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# The health of older children and young people subject to care proceedings in Wales

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Report

**This report provides an overview of the health and health service use of older children and young people (aged 10–17) involved in section 31 care proceedings in Wales. It is part of a series of work that aims to help build a better understanding of the reasons why older children and young people are being brought into care proceedings.**

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Population Data Science  
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# Foreword

We have known for some time that children who are taken into care have poorer health in later life than their peers. Adults who have been in care as children are more likely to die prematurely, to suffer poor mental health, and to experience more physical ill health over their lifespan.

But what is the state of young people's health before care proceedings even start? It is important to know children's health needs at this point to inform strategies to address these lifelong inequalities in health outcomes.

This research, the first of its kind, explored the health needs and health service use of 10-17 year olds who subsequently became subject to care proceedings in Wales. Their significantly higher use of health services than their peers, and the much greater evidence of mental health needs, are striking. The research reveals the extent of the health vulnerabilities of young people who come into care proceedings.

Nuffield Family Justice Observatory is publishing a series of studies to explore why more young people are becoming subject to care proceedings in England and Wales, and what might be done to better support them.

If we are serious about care proceedings being a significant positive turning point in young people's lives, we need to understand what is necessary to reduce the likelihood of lifelong poor health and premature death.

I am very grateful to the authors for shedding light on this important issue.

Lisa Harker  
Director

# Executive summary

This is the first population-based study to examine the health needs of children and young people (aged 10–17) entering care proceedings in Wales. It provides an overview of the health needs and health service use of this group in the year prior to court proceedings. The study helps to build a better understanding of the needs and vulnerabilities of older children and young people in the family justice system.

## About the data

This study used anonymised administrative data supplied by Cafcass Cymru, linked with Welsh health data within the SAIL Databank—a highly secure, trusted research environment.

A cohort of older children and young people (n=1,844) involved in care proceedings in Wales between 2011 and 2019 inclusive was created. Findings were compared to a matched comparison group (n=19,519) selected from older children and young people in the general population of Wales with similar demographic characteristics (age, gender, deprivation) who were not subject to care proceedings.

## Key findings

- In the year prior to care proceedings, the cohort had higher use of both primary and secondary health care, including accident and emergency (A&E) care, compared to a comparison group not involved in proceedings.
- The older children and young people in our study were also more likely to reside in areas of higher deprivation: 67% resided within the two most deprived quintiles of Wales.
- Most noticeable conditions in the cohort, and differences with the comparison group, were mental health vulnerabilities and injuries:
  - just over half of the cohort had a mental health disorder recorded by their GP, compared to a third of the comparison group
  - hospital admissions and A&E attendance for mental health disorders were higher in the cohort than the comparison group
  - a higher prevalence of injury and poisoning-related conditions were recorded in GP health records of the cohort
  - higher levels of hospital admissions and A&E attendance for injuries, poisoning or overdose was also noticeable in the cohort.

## Reflections

- This study evidences the heightened health vulnerabilities of older children and young people in the year prior to care proceedings, with noticeably higher levels of mental health disorders and injury-related conditions compared to a matched comparison group.
- Further work is required to understand types, severity and causes of these conditions in this population. This study highlights the need for better provision of coordinated social and health care support for young people at risk of entering care proceedings.

# Introduction

There is growing recognition of the increasing number of older children and young people coming before the family courts, and the diversity and complexity of their needs. Recent analyses by Roe, Alrouh, and Cusworth (2021) report that the number of older children and young people (aged 10–17) subject to care proceedings under section 31 (s.31) of the Children Act 1989 (2019) has increased substantially in the last decade in Wales: 219 older children and young people were subject to care proceedings in 2011/12, rising to 323 by 2019/20—an increase of 47%.<sup>1</sup>

This report is part of a series that aims to better understand the needs of older children and young people in the family justice system. It provides an overview of the health needs and health service use of these young people in the year prior to court proceedings. Similar work, also led by the Family Justice Data Partnership—a collaboration between Lancaster University and Swansea University—has examined the health vulnerabilities of parents involved in care proceedings (Griffiths et al. 2020; Griffiths et al. 2021; Johnson et al. 2021) as characteristics of all involved must be understood. Ample evidence of health needs and vulnerabilities is required to enable appropriate and effective health and social support and enable services to be effectively tailored. Further, it enables enhanced response from the family courts and other services.

Previous work suggests that looked-after children have an increased prevalence of physical illness (Martin et al. 2014; Williams et al. 2001) but that there is also likely to be a significant unmet need, with health professionals and carers failing to identify illnesses (Martin et al. 2014). Poorer mental health of children and young people in care is also reported (Ford et al. 2007; Baldwin et al. 2019). Recent evidence involving use of data from the Office for National Statistics Longitudinal Study reports that those placed in care are more likely to report worse health than children who grew up in a parental household (Murray et al. 2020). However, such evidence is limited, and few studies have compared those in public court proceedings with the general population using large-scale administrative data.

This current study seeks to address this evidence gap to aid the assessment of current policy and its future development. Population-level data collected routinely by Cafcass Cymru (a Welsh government organisation that represents children’s best interests in family justice proceedings in Wales) for older children and young people has been linked to primary and secondary care health records for research. Preliminary findings are reported here, setting the scene for more in-depth analyses that will enable greater insight into the circumstances and health needs of those involved in care proceedings.

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<sup>1</sup> Care proceedings can result in interim or permanent removal of a child from a parent’s care. At the close of care proceedings, the child may remain in (or return to) the parent’s home, or be accommodated elsewhere (e.g. with a foster carer or in residential care). If a local authority intends to remove a child from his or her parent(s)’ care or assume parental responsibility, the local authority must apply for a care order. Care orders are applied for and authorised by the family courts under section 31 (s.31) of the Children Act 1989.



# Data and methodology

## Data

Administrative data collected and maintained by Cafcass Cymru was acquired by the privacy-protecting SAIL [Secure Anonymised Information Linkage] Databank (Ford et al. 2009; Lyons et al. 2009; Jones et al. 2020). The SAIL Databank contains extensive de-identified health and administrative data about the population of Wales, accessible in an anonymised form via a secure data-sharing platform, underpinned by an innovative and proportionate information governance model.

We used Cafcass Cymru data (described in Appendix A) to create a cohort of older children and young people (n=1,844) involved in s.31 care and supervision proceedings in Wales between 2011 and 2019 inclusive, retaining data relating to the earliest application date for each young person within this period.<sup>2</sup> Demographic characteristics were calculated at this date.

Findings were compared to a matched comparison group (n=19,519) selected from older children and young people in the general population of Wales with similar demographic characteristics (age, gender, deprivation) who were not subject to care proceedings (Appendix B).

## Analysis

Data processing and descriptive analyses were carried out using SQL and R to provide a high-level overview of healthcare use across multiple settings and investigate the underlying reasons for these health events for a one-year period prior to entering s.31 care proceedings.

For each measure, we calculated the total number of older children and young people in the group with at least one of the health event types—for example, a hospital admission (the numerator)—and divided this by the total number of older children and young people in that group (the denominator) to create a percentage value. Measures were not treated as mutually exclusive; for example, an individual could be included in more than one measure.

The Cafcass Cymru records were linked to the following data sources held within the SAIL Databank: Welsh Demographic Service Dataset; Welsh Index of Multiple Deprivation; Patient Episode Database for Wales (for hospital admissions); Emergency Department Dataset for Wales (for A&E attendances); and the Welsh Longitudinal General Practice Dataset (general practice interactions).

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<sup>2</sup> Based on date of issue of the s.31 application

All personally identifiable data had been removed and replaced with an anonymised linkage field for each person, enabling this linkage of records from different sources. SAIL anonymisation and linkage methodology is described elsewhere (Ford et al. 2009; Lyons et al. 2009; Jones et al. 2020).

Further methodology details on the data sources and measures are available in Appendices A and C.

An independent Information Governance Review Panel (IGRP) at Swansea University reviewed the project proposal: project 0929.

## Study strengths and limitations

To our knowledge, this is the first study to examine the health needs of older children and young people involved in care proceedings in Wales and to make comparisons against a group of young people matched on age and deprivation. The use of both primary and secondary healthcare population-level data and exploration of an array of health conditions is novel and provides opportunities to improve a range of support. However, we acknowledge the following limitations.

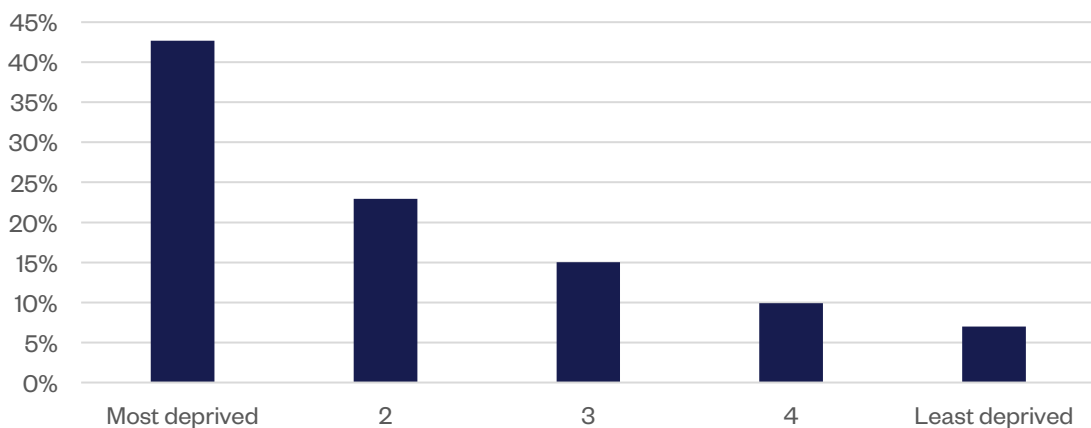
- This report provides an overview of the health of all older children and young people in care proceedings—but not all of those entering care, or who have grown up in care. Further, we have not looked at older children and young people facing extrafamilial harm who may have significant health needs.
- Administrative data is necessarily limited by the scope and quality of available data, collected primarily for non-research purposes. Strengths and limitations of Cafcass Cymru data have previously been reported (Johnson et al. 2020).
- Not all older children and young people involved in the care proceedings could be matched to their health records. However, this was possible for 91.3% of those involved in s.31 care proceedings in Wales within the study period who were, as such, included in this study.

# Key findings

## Characteristics of the older children and young people

Just over half (52%; n=963) of the cohort were female. Overall, 67% (n=1,211) resided in the two most deprived quintiles of Wales (Figure 1). The comparison group has a similar distribution in terms of deprivation, as intended through the matched comparison group process.

**Figure 1: Percentage of older children and young people in study cohort by area-level deprivation quintiles<sup>3</sup>**



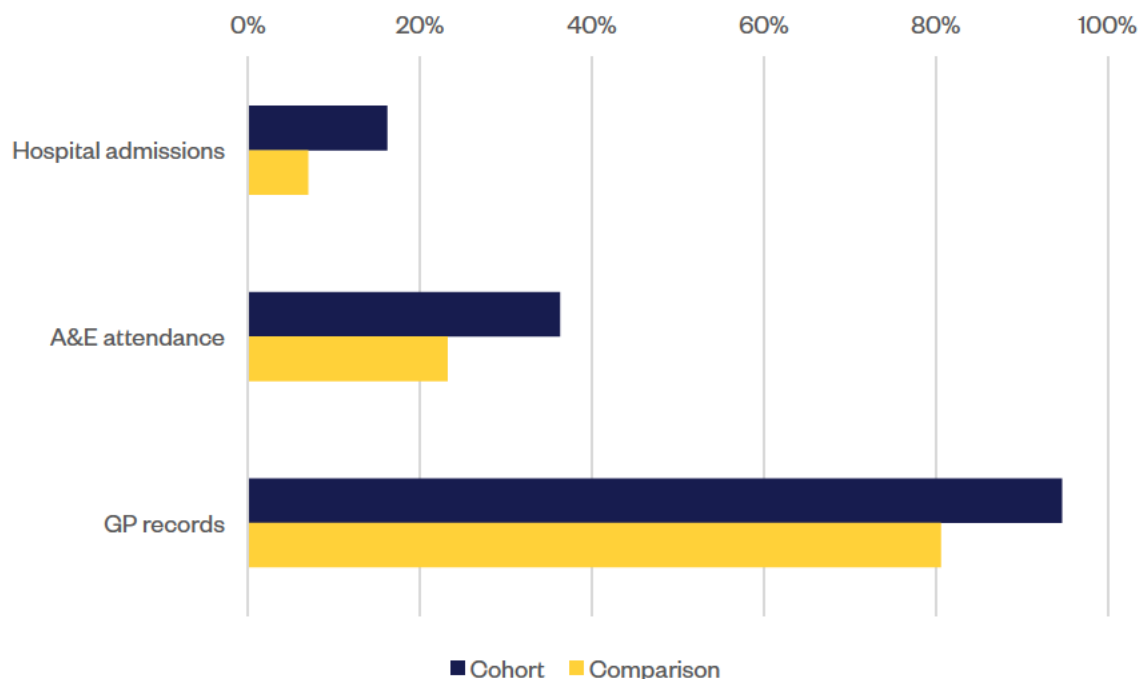
## Overall healthcare use

To analyse and visualise healthcare use patterns we explored the number of older children and young people who had at least one hospital admission, A&E or GP attendance during the year prior to case date.

The overall pattern is one of higher healthcare use for this cohort compared to the comparison group for all three types of health service use (Figure 2).

<sup>3</sup> Area-level deprivation information was missing for 45 older children and young people in the cohort.

**Figure 2: Percentage of older children and young people within study groups by type of healthcare use**



## Health conditions

This section describes the most common reasons for health service use (using primary diagnosis); conditions where percentages were small ( $\geq 0.5\%$ ) for either group are not displayed. Further information on clinical codes used to examine hospital admissions, A&E and GP records is available in Appendix C.

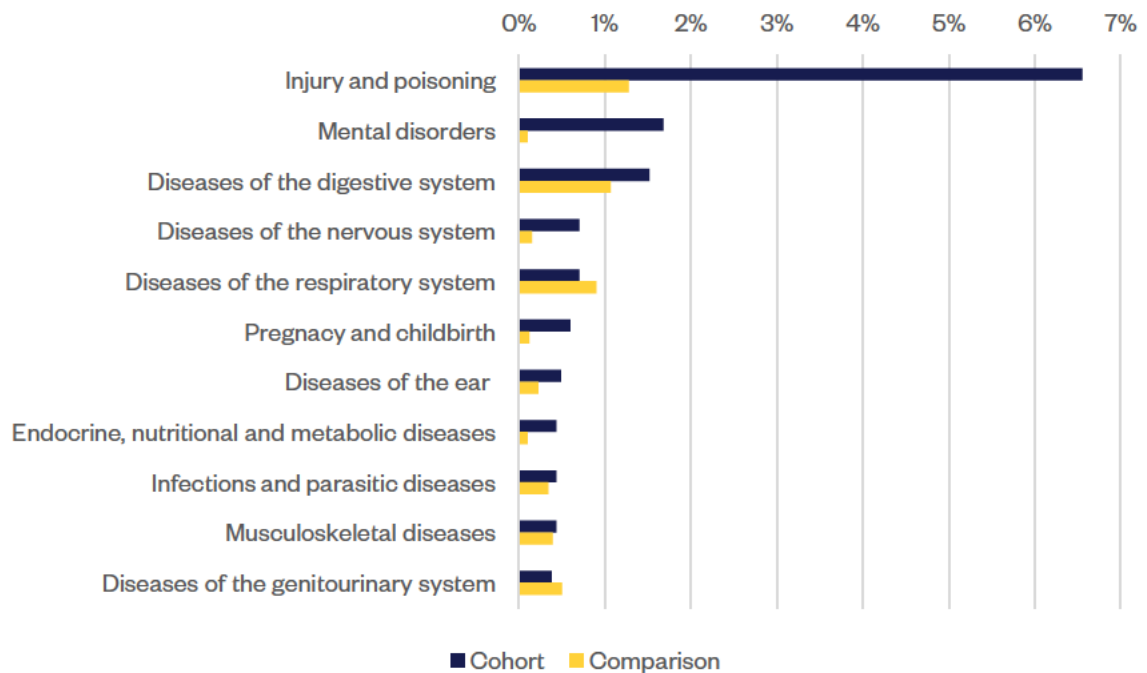
### Hospital admissions

Figure 3 indicates the most common types of hospital presentations, and the relative difference between the study groups. The most common condition in the cohort, and with the most considerable variation compared to the comparison group, is for 'injury and poisoning' (6.6% cohort, 1.3% comparison).<sup>4</sup>

Mental disorders are also higher in the cohort (1.7% cohort, 0.1% comparison). Other comparisons are stark, such as admissions due to nervous system disorders and pregnancy and childbirth. However, the overall prevalence of these conditions was low in both groups, so interpretation must be made with caution.

<sup>4</sup> See <https://icd.codes/icd10cm/chapter19> for a full list of injuries.

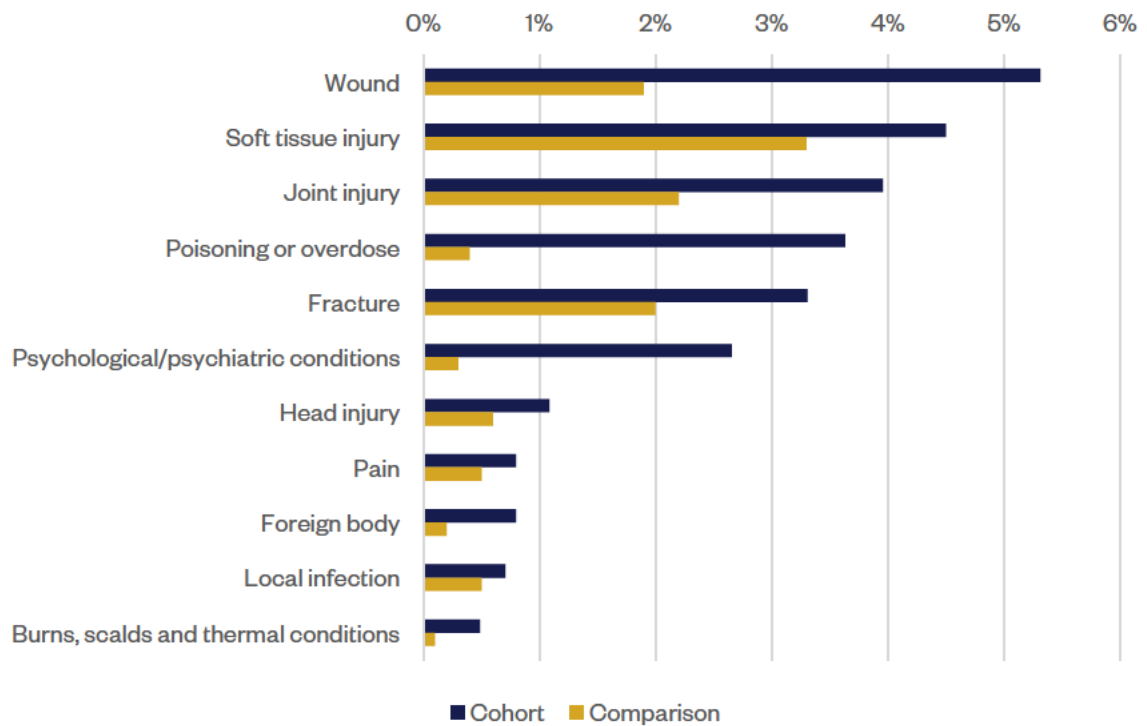
**Figure 3: Hospital admissions—percentage of older children and young people by health condition**



### A&E attendance

Considerable differences are observed in reasons for A&E attendance for all conditions shown in Figure 4. The most common reason for A&E attendance in the cohort was for wounds (5.3% cohort, 1.9% comparison). There were particularly stark differences between the cohort and comparison group for poisoning or overdose (3.6% cohort, 0.4% comparison), and for psychological conditions (2.7% cohort, 0.3%).

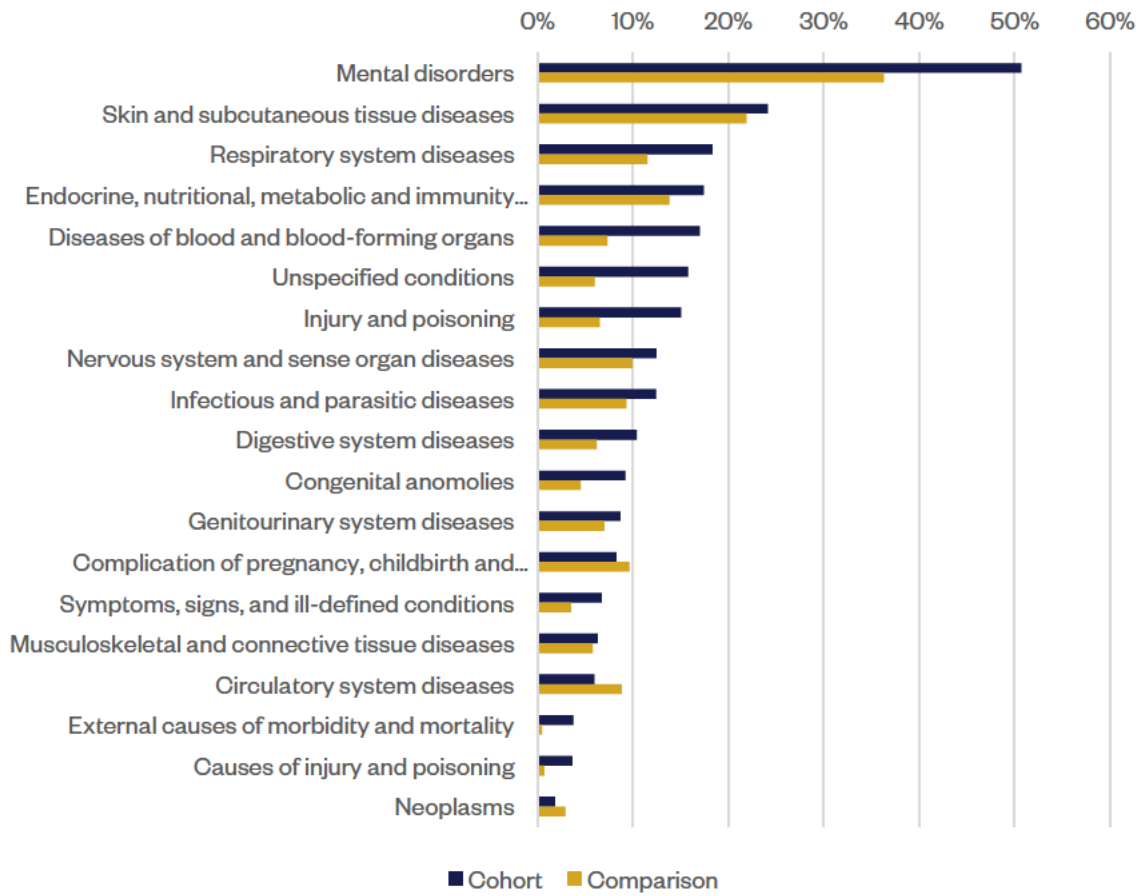
**Figure 4: A&E—percentage of older children and young people by health condition**



### GP records

Figure 5 shows GP-recorded diagnoses for the cohort and comparison group. Around half (50.7%) of the cohort was diagnosed with mental health disorders, compared to 36.3% of the comparison group. Other conditions with larger relative differences between groups include diseases of blood and blood-forming organs (17.0% cohort, 7.3% comparison) and injury and poisoning (15.1% cohort, 6.5% comparison).

Figure 5: GP—percentage of older children and young people by health condition



# Reflections and directions for further research

Our findings highlight the higher use of primary and secondary health care services, including A&E care, for older children and young people prior to care proceedings in Wales. This suggests a need for increased advocacy services for this group of children and young people, potentially supporting their physical and mental health, and reducing demand on emergency health and court services.

- High levels of mental health disorders were particularly noticeable, with half of the children and young people in our study receiving a mental health diagnosis from a GP in the year prior to care proceedings. Higher hospital admissions and attendance at A&E for mental health reasons was also recorded for this group.
- Further work is needed to understand the type and severity of these mental health disorders, age of onset, and the trajectories of those admitted to hospital or who attend A&E in crisis into care. This evidence also suggests the need for proper mental health assessment and support for older children and young people entering care. Provision of targeted, intensive support at this stage may prevent issues escalating.

Higher levels of injury and poisoning-related conditions among the cohort in our study are also noteworthy when compared to the comparison group.

- Further work is needed to explore the nature of these conditions, including their causes, which may include, for example, self-harm, accidents or assault.<sup>5</sup>
- In addition, case file audits are required to fully understand these health issues.

Increased understanding of the health of older children and young people entering care proceedings will support those involved in health services, children's social services and the youth justice system to work together to better identify and support those at risk.

Effectively assisting older children and young people involved in care proceedings may also help to promote healthy adulthood; this may help to break the negative cycle of some becoming birth mothers who appear as respondents in care proceedings.

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<sup>5</sup> Causes not captured in this study as only primary diagnoses were examined in the Patient Episode Database for Wales (PEDW) records.



Our analyses are descriptive and only provide a broad picture of health and health service use. Further analyses using both English and Welsh Cafcass data should, where possible:

- link to other National Health Service (NHS) data such as that from child and adolescent mental health services (CAMHS)
- explore the health of those in contact with social services more broadly
- examine 'younger' (aged 10–14) and 'older' (aged 15 and above) children and young people separately.

There is also a need to understand more about outcomes following care proceedings, including understanding links between outcomes of court proceedings (different court orders) and children and young people's progress and health (Dickens et al. 2019).

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# Appendix A: Data sources

For each data source within the SAIL Databank, including records from Cafcass Cymru, personal identifiable data has been removed and replaced with an anonymised linkage field (ALF) for each person to enable linkage of records from different sources. SAIL anonymisation and linkage methodology is described elsewhere (Ford et al. 2009; Lyons et al. 2009; Jones et al. 2020). All data within the SAIL Databank is treated in accordance with the Data Protection Act 2018 and is compliant with the General Data Protection Regulation 2016.

## Cafcass Cymru

The primary source of family justice data was electronic case management data routinely produced by Cafcass Cymru. The data has previously been described (Johnson et al. 2020). All instances of s.31 care proceedings initiated between 2011 and 2019 (inclusive) were included in this study. Electronic data of sufficient quality for public law research is not available before 2011. For the purpose of this study, the Cafcass Cymru data was linked to other data sources within the SAIL Databank using ALFs. These other data sources include those listed below.

## Emergency department dataset for Wales

The Emergency Department Data Set (EDDS) attempts to capture all activity at emergency departments and minor injury units in NHS Wales hospitals.

## Patient Episode Database for Wales

The Patient Episode Database for Wales (PEDW) contains data for all episodes of hospital inpatient and day-case activity in NHS Wales hospitals, including elective and emergency admissions, minor and major operations.

## Welsh Demographic Service Dataset

The Welsh Demographic Service Dataset (WDSD) provides demographic characteristics of people registered with general practices in Wales—providing residents' demographic and address details including lower layer super output area (LSOA), which can be linked to obtain measures of deprivation.

## Welsh Index of Multiple Deprivation

The Welsh Index of Multiple Deprivation (WIMD) is the Welsh government's official deprivation measure for statistical geographies in Wales—LSOAs.

## Welsh Longitudinal General Practice data

The Welsh Longitudinal General Practice (WLGP) data contains GP records for patients registered with a Welsh GP, for the approximately 80% of practices that supply data to the SAIL Databank; we did not adjust the denominator for GP measures and, as such, we recognise that this information may not have been available for all older children and young people, and we may have underestimated health needs. Measures were calculated using the same method for both groups, and therefore the comparisons remain valid.

# Appendix B: Cohort and comparison group selection

## Cohort creation

We selected older children and young people involved in s.31 care proceedings in Wales between 2011 and 2019 (inclusive). Inclusion criteria:

- case law type = 'public'
- s.31 case issue date = between 1 January 2011 and 31 December 2019
- primary application order = 'care' or 'supervision'.

Of this sample, 91.3% had an anonymised linkage field (ALF) enabling them to be matched with health records, leaving the final cohort of n=1,844 older children and young people.

## Matched comparison group

Initially we created a general population comparison group of children selected from the Welsh Demographic Service Dataset (WDS), which consisted of individuals who had *not* been subject to care proceedings (i.e. within Cafcass Cymru data). To calculate an equivalent count of events during the year prior to case date, we used an index date of 31 December 2019 (i.e. study end point) for all controls.

As we aimed to create a comparison group of individuals with similar demographics to the cohort we added a further stage to create a matched comparison group. This involved matching children in the cohort group to the comparison group. Matching was completed based on the distribution of three demographic variables: gender; age (within one year), and area-level deprivation (deprivation quintiles: most deprived to least deprived). The final matched comparison group consisted of n=19,519 children.

# Appendix C: Measures

The tables below provide details measures used within the analyses, including definitions and data sources.

**Table C.1: Characteristics of the child**

Data item	Data source	Data item detail
Age	Cafcass Cymru, WDS	Age: calculated at application date. Matched comparison process: matched within one year.
Area level deprivation	WDS, WIMD	Measured by linking the child to the address most recent to the application date using their individual residential anonymised linkage field (RALF); then linking LSOA of the RALF to the deprivation index: WIMD (version 2014) grouped into quintiles (1 – most deprived, to 5 – least deprived).

**Table C.1: Health service use**

Hospital admissions (PEDW)	Any hospital admissions within the one-year period; includes any admission method classification as detailed: <a href="http://www.datadictionary.wales.nhs.uk/#!/WordDocuments/admissionmethod.htm">http://www.datadictionary.wales.nhs.uk/#!/WordDocuments/admissionmethod.htm</a>
Emergency (A&E) department (EDDS)	Any new attendance (excludes follow-up attendances) within the one-year period.
GP records (WLG)	Any record within the one-year period was selected for the overall measure for GP record health use.

**Table C.3: Health conditions**

Types of health conditions in emergency hospital admissions (PEDW)	<p>For hospital admissions we grouped health conditions of individuals using the established International Classification of Diseases (ICD-10) —a hierarchal classification system in which clinical diagnoses are classified at various levels of granularity.<sup>6</sup> We report at chapter level—the highest classification level and some chapters were excluded.<sup>7</sup></p> <p>Only the primary diagnostic position was included. The codes were mapped to ICD-10 chapter-level groupings to classify the type of condition. The results displayed are not mutually exclusive.</p> <p>Primary diagnostic code explanations are available:  <a href="http://www.datadictionary.wales.nhs.uk/#!/WordDocuments/primaryicddiagnosticcode.htm">http://www.datadictionary.wales.nhs.uk/#!/WordDocuments/primaryicddiagnosticcode.htm</a></p>
Types of health conditions in GP data (WLGP)	<p>We selected any records classed as diagnoses within the Read classification system (i.e. the first character of the Read code was uppercase). The codes were mapped to approximations of ICD-10 chapter level groupings as indicated by Read code browser software to classify the type of diagnosis. The results displayed are not mutually exclusive, a person could have one or multiple GP interactions with one to many Read codes recorded, which could contain zero to many diagnosis codes.</p> <p>For the purpose of this overview only diagnoses and not symptoms, e.g. of mental health disorders, were examined. This may have led to potential underestimation of health needs (John et al. 2016).</p> <p>We excluded the following chapters: perinatal originating conditions; other symptoms not elsewhere classified; unspecified conditions.</p>
Types of health conditions in A&E attendances (EDDS)	<p>Accident and Emergency Principal Diagnosis Type. EDDS health conditions were assigned based on the principal diagnosis field.</p> <p>Further details available at:  <a href="http://www.datadictionary.wales.nhs.uk/index.html#!/WordDocuments/accidentandemergencydiagnostictypes.htm">http://www.datadictionary.wales.nhs.uk/index.html#!/WordDocuments/accidentandemergencydiagnostictypes.htm</a></p>

<sup>6</sup> ICD classification provides multiple granularity levels, including: chapter; blocks; and further details.  
<https://www.who.int/standards/classifications/classification-of-diseases>;  
[https://icd.who.int/browse10/Content/statichtml/ICD10Volume2\\_en\\_2010.pdf](https://icd.who.int/browse10/Content/statichtml/ICD10Volume2_en_2010.pdf)

<sup>7</sup> The following chapters were excluded from analyses: 18: Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified; 20: External causes, by default as only primary diagnoses were examined; 21: Factors influencing health status and contact with health services; 22: Codes for special purposes.



**Table C.4: Full list of ICD-10 chapter descriptions**

Chapter	Abbreviated chapter description	Full chapter description
1	Infectious and parasitic diseases	Certain infectious and parasitic diseases
2 <sup>a</sup>	Neoplasms	Neoplasms
3 <sup>a</sup>	Blood and immune diseases	Diseases of the blood and bloodforming organs and certain disorders involving the immune mechanism
4	Endocrine, nutritional and metabolic diseases	Endocrine, nutritional and metabolic diseases
5	Mental disorders	Mental, behavioural and neurodevelopmental disorders
6	Diseases of the nervous system	Diseases of the nervous system
7 <sup>a</sup>	Diseases of the eye and adnexa	Diseases of the eye and adnexa
8	Diseases of the ear	Diseases of the ear and mastoid process
9 <sup>a</sup>	Diseases of the circulatory system	Diseases of the circulatory system
10	Diseases of the respiratory system	Diseases of the respiratory system
11	Diseases of the digestive system	Diseases of the digestive system
12 <sup>a</sup>	Diseases of the skin and subcutaneous tissue	Diseases of the skin and subcutaneous tissue
13	Musculoskeletal diseases	Diseases of the musculoskeletal system and connective tissue
14	Diseases of the genitourinary system	Diseases of the genitourinary system
15	Pregnancy and childbirth	Pregnancy, childbirth and the puerperium
17 <sup>a</sup>	Congenital anomalies	Congenital malformations, deformations and chromosomal abnormalities
18 <sup>b</sup>	Other symptoms not elsewhere classified	Symptoms, signs and abnormal clinical and laboratory findings not elsewhere classified
19	Injury and poisoning	Injury, poisoning and certain other consequences of external causes
20 <sup>b</sup>	External causes	External causes of morbidity and mortality
21 <sup>b</sup>	Factors of health status/contact	Factors influencing health status and contact with health services
22 <sup>b</sup>	Special purpose code	Codes for special purposes

<sup>a</sup>Results for these conditions not displayed due to small numbers (percentages for both groups < 0.5%)

<sup>b</sup> Excluded

# Nuffield Family Justice Observatory

Nuffield Family Justice Observatory (Nuffield FJO) aims to support the best possible decisions for children by improving the use of data and research evidence in the family justice system in England and Wales. Covering both public and private law, Nuffield FJO provides accessible analysis and research for professionals working in the family courts.

Nuffield FJO was established by the Nuffield Foundation, an independent charitable trust with a mission to advance social well-being. The Foundation funds research that informs social policy, primarily in education, welfare, and justice. It also funds student programmes for young people to develop skills and confidence in quantitative and scientific methods. The Nuffield Foundation is the founder and co-funder of the Ada Lovelace Institute and the Nuffield Council on Bioethics.

## Family Justice Data Partnership

The Family Justice Data Partnership is a collaboration between Lancaster University and Swansea University, with Cafcass and Cafcass Cymru as integral stakeholders. It is funded by Nuffield Family Justice Observatory.

## SAIL Databank

The Cafcass Cymru and health data used in this study is available from the Secure Anonymised Information Linkage (SAIL) Databank at Swansea University, Swansea, UK, which is part of the national e-health records research infrastructure for Wales. All proposals to use this data are subject to review and approval by the SAIL Information Governance Review Panel (IGRP). When access has been granted, it is gained through a privacy-protecting safe-haven and remote access system, referred to as the SAIL Gateway. Anyone wishing to access data should follow the application process guidelines available at [www.saildatabank.com/application-process](http://www.saildatabank.com/application-process)

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