

# THE COST OF LATE INTERVENTION: EIF ANALYSIS 2016

TECHNICAL REPORT

## **TABLE OF CONTENTS**

Intro	duction	3
Meth	nodology	8
1.	Number of persistent absentees	8
2.	Permanent school exclusions	9
3.	Annual spending on Looked After Children	10
4.	Number of Child Protection Plans	10
5.	Number of Children in Need	11
6.	Children admitted to hospital due to injuries	11
7.	Children admitted to hospital due to mental health	12
8.	Children admitted to hospital due to self-harm	12
9.	Young people admitted to hospital due to substance misuse	13
10.	Children using specialist substance misuse treatment services	14
11.	Children admitted to hospital due to alcohol	15
12.	16–17 year olds who are NEET	15
13.	18–24 year olds who are NEET	16
14.	Reported anti-social behaviour incidents	16
15.	Young people in the Youth Justice System (YJS)	17
16.	Reported cases of domestic violence and abuse	18
Sumi	mary of cost parameters	20
Resu	Its and discussion	21
Refe	rences	24

#### **ACKNOWLEDGMENTS**

This report and the technical analysis underpinning it have both benefited from a range of helpful comments and contributions. Nevertheless, the analysis and findings presented in this report are the views of the authors only.

# Introduction

This technical report accompanies the EIF report: *The cost of late intervention: EIF analysis 2016.*<sup>1</sup> That report provides updated estimates of how much is spent by the state in England and Wales each year in the short-run on 'late intervention': a range of acute or statutory services that are required when children and young people experience significant difficulties in life, as well as other support they may draw upon such as welfare benefits.

This report provides sets out in detail the data sources and methods that been used in arriving at that estimate.

Our estimate of spend on late intervention spend is produced by assessing how much is spent each year in England and Wales on dealing with the following issues:

- School absence and exclusion
- Children's social care
- Child injuries and mental health problems
- Youth substance misuse
- Youth economic inactivity
- Crime and anti-social behaviour

We focus in particular on children and young people – generally aged under 18, although some of the source data used in this report is based on statistics for other age groups such as those aged under 24.2 In each case, the statistics and costs relate to the entire relevant population (e.g. all under-18s in England and Wales). More detail is presented in Table 1 below, which contains the full range of cost items included in this analysis.

The methods and findings contained in this report are not definitive. They are instead an evolving attempt to define and quantify short-run and immediate spending on late intervention based on existing datasets, studies and pieces of analysis across a range of policy areas. While our analysis has become a significant and trusted contribution in this area; our methods have been refined and improved in this year's report, and may be refined further in future reports.

<sup>&</sup>lt;sup>1</sup> Available at: <a href="http://www.eif.org.uk/publication/the-cost-of-late-intervention-eif-analysis-2016">http://www.eif.org.uk/publication/the-cost-of-late-intervention-eif-analysis-2016</a>

<sup>&</sup>lt;sup>2</sup> For domestic violence and abuse, however, the data we use relate to all instances between adults.

**TABLE 1. COST ITEMS CALCULATED IN THE ANALYSIS** 

Issue	Cost items
School absence and exclusion	<ul><li>Number of persistent absentees</li><li>Permanent school exclusions</li></ul>
Children's social care	<ul> <li>Annual spending on Looked After Children</li> <li>Number of Child Protection Plans</li> <li>Number of Children in Need<sup>3</sup></li> </ul>
Child injuries and mental health problems	<ul> <li>Children admitted to hospital due to injuries</li> <li>Children admitted to hospital due to mental health</li> <li>Children admitted to hospital due to self-harm</li> </ul>
Youth substance misuse	<ul> <li>Young people admitted to hospital due to substance misuse</li> <li>Children using specialist substance misuse treatment services</li> <li>Children admitted to hospital due to alcohol</li> </ul>
Youth economic inactivity	<ul> <li>16-17 year olds who are NEET<sup>4</sup></li> <li>18-24 year olds who are NEET</li> </ul>
Crime and anti- social behaviour	<ul> <li>Reported anti-social behaviour incidents</li> <li>Young people in the Youth Justice System (YJS)</li> <li>Reported cases of domestic violence and abuse</li> </ul>

It is important to note certain limitations of this analysis.

- Judgements have been made about which items to include in the analysis.
   Table 1 is not a list every activity that counts as late intervention, and the items in the table add up to the true amount of total spending on late intervention. Instead, Table 1 sets out the key adverse outcomes or types of late intervention for which national and local data on caseloads are available, along with information on total spend or unit costs.
- The items in Table 1 provide information about services not children. Hence the data we have used will reflect local and national decisions about the availability, referral and resourcing of acute services, as well as the broader fiscal climate. Because these data can reflect other factors, they alone cannot be used to make statements about the underlying need for late intervention or the underlying well-being of the children and families.

A unit cost approach is used where the cost item refers to a number of individuals or events per year. In these cases, the caseload is multiplied by an estimated fiscal unit cost (per individual or event) to produce a total annual fiscal cost for that item. The advantage of this approach is that it is linked directly to data on outcomes for children and young people, and to the services they require. However, estimates of unit costs for public services are only available nationally, even though the true cost

<sup>&</sup>lt;sup>3</sup> Excluding cases where the need is classified as child or parental disability.

<sup>&</sup>lt;sup>4</sup> Not in education, employment or training.

of providing a service may vary significantly from one local area to another. Moreover, unit costs may only capture marginal costs of service use, at the risk of excluding overheads or other fixed costs. This would lead to further underestimation of Late Intervention spend. Where it would lead to more robust results, we have also used published data on actual local authority spend on particular acute services — namely, local spend on Looked After Children and local spend on Pupil Referral Units. Table 2 sets this out more clearly.

In the sections that follow Table 2, the methodology for calculating costs for each cost item and apportioning those costs to local areas (where the original data is not available at a local level), is set out in full detail. Table 9, near the end of this report, summarises all of the key figures and estimates that constitute our analysis.

#### **TABLE 2. OUTLINE OF COSTING APPROACH**

Cost item	Source of cost information	Source of outcome information
Number of persistent absentees	NEM, <i>Unit Cost Database (UCD)</i> Brookes et al. (2007)	DfE, Pupil absence in schools in England: 2014 to 2015; Welsh Government, Absenteeism from Schools by Pupil Characteristics; StatsWales, Pupils by local authority, region and age group
2. Permanent school exclusions	NEM, Unit Cost Database (UCD)	DfE, Permanent and fixed-period exclusions in England 2013 to 2014 StatsWales, Permanent and fixed-term exclusions from schools
3. Annual spending on Looked After Children	NEM, Unit Cost Database (UCD)	DfE, LA and school expenditure: 2014 to 2015 financial year StatsWales, Children looked after at 31 March by local authority, gender and age
4. Number of Child Protection Plans	Saied-Tessier (2014)	DfE, Characteristics of children in need: 2014 to 2015 StatsWales, Children on child protection register by local authority and period of time
5. Number of Children in Need	NEM, Unit Cost Database (UCD)	DfE, Characteristics of children in need: 2014 to 2015 StatsWales, Children in need by local authority and category of need
6. Children admitted to hospital due to injuries	National Institute for Health and Clinical Excellence (2010a)	ChiMat, Hospital admissions caused by injury in children NHS Wales Informatics Service, PEDW Statistics - 2014/15
7. Children admitted to hospital due to mental health	Tulloch et al. (2008)	ChiMat, Hospital admissions for mental health disorders Welsh Government, Admission of patients to mental health facilities
8. Children admitted to hospital due to self-harm	National Institute for Health and Clinical Excellence (2011)	ChiMat, Hospital admissions following self-harm (single years) NHS Wales Informatics Service, PEDW Statistics - 2014/15
<ol><li>Young people admitted to hospital due to substance misuse</li></ol>	DH, NHS reference costs 2014 to 2015	ChiMat, Hospital admissions due to substance misuse Public Health Wales (2015)
<ol> <li>Children using specialist substance misuse treatment services</li> </ol>	DH, NHS reference costs 2014 to 2015 Public Health England (2015)	ChiMat, Young people in specialist substance misuse services Public Health Wales (2015)
11. Children admitted to hospital due to alcohol	National Institute for Health and Clinical Excellence (2010b)	ChiMat, Hospital admissions for alcohol conditions Public Health Wales (2015)
12. 16-17 year olds who are NEET	ACEVO (2012)	DfE, NEET data by local authority Welsh Government, Young people not in education, employment or training (NEET)
<b>13.</b> 18-24 year olds who are NEET	ACEVO (2012)	DfE, NEET statistics quarterly brief: October to December 2015 Welsh Government, Young people not in education, employment or training (NEET)
14. Reported anti-social behaviour incidents	NEM, Unit Cost Database (UCD)	ONS, Anti-social behaviour incidents, by police force area, English regions and Wales,
<b>15.</b> Young people in the Youth Justice System (YJS)	National Audit Office (2011)	YJB, Youth Justice Statistics 2014/15
<b>16.</b> Reported cases of domestic violence and abuse	Walby (2004, 2009)	ONS, Focus on Violent Crime and Sexual Offences: year ending March 2015

Notes: ONS = Office for National Statistics, NEM = New Economy Manchester, YJB = Youth Justice Board, DfE = Department for Education, DH = Department of Health. NEM Unit Cost Database available at <a href="http://neweconomymanchester.com/stories/832-unit\_cost\_database">http://neweconomymanchester.com/stories/832-unit\_cost\_database</a>.

# Methodology

#### 1. Number of persistent absentees

The number of persistent absentees by English local authority was obtained from official DfE statistics<sup>5</sup>. For Welsh local authorities, the absenteeism rate (as a percentage of all pupils) was obtained from the relevant statistical release<sup>6</sup> while the total number of pupils was obtained from StatsWales<sup>7</sup>. Combining these two sources yielded an estimated number of persistently absent pupils for each Welsh local authority.

The unit cost of a persistently absent pupil was based partly but not entirely on the NEM Unit Cost Database (UCD) supplemented by estimates from Brookes et al. (2007). Table 3 shows the unit cost estimates used in the analysis.

	Cost	Source
Justice	£265	NEM Unit Cost Database
Police	£265	NEM Unit Cost Database
NHS	£65	NEM Unit Cost Database
Local government	£410	NEM Unit Cost Database
Education	£882	Brookes et al. (2007)
Total	£1,886	

The £530 cost of crime associated with absenteeism (taken from the UCD) was a joint cost for police and criminal justice services together; for the purposes of this analysis, it was therefore assumed to be split equally between the Justice and Police budgets. The UCD estimate of local government cost includes the cost of social services and that of providing alternative provision. Local authorities are generally not required to provide alternative provision in cases of absenteeism. Instead, an estimate of the unit cost an Educational Welfare Service (responsible for improving attendance) was taken from Brookes et al. (2007). This cost was classified as a cost to the Department for Education, given that the funding for Educational Welfare Services most likely comes from the Education Services Grant.<sup>8</sup>

Many of these cost elements overlap with other costs elsewhere in the analysis. The crime cost is likely to overlap with the cost of ASB incidents and of young people in the criminal justice system, both of which were counted previously. Meanwhile, the NHS cost reflects the estimated prevalence of substance misuse and mental health problems among pupils who are persistently absent, both of which are likely to be

<sup>&</sup>lt;sup>5</sup> DfE, Pupil absence in schools in England: 2014 to 2015, Table 11.1

<sup>&</sup>lt;sup>6</sup> Welsh Government, *Absenteeism from schools by pupil characteristics 2014/15*, Table 2

<sup>&</sup>lt;sup>7</sup> StatsWales, Pupils by local authority, region and age group

<sup>&</sup>lt;sup>8</sup> DfE, Education services grant 2015 to 2016, Annex A

picked up in the costs of the relevant hospital admissions. The social services cost is based upon the costs of foster and residential care, which is counted under Looked After Children. Therefore, to avoid double counting, only the education cost of persistent absenteeism is retained when the costs of multiple issues are aggregated together.

#### 2. Permanent school exclusions

The number of permanently excluded pupils in English local authorities was obtained from DfE,<sup>9</sup> while for Welsh local authorities it was obtained from Statistics and Research<sup>10</sup>.

The fiscal cost of permanently excluded pupils came from two sources: estimated subsequent unit costs in police, justice, health, education and local government budgets; and actual local authority spend on Pupil Referral Units (PRUs) for England only. Table 4 presents the unit cost estimates that were used.

TABLE 4. ASSUMED UNIT COST OF A PERMANENTLY EXCLUDED PUPIL (2016-17 PRICES)

	Cost	Source
Justice	£606	NEM Unit Cost Database
Police	£606	NEM Unit Cost Database
NHS	£80	NEM Unit Cost Database
Local government	£1,253	NEM Unit Cost Database
Education	£8,969	NEM Unit Cost Database
Total	£11,514	

Notes: Assumed cost of crime associated with permanent exclusion -£1,212 – has been split equally between police and justice budgets in this analysis. Local government cost relates only to the associated implications for social services, not the cost of alternative provision.

Figures on PRU spend were obtained from DfE<sup>11</sup> for English local authorities. For Welsh authorities, figures were obtained by multiplying the UCD figure for the unit cost of alternative education provision by the number of permanently excluded pupils. For the purposes of this analysis, PRU spend was scored as a cost to the Department for Education rather than local authorities, given source funding from DfE and spot-purchasing of places by schools.

All of the costs presented in Table 4 are likely to overlap with other costs calculated elsewhere in the analysis: the police and justice costs may be covered by the analysis of ASB and young offenders, the NHS cost relates to substance misuse and mental health problems, and the local government cost relates to use of social services (if pupils are taken into care). As a result, when the cost of permanently excluded

<sup>&</sup>lt;sup>9</sup> DfE, Permanent and fixed-period exclusions in England: 2013 to 2014, Table 19.

<sup>&</sup>lt;sup>10</sup> Welsh Government Statistics and Research, Permanent and fixed-term exclusions from schools, Table 2a.

 $<sup>^{\</sup>rm 11}$  DfE, LA and school expenditure: 2014 to 2015 financial year, Table 10.

pupils is combined with other costs, only the education spend on PRUs is retained in order to avoid double-counting.

#### 3. Annual spending on Looked After Children

While a national unit cost estimate per Looked After Child is available from the UCD, it is derived from actual local authority spend on Looked After Children. The latter has the benefit of providing a more accurate, locally variable, figures. We therefore use actual local authority spend.

Using DfE Section 251 returns, we took the 'Looked After Children' spending line as a starting point. To this we added half of the net cost from the 'Safeguarding Children and Young People's services' spending line as well. We based this assumption on previous advice from the UCD that around a third of total children's social care caseload is Looked After Children, but that Looked After Children tend to account for a higher proportion of expenditure. It should be noted that the UCD has excluded this cost from the current version of the dataset while it attempts to obtain a better estimate; however, we felt it was important to reflect some of the wider social work costs related to Looked After Children. Furthermore, only one quarter of the Looked After Children cost estimate relates to this assumption.

The information above was only available for English local authorities.<sup>12</sup> The total spend in England was £4.83 billion in 2014–15 (£4.91 billion in 2016–17 prices).

For Welsh local authorities, actual local authority spend on Looked After Children was not available. Instead, figures on the total number of Looked After Children by local authority were obtained from StatsWales. For the unit cost, we followed the costing methodology used in the UCD, deriving the unit cost from the total cost as per the Section 251 returns and the number of units as per the Section 903 returns. We deviated from the UCD figure by including half the net cost of safeguarding children and young people's services to bring this unit cost in line with the England spend. This led to a unit cost estimate of £70,645 in 2016-17 prices. The full amount of this cost is assigned to the local government budget.

#### 4. Number of Child Protection Plans

For English local authorities, the number of children who were the subject of a Child Protection Plan was obtained from DfE; $^{14}$  for Welsh local authorities the figures were obtained from StatsWales. $^{15}$ 

<sup>&</sup>lt;sup>12</sup> DfE, LA and school expenditure: 2014 to 2015 financial year, Table 6.

 $<sup>^{\</sup>rm 13}$  StatsWales, Children looked after at 31 March by local authority, gender and age.

 $<sup>^{14}</sup>$  DfE, Characteristics of children in need: 2014 to 2015, Table D.1.

<sup>&</sup>lt;sup>15</sup> StatsWales, Children on child protection register by local authority and period of time.

The UCD does not contain an estimate for the unit cost of a Child Protection Plan, so an estimate was instead taken from Saied-Tessier (2014) of £5,298 in 2012–13 prices (uprated to £5,583 in 2016-17 prices). In terms of budget implications, the full amount of this unit cost is assigned to local government. The same unit cost was applied to England and Wales.

Note that the figure provided by Saied-Tessier (2014) includes the cost of referral and assessment, and assumes a six-month duration for the Child Protection Plan. While most Child Protection Plans last less than six months, the average (mean) duration is more than six months.<sup>16</sup>

#### 5. Number of Children in Need

For English local authorities, the number of Children in Need (CiN) was obtained from DfE;<sup>17</sup> for Welsh local authorities the figures were obtained from the Welsh Government.<sup>18</sup> In both datasets, cases were the primary need was child or parent disability were excluded from the total CiN figures in order to focus on other aspects such as abuse and neglect, behaviour issues, parenting family functioning.

The unit cost per CiN was taken from the NEM Unit Cost Database, which provides an estimate of £1,627 (in 2016–17 prices) assuming a six-month case management period. In terms of budget implications, the full amount of this unit cost is assigned to local government. The same unit cost was applied to England and Wales.

#### 6. Children admitted to hospital due to injuries

In England, the total number of hospital admissions for injuries (both accidental and deliberate) among 0-14 year olds was obtained from the ChiMat data atlas, produced by Public Health England.<sup>19</sup> The figures are available at the local authority level. In Wales, the derived data series is not published but similar data was obtained from the raw hospital episode statistics dataset available from the NHS Wales Informatics Service.<sup>20</sup> Injuries themselves are not recorded in this data; we calculated a total based on the primary diagnosis codes most consistent with the incidence of injury,<sup>21</sup> among admissions of 0-14 year olds. The figure was not available by Welsh local authority.

The figures above do not include Accident & Emergency (A&E) visits. Estimates of the number of A&E visits for child injury in England and Wales were calculated by using a fixed percentage -1732% – of hospital admission figures. This was based on the estimated number of A&E visits and hospital admissions for child injury

<sup>&</sup>lt;sup>16</sup> DfE, Characteristics of children in need: 2014 to 2015, Table D.5.

<sup>&</sup>lt;sup>17</sup> DfE, Characteristics of children in need: 2014 to 2015, Table B.3.

<sup>&</sup>lt;sup>18</sup> StatsWales, Children in need by local authority and category of need

<sup>&</sup>lt;sup>19</sup> ChiMat, Hospital admissions caused by injury in children.

<sup>&</sup>lt;sup>20</sup> NHS Wales Informatics Service, PEDW Statistics - 2014/15

<sup>&</sup>lt;sup>21</sup> Diagnosis codes S00–T79 were used, in order to be as comparable as possible with the figures obtained from ChiMat.

contained in the NICE costing report on preventing unintentional injuries among under-15s (National Institute for Health and Clinical Excellence, 2010a).

The NICE costing report estimates the unit cost of emergency department visits and hospital admissions for injuries to under-15 to be £73 and £1,210 per child, respectively. We assumed this to be in 2010–11 prices, and so uprated the costs to £80 and £1,319 respectively in 2016–17 prices. The same unit cost was applied to the English and Welsh imputed A&E figures and hospital admission figures, and the resulting cost was treated as falling entirely within the health budget.

#### 7. Children admitted to hospital due to mental health

In England, figures by local authority on hospital admissions of under-18s for mental health problems were obtained from ChiMat.<sup>22</sup> Estimating a similar figure for Wales is more complex. Figures from the Psychiatric Census show that in 2015, 16 of the 1,441 mental health resident patients in Wales were under 18 on census day.<sup>23</sup> This proportion was used to estimate the number of under-18 mental health patients in Wales during the year as 108, based on 9,762 total admissions to mental health facilities during the year.

The unit cost applied to these admissions was obtained from the study by Tulloch et al. (2008) into inpatient child and adolescent mental health service care. Their estimate of an average admission cost of £33,817 in 2005-06 was uprated to £42,236 to convert it into 2016–17 prices. The same unit cost was applied to England and Wales, and the cost was treated as falling entirely within the health budget.

#### 8. Children admitted to hospital due to self-harm

In England, figures by local authority on children's hospital admissions for mental health problems were obtained from ChiMat.<sup>24</sup> For Wales, information on hospital admissions for self-harm was derived from the Patient Episode Database for Wales provided by the NHS Wales Informatics Service, using primary diagnosis codes most consistent with the incidence of self-harm among 0-14 year olds<sup>25</sup>.

The unit cost for a hospital admission due to self-harm was obtained from the costing report supporting clinical guidance (National Institute for Health and Clinical Excellence, 2011). This estimated the cost of a psychosocial assessment plus seven follow-up therapy sessions at £1,996 for a child, which was uprated to £2,241 in 2016–17 prices. The same unit cost was applied to England and Wales, and the cost was treated as falling entirely within the health budget.

<sup>&</sup>lt;sup>22</sup> ChiMat, Hospital admissions for mental health disorders

 $<sup>^{23}</sup>$  StatsWales, Patients in mental health hospitals and units in Wales with a mental illness

<sup>&</sup>lt;sup>24</sup> ChiMat, Hospital admissions for mental health disorders

<sup>&</sup>lt;sup>25</sup> These were diagnosis codes X60-X84, as used in the ChiMat data

#### Young people admitted to hospital due to substance misuse

In England, figures by local authority on hospital admissions due to substance misuse among 15-24 year olds were obtained from ChiMat. <sup>26</sup> For Wales, the same series of statistics is not published but the annual profile for substance misuse published by Public Health Wales (2015) allows the admissions of 15-24 year olds to be estimated. 789 individuals aged under 25 were admitted to hospital relating to poisoning by an illicit drug during 2014–15, accounting for 882 hospital admissions. Numbers are provided according to gender and age for all but one subgroup. From this, it was possible to estimate that 727 15-24 year olds were admitted in Wales. This was then multiplied by 1.12 (number of hospital admissions/number of individuals admitted) to estimate the total number of admissions in Wales for 15-24 year olds at 813.

To arrive at a unit cost for these admissions, the latest available NHS reference costs for hospital procedures were used.<sup>27</sup> The choice of cost codes and descriptions data was informed by Frontier Economics (2011, Table 24), but the exact codes and descriptors used were updated to reflect changes in the collection of reference costs<sup>28</sup>. The data used non-elective impatient (short stay) costs, based on the work of Frontier Economics. The resulting NHS reference costs used in this analysis are shown below in Table 5.

TABLE 5. ASSUMED COSTS FOR HOSPITAL ADMISSION DUE TO DRUGS (2014–15)

	Number	Unit cost	Total cost
Poisoning Diagnosis with Multiple	31	£1,564	£48,470
Interventions			
Poisoning Diagnosis with Single	44	£641	£28,224
Intervention, with CC Score 2+			
Poisoning Diagnosis with Single	170	£686	£116,681
Intervention, with CC Score 0-1			
Poisoning Diagnosis without	8,077	£406	£3,276,379
Interventions, with CC Score 2+			
Poisoning Diagnosis without	85,595	£383	£32,805,981
Interventions, with CC Score 0-1			
Paediatric Behavioural Disorders with CC	2,733	£605	£1,654,634
Score 1+			
Paediatric Behavioural Disorders with CC	3,148	£545	£1,715,739
Score 0			

Source: Department of Health, NHS reference costs 2014 to 2015

<sup>&</sup>lt;sup>26</sup> ChiMat, Hospital admissions due to substance misuse.

<sup>&</sup>lt;sup>27</sup> Department of Health, NHS reference costs 2014 to 2015.

<sup>&</sup>lt;sup>28</sup> Codes WH04A-WH04E and PT52A-PT52B were used, based on changes described in HSCIC, HRG4+ 2014/15 Reference Costs Grouper Summary of Changes, and HSCIC, HRG4+ 2013/14 Reference Costs Grouper Summary of Changes

The weighted average of these reference costs is £397, which was uprated to £404 in 2016–17 prices. The same unit cost was applied to England and Wales, and the cost was treated as falling entirely within the health budget.

#### Children using specialist substance misuse treatment services

In England, figures by local authority on the number of under-18 year olds attending specialist treatment for drugs or alcohol were obtained from ChiMat.<sup>29</sup> A corresponding figure for Wales was taken from the latest analysis of the Welsh National Database for Substance Misuse,<sup>30</sup> which indicates that 3,466 under-24 year olds were referred to treatment providers in 2014–15.

As with hospital admissions for substance misuse, the use of treatment services was costed using NHS reference costs. Table 6 presents the reference costs used here.

TABLE 6. ASSUMED COSTS FOR SUBSTANCE MISUSE TREATMENT (2014–15)

	Number	Unit cost	Total cost
Alcohol Services, Adult, Admitted Patient	49,112	£351	£17,219,438
Alcohol Services, Adult, Community Contacts	490,518	£104	£50,829,090
Alcohol Services, Adult, Outpatient Attendances	121,832	£81	£9,818,214
Alcohol Services, Children and Adolescents, Community Contacts	1,349	£328	£442,572
Alcohol Services, Children and Adolescents, Outpatient Attendances	403	£214	£86,178
Drug Services, Adult, Admitted Patient	17,130	£452	£7,738,250
Drug Services, Adult, Community Contacts	984,993	£99	£97,791,947
Drug Services, Adult, Outpatient Attendances	178,878	£129	£23,154,780
Drug Services, Children and Adolescents, Community Contacts	3,794	£221	£839,515
Drug Services, Children and Adolescents, Outpatient Attendances	7	£122	£855

Source: Department of Health, NHS reference costs 2014 to 2015

The weighted average of all the costs in Table 6 is £108.59, or £109 in 2016–17 prices. This is assumed to be a daily cost and was therefore multiplied by an estimate of the average length of substance misuse treatment; a figure of 154 days was used, based on Public Health England (2015). The resulting cost per user of specialist substance misuse treatment was therefore estimated at £17,007. The same unit cost

<sup>&</sup>lt;sup>29</sup> ChiMat, Young people in specialist substance misuse services.

<sup>&</sup>lt;sup>30</sup> Welsh Government, Reading Between the Lines: The annual profile for substance misuse 2014-15

was applied to England and Wales, and the cost was treated as falling entirely within the health budget.

#### 11. Children admitted to hospital due to alcohol

In England, figures by local authority on the number of under-18 year olds admitted to hospital due to alcohol were obtained from ChiMat.<sup>31</sup> For Wales, the same series of statistics is not published; however Public Health Wales (2013) indicates that there were 306 hospital admissions for under-25s in Wales in 2014–15, where alcohol-specific conditions were the primary diagnosis.

A figure for the unit cost for these admission was taken from the NICE public health guidance (National Institute for Health and Clinical Excellence, 2010b, Table 5). This provides an indicative unit cost in 2008–09 of £1,540 for admissions wholly attributable to alcohol, which was then uprated to £1,770 in 2016–17 prices. The same unit cost was applied to England and Wales, and the cost was treated as falling entirely within the health budget.

#### 12. 16–17 year olds who are NEET

NEET figures in England and Wales were analysed separately for 16–17 year olds and 18–24 year olds, due to the very different benefit entitlements – and resulting fiscal costs – for the two groups.

In England, figures by local authority on the number of 16- and 17-year olds not in education, employment or training were obtained from the Department for Education.<sup>32</sup> For Wales, figures were taken from the latest available official statistics which indicated a yearly average of 4,900 NEETs aged 16–17 based on the past three years.<sup>33</sup> This was not disaggregated by Welsh local authority.

The unit cost of these individuals is taken from The ACEVO Commission on Youth Unemployment (2012), following the method using in UCD. The commission provides a figure of £583 (in 2016–17 prices) as the average amount of benefits paid to NEETs by DCLG per year. The negative fiscal cost (i.e. benefit) to HMRC due to the payment of working tax credits to NEETs who move into work was not counted.<sup>34</sup> The same unit cost was applied to England and Wales, and total resulting cost was treated as falling entirely within the Department for Work and Pensions welfare budget.

 $<sup>^{\</sup>rm 31}$  ChiMat, Hospital admissions for alcohol conditions.

<sup>32</sup> DfE, NEET data by local authority

<sup>&</sup>lt;sup>33</sup> Welsh Government, Young people not in education, employment or training (NEET), Table 3

<sup>&</sup>lt;sup>34</sup> However, offsetting this is the fact that the estimate does not include the cost to HMRC or foregone income tax.

#### 13. 18-24 year olds who are NEET

To calculate the total number of 18–24 year old NEETs in England, the latest available quarterly statistics by age, published by DfE and averaged over a year, were used. <sup>35</sup> This figure, 696,889, was not disaggregated by local authority. In order to assign 18–24 year old NEETs (and the resulting fiscal cost) to English local authorities, their share of the national 16–18 year old NEET population was used. In other words, if a local authority contained 1% of the total number of 16–18 year old NEETs in England, they were assumed to also have 1% of the total number of 18–24 year old NEETs. For Wales, the national total of 18–24 year old NEETs was obtained from the latest available official figures, as above. <sup>36</sup> It was not disaggregated by Welsh local authority.

As above, the unit cost for 18–24 year old NEETS was taken from The ACEVO Commission on Youth Unemployment. This provides a figure of £3,507 (in 2016–17 prices) as the average amount of benefits paid to them by DCLG per year. The cost to HMRC was not counted, for consistency with 16-17 year olds. The same unit cost was applied to England and Wales, and total resulting cost was treated as falling entirely within the Department for Work and Pensions welfare budget.

#### 14. Reported anti-social behaviour incidents

The estimated unit cost of a reported anti-social behaviour (ASB) incident was obtained from the NEM Unit Cost Database (UCD). This contained an estimate of £35 for incidents requiring no further action and £500 for incidents requiring further action, both in 2002–03 prices. The average of both figures was used, which is £364 in 2016–17 prices after applying HM Treasury GDP deflators. In line with the UCD, the cost is assumed to be borne entirely by the police.

The total number of reported ASB incidents was obtained from ONS.<sup>37</sup> Unfortunately these figures are only published at the police force area level rather than the local authority level; the former is typically larger than the latter. An estimate of ASB incidents in each local authority in England and Wales was imputed on the basis of population share: the population of the local authority as a proportion of the population of the corresponding police force area. This was based on ONS mid-year estimates of the adult population in each local authority. The share was multiplied by the actual number of reported ASB incidents (by police force area) to create an imputed number of ASB incidents for each local authority. For example, if a particularly local authority contained 25% of the corresponding police force area's population, it was assumed to account for 25% of the police force area's recorded ASB incidents as well.

<sup>&</sup>lt;sup>35</sup> DfE, NEET statistics: quarterly brief – October to December 2015, Underlying data: SFR08/2016.

<sup>&</sup>lt;sup>36</sup> Welsh Government, Young people not in education, employment or training (NEET), Table 3.

<sup>&</sup>lt;sup>37</sup> ONS, Anti-social behaviour incidents, by police force area, English regions and Wales, year ending March 2008 to year ending March 2015, Table P14.

By construction, the imputed number of reported anti-social behaviour incidents in each local authority aggregates back up the actual total number of reported incidents for England and Wales, as published by ONS (1,925,952 in 2014–15). The fiscal cost for each local area (and for England and Wales as a whole) was then calculated as the product of the unit cost and the total number of (imputed) reported ASB incidents for that local area.

#### 15. Young people in the Youth Justice System (YJS)

The unit cost of a young offender in the YJS was taken from a report by National Audit Office (2011, Figure 12). This is £7,860, assumed to be 2008–09 prices and therefore uprated to £9,031 in 2016–17 prices across England and Wales together. The costs of young offenders are split between courts, custody, policing, and Youth Offending Teams (YOTs) according to NAO, with the cost of the first two items assumed to fall entirely within the Ministry of Justice budget. The cost of Youth Offending Teams was calculated by multiplying the unit cost by the number of offenders. It was the apportioned to NHS, Justice, police and local government budgets in each local authority on the basis of the proportion of the UK-wide spend on Youth Offending Teams that came from the Youth Justice Board or Statutory Partners. This was done rather than adding the actual spends for YOTs because the NAO estimates are marginal costs, whilst the YOT costs are average costs. The breakdown is presented in Table 77. 39

TABLE 7. ASSUMED UNIT COST OF A YOUNG OFFENDER (2016–17 PRICES)

	England	Wales
Justice	£7,369	£7,435
Police	£1,161	£1,192
NHS	£38	£50
Local government	£429	£707

Notes: Based on Figure 11 of National Audit Office (2011). Local government cost in Wales includes contributions from the devolved Welsh government.

The youth justice caseload in England and Wales is only known at the level of Youth Offending Teams, which often operate across local authorities. <sup>40</sup> An estimate of young offender numbers in each local authority in England and Wales was imputed on the basis of population share: the population of the local authority as a proportion of the population of the corresponding youth offending team area. This was based on ONS mid-year estimates of the adult population in each local authority. The share was multiplied by the actual number of young offenders (by Youth Offending Team) to create an imputed number of young offenders for each local authority. For example, if a particularly local authority contained 25% of the

<sup>&</sup>lt;sup>38</sup> Ministry of Justice, *Youth Justice Statistics 2014/2015*, Table B.4

 $<sup>^{\</sup>rm 39}$  This split is based on Figure 11 of the same NAO report.

<sup>&</sup>lt;sup>40</sup> Ministry of Justice, *Youth Justice Statistics 2014/2015*, Table 1.4

corresponding YOT's population, it was assumed to account for 25% of the YOT's recorded young offenders as well.

#### 16. Reported cases of domestic violence and abuse

Domestic violence and abuse is a somewhat different issue to the all the other costs in this analysis, as it is defined as an issue that occurs between adults and much of the associated late intervention spend is for services related to the adults involved (e.g. criminal justice, health, housing). However, domestic violence and abuse is included in our analysis because it is a problem to which children and young people are exposed that leads to significant fiscal cost and detriment to wellbeing (Guy et al., 2014). Addressing domestic abuse and violence is an important part of early intervention with families, and it is priority issue for EIF (having been the subject of EIF's first report). Nevertheless, the inclusion in this analysis of domestic violence and abuse cases is a matter of judgement by the authors.

The fiscal costs of domestic violence and abuse, in terms of service use required for perpetrators and victims, are originally taken from Walby (2004, 2009). The costs were then projected forward on the basis of the growth rate in the number of recorded incidents of domestic abuse between 2008–09 and 2014–15 (the latest year for which such data is available) from the Office for National Statistics, which was approximately 26%. <sup>41</sup> The modelling assumption made here is that the cost of service use is proportional to the level of recorded incidents.

The estimates were then uprated from 2008–09 prices to 2016–17 prices using the latest available GDP deflators.<sup>42</sup> Table 88 presents the resulting estimates of fiscal costs arising from domestic violence and abuse, for England and Wales as a whole.

TABLE 8. TOTAL FISCAL COSTS OF DOMESTIC VIOLENCE AND ABUSE (£M)

	2001	2008	2014–15	in 2016–17 prices
Criminal justice	1,017	1,261	1,588	1,824
Of which police	490	608	765	879
Healthcare	1,382	1,714	2,157	2,479
Social services	228	283	356	409
Housing and refuges	130	161	203	233
Civil legal services	159	197	248	285
Total	2,916	3,616	4,552	5,230

Notes: 2001 figures taken from Walby (2004); 2008 figures taken from Walby (2009); 2014/15 figures based on author's calculations.

<sup>&</sup>lt;sup>41</sup> ONS, Focus on Violent Crime and Sexual Offences: year ending March 2015, Appendix Table 4.08

<sup>&</sup>lt;sup>42</sup> See <a href="https://www.gov.uk/government/statistics/gdp-deflators-at-market-prices-and-money-gdp-december-2014-quarterly-national-accounts">https://www.gov.uk/government/statistics/gdp-deflators-at-market-prices-and-money-gdp-december-2014-quarterly-national-accounts</a>.

To assign costs to areas of government (or agencies), the criminal justice (excluding police) and civil legal costs were assigned to the Ministry of Justice budget, while the police cost was assigned to the police budget. All of the healthcare costs were assigned to the NHS budget. Housing and refuge costs were assigned to local government budgets, but social services were excluded from the main analysis as they relate to child protection costs calculated elsewhere.

As with ASB incidents, there is no published information on the local prevalence of domestic violence and abuse and abuse except for the level of reported incidents by police force area, produced by the ONS. As with ASB, an estimate of domestic abuse incidents in each local authority in England and Wales was imputed on the basis of population share: the population of the local authority as a proportion of the population of the corresponding police force area. The share was multiplied by the actual number of reported domestic abuse incidents (by police force area) to create an imputed number of incidents for each local authority.

By construction, the imputed number of reported domestic abuse incidents in each local authority aggregates back up the actual total number of reported incidents for England and Wales, as published by ONS (943,628 in 2014–15). <sup>43</sup> This means that the imputed local authority numbers can be used as weights, by dividing them by the total number of reported incidents for England and Wales. The fiscal costs in Table 8 were allocated to local authorities on the basis of these percentage shares.

For example, if police force area X accounted for 1.5% of the national total reported incidents on domestic abuse, and local authority Y accounts for 33% of the population of that police force area, then that local authority is assigned 0.5% (1.5% x 0.33) of the national total reported incidents. By extension, it is also assigned 0.5% of the fiscal costs in Table 8.

An adjustment to the local government cost was necessary to avoid double-counting when adding the domestic violence and abuse cost to the costs of other issues. The local government cost of social services is likely to be picked up in the costs of the child protection system used elsewhere in this analysis. Therefore, while the cost to local government of domestic violence and abuse includes this component, it is removed when adding the overall costs of Looked After Children, Children in Need and Child Protection Plans to avoid double-counting. The remaining cost to local government of domestic violence and abuse is for housing and refuge services, as per Table 88.

<sup>&</sup>lt;sup>43</sup> In EIF's previous analysis, we focussed on 90% of the estimated prevalence and cost, and assumed to be an estimate of the scale of domestic violence and abuse to which children are directly exposed. We no longer make that assumption and instead focus on all domestic violence and abuse.

# Summary of cost parameters

Table 9 summarises the underlying parameters used to calculate the total figure for each of the 16 cost items when actual spends are not available.

TABLE 9. SUMMARY OF COST PARAMETERS (2016–17 PRICES)

Cost item	Total number in England and Wales	Assumed unit cost	Total spend/cost in England and Wales (£m)
Reported cases of domestic violence and abuse	943,628		5,230
2. Reported anti-social behaviour incidents	1,925,952	£364	701
3. Young people in the Youth Justice System (YJS)	37,946	£9,031	342
4. Number of persistent absentees	256,632	£1,886	484
5. Permanent school exclusions	5,029	£2,545ª	442 <sup>b</sup>
6. Annual spending on Looked After Children	75,150	£70,645°	5,309
7. Number of Child Protection Plans	52,624	£5,583	294
8. Number of Children in Need	355,328 <sup>d</sup>	£1,627	578
9a. Children admitted to hospital due to injuries	114,475	£1,319	158
<b>9b.</b> Children admitted to A&E due to injuries	1,982,660	£80	151
10. Children admitted to hospital due to mental health	10,240	£42,236	433
11. Children admitted to hospital due to self-harm	14,386	£2,241	32
12. Young people admitted to hospital due to substance misuse	19,130	£404	8
13. Children using specialist substance misuse treatment services	24,159	£17,007	411
14. Children admitted to hospital due to alcohol	13,736	£1,770	24
<b>15.</b> 16-17 year olds who are NEET	42,940	£630	27
<b>16.</b> 18-24 year olds who are NEET	752,889	£3,507	2,640

<sup>&</sup>lt;sup>b</sup> Excludes spending on Pupil Referral Unit provision. <sup>b</sup> Includes spending on Pupil Referral Unit provision. <sup>c</sup> Only used for Wales.

<sup>&</sup>lt;sup>d</sup> Excludes cases where primary need is child or parent disability.

# Results and discussion

The following tables and figures containing the resulting estimates of annual short-run spend on late intervention. Figure 1 presents a visual breakdown for England and Wales. Overall, nearly £16.6 billion per year is spent by the state according to this analysis, with the largest single items being the costs of children who are taken into care (Looked After Children), the consequences of domestic violence and abuse and welfare benefits for 18-24 year olds who are not in education, employment or training (NEET).



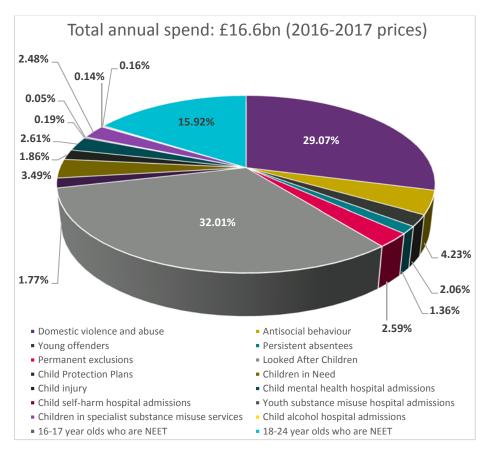


Figure 2 provides a higher level summary by aggregating the cost items under broader headings reflecting a particular social issue. This reveals that late Intervention in the area of children's social care accounts for a third of the total amount, as does spending due to crime and antisocial behaviour.

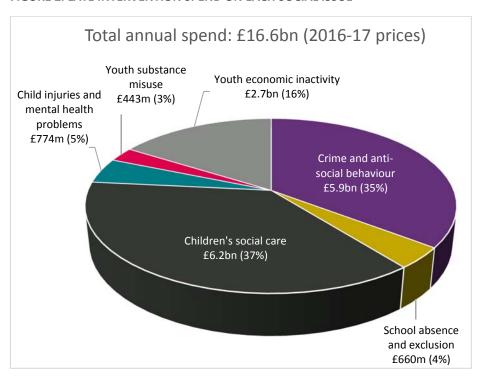


FIGURE 2. LATE INTERVENTION SPEND ON EACH SOCIAL ISSUE

Given how we have apportioned unit cost in this analysis, it is possible to split up the £16.6 billion total into amounts that are borne by specific departmental or agency budgets. This is shown in Figure 3.

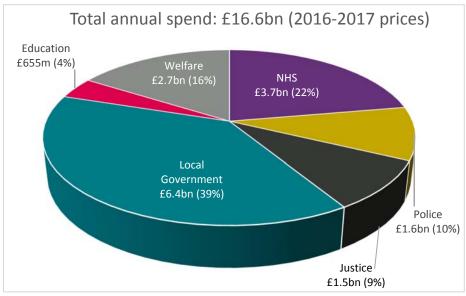


FIGURE 3. LATE INTERVENTION SPEND BY BUDGET AREA

This technical report provides sets out the latest methodology and estimates used by EIF in its 2016 update of the cost of late intervention. As before, it explains how EIF estimates how much is spent by the state in England and Wales each year on short-run late intervention services and benefits to respond to the more severe problems

that children and young people experience. As an annual estimate it only captures the immediate fiscal costs, not longer-term impacts.

The methods and findings contained in this report are not definitive. They are instead an evolving attempt to define and quantify short-run and immediate spending on late intervention based on existing datasets, studies and pieces of analysis across a range of policy areas. While our analysis has become a significant and trusted contribution in this area; our methods have been refined and improved in this year's report, and may be refined further in future reports.

## References

- ACEVO Commission on Youth Unemployment (2012), Youth unemployment: the crisis we cannot afford.
- Brookes, M., Goodall, E., Heady, L. (2007), *Misspent youth The costs of truancy and exclusion*. New Philanthropy Capital.
- Frontier Economics (2011), Specialist drug and alcohol services for young people a cost benefit analysis. Research Report DFE-RR087, Department for Education.
- Guy, J., Feinstein, L., and Griffiths, A. (2014), *Early Intervention in Domestic Violence and Abuse*, Early Intervention Foundation.
- National Audit Office (2011), The cost of a cohort of young offenders to the criminal justice system Technical Paper.
- National Audit Office (2013), Early action: landscape review.
- National Institute for Health and Clinical Excellence (2010a), *PH29 Strategies to prevent unintentional injuries among under-15s: costing report.*
- National Institute for Health and Clinical Excellence (2010b), *Alcohol-use disorders preventing harmful drinking: costing report.*
- National Institute for Health and Clinical Excellence (2011), *National costing report:* Self-harm: longer-term management.
- Public Health England (2015), Young people's statistics from the National Drug Treatment Monitoring System (NDTMS) - 1 April 2014 to 31 March 2015.
- Public Health Wales (2015), Reading Between the Lines: The annual profile for substance misuse 2014-15. Welsh Government.
- Saied-Tessier, A. (2014), Estimating the costs of child sexual abuse in the UK. NSPCC.
- Tulloch, S., Lelliott, P., Bannister, D., Andiappan, M., O'Herlihy, A., Beecham, J., Ayton, A. (2008), The Costs, Outcomes and Satisfaction for Inpatient Child and Adolescent Psychiatric Services (COSI-CAPS) study. Report for the National Coordinating Centre for NHS Service Delivery and Organisation R&D (NCCSDO).
- Walby, S. (2009), The Cost of Domestic Violence: Up-date 2009. Lancaster University.