Full scoping review: Use of administrative data to understand children's involvement with children's statutory social care services

Children at Risk of Poor Outcomes Community Catalyst
Full Report

January 2025

Foundations
What Works Centre for Children & Families

UKRI Economic and Social Research Council

ADR ENGLAND

The ADR England Research Community Catalyst: Children at Risk of Poor Outcomes project has built a community of researchers and analysts focused on children and young people supported by early intervention services or children's social care in the UK. This community serves as a vital point of connection, information sharing, and coaching, and provide national strategic leadership for administrative data and research in this field.

The project is co-funded by ADR England and Foundations – What Works Centre for Children and Families and is a collaboration between Swansea University, Lancaster University, Imperial College London, University College London, and the University of Sussex. The project is also supported by Barnardo's, Data to Insight, Children's Commissioner's Office and the Nuffield Family Justice Observatory.

This comprehensive scoping review has been produced to inform and encourage greater use of administrative data for children's social care research. It aims to identify strengths and gaps in the published literature to provide the research community with a clearer understanding of research priorities.

We have focused on children's statutory social care services, in respect of children in need, children subject to child protection plans, and children looked after.

Recommended citation:

Bailey, G., Broadhurst, Tranter, K., Holmes, L., Harron, K., Hargreaves, D., Woodman, J., K., Griffiths, L.J. (2025) ADR England Community Catalyst: Children at Risk of Poor Outcomes, Full scoping review: Use of administrative data to understand children's involvement with children's statutory social care services. London: Administrative Data Research UK.

Contents

Glossary of terms

ADR	Administrative Data Research
ALSPAC	Avon Longitudinal Study of Parents and Children
Cafcass	Children and Family Court Advisory and Support Service
CIN	Children in Need
CHS	Children's Hearing System
CLA	Children Looked After
CP	Child Protection (Child Protection Plan/Child Protection Register)
CSC	Children's statutory social care services
DfE	Department for Education
ECHILD	Education and Child Health Insights from Linked Data
FNP	Family Nurse Partnership
FSM	Free School Meals
GCSE	General Certificate of Secondary Education
GRO	General Register Office
HES	Hospital Episode Statistics
HESA	Higher Education Statistics Agency
IDACI	Income Deprivation Affecting Children Index
IMD	Index Measures of Deprivation
KS1-5	Key Stage (School Years)
LACGro	Looked After Children Grown Up
LEO	Longitudinal Educational Outcomes
LSOA	Lower super output areas
MoJ	Ministry of Justice
MSOA	Middle super output areas

NEET	Not in education, employment or training
NHAIS	National Health Applications and Infrastructure Services
NPD	National Pupil Database
ONS	Office for National Statistics
ONS LS	Office of National Statistics Longitudinal Study
PuP	Parenting Under Pressure
ScotXed	Scottish Exchange of Data
SCRA	Scottish Children's Reporter Administration
SCQF	Scottish Credit and Qualifications Framework
SEND	Special educational needs and disabilities
SGO(s)	Special Guardianship Order(s)
SOSCARE	Social Services Client Administration and Retrieval Environment
UASC	Unaccompanied asylum seeking children

Introduction

This scoping review has been produced by the ADR England Research Community Catalyst: Children at Risk of Poor Outcomes. ADR England and Foundations are co-funding the project **to encourage greater use of ADR England flagships datasets**. A team of academics at the universities of Swansea, Lancaster, Sussex, University College London and Imperial College are delivering the project.

This review has been produced to inform and encourage greater use of administrative data for children's social care research. The review aims to map the evidence and **identify clear gaps in evidence.** Given this context, this scoping review provides a comprehensive summary of the published research to enable a far clearer understanding of priorities for new research. In keeping with the objectives of a scoping review, we aim for a higher level overview of current research evidence, rather than detailed quality appraisal. However, throughout the review we cite published reviews that have focused in detail on particular substantive topics, and include a more detailed appraisal of methodological limitations.

In reviewing the published quantitative literature, we have focused on **children's statutory social care services,** but where there is published evidence, have also included research concerning support to families (Family Support, previously known as Early Help[1]) provided outside of children's social care statutory services. In our final discussion, we consider the challenges inherent in fully capturing Family Support across sectors.

In considering where the current weight of evidence lies in respect of children's social care involvement, we have differentiated between services provided to Children in Need (CIN) services provided to children subject to child protection plans (CP) and Children in Care (CLA). Although some studies do provide analyses which cut across these different forms of provision, our initial engagement with the literature, indicated that grouping the literature in this way **would more clearly highlight gaps in research evidence concerning CIN and CP children.**

[1] We have used the language prominent in the literature at the time of writing the report. We acknowledge that there has been a move towards the use of Family Support (as per the Independent Care Review), rather than Early Help.

Why use administrative data for children's social care research?

Administrative data can provide a more detailed and comprehensive understanding of children and their families within services (Leary et al. 2023). Administrative data is routinely collected by public services for organisational purposes, but can be used very effectively for research (Harron et al. 2017). Anonymised individual-level administrative data is an efficient way of obtaining a wealth of information at scale, which is also representative of populations. As well as enabling the measurement of service use, this data can produce longitudinal trend analyses, capture service user journeys through services, help to evaluate policies and inform future prevention and targeted intervention strategies (Allnatt et al. 2022). However, often the kind of data which aids an understanding of the lives and service experiences of children at risk of poor outcomes is scattered across different sectors of social care, health, education and justice, presenting major obstacles to capturing a holistic view of the child. Hence, initiatives, such as the work of ADR UK that enable the safe and lawful linkage of data across sectors are vitally important, to advance knowledge.

In line with the official guidance, local authorities are required to submit standardised information about children and families and the social care and education services they receive to central government departments on an annual basis. This data enables service performance to be monitored, but also enables information to be reported regarding characteristics of service users; the type of services provided, and service outcomes (Holmes 2019). Each of the four UK nations publish annual snapshots of aggregated statistics, as well as more detailed individual-level data available for research purposes within trusted research environments[2].

Recent national reports have endorsed the need to maximise the value of administrative data and share data safely across government departments. In 2020, the UK Government published a national data strategy and encouraged the use of administrative data to inform social care provision (UK Gov 2020b). This was closely followed by the *Data Saves Lives* policy paper,

[2]The Department for Education (DfE) collect children's social care data in England, which is available in the Secure Research Service (SRS) soon to be super seceded by the Integrated Data Service (IDS). StatsWales publish data from the Welsh Government which is available in SAIL [Secure Anonymised Information Linkage] Databank. Data from the Scottish Government is held in the Public Health Scotland Scottish National Safe Haven. In Northern Ireland, the Deparment of Health, Social Services and Public Safety (DHSSPS) produces statistics using data supplied by Health and Social Care (HSC) Trusts (this combines health and social services and replaces the NHS). Data is held in the management system SOSCARE which can be accessed via the Health and Social Care Honest Broker Service (HBS). Non-health data is held in the Northern Ireland Statistics and Research Agency (NIRSA) Research Support Unit including the Northern Ireland Longitudinal Study, the Northern Ireland Mortality Study and data through ADR NI.

which again endorsed the need for better data sharing between health and children's social care services (Department of Health & Social Care 2022). The children's social care data and digital strategy aims to set out the foundations for a long-term plan to use data and digital services to their full potential (Department for Education 2023a). In February 2023, alongside the publication of *Children's social care: Stable Homes, Built on Love*, the government's strategy for reforming children's social care, the Government launched a consultation on the **Children's Social Care National Framework** and the **Children's Social Care Dashboard,** aiming to steer data collection in the direction of more effectively capturing child outcomes.

The growing recognition of the benefits of sharing cross-sector data is reflected in the expansion of pre-linked health, social care, education and demographic data (Mc Grath-Lone et al. 2022b) that embed whole-population, individual-level data (Moorthie et al. 2022). ADR UK, with the development of flagship datasets, plays a major role in facilitating this agenda and accelerating both the curation and use of administrative data. Alongside major ADR UK investments, other initiatives include for example the evaluation of synthetic data (e.g. UK Data Service and Research Data Scotland), national longitudinal cohorts using and linked to administrative data (e.g. Millennium Cohort Study and Avon Longitudinal Study of Parents and Children) and government led pilots and projects such as Ministry of Justice: Better Outcomes through Linked Data.

Methodology

This scoping review is informed by best practice developed by Arksey and O'Malley (2005) aiming to map the published and relevant grey literature, relevant to the topic of Children's Social Care (CSC).

Inclusion and exclusion criteria

We included UK based quantitative studies that have used a range of local authority and central government datasets, regarding children involved with children's social care. For the purposes of this review, we restricted our search to UK based studies, given our focus on children within UK statutory services. Studies were limited to English language only. Studies investigating parental exposures of children involved with CSC were included. Full eligibility criteria and rationale is set out in

Table 1.

For the purposes of this review, we have not included studies which are specifically focused on children involved with private family law proceedings as these children are not routinely involved in CSC, unlike children in public family law proceedings (typically care proceedings). We have not included routine statistical releases produced regularly by government departments, but we have included data and analysis reports, where these extend knowledge beyond routine statistical reports.

Table 1. Inclusion and exclusion criteria

Criterion	Rationale
Administrative quantitative research study	Primary research studies using individual-level administrative data published in peer-reviewed journals or identified in grey literature. We also included highly relevant literature which did not use administrative data but supported the evidence. These are denoted by an asterisk (*)
Children's interventions or prevention services	This broad range of services was selected to include all areas of intervention that are considered important for children at risk
English-language only	Due to resources, we limited to the reviewer's language. This is unlikely to bias any findings as it only includes UK studies
Conducted in any UK nation	UK studies only (England, Northern Ireland, Scotland, Wales)
Limited to after 2000	Studies were limited to publications from 2000 onwards given limited access/availability of administrative records for research before this time.
Any study design	We included all study designs.

Sources and search strategy

On 5 March 2024 GAB searched eight online databases (Web of Science, Social Sciences Citation Index (SSCI), American Psychological Association (APA) PyschInfo, Pubmed, Embase, Scopus, Cumulated Index in Nursing and Allied Health Literature (CINAHL) Ultimate, Applied Social Sciences Index and Abstracts (ASSIA)) for studies published between 1 January 2000 and 31 December 2023. We used the search strings available in Appendix 1. References were imported into EndNote, a reference management software.

We also carried out an additional grey literature search on 26 March 2024 using the websites of relevant organisations. The search function on these websites were limited, therefore, it was not possible to use Boolean searches. Instead, separate searches related to "looked after children", "children in need", "child protection plan", "SEN" and "disabilities" were conducted. Where there was no search function, the resources and research pages were manually reviewed.

Study selection

All identified titles and abstracts were independently screened by two authors (GAB and LJG). Any discrepancies were resolved by discussion, a third reviewer was not needed to resolve any discrepancies.

After de-duplication (n=929), a total of 1043 unique studies were identified and screened. From these, 91 publications were included, 36 of which were identified through reference lists (Appendix 2). From the grey literature search, we also identified a large number of reports (n=50) (Appendix 3). This list was then reviewed to identify any omissions by the wider project team (one additional study). The total final sample was: 142. We are aware that systematic searching of the literature is not exhaustive and we may have missed studies.

GB with KB and LG produced the review manuscript, which was then circulated for detailed peer review by the wider project team, before finalising. Key messages from the review, were subject to further discussion and revision at a stakeholder roundtable (September, 2024).

Data extraction

We extracted key information on exposures and findings, as well as the study period, datasets used and whether any data linkage was undertaken. A summary of each study's findings was produced. The research team (GB, KB and LG) identified emerging themes to include in the review. Studies were categorised based on the study aims into the following: 1) child's characteristics 2) parental adversity 3) rates and trends 4) spend 5) care placement components 6) outcomes 7) longitudinal analysis 8) intervention/service evaluation. For each category we extracted and discussed the subgroups of the study population (CIN, CP children and CLA) separately.

Results

Overview

There has been **a steep increase in use of administrative data** in the UK in recent years for research focused on children involved with statutory CSC services and partner agencies (Figure 1). From a comprehensive search of the literature (as above), we found a far greater volume of published studies from 2020 (n=81 or 57%) than between 2010 – 2019 (n=48, 34%), while there were only a handful of publications before 2010 (n=13, 6%). This should be taken within the context that the overall number of publications (irrespective of research area) are likely to have risen within later years because of the availability of administrative data.

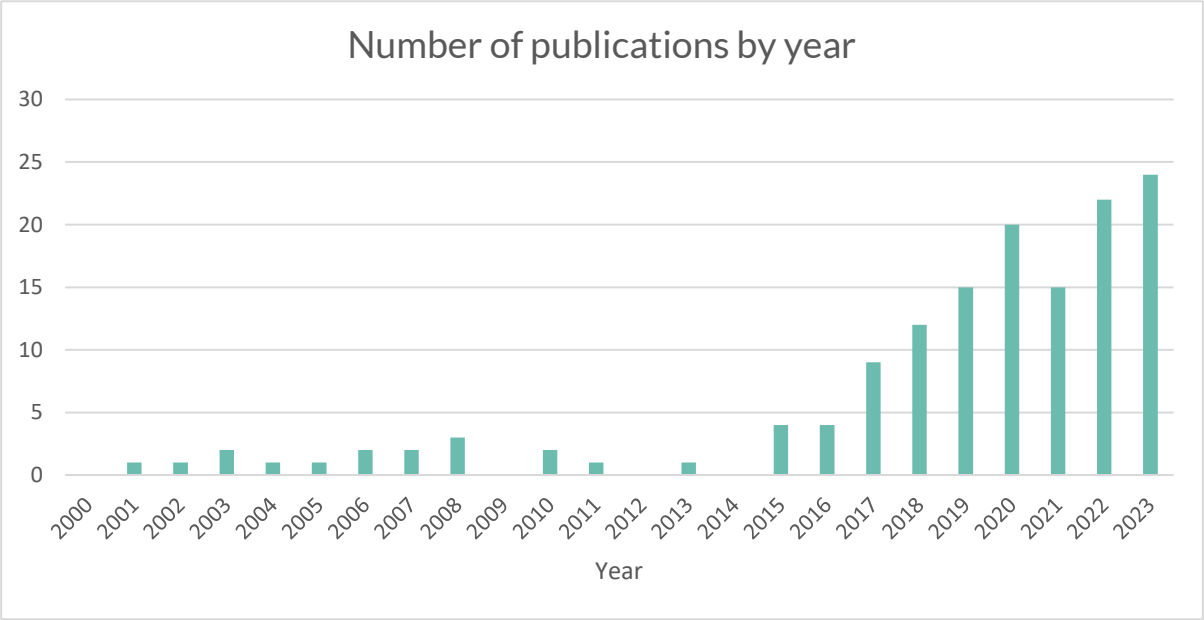

Figure 1. Timeline of publications using administrative data to investigate children involved with children's social care

Figure 1 shows an increase in the number of publications which have used administrative data to examine children's involvement with CSC in recent years. The majority of studies were published in 2020 onwards.

The volume of publications varies by UK country, the majority used English data (n=86 or 61%), and Northern Ireland had the fewest publications (n=11, 8%). As shown below, there were also very few publications which explored children at risk across all four home nations (n=3) (Figure 2).

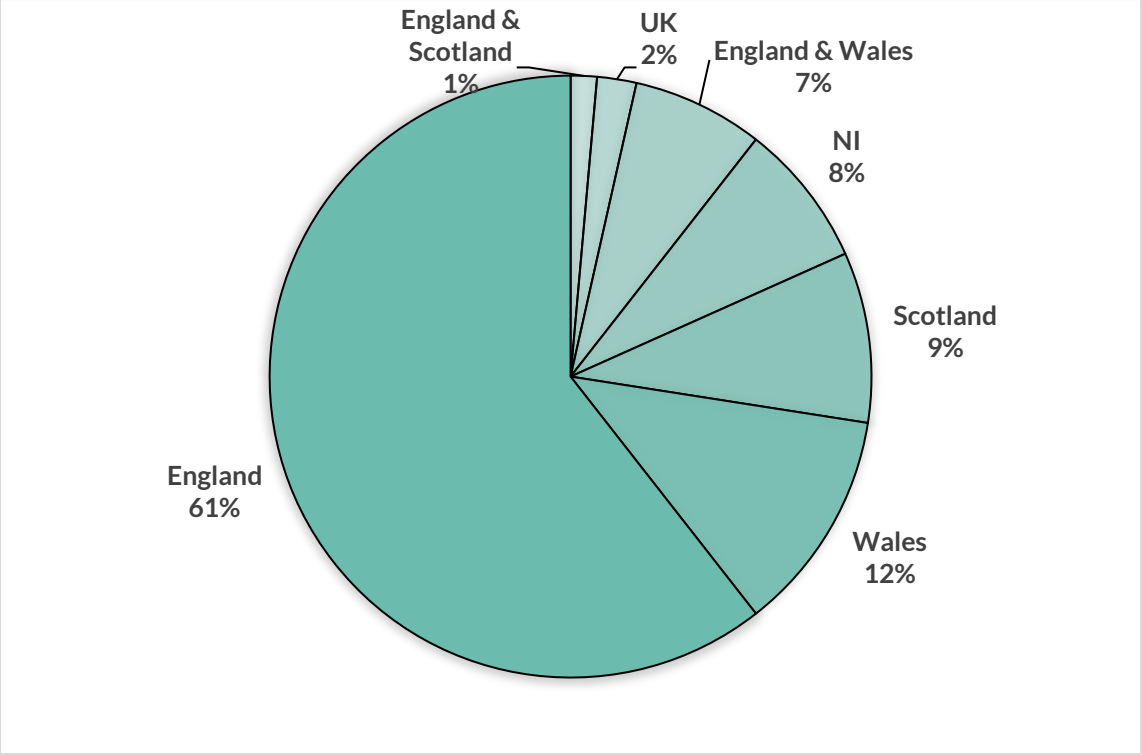

Figure 2. Distribution of publications by the four home nations

Abbreviation: Northern Ireland (NI); United Kingdom (UK)

Most research and analysis using social care administrative data to determine CSC populations has predominantly used the English CLA and/or CIN census returns available through the Department for Education (DfE) (n=40, two of which were used in conjunction with CLA Scotland), while some studies obtained census data from local authorities (n=27/142: England, n=22; Scotland: n=1, Wales: n=2 , UK: n=2). Others have accessed data using trusted research environments (SAIL, n=16; HBS, n=4; Ofsted secure environment, n=4). Some studies will be limited in their analysis because they have utilised published data/data obtained via a Freedom of Information (FOI)[3] request (n=9) which is aggregate data rather than individual-level data. An additional six studies obtaining a download of data from Social Services Client Administration and Retrieval Environment (SOSCARE) (pre-2010). A handful of studies across England and Scotland have used case file data held in Case Management Systems (Children and Family Court Advisory (Cafcass), n=8; Scottish Children's Reporter Administration (SCRA), n=6; Child Protection Database (Serious Case Review data) n=1).

[3] We have grouped these together because of the small numbers and because this is a scoping review rather than a detailed quality appraisal, but we acknowledge that other researchers may have chosen a different approach to categorisation.

The majority of studies focused on questions concerning children involved in care proceedings, in care or leaving care (n=87 including 6 studies with the main focus on characteristics/exposures of parents of children involved with CSC and 1 study of children whose mother was care experienced); with a far more limited number of studies focusing on CIN (n=4) and CP children (n=5 including studies with the main focus on characteristics/exposures of parents of children involved with CSC). There were also several studies which included cohorts which consisted of children with varying levels of statutory care intervention (n=44), and two were described as 'other'. There were very few studies which captured the whole family, rather the studies tended to be either parent *or* child focused.

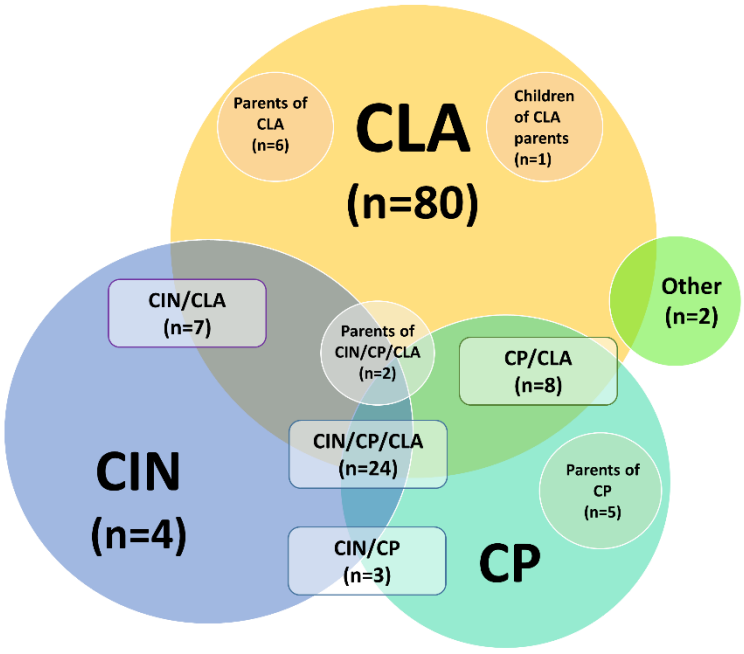

Figure 3. Number of studies concerning children involved with CSC[4]

Abbreviations: CIN: children subject to child in need plans, CP: children subject to child protection plans, CLA: children looked after

As Figure 3 shows, 24 studies captured all three elements of children's social care, but tended to report outcomes specific to each element of CIN, CP and CLA.

Use of standalone and linked datasets

[4] The language of CIN in particular is complex and shifting. However, our language and categorisation reflects the typical terminology and categorisation used in the studies reviewed at the time of writing the report. Researchers typically differentiate between children subject to child in need plans and children subject to child protection plans, although we recognise that the threshold for statutory social care services may differ between local authorities. We note that the DfE refers to CINP to differentiate children subject to CIN plans from the broader categorisation of children subject to section 17 support. We did not find that CINP was used widely in the literature.

A larger proportion of studies used linked datasets (65%, n=92) compared to those using standalone data (35%, n=50). The sources of the single datasets were varied, but typically consisted of data drawn from the Children Looked After census and Children in Need census returns held by the government (n=11), published data/FOI request (n=9), data requested from local authorities (n=7), downloads from SOSCARE (n=6) or Cafcass/Cafcass Cymru via SAIL Databank (n=4) or Case Management Systems (n=5).

A quarter of all studies made use of pre-linked datasets (n=36, 25%), particularly linkage of the National Pupil Database[5] (NPD) and the CIN and CLA censuses (n=28[6]). Other studies have used pre-linked longitudinal education data (LEO, n=1) and health care data (Education and Child Health Insights from Linked Data (ECHILD): n=1[7]), and two have used the Ministry of Justice and Department for Education (MoJ-DfE) pre-linked dataset. Five studies have used the Office for National Statistics (ONS) Longitudinal Study (LS) dataset, a longitudinal linked dataset of a sample populations census record, to examine health, education, labour market and family circumstances. Finally, two studies in Scotland used the pre-linked CLA data and made comparison to the CLA data held by the DfE.

Studies using English data had the largest number of linkages by far (n=27, including three studies which linked deprivation to pre-linked datasets). The number of studies undertaking data linkage was similar across the other three countries (Wales: n=12, Scotland: n=10, England and Wales: n=2, UK: n=2), except for Northern Ireland (n=4). A large proportion of these studies involved linkage of the postcode of residence of the child (via CSC data) to Lower Super Output Areas (LSOA) to determine neighbourhood deprivation scores (n=22).

In England, although not necessarily the primary linkage undertaken, nearly half of all linkage studies established deprivation measures (n=13/27). English local authority data was often linked to birth cohorts (n=7) including the longitudinal cohort Avon Longitudinal Study of Parents and Children (ALSPAC) (n=6) and one undisclosed birth cohort study. Other novel linkages included: 1) Cafcass data to health care data (Clinical Record Interactive Search (CRIS) to South London & Maudsley (SLaM) extracts (i) substance use ii) Children and Adolescent Mental Health Services (CAMHS) records); 2) FamilyMan data to the Police National Computer (PNC); 3) families involved in early interventions (Family Nurse Partnership) and health and education data; 4) Data from the Secure Welfare Coordination Unit to CIN and CLA data.

[5] The NPD contains data from the CIN and CLA Census but there are additional data items relating to CSC that are not in the NPD.
[6] This number includes work by the Department for Education and Hunter *et al.* both of which also makes use of MoJ-DfE linked data, which we count again below.
[7] Two studies which also used NPD and LEO data.

The majority of linkage studies in Wales were undertaken within SAIL Databank (n=11), and included families involved care proceedings (Cafcass Cymru) and children in receipt of statutory services (via censuses) linked to health care data (general practices, accident and emergency and hospital admissions) (n=8[8]), and demographic data such as deprivation (n=3). Outside of SAIL, CLA data provided by the Welsh government was linked to deprivation data.

Three studies in Scotland explored the feasibility of linking social care, health (Community Health Index, Scottish Morbidity Records, Prescribing Information System) and/or education data (Pupil Census, School Leavers Survey, Attendance, Absence and Exclusions Survey), similar linkage was used by one study. One other study demonstrated the feasibility of linkage between Children's Hearing System (SCRA) and the CLA census, which was utilised by three additional studies. One study linked the CLA data to examine dental health (Management Information and Dental Accounting System). The final study linked to deprivation data (Index of Multiple Deprivation, IMD). Two studies in Northern Ireland linked social care (within SOSCARE) to health records to examine mental health. The other two linked to deprivation data (IMD).

[8] Includes North *et al.'s* work which linked to health care data to obtain the ethnicity variable.

Which children are involved with children's statutory services?

a. Deprivation

There is consistent evidence that children involved with social care services will typically be from families living in deprived areas. A growing body of evidence has used administrative data to evidence a clear social gradient, with **elevated rates of CIN, CP and CLA children observed in more deprived areas.** Studies[9] have used the Indices Measure of Deprivation (IMD) based on either small area-levels (lower super output areas (LSOAs in England, Wales and Northern Ireland or data zones in Scotland) or middle-layer super output areas (MSOAs)) within local authorities (Allik et al. 2022; Bennett et al. 2020; Bunting et al. 2023; Bunting, McCartan, and Davidson 2017; Bywaters et al. 2016, 2018; Cusworth et al. 2022; Doebler et al. 2022, 2023; Elliott 2020; Goldacre and Hood 2022; Hood et al. 2020, 2021b; Hooper, Shapira, and Daniel 2017; McCartan et al. 2018; Melis et al. 2023; Raab et al. 2023; Scourfield et al. 2021; Sidebotham, Heron, and Golding 2002; Webb 2023; Webb et al. 2020a, 2020b; Wijedasa, Warner, and Scourfield 2018). The IMD is an area-based measure available in Scotland (SIMD), Wales (WIMD), Northern Ireland (NIMD) and England (IMD) that assesses seven different domains of deprivation: health, income, employment, education skills and training, proximity to services, living environment, and crime and disorder. Moreover, studies also provide evidence that rising rates of poverty are associated with rising rates of children's entry to care (Bywaters and Skinner 2022)*. Bennett et al. (2022) found that after controlling for employment rates, a one percent increase in child poverty was associated with an additional five per 100,000 children entering care in the same year, with Northern and coastal areas of England, evidencing the greatest increases, compared to other areas of England.

The main social care or family justice datasets that have been used in the above studies include social care data provided by local authorities (n=6), CIN and CLA census data held by the DfE (n=3), SOSCARE (n=2), with two recent studies using Cafcass Cymru data.

Descriptive studies are vital to understanding children's involvement in CSC. Studies that have advanced beyond description are few in number. Regarding explanatory studies**, these have typically tried to disentangle the extent to which deprivation (alone or in combination)** explains rates of children's social care involvement. Five studies report that income deprivation (i.e. low-income families and higher levels of unemployment) at the level of the local authority,

[9] Other studies have used the Income Deprivation Affecting Children Index (IDACI), a subset of the IMD which calculates the proportion of children aged 0 – 15 years who live in low-income households (defined by receipt of various benefits and tax credits) at a local authority level. The IDACI tended to be used in studies with an educational context because it is available within the NPD census.

is a strong predictor of elevated rates of CIN, CP and CLA (Bennett et al. 2020; Doebler et al. 2021; Goldacre and Hood 2022; Webb et al. 2020b, 2021). Webb et al., (2021), found that, when combined with income deprivation, ethnic density and education explained three-quarters of CLA rates. Studies have used several different income data resources, including gross and mean income data purchased from CACI Ltd. (n=1), income deprivation scores from the IMD (n=3), with a more detailed analysis by Webb et al., (2020) using a combination of datasets including, deprivation scores from the IMD, the DfE's Local Authority Interactive Tool (LAIT) for Job Seeker's Allowance claimant rate[10] and the CACI Ltd. Paycheck dataset[11].

A small number of studies have probed the **impact of deprivation on children's journeys through services or longer-term outcomes of service involvement**. However, where studies are few in number and ask different questions, it is difficult to draw firm conclusions. For example, a study by Goldacre et al., (2022), found that deprivation had no impact on whether a child re-enters care, whereas Neil et al., (2020), reported increasing rates of reunification among families in least deprived areas (Goldacre et al. 2022; Neil, Gitsels, and Thoburn 2020). It is important to note that these two studies used different data sources, which may help explain inconsistent findings. Goldacre et al., (2022), used data from all English local authorities, whereas Neil et al., (2020), used social care data from one local authority.

Studies have also sought to disentangle the role that **different cultures of practice may have in moderating deprivation**. We know from official performance statistics (UK Gov 2024b) and the broader literature (Harwin et al. 2018) that there is considerable variation in both child and family need and cultures of professional practice. However, evidence to support a hypothesis that higher rates of referral to CSC may (in part) account for higher rates of children's CSC involvement is limited. Emmott et al., (2021) found that rates of referrals from health professionals remained high when adjusting for child poverty, which provides some evidence that professional practice plays a part in referral rates. In the absence of a body of literature with this focus, it is however, difficult to draw any firm conclusions. There is however, some evidence that investment in prevention services (or cuts to preventative services) impacts rates of children's CSC involvement (Bennett et al., 2022).

Of note is a Scottish birth cohort study which demonstrated that **socioeconomic disadvantage persisted when children entered care**. A higher proportion of care experienced children were

[10] Jobseeker's Allowance is an unemployment benefit that can be claimed whilst looking for work. This is captured in the LAIT, an interactive spreadsheet which compares data about children and young people across all local authorities in England.

[11] The Paycheck dataset was used to estimate income inequality from summary data of household income from CACI Ltd.

born into the most deprived areas, when compared to the general population (59% vs 25% general population). Although some of these children moved away from the most deprived areas, they were still more likely to remain in more deprived areas when they entered kinship, foster or residential care (41% vs 22% general population at follow-up) (Allik et al. 2022).

It is important to note that in many of these studies, deprivation is being used as a proxy for the need of services because it is not easy to understand the burden of family need or need for protection in the community. Use of linked administrative data could provide an alternative approach to ascertain this. For example, hospital records, in particular primary care records, could be used to understand the burden of need and adversity.

To summarise:

- **There is consistent evidence demonstrating a relationship between area-level deprivation and elevated rates of children's involvement in statutory social care services**. There is sufficient evidence to conclude that this is common to the four nations of the UK. Moreover, this association applies to CIN, CP and CLA children.
- **Evidence of this relationship is however, strongest in respect of children's entry to care.** Studies focused on CIN are few in number (n=5) (Goldacre and Hood 2022; Hood et al. 2020, 2021b; Webb 2023; Webb et al. 2020b). There are 10 studies focused on CP children (Bunting et al. 2023; Bywaters et al. 2016, 2018; Goldacre and Hood 2022; Hood et al. 2020, 2021b; Hooper et al. 2017; Scourfield et al. 2021; Sidebotham et al. 2002; Webb et al. 2020b). The greatest volume of literature is focused on CLA or children subject to care proceedings (n=16) (Allik et al. 2022; Bennett et al. 2020; Bunting et al. 2023, 2017; Bywaters et al. 2016, 2018; Cusworth et al. 2022; Doebler et al. 2022, 2023; Elliott 2020; Hood et al. 2020; McCartan et al. 2018; Melis et al. 2023; Raab et al. 2023; Scourfield et al. 2021; Webb et al. 2020b).
- **Evidence is more scant** in relation to the **combination of, or interactions** between factors, including deprivation, which lead to elevated rates of CSC involvement, or factors that might moderate deprivation.
- Research which includes measures of deprivation at the household level (e.g. Bennett et al., 2022) are few in number[12]. This leaves **questions about intergenerational, or the**

[12] We note that some studies have used the eligibility of Free School Meals (FSM) as a proxy for household levels of deprivation. This is a government initiative which provides children who are attending a primary or secondary state school with free school meals that is available for children with families on low incomes. This proxy was often used within the educational research because it is available within the NPD census and relates to school-aged children.

type, severity and persistence of deprivation at the household level insufficiently addressed.

- The use of IMD may blunt associations and does not allow for a full investigation of deprivation gradients. This can be overcome by using household level information such as income.

b. Ethnicity

There is a body of research using administrative data (n=11) that has examined the ethnic backgrounds of children involved with children's statutory services. Overall, studies provide **some concerning findings regarding disparities based on ethnicity**, although studies are limited in number and **the majority of studies of ethnicity are focused on children in care.** Beyond important descriptive work, a number of studies have attempted to probe pathways through services for children from different ethnic groups, but again, the literature is scant.

Descriptive studies in England which used CIN and CLA census returns from local authorities and those held by the DfE, have generally reported consistent findings that, when compared to rates of service use for White children, **rates of service use for children categorised as 'Mixed' or 'Black' or 'Other' are higher**, **whereas for Asian children, rates of service involvement are lower across CIN, CP and CLA populations** (Bywaters et al. 2017, 2018, 2020; Goldacre and Hood 2022). Similar findings have been reported for Scotland, whereby Asian children are less likely to be subject to CP or to become looked after (Fleming et al. 2021; Hooper et al. 2017).

A small number of studies have tried to disentangle ethnicity from other risk factors for social care involvement, but differences in the underlying data sources and the varied focus of the studies, mean it is difficult to reconcile contrasting findings. For example, studies by Bywaters et al., (2018, 2020) which used local authority data, found that, when comparing rates of children looked after in *equally deprived areas* by ethnic groups in England, the gap between Mixed and White children was greatly reduced, although inequalities remained for children from ethnic minorities overall (Bywaters et al. 2018, 2020). A second study, specifically addressing social care experiences by ethnicity using the annual CIN and CLA censuses (held by DfE) found that after controlling for demographics (age, gender, disability, unaccompanied asylum seeking child status, geography and free school meal status), children of Mixed White and Black Caribbean ethnicity **were around 30% more likely to have a child protection plan** following a referral compared to White British children. While referrals from children of any Asian ethnic group,

Chinese, Black African, Any Other Black, Any Other White and Any Other were less likely to escalate to CP (Department for Education 2022b).

By far the largest volume of studies in respect of ethnicity and statutory service use, are focused on children in care. Studies of children in care have moved beyond descriptive questions of rates of service user, to probe questions about pathways and outcomes of care experience. Studies have examined **placement type, placement moves and reunification. Again however, evidence against specific questions is derived from either a single or very small number of studies, indicating the need for further research.**

- Based on a single study, a surprisingly high proportion of children from the categories 'Asian', 'Black' and 'Any Other' ethnicity (42%, 37% and 46%, respectively) **had no previous contact with statutory services as CIN or CP children**, in the month prior to becoming looked after, when compared to children categorised as White (only 14% did *not* record CIN or CP involvement) (Department for Education 2022b).
- Ethnic disparities have been found in the use of **non-relative care placements**, with higher rates of children in the Mixed, Black or Other categories in these placements, rather than being placed at home with parents or within the wider family network (Hooper et al. 2017; Mc Grath-Lone et al. 2016).
- A single study reported that **multiple placement** moves were more common among White Traveller of Irish heritage and Black Carribean children (Department for Education 2022b). This observation may reflect that fact that children in non-relative care placements, tend to have the least stable care histories (Boddy 2013; Brown and Ward 2013; Harwin et al. 2019)*.
- Ethnicity has also been found to impact children's reunification and likelihood of returning to care. Compared to White children, Asian, Black or Other children are more likely to return home and less likely to re-enter enter care (Goldacre et al. 2022; Mc Grath-Lone et al. 2017; Neil et al. 2020).
- Ethnicity does not appear to impact whether a child remains in long-term care or reasons for leaving care, with the majority of children returning to parents (Department for Education 2022b; Neil, Gitsels, and Thoburn 2019). This is in line with the broader literature, which indicates that the majority of children who leave care, return home.

Overall, there is sufficient evidence to indicate some concerning ethnic disparties regarding children's entry to care and care experience. **Reflecting the general spread of published literature, evidence is more limited in respect of ethnicity for CIN and CP children.** There are several limitations regarding the recording and analysis of ethnicity within adminstrative data

which has a significant impact on research of ethnic minorities. Often data is aggregated into high-level ethnic groups, poorly recorded or inappropriately analysed as a static construct (Lam et al. 2023)*.

c. Unaccompanied Asylum-Seeking Children (UASC)

There is very limited quantitative research on UASC. We identified two studies using administrative data. The first study was limited to one London borough local authority which used the Home Office database to examine the wellbeing and placement of Afghan UASC. The majority of children were placed in foster care (62.6%) or semi-independent care (34.2%). **Living in foster care was associated with lower levels of emotional and behavioural difficulties,** although for almost a third of UASC children (31.4%), these difficulties were reported. Longer periods in the UK were also associated with higher levels of emotional and behavioural difficulties (Bronstein, Montgomery, and Ott 2013). A second study reported UASC to be older at entry into care (mean age of UASC children: 13 years old vs children in care: 9 years old), reflected in fewer and shorter placements (mean number of placements 2.67 vs 4.79, length of time 3.24 years vs 6.15 years) in comparison to other children in care (O'Higgins 2019).

Children who are UASC are infrequently the focus of research specific to their circumstances and needs. More frequently this category of children are simply included among a wider category of children according to ethnicity, which limits evidence specific to UASC. This mirrors the limited information about UASC provided within official statistics. **Overall, quantitative knowledge about UASC is very limited, studies are few in number and are regionally based.**

d. Religion

This review identified no studies which specifically investigated religion among children involved with CSC; however, one study using secondary analysis of data from the CIN Census (via the Ofsted secure environment) included "abuse linked to faith/belief" (identified in social work assessments) as a latent class factor and found no influence on the demand for CSC (Hood et al. 2023).

e. Age of the child and service involvement

Age at service contact/entry has also been examined in a small number of research studies. Regarding both CIN and CP services, **it is the youngest children who are more likely to be referred to and involved in these statutory services**. For children subject to child protection plans, rates are highest for the youngest children, with older children being far less likely to be CP (Bywaters et al. 2017; Hood et al. 2020; Hooper et al. 2017).

Research is limited about the source of referrals in respect of age, however, a single study reported that infants under the age of one year old are **more likely to be the subjects of CIN referrals**, particularly from health professionals, although variation was observed across local authorities (Emmott et al. 2021).

Again, **it is the subject of age and care (including care proceedings)**, which is the focus of the majority of studies. Regarding age at entry to care or age at initial application for care proceedings, age is a key characteristic. Younger children (<1 year old) are **more likely to be subject to care proceedings and have the highest rates of entry into care** (30% in Wales, 27% in England and 20% in Scotland) (Alrouh et al. 2019; Broadhurst et al. 2018; Bunting et al. 2017; Cusworth et al. 2019, 2022; Doebler et al. 2022, 2023; Hooper, Cusworth, and Whincup 2019; Pattinson et al. 2021; Raab et al. 2023). Moreover, a high proportion of infants are subject to care proceedings/enter care within a week of birth (up to 31%) (Alrouh et al. 2019; Broadhurst et al. 2018; Cusworth et al. 2022; Raab et al. 2023).

Regarding adolescents, those entering care aged 12 years and older, were more likely to remain in care for longer, but short and frequent placement changes were common, with a third of children experiencing four or more placements (Children's Commissioner 2020; Neil et al. 2019). Fewer stable reunifications were also observed (Neil et al. 2020). If older entrants left care, they either returned to a parent (43%) or moved to independent living (38%) (Neil et al. 2019). Older children, between the ages of 10 – 15 years old are also more likely (2.36 times) to re-enter care compared to children under the age of 10 (Goldacre et al. 2022; Hooper et al. 2017; Mc Grath-Lone et al. 2017).

A third of children who entered care for the first time as an adolescent (aged 13 – 15 years) had not been in contact with children's statutory care in the last six years, and only a third had a social worker in the two years prior to care entry despite them having high level of needs prior to them entering care (Children's Commissioner for England 2021).

- Overall, the body of research on age and care highlights important differences in age groups according to age at involvement with CSC.
- Late entrants to care **experience the most problematic care trajectories, with a concerning proportion of children, appearing to be unknown to services prior to care entry.**

What do we know about parental health, behaviours and circumstances and service involvement?

Several studies have used administrative data to assess parental vulnerability/risk factors associated with children's involvement with CSC, as well as care proceedings. Across a number of studies, **a wide range of maternal vulnerabilities** have been found to be associated with children's social care (and care proceedings) involvement: deprivation, ethnicity, unemployment, living alone, lower maternal age, learning difficulties/disabilities, smoking, exposure to violence/domestic violence/abuse, history of mental health problems, substance misuse and alcohol-related hospital admissions before and during pregnancy, elevated health care utilisation (Allik et al. 2022; Baldwin et al. 2020; Canfield et al. 2023; Cousins and Milner 2006; Cusworth et al. 2019; Griffiths et al. 2020; Johnson et al. 2022, 2023; Melis et al. 2023; Monteith and Cousins 2003; Pearson et al. 2020, 2021). While two Scottish studies did not differentiate between mothers and fathers, they found that problems experienced by both parents included victim/perpetrator of abuse, alcohol and drug abuse, criminal offending, imprisonment, breach of legal order mental health difficulties health, learning difficulties, bereavement, isolation, financial difficulties, conflict in intimate partner relationships and poor physical health (Cusworth et al. 2022; Woods et al. 2018). The majority of these descriptive studies tend to use blunt categories of need, providing insufficient detail regarding severity of need, duration over time, or combination of need/risk factors.

Domestic violence and abuse is a major factor for CSC involvement, however, the literature is very limited. This most likely reflects the limited information within social care or educational data with this focus. Johnson et al., (2023) found that mothers involved in family court proceedings (Cafcass Cymru) were eight times more likely to have reported domestic violence/abuse to their general practitioner compared to women in the general population (Johnson et al. 2023). This study linked family justice data to primary care data in Wales. A second study found that domestic violence/abuse was the most common reason for CSC intervention identified during a social worker assessment, and that proportions of domestic violence/abuse were higher for Indian and Irish traveller children (27% and 25%) than White British children (Department for Education 2022b). As above, four other studies have reported that domestic violence/abuse was a common risk factor for involvement with CSC, but provided no further detail of this category (Canfield et al. 2023; Hood et al. 2021a; Sidebotham and Heron 2006; Woods and Henderson 2018).

Five studies have **linked administrative data to longitudinal birth cohorts**, all of which analysed **maternal vulnerabilities/risk factors**, with three also including paternal vulnerabilities/risk factors for children in involved with CSC (Baldwin et al. 2020; Sidebotham and Golding 2001; Sidebotham and Heron 2006; Teyhan et al. 2019; Zhang et al. 2020). Linkage between administrative data (NPD) and the ALSPAC cohort found that a high proportion of mothers of the children with social care records had low educational attainment (CIN: 48.5%, CLA: 62.5%, no CIN/CLA: 32.8%), smoked (CIN: 41.3%, CLA: 58.6%, no CIN/CLA: 26.6%), and had low social support (CIN: 20.8%, CLA: 25.9%, no CIN/CLA: 10.3%). Experience of depression was higher for mothers of CLA children (CIN: 29.4%, CLA: 47.8%, no CIN/CLA: 23.4%) (Teyhan et al. 2019). Four studies linked the ALSPAC cohort to local authority CP data. The first found that maternal predictors including recent hospitalisation and daily alcohol consumption were associated with contact with social workers, and as a consequence, their children were more likely to have higher scores on the strengths and difficulties questionnaire (assessment of mental and emotional health) (Zhang et al. 2020)[13]. Likewise, the two other studies reported paternal and maternal deprivation, history of being looked after and childhood abuse, poor academic achievements, maternal sexual abuse and psychiatric illness, as factors associated with a child being subject to CP (Sidebotham and Golding 2001; Sidebotham and Heron 2006).

An additional study which used data from the UK Millenium Cohort Study found evidence to suggest that maternal vulnerabilities/risk factors, including parental education, socio-economic resources (e.g. employment status/area-level deprivation) and housing conditions explain the educational disadvantage of children of care leavers, rather than the mother's experience of care (Parsons, Fitzsimons, and Schoon 2023).

While **studies focused specifically on fathers** are few in number, studies have reported that fathers are less likely to be employed compared to fathers of children in the general population. Studies have also identified elevated health care utilisation, mental health problems and drug and/or alcohol dependence among fathers (Allik et al. 2022; Baldwin et al. 2020; Cusworth et al. 2019; Johnson et al. 2022; Monteith and Cousins 2003).

A small number of studies have examined parents' own childhoods. High rates of childhood abuse (mothers: 38.8% and fathers: 16.9%), neglect (mothers: 45.3% and fathers: 23.8%), and being looked after away from home (mother: 24.7% and father: 13.9%) have also been reported among parents of CLA (Cusworth et al. 2019). As mentioned above, these findings have been

[13] This study also found that self-reported CP contact was substantially underreported (22%). This reporting bias is likely to impact findings from other studies which use data from observational studies.

replicated in cohort studies among parents of CP children[14] (Sidebotham and Golding 2001; Sidebotham and Heron 2006).

We identified seven studies which used Cafcass and Cafcass Cymru (England and Wales) data to show distinct profiles of **parents involved in care proceedings** (Bedston et al. 2019; Broadhurst et al. 2015; Canfield et al. 2023; Griffiths et al. 2020; Johnson et al. 2022, 2023; Pearson et al. 2021). A single Welsh based study identified elevated health and sociodemographic needs among mothers involved in care proceedings compared to mothers in the general population. Mothers were more likely to be younger age at time of first motherhood, have mental health problems, substance misuse issues and smoke while pregnant (Griffiths et al. 2020). In terms of risk factors, a body of literature has also examined the impact of parental involvement in recurrent care proceedings. Studies have found that a history of care proceedings heightens the risk that further children will be involved in care proceedings, with recurrent proceedings most likely to involve children aged less than one years old (Broadhurst et al. 2015). Within the same study, most cases involved the mother and father (65.1%), but a third of women appeared as a lone respondent (n = 12,146; 27.9%) (Broadhurst et al. 2015).

- **There is a substantial volume of literature on a range of maternal risk factors associated with children's involvement in statutory social care services** (n=22). The majority of studies are focused on children in care or care proceedings (n=16). The remaining five studies linked a longitudinal birth cohort (ALSPAC) to the NPD (n=1) and local authority CIN/CP data (n=4) to identify maternal/paternal predictors of children's contact with statutory social care services. **The majority of studies use blunt categories to identify maternal need/risks, providing limited information about the duration or combinations of needs/risks in respect of service involvement, or service inputs.**
- Reading across the literature, it is possible to conclude that the following parental vulnerability/risk factors are associated with children's involvement with statutory social care services: i) demographic factors such as age at motherhood/fatherhood, ethnicity, deprivation and employment status, ii) health and family factors (e.g. mental health, substance misuse, domestic violence/abuse, learning disability), iii) educational outcomes (low attainment) and iv) criminal offences.
- **Research on domestic violence/abuse is very limited**, despite the fact that domestic violence/abuse is a key reason why children are involved with CSC services.

[14] This cohort included children screened va the local Social Services child protection registers who had been investigated for possible abuse or neglect, and placed on the child protection register.

- **There are limited studies focused on fathers.** Studies often combined data with the mothers (n=12) or solely focused on mothers (n=10). Overall, evidence about parental needs/risk factors is limited in volume and adopts blunt categories as above.
- There is some limited descriptive evidence which demonstrates a pattern of **intergenerational vulnerability/risk**. A high proportion of parents whose child was taken into care were known to have been in care themselves as children (Cusworth et al. 2022; Sidebotham and Golding 2001; Sidebotham and Heron 2006).
- There was also some evidence of **intergenerational educational disadvantage.** Children whose mother had care experience were more likely to have worse educational attainment. However, when controlling for parental education, socio-economic resources and housing conditions the association between maternal care experience and educational attainment was attenuated (Parsons et al. 2023).

Children's involvement with statutory social care services: Rates and trends

Population-level administrative data is a valuable source of insight about volumes and trends in children's involvement with statutory social care services, with analyses produced by both government analysts and academic researchers. Published studies have used administrative data to provide insights about types of involvement with children's services, in respect of CIN, CP and CLA. Population-level data can also enable comparison between the four nations of the UK, subject to careful consideration of approaches to data collection and categorisation.

Based on studies that are focused on trends, findings are that rates of CIN referrals and **number of children who are categorised as CIN, have remained largely unchanged since 2012**, although there is evidence of a slight increase over time (Bunting et al. 2023; Department for Education 2019; Emmott et al. 2021; Hood et al. 2020).

Regarding trends and CP children, from 2007 onwards, there has been **a steady increase in the number of these children** in Northern Ireland, England and Wales, this was particularly evident in Northern Ireland between 2007 and 2011 (Bunting et al. 2023; Hayes and Pinkerton 2016; Hood et al. 2020). Likely contributing influences include the growing public concern surrounding child abuse tragedies ("Baby P effect") and reports of repeated failures following inspections of child protection services in Northern Ireland (Hayes and Pinkerton 2016). More recently, cuts to preventative services may mean that problems escalate to CP before a statutory response is provided (Macalister 2022; The Association of Directors of Children's Services 2022)*.

Northern Ireland, England and Wales have **comparable rates** of CP (Bywaters et al. 2020). **However, CP rates are considerably lower in Scotland** – the most recent figure being the lowest since 2006, although decreases have not been seen across all Scottish local authorities (Bywaters et al. 2020).

Snapshot and longitudinal analyses of trends and rates of children's contact with both statutory child in need and child protection services provide vital insights about need in communities and service demand, but what limited detail of children's pathways between respective parts of the child welfare and protection systems. Recent analyses of CIN and CP children by the Department for Education using internally linked social care and education data ('data and analysis' reports, (Department for Education 2018, 2019)) provide welcome insights into proportions of CIN children who progress to CP and CLA, and their characteristics and

educational attainment outcomes. However, overall, the current research literature provides limited evidence about **the nature of interventions or family support and protection services offered** (e.g. therapeutic services for children; parent education; practical support) over and above CIN, CP or CLA statuses. This means it is difficult to understand why a proportion of CIN children (about 1 in 5, Department for Education (2019)) do progress to CP status, and why others do not. The same applies to escalation of children to out-of-home care (about 1 in 10 children, Department for Education (2019).

- Welcome developments to internally link DfE data provide new opportunities for government and external analysts to understand children's CSC involvement. However, regarding both children's journeys into and through statutory services, and the effectiveness of services, datasets which provide cross-sector linked data are required. Capturing service inputs and interventions remains an on-going and complex research challenge, which would also require linking national and local/regional data.

Children entering care

Regarding children entering care, studies have consistently reported rising rates of children entering care (CLA) over the last two decades. This is thought to be driven by cuts to preventative services, as well as rising rates of child poverty (Bennett et al. 2022; Bunting et al. 2023; Elliott 2020; Hayes and Pinkerton 2016; Hood et al. 2020; Mc Grath-Lone et al. 2016; McGhee et al. 2018; Raab et al. 2023; Ubbesen, Gilbert, and Thoburn 2015; Wijedasa et al. 2018; Woods and Henderson 2018). Scotland's rate of children looked after remains substantially higher than the rest of the UK but may be accounted for by use of Compulsory Supervision Orders or permanence orders (which count children as looked after, unlike Special Guardianship Orders) (Cusworth et al. 2022; McCartan et al. 2018; McGhee et al. 2018; Raab et al. 2023). Yet rates have been falling since 2012, whereas the other three home nations have shown an upward trend from 2017 (McGhee et al. 2018).

An important finding to emerge from research using administrative data is **the divide between the North and South of England, regarding rates of children involved with CSC** (Bennett et al. 2022). Under-investment in children's statutory services is thought to be exacerbating deep rooted social inequalities. Four studies provide a body of quantitative evidence regarding disproportionately high rates of statutory social care involvement, according to region: two using CIN and CLA census data from the DfE (one via a Freedom of Information request and one using data releases[15]) (Bennett et al. 2022; Wijedasa et al. 2018) and two using Cafcass data found that rates of children involved in care/care proceedings are higher in the Northeast and Northwest of England and lowest in London and the Southeast (Broadhurst et al. 2018; Pattinson et al. 2021). While divisions in Wales are less clear cut because deprivation is more dispersed, generally, more deprived areas are concentrated in the South Wales cities and valley towns, with largely corresponding high rates of children in care. Again, these findings have been mirrored in several studies using Cafcass Cymru data (Alrouh et al. 2019; Cowley et al. 2023; Doebler et al. 2021).

Administrative data has also been used to assess the impact that the COVID-19 pandemic had on the rates of children and young people entering care in Scotland. There were fewer (38%) children entering and leaving (22%) care during the initial year of the pandemic, as of July 2021, these levels had not returned to pre-pandemic level (Soraghan et al. 2023).

[15] DfE Archives and Statistical first release data on children looked after.

- Care entry and care proceedings rates are highest in the North of England and lowest in London and the South East. This is in keeping with the wider evidence of regional economic, cultural and social inequalities (Bennett et al. 2024; Children's Commissioner 2018a)*.
- Compared to England, a different pattern has been seen in Wales. More urban areas such as Swansea and Cardiff, and valley authorities (including Torfaen, Blaenau Gwent, Merthyr Tydfil, Rhondda Cynon Taff, Neath Port Talbot and Bridgend[16]) have higher incidence rates of care proceedings and infants entering care.

[16] Doebler et al. (2021) and Cowley et al. (2023).

Rates and spend

There is limited research evidence on the relationship between spend and children in care – despite widespread concern that a reduction in preventative services is fuelling care entry.. Available studies conclude that cuts to the funding have a detrimental impact on children's social care services being able to deliver effective, early and preventative support, with some publications even going as far to suggest that this is driving demand for more severe, delayed interventions (Bennett et al. 2021). In particular, prevention spending reductions have been associated with growing rates of adolescents entering care (Bennett et al. 2021). A recent study (2023) used statistical modelling techniques to analyse the relationship between local authority preventative spending and children in need rates. Higher spending was associated with significant reductions in CIN rates. Using modelling techniques, it was estimated that local authority spending cuts to early help/family support services resulted in approximately 13,000 – 16,500 additional children being put or kept at risk of development or health impairments between 2010/11 and 2014/15 (Webb 2023). Likewise, local authorities with fewer children in care were more likely to have higher costs attached to children in need, implying there is an association between spending more on children in need and a lower number of children in care (Wijedasa et al. 2018). **There was limited research examining spend variability across local authorities.**

Regarding spend, it is difficult to establish impact on services, workforce and child/family experience from administrative data alone. However, a single mixed methods study provides insights into the challenges that local authorities face in respect of spending cuts, which include: high staff vacancy rates, high staff turnover and overreliance on agency staff (Hood et al. 2020). Combined with qualitative data, Hood et al. (2021) found that local authorities with high rates of CIN demand spend less on individual CIN children. Local authorities with high demand also tend to have higher caseloads, higher rates of CIN per social worker and are less likely to undertake longer-term work with children. We were not able to identify studies that captured the quality of services, which again may be hard to measure using administrative data alone.

Administrative data has the potential to contribute to our understanding about the costs of children's social care, however, there is too much dependence on expenditure data to inform cost calculations and limited research on the longer-term impact and outcomes. Consistent with the wider literature, we found that there are still gaps in our understanding of what makes a **service cost-effective and cost from a holistic cross-sector persepective** (Suh and Holmes 2022)*.

- **The published literature on spend and CSC services is limited, in particular, differences between local authorities.**
- A single mixed-methods study has shown that local authorities with higher levels of CIN demand and deprivation have a tendency to *ration* i.e. spend less on children in need (Hood et al. 2020).
- Capturing the impact of spending cuts on services has been addressed through combining data sources, including administrative data, but also qualitative data.

Understanding children in care, including routes into care (care proceedings)

By far the greatest volume of studies in our final sample (n=20) are focused on children in care. There is also a growing body of literature on different routes into care, including care proceedings.

Across the UK (England, Scotland and Wales), **more children enter out-of-home for the first time through a voluntary agreement with parents, than through care proceedings** (Cusworth et al. 2019; Mc Grath-Lone et al. 2015, 2020; Neil et al. 2019; Raab et al. 2023; Roe, Alrouh, and Cusworth 2021). However, within two years, although more often within two weeks of a voluntary arrangement, a large proportion (up to 63%) of these children will become subject to care proceedings (Cowley et al. 2023; Neil et al. 2019; Raab et al. 2023). Examination of children's routes into care in both England and Wales has shown that rates of voluntary arrangements have decreased since 2013/14, with rates of entry by care order, increasing (Alrouh et al. 2019; Cowley et al. 2023; Hood et al. 2020; Mc Grath-Lone et al. 2016; McGhee et al. 2018; Pattinson et al. 2021). Similar work in Northern Ireland also found a rise in care order applications between 2007/08 to 2012/13 (Hayes and Pinkerton 2016). In contrast, the number of children entering care under a voluntary agreement in Scotland has remained more stable (Raab et al. 2023).

Changes in children's routes into care, and the greater use of care proceedings, has been attributed to concern that voluntary arrangements were being used inappropriately, although there remains considerable debate about the respective benefits or otherwise, of these different routes. There has been considerable judicial criticism of the 'misuse and abuse' of section 20/76 (England/Wales) by local authorities (Hodges and Bristow 2019)*. However, resolving debates about entry to care has been arguably, hampered due to a lack of analysis of child outcomes in respect of route of entry to care. Only one Welsh study focused on infants has examined the outcomes of different routes to care entry, finding greater rates of reunification in cases of care agreed on a voluntary basis with parents (Cowley et al. 2023).

- The majority of children enter care for the first time through a voluntary arrangement, however, within a short space of time, an application for an interim care order is frequently made by local authorities.
- In England, Northern Ireland and Wales, the number of applications for care orders has increased while voluntary arrangements have decreased. Whereas in Scotland, the number of voluntary arrangements has remained stable.

a. Placement types, duration and stability

In the UK, the majority of children are placed in foster care, while a minority are adopted. **In more recent years, children are increasingly being placed in family type settings**, and first placements are becoming longer (Mc Grath-Lone et al. 2016). More recently, studies using population-scale Cafcass and Cafcass Cymru data have accelerated insights into the legal order (placement) and outcomes of care proceedings, **indicating considerable variation between courts and region** (Alrouh et al. 2019; Broadhurst et al. 2018; Cowley et al. 2023; Doebler et al. 2021; Pattinson et al. 2021).

England and Wales have seen **a decrease in the number of adoption plans** (30% down to 15%) over a five-year period (2009/2010 vs 2014/2015), this has been supplemented by the near doubling of children subject to special guardianship orders (13% to 24%) (Dickens et al. 2019). Therefore, a significant trend is the marked increase in SGOs and decline in adoption for England and Wales. Previous work has discussed the use of SGOs in detail and concluded there is a lack of robust longitudinal evidence for children placed under an SGO aside from placement stability, with calls for greater holistic knowledge about SGO children's outcomes (Harwin et al. 2019)*.

A number of studies (n=6) have explored **the profiles of children in specific placement types**. The literature investigating children in **residential care** settings in England and Wales has consistently found that this is a cohort of predominantly male adolescents, with high levels of recorded SEN and criminal warnings or convictions (Department for Education 2016; Elliott, Staples, and Scourfield 2018; Schoenwald et al. 2022b). These children often remain in care much longer (median 3.6 years compared to 1.6 years of all children in care) and experience placement instability (6.7 mean number of placements). Lastly, children referred to **secure accommodation** were mostly aged 14 – 16 years with challenging behaviours, including self-harm. Two in every five children received a secure accommodation referral because they were perceived as a danger to themselves. This body of literature includes studies which combine quantitative and qualitative data. For example, a study by Williams et al., (2020), which included a qualitative element, confirmed high levels of abuse, neglect, bereavement and being a victim of crime among children in secure accommodation. Almost half of the children and young people were victims of sexual exploitation, at risk of self-harm or diagnosed with a mental health condition.

A series of reports by the Children's Commissioner (England) using the CLA census and NPD (held by DfE) has established that **placement instability** remains a consistent issue, with around 1-in-4 children experiencing two or more placements across two years (Children's

Commissioner 2017, 2018b, 2019, 2020). However, on closer examination while rates of placement instability remain largely the same for adolescents, the number of younger children with two or more placements is rapidly rising (up 15%) (Children's Commissioner 2020). Placement instability appears to be more common among children whose first placement is in secure/specialist residential placements (25.5%) or children's homes (16.7%), while placement with kinship carers offers greater stability (Children's Commissioner 2020; Cusworth et al. 2019).

Studies do not always get to the detail or quality of care as an intervention, rather they tend to treat care as a single exposure; notwithstanding the importance of studies which have examined placement type, duration and stability. However, very few studies **go beyond an 'in care' analysis**, despite Mc Grath-Lone et al. (2020) reporting differences in 'types' of care depending on duration, timing of care placement, number of placements, entry route into care (legal status) and who they are placed with.

For-profit outsourcing of privately provided care is growing (up 8% between 2016 and 2019),(Children's Commissioner 2020) despite evidence that this has resulted in more children being placed outside of their home local authority and long-term placement instability (Bach-Mortensen, Goodair, and Barlow 2023). While this may be appropriate in certain cases, e.g. for specialised treatment, **43% of children were placed out of area despite guidance strongly recommending local authority placement**.

- Consistent with existing literature, we found that children's characteristics, including age, sex, ethnicity, emotional and behavioural difficulties and SEND are influential factors for type of placement and placement stability (Boddy 2013; Munro and Hardy 2019)*.
- **Type of placement is a critical factor that affects placement stability**. Children placed with relatives or friends are less likely to experience placement changes compared to children placed in non-familial care such as residential care. **Children's pre-care characteristics are however a key factor in placement decisions**. Findings from studies using administrative data are broadly consistent with the broader mixed-methods literature (Boddy 2013; Rock et al. 2015)*.
- In some cases, placement moves may be in the best interest of the child, however, there is a high proportion of children who experience multiple placement moves, **with a concerning increase in instability for younger children in England**. Frequent moves has been shown to have a detrimental impact on children's long-term outcomes (Smith 2022)*.

- More permanent placements such as kinship care and adoption appear to be associated with better outcomes including mental health and educational attainment compared to other types of non-parental care. Again, this is consistent with the broader literature (Macalister 2022; Smith 2022)*.

b. Child reunification following a care episode

The planned reunification of children with their parents, wherever safe and desirable, is a key objective of children's social care. However, local authority reunification practices continue to be under-resourced in comparison with other permanency routes (Hood et al., 2022)*. Survey data supports this assertion. One study found that 56% of council respondents do not have a reunification policy or strategy in place, and only 19% have a standalone reunification team (Ford and McKay 2024)*.

Reunification also has a relatively high care re-entry rate. Estimates vary between studies, but with researchers citing breakdown rates of up to 35% (Ford and McKay 2024; Hood et al. 2022)*. There is also some concern that fewer children are returning home from care, which in part explains, a larger in-care population (Hood et al., 2022)*.

Regarding reunification, four studies were identified (n=4). Studies have identified the following factors as impacting successful/unsuccessful reunification: **age is a key factor** in successful reunification, with younger children less likely to re-enter care following return home (<12 years). If a child has previously been in care and **experienced a failed reunification,** this reduces the likelihood of a future successful reunification. Other family factors associated with failed reunification include disability in a parent or child, substance misuse and domestic violence/abuse. In terms of services, **a planned approach to reunification and effective family support is associated with more stable reunification** (Cusworth et al. 2019; Department for Education 2010; Goldacre et al. 2022; Neil et al. 2020). Maltreated children are less likely to leave care than children who were looked after for other reasons, most likely due to risk of further harm. However, for those who remained in care, outcomes were better in regards to stability and well-being (Department for Education 2010). There are some inconsistencies in how reunification is defined, as well as study populations, which may account for some inconsistencies in findings from this small body of literature. For example, Neil et al., (2020), based analysis on data from a single local authority, whereas Goldacre et al., used data from all local authorities in England. In terms of definition, it is not entirely clear from studies which

children are included in study populations, for example, there is a difference between planned reunification following a care episode, and a young person simply deciding to return home after leaving care. Supporting effective contact (family time) between children in care and their parents is key to planned and successful reunification. However, the subject of contact has not been examined, largely because this information is not readily available within administrative data.

- Certain factors such as age (older children), disability (child), and care history (high number of placement moves) are associated with reunification instability. These findings support the need for careful planning and considerations to enable a successful return home (Ford and McKay 2024)*.
- Quantitative studies of reunification are limited in the context of a far larger volume of studies on children in care, with key elements of practice, such as support for contact (family time) difficult to capture through national datasets.

How have studies captured outcomes of children's social care involvement?

Studies identified in this review have focused on a range of outcomes including health, education and criminal justice. There has been considerable progress made in devising measures for and capturing children's educational and mental health outcomes, **but more limited progress in respect of physical health and criminal justice outcomes.** Two of ADR England's flagship pre-linked datasets the Longitudinal Education Outcomes (LEO) and Education and Child Health Insights from Linked Data (ECHILD) have been used to examine health and educational outcomes.

Educational outcomes

A large proportion of the studies identified focused on the **educational outcomes of children involved in children's social care services**. These studies were prominently from England, using the DfE National Pupil Dataset (NPD), a key educational dataset also containing information about children services including children in need and children looked after.

a. Absences, exclusions and school moves

Several studies have shown that children in receipt of children's statutory children's social care services are more likely to experience **mid-year school movements**, **be unlawfully (pushing out/off-rolling[17]) excluded from school or be absent,** predominantly those with SEND (Children's Commissioner 2020; Fleming et al. 2021; Jay et al. 2022). Change of schools, was also predominant among the UASC population, at almost four times the rate of the general population and other CSC groups (CIN and children in care) during the two years prior to exams (aged 14 – 16 years) (O'Higgins 2019). High rates of exclusion and **not being enrolled** have also been observed in CIN, CP and CLA cohorts, when compared to children in the general population (Jay et al. 2022, 2023).

[17] This is the practice of removing a pupil from school without using a formal, permanent exclusion or by encouraging a parent to remove their child from school. The removal is in the best interests of the school rather than the pupil.

b. Attainment

Multiple studies have reported **educational disadvantage regarding attainment** among children involved with statutory children's social care services, when compared to the general population. Poorer educational achievement at each Key Stage, regarding the General Certificate of Secondary Education (GCSE) or Scottish Credit and Qualifications Framework (SCQF level 3) at ages 14 – 16 (known as Key Stage 4 (KS4) in England/Wales), has been observed among cohorts of CIN or CLA children (Berridge et al. 2020; Department for Education 2019; Fleming et al. 2021; Luke, Sinclair, and O'Higgins 2015; Sinclair et al. 2020; Stewart, Dundas, and Leyland 2017; Teyhan et al. 2019).

Progress and attainment appear to be worse for CLA children, than CIN and CP children, suggesting that either CLA children have experienced greater educational disadvantage pre-care, or care is not moderating these difficulties, once children are looked after (Berridge et al. 2020; Luke et al. 2015). Those in need of social care services were up to 50% less likely to achieve English and maths GCSEs, this was evident if they were in need in the four years leading up to exams. A notable study explored the educational trajectories of CIN or CLA. Analysis revealed that both groups of children were already behind their peers at KS1, despite 79% of the sample, *not* being in care. Often, these children were on problematic trajectories[18], achieving low attainment at KS4 (Sinclair et al. 2020).

Other studies have found more promising results, a recent study found that up to 52% of CLA made considerable progress (i.e. 'caught-up') when in favourable conditions, including having a stable placement two years prior to KS4 examinations, and schools 'impact'[19] (Sinclair et al. 2022). In explaining contrasting findings, a key issue is whether researchers have, or have not, included children excluded from mainstream schooling. To expand, Luke et al., 2015, found that just over a third of CIN (35%) and CLA (39%) were not in mainstream schools. Omitting these children from study populations, reduces the educational attainment gap. Other contributory factors regarding lower attainment, include gender (male), ethnicity (White British or Traveller), SEND, school exclusions, absences or school changes (Berridge et al. 2020; Luke et al. 2015; Sinclair, Luke, and Berridge 2019).

[18] These children (CIN and CLA) are already performing worse at KS1 compared to an unmatched comparison group, and continue to have a negative performance at KS4. The 'education gap' continues to widen between KS1 and KS4, meaning CIN and CLA fall further behind the general population.
[19] Schools vary in their impact that they have on children involved with CSC. Some schools i.e. 'good schools' had more of a positive impact on attainment, however this research did not investigate what brought about these positive outcomes.

Instability and discontinuities in care are risk factors for educational progress and outcomes; children who only have one period of care or fewer placement changes are more likely to attain better GCSEs/SCQF, attend 'other' education[20], KS5, higher education and be employed compared to those who re-enter care (Berridge et al. 2020; Department for Education 2022c; Fleming et al. 2021; Scottish Government 2023). This is most likely explained by the detrimental impact of school changes because of placement change. There is strong evidence to support the protective factor that stable care can provide. Six studies revealed that being in care for a longer period was conducive to children's educational progress and post-secondary activity. They were more likely to achieve higher at General Certificate of Secondary Education (GCSE) during Key Stage 4 (KS4), as well as remain in higher education or become employed compared to those who entered late (Berridge et al. 2020; Department for Education 2022c; Sebba et al. 2015; Sinclair et al. 2020, 2019; Sutcliffe, Gardiner, and Melhuish 2017).

Placement type may also affect outcomes, although it is important to note that this may be caused by differences in the characteristics and pre-care experiences of children in these placements, as discussed in the previous section. On average, children in foster care or kinship had higher rates of attainment (Department for Education 2022c; Scottish Government 2023; Sebba et al. 2015), with children subject to a SGO attaining better KS4 results than all children in care (26% vs 20.9%) (Schoenwald et al. 2022a). However, to a certain extent, this may reflect the placement length and stability. Conversely, those placed in **residential care had poor educational outcomes**. Schoenwald et al., (2022) found that only 7% of children in residential care achieved an Attainment 8 score of at least 30 (national average for children with SEN) compared to 33% of all children who had been in care (Schoenwald et al. 2022b).

In keeping with these findings, linkage of the Avon Longitudinal Study of Parents and Children (ALSPAC) cohort to the NPD showed that children in need and children looked after were more disadvantaged than children in the general population, educational performance was lower (<15% passed with 5+ GCSEs compared to >50% of their peers). These findings remained when controlling for the higher rates of SEN, disability and persistent absences (Teyhan et al. 2019). Together, with the studies discussed above, this may suggest that adolescents entering care may have more challenging behaviours or, equally, that children who enter care at a younger age have left the system (e.g. adoption, SGO). A single contradictory study showed higher rates of underperformers (bottom 10% of cohort) at Key Stage 1 (KS1) and Key Stage 2 (KS2) reading and maths scores among young people who entered care before 13 years old compared to young

[20] DfE categorisation includes 16 – 18 year olds in apprenticeships (any level) and classroom learning at level 2 or below.

people who entered care aged 13 – 15 years (Children's Commissioner for England 2021). There is clear evidence examining GCSE attainment, and although important, arguably other educational outcomes are also relevant and should be examined.

- CLA (10.4%) were at the highest risk of not being enrolled for one year or more by year 11, followed by CP children (9.4%), then those with a history of CIN (8.1%). However, the proportions of children not enrolled for more than one year, are concerningly high across all groups (Jay et al. 2022).
- Similar research has found that children who enter care are more likely to be missing from a school term census (i.e. not enrolled in school) compared to adolescents not in involved with children's statutory social care services. This was particularly prevalent in the years leading up to care entry (Children's Commissioner for England 2021; Fleming et al. 2021).
- Fixed and permanent exclusions are somewhat common among CLA (Fleming et al. 2021; Schoenwald et al. 2022b), and may explain a substantial proportion of school attainment (Fleming et al. 2021; Sebba et al. 2015).
- However, closer inspection of entry into care and trajectories of attainment suggests that the duration in care appears to provide some protection against absences and exclusions. Children who enter care at a younger age (KS1 and KS2) had comparable rates of unauthorised absences and exclusions to controls, and lower rates than children in need. Whereas children who entered care later (KS3 and KS4) resembled absences of children in need (Sinclair et al. 2019).
- Children involved in children's statutory social care services have been shown to consistently perform worse than their peers on all education outcomes, including attainment, absences, exclusions and school moves (Berridge et al. 2020; Department for Education 2019; Fleming et al. 2021; Jay et al. 2023; O'Higgins 2019; Sebba et al. 2015; Teyhan et al. 2019).
- Evidence is less consistent when examining differences between CIN and CLA. Some studies have shown that CIN have worse outcomes than CLA (Department for Education 2019; O'Higgins 2019; Teyhan et al. 2019), while others report the opposite (Berridge et al. 2020; Jay et al. 2023; Sinclair et al. 2020).
- These differences may be partly explained by age at entry and duration in care. Children who enter care at a younger age and who are in care for longer (12+ months), tend to perform better than children who enter care later or for a short period (<12 months) (Berridge et al. 2020; Luke et al. 2015; Sebba et al. 2015; Sinclair et al. 2020, 2019; Sutcliffe et al. 2017).

- **Evidence is inconsistent regarding ethnicity and educational attainment**. Some studies have found that, in both the CIN and CLA populations, particularly Travellers or White British perform worse than their peers (Berridge et al. 2020; Luke et al. 2015; Sinclair et al. 2020; Sutcliffe et al. 2017). Contrary to this, one other study reported that ethnicity was not a predictor of educational attainment (Sebba et al. 2015).

c. Special educational needs and disabilities (SEND)

It is also important to consider the association between SEN/SEND and educational attainment. SEN/SEND support is an indicator of underlying needs which may be associated with poorer educational achievement. Studies using data from the English NPD (n=5) and the Scottish pupil census (held by ScotXed, n=1) and **have consistently demonstrated that children involved with social services are more likely to receive SEN support than comparison groups, with considerably higher rates among CLA compared to CIN** (Berridge et al. 2020; Children's Commissioner for England 2021; Fleming et al. 2021; Jay and Gilbert 2021; Luke et al. 2015; Sebba et al. 2015). This may explain why children with SEND, again identified using the NPD, are more likely to be excluded and less likely to be enrolled in secondary school education, this was particularly evident when the child was also CIN or subject to a CP (Jay et al. 2022, 2023). When SEND is taken into consideration, the 'attainment gap' is significantly reduced although it still exists (Sebba et al. 2015; Teyhan et al. 2019). Others have attributed high levels of SEN to deprivation, SEN was more common in more deprived areas among CLA (Fleming et al. 2021). Unexpectedly, this was not the case for a sample of UASC, whereby GCSE exam scores (in the NPD) were comparable between UASC with or without SEN (O'Higgins 2019).

- There is a substantially higher proportion of children in care and children in need identified with SEN (Children's Commissioner for England 2021; Fleming et al. 2021; Jay and Gilbert 2021; Luke et al. 2015; O'Higgins 2019; Sebba et al. 2015; Sinclair et al. 2020, 2022, 2019) or SEND (Berridge et al. 2020; Teyhan et al. 2019) compared to those in the general population.
- Both SEN and SEND were also more common among children in care, particularly those in long-term care (12+ months) compared to children in need (Berridge et al. 2020; Children's Commissioner for England 2021; Luke et al. 2015; O'Higgins 2019; Sebba et al. 2015; Sinclair et al. 2020, 2022).
- The highest proportions of SEN among CLA were behavioural, emotional and social disorders and learning difficulties; whereas autism spectrum disorder and physical,

sensory or other disabilities was highest among CIN. However, there was variation in the most common types of SEN depending on the child's type of care intervention, duration of intervention and their age at the time of SEN provisioning (Berridge et al. 2020; Fleming et al. 2021; O'Higgins 2019; Sebba et al. 2015; Sinclair et al. 2020).

- **Fewer studies have analysed children with disabilities**, but those that have shown it is associated with poorer educational outcomes (Sebba et al. 2015). Some studies include disability as a separate category from SEN, while others include as part of SEN.
- A single study report limited data recording i.e. missing data of disabilities and learning difficulties (O'Higgins 2019).

**For a more in-depth analysis of research quality issues and educational outcomes see Jay et al., (2019).*

Health outcomes

There are a comparable number of studies examining the health outcomes of children in receipt of statutory children's social care services. Although there has been considerable national disquiet about barriers to accessing health data, progress has been made in respect of linking health and CSC data. Of the work to date, there has been **a greater focus on children mental health, than physical health.**

Studies across all four nations have reported **elevated rates and risk of self-harm and mental health problems including hospitalisation and prescriptions for medication (such as antidepressants) among children involved in care proceedings or children looked after** (Allik et al. 2022; Fleming et al. 2021; Griffiths et al. 2022; Hiller et al. 2023; McKenna, O'Reilly, and Maguire 2023b; Phillips et al. 2023; Rodrigues 2004).

Factors such as placement stability, duration, type of placement, and the level of child vulnerability are thought to affect rates of poor mental health: children looked after have the highest rates of mental health need (13.7%), followed by children in need (4%) and children with no involvement with CSC (0.7%) (McKenna et al. 2023b).

It has been hypothesised that higher rates of poor mental health are caused by placement disruption resulting in children being less likely to complete treatment or not having consistent advocates to support referrals, while others have argued that this may be explained by the CLA cohort being an older population (Cusworth et al. 2019; McKenna et al. 2023b).

Several studies (n=7) have made use of the mandatory Strengths and Difficulties (SDQ) screening tool to measure emotional and behavioural health as part of the CLA return (Baldwin et al. 2019; Cocker, Minnis, and Sweeting 2018; Cousins, McGowan, and Milner 2008; Cousins, Taggart, and Milner 2010; Hiller et al. 2023; Phillips et al. 2023; Taggart, Cousins, and Milner 2007). Local authorities are required to ensure that the main carer for children looked after completes the questionnaire annually[21]. The same study found that around half of all children screened had abnormal or borderline scores, a finding which was also replicated in Northern Ireland (Cocker et al. 2018; Cousins et al. 2008, 2010). However, SDQ scores have remained consistent over 7-years which suggests that there have been no improvements in mental health (Cocker et al. 2018). Expanding upon this, a second study found that more than half (52%) of children with mental health referrals were either turned away from treatment or had treatment breakdowns, with placement instability a known barrier (Phillips et al. 2023). Interestingly,

[21] Despite this, Cocker et al., (2018) found that SDQ completeness is relatively poor (58.3%)

factors such as earlier entry into care and separation from siblings was associated with specific externalising (conduct problems and hyperactivity) and internalising behaviour (emotional problems and peer problems) profiles (Hiller et al. 2023). Lastly, work in Northern Ireland demonstrated that CLA with learning disabilities were more likely to have mental health problems than CLA without learning disabilities (77.1% vs 49.6%) (Taggart et al. 2007).

Self-harm (12.7%) and suicide (10.3%) are prevalent among adolescents in state care (Cousins et al. 2008). These risks persist over the lifetime, excess mortality has also been observed up to 42 years later among those who have been in care. These deaths are often avoidable deaths and have been attributed to mental and behavioural causes (Murray et al. 2020a). Comparable findings have been observed among care leavers in Northern Ireland and Scotland, whereby more than half (68% and 58.2%) of all deaths were due to avoidable external causes such as accidents and suicide compared to 41% in the general population (Allik et al. 2022; Fleming et al. 2021; McKenna, O'Reilly, and Maguire 2023a).

Physical health: Health difficulties extend to physical health, however, the literature is far more limited. Children with adverse social circumstances and those looked after are more likely to have dental problems (NHS Scotland primary care dental and Scottish Morbidity Records[22]) (10% general population vs 23% CLA) (McMahon et al. 2018), and experience elevated and repeated risk of hospitalisation for any cause, injuries and poisonings (2% general population vs 9% CLA) compared to the general population (Scottish Morbidity Records) (Allik et al. 2022; Fleming et al. 2021). Disruptions to health care were particularly evident during the COVID-19 pandemic, whereby children in receipt of CSC had greater reductions in outpatient attendances (-290 vs -225 per 1000 child-years) and planned hospital admissions (-36 vs -16 per 1000 child-years), as demonstrated through use of the ECHILD dataset (Mc Grath-Lone et al. 2022a). Although studies report asthma, skin conditions such as eczema, and acute conditions such as common infections and dental health problems, as being common problems among children looked after (Rodrigues 2004)[23], when using Scottish Morbidity Records the prevalence of asthma, skin conditions and diabetes (type 1) was similar to children in the general population, yet children looked after were more likely to be hospitalised for conditions that can be managed (Allik et al. 2022; Fleming et al. 2021). Given the excess findings of maternal alcohol misuse, it is expected that CLA in Northern Ireland were at greater risk of foetal alcohol syndrome (32.6

[22] Contains information on hospital admissions in Scotland.
[23] Health data via case notes from statutory medical examinations.

cases per 1000 births) than the UK general population (0.07 cases per 1000 births) (Cousins and Wells 2005)[24].

Other studies report positive findings across a range of health indicators, including evidence of up-to-date vaccines using the National Community Child Health Database among children in receipt of care and support from CSC in relation to a comparison group in Wales (Bailey et al. 2023). Children looked after in England also have more intensive health visiting than their peers, with more frequent face-to-face contacts (Fraser et al. 2022). Both sets of findings are likely to be attributed to the additional health assessment and interventions for children receiving services.

Lastly, higher rates of teenage pregnancy among care leavers compared to non-care experienced peers have been reported (Allik et al. 2021; Sacker et al. 2022). It has been suggested that this may be due to preference of parenthood rather than unemployment, although it is likely to be more complicated than this, other contributory factors include high levels of family disruption (Sacker et al. 2021). There is also some evidence which demonstrates that adverse health issues remain at 30 years follow-up among care leavers (Murray et al. 2020b), particularly for children who were placed in residential care (Meltzer et al. 2008).

- Of work to date, there is an overwhelming focus on mental health (n=14). All of the studies we identified involved children in care or care proceedings (n=14), **with only two studies also including children in need (n=2).**
- Half of these studies utilised the Strengths and Difficulties questionnaire within the CLA return (n=7) to identify mental health problems, the most frequent being emotional or conduct problems.
- There were only a small number of studies which linked social care data to health care data (i.e. primary or secondary care records) to explore mental health: two in Northern Ireland and Scotland, and one in Wales.
- Over-representation of children in care with mental health problems may be explained by a number of factors, including placement instability, but also high levels of children with disabilities and developmental delays (Baldwin et al. 2019; Taggart et al. 2007).
- Studies report a concerning finding that children looked after experience delay or difficulties in accessing specialised mental health services (Cusworth et al. 2019; Phillips et al. 2023; Rodrigues 2004), despite the benefits that mental health interventions

[24] This study used case file data to obtain medical diagnosis of foetal alcohol syndrome.

(HeadStart) in an educational setting can provide for children who have been in care (Cattan et al. 2023).

- Poor mental health contributes to decisions around placements and reunification (Baldwin et al. 2019; Cusworth et al. 2019; McKenna et al. 2023b), and is interrelated with placement instability (Hiller et al. 2023).
- Only four studies examined physical health among children involved with CSC. Dental cavities and hospitalisation for conditions such as diabetes (type 1), asthma and epilepsy were higher than the general population. Three of the four studies were Scottish and linked to NHS health data, the remaining English study identified health conditions through data at the time of statutory medical examination.
- Exploratory work suggests that care experienced women are more likely to have teenage pregnancies compared to non-care experienced women (n=3).
- Information related to disabilities is often missing (up to 21%) from census data (Cusworth et al. 2019; O'Higgins 2019). This data is vital given that these children may need additional support.
- Administrative data and mixed methods approaches also demonstrate concerns regarding the underdiagnosis/misdiagnosis of foetal alcohol syndrome (Cousins and Milner 2006; Cusworth et al. 2019).
- Poor mental and physical health persists up to 30 years later for care leavers, with one in three self-reporting a long-standing illness (Meltzer et al. 2008; Murray et al. 2020b).

Criminal justice outcomes

There has been limited analysis of criminal justice outcomes for CSC children. An initial report linking data from family justice court cases (FamilyMan) to the Police National Computer (PNC) dataset identified poorer outcomes for children involved in public law cases. These children had higher rates of youth offending and were more likely to be prolific offenders (in receipt of four or more cautions or convictions), engage in violent crimes and start offending at a younger age compared to the general population (Forty and Sturrock 2017).

These findings have also been replicated among children involved with CSC using the newly linked MoJ-DFE dataset (Department for Education 2022a; Hunter, Francis, and Fitzpatrick 2023). They reported higher rates of criminal cautions, offences and sentencing among children known to social care services compared to those without contact. In addition to this, both studies also found that care-experienced children were more likely to be juvenile prolific offenders and receive harsher sentences compared to children with no CSC involvement. This initial study found involvement with CSC often preceded the first offence (CIN: 53%, CP: 42%, CLA: 52%) (Department for Education 2022a).

Hunter et al., 2023 expanded this work, to highlight differences in involvement across ethnic groups; although there was an overall reduction in the number of care-experienced children involved in the criminal justice system during the study period, this was less pronounced for ethnic minority groups compared to White care-experienced children. Black and Mixed care-experienced children were also nearly twice as likely to receive custodial sentences compared White care-experienced children (Hunter et al. 2023). Another study limited to a single prison in Wales demonstrated that 22% of prisoners self-reported being CLA using administrative data collected by the Do-IT profiler screening tool. Compared to non-CLA prisoners, the CLA cohort were more likely to have substance misuse problems, neurodisabilities such as ASD, ADHD and developmental co-ordination disorders (Kent et al. 2023).

- **The literature concerning dual system involvement (CSC and criminal justice) is limited** (n=4), despite the fact that evidence indicates heightened risk of offending and prolific offending, together with some evidence of bias in criminal justice punishments for CLA children. All of these studies involve children who are care experienced or involved in family court proceedings. Three of the four studies focus on youth offending, with the fourth study exploring the characteristics of care-experienced adults in prison.

- Compared to the general population, CLA children have higher rates of cautions or sentencing for an offence (Department for Education 2022a; Hunter et al. 2023; Kent et al. 2023).
- For children in need, the proportion of offending was higher than CLA. However, **CLA had higher proportions of serious violence offences** than CIN (10% vs 6%) (Department for Education 2022a).
- **Children who were cautioned or sentenced for a serious violence offence were more likely to have had an Education, Health and Care plan** before their first serious offence (Department for Education 2022a).
- Age at entry into care, ethnicity, type of placement, placement stability, SEN, school exclusion and educational attainment are risk factors that are associated with youth justice involvement (Department for Education 2022a; Forty and Sturrock 2017; Hunter et al. 2023).
- **Vulnerabilities that present in CLA often persist into adulthood**. Care experienced adults in prison are more likely to have neurodisabilities, substance use, unemployment and homelessness (Kent et al. 2023).

Post-16 outcomes and care leavers

There were very few studies which examined the outcomes of care leavers during their adulthood. Of those that did, outcomes immediately post-care or during early adulthood (<25 years) predominantly focused on post-16 higher education and/or involvement in the labour market (Department for Education 2021b, 2022c; Harrison 2020; Harrison et al. 2019, 2023). On the other hand, a series of studies using linked census data examined health and educational outcomes into adulthood but were limited in data quality (Murray et al. 2020b, 2020a; Sacker et al. 2021, 2022).

a. Post-16 outcomes

Evidence supports differences in the educational pathways for children involved with social services. Compared to peers aged 16 – 18, a higher proportion of children in need, subject to a child protection plan or children looked after attend 'other education' settings (Department for Education 2022c). For children in need during KS4, they were three times less likely to go on to study A levels, and five times less likely to enter higher education at 18 (Department for Education 2019).

b. Post-16 education and employment

There is a consensus that children who have been looked after by the state are more likely to be 'not in education, employment or training' (NEET), in particular, that they are less likely to attend higher education (Department for Education 2021b, 2022c; Fleming et al. 2021; Harrison 2020; Harrison et al. 2019, 2023). Despite this, some evidence suggests that a high proportion of care leavers (67.9%) engage in some form of further education (up to 20 years and 7 months), although this was more likely to be in FE college rather than sixth form school (KS5) (Harrison et al. 2023). Likely impediments include disruptions to education or negative experiences which resulted in low educational attainment at 16 years (e.g. absences, exclusions or school moves), higher rates of mental health issues, SEN and disabilities and less meaningful relationships with the young people and adults around them (i.e. people they did not want to let down). This translates into lower earnings on average, lower rates of positive destinations (education, employment or training) and higher out-of-work benefits (Department for Education 2021b). On a positive note, one study using the Longitudinal Educational Outcomes (LEO) dataset found that relatively few (5.7%) care leavers were unemployed for a long period (3 months or more), which may suggest that insecure job opportunities are barriers (Harrison et al. 2023).

Unlike pre-16 education, analysis of the LEO dataset showed that components of care (e.g. placement stability, duration) did not appear to influence care leavers' outcomes at 20 years old, although a second study did report marginally better education and labour market outcomes for those in care for longer periods compared to shorter periods (Department for Education 2021b; Harrison et al. 2023). Of note, the type of last placement did have some effect. Those in foster care were more likely to be studying compared to those in a secure unit, while those in kinship care were more likely to have stable work (Harrison et al. 2023).

Two studies showed that deprivation and ethnicity also impacted educational and economic activity; White and Mixed ethnic groups had the lowest rates of education, employment or training, while both studies showed Black care leavers had lower economic activity but were more likely to be long-term unemployed. Deprivation was also associated with worse labour outcomes (Department for Education 2022b; Harrison et al. 2023). Other factors such as attendance and exclusions from secondary school are likely to play an important role in post-16 outcomes, but no research has explored this in detail.

Examination of care leavers in Higher Education showed that these challenges persist when compared to non-care experienced graduates. Care leavers with degrees were less likely to

achieve a first or upper second-class degree, a slightly smaller proportion were in some form of work post-graduation (72.5% non-care experienced vs 68.1% care-experienced) and professional roles were less common (77% vs 70.7%). By contrast, salary profiles were promisingly similar. It is important to note that differences in the subjects studied may account for these differences. Distinct demographic profiles were also noted, care-experienced graduates were more likely to be female, older, disabled and Black, Mixed or other Asian ethnicity, one could argue that to an extent these factors could influence outcomes (Harrison et al. 2019)[25].

- The majority of care leavers work focuses on educational and labour market outcomes (n=5), utilising the pre-linked LEO dataset (n=3) and the standalone HESA dataset (n=2). This work has consistently found that CLA have higher proportions of 'NEET' and out-of-work benefits and are less likely to attend higher education compared to the general population and CIN and those subject to a CP (Department for Education 2021b, 2022c; Harrison 2020; Harrison et al. 2019, 2023).
- Compared to CIN and CP, children looked after had lower proportions of ever attending Key Stage 5 and higher education, but higher proportions of 'Other Education' (aged 16 – 18 years) and adult full-time education (19+ years) (Department for Education 2022c).
- Attending Key Stage 5 for CIN, CP and CLA was associated with better outcomes including higher employment, higher earnings on average and lower proportion on benefits (Department for Education 2022c).
- Protective factors for attaining qualifications, including completion of a degree were being from the Black, Asian or Indian/Pakistani/Bangladeshi communities (Harrison et al. 2019, 2023), although these patterns are complex as being Black was also associated with long-term unemployment and unstable work (Harrison et al. 2023).
- There were inconsistencies around whether care components were related to care leavers' educational and labour market outcomes. One study found that children who entered care younger (aged 12 and under), had fewer placements, placed in foster care and whose latest period of care was longer (5 to 10 years) had better outcomes (Department for Education 2022c). In contrast, a second study found no relation, except for those being in foster care having more positive outcomes (Harrison et al. 2023). Although these studies both used the LEO dataset, there was a difference in the follow-up period.

[25] In support of this, work by Parsons *et al* (2023) which examined the intergenerational transmission of educational disadvantage also found that being female and ethnic minority status amongst children of care leavers was positively associated with higher educational attainment at GCSE.

- A single study showed that attending University did not alleviate these disadvantages. When comparing care experienced undergraduates and non-care experienced undergraduates, those with care experience achieved lower degrees, were less likely to be employed and were less likely to be in a professional job. However, average earnings were similar (Harrison et al. 2019).
- Poor education and labour market outcomes are likely to be associated with a combination of factors, including poor mental health and wellbeing (Department for Education 2021b; Harrison et al. 2023). Despite this, we noted that there were no studies which linked adult care leavers to health datasets. Five studies linked data between the England and Wales censuses and found evidence of poor self-reported mental and physical health up to 30 years later, although this work is caveated.

Life chances – taking a longer view of outcomes

As part of the Looked After Children Grown Up (LACGro) project, four studies utilised data from the Office of National Statistics Longitudinal Study (ONS LS) to follow-up care leavers for up to 40 years (Murray et al. 2020a, 2020b; Sacker et al. 2021, 2022). Various health and social outcomes of children looked after in England and Wales were examined. Although this work highlighted the increased risk of premature mortality due to self-harm, accidents and mental and behavioural causes; poor self-reported health (as previously discussed); and poorer socioeconomic circumstances which persisted into the care leavers 40s, it was largely caveated by its methodology. Care experience was obtained through Census data, which is recorded every 10 years and information was therefore limited: timings of out-of-home care experience were imprecise, and duration and placement movements were not available. A single study outside of the LACGro project also made use of this dataset. Likewise, they found that children in residential care were three times more likely to have died than other children (4% vs 2%, respectively) (Meltzer et al. 2008). At follow-up (30 years) they were also more likely to have no educational qualifications compared to children at home (41% vs 18%), which is likely to contribute to the evident disparity in employment (56% of children in residential care compared to 81% of children at home).

Interventions to improve child outcomes

Very few studies have used administrative data to investigate interventions or programmes designed to prevent adverse child outcomes (n=4). Preventative interventions were mostly home visiting programmes targeting at improving parenting, with two studies evaluating their effectiveness. A pilot study using a mixed methods approach, including administrative records (not stated) at birth and at 12 months, assessed the feasibility of the Parents under Pressure (PuP) programme. The programme's primary purpose was to help high-risk families with potential involvement in child protection services. 42 percent of infants whose mothers received pre-birth assessments and care pathways as part of the PuP showed improvements in the child protection status (either change from child protection to child in need or case closed due to no further concerns) compared to only 14 percent of infants in routine care (standard pre-birth assessment consisting of visits made by social workers within CSC to assess the risk of harm to the unborn/newborn baby). For those in routine care, safeguarding status either remained stable or worsened in 52% of cases compared to 26% of those receiving the intervention (Harnett et al. 2018). Other interventions included the larger Family Nurse Partnership (FNP), a service offered to vulnerable first-time pregnant adolescents. An administrative data study of >25,000 FNP participants found mothers' contact with CSC was a risk factor for FNP enrolment: a high proportion were care experienced (47.5%) or had a child protection plan (44.1%) (Cavallaro et al. 2022). Similar findings of no evidence of a difference in the number of CIN, CP or CLA were observed in a randomised controlled trial. The trial showed that children had a small advantage than those not enrolled and were more likely to have a 'good level' of development in regards to writing and reading scores compared to children who did not receive FNP. However, this advancement did not persist after reception, and at KS1 there was no difference in academic levels between groups (Robling et al. 2021, 2022)[26].

An England based study evaluated the impact of the HeadStart programme, an intervention aimed to improve mental health and wellbeing of 10 – 16 year olds, regarding educational outcomes of secondary school children in six local authorities. The impact of the policy appeared to differ between student's characteristics; the programme had no effect on student's absenteeism or academic attainment among the entire cohort, while those who had been in receipt of CSC support (CIN or CLA) were more likely to have reductions in the number of exclusions (Cattan et al. 2023). These findings may suggest that the intervention was more

[26] Full funder report and paper.

effective among children at greater risk of these behaviours to begin with. There is mixed evidence which supports the effectiveness of targeted interventions and programmes.

- Two interventions (PuP and HeadStart) have demonstrated some success in reducing the number of children who become known to children's social services and school exclusions among children in need or looked after.
- The same could not be said for the FNP, the intervention had no impact on children having contact with CSC. However, there was a small benefit to the early child's development.
- Several factors may explain why these interventions may explain why interventions do not appear to be successful. These may include small sample sizes, limited to a single local authority, a lag effect and bias i.e. vulnerable mothers with adverse experiences are more likely to be enrolled in the intervention.
- There is still much to be learned from research into interventions, it clearly has potential but is largely underexplored. For example, prospective linkage to administrative data could allow for detailed investigation into differences between families for which interventions benefitted compared to those who did not see any benefit.

The **consistent** key findings from the review have been condensed in Figure 4 overleaf.

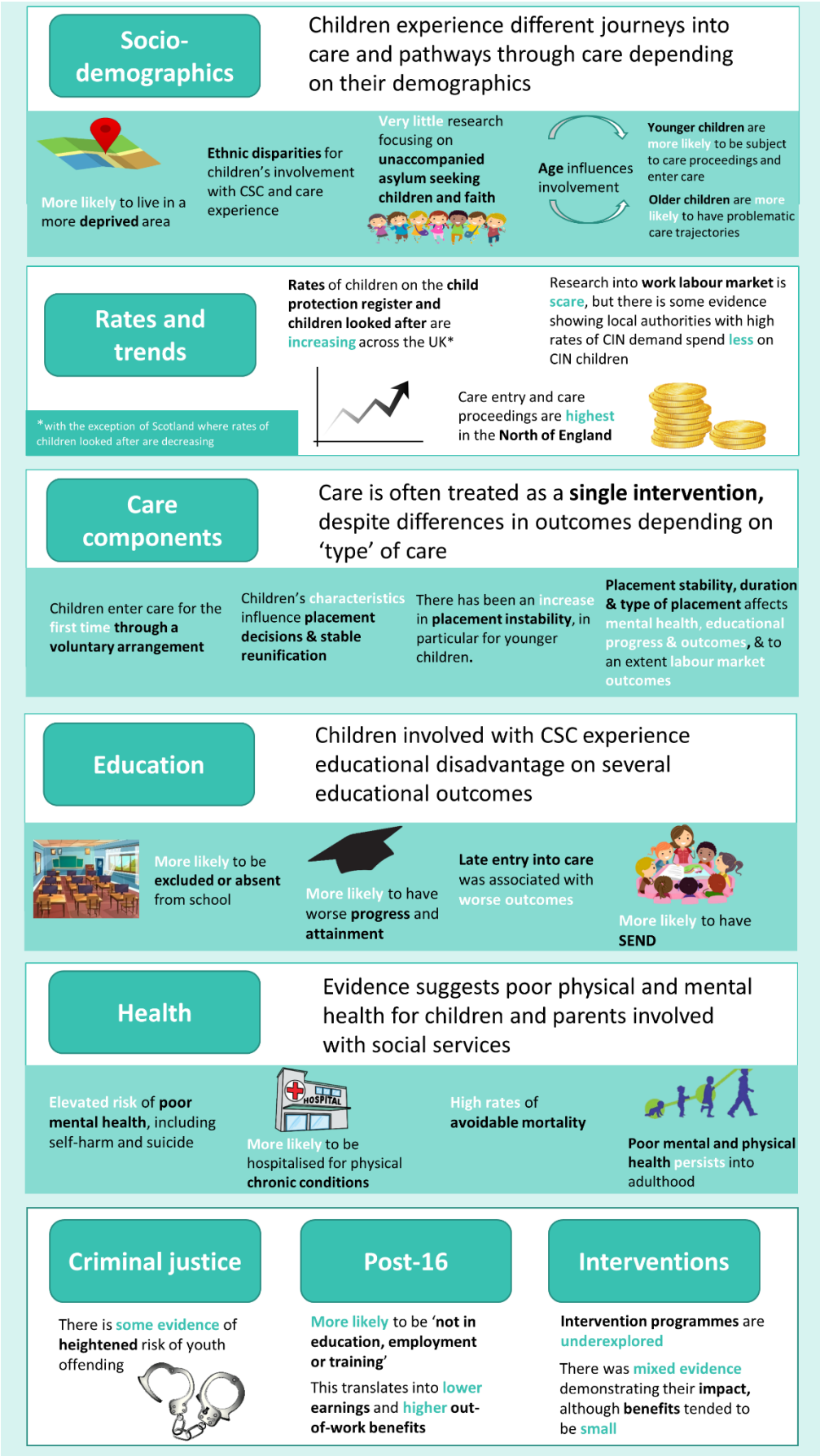

Figure 4. Overview of the consistent key findings

Discussion and evidence gaps

This review has demonstrated the strength and breadth of research which utilises routinely produced administrative data, and the contribution of this body of quantitative evidence to understanding children's involvement with CSC. Since 2000, there has been a steady growth in the number of studies using administrative data. A total of 141 studies were identified. To-date, researchers have made substantial use of local authority data, alongside the ADR UK flagship datasets to produce important findings based on population-scale data about children involved with children's statutory social care services. **More recently, researchers are developing important cross-sector insights about children** by making use of new pre-linked datasets, as well as curating novel linked datasets, in all four nations of the UK. Evidence of uptake of the linked flagship datasets and the novel linked datasets created within Trusted Research Environments across the UK (e.g., the SAIL Databank), indicate an appetite for more advanced data linkage research, and growing awareness of the importance of understanding the child more holistically. In summarising and making recommendations about gaps in evidence, we have divided our discussion into five sections, with the prevention of poor outcomes for children, the context for our discussion.

A. Bringing research more closely in line with prevention
B. Spotlight on neglected CSC topics
C. Capitalising on opportunities to advance CSC-Justice knowledge using pre-linked ADR UK flagship datasets
D. Inclusion and the position of minority groups in administrative data research
E. Using administrative data to evaluate CSC

In discussing gaps in evidence, we have also highlighted ongoing and new initiatives in relation to both national and regional data collection, and related research.

a. Bringing research more closely in line with prevention[27]

As stated throughout this review, the literature is currently weighted **to children in care, with significant gaps in our knowledge about CIN and CP children.** To-date, there remains a clear mismatch between an emphasis on early intervention, prevention and family support, and the scope of the current CSC research evidence. Notwithstanding a series of very helpful 'data and

[27] We use the term prevention in its literal sense whilst acknowledging in practice that thresholds can be very high for children in need and therefore miss a timely window of opportunity for prevention

analysis' reports published by the DfE focused on CIN and CP children (Department for Education 2018, 2019), significant gaps in evidence remain. For example, we know that a significant proportion of CIN children will become looked after, but we do not know enough about *why* CIN children become CLA, nor why other children do *not*. Given that in 2017/18, an estimated 1.2 million children were CIN (Department for Education 2019), it is vital that services are designed to maximise their preventative potential. At present many questions remain unaddressed, for example, are waiting lists for mental health support for children or substance misuse treatment for a parent, key factors in escalation of CIN children to CLA? To what extent is physical disability in a parent, a key factor in family breakdown? The DfE has completed excellent work to link children's CIN and CLA records in-house to produce (*inter alia*) foundational insights about the characteristics of CIN and CP children, and the proportions who become CLA (Department for Education 2019), but **only through linking data across sectors, will we now advance knowledge.**

In addition, **we need a clearer view of children's longitudinal trajectories through CSC and partner health, education and criminal justice services and what support they receive.** One of the gaps identified in the scoping review relates to the services and support children receive once they have been referred to children's social services, and meet the threshold for statutory children's services (i.e. children in need or child protection). However, data items about services are not currently included in the CIN census. The focus of this administrative data is whether there was a referral, and about periods of being a child in need. The lack of service information within the census has been highlighted for some time (see for example Holmes and McDermid 2012). The work to link administrative datasets will increase our knowledge and understanding of services provided by agencies other than children's social care, but there remains a substantial gap in relation to the type, frequency and duration of any services provided via children's social care. It is vital that further research investment is steered *upstream* to expand knowledge about CIN and CP children that will help to inform service developments.

- **The ADR UK flagship dataset ECHILD** provides research access to linked health, education and social care records for school age children. Such linkages are critical given we know that a large proportion of CIN are SEND, and that children involved with CSC also have higher rates of mental health needs. Investment in the use of ECHILD holds out the promise advancing knowledge about CIN and CP children. For details of ECHILD see: www.echild.ac.uk

- **However, a major obstacle remains regarding non-school age children.** CSC children are currently linked to their education records using their unique pupil number (UPN) which is assigned for *school-age* children. This is a major shortfall because children under the age of four are less likely to re-enter care than older children (Mc Grath-Lone et al. 2017). It also highlights the benefits of linking across different datasets, in particular, utilising characteristics other than the UPN. Further work should explore these opportunities at a national level, given the DfE and Department for Health and Social Care's focus on early years, specifically children under two years old. **This point has been made previously by a number of other authors** (*see Emmott et al., (2019), for a fuller account, and ECHILD information as above).
- Children live within households families, and hence work to link family relationships, parents and siblings, is also critical to advancing knowledge.
- Advances made across England and the devolved nations to link families and overcome limitations of CIN linkages are currently underway, and it is vital that learning is shared (e.g. SAIL).

Given the value but also limitation of national datasets built from standardised central government data, **ADR UK investment in regional linked datasets** is vital, given the additional breadth and depth of these (for example: https://www.adruk.org/our-work/browse-all-projects/linked-local-data-on-children-and-young-people/.) and their potential to generate knowledge that is not restricted to school age children.

Linked to our observations about CIN and CP children, are similar strong recommendations regarding future work on children's **CSC involvement and deprivation**. A relationship between area level deprivation and CSC involvement is consistently evidenced. Across all four nations, findings are sufficiently consistent to conclude that area-level deprivation renders families living in those areas more at risk of CSC involvement and family breakdown (CLA). **To advance knowledge, an obvious next step, is to increase research which is focused on households** (Skarda, Cookson, and Gilbert 2024)**.** Clearly there is an interaction between area level deprivation and household poverty, but at present, there is a paucity of research examining this relationship for CSC children (Clery et al. 2022)**. At the level of households, and in the context of increasing concern about family incomes given the impact of recent inflationary pressures, multiple questions are relevant**, for example questions of disposable income, debt, benefits and sanctions, housing and energy costs, additional costs of caring for children and adults with disabilities. Ongoing work exploring the feasibility of linking individuals in ECHILD to their place of residence using the Unique Property Reference Number (UPRN) is the first step towards

producing measures of household disadvantage (ADR UK n.d.). The addition of Pupil Parent Matched Data (PPMD) within the LEO dataset has great potential to provide a more detailed understanding of the environment and circumstances in which children grow up. For example, linkage of these datasets would allow researchers to link parents' tax records to their children's involvement with social services and educational outcomes. We also welcome the new poverty measure *Below Average Resources* which is being developed by the DWP (UK Gov 2024a).

Evidence is that 'deep poverty' at the level of the household is growing in the UK, including destitution (Joseph Rowntree Foundation 2022), with particularly damaging impacts on children's development and safety (Barnando's 2022; Dickerson and Popli 2016). However, we know very little about whether CSC children and their families experience deep and persistent poverty, the elements of this, and whether this is an experience which cuts across generations. Increasingly service leads argue that family poverty is a major factor in children's entry to care, but a stronger case for change would be made, if advocates had a better grasp of the scale and nature of household financial strain. Again, we are not the first to make this recommendation (Skinner, Bywaters, and Kennedy 2023). As research with a household focus is not yet advanced, drawing together key stakeholders involved with developing data resources and measures will be a first starting point, for example, Office of National Statistics, DWP etc. (Skarda et al. 2024). Learning from the international research (Doidge et al. 2017). Throughout the review we have indicated where there is consistent evidence, where the weight of evidence lies, hence in this discussion we focus on evidence gaps, with a view to informing priorities for a research agenda.

Linked to all the points made above, further analysis of **organisational spend and workforce capacity is critical**. Research evidence regarding how local authorities invest in prevention is very limited, as is empirical evidence about workforce capacity, to include, experience, vacancies and turnover (e.g. acquisition of the children's social work workforce survey). In the context of considerable concern about on-going workforce challenges across sectors and the impact on child outcomes, research needs to move beyond analysis of a single profession, towards analysis of regional systems of family support and preventative services.

b. Spotlight on neglected CSC topics

Domestic violence/abuse

A major gap in evidence concerns domestic violence/abuse. A key finding from this review is that there is **a paucity of research evidence regarding domestic violence and abuse,** despite the fact that this is a key reason why children are involved in CSC. Data and analysis reports regarding CIN and CP children found that domestic violence and abuse and mental health were the two key factors bringing children into contact with CSC (Department for Education 2019). However, beyond counting domestic violence/abuse as a vulnerability/risk factor, research is not particularly well progressed. **Blunt categories are useful as a starting point for research, but a fuller picture of the nature, severity, longevity and impact of abuse at population-scale is vital for CSC.** At present, we know that domestic homicide is increasing, at the same time, prosecutions are falling. However, we do not know how many of the 2.1 million adults aged over 16 and their children are involved with CSC. However, consistent evidence is that exposure to domestic violence/abuse is implicated in poor outcomes for children.

Domestic violence/abuse remains something of a blind spot within the ADR UK community. **There is a major challenge in piecing together and linking the scattered information about domestic violence/abuse, hence, foundational work to identify data sources and their linkages is required, bringing together relevant experts.** The ONS uses the Crime Survey for England and Wales to produce vital annual statistics. Cross-sector analysis of domestic violence/abuse using population scale data, is wanting. Data extracts from the Police National Computer (PNC) were recently made available as part of the MoJ-DfE ADR UK flagship dataset and holds promise for the investigation of domestic violence/abuse. However, it may still be challenging to collect information on this sensitive topic because it is not currently a specific criminal offence (with the exception of controlling or coercive behaviour) (Office for National Statistics 2023a). Furthermore, crime data only gives a partial picture of domestic violence/abuse because it often goes underreported. A more coherent picture could be captured through administrative data from various sources. For example, interactions with service use or support services such as Emergency Departments or accommodation services used by individuals at risk of domestic violence/abuse (women's refuges or hostels). Over time, this has the potential to map geographical regions to reveal hidden patterns, particularly relocation journeys of victims of domestic violence/abuse.

SEND

While we know that children looked after are more likely to have SEND in comparison to the general population, there is still a **large gap in our understanding of the scale of SEND and how it impacts educational outcomes** such as exclusions, school disengagement and post-16 outcomes such as employment. There is evidence to suggest that a large number of children may be undiagnosed when they start to be looked after, placing strong emphasis on the importance of each child having an EHCP (Education, Health and Care Plan[28]) needs assessment and a personal education plan (PEP) in place within a short timeframe.

One benefit of children having an EHCP is that they will have a Virtual School Head[29] assigned to them. The Virtual School exists to help children involved with CSC (CIN, CP and CLA) and care leavers to achieve their full educational potential. The Virtual School also considers what additional support can be put in place to support the child's **engagement with school**, including ensuring that carers and social workers know what their role is in helping **support positive relationships** (National Education Union 2021). However, children in care who are missing from school are becoming a growing concern, especially after the COVID-19 pandemic, because they are at **risk of becoming invisible to services**. A recent report by the Children's Commissioner for England found that children looked after are overrepresented among those missing from school (2.7%: 1.3% were educated in unregistered settings: 1.1% were not enrolled at any educational provision, and 0.3% were registered at school but with 0% attendance), particularly those with additional vulnerabilities such as **UASC and SEN** (Children's Commissioner for England 2023).

Gaps in data collection make it difficult to ensure that CLA are in school. At present, **there is no national data collection on children who are not in school**. While it is possible to identify children who disappear from school rolls using the NPD, it is impossible to determine the reason for their disappearance. To tackle this, we welcome the Children's Commissioner's recommendation for the government to fulfil its commitment to legislate a compulsory child not in school register as part of the Children Not in School Bill[30] (House of Commons 2024). **The DfE should make it a priority to collect data from schools and local authorities about**

[28] A legally binding document that supports a child or young person with SEND until they are 25 years old.
[29] The purpose of the Virtual School Head is to source advice and information to promote educational attainment, as well as ensure that there are effective systems in place to provide appropriate support in an educational setting for SEND (e.g. initiating PEP). Local authorities are required to appoint a Virtual School Head to a CLA. The Virtual School Head was extended to children in need (2021) on a non-statutory basis.
[30] In 2023/2024 the Children Not in School Bill was proposed which would introduce a responsibility for local authorities in England to maintain registers of children of compulsory school age who are not in full-time education.

education placements and their CSC involvement, to enable the monitoring of all school-aged children. To-date, **the research evidence for intervention programmes improving school attendance is weak** (Foundations 2023).

c. Capitalising on opportunities to advance CSC-justice knowledge using pre-linked flagship datasets

Family court proceedings are an integral element in children's CSC journeys. There has been very welcome progress in understanding children's involvement in the family courts (family justice) using full-service population level data produced routinely by Cafcass and Cafcass Cymru data linked to a range of other datasets, with researchers making excellent use of opportunities to curate novel linked datasets through the SAIL Databank (See Family Justice Data Partnership, a Nuffield Family Justice Observatory investment (2019 – 2024)). Given that the family courts have a significant impact on both CSC practice and make highly consequential decisions regarding the caregiver arrangements for children involved with CSC services, it is important to continue to build on this foundation. The ADR UK flagship dataset provides opportunities to further understand the position of children whose outcomes include curtailment or permanent severance of parental rights (ADR UK 2022; UK Gov 2020a).

A major blind spot lies in CSC children and family involvement in Criminal justice. Again, this is a critical issue for ADR UK, given that available evidence derived from smaller-scale studies (e.g., evidence from the family drug and alcohol treatment courts, Harwin *et al*), indicates high levels of offending among parents whose children enter care. In addition, new insights from first analyses of the MoJ-DfE flagship linked dataset also evidence concerning rates of offending among children in care and racial disparities in sentencing (Hunter et al. 2023). Regarding poor outcomes for children, offending is particularly pernicious, impacting life chances in the longer-term. Regarding parents – evidence from qualitative studies is that offending can also disrupt caregiver relationships for children, particularly where mothers receive custodial sentences as they will often be the primary or lone carer for children (Minson 2019).

d. The position of Minority Groups in administrative data research

Ethnicity

It is clear **further work is needed to improve the way that ethnicity is collected in administrative data**. There are inconsistencies in the ethnicity categories used across datasets. Currently, CSC collects limited ethnic data which is aggregated to five ethnic categories including 'not obtained', it is also remains unclear whether it is self-reported or not. There is often no incentive to confirm the ethnicity of the child, with arbitrary categories deemed a suitable response. That being said, it may not always be clear to the social worker, or parent/care giver as to why ethnicity data is collected or how it may be used, therefore they may be more reluctant to provide an answer. We also note that social workers may lack confidence to ask families about their ethnicity because it is a *personal* or *sensitive* question.

Although ethnicity data is made publicly available through the official statistics release by the DfE[31], and despite the DfE having recently published a report profiling children who enter care by ethnicity further work is needed (Department for Education 2022b). **A more holistic and longitudinal picture of the care journey is needed**. For example, it does not explore whether routes out of care and duration in care differ across ethnic groups. Although some of this information is available at a national level as part of the CLA statistical release, it would be useful to **explore in detail at a local authority level given the clustering of ethnic minorities** within local authorities.

To improve collection of CSC data, the DfE (2023) recently developed a CSC Dashboard which is being trialled on a small scale in some local authorities. As part of this, they are considering the collection of ethnicity data, it would also be extremely beneficial for DfE to consider collecting more granular categories[32]. However, it should be noted that it may not always be possible to use disaggregated ethnicity data. In order to prevent disclosure, values fewer than 6 are suppressed and rounded to the nearest 10 (England), this may limit any analysis at a local authority level. Additional qualitative work may be necessary to complement administrative data, existing or new survey data may bridge the gap.

To address concerns around poor quality ethnic data, the Health Data Research UK (HDR UK) established the Ethnicity Coding Working Group[33] to try to tackle challenges and explore opportunities in the use of administrative data to report ethnicity. Where possible, they recommend the **use of the ONS 19 ethnic group categories** (including the newly implemented

[31] https://www.ethnicity-facts-figures.service.gov.uk/health/social-care/adopted-and-looked-after-children/latest/#:~:text=White%20children%20make%20up%20the,under%2D18%20population%20(5%25)
[32] https://www.gov.uk/government/publications/looked-after-children-data-strategy/looked-after-children-data-strategy
[33] https://www.hdruk.ac.uk/news/uk-health-data-research-alliance-calls-for-action-to-improve-coding-of-ethnicity-data/

Roma category) across the four nations[34]. While the ONS Census is considered the most robust source of ethnicity information, other administrative data sources such as the Hospital Episode Statistics (HES) show similar levels of data (Office for National Statistics 2023b). This provides research within the field of social care the opportunity to include granular ethnic groups through use of the ECHILD Database. However, there are several challenges surrounding the collection and use of ethnicity from administrative data, in particular, the ethic bias in data linkage. Ethnic minorities are less likely to be linkable to other datasets (Mc Grath-Lone et al. 2021). In Wales, there has already been excellent progress to improve the data quality and completeness of ethnicity data. A recently developed longitudinal, research ready 'ethnicity-spine' compiles ethnicity from 26 different sources of data (Akbari et al. 2024).

Unaccompanied Asylum-Seeking Children

The number of children entering the care system with UASC status has peaked in recent years (Department for Education 2023b). These are an extremely vulnerable group of distinct children who are **poorly understood due to the lack of nationally collected data**. The children receiving care and support (Wales) and children looked after censuses (England and Wales) are the only definitive sources of administrative data which record UASC status that is available outside of data collected by the Home Office (obtained via a FOI), but even then, the CIN/CLA census data is limited. Taken together with the small numbers, this makes it a very difficult population to study. It was not until last year (2023) that the DfE published the proportion of UASC by placement type for the first time as part of the statistical release, and while this is progress, a much **more in-depth analysis is needed**. Key concerns such as shortage of suitable accommodation and school places, and elevated risk of mental health needs and missing UASC have previously been discussed, but are hampered by the pressure on public services (The Association of Directors of Children's Services 2016). Adding to these to growing concerns, a report by the Children's Commissioner for England found that a concerning level of data (requested data from the Home Office) vital to monitoring safeguarding processes was missing, including data related to whether any safeguarding referrals were made and whether they had visited a healthcare professional (Children's Commissioner 2023).

Religion

[34] https://www.hdruk.ac.uk/wp-content/uploads/2023/06/Draft-recommendations-ethnicity-standards-June-2023-V2.pdf

At present social workers do not collect data on the religion of young children. This would be difficult to capture because of the complexities surrounding religion. For example, children may have 'inherited'[35] their religion from their birth parents. Further research is needed to determine whether it would be possible to collect religion data in a way that it would be accurate enough to be used in analysis. We note that the ONS Census data captures religion, although again, this is likely to reflect the parent's beliefs if the child is young, and has not been used in analysis to date.

e. Using administrative data for evaluation purposes

There is a consistent body of evidence which uses administrative data to produce snapshot baseline metrics and regional differences of children involved with CSC. The recent analyses by the DfE are key examples of this type of work, and although they are very informative there is a need for research to expand upon this type of work. From the literature discussed in this review, we consistently observe that children involved with CSC have poor educational attainment and mental health, as well as how late entry into care has a detrimental impact on children's outcomes. It remains unclear as to how we tackle these issues and what care journeys look like over time. **One way in which administrative data can be put to good use is as an evaluation tool** (Office for National Statistics 2023c), either through investigating data availability and comprehensiveness (to inform data collection), measuring outcomes (e.g. reducing the number of children involved with CSC, increasing placement stability) or monitoring impact (e.g. evaluation of preventative programmes or service models to inform efficacy). At present, there is large variation among how local authorities make use of their routinely collected data, some work closely with projects to make better use of data, **while others do not use it sufficiently** (Sebba et al. 2017).

Throughout this review, we identified a small number of studies which evaluated the effectiveness of early intervention programmes (e.g. PuP and FNP) in reducing the number of children who become involved with CSC. While these types of studies have great potential, using administrative data can be challenging evaluating interventions. Residual confounders are problematic because some vulnerabilities/risk factors may not be disclosed or recorded in adminstrative data e.g. household income, domestic violence/abuse etc. Other issues include the availability of outcomes captured in administrative data which are key to the intervention,

[35] The idea that religion is passed down intergenerationally, when someone is born into a particular religion

eligibility and enrolment to the intervention and how we interpret what 'normal care' is. These issues have been discussed in detail elsewhere (Cavallaro et al. 2023).

In 2014, the government launched the Children's Social Care Innovation Programme (CSCIP) to provide and share an informed evidence base of effective ways to support children involved with CSC (Department for Education 2021a). As part of this, the DfE commissioned evaluation research led by the Rees Centre, with the aim to improve the quality of services (Sebba et al. 2017). Limitations highlighted by the research team included small sample sizes due to delays in recruitment, changes to the intervention, insufficient consistency in data collected, availability and sharing agreements of data and discrepancies in social work practice. These issues need to be considered when evaluating complex population-level interventions.

The What Works for Children's Social Care (WWCSC) play a key role in evaluating programmes and acknowledge that more robust evaluation studies are needed. We note that they are **undertaking an evaluation of interventions that are delivered to families affected by domestic violence/abuse**, an area we feel has not been paid enough attention (What Works for Children's Social Care 2022). Some of their other top research priorities, such as education, would benefit from evaluations. For example, funders could commission or carry out research that **evaluates best practice models for the Virtual School, in particular school disengagement and SEND.** We would like to draw attention to work that was carried out by the DfE to evaluate retention of the workforce, for example, the evaluation of *Signs of Safety* found that there were no improvements in relation to staff wellbeing and retention (Department for Education 2020).

This review highlights how administrative data has significantly enhanced our understanding of children involved with CSC. The work of the administrative data research community, together with the broader relevant literature provides important findings which aid policymakers, service providers and frontline practitioners in their work to improve outcomes for children.

References

ADR UK. 2022. “Data First: Family Court Linked to Cafcass and Census 2021 - England and Wales - ADR UK.” *ADR UK*. Retrieved (https://www.adruk.org/data-access/flagship-datasets/data-first-family-court-linked-to-cafcass-and-census-2021-england-and-wales/).

ADR UK. n.d. “ECHILD: Linking Children’s Health and Education Data for England.” *ADR UK*. Retrieved (https://www.adruk.org/our-work/browse-all-projects/echild-linking-childrens-health-and-education-data-for-england-142/).

Akbari, Ashley et al. 2024. “Exploring Ethnicity Dynamics in Wales: A Longitudinal Population-Scale Linked Data Study and Development of a Harmonised Ethnicity Spine.” *BMJ Open* 14(8):e077675. doi: 10.1136/bmjopen-2023-077675.

Allik, Mirjam et al. 2021. “Cohort Profile: The ‘Children’s Health in Care in Scotland’ (CHiCS) Study-a Longitudinal Dataset to Compare Health Outcomes for Care Experienced Children and General Population Children.” *BMJ Open* 11(9):1–12. doi: 10.1136/bmjopen-2021-054664.

Allik, Mirjam et al. 2022. *Children’ s Health in Care in Scotland (CHiCS) Main Findings from Population-Wide Research*.

Allnatt, G. et al. 2022. “Use of Linked Administrative Children’s Social Care Data for Research: A Scoping Review of Existing UK Studies.” *British Journal of Social Work* 52(7):3923–44. doi: 10.1093/bjsw/bcac049.

Alrouh, Bachar et al. 2019. “Born into Care: Newborns and Infants in Care Proceedings in Wales.” *Nuffield Family Justice Observatory*.

Bach-Mortensen, Anders Malthe et al. 2023. “For-Profit Outsourcing and Its Effects on Placement Stability and Locality for Children in Care in England, 2011–2022: A Longitudinal Ecological Analysis.” *Child Abuse and Neglect* 144(May):106245. doi: 10.1016/j.chiabu.2023.106245.

Bailey, Grace A. et al. 2023. “Immunisation Status of Children Receiving Care and Support in Wales: A National Data Linkage Study.” *Frontiers in Public Health* 11. doi: 10.3389/FPUBH.2023.1231264/FULL.

Baldwin, Helen et al. 2019. “Disentangling the Effect of Out-of-Home Care on Child Mental

Health." *Child Abuse and Neglect* 88(November 2018):189–200. doi: 10.1016/j.chiabu.2018.11.011.

Baldwin, Helen et al. 2020. "Antenatal Risk Factors for Child Maltreatment: Linkage of Data from a Birth Cohort Study to Child Welfare Records." *Child Abuse and Neglect* 107(June):104605. doi: 10.1016/j.chiabu.2020.104605.

Barnando's. 2022. *At What Cost? The Impact of the Cost-of-Living Crisis on Children and Young People*.

Bedston, Stuart et al. 2019. "Linked Lives: Gender, Family Relations and Recurrent Care Proceedings in England." *Children and Youth Services Review* 105(April):104392. doi: 10.1016/j.childyouth.2019.104392.

Bennett, D. et al. 2020. "Trends in Inequalities in Children Looked After in England between 2004 and 2019: A Local Area Ecological Analysis." *BMJ Open* 10(11):e041774. doi: 10.1136/bmjopen-2020-041774.

Bennett, D. et al. 2021. "Funding for Preventative Children's Services and Rates of Children Becoming Looked after: A Natural Experiment Using Longitudinal Area-Level Data in England." *Children and Youth Services Review* 131(April):106289. doi: 10.1016/j.childyouth.2021.106289.

Bennett, D. et al. 2022. "Child Poverty and Children Entering Care in England, 2015–20: A Longitudinal Ecological Study at the Local Area Level." *The Lancet Public Health* 7(6):e496–503. doi: 10.1016/S2468-2667(22)00065-2.

Bennett, D. et al. 2024. "Children in Care in the North of England: A Report Prepared for the Child of the North All-Party Parliamentary Group." *Child of the North* 1–32.

Berridge, David et al. 2020. *Children in Need and Children in Care: Educational Attainment and Progress*.

Boddy, Janet. 2013. "Understanding Permanence for Looked After Children a Review of Research for the Care Inquiry Understanding Permanence for Looked after Children: A Review of Research for the Care Inquiry." *The Care Inquiry* (April).

Broadhurst, Karen et al. 2015. "Connecting Events in Time to Identify a Hidden Population: Birth Mothers and Their Children in Recurrent Care Proceedings in England." *British Journal of Social Work* 45(8):2241–60. doi: 10.1093/bjsw/bcv130.

Broadhurst, Karen et al. 2018. "Born into Care: Newborns in Care Proceedings in England."

Nuffield Family Justice Observatory (October).

Bronstein, Israel et al. 2013. "Emotional and Behavioural Problems among Afghan Unaccompanied Asylum-Seeking Children: Results from a Large-Scale Cross-Sectional Study." *European Child and Adolescent Psychiatry* 22(5):285–94. doi: 10.1007/s00787-012-0344-z.

Brown, Rebecca et al. 2013. "Decision-Making within a Child ' s Timeframe." *Childhood Wellbeing Research Centre* (October).

Bunting, Lisa et al. 2017. *Child Welfare Inequalities in Nothern Ireland*.

Bunting, Lisa et al. 2023. "Changing Trends in Child Welfare Inequalities in Northern Ireland." *International Journal of Population Data Science* 8(2):1–21. doi: 10.23889/ijpds.v8i2.2351.

Bywaters, Paul et al. 2016. "Child Welfare Inequalities: New Evidence, Further Questions." *Child and Family Social Work* 21(3):369–80. doi: 10.1111/cfs.12154.

Bywaters, Paul et al. 2017. "Out of Sight, out of Mind: Ethnic Inequalities in Child Protection and out-of-Home Care Intervention Rates." *British Journal of Social Work* 47(7):1884–1902. doi: 10.1093/bjsw/bcw165.

Bywaters, Paul et al. 2018. "Inequalities in English Child Protection Practice under Austerity: A Universal Challenge?" *Child and Family Social Work* 23(1):53–61. doi: 10.1111/cfs.12383.

Bywaters, Paul et al. 2020. "Child Welfare Inequalities in the Four Nations of the UK." *Journal of Social Work* 20(2):193–215. doi: 10.1177/1468017318793479.

Bywaters, Paul et al. 2022. *The Relationship Between Poverty and Child Abuse and Neglect: New Evidence Aims and Background Key Findings*.

Canfield, Martha et al. 2023. "Risk Factors for Involvement in Care Proceedings for Mothers Receiving Treatment for Substance Use: A Cohort Study Using Linked and Administrative Data in South London." *Children and Youth Services Review* 155(September):107180. doi: 10.1016/j.childyouth.2023.107180.

Cattan, Sarah et al. 2023. "The Impact of Area Level Mental Health Interventions on Outcomes for Secondary School Pupils: Evidence from the HeadStart Programme in England." *Economics of Education Review* 96(July):102425. doi: 10.1016/j.econedurev.2023.102425.

Cavallaro, F. et al. 2022. "Characteristics of Enrolment in an Intensive Home-Visiting Programme among Eligible First-Time Adolescent Mothers in England: A Linked

Administrative Data Cohort Study." *Journal of Epidemiology and Community Health* 76(12):991–98. doi: 10.1136/jech-2021-217986.

Cavallaro, Francesca et al. 2023. "Lessons Learned from Using Linked Administrative Data to Evaluate the Family Nurse Partnership in England and Scotland." *International Journal of Population Data Science* 8(1). doi: 10.23889/ijpds.v8i1.2113.

Children's Commissioner. 2017. "Stability Index for Children in Care: Phase 1 Technical Information." *Children's Commissioner* (April):1–68.

Children's Commissioner. 2018a. "Growing up North - Look North: A Generation of Children Await the Powerhouse Promise." *Children's Commissioner* 1–53.

Children's Commissioner. 2018b. "Stability Index 2018." *Children's Commissioner*. doi: 10.1515/ci-2018-0440.

Children's Commissioner. 2019. "Stability Index 2019." *Children's Commissioner* (August):23pp.

Children's Commissioner. 2020. "Stability Index 2020." *Children's Commissioner* (November).

Children's Commissioner. 2023. *Unaccompanied Children in Need of Care*.

Children's Commissioner for England. 2021. "Characteristics of Children Entering Care for the First Time as Teenagers." *Children's Commissioner* (February):1–55.

Children's Commissioner for England. 2023. "Looked after Children Who Are Not in School." *Children's Commissioner* (May):1–71.

Clery, A. et al. 2022. "Measuring Disadvantage in the Early Years in the UK: A Systematic Scoping Review." *SSM - Population Health* 19. doi: 10.1016/j.ssmph.2022.101206.

Cocker, Christine et al. 2018. "Potential Value of the Current Mental Health Monitoring of Children in State Care in England." *BJPsych Open* 4(6):486–91. doi: 10.1192/bjo.2018.70.

Cousins, Wendy et al. 2005. "'One More for My Baby': Foetal Alcohol Syndrome and Its Implications for Social Workers." *Child Care in Practice* 11(3):375–83. doi: 10.1080/13575270500151953.

Cousins, Wendy et al. 2006. "Drug Abuse and Parenting : The Impact on Young Children in the Social Care System in Northern Ireland." *Journal of Aplied Social Studie* 7(1):95–108.

Cousins, Wendy et al. 2008. "Self-Harm and Attempted Suicide in Young People Looked after in State Care." *Journal of Children's and Young People's Nursing* 2(2):51–54. doi:

10.12968/jcyn.2008.2.2.28195.

Cousins, Wendy et al. 2010. “Looked after or Overlooked? An Exploratory Investigation of the Mental Health Issues of Adolescents Living in State Care in Northern Ireland.” *Psychology, Health and Medicine* 15(5):497–506. doi: 10.1080/13548506.2010.487110.

Cowley, L. et al. 2023. “Born into Care: Understanding Care Pathways and Placement Stability for Infants in Wales.” 15–15. doi: 10.18356/5d9e0035-en.

Cusworth, Linda et al. 2019. “Children Looked after Away from Home Aged Five and under in Scotland: Experiences, Pathways and Outcomes.” *University of Stirling*.

Cusworth, Linda et al. 2022. “Born into Care in Scotland : Circumstances , Recurrence and Pathways.” *Scottish Government* (March).

Department for Education. 2010. “Maltreated Children in the Looked After System: A Comparison of Outcomes for Those Who Go Home and Those Who Do Not.” *Department for Education* (August):1–3.

Department for Education. 2016. *Looked after Children in Residential Care: Analysis*.

Department for Education. 2018. *Children in Need of Help and Protection: Data and Analysis*.

Department for Education. 2019. “Children in Need of Help and Protection: Final Data and Analysis.” *Department for Education* (June).

Department for Education. 2020. *Evaluation of MTM’s Signs of Safety Pilots: Evaluation Report*.

Department for Education. 2021a. “Children’s Social Care Innovation Programme: Insights and Evaluation.” *Evaluation and Summary Reports for the Children’s Social Care Innovation Programme (CSCIP) Grouped by Theme*.

Department for Education. 2021b. “Post-16 Education and Labour Market Outcomes for Looked After Children (LEO) Research Report.” *Department for Education* (June).

Department for Education. 2022a. “Education, Children’s Social Care and Offending.” *Department for Education* (March).

Department for Education. 2022b. “Ethnicity and Children’s Social Care.” *Department for Education* (May):66.

Department for Education. 2022c. “Post-16 Educational and Employment Outcomes of Children in Need.” *Department for Education* (May).

Department for Education. 2023a. “Children’s Social Care Data and Digital Strategy.” *UK Government*. Retrieved (https://www.gov.uk/government/publications/childrens-social-care-data-and-digital-strategy/childrens-social-care-data-and-digital-strategy#our-strategic-objectives).

Department for Education. 2023b. “Children Looked after in England Including Adoptions.” *UK Gov*. Retrieved (https://explore-education-statistics.service.gov.uk/find-statistics/children-looked-after-in-england-including-adoptions/2023).

Department of Health & Social Care. 2022. “Data Saves Lives: Reshaping Health and Social Care with Data - GOV.UK.” *UK Government*. Retrieved (https://www.gov.uk/government/publications/data-saves-lives-reshaping-health-and-social-care-with-data/data-saves-lives-reshaping-health-and-social-care-with-data#improving-data-for-adult-social-care).

Dickens, Jonathan et al. 2019. “Courts, Care Proceedings and Outcomes Uncertainty: The Challenges of Achieving and Assessing ‘Good Outcomes’ for Children after Child Protection Proceedings.” *Child and Family Social Work* 24(4):574–81. doi: 10.1111/cfs.12638.

Dickerson, Andrew et al. 2016. “Persistent Poverty and Children’s Cognitive Development: Evidence from the UK Millennium Cohort Study.” *Journal of the Royal Statistical Society. Series A: Statistics in Society* 179(2):535–58. doi: 10.1111/rssa.12128.

Doebler, Stefanie et al. 2021. “Born into Care: Unpacking the Impact of Area-Level Deprivation in Wales.” *Centre for Child & Family Justice Research* (July).

Doebler, Stefanie et al. 2022. “Born into Care: Associations between Area-Level Deprivation and the Rates of Children Entering Care Proceedings in Wales.” *Children and Youth Services Review* 141:106595. doi: 10.1016/j.childyouth.2022.106595.

Doebler, Stefanie et al. 2023. “Area-Deprivation, Social Care Spending and the Rates of Children in Care Proceedings in Local Authorities in England.” *Children and Society* 38(2):578–95. doi: 10.1111/chso.12735.

Doidge, James C. et al. 2017. “Economic Predictors of Child Maltreatment in an Australian Population-Based Birth Cohort.” *Children and Youth Services Review* 72:14–25. doi: 10.1016/j.childyouth.2016.10.012.

Elliott, Martin et al. 2018. “The Characteristics of Children and Young People in Residential

Care in Wales." *Child Care in Practice* 24(3):317–30. doi: 10.1080/13575279.2017.1319798.

Elliott, Martin. 2020. "Child Welfare Inequalities in a Time of Rising Numbers of Children Entering Out-of-Home Care." *British Journal of Social Work* 50(2):581–97. doi: 10.1093/bjsw/bcz154.

Emmott, E. H. et al. 2021. "Explaining Local Variation in Referrals from Health Services to Children's Social Care in England 2013-16: A Study Using 'children in Need' Administrative Data." *Journal of Public Health (United Kingdom)* 43(1):180–88. doi: 10.1093/pubmed/fdz050.

Fleming, Michael et al. 2021. "Educational and Health Outcomes of Schoolchildren in Local Authority Care in Scotland: A Retrospective Record Linkage Study." *PLoS Medicine* 18(11):1–20. doi: 10.1371/journal.pmed.1003832.

Ford, J. et al. 2024. "Home Again: Understanding Reunification Practice in the Children's Social Care System in England." *NSPCC*.

Forty, Rachel et al. 2017. *Using Family Court Data to Explore Links between Adverse Family Experiences and Proven Youth Offending*.

Foundations. 2023. *SCHOOL NON-ATTENDANCE BY CHILDREN WITH A SOCIAL WORKER IN THE UK :*

Fraser, Caroline et al. 2022. "Variation in Health Visiting Contacts for Children in England: Cross-Sectional Analysis of the 2-2½ Year Review Using Administrative Data (Community Services Dataset, CSDS)." *BMJ Open* 12(2):e053884. doi: 10.1136/bmjopen-2021-053884.

Goldacre, Allie et al. 2022. "Factors Affecting the Social Gradient in Children's Social Care." *British Journal of Social Work* 52(6):3599–3617. doi: 10.1093/bjsw/bcab255.

Goldacre, Allie et al. 2022. "Reunification and Re-Entry to Care: An Analysis of the National Datasets for Children Looked after in England." *British Journal of Social Work* 52(8):4756–77. doi: 10.1093/bjsw/bcac079.

Griffiths, L. J. et al. 2020. "Maternal Health, Pregnancy and Birth Outcomes for Women Involved in Care Proceedings in Wales: A Linked Data Study." *BMC Pregnancy and Childbirth* 20(1):1–13. doi: 10.1186/s12884-020-03370-4.

Griffiths, Lucy Jane et al. 2022. "Anxiety and Depression among Children and Young People

Involved in Family Justice Court Proceedings: Longitudinal National Data Linkage Study." *BJPsych Open* 8(2). doi: 10.1192/bjo.2022.6.

Harnett, Paul H. et al. 2018. "Assessing Capacity to Change in High-Risk Pregnant Women: A Pilot Study." *Child Abuse Review* 27(1):72–84. doi: 10.1002/car.2491.

Harrison, Neil et al. 2019. "Positive Impact? HESA Analysis: Employment and Further Study Outcomes for Care Experienced Undergraduates in the 2016/17 Graduate Cohort." *The Unite Foundation*.

Harrison, Neil. 2020. "Patterns of Participation in Higher Education for Care-Experienced Students in England: Why Has There Not Been More Progress?" *Studies in Higher Education* 45(9):1986–2000. doi: 10.1080/03075079.2019.1582014.

Harrison, Neil et al. 2023. "Care Leavers' Transition into the Labour Market in England." *Rees Centre* (January).

Harron, Katie et al. 2017. "Challenges in Administrative Data Linkage for Research." *Big Data and Society* 4(2):1–12. doi: 10.1177/2053951717745678.

Harwin, Judith et al. 2018. "Care Demand and Regional Variability in England: 2010/11 to 2016/17." *Centre for Child and Justice Research* (February).

Harwin, Judith et al. 2019. "Special Guardianship: A Review of the English Research Studies Report Focus Review of the Evidence from English Research on Special Guardianship." *Nuffield Family Justice Observatory*.

Hayes, Davy et al. 2016. "What's in the Numbers? Child Welfare Statistics and the Children (Northern Ireland) Order." *Child Care in Practice* 22(4):408–21. doi: 10.1080/13575279.2016.1209904.

Hiller, Rachel M. et al. 2023. "The Development of Young Peoples' Internalising and Externalising Difficulties Over the First Three-Years in the Public Care System." *Child Maltreatment* 28(1):141–51. doi: 10.1177/10775595211070765.

Hodges, Helen et al. 2019. "Analysis of the Factors Contributing to the High Rates of Care in Wales Briefing Paper (Revised)." (July).

Holmes, Lisa. et al. 2012. *Understanding Costs and Outcomes in Child Welfare Services: A Comprehensive Costing Approach to Managing Your Resources*. London: Jessica Kingsley Publishers.

Holmes, Lisa. 2019. “Use of Children’s Social Care Data at the Local and Regional Area Level.” *Nuffield Family Justice Observatory*.

Hood, Rick; et al. 2022. “Improving the Chances of Successful Reunification for Children Who Return Home from Care: A Rapid Evidence Review.” *What Works for Children’s Social Care* (March).

Hood, Rick et al. 2020. *Identifying and Understanding the Link between System Conditions and Welfare Inequalities in Children’s Social Care Services: Final Report*.

Hood, Rick et al. 2021a. “Beyond the Toxic Trio: Exploring Demand Typologies in Children’s Social Care.” *British Journal of Social Work* 51(6):1942–62. doi: 10.1093/bjsw/bcab058.

Hood, Rick et al. 2021b. “The Social Gradient in English Child Welfare Services: An Analysis of the National Children’s Social Care Datasets Full Report.” *Nuffield Foundation* (June).

Hood, Rick et al. 2023. “Categorising Demand for Child Welfare Services Using Latent Class Analysis: A Study of the National Data-Sets on Children in Need in England.” *British Journal of Social Work* 53(8):3704–24. doi: 10.1093/bjsw/bcad141.

Hooper, J. et al. 2019. “Linking Two Adminstrative Datasets about Looked after Children: Testing Feasibility and Enhancing Understanding.” *University of Stirling*.

Hooper, Jade et al. 2017. *Identifying and Understanding Inequalities in Child Welfare Intervention Rates: Comparative Studies in Four UK Countries*.

House of Commons. 2024. “Children Not in School (Registers, Support and Orders) Bill 2023-24.” *House of Commons* (April):1–24.

Hunter, Katie et al. 2023. “Care Experience, Ethnicity and Youth Justice Involvement: Key Trends and Policy Implications.” *ADR UK*.

Jay, Matthew A. et al. 2021. “Special Educational Needs, Social Care and Health.” *Archives of Disease in Childhood* 106(1):83–85. doi: 10.1136/archdischild-2019-317985.

Jay, Matthew A. et al. 2022. “Evaluation of Pushing out of Children from All English State Schools: Administrative Data Cohort Study of Children Receiving Social Care and Their Peers.” *Child Abuse and Neglect* 127(February 2022):105582. doi: 10.1016/j.chiabu.2022.105582.

Jay, Matthew A. et al. 2023. “Risk of School Exclusion among Adolescents Receiving Social Care or Special Educational Needs Services: A Whole-Population Administrative Data

Cohort Study." *Child Abuse and Neglect* 144(July):106325. doi: 10.1016/j.chiabu.2023.106325.

Johnson, Rhodri D. et al. 2022. "A Population Level Study into Health Vulnerabilities of Mothers and Fathers Involved in Public Law Care Proceedings in Wales, UK between 2011 and 2019." *International Journal of Population Data Science* 7(1). doi: 10.23889/ijpds.v7i1.1723.

Johnson, Rhodri D. et al. 2023. "Risk Factors Associated With Primary Care-Reported Domestic Violence for Women Involved in Family Law Care Proceedings: Data Linkage Observational Study." *Journal of Medical Internet Research* 25. doi: 10.2196/42375.

Joseph Rowntree Foundation. 2022. *UK Poverty 2022: The Essential Guide to Understanding Poverty in the UK*.

Kent, Hope et al. 2023. "Looked after Children in Prison as Adults: Life Adversity and Neurodisability." *International Journal of Prisoner Health* 19(4):512–23. doi: 10.1108/IJPH-08-2022-0051.

Lam, Joseph et al. 2023. "How Is Ethnicity Reported, Described, and Analysed in Health Research in the UK? A Bibliographical Review and Focus Group Discussions with Young Refugees." *BMC Public Health* 23(1):1–11. doi: 10.1186/s12889-023-16947-3.

Leary, Donna O. et al. 2023. "Irish Journal of Applied Social Studies Exploring the Potential of Administrative Data for Understanding and Advancing Child Protection and Family Support Policy , Practice and Research in Ireland Advancing Child Protection and Family Support Policy , Pra." *Irish Journal of Applied Social Sciences* 22(1).

Luke, Nikki et al. 2015. *The Educational Progress of Looked After Children in England Technical Report 2: Relating Care to Educational Attainment and Progress*.

Macalister, Josh. 2022. "The Independent Review of Children's Social Care." *UK Government* (May):278.

Mc Grath-Lone, L. et al. 2015. "Changes in First Entry to Out-of-Home Care from 1992 to 2012 among Children in England: Analysis of Administrative Data." *Lancet* 386:S55–S55.

Mc Grath-Lone, Louise et al. 2016. "Changes in First Entry to Out-of-Home Care from 1992 to 2012 among Children in England." *Child Abuse and Neglect* 51:163–71. doi: 10.1016/j.chiabu.2015.10.020.

Mc Grath-Lone, Louise et al. 2017. "Factors Associated with Re-Entry to out-of-Home Care

among Children in England." *Child Abuse and Neglect* 63:73–83. doi: 10.1016/j.chiabu.2016.11.012.

Mc Grath-Lone, Louise et al. 2020. "Exploring Placement Stability for Children in Out-of-Home Care in England: A Sequence Analysis of Longitudinal Administrative Data." *Child Abuse and Neglect* 109(May):104689. doi: 10.1016/j.chiabu.2020.104689.

Mc Grath-Lone, Louise et al. 2022a. "Changes in Adolescents' Planned Hospital Care during the COVID-19 Pandemic: Analysis of Linked Administrative Data." *Archives of Disease in Childhood* 107(10):E29. doi: 10.1136/archdischild-2021-323616.

Mc Grath-Lone, Louise et al. 2022b. "Data Resource Profile: The Education and Child Health Insights from Linked Data (ECHILD) Database." *International Journal of Epidemiology* 51(1):17-17F. doi: 10.1093/ije/dyab149.

Mc Grath-Lone, Louise Mc et al. 2021. "Ethnic Bias in Data Linkage." *The Lancet Digital Health* 3(6):e339. doi: 10.1016/S2589-7500(21)00081-9.

McCartan, Claire et al. 2018. "A Four-Nation Comparison of Kinship Care in the UK: The Relationship between Formal Kinship Care and Deprivation." *Social Policy and Society* 17(4):619–35. doi: 10.1017/S1474746418000179.

McGhee, Janice et al. 2018. "Looking after Children in the UK—Convergence or Divergence?" *British Journal of Social Work* 48(5):1176–98. doi: 10.1093/bjsw/bcx103.

McKenna, Sarah et al. 2023a. "Childhood Contact with Social Services and Risk of Suicide or Sudden Death in Young Adulthood: Identifying Hidden Risk in a Population-Wide Cohort Study." *Journal of Epidemiology and Community Health* 78(1):47–53. doi: 10.1136/jech-2023-220975.

McKenna, Sarah et al. 2023b. "The Mental Health of All Children in Contact with Social Services: A Population-Wide Record-Linkage Study in Northern Ireland." *Epidemiology and Psychiatric Sciences* 32. doi: 10.1017/S2045796023000276.

McMahon, Alex D. et al. 2018. "Inequalities in the Dental Health Needs and Access to Dental Services among Looked after Children in Scotland: A Population Data Linkage Study." *Archives of Disease in Childhood* 103(1):39–43. doi: 10.1136/archdischild-2016-312389.

Melis, G. et al. 2023. "Impact of Socio-Economic Conditions and Perinatal Factors on Risk of Becoming a Child Looked after: A Whole Population Cohort Study Using Routinely Collected Data in Wales." *Public Health* 224:215–23. doi: 10.1016/j.puhe.2023.09.001.

Meltzer, Howard et al. 2008. “A Thirty-Year Prospective Study of Children in Residential Care in the 1970s.” *Scottish Journal of Residential Child Care* 7(1):1–6.

Minson, Shona. 2019. “Direct Harms and Social Consequences: An Analysis of the Impact of Maternal Imprisonment on Dependent Children in England and Wales.” *Criminology and Criminal Justice* 19(5):519–36. doi: 10.1177/1748895818794790.

Monteith, Marina et al. 2003. “The Importance of Stability in the Lives of Looked after Children: A Study of under Fives in Northern Ireland.” *International Journal of Phytoremediation* 21(1):62–71. doi: 10.1080/13575270302167.

Moorthie, Sowmiya et al. 2022. “Rapid Systematic Review to Identify Key Barriers to Access, Linkage, and Use of Local Authority Administrative Data for Population Health Research, Practice, and Policy in the United Kingdom.” *BMC Public Health* 22(1):1–13. doi: 10.1186/s12889-022-13187-9.

Munro, E. et al. 2019. *Placement Stability: A Review of the Literature*. doi: 10.4324/9780429433399-2.

Murray, Emily T. et al. 2020a. “Association of Childhood Out-of-Home Care Status with All-Cause Mortality up to 42-Years Later: Office of National Statistics Longitudinal Study.” *BMC Public Health* 20(1):1–10. doi: 10.1186/s12889-020-08867-3.

Murray, Emily T. et al. 2020b. “Non-Parental Care in Childhood and Health up to 30 Years Later: ONS Longitudinal Study 1971-2011.” *European Journal of Public Health* 30(6):1121–27. doi: 10.1093/eurpub/ckaa113.

National Education Union. 2021. *Support for Looked after Children in Care*.

Neil, Elsbeth et al. 2019. “Children in Care: Where Do Children Entering Care at Different Ages End up? An Analysis of Local Authority Administrative Data.” *Children and Youth Services Review* 106(April):104472. doi: 10.1016/j.childyouth.2019.104472.

Neil, Elsbeth et al. 2020. “Returning Children Home from Care: What Can Be Learned from Local Authority Data?” *Child and Family Social Work* 25(3):548–56. doi: 10.1111/cfs.12724.

O’Higgins, Aoife. 2019. “Analysis of Care and Education Pathways of Refugee and Asylum-Seeking Children in Care in England: Implications for Social Work.” *International Journal of Social Welfare* 28(1):53–62. doi: 10.1111/ijsw.12324.

Office for National Statistics. 2023a. “How Domestic Abuse Data Are Captured through the

Criminal Justice System - Office for National Statistics." *Office for National Statistics*. Retrieved (https://www.ons.gov.uk/peoplepopulationandcommunity/crimeandjustice/articles/howdomesticabusedataarecapturedthroughthecriminaljusticesystem/2023-11-24).

Office for National Statistics. 2023b. "Quality of Ethnicity Data in Health-Related Administrative Data Sources." Retrieved (https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/healthinequalities/articles/understandingconsistencyofethnicitydatarecordedinhealthrelatedadministrativedatasetsinengland2011to2021/november2023).

Office for National Statistics. 2023c. "Thematic Research Review : Commissioned Research for Policy." *Office for National Statistics* (October).

Parsons, Sam et al. 2023. "Intergenerational Transmission of Educational Disadvantage: Education Progression of Children of Care Leavers Compared to a General Population Sample." *British Educational Research Journal* 49(5):875–99. doi: 10.1002/berj.3872.

Pattinson, Rebecca et al. 2021. *Newborn Babies in Urgent Care Proceedings in England and Wales*.

Pearson, R. J. et al. 2021. "Linking Data on Women in Public Family Law Court Proceedings Concerning Their Children to Mental Health Service Records in South London." *International Journal of Population Data Science* 6(1). doi: 10.23889/IJPDS.V6I1.1385.

Pearson, Rachel Jane et al. 2020. "Association between Health Indicators of Maternal Adversity and the Rate of Infant Entry to Local Authority Care in England: A Longitudinal Ecological Study." *BMJ Open* 10(8):e036564. doi: 10.1136/bmjopen-2019-036564.

Phillips, Alice R. et al. 2023. "Secondary Data Analysis of Social Care Records to Examine the Provision of Mental Health Support for Young People in Care." *JCPP Advances* 3(2). doi: 10.1002/jcv2.12161.

Raab, Gillian et al. 2023. "Infants Born into Care in Scotland Updated Report: Including Data to July 2021." *ADR Scotland* (July):0–32.

Robling, Michael et al. 2021. "The Family Nurse Partnership to Reduce Maltreatment and Improve Child Health and Development in Young Children: The BB:2–6 Routine Data-Linkage Follow-up to Earlier RCT." *Public Health Research* 9(2):1–160. doi: 10.3310/phr09020.

Robling, Michael et al. 2022. "Nurse-Led Home-Visitation Programme for First-Time Mothers

in Reducing Maltreatment and Improving Child Health and Development (BB:2-6): Longer-Term Outcomes from a Randomised Cohort Using Data Linkage." *BMJ Open* 12(2):1–15. doi: 10.1136/bmjopen-2021-049960.

Rock, Stephen et al. 2015. "Understanding Foster Placement Instability for Looked after Children: A Systematic Review and Narrative Synthesis of Quantitative and Qualitative Evidence." *British Journal of Social Work* 45(1):177–203. doi: 10.1093/bjsw/bct084.

Rodrigues, Veena C. 2004. "Health of Children Looked after by the Local Authorities." *Public Health* 118(5):370–76. doi: 10.1016/j.puhe.2003.10.009.

Roe, Alice et al. 2021. *Older Children and Young People in Care Proceedings in England and Wales*.

Sacker, Amanda et al. 2021. "The Lifelong Health and Wellbeing Trajectories of People Who Have Been in Care Findings from the Looked-after Children Grown up Project The LACGro Project." *Nuffield Foundation* (July).

Sacker, Amanda et al. 2022. "Out-of-Home Care in Childhood and Socio-Economic Functioning in Adulthood: ONS Longitudinal Study 1971–2011." *Children and Youth Services Review* 132(November 2021). doi: 10.1016/j.childyouth.2021.106300.

Schoenwald, Eva et al. 2022a. *Understanding Formal Kinship Care Arrangements in England*.

Schoenwald, Eva et al. 2022b. *Understanding Residential Care for Children in Care in England Summary Report*.

Scottish Government. 2023. *Education Outcomes for Looked After Children 2021/22*.

Scourfield, Jonathan et al. 2021. "Are Child Welfare Intervention Rates Higher or Lower in Areas Targeted for Enhanced Early Years Services?" *Child Abuse Review* 30(4):306–17. doi: 10.1002/car.2696.

Sebba, J. et al. 2015. *The Educational Progress of Looked after Children in England: Linking Care and Educational Data*.

Sebba, Judy et al. 2017. *Children's Social Care Innovation Programme Final Evaluation Report*.

Sidebotham, Peter et al. 2001. "Child Maltreatment in the 'Children of the Nineties': A Longitudinal Study of Parental Risk Factors." *Child Abuse and Neglect* 25(9):1177–1200. doi: 10.1016/S0145-2134(01)00261-7.

Sidebotham, Peter et al. 2002. "Child Maltreatment in the 'Children of the Nineties:' Deprivation, Class, and Social Networks in a UK Sample." *Child Abuse and Neglect*

26(12):1243–59. doi: 10.1016/S0145-2134(02)00415-5.

Sidebotham, Peter et al. 2006. "Child Maltreatment in the 'Children of the Nineties': A Cohort Study of Risk Factors." *Child Abuse and Neglect* 30(5):497–522. doi: 10.1016/j.chiabu.2005.11.005.

Sinclair, Ian et al. 2019. "Children in Care or in Need: Educational Progress at Home and in Care." *Oxford Review of Education* 45(4):443–60. doi: 10.1080/03054985.2019.1600488.

Sinclair, Ian et al. 2020. "The Education of Children in Care and Children in Need: Who Falls behind and When?" *Child and Family Social Work* 25(3):536–47. doi: 10.1111/cfs.12719.

Sinclair, Ian et al. 2022. "'Closing the Gap': The Conditions under Which Children in Care Are Most Likely to Catch up in Mainstream Schools." *Oxford Review of Education* 48(2):252–69. doi: 10.1080/03054985.2021.1967118.

Skarda, Ieva et al. 2024. "Does Household Income Predict Health and Educational Outcomes in Childhood Better than Neighbourhood Deprivation?" *MedRxiv* (Pre-print).

Skinner, Guy C. M. et al. 2023. "A Review of the Relationship between Poverty and Child Abuse and Neglect: Insights from Scoping Reviews, Systematic Reviews and Meta-Analyses." *Child Abuse Review* 32(2):1–16. doi: 10.1002/car.2795.

Smith, N. 2022. *From Pillar to Post*. doi: 10.1093/nq/s10-IV.105.528-a.

Soraghan, Joanna et al. 2023. *The Impact of COVID 19 on Children's Care Journeys in Scotland*. doi: 10.36348/sjnhc.2021.v04i01.001.

Stewart, Catherine H. et al. 2017. "The Scottish School Leavers Cohort: Linkage of Education Data to Routinely Collected Records for Mortality, Hospital Discharge and Offspring Birth Characteristics." *BMJ Open* 7(7):1–18. doi: 10.1136/bmjopen-2016-015027.

Suh, Ellie et al. 2022. "A Critical Review of Cost-Effectiveness Research in Children's Social Care: What Have We Learnt so Far?" *Social Policy and Administration* 56(5):742–56. doi: 10.1111/spol.12795.

Sutcliffe, Alastair G. et al. 2017. "Educational Progress of Looked-After Children in England: A Study Using Group Trajectory Analysis." *Pediatrics* 140(3). doi: 10.1542/peds.2017-0503.

Taggart, Laurence et al. 2007. "Young People with Learning Disabilities Living in State Care: Their Emotional, Behavioural and Mental Health Status." *Child Care in Practice* 13(4):401–16. doi: 10.1080/13575270701488816.

Teyhan, Alison et al. 2019. “Early Life Adversity, Contact with Children’s Social Care Services and Educational Outcomes at Age 16 Years: UK Birth Cohort Study with Linkage to National Administrative Records.” *BMJ Open* 9(10):1–9. doi: 10.1136/bmjopen-2019-030213.

The Association of Directors of Children’s Services. 2016. *Unaccompanied Asylum Seeking and Refugee Children*.

The Association of Directors of Children’s Services. 2022. “Safeguarding Pressures - Phase 8.” *Manchester: ADCS*.

Ubbesen, Mads Bonde et al. 2015. “Cumulative Incidence of Entry into Out-of-Home Care: Changes over Time in Denmark and England.” *Child Abuse and Neglect* 42:63–71. doi: 10.1016/j.chiabu.2014.10.006.

UK Gov. 2020a. “Ministry of Justice: Data First.” *Uk Gov*. Retrieved (https://www.gov.uk/guidance/ministry-of-justice-data-first).

UK Gov. 2020b. “National Data Strategy - GOV.UK.” *UK Government*. Retrieved (https://www.gov.uk/government/publications/uk-national-data-strategy/national-data-strategy).

UK Gov. 2024a. “Below Average Resources: Developing a New Poverty Measure.”

UK Gov. 2024b. “Local Authority Interactive Tool (LAIT) - GOV.UK.”

Webb, Calum et al. 2020a. “Cuts Both Ways: Ethnicity, Poverty, and the Social Gradient in Child Welfare Interventions.” *Children and Youth Services Review* 117(August). doi: 10.1016/j.childyouth.2020.105299.

Webb, Calum et al. 2020b. “Untangling Child Welfare Inequalities and the ‘Inverse Intervention Law’ in England.” *Children and Youth Services Review* 111. doi: 10.1016/j.childyouth.2020.104849.

Webb, Calum et al. 2021. “Income Inequality and Child Welfare Interventions in England and Wales.” *Journal of Epidemiology and Community Health* 75(3):251–57. doi: 10.1136/jech-2020-214501.

Webb, Calum. 2023. “In Defence of Ordinary Help: Estimating the Effect of Early Help/Family Support Spending on Children in Need Rates in England Using ALT-SR.” *Journal of Social Policy* 52(2):396–423. doi: 10.1017/S0047279421000696.

What Works for Children's Social Care. 2022. "Domestic Abuse Interventions in Children's Social Care - Feasibility Study." *What Works for Children's Social Care* 1–24.

Wijedasa, Dinithi et al. 2018. *Exploratory Analyses of the Rates of Children Looked after in English Local Authorities (2012-2017)*.

Woods, Ruth et al. 2018. "Changes in out of Home Care and Permanence Planning among Young Children in Scotland, 2003 to 2017." *Adoption and Fostering* 42(3):282–94. doi: 10.1177/0308575918790435.

Woods, Ruth et al. 2018. "Complexity in the Lives of Looked after Children and Their Families in Scotland: 2003 to 2016." *Scottish Children's Reporter Administration*.

Zhang, Meng Le et al. 2020. "Social Work Contact in a UK Cohort Study: Under-Reporting, Predictors of Contact and the Emotional and Behavioural Problems of Children." *Children and Youth Services Review* 115:105071. doi: 10.1016/j.childyouth.2020.105071.

Acknowledgements

The Research Community Catalyst: Children at Risk of Poor Outcomes project is led by Swansea University, Lancaster University, University College London, Imperial College London and the University of Sussex. This work is funded by ADR UK (Administrative Data Research UK), an Economic and Social Research Council investment (part of UK Research and Innovation) and Foundations: What Works Centre for Children and Families. Grant reference: ES/Y010566/1. Project partners include Barnardo's, Data to Insight, Children's Commissioner's Office and Nuffield Family Justice Observatory.

Authors

Dr Grace Bailey, Swansea University

Professor Karen Broadhurst, Lancaster University

Kat Tranter, Lancaster University

Professor Lisa Holmes, University of Sussex

Professor Katie Harron, University College London

Dr Dougal Hargreaves, Imperial College London

Professor Jenny Woodman, University College London

Professor Lucy Griffiths, Swansea University

Visit the ADR UK website.

@ADR_UK
@ADR_CC_CAR

Appendices

Appendix 1: Search terms

Population	Data	Exposure	Country
Child* OR young* OR adolescen* OR juvenile* OR youth*	(Ministry of Justice OR Department for Education OR CAFCASS data OR Growing Up in England dataset OR Longitudinal Education Outcomes dataset OR ECHILD OR National Pupil Database OR Children in Need OR Children Receiving Care or Support OR Children Looked After OR Scottish Exchange of data OR SOSCARE OR The Edinburgh Child Protection Dataset OR local authorit* data) AND ("data link*" OR "administrative data")	looked after child* OR child* looked after OR child protection OR child welfare OR child abuse OR child neglect OR out of home care OR adopted child* OR childcare system OR left care OR transition* care OR child*-in care OR child* at risk OR child* in need OR children receiving care and support OR early interventions OR prevention program* OR support services OR special education needs OR disabilit*	United Kingdom OR UK OR Great Britain OR GB OR England OR Wales OR Scotland OR Northern Ireland OR NI

Appendix 2: Results of peer-reviewed articles

Country	Author	Year	Study period	Cohort	National or local level	Area	Dataset	Linkage	Findings
England	Bach-Mortensen *et al.*	2023	2011 – 2022	CLA; varies year-on-year	National	Social care	DfE (CLA census)	No	Local authorities differ in their out-of-area placements. Rural local authorities tend to place nearly all children within the boundaries, while within London placing children within the boundaries is problematic. For-profit outsourcing has increased during the study period (9%), which has increased out-of-area and unstable placements.
England	Baldwin *et al.*	2019	Children born between September 2005 – August 2012	CLA (n=122) Re-unified children (n=82) Children who have never been in care (n=159)	One local authority	Social care and health	Child welfare data (local authority); survey of social workers; interviews with children's	Yes; administrative data and qualitative data	Children in out-of-home care did not have higher rates of mental health problems than children who had never been in care. However, they did have higher levels of reactive attachment disorder. Children

			CLA/CPP by August 2014				caregivers including SDQ, Relationship Problems Questionnaire; 10-item rating for reactive attachment disorder; Warwick Child Health and Morbidity Profile; 12-item General Health Questionnaire; Child Rearing Questionnaire		in care were also more likely to have a physical disability or learning disability.
England	Baldwin *et al.*	2020	2007 – 2011	CIN (n = 1086) due to abuse or neglect Children not in need due to abuse or neglect (n=10,246)	National	Social care and health	Administrative data on children referred to child welfare services (CIN) (local authority); General Health	Yes; birth cohort study questionnaire (GHQ-28) and	Several factors during the antenatal period are associated with children in need. Lower maternal education level, maternal age and maternal mental illness increases risk of child

							Questionnaire (GHQ-28)	administrative data	maltreatment. Parental sociodemographic factors such as deprivation, social housing, paternal unemployment, ethnicity and receipt of welfare benefits also increase risk of child maltreatment.
England	Bedston *et al.*	2019	March 2008 – 2018	s31 care proceedings (n=25,457 recurrent parents)	National	Family justice	Cafcass	No	There was a high recurrence rate of families returning to court, with 40.9% and 25.9% of fathers and mothers, respectively. On the other hand, a high proportion of mothers returned to court with a new partner and new child (30.5%) compared to 11.2% of fathers. The older the child at time of the index proceedings the more likely the mother and father return to court with the same family or partner.
England	Bennett *et al.*	2020	2004 – 2019	CLA rates; varied over time	150 local authorities excluding the	Social care	DfE published data and FOI (CIN census; CLA	No	Since 2004, there has been a steady increase in the rates of CLA. A social gradient was

					City of London and the Isles of Scilly		census); 2010 Indices of Multiple Deprivation; local authority unemployment rates including Jobseeker's Allowance and Universal Credits		apparent throughout, with greater increases in more deprived areas. Increases in CLA was associated with LA unemployment. There was no evidence of a social gradient for CPP.
England	Bennett *et al.*	2021	Children entering care between 2011 – 2019	CLA aged 1 – 4 years CLA aged 16 – 17 years	150 local authorities excluding the City of London and the Isles of Scilly	Social care	DfE (CLA census); ONS mid-year population estimates; Labour Force Survey data; Households Below Average Income statistics	No	Despite increases in the number of children becoming looked after, there has been cuts to prevention services. Particularly for adolescents where there has been a greater increase in number of children becoming looked after
England	Bennett *et al.*	2022	March 2015 – April 2020	Children under 16 years old started to be	147 local authorities excluding City of	Social care	DfE (CIN census; CLA census); Department for	Yes; Departme nt for	Increases overtime have disproportionately affected more deprived local

				looked after (n=10,351) CPP (n=22,945) CIN (n=51,736)	London, Isles of Scilly, Bournemouth, Christchurch and Poole		Work and Pensions and HM Revenue and Customs to compile children in low-income families statistics	Work and Pensions and HM Revenue and Customs to DfE data	authorities. A social gradient remained even when controlling for employment.
England	Broadhurst *et al.*	2015	April 2007 – March 2014	Birth mothers (n=43,541) Infants (n=5455)	National	Family justice	Cafcass	No	Of all mothers recorded, 16.1% (n=7,022) had a repeat episode. This tended to be mothers who had rapid repeat pregnancy. In nearly a third (n= 42,247, 97%) of index cases, women appeared as a lone respondent. Just over half of index applications concerned only one child. The majority of recurrent cases in Cafcass involved only one child. 43% of children were aged less than one years old, which increased for the first (70%) and second (60%) of proceedings.

England	Bronstein *et al.*	2013	Not reported	Afghan UASC (n = 222)	Local authority: one London borough	Social care	Local authority database; Home office databases; The Hopkins Symptoms Check List 37A; Stressful Life Events Questionnaire	Yes; social care data and questionnaire data	The majority of UASC were placed in foster care (62.6%), followed by semi-independent care (34.2%). Nearly a third (31.4%) of UASC scored high on emotional and behavioural problems, including anxiety and depression. Living in foster care was associated with lower levels of emotional and behavioural problems. Interestingly, longer periods in the UK was associated with great levels of problems.
England	Bywaters *et al.*	2016	March 2012	CPP (n=4963) CLA (n=8295) All children (n=1,187,320)	Local authority: 14 in the West Midlands	Social care	Local authority data on CPP or CLA; 2011 Census	No	CPP and CLA rates were slightly higher than the national average. A high number of children subject to a CPP (10 times higher) and CLA (11 times higher) were from deprived areas (60% collectively). There was evidence of a social gradient and an inverse intervention

								law, which is where children in more deprived areas were more likely to CPP/CLA if their local authority was more affluent.
England	Bywaters *et al.*	2017	March 2012	CPP (n=4963) CLA (n=8295) All children (n=1,187,320)	Local authority: 13 in the West Midlands	Social care	Local authority data on CPP or CLA; 2011 Census	No	The chances of a child being on a CPP in the most deprived areas was six times greater than the least deprived, while CLA was five times greater. Ethnicity is also strongly associated with the child's chances of experiencing state interventions. Children with Mixed Heritage were overrepresented among CPP and CLA, and Black children were overrepresented among CLA. For White, Mixed and Black children rates of CLA were much higher than rates of CPP, whereas Asian children were lower.

England	Bywaters *et al.*	2018	March 2015	Children aged 0 – 17 years (n=1,432,180) CIN (n=52,179) CPP (n=6716) CLA (n=8865)	18 local authorities	Social care	DfE (CIN census; CLA census); 2011 Census; 2014 mid-year population estimates; Index of Multiple Deprivation scores (2015)	Yes; social care data and deprivation measures (LSOA)	Children from the most deprived areas were more likely to be on the CPP (13 times) and CLA (11 times) than those in the least deprived areas. Intervention rates also differed by ethnicity. CLA who identified as Mixed, Black or Other had higher rates than White, while Asian rates were lowest. However, when looking at equally deprived neighbourhoods, White and Mixed CLA had similar rates.
England	Canfield *et al.*	2023	April 2007 – March 2019	Mothers (n=1587) Involved in care proceedings (n=480) Not involved in care proceedings (n=1107)	Local authority: South London	Family justice and health	CRIS to extract data from South London and Maudsley NHS Foundation Trust addiction services; Cafcass	Yes; CRIS-Cafcass	82% of children were placed in out-of-home care if their mother was involved in care proceedings and in receipt of substance use treatment services (compared to 50% of the general population of care proceeding cases). The most common out-of-home order was placement with a relative

									(27%). Most children involved were under the age of four. Out-of-home placement of children was more likely among mother's who were young, used drugs, had housing problems, and poor quality of life. Having the father involved in the proceedings was a protective factor for maintaining care of the child.
England	Cattan *et al.*	2023	Pre-intervention data September 2013 – August 2016 Intervention data September 2016 – August 2019	Not reported	Local authority: six in Blackpool, Cornwall, Hull, Kent, Newham and Wolverhampton (only 2017/18)	Social care and education	DfE (CIN census; CLA census; NPD)	Pre-linked	While there were no differences between sessions missed between the intervention and control groups, there was a reduction (15%) in the number of exclusions in the HeadStart local authorities. GCSE attainment slightly improved in 2018/19. The policy appeared to be more effective among children who were

									more at risk (SEN statement or children's social care plan).
England	Cavallaro *et al.*	2022	April 2010 – March 2017	First time mothers aged 13 – 19 years enrolled in the FNP (n=25,680)	>130 local authorities	Social care and health	Family Nurse Partnership (FNP); HES; HES A&E; DfE (CIN census; CLA census; NPD)	Yes; hospital data with NPD	Of those who were eligible, only 32.2% enrolled in the FNP. Younger mothers aged 13 – 15 years were most likely to enrol in the FNP. 44% of those who enrolled had ever been looked after by social services. Ever having a child protection plan or ever having SEN were also risk factors for enrolment.
England	Cocker *et al.*	2018	2009 – 2017	Children aged 4 – 17 years old (n=22,681) with SDQ data	National	Social care and health	DfE (CLA census which includes SDQ data)	No	Only 58.3% of CLA children had complete SQD data. Around 60% of children looked after had abnormal or borderline scores, which remained consistent. However, there were no changes in SDQ scores for children looked after over 2 – 4 consecutive years, which may suggest issues with health referrals.

England	Coulthard *et al.*	2022	January 2015 – December 2017	Case order applications (n=31,000)	National	Family justice	Cafcass	No	Natural language processing was used to identify risk factors included within social work text in child protection court proceedings. Prevalent terms included substance misuse (estimate 64 – 75%), domestic violence (56 – 66%), criminality (56 – 64%), neglect (58 – 73%) and mental health difficulties (50 – 62%).
England	Dickens *et al.*	2007	March 2001	CLA new entry (n=712), n=251 with survey data	24 local authorities	Social care	DfE (CIN census; CLA census); survey of social workers	No	Under one year olds were slightly over-represented (21%). 80% of children were White. Most started to be looked after on voluntary accommodation (71%), followed by an interim care order (16%).
England	Doebler *et al.*	2023	2015 – 2019	Children involved in s31 care proceedings (n = 117,098)	National; except city of London due to small sample size	Family justice	Cafcass	No	A large proportion of the s31 cases were children under the age of one. Incidence rates of care proceedings were higher

									the lower the local authorities social spending care was.
England	Emmott *et al.*	2019	April 2013 – March 2016	CIN (n=1,372,352) aged 0 – 17 years	National	Social care	DfE (CIN census); ONS 2016 mid-year estimates; HM Revenue and Customs	No	There were an average of 54.4 referrals per 1000 children per year. Rates have slowly declined over the study period. Children from higher area-level child poverty had higher health referral rates, with variation across local authorities.
England	Fraser *et al.*	2022	April 2018 – March 2019	Children aged 2 (n=181,130) Safeguarding vulnerability (n=205) CLA (n=205)	Local authority: 33. 13 with Children Looked After data and 7 with safeguarding codes	Social care and health	Community Services Dataset	No	Children looked after (44%) were less likely to receive their 2 – 2.5 year mandated health review compared to children not looked after (69%). Those with and without safeguarding vulnerabilities were similar (84% safeguarding vs 86% not safeguarding). Children in the most deprived areas and Other ethnicity were also more likely to miss out on their review.

England	Goldacre & Hood	2022	2018 2019	–	CIN (n of episodes =186,112) CPP (n of episodes = 31,380)	National (all 152 local authorities, except Isles of Scilly and City of London due to small population sizes)	Social care	DfE (CIN census); ONS 2019 mid-year estimates	No	Less deprived local authorities tended to have a stronger social gradient. Referrals were higher for younger children, and decreased from five years old onwards. Social gradient referral was strongest for White children and lowest for Black children. Neglect child protection plan categories had the strongest social gradient, while sexual abuse had the lowest.
England	Goldacre *et al.*	2022	2014 2020	–	CLA (n=46,703)	National: 152 (except Isles of Scilly, City of London due to small population sizes; Dorset, Bournemouth and Poole due to boundary changes during	Social care	DfE (CLA census); ONS data	No	A total of 13,362 (26%) re-entered care during the study period. Re-entry rate at six-years was 35%, with slight rates in reduction over time. The probability of re-entering care within one year was 19% (in 2019/20). Older children (between 10 and 15) who return home are 2.36 times more likely to re-enter care

				the study period)				than children aged under one year. Risk of re-entry was also lower for children who were Asian, Black or Other compared to White children.
England	Harnett *et al.*	2018	Pregnant high risk females (n=68): Routine care (n=33) Care pathway (n=35)	Local authority: Oxfordshire	Social care	Child Protection Status from Administrative data; data from Parents Under Pressure Online Support Tool; semi-structured interviews; Depression, Anxiety and Stress Scale questionnaire; Multidimensional Scale of Perceived Social Support questionnaire; Alcohol Use	Yes; qualitative	At 12-months follow up, a higher proportion of mothers who were enrolled in the care pathway had an improvement in their child's safeguarding status (42%) compared to only 14% of mothers in routine care. There was also a small number of mothers in the care pathway who had no change to their safeguarding status (10% care pathway vs 42% routine care)

							Disorders Identification Tests		
England	Harrison	2020	1) 2006 – 2017 2) Aged 16 at the end of 2007/08, and entered higher education up to 2014/15. Care experience during 2007/08 3) 2016/17	1) n=1,640 care leavers /27,010 aged 19-21 2) HESA: n=280,245, including n=6,470 people in care 3) Individuals in HESA (n=1,240,574); self-reported care leavers (n=4,140); confirmed as care leaver by higher education institute (n=2,980)	National	Care leavers and education	1) DfE (CLA census) 2) DfE (NPD; HESA) 3) DfE (HESA) and self-declared care experience on the University and Colleges Admissions Services application or confirmed by the higher education institute	Pre-linked	1) While there was a steady increase in the number of young people from deprived areas attending higher education, the number of care leavers attending higher education has remained stable (~6%). 2) Of the 6470, 12% (n=765) entered higher education. Care leavers tended to enter higher education later than other young people. 33% of care leavers were aged 19 at the end of their first year, compared to 58% of the whole cohort. This is likely due to care leavers having significantly lower attainment at 16. Only 9% achieved 5 A* - C compared to 48% of the whole cohort.

England	Hiller *et al.*	2023	2012 2016	–	CLA in the care system for at least 2.5 consecutive years (n=742) and n=672 with SDQ	Local authority: Three	Social care and health	Social care data from local authorities including SDQ	No	Sex (males) and care entry at an earlier age was associated with hyperactivity. Emotional problems were associated with separation from siblings, as was peer problems and hyperactivity.
England	Hood *et al.*	2021a	2015 2018	–	CIN episodes (n=115,000)	Local authorities: Six in South East England	Social care	DfE (CIN census); measures of deprivation (IMD)	No	Latent class analysis was used to profile risks to children. It found seven classes present across local authorities which could profile child characteristics. Domestic violence was likely to be assessed in combination with parental health problems, with alcohol and/or drug misuse and/or emotional abuse was the most common class in five out of six local authorities. While domestic violence and emotional abuse, as well as physical abuse, neglect and/or the child's mental health had

										the highest likelihood of multiple risks to children. This had a higher proportion of children looked after and child protection plan.
England	Hood *et al.*	2023	2014 – 2021	CIN episodes (n=4.2 million) aged 0 – 17 years	National (n=152 local authorities)	Social care	DfE (CIN census)	No		Twelve latent classes were identified which identified mutually exclusive sub-groups among children in need (one being 'other'). The most prevalent was domestic abuse and violence (20%), where there was a 75% probability of concerns about child's parents or carers being subject to domestic abuse and violence, and 30% directed towards the child. Parental mental health (18%) was second, followed by disability as the most prevalent categories (9%). These findings suggest that it is possible to categories the demands for CSC services – classes were

									consistent over time and across local authorities.
England	Jay & Gilbert	2021	Children in school September 2005 – August 2006 CLA between September 2005 – March 2016 CIN between October 2008 – March 2015	CIN (n=57,206) CLA (n=6240) Children in Year 1 (aged 5/6) (n=411,917)	National	Social care and education	DfE (CIN census; CLA census; NPD)	Pre-linked	By the end of compulsory education (year 11), 83% and 65% of CLA and CIN, respectively had received SEN provision compared to 37% in neither CIN or CLA.
England	Jay *et al.*	2022	September 2011 – August 2013	Aim 1 (CSC status year 4 to 6: CIN (n = 65,880) CPP (n = 5202) CLA (n=5435)	National	Social care and education	DfE (CIN census; CLA census; NPD)	Pre-linked	Children in receipt of CSC were more likely to be non-enrolled in school than their non-exposed peers in both study aims. These findings suggest that children with a

				Aim 2 (CSC status year 4 to 9): CIN (n = 96,306) CPP (n = 12,987) CLA (n=11,161)					CSC history are more likely to be pushed out from school than children without. Low socio-economic position was associated with poor mental health for those with intellectual disability but not those without.
England	Jay *et al.*	2023	September 2011 – August 2013	Aim 1 (CSC status year 4 to 6: CIN (n = 60,560) CPP (n = 4660) CLA (n=4930) Aim 2 (CSC status year 4 to 9): CIN (n = 88,550) CPP (n = 11,600) CLA (n=9560)	National	Social care and education	DfE (CIN census; CLA census; NPD)	Pre-linked	Those with CSC exposure were significantly more likely to be excluded across years 7 – 11, than children without. 32% of CIN children were excluded at least once, and 40% of those subject to CPPs and CLA. Exclusion rates were also higher among those with SEN history, particularly for those aged 11 – 14.
England	Mc Grath-Lone *et al.*	2016	Born between January 1992 –	Children born (n=92,190) CLA (n=13,700)	National	Social care	DfE (CLA census)	No	By 18, 3.3% of children born between 1992 and 1994 had entered out-of-home care. The proportion varied by ethnicity, with Black children (4.5%) and

			December 2011 Episodes of care for January 1992 – December 2012						Mixed (4.2%) having highest rate of entry by age 9, while Asian (0.8%) and White (1.6%) were lowest. The number of children entering care also increased over the study period, with White children being the main determinant. Placement types varied depending on age, infants were typically placed in a family care setting. Over time, young children (1 – 10 years old) were increasingly placed in foster care rather than group care settings. Over a third of children entering out-of-home care for the first time aged 16 or over were placed in independent living.
England	Mc Grath-Lone *et al.*	2017	January 1992 – December 2013	CLA (n=95,369) excluding voluntary and respite care	National	Social care	DfE (CLA census)	No	There were increases in special guardianship and residence orders between 2007 and 2012. Over a third (35.3%) re-

									entered out-of-home care within five years or leaving. On average, re-entry occurred within a year. Factors associated with re-entry into care included ethnicity (White or Mixed were more likely to re-enter), older children (11 – 15 years) and number of placements.
England	Mc Grath-Lone *et al.*	2020	January 1992 – December 2012	CLA (n= 16,000): born between January 1992 and December 1994, excluding respite care	National	Social care	DfE (CLA census)	No	Six patterns of out-of-home care were identified. More than half of children had a relatively short out-of-care placement (58.4%). Followed by adolescent entry (17.6%), long-term complex care (13.1%) and early interventions (6.9%). Very few children had long-term stable care (4.0%) or a stable second placement (2.4%). Most of these children achieved some form of stability, although it

									was often through shorter-term care ending with family reunification, adoption or special guardianship, rather than within the social care system.
England	Mc Grath-Lone *et al.*	2022	March – December 2015 – 2020	CSC (n =621,147) SEN-only (n = 428,964) Both SEN and CSC (n=81,783): Pupils in aged 11 – 16 years	National	Social care and health	ECHILD	Pre-linked	A fifth of children (n= 621,137, 20.5%) aged 11 – 16 years in 2019/20 were receiving statutory support/services. Of these, 14.2% were SEN support only, 3.6% CSC services and 2.7% were both. During the COVID-19 pandemic, adolescents receiving CSC support were disproportionately affected, and were less likely to have face-to-face care than their peers.
England	Neil *et al.*	2019	April 2009 – March 2015	CLA (n=2208)	Local authority: one large unnamed local authority	Social care	DfE (CLA census)	No	Age was shown to have a strong effect on how long children stay in care, and if they leave, where they are placed.

									Younger children were more likely to be adopted (0 - 2 years, 41%), while older children entering care (aged ≥7) had a low chance of being adopted. Overall, the most common exit route was returning to parents (37%). A third of children aged 12 – 17 years old experienced four or more placements. Ethnicity was not related to whether a child stayed in long-term care, although only two ethnic categories were used.
England	Neil *et al.*	2020	April 2009 – March 2017	CLA (n=2208) (2009 – 2015)	Local authority: one large unnamed local authority	Social care	DfE (CLA census)	No	Over a third of children (36%) returned home during the study period. Those who entered care under 12 were more likely to have stable reunifications than children aged 12 – 17 years. Care orders, fewer placements in care, minority ethnicity and being from least deprived

									areas also had more stable reunification.
England	Parson *et al.*	2023	Children born to care experienced mothers Sep 2000 – Jan 2002 (data collected at 9 months, 3, 5, 7, 11, 14 and 17years)	Self-reported maternal care leavers and their child (n=138) Mothers with no care experience and their child (n=6091)	National	Social care and education	UK Millenium Cohort Study	No	Children with a mother with care experience were more likely to have educational disadvantage during education transitions (age 3, 5 and 16). However, when controlling for maternal risk factors including socio-economic resources, maternal education and housing conditions the negative association between maternal care experience and the child's educational outcomes was attenuated.
England	Pearson *et al.*	2020	April 2005 – March 2014	CLA (n not reported) excluding respite	National: 131 (20 excluded due to too few live births or poor data quality)	Care leavers and education	DfE (CLA census); HES; ONS mid-year estimates; 2011 Census; measures of deprivation (LSOA)	Pre-linked (HES APC mothers and babies)	Rate of entry into care varied depending on local authority, the median being 72.86 per 10,000 in 2006/07 and 90.14 per 10,000 in 2013/14. Entry rates into care were associated with increased maternal prevalence history of

									adversity-related hospital admissions (accounting for 24%).
England	Pearson *et al.*	2021	April 2007 – March 2019	Mothers with a child subject to care proceedings (n=3226)	Four local authorities (Croydon, Lambeth, Lewisham and Southwark)	Family justice and health	Cafcass; SLaM data from CRIS	Yes; linkage feasibility of Cafcass and SLaM data	A high proportion of mothers involved in care proceedings had previously had contact with a secondary or tertiary mental health or substance misuse service (91.9%). These woman also entered motherhood younger than the general population.
England	Phillips *et al.*	2023	2012 – 2016	CLA for at least 2.5 years and emotional/behavioural difficulties (n= 112), n=97 with descriptive information	Three local authorities	Social care and health	Social care data from local authorities including SDQ	No	Children were at risk of externalising symptoms during the first year of being in care, and being referred to mental health services (81% of cohort). Although more than half (52%) were turned away or had treatment breakdowns. Access to mental health

									services was not associated with changes in mental health
England	Robling *et al.*	2022	June 2009 – July 2010, follow-up May 2018	Assessed but not in need (n =91) CIN (n=323) CPP (n= 101) CLA (n= 52) Mothers (n=1537)	National	Social care, health, and education	DfE (CIN Census; CLA Census; NPD); HES; ONS mortality data	Yes; NHS data and DfE data	Children enrolled in the FNP were more likely to reach a good level of development by the end of reception than children in the 'usual care' arm (55.5% vs 52.2%). There was no evidence of differences in KS1 assessments.
England	Rodrigues	2004	June 2001	CLA (n=136) excluding respite	Local authority: Surrey	Social care and health	Surrey Social Services database; medical examinations records; CAMHS data; East Surrey Drug Action Team, immunisation data; education services	No	Almost two-thirds of children were placed with foster parents, similar to national figures. 10% had three or more placements. Only 64% had a medical examination the previous year. Common physical health problems included asthma (14%), developmental delays – primarily speech (12%), emotional and behavioural problems (36%). A quarter of children had a SEN provision

										(25%). Immunisation rates were lower compared to the general population.
England	Sidebotham & Golding	2001	January 1991 – December 1998	Mothers (n=13,995) Children (n=14,138)	Local authority: Avon area	Social care	ALSPAC; data	CPR	Yes; ALSPAC and CPR data (local authority)	162 children were placed on the CPR, most commonly for; physical injury sexual abuse, emotional abuse or neglect. Mothers had lower educational levels, were more likely to have been sexually abused (23.8% vs 3.4%) and in local authority care (14.3% vs 2.1%) and have psychiatric illness (12.3% vs 4%). Similar patterns were observed for fathers.
England	Sidebotham *et al.*	2002	January 1991 – December 1998	Mothers (n=14,893) Children (n=14,256) on CPR (n=115) by sixth birthday	Local authority: Avon area	Social care	ALSPAC; data	CPR	Yes; ALSPAC and CPR data (local authority)	Deprivation, including unemployment, council housing, over crowing and car ownership were associated with risk of being placed on the CPR
England	Sidebotham & Heron	2003	January 1991 –	Mothers (n=14,893)	Local authority: Avon area	Social care	ALSPAC; data	CPR	Yes; ALSPAC	Nearly one tenth of children (8.7%) had been registered in

			December 1998	Children (n=14,256) on CPR (n=115) by sixth birthday				and CPR data (local authority)	the four weeks of birth. Parents of children placed on the CPR were more likely to express concerns about speech, behaviour or general development compared to those no placed on the CPR (.8% vs .3%). Frequent tantrums were also reported (1.1% vs .4%).
England	Sidebotham & Heron	2006	January 1991 – December 1998	Mothers (n=14,893) Children (n=14,256) on CPR (n=115) by sixth birthday	Local authority: Avon area	Social care	ALSPAC; CPR data	Yes; ALSPAC and CPR data (local authority)	A small proportion (2.1%) of children in the ALSPAC study by their sixth birthday. Of these 44% were placed on the CPR. Young parents had higher risk of being investigated, and those with history of childhood abuse.
England	Sinclair *et al.*	2019	Aged 16 years old in academic year 2012/2013	*Main cohort* CLA (n=6,236) CIN (n=20,383) Other pupils (n=616,186)	National	Social care and education	DfE (CIN Census; CLA Census; NPD)	Pre-linked	Early entrants into care (KS1 or KS2) had similar unauthorised absences to controls, while CIN were much higher, there was sharp increases year on year. Those who entered care

				Matched sample CLA (n=5,175) CIN (n=17,392) Matched comparison group on FSM and attainment (n=22,567)					later (KS3/KS4) had similar absences to CIN because they are outside of care but when they enter care, the number of unauthorised absences starts to fall. On average, children in care have similar exclusions to CIN, both of which are higher than controls.
England	Sinclair *et al.*	2020	Aged 16 years old in academic year 2012/2013	CLA (n=6,236) CIN (n=20,383) Matched comparison group on FSM and attainment (n=11,804) Unmatched comparison group (n=605,102)	National	Social care and education	DfE (CIN Census; CLA Census; NPD)	Pre-linked	CIN and CLA children, and the matched comparison group were disadvantaged at KS1 compared to the unmatched group. Attainment at KS1 was a key predictor of attainment at KS4. Declines among the CLA cohort was associated with late entry into care, absences and exclusions. Exploration of trajectories from KS1 (at 7 years) to KS4 (at 16 years), show that around 50% of CLA or CIN children

									start in the top third and finish in the bottom third.
England	Sinclair *et al.*	2022	Children aged 15 in September 2012	CLA (n=2,528) for 12 months on March 2013 Comparison sample (n=522,119) (sample drawn from Sebba *et al.*)	National	Social care and education	DfE (CIN Census; CLA Census; NPD)	Pre-linked	A high proportion of the CLA sample had SEN (35.4% vs 9.6%). When excluding children who were educated in a non-mainstream state secondary school (38% of CLA vs national figure 5%), both cohorts slightly improved attainment between KS2 and KS4. Differences between schools has a large impact on attainment, up to 52% of CLA made considerable progress ('catch-up') when in favourable conditions such as placement stability and schools with impact.
England	Sutcliffe *et al.*	2017	Children born in academic years 1993/1994	CLA (n=47,500) excluding UASC	National	Social care and education	DfE (CLA Census; NPD)	Pre-linked	Children who were care-experienced from a younger age (Key Stage 1) had a higher probability of a high achievement trajectory and

			– 1997/1998 and in care during March 2005 to April 2013						lower probability of a late decline by Key Stage 4. Children looked after for the first time during Key Stage 2 – 4 were also associated with following a high achievement trajectory. Those who spend longer in care and looked after earlier had better outcomes.
England	Teyhan *et al.*	2019	Born between 1991 – 1992 CLA 1998 – 2003	CIN (n=148) CLA (n=76) Comparison group: ever looked after in ALSPAC area (n=713) Ever looked after in England (n=43,938)	Local authority: Bristol (Bristol City, South Gloucestershire, North Somerset, Bath and North East Somerset)	Social care and education	ALSPAC; DfE (CLA census; CIN census; NPD)	Yes; NPD and ALSPAC	Those with CLA (n=49) or CIN (n=64) status during Key Stage 4 had low GCSE attainment. Less than 15% passed 5 or more 'good' GCSEs compared to >50% of their peers. CSC experienced children were more likely to have SEN and absence rates. Patterns were similar for ever CLA (n=76), while ever CIN (n=148) tended to perform better than those were in need during Key Stage 4. There was a high proportion of CLA and CIN with SEN or

									disabilities, however, this did not explain the low average attainment.
England	Ubbesen *et al.*	2015	1992 – 2008	CLA (n=2845) before their 16th birthday	Local authorities: 8/154 (restricted but representative of a range of local authorities); and Denmark	Social care	DfE (CLA census)	No	Only 24% of children entered out-of-home care for the first time aged ≥10 years. 59% were white British of European. Foster care was the most common type of out-of-home care (78% of first placements). The cumulative incidence rates of entry into out-of-home care has increased over time.
England	Vostanis *et al.*	2008		CLA (n=1039) aged between 5 and 17 years	142 local authorities	Social care and health	Local authorities databases to obtain England survey of CLA; interviews	No	Nearly half (45%) met the criteria for a mental health ICD-10 criteria. Most common included conduct disorder (37%), emotional disorder (12%) and hyperkinetic disorder (7%). Depending on the disorder, between 38 – 62% had seen a CAMHS specialist.

England	Webb *et al.*	2020a	March 2015	CIN (n=5031) CP and CLA collectively (n=7824)	18 Local Authorities for CPP/CLA and 5 Local Authorities for CIN	Social care	DfE (CIN census; CLA census); Deprivation measures (MSOA-level)	Yes; Social care data (individual level) to MSOA code of parental home	Ethnic minorities have significantly difference levels of child welfare interventions compared to White British populations. Different social gradients were evident across different ethnic populations and types of social services interventions.
England	Webb *et al.*	2020b	March 2015	CIN (n=52,179) CPP (n=6716) CLA (n=8865)	18 Local Authorities for CPP/CLA and 13 Local Authorities for CIN	Social care	Local authority data (CIN, CPP, CLA data); ONS estimates of infant mortality; DfE LAIT; 2011 Census; CACI income inequality estimates; Deprivation measures (LSOA-level)	Yes; Social care data (individual level) to LSOA code	Low deprivation and high income inequality was associated with neighbourhood intervention rates. There was also evidence of the inverse intervention law for CLA and CIN rates but not CPP rates, whereby social gradient is dependent on local authority level deprivation.

England	Webb	2023	2010/11 – 2018/19	CIN (n not reported)	National: 150/152 (excluding City of London and Isles of Scilly due to small populations)	Social care	DfE (CIN census)	No	Modelling was used to analyse the relationship between local authority spending and CIN rates. Higher spending was associated with decreased rates in CIN between 2010/11 and 2014/15. Spending cuts equated to 13,000 – 16,500 children and young people at risk of developmental or health impairments (2010 – 2015).
England	le Zhang *et al.*	2020	Children born between April 1991 – December 1992	All children (n=13,988) alive at one years old Mothers (n=14,541)	Local authority: Bristol area	Social care and health	ALSPAC (including SDQ); self-reported social work contact; CPR data	Yes; ALSPAC and CPR	Children whose mothers had social work contact had worse emotional and behavioural problems within the first seven years of life than those without.
Scotland	Clark *et al.*	2017	September 2011 – August 2012	Currently CLA of school age (n=10,009) Previously CLA of school age (n=1757) All children of school age (n=670,52)	National	Social care	Children Looked After Statistics; Pupil Census Annual Return; Community Health Index database	Yes; linkage feasibility of social care, health and	For their most recent episode, most children were looked after under a compulsory supervision at home (40%) or away from home (34%). Only 9% were under voluntary care, and 7% were on a permanence

								education datasets	order or awaiting adoption. Since the start of the study period, more than half of children (60%) had only had one placement.
Scotland	Fleming *et al.*	2021	September 2009 – August 2012	Children in school, not looked after (n=701,203) Children looked after (n=13,898)	National	Social care, health and education	Pupil census; Scottish Qualifications Authority; CLA survey; Prescribing Information System; National Records of Scotland; Maternity Record (SMR02)	Yes; 9 databases covering prescriptions, hospital admissions, maternity records, death certificates, annual pupil census, examinations, school absences/ exclusions	Children looked after were more likely to be from more deprived areas, have chronic conditions, neurodevelopmental multimorbidity and require SEN provisioning. They were also more likely to have poor educational attainment, absenteeism, exclusions and unemployment

								unemployment and children looked after	
Scotland	McMahon *et al.*	2018	CLA from 2007/08 – 2011/12 Dental services 2009 – 2013	CLA (n=10,924) Comparison group (n=622,280)	National	Social care and health	ScotXed Looked After Children dataset; ScotXed Pupil Census; Management Information and Dental Accounting system; Scottish Morbidity Records (SMR01); National Dental Inspection Programme	Yes; children looked after, pupil census and NHS data	Children looked after were more likely to have urgent dental treatment at 5 years old (23% vs 10%), were less likely to attend a dentist regularly (51% vs 63%) and more likely to have teeth extracted under general anaesthetic (9% vs 5%).
Scotland	Stewart *et al.*	2017	Secondary school during 2006/2007	School leavers (n=284,621)	National	Social care and education	ScotXed (School Leavers Survey; School Pupil Census; National	Yes; linkage feasibility of	Children looked after away from home were more likely to have no passes at level 3 (SCQF) compared to those

			– 2010/2011 followed-up until September 2012				Statistics School Leaver Destinations Survey; Attendance, Absence and Exclusions survey); Scottish Morbidity Record (Scottish birth records; SMR01; SMR02 maternity records)	education and health data	looked after away from home or not looked after.
Scotland	Woods & Henderson	2018	Children born between April 2003 and January 2004, and April 2013 and January 2014	Children placed on a Compulsory Supervision Orders (n=227): Children born in 2003 (n=110) Children born in 2013 (n=117)	Six local authorities	Social care and family justice	Scottish Children's Reporter Administration (SCRA); Case Management System	Yes; SCRA and case files/ Case Mangament System data	More children born in 2013 (33%) were placed in out of home care at birth compared to the cohort born in 2003 (9%). Fewer of the 2013 cohort resided with their parents (28%) at the age of three compared to the 2003 cohort (40%). Lastly, there was evidence of more permanence

									planning for the 2013-cohort (62%) than the 2003-cohort (41%).
Northern Ireland	Bunting *et al.*	2023	2010 – 2017	CIN referrals (n=228,779) CP investigation (n=32,091) CPR (n=15,849) CLA (n=37,216) excluding respite	National	Social care	SOSCARE	Yes; social care data and deprivation	Children referred to children's social care services, subject to the CPR and CLA were four to five times more likely to come from the most deprived areas. Younger children (aged – 4 years) across all social care services interventions had a greater social gradient (i.e. inequality)
Northern Ireland	Cousins & Wells	2005	March 2000 followed-up to March 2002	CLA under five years (n=388)	National	Social care and health	SOSCARE	No	Over half of children's records reported the child's mother had alcohol misuse (58.7%). Two years later, 12 (3%) children had received a diagnosis of foetal alcohol syndrome.
Northern Ireland	Cousins & Milner	2006	2000 – 2002	CLA under five years (n=388)	National	Social care and health	SOSCARE	No	Only a small proportion of children were first referred to social services because of drug abuse in the family (5.9%).

									Likely underreported given that 41.8% of CLA has substance abuse documented in case files. Drugs mainly consisted of 'softer drugs'. Rates of drug use varied by geographical area. Familial history of alcohol abuse was reported in three-quarters of records (75.7%).
Northern Ireland	Cousins *et al.*	2008	2002 – 2003	CLA aged 10 – 15 years (n=165)	National	Social care and health	SOSCARE including SDQ	No	10.3% had attempted suicide over the course of their lifetime. 12.7% had engaged in self-harm at some point in their life. Half (49.6%) of children had mental health problems.
Northern Ireland	Cousins *et al.*	2010	Not reported	CLA in residential and foster care aged 10 – 15 years (n=165)	National	Social care and health	SOSCARE including SDQ	No	More than half of the population (53.9%) had mental health difficulties. Children in residential accommodation were more likely than those in foster care to have; challenging behaviours, misuse alcohol, be emotionally disturbed and

									smoke. Of the whole cohort, just under 10% of children had attempted suicide (6%).
Northern Ireland	Hayes & Pinkerton	2016	1998 – 2015	CPR; varies year-on-year CLA; varies year-on-year	National	Social care	DHSSPS	No	There were sharp increases in the number of children on the CPR between 2004 and 2009. From 2012 onwards, the numbers have gradually decreased. The gap between children entering and leaving care continues to widen, with most apparent differences after 2008.
Northern Ireland	McKenna *et al.*	2023a	Individuals born between 1985 – 1997	No contact (n= 385,911) Assessed but not in need (n = 11,565) CIN/CP (n= 33,784) CLA (n= 5748)	National	Social care and health	SOSCARE; NHAIS; GRO	Yes; NHAIS, SOSCARE and GRO	11.7% of children born between 1985 and 1997 had childhood contact with social services. By the end of the study 0.52% (n=2273) had died, with children who had contact with social services accounting for 30.9% of all deaths. Death from suicide accounted for nearly half

									(58.2%) of all deaths among young adults who were in care. Level of social service contact and mortality risk is evident, but also extends to children with social service contact but never entered care.
Northern Ireland	McKenna *et al.*	2023b	Alive and residing in Northern Ireland in 2015	≤17 years old on 1 January No contact (n= 411,477) Assessed but not in need (n = 4876) CIN/CP (n= 17,795) CLA (n= 1304)	National	Social care and health	SOSCARE; NHAIS; GRO	Yes; NHAIS, SOSCARE and GRO	Of those who had contact with social services, 18.6% had experienced mental health in 2015. Mental illness was lowest in children with no social contact (0.7%), but increased to 4.4 for children assessed but not in need, 4% for CIN and 13.7% for CLA. Antidepressants were the most common medication prescribed and were 18 times higher for CLA (6.8%) compared to children with no social services contact (0.4%). However, it is important to note that this may be elevated

									due to an older population in CLA. CLA children who had more placements (four or more) were more likely (2.8 times) to receive psychotropic medication compared to those who had a single care episode. Those placed in children's homes were also more likely to be in receipt of psychotropic medication and experience mental health compared to those placed in non-kinship foster care.
Northern Ireland	Monteith & Cousins	2003	March 2000 followed-up to March 2002	CLA under five years old (n=395)	National	Social care and health	SOSCARE	No	Young children entering care came from adverse family circumstances. Poverty was apparent, and often consisted of a lone parent. Health problems were also common (56%). Placement instability was high, 12% had three or more placements in one year.

Northern Ireland	Taggart *et al.*	2007	2002 – 2003	CLA in residential and foster care aged 10 – 15 years (n=165)	National	Social care and health	SOSCARE including SDQ	No	Over one fifth (22.4%) had a learning disability recorded. Other health problems were evident. They were also more likely to have Total Difficulties (SDQ) than non-learning disability CLA, indicating mental health problems.
Wales	Anthony *et al.*	2023	April 2017 – March 2018	CRCS (n=12,792) including CPR (n=1197) CLA (n=3382)	National	Social care	CRCS; WECC	Yes; WECC and CRCS	Children in receipt of care and support had four distinct profiles: 1) child disability (50%), multiple risks (23%), low adversities (20.3%) and family poor health (6.7%). Children at risk of multiple adverisities were more likely to be from more deprived areas.
Wales	Bailey *et al.*	2023	April 2016 – March 2021	CRCS (n = 24,540): CRCS but not CPR or CLA (n= 12,480) CPR (n = 6,225) CLA (n = 5,840)	National	Social care and health	CRCS, NCCHD	Yes; all linkable	Children who were in contact with the welfare system were more likely to be up-to-date on their childhood vaccinations compared to a comparison group. However, they were

									less likely to receive their vaccines in a timely manner.
Wales	Elliott *et al.*	2018	April 2008 – March 2014	CLA (n = 769)	National	Social care	CLA census	No	Most children entering care were placed voluntarily in residential care. When leaving care for the first time the most common reason was returning home (37.6%). Wales appears to have a lower proportion of children and young people placed in children's homes compared to England.
Wales	Elliott	2020	April 2008 – March 2014	CLA (n=8853)	National (18 of the 22 local authorities)	Social care	CLA census	No	There were higher rates of children looked after in the more deprived areas. Children in the most deprived decile were almost twelves times as likely to become looked after. This trend remained over a six-year period, demonstrating clear evidence of the social gradient in which children were subject to child welfare interventions.

Wales	Griffiths *et al.*	2020	January 2015 – December 2018	Birth mothers of infants involved in s31 care proceedings (n=1111) Age-deprivation-matched comparison group (n=23,414)	National	Family justice and health	Cafcass Cymru; WLGP; PEDW; WDSD; MIDS	Yes; all linkable	Mothers who experienced care proceedings before their child was one years old had elevated vulnerability. They were more likely to be a younger at time of birth (<21 years, 63.5% compared to 42.7% in the comparison group), have mental health (28.6% compared to 8.2%), and substance use issues (10.4% compared to 0.6%)
Wales	Griffiths *et al.*	2022	January 2011 – December 2018	Public law proceedings (n=5524) Private law proceedings (n=17,041)	National	Family justice and health	Cafcass Cymru; WLGP; WDSD	Yes; all linkable	Children and young people were three times more likely to be involved in private than public law proceedings. Over 85% of the applicants were under 10-years old in both private (92.1%) and public (88.5%) law. Application numbers were higher for those residing in more deprived areas (three-fold for private and ten-fold for public).

									Incidence rates of depression and anxiety were higher for older children and girls, compared with boys, who were involved in private and public proceedings.
Wales	Johnson *et al.*	2022	January 2011 – December 2019	Parents involved in care proceedings (n=8821) Age-, sex- and deprivation-matched parents not involved in care proceedings (n=32,006)	National	Family justice and health	Cafcass Cymru; WLGP; PEDW; OPDW; EDDS; WDSD	Yes; all linkable	Parents involved in care proceedings had elevated health care use compared to the comparison group. Emergency department attendances had the most prominent differences (59.3% vs 37.0%); as well as specific health conditions including mental health (43.6% vs 16.0%), substance use (19.4% vs 1.6%) and injuries (41.5% vs 23.6%).
Wales	Johnson *et al.*	2023	January 2011 – December 2019	Mothers involved in public law family court proceedings (n=4,695) Comparison group of mothers not involved	National	Family justice and health	Cafcass Cymru; WLGP; WDSD; PEDW; EDDS	Yes; all linkable	Mothers involved in public law proceedings were 8 times more likely to have exposure to domestic violence and abuse (n=269, 5.7%) in their general

				in public law proceedings (n=233,171)						practice health records compared to mothers in the general population. Risk factors for domestic abuse and violence included mothers with mental health conditions, intellectual disabilities, substance use and mothers who had a recent pregnancy or childbirth
Wales	Kent *et al.*	2023	2017 – 2018	CLA (n = 631)	Local level (HM Prison Parc, Bridgend)	Care leavers and criminal justice	Do-IT profiler (includes demographics and background, knowledge and skill screener, learning difficulties)	No		22% of prisons self-reported being CLA. Comparison of CLA prisoners to those not in CLA showed CLA prisoners were more likely to have substance misuse problems, neurodisabilities, traits of dyslexia, attention deficit disorder, autism spectrum disorders and developmental co-ordination disorder.
Wales	Melis *et al.*	2023	Children born between	Children born in Wales between April 2006 and March 2021	National	Social care and health	CRCS; CLA; EDUW; Health data (WLGP;	Yes; all linkable		Children from most deprived areas were more likely to enter care (3.4 times) than those in

			April 2006 – March 2021	(n=395,610); CLA (n=7971)			PEDW; NCCH); WDSD; MIDS; ADBE; ADDE		the least deprived areas. Maternal mental health problems in pregnancy, alcohol problems, substance use in pregnancy, as well as congenital anomalies, preterm birth and low birth weight were associated with higher risk of CLA status.
Wales	Scourfield *et al.*	2021	March 2015	CP: varies year-on-year CLA: varies year-on-year	National: 20/22 local authorities (Ceredigion and Vale of Glamorgan had missing LSOA data)	Social care	Welsh local authorities supplied CIN census and CLA census; Flying Start data from Welsh Government	No	More deprived areas had more Flying Start operating in them. Areas with Flying Start also had higher number of child welfare interventions than those without. These results suggest there is asocial gradient for child welfare interventions in Wales.
UK	Bywaters *et al.*	2020	March 2015 (July 2015 in Scotland)	CP (n=12,412) CLA (n=24,477)	England (18 representative local authorities), Northern Ireland (all local	Social care	CP and CLA data from local authorities	No	Around half of children in Northern Ireland and Scotland were placed with a parent, relative or friend, compared to approximately a quarter in Wales and one in six in

					authorities), Scotland (10 local authorities) and Wales (all local authorities)				England. Across all countries, children from more deprived areas were over-represented. Nearly 70% of children in Northern Ireland were living in the 40% most deprived areas. Deprivation was a primary driver in service demand.
UK	Dickens *et al.*	2019	Cohort 1: cases between 2009 – 2010 Cohort 2: cases between 2014 – 2015 Both cohorts followed up until March 2016	Cohort 1 (n=290) Cohort 2 (n=326)	England (five local authorities) and Wales (one local authority)	Family justice	DfE (CIN census; CLA census); Cafcass data (random sample of care cases); Cafcass; Interviews with staff in local authorities	Yes; Cafcass and DfE data	Adoption plans had dropped by half between the two cohorts (30% vs 15%), with increases in special guardianship orders (13% vs 24%). Slight increases in the number of children returning to/remaining with at least one parent increases (25% to 32%).

UK	McCartan *et al.*	2018	March 2015 (July 2015 in Scotland)	Children aged 0 – 17 on a CP, CLA No sample size reported	England (18 local authorities), Northern Ireland (all local authorities), Scotland (10/32 local authorities), Wales (all local authorities)	Social care	DHSSPS (Ireland); data from local authorities (England, Scotland and Wales)	Yes; social care data, population data and deprivation data	Types of care differed across the UK. Formal kinship care was much higher in Scotland and Northern Ireland where it continues to rise, compared to England and Wales. CLA rates are much higher in Scotland than the other nations, permanence orders did not account for this.
UK	McGhee *et al.*	2018	2005 – 2014	CLA; varies year-on-year	England, Northern Ireland, Scotland, Wales	Social care	Recent publications; authority statistics; Office for National Statistics mid-year population estimates	No	Compared to the rest of the UK nations, Scotland remains considerably higher in the rate of children looked after. Wales shows a steady increase over time, while England and Northern Ireland show a slight upward trend. Differences in these rates is thought to be due to variations in operational and legal practice.

UK	Murray *et al.*	2020b	1971; 1981; 1991; 2001; census data (care) 1981 – 2011 follow-up	Individuals with health data at 10 (n=157,896), 20 (n=166,844) and 30-years (n=173,801) follow-up	England and Wales	Care leavers and health	Office for National Statistics Longitudinal Study (1% representative sample)	Yes; linked between Censuses	Health outcomes vary by care type. Follow-up at 10 years showed that children in residential care have more health care problems than those in other care arrangements. Younger children were at greater risk of developmental delays and attachment disorder. Health differences remained at 30 years follow-up, worse mental health, self-rated physical and mental health problems and mortality were observed.
UK	Murray *et al.*	2020a	1971; 1981; 1991; 2001; census data (care), followed-up until 2013	Individuals (n=353,601) with n=6444 observations in care	England and Wales	Care leavers and health	Office for National Statistics Longitudinal Study (1% representative sample)	Yes; linked between Censuses	Children who had been in care at any time point were 70% more likely to die during the follow-up period compared to those who had not been in care. This increased risk remained for up to 42 years. Excess mortality was attributed to deaths categorised as self-

									harm, accidents and mental and behavioural causes.
UK	Sacker *et al.*	2022	1971; 1981; 1991; 2001 census data (care) 1981 – 2011 follow-up	Individuals (n=242,843) with n=3477 observations in care	England and Wales	Care leavers and education	Office for National Statistics Longitudinal Study (1% representative sample)	Yes; linked between Censuses	Out-of-home care increased the risk of poorer functioning in socioeconomic circumstances, family formation and relationships and living arrangements in their 20s, 30s and 40s. Worse outcomes were found for those with a history of residential care, followed by non-relative out-of-home care. There was an increased risk of being out of the labour force associated with those in non-parental care, evident in the 30s and 40s. Those followed-up into their 40s had a higher probability of having 18-year level qualifications than those follow-up into their 20s

UK	Webb *et al.*	2021	March each year 2013 – 2018	Children CP and CLA aged 0 – 17 years No sample size reported	172 local authorities in Wales and England (City of London and Isles of Scilly were excluded due to small population)	Social care	DfE; Department for Communities; Welsh Government; Local Government; Office for National Statistics; CACI Ltd.	No	Child maltreatment is an adverse consequence of income inequality. However, this was not observed across different forms of child protection: income inequality was only a predictor of CLA rates, despite CIN having similar income deprivation. These findings suggest that local authorities that are poor or have greater income inequality have higher rates of CLA.

We highlight the studies which have used ADR England datasets in green.

Abbreviations: A&E: Accident and Emergency; **ADBE:** Annual District Birth Extract; **ADDE:** Annual District Death Extract; **ALSPAC**: Avon Longitudinal Study of Parents and Children, **Cafcass:** Children and Family Court Advisory and Support Services; **CAMHS:** Children and Adolescent Mental Health Services; **CIN**: Children In Need; **CLA**: Children Looked After; **CPP:** Child Protection Plan; **CPR:** Child Protection Register; **CRCS:** Children Receiving Care and Support; **CRIS:** Clinical Record Interactive Search; **CSC:** Children Social Care; **DHSSPS:** Department of Health, Social Services and Public Safety; **DfE:** Department for Education; **ECHILD:** Education and Child Health Insights from Linked Data; **EDDS:** Emergency Department Dataset; **EDUW:** Education Wales; **FNP:** Family Nurse Partnership; **FMS:** Free School Meals; **GCSE:** General Certificate of Education; **GHQ:** General Health Questionnaire; **GRO:** General Register Office; **HES:** Hospital Episode Statistics; **HESA:** Higher Education Statistics Agency; **ICD-10:** International Classification of Diseases 10th Revision; **LAIT:** Local Authority Interactive Tool; **LSOA:** Lower Super Output Area; **MCS:** Millennium Cohort Study; **MIDS:** Maternity Indicators Dataset; **MSOA:** Middle Layer Super Output Area; **NCCHD:** National Community Child Health Dataset; **NHAIS:** National Health Application and Infrastructure

Services; **NPD:** National Pupil Database; **ONS:** Office for National Statistics; **OPDW:** Outpatient Database for Wales; **PEDW:** Patient Episode Dataset for Wales; **SDQ:** Strengths and Difficulties Questionnaire; **SEN:** Special Educational Needs; **SOSCARE:** Social Care Services Data; **UASC:** Unaccompanied Asylum Seeking Children; **WDSD:** Welsh Demographic Service Dataset; **WLGP:** Welsh Longitudinal General Practice

Appendix 3: Results of reports from the grey literature search

Country	Author	Year	Study period	Cohort	National or local level	Area	Dataset	Linkage	Findings
England	ADR UK (Hunter et al. 2023)	2023	Children born between 1996 and 1999 with a minimum age of 10	CLA (n=50,080) and No care experience (n=2,241,260)	National	Criminal justice	MoJ-DfE	Pre-linked	Care experienced children were more likely to have youth justice involvement compared to children without care experience. Ethnic minority care-experienced children had even higher levels of justice involvement. A larger proportion of care-experienced children received a custodial sentence compared to non-care experienced children.
England	Children's Commissioner for England (Children's Commissioner 2017, 2018b,	2017 – 2020 (series)	March each year, 2015 – 2018	2015/16: (n=100,810) 2016/17: (n=72,670) 2017/18: (n=75,420)	National	Social care	DfE (CLA census; NPD)	Pre-linked	In 2018/19 around 10% of children (~8,000) experienced multiple placement changes, this remains largely unchanged since 2016. Older children are more likely to experience multiple moves in a year. Around 3% of CLA experienced children are subject to sustained multiple placement moves, again, this remains

	2019, 2020)**								largely unchanged from 2016/17. A quarter of CLA have multiple social worker changes over the last 12 months. Over the series, the rates of children experiencing school moves during the year remains constant (17%).
England	Children's Commissioner report (Children's Commissioner for England 2021)	2021	First entry into care between April 2018 and March 2019	CLA (n=3,693) aged 13 – 15 years	National	Social care and education	DfE census; NPD)	(CLA CIN;	Pre-linked	Teenagers entering care have higher levels of needs prior to entering care. They are more likely to be eligible for free school meals (two-thirds), have higher rates of SEN (just over two-thirds) prior to being taken into care (compared to one in three of those without social care involvement). Despite this, most of these children have no contact with social services prior to being taken into care. Four years prior to entering care, children had increased rates of absence, exclusions, time out of school and service referrals which suggest there may be early warning signs.

England	Department for Education (CIN analysis)	2019	2012 – 2018	Contact with social care (n=1.6 million)	National	Social care and education	DfE (CIN census; CLA census; NPD)	Pre-linked	Of children in contact with social services, the majority were a single referral (61%). Over half had a CIN episode (54%), 19% were CPP and 11% were CLA. 35% of children in need had SEN over the study period. Children in receipt of social care services have a higher chance of exclusion, (4 times more likely in CIN, 3.5 in CPP and 2.3 times in CLA). Children in need also had lower attainment than non-CIN children. They were less likely to pass English and mathematics at Key Stage 4 (17% vs 46%), and 3-times less likely to go on to study A-levels (15% vs 51%).
England	Department for Education (CLA in residential care)	2016	March 2015	CLA (n=5,290)	National	Social care	DfE (CLA census; NPD)	Pre-linked	Children in residential care were mostly older children aged 10 years and older (97%). The main category of need for children in children's homes was abuse or neglect (45%). 53% were placed on a voluntary agreement; the remaining 46% were as a result of care orders. Over half (53%) had a SEN

									statement or an EHC plan of SEN, and 28% had SEN without a statement or EHC plan. Since 2013, there has been reductions in the percentage of CLA children convicted, given a final warning or reprimanded (15% in 2015).
England	Department for Education (Education and offending)	2022a	All-pupils who finished key stage 2 in 2007/08 – 2009/10 CIN/CP March of each year, 2011 – 2018 CLA March of each year, 2005 – 2018	All pupils (n=560,700) Children cautioned or sentenced for an offence (n=77,300) No sample size of CIN or CLA reported	National	Social care, criminal justice and education	MoJ-DfE	Pre-linked	Of all the pupil cohort, just 5% (n=77,300) were cautioned or sentenced for an offence. 59% of those who had offended gad ever been permanently excluded; 26% had an alternative provision; 80% had a SEN; 69% were eligible for FSM and 9% had ever been persistently absent. A higher proportion of these children were White (80%). Children looked after (11% aged 6 – 16) or in need (32% aged 12 – 16) were more likely to be cautioned or sentenced for an offence than the all-pupil cohort. Children cautioned or sentenced for a higher number of

									offences were more likely to be children in need (aged 12 – 16) compared to those with a lower number of offences.
England	Department for Education (Ahmed *et al.*)	2022b	2012 – 2020	CIN CPP CLA Numbers not reported	National	Social care	DfE (CIN census; CLA census)	Yes; linking of the annual censuses	Children from Black and Mixed ethnic groups showed overrepresentation in comparison to the general population. Asian children tended to underrepresent CIN, CPP and CLA, and were less likely to be a CIN or have a CPP in the month prior to becoming looked after. Children from White and Mixed ethnic groups had the highest rates of CPP and becoming looked after. Children from Black ethnic minorities were most likely to have multiple periods of care. Among all ethnic groups, returning to parents was the most common reason for care to cease. White and Mixed (46% and 47%, respectively) ethnic care leavers had the lowest rates in education, employment or training.

England	Department for Education (Ahmed *et al.*)	2022c	Children taking their GCSEs in academic year 2010/11	Children (n= 620,000)	National	Care leavers, education and labour market	DfE (CIN census; CLA census; NPD; LEO)	Pre-linked	Individuals involved with social services were the less likely to have Key Stage 5, Higher Education or employment recorded as their main activity compared to the general population. They were also more likely to be claiming out-of-work benefits (CLA: 77%; CPP: 68%; CIN: 66%, all individuals 21%). Poorer outcomes tended to be observed in those with care experience, followed by CPP and then CIN. Looked after children with more favourable outcomes were likely to be 12 or younger when they first entered care; in care for over 5 years; did not re-enter care; in foster placements only.
England	Department for Education (Nelson & Anderson)	2021	Children taking their GCSEs between 2006 and 2009	CLA (n=25,000)	National	Social care, education and labour market	DfE (CLA census; LEO)	Pre-linked	Children looked after have far lower post-16 educational achievement than their peers (achieving at least 3 qualifications, CLA: 13% vs all leavers 31%). Looked after children were also more likely to claim out-of-work benefits (44% vs 9%) and be

									unemployed compared to their peers (22% vs 57%). On average, they also had lower earnings.
England	Department for Education (Sidebotham *et al.*)	2011	Serious Case Reviews: April 2009 – March 2010 CP: April 2009 – March 2010 CIN: April 2009 – March 2010	Serious Case Reviews (n=105) Aged 0 – 17 years CPP (n=38,400) CIN (n=342,000)	National	Social care	DfE (Serious Case Reviews; CIN census; CPP census; Child Death Overview Panel Returns); ONS population, birth and death registration data; Home Office Homicide Database;	No	Of the 105 incidents, 62 (59%) were fatal and 43 (41%) were non-fatal. Demographic data was available for 104 cases, which showed that over a third (38%) of cases were related to babies under 1 years old. There was a slightly higher rate of serious cases in males, while this trend reserved for fatal cases.
England	Department for Education (Wade *et al.*)	2010	2003/04 followed-up for up to three years	CLA (n=3,872)	Local authority level: seven	Social care	CLA data from local authorities; survey; interviews	No	A large proportion of children experienced multiple forms of maltreatment (89%), with physical and emotional abuse with neglect (34%) being the most common

									combination. Maltreated children were less likely to leave the care system than those looked after for other reasons. The local authority responsible for care strongly predicted whether a maltreated child returned home. Reunification was also less likely to they had a learning disability, they did not want to return home, contact with birth parent was infrequent, and where parental problems were 'serious'. At follow-up children fared better in the care group than those who returned home. Although there was evidence of children doing better at home depending on type of maltreatment.
England	Nuffield Family Justice Observatory (Alrouh *et al.*)	2022	April 2007 – March 2020	Children (n=322,000) and adults (n=444,000) in public law cases	National	Family justice	Cafcass; ONS experimental statistics 2019	No	The majority of children and adults involved in public and private law proceedings were White, which has remained stable since 2017. Other and Black ethnic groups were over-represented in public and private law proceedings, while Asian were only

				Children (n=808,000) and adults (n=1,230,000) in private law cases					under-represented in public law cases.
England	Nuffield Family Justice Observatory (Broadhurst *et al.*)	2018	April 2007 – March 2017	Newborns subject to s31 care proceedings (n=47,172 infants and n=16,849 newborns)	National	Family justice	Cafcass	No	Infants aged <1 accounted for 27% of all children in care proceedings between 2007 and 2017, with an upward trend in incidence rates over the study period (32% vs 42%). Regional differences in rates were evident. 47% of newborns were linked to mothers who had previously appeared in care proceedings with an older sibling. Almost half of all newborns were "placed for adoption", with fewer newborns compare to older infants being placed "with extended family".
England	Nuffield Family Justice Observato	2019	2007 – 2017 (Special Guardianship Orders)	All s31 proceedings (n=140,059 children,	National	Family justice	Cafcass; interviews and focus groups; case	No	Between 2007 and 2017 there has been a large increase in the number of children subject to s31 proceedings. 88% of all supervision orders made

	ry (Harwin *et al.*)	2010 – 2017 (legal orders)	n=81,758 cases)			file analysis within four local authorities		between 2010 and 2017 were to support family reunification resulting from a care application. There was a marked rise in the use of SGOs (from 11% to 17%), while children subject to placement orders has fallen (22% to 16%). The majority of SGOs were made by the court acting of its own motion (57%), rather than upon the application of a prospective guardian (1%). Children on a standalone supervision order have the highest probability (20%) of returning to court for new S31 proceedings, with an SGO or child arrangements order also having high probability of returning to court for new s31 proceedings.
England	Nuffield Foundation (Hood *et al.*)	2020	2013/14 – 2017/18	No sample size reported	Six local authorities: five in Greater London and one in Southeast England	Social care	DfE(CIN census and CLA returns); Index of Multiple Deprivation; Section 352	Yes; CIN and CLA linked to deprivation data	Trend analysis revealed that care admissions have increased faster than CIN. Voluntary arrangements have decreased while care orders have increased. More deprived areas received more referrals, had more CIN and CPP plans and admitted more

							outrtrun; Children;s Social Care Workforce data collection; qualitative interviews		children into care. High levels of demand was associated with higher levels of screening, those that assessed more tended to end up with higher levels of CIN. There was evidence of social gradient interventions, and the inverse intervention effect.
England	Nuffield Foundation (Hood *et al.*)	2021b	Aged 5 – 15 years in April 2018 – March 2019	CIN referrals (n=300,830) CIN assessment (n=295,591) CIN (n of episodes =186,112) CP plans (n=31,380)	National (150/152: excluding Isles of Scilly and the City of London)	Social care	DfE (CIN census; NPD); ONS data; DHCLG; PHE	Pre-linked; additional linkage to deprivation	The social gradient was observed across all social care services interventions, meaning that children living in the most deprived areas were more likely to have a statutory intervention than those in the least deprived areas. The social gradient was steeper for children with CP plans. There was also evidence of the inverse intervention effect.
England	Rees Centre (Berridge *et al.*)	2020	Children born in 2000/2001 starting school in	Birth cohort (n=471,688) Contact with Children's services at any	National	Social care and education	DfE (CIN census; CLA census; NPD); qualitative interviews in	Pre-linked	The most common reason for contact with social services included 76% with a CIN plan; 11% a CPP; 13% were CLA. A quarter of children were receiving social work interventions

			2006/2007 until their exams in 2017	point (n=69,246)			six local authorities		during the year of their GCSE exams. Attainment was lower for children who had any social work intervention compared to those with none. The severity of the intervention increased the gap: at Key Stage 4, CIN scored 34% lower, CPP 46% and CLA 53% lower. Ethnicity, SEND and missing school were also associated with poorer Key Stage 4 scores.
England	Rees Centre (Luke *et al.*)	2015	Aged 15 on September 2012 CLA April 2012 – March 2013	CLA – long stay (n=4,849) CLA – short stay (n=1,387) CIN) (n=13,599) Comparison group (n=622,970)	National	Social services and educatio n	DfE (CIN census; CLA census; NPD)	Pre-linked	Children looked after for a short period performed worst at GCSE compared to the others. Children from Traveller backgrounds had worst KS4 and Asian/black African children had the best. All ethnic groups performed worse for the CIN and CLA cohorts compared to the comparison group. Having free school meal status at KS1 and KS4 was associated with worse scores at KS4. SEN was over-represented among CLA. Trajectory analysis shows a decline in attainment for short term

									CLA, but less prominent for those in long-term later-entry care. Positive results were found for long-term early care entrants.
England	Rees Centre (Harrison *et al.*)	2023	Born between September 1995 – August 1996	Care leaver (n=3850) CIN (n=26,160) CSC experience (n=28,810) General population (n=495,880)	National	Care leavers, education and labour market	DfE (CIN census; CLA census; NPD; LEO; Individual Learn Record); HESA; qualitative interviews in five local authorities	Pre-linked DfE data	41% of care leavers aged 19 to 21 are not employed or in full time education. Care leavers, care-experienced children and CIN were more likely to have SEN than the general population. There was a strong association between care and educational disruption. Differences between CSC experienced children and the general population regarding educational attainment can be seen as early as Key Stage 2: they perform worse at English and mathematics. A lower percentage of care leavers achieve 5 A* – C GCSE grades (20% vs 62%).
England	Rees Centre (Harrison *et al.)*	2019	Graduate cohort 2016/2017	UK students (n=242,895); with Care-experienced (n=1600)	National	Care leavers and education	HESA	No	Care-experienced graduates have a distinct demographic profile. They are more likely to be female, disabled or be Black, Mixed, or other Asian ethnicity. Care-experienced

									graduates were also less likely to get a first or upper class degree; however this is partly explained by them being more likely to pursue a non-degree course. Of the 1,150 who gave information within the DLHE survey, care-experienced graduates had a higher proportion studying full-time or part-time, but were more likely to be unemployed (5.5% compared to 4.4%) and engaged in 'other' activities such caring, travelling and long-term sickness (5.7% vs 4.4%). Of those in work, salaries were relatively similar between the two groups.
England	Rees Centre (Sebba *et al.*)	2015	Age 15 September 2012; CIN or CLA April 2012 – March 2013	CIN (n=13,599) CLA (n=6236) Comparison group (n=622,970)	National	Social care and education	DfE (CLA census; NPD); interviews in six local authorities	Pre-linked	Children who have long-term CLA placements have the best educational performance (GCSEs), followed by children in need, while short-term stay CLA perform worst. This suggests that care provides a more positive experience, particularly if they enter care at a younger age.

									Placement type also appeared to affect GCSE attainment, those in foster or kinship care did better. CIN were more deprived and more likely to have SEN, poor attendance and more exclusions. SEN are more common among CLA and associated with large differences in outcomes. Having a disability was also associated with poorer outcomes.
England	What Works for Children's Social Care (Schoenwald *et al.*)	2022b	Turned 18 and in residential care at any point between in April 2019 – March 2020	Children recorded as in residential care (n=10,046)	National	Social care, education and labour market	DfE (CLA census; NPD)	Pre-linked	Children living in residential care are not a homogeneous group, entering care at different stages of their lives. 41% enter before age 11; 40% between 11 and 15; and 15% of children living in residential care due to a disability or illness. 92% of children living in residential care had been recorded as having a SEN provision. Residential care often seems to be used after other placements (foster care or kinship care) have been explored. Poorer

									outcomes were found for children who had lived in residential care.
England	What Works for Children's Social Care (Schoenwald *et al.*)	2022a	Turned 18 and in kinship care at any point between in April 2019 – March 2020	Children recorded as kinship foster care (n=18,962) and those leaving kinship special guardian (n-3,277) during 2019/2020 CLA (n=108,552)	National	Social care, education and labour market	DfE (CLA census; NPD)	Pre-linked	Use of kinship care placements varies in local authorities from 4% to 39%. Kinship special guardianships range from 2% to 27%. Children in the latter placement experience high placement stability, more than half (54%) leave care immediately after their first placement. Children from ethnic minorities are under-represented in kinships placements. Educational attainment at Key Stage 4 for children who left care to a kinship special guardianship is typically higher than attainment of children in care.
England	What Works for Children's Social Care (Wijedsa *et al.*)(Wijedasa et al. 2018)	2018	2012 – 2017	CLA between 54 – 62 children per 10,000 in care during the study period	National (151/152: excluding Isles of Scilly)	Social care	DfE (CLA census); Local authority interactive tool; ONS mid-year population estimates	No	Regional patterns in the rates of CLA were found. Local authorities in Inner and Outer London showed a reduction in rates of CLA, while those in the North West and North East showed increases. Economic factors and service quality affected the rate of children in care (proportion of low

									income families, social worker turner, Ofsted judgements).
England	What Works for Children's Social Care (Williams *et al.*)	2020	October 2016 – March 2018	Young people referred to secure accommodation (n=527)	National (129 local authorities)	Social care	DfE (CIN census; CLA census); Secure Welfare Coordination Unit	Yes; Secure Welfare Coordination Unit data, and CLA and CIN data	Of the 527 referred to secure accommodation, 319 were placed in secure and 208 in alternative accommodation. Two-thirds were White, 15% were from mixed ethnic groups, 12% were Black/African/Caribbean/Black British, and 4% were Asian/Asian British. Prior to referral, children's homes and foster placements were the most common placements. Two of every five received a secure order because they were perceived as a danger to themselves. Nearly half had a recorded substance misuse problem before referral. Just over half had a recorded conviction within the study period.
Northern Ireland	Nuffield Foundation (Bunting *et al.*)	2017	March 2015	CIN (n=22,706) CPR (n=1,845) CLA (n=2,882)	National	Social care	SOSCARE (CIN; CPR; CLA); Northern	No	Children living in the most deprived areas are 6 times likely to be placed on the CPR and 4-times higher rate of becoming a CLA. Neglect, physical

							Ireland published data		abuse and emotional abuse increased across the deprivation quintiles for those on the CPR. Deprivation did not appear to influence the use of adoption or youth justice measure, but kinship care (10 times) and foster care (3 times) had an increase between quintiles 1 and 5.
Scotland	ADR UK (Soraghan *et al.*)	2023	August 2018 – July 2021	Number of placement episodes (n=22,760)	National	Social care	Scottish Government (CLA Scotland)	No	During the COVID-19 pandemic, there were clear changes to the number of children entering care. There was a reduction in children entering care (38%, approximately 1500 children). However, the rates for infants remaining in care were more stable. Fewer children also left care (22%) and moved placements – 86% had no placement movements during the first year of the pandemic.
Scotland	Scottish Government (Cusworth *et al.*)	2022	April 2013 – March 2020	Infants <1 (n=2849) on a s25 compulsory	National	Family justice	SCRA (CLA via children referred to CHS)	No	Around 14,000 children (<16 years old) were looked after away from home. Infants made up 20% of these children. In comparison to England and Wales, this is a lower proportion

				supervision order Infants <1 (n=70) on a s25 compulsory supervision order between April 2018 and March 2019					(27% and 30%, respectively). Of these infants, almost a third (31%) entered the Children's Hearing Service within a week of birth. Again, these rates were higher in England and Wales (443% and 40%, respectively). The level of deprivation and local rates of infants looked after were related.
Scotland	University of Glasgow (Allik *et al.*)	2022	Children born between 1990 – 2004 followed-up to July 2016 Pupil and CLA Census 2009/10	Children in the general population (n=649,771) CLA (n=13,830)	National	Social care, education and health	Scottish Government (Children's Pupil Census; CLA census); Birth registrations; Death registrations; Scottish Morbidity Records (SMR00;	Yes; 10 datasets	Care experienced children are at greater risk of mortality, hospitalisations related to mental health, chronic conditions (e.g. asthma or epilepsy) and injuries compared to the general population. As this population ages, health problems become more pronounced. When transitioning into adulthood, hospitalisations for depression and poisoning from painkillers sharply increase. A subsample of the population (14 - 24 year olds) found

							SMR01; SMR02; SMR04); Accident and Emergencies; Prescribing Information System		higher rates of their first birth (19.3%) between 14- 24 years compared to the general population (4.1%)
Scotland	University of Stirling (Hooper *et al.*)	2017	July 2015	CPR (n=1531) CLA (n=8418) aged 0 – 17 years	Ten local authorities	Social care	CPR and CLA returns provided by local authorities	No	Rates of children's services interventions increase with levels of deprivation, with more deprived areas 20 times more likely to have children subject to CPR or CLA. Rates of CPR decrease with age, with the most common age being 0 – 4 years. Highest rates of CLA are aged 10 – 15 years. There was a social gradient for White children, although this could not be examined to other ethnic categories due to small numbers.
Scotland	University of Stirling (Hooper *et al.*)	2019	Children born between August	CLA and five years or under (n=1836)	National	Social care and family justice	Scottish Government (CLA statistics	Yes; linkage feasibility of CLA statistics	Nearly three quarters of the sample were looked after away from home (73.8%) with the remaining 26.2% looked after at home. Children with

			2007 – July 2013 CLA between August 2012 – July 2013 followed-up until July 2016				data); SCRA (CHS)	data and SCRA data	referrals ro SCRA were most likely to be under one years old (index referral, 41.3%), and came from Social work (69.2%). Most common grounds for referral were 'lack of parental care' (index referral, n=91.8%). For more than half of children (52.4%), the Children's Hearing decided the child should be looked after away from home during the index referral. Most children did not have an appeal to a sheriff (81.2%) by the end of the study.
Scotland	University of Stirling (Biehal *et al.*)	2019	CLA between August 2012 – July 2013 followed-up to August 2016	CLA (n=1836) aged under five on 31 July 2013	National	Social care and family justice	Scottish Government (CLA statistics data); SCRA (Children's Hearing System); survey questionnaires; interviews	Yes; CLA statistics and SCRA data	74% of children became looked after away from home during the first year, the remaining 26% were looked after at home. 7% of children had additional support needs, this was slightly higher in the away home group (8%) compared to the at home group (5%). A higher proportion of children looked after away from home were younger than one (46%) compared to 14% of the home group. Four and five-year old children who started to be

									looked after at home was double that in the away from home group.
Scotland	University of Stirling (Cusworth *et al.*)	2019	CLA between August 2012 – July 2013 followed-up to August 2016	CLA pathways (n=1,836) CLA outcomes (n=643) Aged under 5 years old	National	Social care and family justice	Scottish Government (CLA statistics data); SCRA (CHS); surveys	Yes; CLA statistics and SCRA data	A large proportion experienced abuse or neglect (89%) prior to care entry. When they became looked after more than half were under one year old. Most of these children were initially placed with unrelated foster carers (59%) or kinship carers (36%).
Scotland	SCRA (Woods *et al.*)	2018	Children born between April 2003 and January 2004, and April 2013 and January 2014	Children placed on a Compulsory Supervision Orders (n=227)	Six local authorities (Aberdeen City, Aberdeenshire, Dundee, Edinburgh, North Lanarkshire and South Lanarkshire)	Family justice	SCRA (Case Management System)	No	There were increases in the number of changes in CSOs. Parents also faced more problems including criminality, victim of abuse, perpetrator of abuse, abused drugs, mental illness, unemployed and/or volatile relationship.
Wales	Centre for Child & Family	2023	April 2003 – March 2021	Infants <1 years old (n=6333)	National	Social care	CLA	Yes; CLA and	The number of infants entering care in Wales are rising, particularly in more deprived areas. Newborns represent

	Justice Research (Cowley *et al.*)							deprivation measures	the largest of infants entering care (38%). More than half of infants entered under a voluntary arrangement. A large proportion of these became a compulsory arrangement within two years (63%). Route of entry into care appears to influence the placement outcome at two years old. Those who initially entered on a voluntary basis have greater family preservation
Wales	Centre for Child & Family Justice Research (Doebler *et al.*)	2021	January 2014 – December 2018	Children subject to s31 care proceedings (n=7,381)	National	Family justice	Cafcass Cymru	Yes; CLA and deprivation measures	Infants in Wales were at greater risk of appearing in care proceedings compared to older children. Higher area-level deprivation was also associated with greater risk of becoming subject to care proceedings for both infants and children. Public law cases involving children cluster in deprived and urban areas of South Wales and some areas in North Wales.
Wales	Nuffield Family Justice	2019	January 2011 –	Children subject to s31 care	National	Family justice	Cafcass Cymru	No	30% of children entering care proceedings in Wales were less than 1 years old (n=3,266). Over time,

	Observatory (Alrouh *et al.*)		December 2018	proceedings (n=10,959)					newborns have become more likely to appear in care proceedings soon after birth. Rates for care proceedings for newborns varied across the three Welsh DJF areas. Nearly half (49%) of newborns between 2016 and 2018 were younger siblings born to mothers who had already appeared in care proceedings concerning an older sibling. Newborns are also more likely to be subject to urgent interim care order hearings.
Wales	Nuffield Family Justice Observatory (North *et al.*)	2022	April 2011 – March 2020	Children involved in public law cases (n= 14,000) and private law cases (n=37,000)	National	Family justice	Cafcass Cymru; WLGP; PEDW; 2011 ONS Census; 2019 ONS experimental statistics;	Yes; Cafcass, Census and health data for ethnicity	The majority of children in the family justice system in Wales are White (around 95%). Asian or Asian British were under-represented in both private and public law cases (1.5% and 1.3% respectively, compared to 2.4% of the general population), while Mixed or multiple ethnic groups were over-represented (1.5% in public law and 1.9% in private law compared to 0.9% in the general population). Black, African, Caribbean or Black British,

									and Other ethnic groups reflected the proportion in the general population.
Wales	What Works for Children's Social Care (Parkin *et al.*)	2023	January 2013 – March 2020	0 – 17 years (n=1,113,776) with social care data (n=46,704) CIN (n=35,481) CRCS (n=26,653) CLA (n=7,363)	National	Social care and health	WLGP; PEDW; OPDW; EDDS; CCDS; SMDS; CINW; CRCS; CLA; WDSD; EDUW	Yes; all linkable	14.4% of children in contact with social services were diagnosed with one mental health problem. This was a similar proportion of children within the general population (14.85%). Of children in contact with social care, substance misuse, having autism and being Indian were the most predictive of a mental health diagnosis. Interestingly, these risk factors relate to individual factors rather than family circumstances. This may be a limitation of the data used.
Wales	Social Care Wales (Williams *et al.*)	2019	April 2016 – March 2018	10 – 17 year olds in secure accommodation (n=43)	National	Social care	CLA returns from local authorities; interviews	No	All but one local authority applied for a Secure Accommodation Order during the study period. 56 Secure Accommodation Orders were granted involving 43 different young people. Of the 40 who could be followed, 38 were placed in secure accommodation, two received alternative accommodation. There

									were no gender differences (50% male). Most entered secure accommodation between ages 14 and 15 – there were two before their 13th birthday which requires approval from Welsh Ministers.
UK	ADR Scotland (Raab *et al.*)	2020; 2023 (series)	April 2008 – July 2021 (in most recent)	CLA in Scotland (n=8450)	England and Scotland	Social care	DfE (CLA England); Scottish Government (CLA Scotland)	No	Higher rates of infants enter care in Scotland compared to England. In recent years, rates in the number of children entering care has risen, while there has been a decline in similar aged children in Scotland. Infants entering voluntary care has risen in England, while the proportion in Scotland has not changed. Patterns of children's pathways through care are complex and vary.
UK	Celcis (Meltzer *et al.*)	2008	1971; 1981; 1991; 2001; census data	Children in residential care (n=312)	England and Wales	Care leavers, education and health	Office for National Statistics Longitudinal Study (1% representative sample)	Yes; Census linkage and births, deaths and cancer registrations	Of the children in residential care in 1971, 4.5% had died by 2001, compared with 2% of other children. At 30 years of follow-up children in residential care were more than twice likely to have no educational qualifications than other children

									(18% vs 41%). Adults in 2001 had poorer health, were less qualified and had more difficulties with employment.
UK	Ministry of Justice (Forty & Sturrock)	2017	Children born between 1990 and 1992	Child in public family law case aged 10 – 17 years (n=7559) Comparison group of 10 – 17 years in the general population	England and Wales	Family and criminal justice	Police National Computer; FamilyMan	Yes; FamilyMan and Police National Computer	Children in contact with the public law system in their early teenage years were more likely to offend than those involved at any other age, as well as in comparison to the general population (2.9 times). 39% of individuals had committed one or more proven offences by the age of 17. They were also 4.6 times more likely to commit a 'violence against the person' offence than the general population.
UK	Nuffield Family Justice Observatory (Pattinson *et al.*)	2021	April 2012 – March 2020	All s31 care proceedings (n=47,955 infants) All s44 applications in England (n=13,119)	England and Wales	Family justice	Cafcass; Cafcass Cymru; ONS live birth data	No	Since 2012, the average number of newborns and infants in care proceedings has increased in England and Wales. In 2019/20, 86.3% and 74.8% of cases involving newborn babies in England and Wales, respectively, were heard at short notice (< 7 days). Infants in England were more likely to be subject to

									emergency protection orders than older children.
UK	Nuffield Family Justice Observatory (Roe *et al.*)	2021	April 2011 – March 2020	10 – 17 year olds involved in the family justice system (s31 care proceedings) England (n=54,509) Wales (n=2649)	England and Wales	Family justice	Cafcass; Cafcass Cymru; ONS mid-year population estimates	No	Adolescents subject to care proceedings in England had increased by 95% from 2011/12 to 2019/20. There was also an increase in Wales, with a small increase of 47%. Largest increases were around the time there were changes to s20 (England) and s76 (Wales) voluntary care arrangements following concerns with their use. Rates of adolescents subject to care proceedings varied by region, but was largest in the North East of England and in Wales, Cardiff and South East had highest rates.
UK	Nuffield Foundation (Sacker *et al.*)	2021	1971; 1981; 1991; 2001 census data (care) 1981 – 2011 follow-up	Individuals (n=353,601) with n=35681 in care	England and Wales	Care leavers, health and education	Office for National Statistics Longitudinal Study (1% representative sample)	Yes; census linkage	Care leavers had higher rates of premature mortality. There was also an increased risk of unnatural deaths. Adults who had been in care were more likely to return to education and gain further qualifications. Life trajectories were not the same for all ethnic minorities of children in care.

				UK born adults who had been in care were less advantaged in social positions compared those born outside the UK. Children of kinship or foster parents were less likely to successfully transition to adulthood: poorer health, fewer qualifications, more unemployment, lower chance of owning their own home and are more likely to divorce.

We highlight the studies which have used ADR England datasets in green.

Abbreviations: ADHD: Attention Deficit Hyperactive Disorder; **Cafcass:** Children and Family Court Advisory and Support Services; **CCDS:** Critical Care Dataset; **CIN**: Children In Need; **CINW:** Children In Need Wales; **CfE:** Curriculum for Excellence; **CHS:** Children's Hearings System; **CLA**: Children Looked After; **CPP:** Child Protection Plan; **CPR:** Child Protection Register; **CRCS:** Children Receiving Care and Support**; CSC:** Children Social Care; **CSO:** Compulsory Supervision Orders; **EDDS:** Emergency Department Dataset**; DfE:** Department for Education; **EHC:** Education, Health and Care; **EDUW:** Education Wales; **DLHE:** Detestations of Leavers from Higher Education; **FMS:** Free School Meals; **GCSE:** General Certificate of Education; **HESA:** Higher Education Statistics Agency; **KS1 – 4:** Key Stage 1 – 4; **LEO:** Longitudinal Education Outcomes; **MoJ:** Minsitry of Justice; **NISRA:** Northern Ireland Statistics and Research Agency: **NPD:** National Pupil Database; **Ofsted:** Office for Standards in Education, Children's Services and Skills; **ONS:** Office for National Statistics; **OPDW:** Outpatient Database for Wales**; PEDW:** Patient Episode Dataset for Wales; **SCRA:** Scottish Children's Reporter Administration; **SEND:** Special Educational Needs and Disabilities; **SGO:** Special Guardianship Orders; **SOSCARE:** Social Care Services Data; **SMDS:** Substance Misuse Dataset; **WDSD:** Welsh Demographic Service Dataset; **WLGP:** Welsh Longitudinal General Practice

**Cross-sectional annual releases were aggregated as one study for this review