Children in need census matched to the national pupil database

Methodology document for 2013 to 2014 census

February 2015

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 on the PLUG website.

Further information on requesting NPD extracts can be found here.

The CIN census has been matched to the NPD to understand characteristics, attainment and absence of children in need. This is the fifth 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 not published due to data quality concerns. Due to improved data quality, this is the third 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 on page 5.

The analysis contained in the additional 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

External matching process

The matching of the CIN census to the NPD is managed by an external contractor. 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 asked to return UPNs as part of the CIN census.

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 2013 to 2014 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.

Internal matching process

The matching between the CIN census and the NPD was carried out using the CIN files submitted by local authorities in summer 2014. However, these files do not indicate whether the children included are 'in need'. The children in need population is subsequently calculated by DfE for the statistical first release (SFR) which was published in October 2014. Therefore once the NPD was matched to CIN census files, DfE subsequently added an 'in need' indicator to this matched file. This 'in need' indicator excludes referrals with no further action and cases which are closed after initial assessment where the reason for the closure of the case being that the case was closed after assessment with no further action.

Children in need population

The SFR estimated that there were 397,600 children in need at 31 March 2014. This included estimated numbers for one local authority. This local authority made a partial CIN return, so it was not possible to calculate their numbers of children in need. There were 394,000 children in need on the child-level CIN census file with open cases at 31 March 2014, but this reduced to 392,000 children in need when duplicates (which were identified as errors when the CIN census data was submitted, but approved by LAs) 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 already published for looked after children, therefore they were 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 which 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 392,000 to 324,900.

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. 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

Overall, 87.8% of school age children in need matched to the NPD. There is much variation in matching rates at local authority level, from 10.2% to 100% (see Table L1). The CIN census was matched to the CLA return to remove looked after children from the children in need cohort. The matching rate was 94% and again there was much variation between local authorities, from 28% to 100%. 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.

Analysis

The analysis used the number of school age (5 to 16 inclusive) children in need at 31 March 2014, with the exception of exclusions data which used the number of school age children in need at 1 April 2013. Exclusions information runs to a much later timetable than other information from the NPD (due to the appeals process). Therefore exclusions information for the 2012 to 2013 academic year was matched to the 2013 to 2014 CIN census. All children aged 5 to 16 years who were in need at 1 April 2013 were identified and exclusions information was provided for the previous year for this cohort.

National figures have been rounded to the nearest 100. 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 has also 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 2014 in the matched CIN-NPD dataset	Number of school age children in need in the CIN census at 31 March 2014	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 2014 in the matched CIN-NPD dataset with: -no SEN -SEN -at School Action -at School Action Plus -with Statements of SEN	Number of school age children in need at 31 March 2014 in the matched CIN-NPD dataset with SEN information	Percentage of school age children in need at 31 March 2014 in the matched CIN-NPD dataset with: -no SEN -SEN -at School Action -at School Action Plus -with Statements of SEN
Table L3: Free school meals (FSM) eligibility		
Number of school age children in need at 31 March 2014 in the matched CIN-NPD dataset and eligible for FSM	Number of school age children in need at 31 March 2014 in the matched CIN-NPD dataset with FSM information	Percentage of school age children in need at 31 March 2014 who were eligible for FSM

Table L4: Key stage 2 (KS2) attainment		
Number of school age children in need at 31 March 2014 in the matched CIN-NPD dataset achieving level 4 or above in KS2: -Reading -Writing (teacher assessment) -Mathematics -Reading, writing and mathematics -Grammar, punctuation and spelling	Number of school age children in need at 31 March 2014 in the matched CIN-NPD dataset with KS2 information	Percentage of school age children in need at 31 March 2014 in the matched CIN-NPD dataset achieving level 4 or above in KS2: -Reading -Writing (teacher assessment) -Mathematics -Reading, writing and mathematics -Grammar, punctuation and spelling
Table L5: Key stage 4 (KS4) attainment		
Number of school age children in need at 31 March 2014 in the matched CIN-NPD dataset achieving: -Any KS4 pass -5 A*-G grades -5 A*-G grades (inc English and mathematics) -5 A*-C grades -5 A*-C grades (inc English and mathematics)	Number of school age children in need at 31 March 2014 in the matched CIN-NPD dataset with KS4 information	Percentage of school age children in need at 31 March 2014 in the matched CIN-NPD dataset achieving: -Any KS4 pass -5 A*-G grades -5 A*-G grades (inc English and mathematics) -5 A*-C grades -5 A*-C grades (inc English and mathematics)
Table L6: Progression between key stage 2 (KS2) and key stage 4 (KS4)[1]		
Number of school age children in need at 31 March 2014 in the matched CIN-NPD dataset, achieving: -two levels of progress in English -two levels of progress in mathematics	Number of school age children in need at 31 March 2014 in the CIN-NPD dataset with KS2 and KS4 information in: -English -Mathematics	Percentage of school age children in need at 31 March 2014 in the matched CIN-NPD dataset, between KS2 and KS4 achieving: -two levels of progress in English -two levels of progress in mathematics

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[1] A full explanation of how expected progress is calculated is included in the 2013 to 2014 GCSE and equivalent results provisional publication.

Table L7: Absence from school in the autumn and spring term 2013/14 unauthorised / authorised / overall absence levels		
Number of sessions of: -unauthorised absence -authorised absence -overall absence for school age children in need at 31 March 2014 in the matched CIN-NPD dataset, during the autumn and spring terms of 2013/14	Total number of sessions for school age children in need at 31 March 2014 in the matched CIN-NPD dataset, with absence information in a primary, secondary or special school in January 2014, during the autumn and spring terms of 2013/14	Absence rates for school age children in need at 31 March 2014 for: -unauthorised absence -authorised absence -overall absence
Persistent absence level[2]		
Number of school age children in need at 31 March 2014 in the matched CIN-NPD dataset who were persistent absentees	Number of school age children in need at 31 March 2014 in the matched CIN-NPD dataset with absence information in a primary, secondary or special school in January 2014	Percentage of school age children in need at 31 March 2014 in the matched CIN-NPD dataset who were persistent absentees
Table L8: Exclusions in 2012/13		
Number of school age children in need at 1 April 2013 in the matched CIN-NPD dataset by: -number of fixed period exclusions -number of permanent exclusions	Number of school age children in need at 1 April 2013 in the matched CIN-NPD dataset, with exclusions information in a primary, secondary or special school in January 2014	Percentage of school age children in need at 1 April 2013 in the matched CIN-NPD dataset with: -fixed period exclusions -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 2014 who were also the subject of a child protection plan	Total number of sessions for school age children in need at 31 March 2014 who were also the subject of a child protection plan in 2013-14 in the matched CIN-NPD dataset, with absence information in a primary, secondary or	Absence rates for school age children in need at 31 March 2014 who were the subject of a child protection plan in 2013-14 for: -unauthorised absence -authorised absence -overall absence

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[2] Persistent absentees are defined as pupils who have missed 15% or more of school sessions through authorised or unauthorised absence.

in 2013-14 in the matched CIN-NPD dataset, during the autumn and spring terms of 2013/14	special school in January 2014, during the autumn and spring terms of 2013/14	
Persistent absence levels		
Number of school age children in need at 31 March 2014 in the matched CIN-NPD dataset who were also the subject of a child protection plan in 2013-14, who were persistent absentees	Number of school age children in need at 31 March 2014 in the matched CIN-NPD dataset who were also the subject of a child protection plan in 2013-14, with absence information in a primary, secondary or special school in January 2014	Percentage of children in need at 31 March 2014 in the matched CIN-NPD dataset who were the subject of a child protection plan, who were persistent absentees

Related publications

Looked after children

Outcomes for children looked after includes educational attainment, special educational needs (SEN), exclusions from school, health, development of children aged under 5, education and employment after year 11, offending and substance misuse. 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 2014.

All children

Special educational needs in England: January 2014 reports on children with SEN and free school meal eligibility.

Revised key stage 2 results for 2013 to 2014 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 in the 2012 to 2013 academic year can be found in revised GCSE and equivalent results 2013 to 2014.

Pupil absence in schools in England: autumn 2013 and spring 2014 reports levels of overall, authorised and unauthorised absence by school type and reason, with summary statistics on persistent absentees.

Information about exclusions from school can be found in permanent and fixed period exclusions from schools in England: 2012 to 2013 academic year.