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Intervention Pathways following a Social Work Assessment: An Analysis of National Administrative Data for Children's Social Care in England

Rick Hood[1,*], Allie Goldacre[1], Ed Jones[2], Emma Martin[2], Keith Clements [3] and Calum Webb [4]

[1]*Faculty of Health, Social Care and Education, Kingston University and St Georges, University of London, Kingston-Upon-Thames, KT2 7LB, UK*
[2]*Social Care Data & Analysis Team, Ofsted, 2 Rivergate, Redcliffe, Temple Quay, Bristol, BS1 6DZ, UK*
[3]*National Children's Bureau, 23 Mentmore Terrace, London, E8 3PN, UK*
[4]*Sheffield Methods Institute, University of Sheffield, 219 Portobello, Sheffield, S1 4DP, UK*

*Correspondence to Rick Hood, Department of Social Work and Social Care, Kingston University, Kingston Hill, Kingston-Upon-Thames, KT2 7LB, UK.
E-mail: Rick.Hood@kingston.ac.uk

Abstract

The majority of children referred to social care services in England go on to receive a statutory assessment by a social worker. Research has identified consistent categories of demand based on the needs identified in assessments. However, little is known about the relationship between children's assessed needs and their subsequent intervention pathways. To explore this relationship, secondary analysis was undertaken of a national administrative data-set including all children who received a social work assessment in England from 2015 to 2020 ($n = 3.6$ m). Children's characteristics, assessed needs and intervention pathways were compared for each episode of CSC involvement. Regression analysis then explored how the proportion of children receiving different types of provision varied according to their needs as well as intersections of gender, age and ethnicity. The findings showed significant differences across twelve categories of demand, pointing to variation in the assessment and response to similar types of presenting needs. Implications are discussed for the planning and design of services.

Keywords: children's social care, demand, interventions, needs, quantitative analysis

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Introduction

Children's social care (CSC) is the overarching term for child welfare services in England, which include children's centres, family support services, child protection (CP) and out-of-home care. The main provider of these services are local authorities (LAs), as well as voluntary and private sector agencies. This article is about statutory CSC, which is mainly coordinated or undertaken by social workers and covers activities such as assessment, casework, case management, CP investigations and direct work. Eligibility for CSC is determined by operational and legal thresholds, which provide the framework for what happens after a child is referred. After initial contact and screening, most cases proceed to a social work assessment, which establishes the main presenting issues, examines developmental implications for the child in the context of family and social environment, and recommends a plan of action. Any concerns about significant harm are investigated through a 'section 47' enquiry, which may lead to a CP conference being held. Children assessed as requiring statutory services to promote their health and development are designated as 'children in need' (CIN). CP conferences make the additional decision as to whether a CP plan is required. Government figures show that just over 403,000 children were classed as in need in England during 2022–2023 (a rate of 343 per 10,000 children) and just under 51,000 children were subject to CP plans (Department for Education, 2023). Children who require an episode of out-of-home care, which may be a consensual arrangement with parents or mandated by the court, are known as children looked after (CLA) during their time in care. For those children deemed not to require any kind of statutory CSC service ('assessed not-CIN'), additional support and assistance may still be provided in the form of non-statutory 'Early Help' services (Lucas and Archard, 2021). Since these pathways require a child and family assessment to be completed, it is important to understand the relationship between assessed needs and subsequent interventions. However, surprisingly little is known about this link, a gap in knowledge which this article aims to address.

Statutory CSC services in England collect administrative data on the main factors identified at the end of a child and family assessment. All social workers completing an assessment complete the same checklist, which consists of forty 'factors at assessment' (Department for Education, 2020). The recorded factors form part of the annual CIN

Census data returned to the government (Department for Education, 2022a), which presents an aggregate picture of the needs and risks being assessed across the country. For example, DfE figures for 2021–2022 showed that concerns about the child's parent/carer being the victim of domestic abuse and the mental health of the child's parent/carer were the two most commonly recorded factors at assessment, both being identified in just under one-third of episodes with assessment factors recorded (Department for Education, 2022a). Although similar parental factors are likely to be assessed in other child welfare systems, there is little consistency in how they are recorded in administrative data; indeed, reporting practices vary considerably even across the constituent countries of the UK. In Wales, for example, government figures on 'Children Receiving Care and Support' include information on children's health, disability and parental factors (Welsh Government, 2022), whereas in Scotland, multiple concerns are only systematically recorded for children subject to CP conferences (Scottish Government, 2022). In Northern Ireland, CSC statistics include information on categories of abuse for CP plans but not the needs identified at assessment (Department of Health, 2023). UK jurisdictions share a broad definition of safeguarding, which means that children may be referred to CSC for support and assistance, as well as concerns about abuse or neglect. In other countries, particularly where mandatory reporting laws exist, there may be more emphasis on the notification, investigation and substantiation of child maltreatment (Australian Government, 2022). Administrative data may also be incorporated into tailored data-sets, such as the Canadian Incidence Study of Reported Child Abuse and Neglect (Trocmé *et al.*, 2003) and the National Child Abuse and Neglect Data System (Fluke *et al.*, 2019). Analysis of these data-sets has revealed some of the risk factors associated with notifications or substantiated child abuse (Sidebotham *et al.*, 2006; Cross and Casanueva, 2009; Vial *et al.*, 2020), as well as shedding light on inequities in intervention and decision making, which particularly affect children from racialised and/or low-income groups (Boatswain-Kyte *et al.*, 2020; Zhang *et al.*, 2021).

Categories of assessed need

It is generally the case that child welfare assessments identify multiple and overlapping problems (Hood *et al.*, 2021). Focusing on the contribution of single risk factors may underplay the complexity of children's needs and misrepresent the lived experience of families. In an effort to capture this complexity, Hood *et al.* (2023) carried out a latent class analysis of factors at assessment in a national data-set of over 4.2 million child and family assessments carried out in England between 2014 and 2021. The analysis found twelve categories of demand, each consisting of

certain factors or combinations of factors that were likely to co-occur consistently over time and across LAs. The categories were sense-checked in consultation with stakeholders and were broadly consistent with previous studies of demand based on non-representative samples, or those focusing on particular groups. In order of prevalence, the demand categories were:

1. **Domestic abuse and violence** (20 per cent)—characterised by the assessment of domestic violence in relation to the parent, child and/or another person, sometimes recorded in combination with emotional abuse.
2. **Complexities around parental mental health** (18 per cent)—characterised by concerns about parental mental health, often in combination with parental drug or alcohol misuse, sometimes in combination with DV.
3. **Disability** (9 per cent)—mainly characterised by children with disabilities but also included some children who were not recorded as having a disability themselves but had parents with a disability and/or mental health problems.
4. **Risks outside the home** (7 per cent)—characterised by concerns about children's risk-taking behaviour and potential vulnerability to criminal and sexual exploitation and extra-familial harm (EFH).
5. **Complex domestic abuse/Risks at home** (7 per cent)—characterised by concerns about domestic violence and abuse, generally in combination with other parental risk factors, such as mental health problems and substance misuse. It was associated with a high risk of abuse (emotional and physical) and neglect.
6. **Child's mental health (**6 per cent)—characterised by the child's own needs around their mental health, sometimes in combination with concerns about self-harm, or parental mental health.
7. **Physical abuse** (6 per cent), **Neglect** (4 per cent) and **Sexual Abuse** (3.5 per cent)—these three categories were characterised by a single maltreatment factor being recorded in all cases.
8. **Concerns about another person in the family or household** (3 per cent)—characterised by concerns about another person in the household other than the child or parent, particularly in relation to mental health problems and drug or alcohol misuse, and often combined with domestic violence towards the parent. Emotional abuse and neglect were identified in many such cases.
9. **Risks in and outside the home** (2 per cent)—characterised by a high risk of EFH, as well as problems within the family home. Key combinations included the child's own needs (e.g. substance misuse, mental health), behavioural issues (e.g. going/being missing), concerns about criminal exploitation (e.g. CSE, gang

involvement) and concerns about domestic violence, emotional abuse and/or neglect.

10. **Other** (13 per cent)—assessments in which only 'other' was recorded, i.e. none of the factors in the checklist were used to describe the risks and needs identified in the assessment.

Hood *et al.* (2023) suggest that a potential use of these categories is to examine how services respond to different types of needs. Although children may receive various types of provision at different stages in their involvement with CSC, the intervention pathway for a specific episode may be defined as the 'highest' threshold at which services were provided, e.g. CIN, CP or care. This links to a number of areas of interest for policy and practice. For example, it is worth knowing which categories of need are most likely to proceed to a protective or care intervention, or which are least likely to meet the threshold for statutory services, as this has a bearing on the resources and expertise required at different tiers of provision (see Hood *et al.*, 2021). Likewise, it is important to know whether certain types of children are disproportionately likely to receive a protective intervention, or conversely not to receive any kind of service, as this may be linked to inequalities around race, gender or deprivation (Dettlaff and Boyd, 2020; Webb *et al.*, 2020; LaBrenz *et al.*, 2021).

Given the availability of a national data-set that included demand categories based on factors at assessment, and the limitations of the existing evidence base, the study proceeded to address two research questions:

1. What were the characteristics of, and intervention pathways for, children in different categories of assessed need?
2. Were some groups of children disproportionately likely to receive protective or care interventions?

Methods

The study was designed as a secondary analysis of longitudinal, administrative data from the national CIN Census and CLA returns for England. Ethical review was undertaken by the Research Ethics Committee of Kingston University (ref. 2835, approved 21 June 2021); research governance approvals were obtained from both the DfE and Ofsted. The principal investigator and data analyst both completed training and accreditation with the ONS Secure Research Service. Access to the anonymised data was via an encrypted Ofsted computer so that all data storage and processing remained within the Ofsted secure environment. ONS guidance on statistical disclosure control was followed for all outputs for publication.

The CIN Census contains case-level information about all interactions with CSC from the point of referral onwards, including assessments, section 47 enquiries, and CP plans (Department for Education, 2022b). The CIN data were linked to the CLA data by using a unique LA child identifier (a concatenation of LA ID and Child ID), which is recorded in both data-sets. The CLA data include information on care characteristics, such as placement type, placement provider, reason for looked after episode, and reason episode ceased (Department for Education, 2022c). A unique identifier was used to link all social care activity carried out as part of an overall CSC episode (i.e. the assessments, CP enquiries, periods of care, etc.). Each CSC episode has an opening and closure date. Once a CSC episode is closed any new social care activity must be carried out as part of a new CIN episode. Lower Super Output Area (LSOA) codes were used to link additional information, including Index of Multiple Deprivation (IMD) scores, which were appended to each social care record (Ministry of Housing Communities & Local Government (MHCLG, 2019). LSOA codes were only available for children who had a Pupil Matching Reference (PMR) number in the data, meaning that the analysis on IMD was restricted only to children aged five to fifteen years.

Based on the latent class model carried out by Hood *et al.* (2023), each CSC assessment was assigned to a latent class based on the modal posterior probability, i.e. the highest probability of belonging to a latent class. The end result is a mutually exclusive categorical variable whereby each assessment is assigned to one of the ten categories of need. This technique enabled us to examine the relationship between different categories of assessed need and child characteristics (including gender, age, ethnicity, and deprivation) as well as subsequent provision (children in need episodes, CP plans, or periods of care).

The analysis considered all CSC episodes that started between 1 April 2014 and 31 March 2018, across 147 LAs ($n = 2{,}550{,}853$). The cohort was restricted to CSC episodes that began before 31 March 2018 because of a time lag between the point of referral and subsequent escalation to CP plans or admission to care. Descriptive analysis found that nearly all CP plans and periods of care occurred within two years of the referral (cumulative frequencies for CPP and CLA are shown in a supplementary chart). The observation window for analyses allowed for at least two years of follow-up (up to 31 March 2020) from the point of a referral. A range of sensitivity analyses was carried out in order to check the consistency of results where data were aggregated up to CIN episodes or to the child level. For example, when comparing analyses based on the first or last assessments within CIN episodes the findings were practically identical. This is because 92 per cent of CIN episodes recorded only one assessment and the majority of CIN episodes that recorded multiple assessments did not have substantively different factors (i.e. they were categorised in the same way regardless of the assessment).

Cross-tabulation analysis was carried out to look at intervention pathways following an assessment, as well as differences on the basis of age, gender, ethnicity and deprivation (using IMD quintiles). Following bivariate analysis, we used binary logistic regression to estimate the predicted probability of a case resulting in a CP plan or care episode for each category, using marginal effects, i.e. alternating the marginal effect for each child characteristic whilst keeping all other child characteristics at mean values. The predicted probabilities are shown in the findings section and the regression models are included in Supplementary Tables 1 and 2. The main aim of this analysis was to find out whether the likelihood of receiving a protective or care intervention for a particular type of need was associated with child characteristics, adjusting for potential confounding effects. Given that data on IMD was only available for children who attend state-funded schools, the bivariate analysis on IMD scores was restricted only to children aged five to fifteen years. In total, 81 per cent of children in this age group had PMR numbers that could be matched to records in the NPD. Due to the potential bias this might introduce through listwise deletion in a multiple regression model, we chose to exclude deprivation as a predictor in multiple regression models in order to instead focus on gender, age and ethnicity characteristics; this also meant the models could include children under five and over fifteen years.

All analysis was carried out in Stata version 16.

Findings

Typical intervention pathways for children within each category of assessed need are summarised in Table 1. The pathways correspond to four thresholds of provision following the first assessment in an episode of CSC involvement:

- None—episodes in which children were assessed as not-CIN, i.e. not eligible for statutory services.
- CIN only—episodes in which children were assessed as CIN and therefore received statutory services but no protective or care interventions.
- CP plan—episodes in which children were subject to a CP plan but not accommodated in care.
- CLA—episodes in which children experienced a period of care.

The most common intervention pathway following assessment was CIN only, constituting 45 per cent of episodes, followed by not-CIN, which made up 40 per cent of episodes. In contrast, only 9 per cent of assessments led to a CP pathway and 5 per cent to an episode of care. Table 1 shows the proportion of episodes within each intervention

Table 1. Categories of assessed need and associated intervention pathways.

	Domestic abuse and violence	Complexities around parental mental health	Disability	Risks outside the home	Complex domestic abuse/risks at home	Child's mental health	Physical abuse	Neglect	Concerns about another person in the family or household	Sexual abuse	Risks in and outside the home	Other	No factors recorded	All classes
Type of intervention following an assessment (counting the first assessment from each episode)[a,b]														
Count														
None	172,660	127,040	58,210	49,290	18,970	40,470	37,670	26,340	15,180	22,950	6,510	80,910	374,610	1,030,790
CINO[c]	214,340	172,490	99,500	78,480	43,940	65,990	90,210	45,880	22,120	49,380	17,690	193,390	67,910	1,161,310
CP plan[d]	49,330	47,600	10,020	6,750	38,380	7,680	12,870	13,910	14,120	7,100	7,470	11,800	3,880	230,890
CLA[e]	11,720	25,260	6,140	16,890	18,950	6,000	8,150	7,510	6,440	1,880	5,980	9,420	3,520	127,870
Total	448,040	372,390	173,870	151,410	120,240	120,150	148,890	93,630	57,870	81,310	37,650	295,520	449,910	2,550,850
Percentage of all episodes in intervention pathway (Row %)														
None,	26	19	9	8	3	6	6	4	2	4	1	12	–	100
CINO[c]	20	16	9	7	4	6	8	4	2	5	2	18	–	100
CP, % plan[d]	22	21	4	3	17	3	6	6	6	3	3	5	–	100
CLA[e]	9	20	5	14	15	5	7	6	5	2	5	8	–	100
Total, %	21	18	8	7	6	6	7	5	3	4	2	14	–	100
Percentage of all episodes in category of need (Column %)														
None, %	39	34	34	33	16	34	25	28	26	28	17	27	83	40
CINO[c]	48	46	57	52	37	55	61	49	38	61	47	65	15	46
CP, % plan[d]	11	13	6	5	32	6	9	15	24	9	20	4	1	9
CLA[e]	3	7	4	11	16	5	6	8	11	2	16	3	1	5
Total, %	100	100	100	100	100	100	100	100	100	100	100	100	100%	100%

[a]Hierarchical categorisation of interventions, i.e. the highest level of intervention following assessment.
[b]Including episodes with at least one year of follow-up after assessment.
[c]CINO refers to 'CIN only' episodes that were not CP plans or CLA.
[d]CP plan: child protection plan.
[e]CLA: child looked after.

pathway accounted for by each category of need (as defined by Hood *et al.*, 2023), as well as the proportion of episodes within each category of need that proceeded down each intervention pathway. The results show that three categories accounted for the majority of CP plans:

- domestic abuse and violence (assessments identifying concerns about domestic violence, usually without other factors being recorded; 22 per cent of all CP plans);
- complexities around parental mental health (concerns about the parent/carer's mental health, often in combination with concerns about parental drug or alcohol misuse; 21 per cent of CP plans);
- complex domestic abuse/risks inside the home (concerns about domestic violence, often in combination with other parental risk factors and concerns about child maltreatment; 17 per cent).

Three categories also accounted for around half of all episodes of care: complexities around parental mental health, complex domestic abuse/risks at home, and risks outside the home (concerns about children's risk-taking behaviour and vulnerability to EFH). The most likely category to lead to a CP plan following assessment was complex domestic abuse/risks outside the home, in which about a third of cases (32 per cent) proceeded to a CP plan, followed by concerns about another person in the family/household (24 per cent), and risks in and outside the home (20 per cent). Similarly, the most likely categories to lead to an episode of care were risks in and outside the home (16 per cent), complex domestic abuse/risks inside the home (16 per cent) and risks outside the home (11 per cent). Amongst cases that did not lead to any statutory intervention, the categories most likely to result in an assessment of not-CIN were domestic abuse and violence (39 per cent), complexities around parental mental health (34 per cent), child mental health (34 per cent) and disability (34 per cent). Overall, the category most likely to result in either a CP plan or episode of care was complex domestic abuse/risks at home; however, even amongst these cases the majority of assessments (52 per cent) still resulted in either a CIN or not-CIN pathway.

Table 2 provides a descriptive profile of children within each category of need, based on the characteristics of gender, age, ethnicity and local area deprivation. These profiles can be compared to overall demographics for children with CSC involvement, as well as to intervention pathways for different groups. In relation to gender, only binary male/female classifications are available in the administrative data, with males slightly more prevalent than females. The category with the highest proportion of male children was disability (58 per cent), followed by risks outside the home and physical abuse. The category with the highest proportion of female children was sexual abuse (57 per cent), followed by

Table 2. Descriptive profile of categories of need by gender, age, ethnicity and deprivation.

	Domestic abuse and violence	Complexities around parental mental health	Disability	Risks outside the home	Complex domestic abuse/risks at home	Childs mental health	Physical abuse	Neglect	Concerns about another person in the family or household	Sexual abuse	Risks in and outside the home	Other	No factors recorded	All classes
Gender[a] (%)														
Male	51	51	58	55	51	44	53	52	51	43	47	51	50	51
Female	49	49	42	45	49	56	47	48	49	57	53	49	50	49
Total (column)	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Age (when episode started)[a] (%)														
Under 1 year	14	18	7	4	17	3	8	15	17	7	4	11	10	11
1–4 years	28	27	18	8	23	9	22	27	23	19	8	23	24	22
5–9 years	30	28	3 1	15	28	19	35	29	28	28	14	29	29	28
10–15 years	23	23	36	50	27	51	31	25	26	38	53	30	29	31
16–17 years	5	4	8	23	5	18	5	5	6	8	22	8	8	8
Total (column)	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Ethnicity[a] (%)														
Asian	11	5	9	8	6	6	12	5	4	6	4	9	9	8
Black	7	5	9	14	4	5	17	10	3	5	5	11	9	8
Mixed	10	9	7	8	9	7	7	7	9	5	9	8	7	8
Other	3	2	2	5	2	2	4	3	1	2	2	4	3	3
White	70	80	73	65	79	81	61	75	84	83	81	68	72	73
Total (column)	100	100	100	100	100	100	100	100	100	100	100	100	100	100
IMD[a,b] (%)														
Missing	16	14	16	21	12	17	18	17	12	16	16	20	19	17
1 (least deprived)	7	6	7	6	6	8	7	5	5	8	6	7	6	6
2	9	9	10	8	9	11	9	7	10	10	9	8	9	9
3	14	13	14	12	13	14	13	12	14	13	13	12	13	13
4	20	21	21	20	21	20	20	21	22	19	20	19	20	20
5 (most deprived)	35	37	33	33	39	31	34	39	38	34	37	33	34	35
Total (column)	100	100	100	100	100	100	100	100	100	100	100	100	100	100

[a]Hierarchical categorisation of interventions, i.e. the highest level of intervention following assessment.
[b]Including episodes with at least one year of follow-up after assessment.

child's mental health and risks in and outside the home. In relation to age, the bulk of assessments were for children in the ten to fifteen age group (31 per cent). Categories with the highest proportion of young children (under five years) were complexities around parental mental health and complex domestic abuse, whilst categories with the highest proportion of older children (ten plus years) were disability and risks outside the home. In relation to ethnicity, only very broad classifications were available in the data, with the largest group being White children (73 per cent). Some categories of need had a comparatively high proportion of children from White backgrounds, particularly concerns about another person, sexual abuse, and child's mental health. In contrast, Black children were over-represented (relative to other categories) in the categories of physical abuse, risks outside the home and neglect, whilst Asian children were over-represented in physical abuse, domestic abuse and violence and complexities around parental mental health. In relation to deprivation, data were only available for children attending school, so predominantly covering five- to fifteen-year-olds. All categories had a steep social gradient (Goldacre and Hood, 2022), in that children from higher deprivation quintiles were much more prevalent than children from lower deprivation quintiles. Categories with the strongest social gradient were neglect, complex domestic abuse and risks in and outside the home.

Table 3 shows the predicted probabilities (percentage) of CP plans for each category, by gender age and ethnicity, using marginal effects from a multiple regression model. The full model, along with a detailed table showing confidence intervals for each percentage, is included in the supplementary information. The comparison by gender suggests that the proportion of CP plans made within each category was similar for male and female children. There were some small gender-related differences. For example, girls in the risks in and outside the home category were slightly more likely than boys to receive a CP plan, and were more likely to be assessed in this category overall (see Table 2).

The comparison by age group revealed more differences than for gender. In all the categories, children under five were more likely to receive a CP plan than children in other age groups, whether or not they were the most prevalent group in the assessed cohort. Conversely, twelve- to seventeen-year-olds were the least likely to receive a CP plan, regardless of their overall prevalence within the category. The biggest differences were seen in the category of complex domestic abuse, in which 50 per cent of children under five years were predicted to have a CP plan compared to 30 per cent of twelve- to seventeen-year-olds. Finally, the comparison by ethnicity also showed some differences, although important distinctions between ethnic groups are likely to be obscured within these broad classifications. Bearing in mind this limitation, the results in Table 3 show that children from Mixed backgrounds were often more likely to receive a CP plan than children from other ethnicities within

Table 3. Predicted percentages of CP plans for each category, by gender age and ethnicity (based on marginal effects, adjusted model).

	Gender		Age			Ethnicity			
	Males (%)	**Females** (%)	**0–5 years** (%)	**6–11 years** (%)	**12–17 years** (%)	**Asian** (%)	**Black** (%)	**Mixed** (%)	**White** (%)
Domestic abuse and violence	12	12	15	12	9	14	11	14	12
Complexities around parental mental health	16	16	21	16	11	13	15	20	17
Disability	7	8	11	7	5	6	6	9	8
Risks outside the home	7	8	9	7	5	5	6	9	7
Complex domestic abuse/risks at home	41	42	50	41	30	44	39	45	41
Child's mental health	10	10	13	10	6	10	11	11	10
Physical abuse	11	11	14	10	8	9	10	11	11
Neglect	20	19	24	19	14	12	11	21	21
Concerns about another person in the family or household	32	31	39	31	22	32	29	34	32
Sexual abuse	11	11	13	10	7	13	9	12	10
Risks in and outside the home	31	33	38	34	23	33	32	34	32
Other	5	5	7	5	3	3	3	6	6

the same category of need. These differences were generally small but more noticeable in the categories of complexities around parental health and risks outside the home. Conversely, Black children were often less likely to receive a CP plan than children from other ethnicities within the same category of need. Again, these differences were small, being most noticeable in the category of sexual abuse.

Table 4 shows the predicted percentages of children receiving a period of care within each category, by gender, age and ethnicity, again using marginal effects from an adjusted model rather than descriptive stratification. A more detailed table showing confidence intervals for each percentage is included in the supplementary material. Comparison by gender suggests that that the proportion of care episodes within each category was generally similar for male and female children. The main exception was the risks outside the home category, in which boys were over twice as likely to be accommodated in care than girls. Comparison by age group revealed a somewhat more varied picture than for CP plans. Children under five years were more likely to experience a period of care than older children—sometimes over twice as likely as the oldest age group (twelve to seventeen years), as was the case for complexities around parental mental health, complex domestic abuse, and concerns about

Table 4. Predicted percentages of CLA for each category, by gender, age and ethnicity.

	Gender		Age			Ethnicity			
	Males (%)	**Females** (%)	**0–5 years** (%)	**6–11 years** (%)	**12–17 years** (%)	**Asian** (%)	**Black** (%)	**Mixed** (%)	**White** (%)
Domestic abuse and violence	3	3	3	2	2	2	3	3	3
Complexities around parental mental health	6	6	9	5	4	3	7	8	6
Disability	4	4	5	3	3	2	4	4	4
Risks outside the home	7	3	3	2	11	11	11	5	3
Complex domestic abuse/risks at home	15	15	21	12	10	11	17	17	15
Child's mental health	4	4	4	3	6	4	6	5	4
Physical abuse	6	6	8	4	5	5	6	6	5
Neglect	8	7	11	5	6	4	7	9	8
Concerns about another person in the family or household	10	10	16	7	6	7	9	12	10
Sexual abuse	2	2	3	2	2	2	3	2	2
Risks in and outside the home	14	13	13	9	17	12	18	17	12
Other	3	3	3	2	4	3	4	4	3

another person. However, in the two RFH categories, risks outside the home and risks in and outside the home, twelve- to seventeen-year-olds were the most likely age group to receive an episode of care. Finally, comparison by ethnicity also revealed some differences, albeit with the limitations of broad classifications. The results in Table 4 show that White children were often less likely to be accommodated in care than children from other ethnic groups within the same category of need (neglect being the main exception). This tendency was particularly noticeable for children in the risks outside the home and risks in and outside the home categories. Conversely, Black children in these two categories were more likely to be accommodated in care than children from other ethnic groups.

Discussion

The findings show that children in different categories of assessed need have a distinctive profile both in terms of demographic characteristics and their intervention pathways following assessment. These patterns were based on analysis of a large national data-set covering 2.5 million CSC episodes over a seven-year period and so may be considered broadly applicable across England. However, there is considerable variation in demand for CSC between LAs (Hood *et al.*, 2023) and it can be

assumed that local responses to demand will also be different. Furthermore, the interaction between demand and provision is affected by numerous externalities including economic drivers, changes in legislation, social and fiscal policy, regulation and inspection, and indeed pandemics (Hood *et al.*, 2022). Owing to the extent of missing IMD data, we did not include deprivation as a predictor in multiple regression models and models with restrictions on age could be explored in future. Alternative statistical approaches, such as multilevel analysis of individual heterogeneity and discriminatory accuracy (MAIHDA) models, could be used to further investigate intersectionality across multiple demographic variables. With these limitations in mind, some implications for policy and practice are evident in relation to children assessed in particular categories of need.

One starting point is the complexity of EFH, which has become a key issue for CSC services in England following a series of reports into institutional failings in relation to child sexual exploitation (Jay, 2014; Leivers, 2015), as well as increasing awareness of vulnerable children being recruited for 'county lines' drug dealing and other forms of child criminal exploitation. Hood *et al.* (2023) reported two categories of demand relating to EFH, one in which risks were assessed as being entirely outside the home and a second in which these risks were assessed alongside familial risk factors. In this study, the two categories were shown to have different profiles in terms of child characteristics and intervention pathways. Compared to the cohort as a whole, children in the risks outside the home category were more likely to be male and/or Black, less likely to be subject to a CP plan, but more likely to have an episode of care. In contrast, children in the risks in and outside the home category were more likely to be female and/or White, as well as being more likely to have either a CP plan or episode of care. In their review of contextual safeguarding approaches, Firmin and Lloyd (2020) observe that CP plans are more commonly used for children at risk of EFH when there are additional concerns about parenting—something borne out by our findings. However, this raises the question of why concerns about family circumstances seem more likely to be assessed for some groups (female or white children) than others (male or black children) when risks outside the home are (also) identified. It could be that that family problems are more prevalent in those groups, or that assessment practices differ between them. The findings here suggest such disparities play a role in the response to EFH, resulting in greater use of out-of-home care for older children from Black or Mixed backgrounds, for example, and greater use of CP interventions for younger children and girls.

Ecological frameworks to decision making in CSC point to the distinction between assessing risks to children and deciding what kind of action to take (Baumann *et al.*, 2011). For example, Dettlaff *et al.* (2011) used administrative data from child welfare services in Texas to explore the

impact of race on substantiation decisions in cases of concern about child maltreatment, finding that the threshold for substantiation was different for Black children compared to White children but only after controlling for the caseworker's assessment of risk (see also Font *et al.*, 2012). Research into adultification bias (Davis and Marsh, 2020; Carpan, 2022) also suggests that the distinction is important—for example, services may be less inclined to adopt a trauma-informed approach when assessing the needs of Black children yet at the same time prepared to use intrusive and coercive interventions to control behaviour seen as problematic. Similar issues arise in the response to DAV, which was the most common single factor identified in social work assessments. When DAV was assessed in combination with other factors, these categories were more likely to lead to a CP plan or period of care than when DAV was assessed on its own (Hood *et al.*, 2023). Children from Asian and Mixed ethnic backgrounds were over-represented in the single factor DAV category, whereas White children were over-represented in the complex categories. Younger children were generally more likely to receive protective interventions, whilst children from Black and Mixed backgrounds were more likely to be placed in care, particularly in the complex DAV and risks in and outside the home categories. Such patterns point to the role that differential perceptions of vulnerability relating to age, gender and ethnicity may affect decisions around thresholds and the use of protective interventions.

The findings also point to the importance of drug or alcohol misuse in combination with concerns about parental mental health. Complexities around parental mental health, the second most prevalent category, were characterised by this combination and were relatively more likely to proceed to a CP plan or period of care. Mental health problems alongside substance misuse have long been known to present an increased risk of child maltreatment (Forrester, 2000; Sheehan, 2004; Clark *et al.*, 2009; Harwin *et al.*, 2019). Recent years have also seen increasing interest in their cumulative impact (Coates, 2017; Roscoe *et al.*, 2018), although recognition of their co-occurrence as a specific phenomenon in CP practice has arguably been hampered by the continued influence of the toxic trio discourse. In contrast, 'dual diagnosis' has long been a prominent issue in adult mental health services, where co-occurring mental illness and substance misuse are recognised as presenting particular challenges for treatment and recovery (Tsantefski *et al.*, 2015; Iudici *et al.*, 2020). This study's findings would suggest that co-occurrence of the two risk factors is an important consideration for designing support for many families in contact with CSC. However, it is important to consider what is meant by a 'concern' about mental health, and how this may co-occur with substance misuse to create an elevated risk to children's welfare. Mental health itself is a broad concept, with only limited consensus on its definition (Manwell *et al.*, 2015). Whilst social work assessments record

concerns about parental mental health as a single area of risk, such concerns may relate to a range of emotional and psychological problems and only sometimes to a clinically diagnosed illness or disorder. Concerns about parental mental health are therefore both prevalent and multiply present in the demand categories identified by Hood *et al.*, (2023). Indeed, stakeholders consulted on the interpretation of these categories cautioned against any assumption that the parents in such cases had a particular diagnosis or had been referred to specialist mental health services.

Finally, there is perhaps a broader point to be made about the way in which multiple factors are considered indicative of heightened risk to children. The findings suggest that 'cumulativeness' on its own is an imperfect proxy for demand that is defined by discrete clusters. Care must therefore be taken to make full use of what we know about childhood adversity, in order to understand the distinct problems that children are facing and which require a bespoke response from CSC. A related issue is that multiplicity of need, or the clustering of risk factors, may be assessed at the individual or family level by practitioners but at the population level is rooted in the (lack of) social and material conditions for human flourishing. As White *et al.* (2019) point out, a potential problem of focusing on adverse childhood experiences is that by prioritising intrafamilial circumstances and parent-child relations, researchers may inadvertently minimise the role of structural factors over which parents and children have no control. For the same reason, professional assessment-based categories such as those considered in this article can only tell us part of the story.

Conclusion

This article has reported on the intervention pathways following a social work assessment, using categories of need identified from national administrative data for CSC services in England. The findings showed that each category had a distinctive profile in terms of children's characteristics and the type of service they received. Further analysis also revealed that certain groups of children were more likely to be subject to CP plans or an episode of care. The findings provide insight into operational judgements and definitions in CSC, reveal distinctive clusters of complex needs, and contribute to knowledge about inequalities in decision making and intervention. This information is potentially useful for planning and designing services in response to different categories of need, which can be identified from assessment data routinely collected by agencies. Nonetheless, it is necessary for services to engage families and communities, as well as other key stakeholders, in order to understand any strategic concerns identified in administrative records.

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Supplementary material

Supplementary material is available at *British Journal of Social Work Journal* online.

Conflict of interest statement

None declared.

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