Outcomes for Children in Need: 31 March 2016

Methodology document

23 March 2017

Contents

Data sources

Children in need census

The children in need (CIN) census collects information at child level on:

- any child referred to children's social care services within the year; and
- any cases open at the beginning of the year for whom local authorities were providing a service

The collection of the data from each local authority allows the local and national level calculation of information on the numbers of referrals and assessments carried out by children's social care services, along with the identification of the number of children assessed to be in need and the numbers who were the subject of a child protection plan.

National pupil database

The national pupil database (NPD) is a longitudinal database linking pupil/student characteristics to school and college learning aims and achievement information for all children in state-funded schools in England. Further information on the NPD, including a user guide, can be found here. Information on requesting NPD extracts can be found here.

The CIN census has been matched to the NPD to understand the characteristics, attainment, absence and exclusions of children in need. This is the seventh year the CIN census has been matched to the NPD. For years prior to 2011 to 2012, analysis has been shared with local authorities but was not published due to data quality concerns. Due to improved data quality, this is the fifth year DfE has published this analysis.

Looked after children have been removed from the analysis to align with measures included in the children's safeguarding performance information framework. Further detail on the removal of looked after children can be found in the Removing looked after children section.

The analysis contained in the additional outcomes tables includes local authority and national level information on:

- matching rates between the CIN census and the NPD
- prevalence of special educational needs (SEN) and free school meals (FSM)
- attainment at key stage 2, key stage 4 and progression between these key stages
- absence and exclusion rates
- absence rates for children in need who were also the subject of a child protection plan

Matching process

Children in need population

There were 394,400 children in need on the child-level CIN census file with open cases at 31 March 2016, but this reduced to 394,100 children in need when duplicates (which were identified as errors when the CIN census data was submitted, but approved by local authorities) were removed from the file.

Removing looked after children

Indicators N1, N2 and N3 of the children's safeguarding performance information framework cover the educational attainment, absence and exclusions of children in need. Comparable data is published for looked after children; therefore, they are excluded from this analysis to focus on other children in need.

The CIN census was matched to the children looked after (CLA) return (also known as SSDA903) using the local authority child ID. This is an ID assigned by the local authority for each child that is unique within that local authority and it should be retained from year to year. Local authorities use the same child IDs for the CIN and CLA returns which allows these datasets to be linked. Children who were looked after at any point during the year were removed from the children in need dataset; however, the following groups of children were retained:

- Children who received only respite care during the year (these are not included in the looked after children education statistics).
- looked after children who were also the subject of a child protection plan

The removal of looked after children reduced the children in need dataset from 394,100 to 320,700.

Matching CIN to NPD

An external contractor manages the matching of the CIN census to the NPD. The main matching key is the child's unique pupil number (UPN). A UPN is automatically allocated to each child in maintained schools in England and Wales. It is an identifier only for use in an educational context during a child's school career. Local authorities are required to return UPNs as part of the CIN census. Further details of what is collected in the children in need census can be found here.

A record from the CIN census is matched into the NPD if there is enough identifiable or characteristic information (mainly UPN, but also gender and date of birth) available in that record which either:

a) identifies the child as already being in the NPD via its appearance in other data sources (which includes the school census and the early years census and previous CIN-NPD datasets) and from which the existing pupil ID can then be attributed to the new record from the 2015 to 2016 CIN census, or

b) involves creating a new pupil ID for the child when the child's characteristics cannot be accurately determined as currently existing in the NPD

Hence, even though a record from the CIN census has been matched into the NPD (i.e. given a pupil ID), it does not necessarily mean that it can be linked to other data in the NPD if there is no other information attributed to that pupil ID from other data sources. This is particularly relevant for the CIN census as a new child can appear, and therefore be matched into the NPD for the first time, before they start school if enough characteristic information is available in their CIN record to create a new pupil ID.

Duplicate records in the NPD extract

There were a very small number of duplicate records in the NPD where the same child was listed as taking key stage 4 examinations in different schools. In order to analyse the attainment of children in need at key stage 4, only one record could be used. A variable on the NPD identifies whether the record was included in the school's results in the performance tables. Cases which were included in the performance tables were selected and in the very small number of cases where all duplicate records were used in a school's results, the record with the highest attainment was selected.

The children in need dataset, which had looked after children removed, was then matched to the NPD extract. This allowed the characteristics, attainment and absence of children in need to be analysed.

Data quality

The CIN census was matched to the CLA return to remove looked after children from the children in need cohort. The matching rate was 96% and again there was much variation between local authorities, from 66% to 100%. CLA information did not match to the CIN census for one local authority, likely due to their management information systems assigning different IDs. For local authorities where the matching rate between the CIN census and the CLA return was low, there are likely to be looked after children in the children in need cohort for those local authorities. These local authorities are footnoted in the relevant tables within the publication.

Overall, 87.4% of school age children in need were matched to the NPD. There is much variation in matching rates at local authority level, from 21.5% to 100% (see table L1).

Analysis

The analysis used the number of school age (5 to 16 inclusive) children in need at 31 March 2016, with the exception of exclusions data, which used the number of school age children in need at 1 April 2015. Exclusions information runs to a much later timetable than other information from the NPD (due to the exclusions review process). Therefore, exclusions information for the 2014 to 2015 academic year was matched to the 2015 to 2016 CIN census. All children aged 5 to 16 years who were in need at 1 April 2015 were identified and exclusions information was provided for the previous year for this cohort.

National figures have been rounded to the nearest 100 and regional figures to the nearest 10. Percentages have been derived from unrounded numerators and denominators, but have been rounded to one decimal place in the tables. Values between 1 and 5 inclusive have been suppressed and replaced with x. Some secondary suppression may have taken place, where necessary, to protect confidentiality.

The following table provides definitions for the numerators and denominators used to calculate the percentages in the tables.

Numerator(s)	Denominator	Percentage
Table L1: Matching rates		
Number of school age children in need at 31 March 2016 in the matched CIN-NPD dataset	Number of school age children in need in the CIN census at 31 March 2016	Percentage of school age children in need matched to the NPD
Table L2: Special educational needs (SEN)		
Number of school age children in need at 31 March 2016 in the matched CIN-NPD dataset with: -no identified SEN -SEN support -SEN with a statement or EHC plan	Number of school age children in need at 31 March 2016 in the matched CIN-NPD dataset with: -no identified SEN -SEN support -SEN with a statement or EHC plan	Percentage of school age children in need at 31 March 2016 in the matched CIN-NPD dataset with: -no identified SEN -SEN support -SEN with a statement or EHC plan
Table L3: Free school meals (FSM) eligibility		
Number of school age children in need at 31 March 2016 in the matched CIN-NPD dataset and eligible for FSM	Number of school age children in need at 31 March 2016 in the matched CIN-NPD dataset with FSM information	Percentage of school age children in need at 31 March 2016 who were eligible for FSM
Numerator(s)	Denominator	Percentage
Table L4: Key stage 2 (KS2) attainment		
Number of school age children in need at 31 March 2016 in the matched CIN-NPD dataset achieving the required level in KS2: -Mathematics (test) -Reading (test) -Writing (teacher assessment) -Grammar, punctuation and spelling (test) -Reading, writing and mathematics	Number of school age children in need at 31 March 2016 in the matched CIN-NPD dataset with KS2 information: -Mathematics (test) -Reading (test) -Writing (teacher assessment) -Grammar, punctuation and spelling (test) -Reading, writing and mathematics	Percentage of school age children in need at 31 March 2016 in the matched CIN-NPD dataset achieving the required level in KS2: -Mathematics (test) -Reading (test) -Writing (teacher assessment) -Grammar, punctuation and spelling (test) -Reading, writing and mathematics
Table L5: Key stage 4 (KS4) attainment		

Number of school age children in need at 31 March 2016 in the matched CIN-NPD dataset achieving: -5 A*-C grades (inc English and mathematics) -Achieving A*-C in English and Maths -Entering English Baccalaureate -Achieving English Baccalaureate	Number of school age children in need at 31 March 2016 in the matched CIN-NPD dataset with KS4 information.	Percentage of school age children in need at 31 March 2016 in the matched CIN-NPD dataset achieving: -5 A*-C grades (inc English and mathematics) -Achieving A*-C in English and Maths -Entering English Baccalaureate -Achieving English Baccalaureate - Average attainment 8 score* * Attainment 8 measures the achievement of a pupil across 8 qualifications including mathematics (double weighted) and English (double weighted), 3 further qualifications that count in the English Baccalaureate (EBacc) measure and 3 further qualifications that can be GCSE qualifications (including EBacc subjects) or technical awards from the DfE approved list. The average attainment 8 score per pupil is presented.
Numerator(s)	**Denominator**	**Percentage**
Table L6: Progression between key stage 2 and key stage 4		

Progress 8 measure

A Progress 8 score is calculated for each pupil by comparing their achievement –their Attainment 8 score – with the average Attainment 8 score of all pupils nationally who had a similar starting point (or 'prior attainment'), calculated using assessment results from the end of primary school. The greater the Progress 8 score, the greater the progress made by the pupil compared to the average of pupils with similar prior attainment.

We present:

- Number of eligible Children in Need at the end of Key Stage
- Number of pupils included in progress 8 calculation
- Average progress 8 score
- Lower confidence interval
- Upper confidence interval

Table L7: Absence from school in the autumn, spring and summer term 2015/16 unauthorised / authorised / overall absence levels

Number of sessions of: -unauthorised absence -authorised absence -overall absence for school age children in need at 31 March 2016 in the matched CIN-NPD dataset, during the autumn, spring and summer terms of 2015/16	Total number of sessions for school age children in need at 31 March 2016 in the matched CIN-NPD dataset, with absence information in a primary, secondary or special school in January 2016, during the autumn, spring and summer terms of 2015/16	Absence rates for school age children in need at 31 March 2016 for: -unauthorised absence -authorised absence -overall absence
Persistent absence level[1]		
Number of school age children in need at 31 March 2016 in the matched CIN-NPD dataset who were persistent absentees	Number of school age children in need at 31 March 2016 in the matched CIN-NPD dataset with absence information in a primary, secondary or special school in January 2016	Percentage of school age children in need at 31 March 2016 in the matched CIN-NPD dataset who were persistent absentees

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[1] Persistent absentees are defined as having an overall absence rate of around 10 per cent or more of all the sessions that individual was expected to attend.

Numerator(s)	Denominator	Percentage
Table L8: Exclusions in 2014/15		
Number of school age children in need at 1 April 2015 in the matched CIN-NPD dataset by: -number with at least one fixed period exclusion -number with a permanent exclusion	Number of school age children in need at 1 April 2015 in the matched CIN-NPD dataset, with exclusions information in a primary, secondary or special school in January 2016	Percentage of school age children in need at 1 April 2015 in the matched CIN-NPD dataset with: -at least one fixed period exclusion -permanent exclusions
Table L9: Child protection plans **unauthorised / authorised / overall absence levels**		
Number of sessions of: -unauthorised absence -authorised absence -overall absence for school age children in need at 31 March 2016 who were also the subject of a child protection plan in 2015-16 in the matched CIN-NPD dataset, during the autumn, spring and summer terms of 2015/16	Total number of sessions for school age children in need at 31 March 2016 who were also the subject of a child protection plan in 2015-16 in the matched CIN-NPD dataset, with absence information in a primary, secondary or special school in January 2016, during the autumn and spring terms of 2015/16	Absence rates for school age children in need at 31 March 2016 who were the subject of a child protection plan in 2015-16 for: -unauthorised absence -authorised absence -overall absence
Persistent absence levels[2]		
Number of school age children in need at 31 March 2016 in the matched CIN-NPD dataset who were also the subject of a child protection plan in 2015-16, who were persistent absentees	Number of school age children in need at 31 March 2016 in the matched CIN-NPD dataset who were also the subject of a child protection plan in 2015-16, with absence information in a primary, secondary or special school in January 2016	Percentage of children in need at 31 March 2016 in the matched CIN-NPD dataset who were the subject of a child protection plan, who were persistent absentees

[2] Persistent absentees are defined as having an overall absence rate of around 10 per cent or more of all the sessions that individual was expected to attend.

Changes to the time series

Prior to last year's publication (2014-15), the children in need outcome tables had been published in February and the attainment figures have been based on provisional key stage 2 and key stage 4 data, and the absence figures were based on 2-term absence rates. From last year, the tables were published in March in order to align the versions of attainment and absence data with those used in the outcomes for children looked after SFR. As a result, data from 2014-15 onwards is based on revised key stage 2 and 4 attainment data, and 3-term absence rates.

Related publications

Looked after children

Outcomes for children looked after includes educational attainment, special educational needs (SEN), and absence and exclusions from school. Data is published at national and local authority level on the outcomes for children who have been looked after continuously for at least 12 months at 31 March 2016.

All children

Special educational needs in England: January 2016 reports on children with SEN and free school meal eligibility.

Revised key stage 2 results for 2015 to 2016 academic year can be found in revised national curriculum assessments at key stage 2 in England.

Attainment of pupils at key stage 4 along with progression between key stages 2 and 4 can be found in revised GCSE and equivalent results 2015 to 2016.

Statistics: pupil absence shows releases reporting levels of overall, authorised and unauthorised absence by school type and reason, with summary statistics on persistent absentees for both 2 term (autumn and spring) and full year absence.

Information about exclusions from school can be found in permanent and fixed period exclusions from schools in England: 2014 to 2015 academic year.