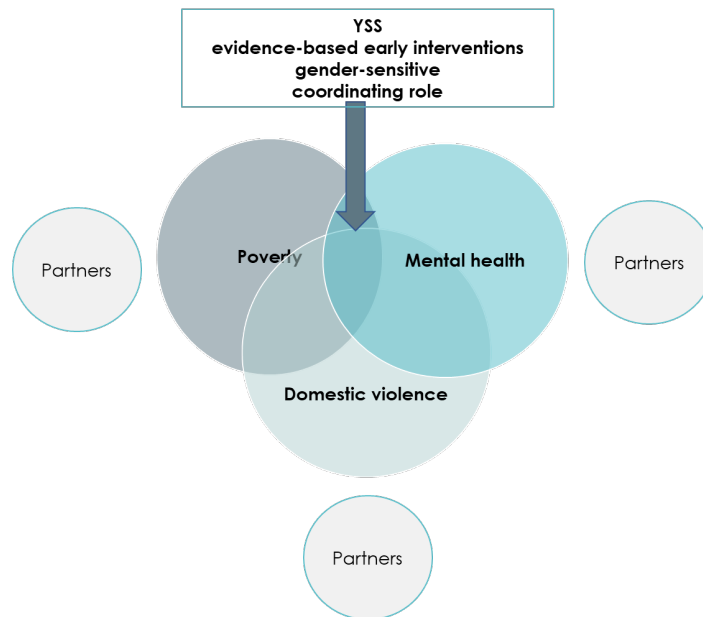


Figure 5: Potential service model

### Summary of options analysis

The Women's Centre approach, either as a standalone centre or a coordination of existing women's services like the Coventry model, is the most promising and apposite area of service development for YSS. It would best address the needs identified in the literature and data for West Mercia, as well as build on the existing experience, strengths, and capacity of YSS.

The final section of the report presents the findings from economic modelling of the potential savings that a Women's Centre model could generate in West Mercia.

## 6. Economic modelling of potential savings

This section presents the results of economic modelling to show the potential savings from investment in a Women's Centre model of service delivery.

There are three ways in which a women's service approach could work to generate cost beneficial outcomes. These are as follows:

- 1) By diverting women away from the criminal justice system and supporting them to improve their life chances and that of their children
- 2) By improving maternal skills/family functioning and thereby reducing the likelihood that children will become known to social services and require formal interventions (i.e. become children in need)
- 3) By increasing the likelihood of disclosures and effective responses around domestic violence and the related costs to victims, perpetrators, and wider society

For the economic analysis, we have combined primary data from West Mercia and Warwickshire with secondary costs data to estimate potential savings from a women-oriented specialist service. Although Women's Centres have been shown to achieve a much wider set of outcomes, reducing offending is part of YSS remit and is an area of ongoing policy interest vis-a-vis women's centres and is, thus, the focus of this economic analysis.

### Women in the criminal justice system

Women make up a minority of offenders but their needs are highly complex and distinct from male offenders. Home Office research finds that compared to males, a higher proportion of females reported: self-declared mental health problems, physical disability, having drug and alcohol problems, money worries and housing worries.<sup>52</sup> Indeed the needs of most women offenders make them more similar to the broader population of women who have experienced abuse and trauma.<sup>53</sup>

Since the Corston review into the deaths of women in custody in 2007, there has been a statutory recognition that the prison system – developed as a male institution – is largely unsuitable for women, especially non-violent offenders who tend to have very complex needs. The Female Offender Strategy makes an evidence-based case

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[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/938360/statistics-on-women-and-the-criminal-justice-system-2019.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/938360/statistics-on-women-and-the-criminal-justice-system-2019.pdf)

<sup>53</sup> <http://www.womencentredworking.com/wp-content/uploads/2014/08/Nef-report-Womens-Community-Services-A-Wise-Commission.pdf>



for addressing the distinct needs of women in the justice system and recognises that they have worse outcomes from prison than men.<sup>54</sup>

Community orders located in holistic Women's Centres were identified by Corston as a promising alternative and additional funding was made available for these services in the years after the review.

The economic benefits of these interventions have also been studied. In 2008, the New Economics Foundation published *Unlocking Value*, which estimated the costs of imprisoning non-violent women offenders (Lawlor et al. 2008). This research identified a range of negative impacts of imprisoning women. The report made a case for investment in women-centred services as an alternative to prison with an estimated social return on investment (SROI) in these services of 14:1, suggesting that for every pound invested in these services, £14 of social value was generated.

Following on from this, NEF consulting worked with the Corston Independent Funders Coalition and the Ministry of Justice-supported Women's Diversionary Fund to enable five integrated support providers to undertake their own SROI analyses. Among the five grantees, the SROI analyses found that their services returned a social value of between £3.44 and £6.65 for every £1 invested.

More recently, a cross-government costing project led by the Ministry of Justice and HM Treasury considered wider government costs and estimated that female offenders cost the government £1.7 billion in 2015-16, including £1 billion in police costs.<sup>55</sup> However, although the costs of women's offending are well-documented, as are the benefits of reducing it via more humane and inexpensive means, women's services have lacked hard quantitative data to demonstrate impact.

To construct the economic model, we focus on those women that are at high risk of entering the criminal justice system. To estimate this, we take as a proxy the number of women that have been arrested in West Mercia in 2020 for a non-violent offence. In 2020, there were 640,000 arrests in England and Wales and 21% were of women. Given that West Mercia crime and social need data are broadly reflective of the England and Wales average, we can use population statistics to estimate the number of West Mercia arrests. Although arrest is not a perfect measure of the risk of entering the CJS – as these women are already in the CJS – it is a conservative proxy. Based on these data, we estimate that about 2,400 women in West Mercia fall into this category every year (see Table 4).

*Table 1: Variables and incidence used in the model*

Variable	Incidence
Total number of arrests E&W	640,000

<sup>54</sup> <https://www.nao.org.uk/wp-content/uploads/2022/01/Improving-outcomes-for-women-in-the-criminal-justice-system.pdf>

<sup>55</sup> <https://www.nao.org.uk/wp-content/uploads/2022/01/Improving-outcomes-for-women-in-the-criminal-justice-system.pdf>

Female arrests E&W	134400
% of crimes non-violent	54%
% of E&W population in West Mercia	3.30%

Based on the MoJ estimate of women offenders costing the state £1.17 billion, we can estimate that the costs for West Mercia are about 3.3% of this (in line with population estimates) resulting in a cost of £38 million. This would suggest that the 2,400 women in the CJS cost the state, on average, around £16,000 each per year. Given that the average cost of a female prison place was £52,000 in 2020, this is a plausible assumption.

If a Women's Centre could divert just 10% of these women away from the CJS, this would result in 240 women being diverted annually resulting in a saving of £3.84 million. This compares favourably with the cost of delivering a large Women's Centre, estimated to be £432,031 with a return on investment of 9/1.<sup>56</sup>

The NEF reports finds that Women's Centres are good at improving outcomes like mental health and that children avoid the negative consequences of maternal imprisonment. However, robust direct links between these services and offending remain elusive. If such a service is set up by YSS, we would recommend including a budget line for a robust evaluation that includes an economic analysis and can track women against an appropriate benchmark.

### Children in need

Children are a clear beneficiary of services that improve outcomes for women. To avoid duplication with other work commissioned by YSS, we will not focus on outcomes for children of prisoners. Instead, we will look at the potential savings from upstream interventions with children in need.

In 2020, there were 16,431 children identified as 'in need' in West Mercia and Warwickshire. Table 5 breaks these down by primary cause of referral. As we can see, the largest single category is abuse and neglect (6962).

*Table 2: Incidence of primary need*

Category	Incidence
Abuse or neglect	6962
Child disability or illness	2272
parent disability or illness	481
Family in acute stress	1291

<sup>56</sup>

Family dysfunction	2833
Socially unacceptable behaviour	467
Low income	76
Absent parents	527
Cases other than CIN	75
Not stated	1447

Conti et al. (2017) have estimated the discounted average lifetime incidence cost of non-fatal child maltreatment by a primary caregiver at £89,390 (95% uncertainty interval, £44,896 to £145,508). The largest contributors to this are costs from social care, short-term health, and long-term labour market outcomes. This figure includes £4,316 in future criminal justice costs per victim.

We can use this data to estimate the potential savings for West Mercia. Although maltreatment will be a risk for all children referred to services, it is definitively so in the case of abuse and neglect. As such, we will restrict our economic analysis to this cohort in order to produce a conservative estimate.

Based on the median cost per case of £89,390, this would suggest that the total economic cost for West Mercia is in the region of £622 million with a minimum cost of £307 million. The criminal justice element of these costs is £30 million. If the Women's Centre model were able to prevent just 10% of these abuse and neglect cases, this would save the State lifetime costs of £30.7 million (using the lower end of the cost estimate) and £3 million in criminal justice savings alone.

### Domestic violence and mental health

As well as the highly targeted interventions Women's Centres deliver, including as part of community orders, there is a cohort of women with lower needs that can benefit from such a service.

A notable example is the many women that experience domestic violence every year. Research indicates that women are often reluctant to disclose abuse because they fear that they will not get support, yet disclosure is key to accessing help.<sup>57</sup> Evidence from women's centres shows that women are more likely to disclose domestic violence when they feel comfortable and empowered to do so.<sup>58</sup>

<sup>57</sup> Levendosky, A. A., Bogat, G. A., Theran, S. A., Trotter, J. S., Eye, A. V., & Davidson, W. S. (2004). The social networks of women experiencing domestic violence. *American Journal of Community Psychology*, 34(1-2), 95-109.

<sup>58</sup> Reference Coventry research

The final potential saving, therefore, that we estimate is to women who disclose domestic violence and who are subsequently able to access an effective intervention.

Mental health is a key entry point for working with women experiencing domestic violence and the strengths-based approach practiced by Women's Centres that focuses on skill-building, self-esteem and empowerment, as well as the provision of practical services is well-placed to address both of these challenges. There is evidence that women present to Women's Centres with mental health problems, including severe and enduring conditions and self-harm.<sup>59</sup> NEF consulting research over a three-month period in Women's Centres, found that 44% of women demonstrated a measurable increase in well-being, with the greatest increase in autonomy.

The costs to the State of domestic violence are estimated to be £5.5 billion. Women make up 66% of victims in the UK (1.3 million). Based on these data, we can estimate that there are 42,900 women experiencing domestic violence in West Mercia at a cost of £2,770 per victim per year, or £119 million for the region. Again, if we assume that a Women's Centre intervention could reduce these cases by 10%, this would lead to a saving of £11.9 million in West Mercia annually.

It is estimated that between 10 and 20% of children are exposed to domestic violence each year. If we take a midway point of 15%, this would translate into 56,000 children in a West Mercia context. Many of these children will over time become known to social services and enter the criminal justice system as victims and perpetrator, perpetuating the cycle of violence and leading to State costs.<sup>60</sup>

### Summary of potential savings

The Women's Centre model of service has the potential to improve outcomes for women, children and society in the West Mercia region. The economic modelling has shown the following potential savings:

- Diverting 10% of women (240 women) from the criminal justice system, would result in a saving of £3.84 million.
- Preventing 10% of child abuse and neglect cases in West Mercia, would save the State lifetime costs of £30.7 million
- Reducing cases of Domestic Violence by 10% would lead to a saving of £11.9 million in West Mercia annually

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<sup>59</sup> Hatchett, V., Pybis, J., Tebbet-Duffin, U., & Rowland, N. (2015). Provision of mental health interventions in women's centres: An exploratory study. *Counselling and Psychotherapy Research, 15*(2), 88-97.

<sup>60</sup> Farrington, D. P., & Welsh, B. C. (2008). Saving children from a life of crime: Early risk factors and effective interventions.

## 7. Conclusion and recommendation

This research has combined a review of literature on ACE, criminal justice and early interventions with an analysis of needs data in West Mercia to better understand the potential for preventative interventions to reduce women and children entering the criminal justice system.

When set in the context of YSS' expertise and research, the Women's Centre approach, delivered either as a standalone intervention or in partnership, is a promising route to impact. Women's Centres have been shown to be highly effective in addressing the key needs identified in the West Mercia data, namely around abuse and neglect, domestic violence, and mental health.

There is also a strong economic case for such an investment. A conservative and high-level economic analysis finds benefits to the state of around £45 million. This does not take account of social and economic benefits to individuals.

Should such a service be established, we recommend implementing a robust evaluation framework to track offending and other outcomes in order to contribute to the emerging evidence base for these types of services.