

Permanently Progressing?

Building secure futures for children in Scotland

Linking two administrative datasets about looked after children: testing feasibility and enhancing understanding

Jade Hooper
Linda Cusworth
Helen Whincup



Acknowledgements

This report has been completed as one part of the research study *Permanently Progressing? Building secure futures for children in Scotland*. We¹ are very grateful to the anonymous donor who made this study possible. Thanks also to our Steering Group² for their advice and support throughout Phase One of the study and for reading and providing comments on previous drafts. Thanks also go to the peer reviewers for their detailed feedback.

The report draws on data from the Children Looked After Statistics (CLAS data) supplied to the team by the data analysis team at the Scottish Government. It also draws on data collected by Scottish Children's Reporter Administration (SCRA). We owe a huge debt to Celia MacIntyre (Scottish Government) and Gillian Henderson and Donald Lamb (both SCRA) without whom the linkage would not have been able to happen.

We linked the data on children safely and securely through the support of the Administrative Data Research Network (ADRN).³ The ADRN was funded by the Economic and Social Research Council, from 2013 to 2018, when it closed. The Administrative Data Research Centre – Scotland (ADRC-S) was the Scottish arm of the ADRN.

This involved a range of people, and our thanks go to them and to Amy Tilbrook who was a consistent contact there during the linkage process.

¹ See Appendix 1 for details about the authors.

² See Appendix 2 for a list of the Steering Group members.

³ For information see www.adrn.ac.uk.

Contents

List of tables.....	ii
List of figures.....	iv
1. Introduction.....	1
Ethical approval and data protection.....	2
2. Legislative Context.....	3
3. Sources of administrative data on looked after children	7
Children Looked After Statistics (CLAS data).....	7
Scottish Children’s Reporter Administration (SCRA) Data	8
4. Linking the administrative data.....	9
Objectives of data linkage	9
The process of linkage: would it be possible?	12
5. Terminology	15
6. Analysis	16
7. Did the CLAS and SCRA data link in the way we expected?.....	17
Local authority variation	19
Variation by whether children were looked after at home or away from home.....	19
Children with CLAS only data whom we did not expect to match.....	20
Summary.....	21
8. What does analysis of the linked data tell us about the children?.....	22
8.1 Previous involvement with the Children’s Hearing System.....	22
Summary.....	25
8.2 First and index referrals.....	26
Summary.....	27
8.3 Why were people concerned about the children?.....	28
Summary.....	30
8.4 How long did it take children from first referral to becoming looked after in 2012-13?.....	31
Summary.....	33
8.5 Differences for children looked after at home or away from home.....	33
Summary.....	45
9. Discussion and implications of linkage	46
References.....	49
Appendix 1: About the authors.....	51
Appendix 2: Steering Group.....	52
Appendix 3: List of variables sent to the safe haven.....	53

List of tables

Table 1: The number of children with records where linkage was as expected or not and their 'matching category' (n=2,230).....	17
Table 2: Number of children by looked after <i>at home</i> or <i>away from home</i> group with records where linkage was as expected or not (n=1,834).....	20
Table 3: Number of children in the <i>Pathways</i> strand (n=1,834) and the sample of linked children (n=1,000) who were in the <i>at home</i> and <i>away from home</i> groups.....	20
Table 4: First legal reason for children with CLAS data only (n=523).....	21
Table 5: Reporter's decision from prior referral (n=418).....	23
Table 6: Source of previous referral and whether Supervision Requirement was made (n=401).....	25
Table 7: Age of children at previous referral (n=418).....	25
Table 8: Age of children at first and index referrals (n=1,000).....	26
Table 9: Source of first and index referrals (n=1,000).....	27
Table 10: Warrant/ICSO granted on first or index referral.....	27
Table 11: Number of grounds for referral at first and index referral (n=1,000).....	28
Table 12: Grounds for referral at first and index referral.....	29
Table 13: Whether grounds for referral were established at first and index referral (n=1,000).....	29
Table 14: Supervision Requirement detail from index referral (n=1,000).....	30
Table 15: Average time in months from first referral to becoming looked after in 2012-13 by age-group when became looked after in 2012-13 (n=1,000).....	32
Table 16: Previous referrals for <i>at home</i> and <i>away from home</i> groups (n=1,000).....	34
Table 17: Source of first referral, for <i>at home</i> and <i>away from home</i> groups (n=1,000).....	34
Table 18: Source of index referral, for <i>at home</i> and <i>away from home</i> groups (n=1,000).....	35
Table 19: Age at first referral, for <i>at home</i> and <i>away from home</i> groups (n=1,000).....	35
Table 20: Reporter's decision on first referral, for <i>at home</i> and <i>away from home</i> groups (n=995).....	36
Table 21: Grounds for first referral - Lack of parental care, for <i>at home</i> and <i>away from home</i> groups (n=1,000).....	37
Table 22: Grounds for first referral – Child victim, for <i>at home</i> and <i>away from home</i> groups (n=1,000).....	37
Table 23: Use of child protection measures – first referral, for <i>at home</i> and <i>away from home</i> groups (n=1,000).....	38
Table 24: Use of child protection measures – index referral, for <i>at home</i> and <i>away from home</i> groups (n=1,000).....	38
Table 25: Number of Hearings where the outcome was a Compulsory Supervision Order to 31 March 2016, for <i>at home</i> and <i>away from home</i> groups (n=1,000).....	39
Table 26: Number of continued Review Hearings to 31 March 2016, for <i>at home</i> and <i>away from home</i> groups (n=1,000).....	40
Table 27: Review Hearings with substantive outcome to 31 March 2016, for <i>at home</i> and <i>away from home</i> groups (n=1,000).....	40

Table 28: Number of referrals to 31 March 2016, for <i>at home</i> and <i>away from home</i> groups (n=1,000).....	41
Table 29: Number of referrals where the Reporter arranged a Children’s Hearing to 31 March 2016, for <i>at home</i> and <i>away from home</i> groups (n=1,000).....	42
Table 31: Number of appeals to a sheriff to 31 March 2016, for <i>at home</i> and <i>away from home</i> groups (n=1,000)	43
Table 32: Children’s permanence group at the end of year 4 (2016) (n=1,000)	44

List of figures

Figure 1: Data linkage process	11
Figure 2: Outcome of previous referral.....	24

1. Introduction

This report on the linkage of Children Looked After Statistics (CLAS) with data from Scottish Children's Reporter Administration (SCRA) is one strand of the *Permanently Progressing?* study. The study is the first in Scotland to investigate decision making, permanence, progress, outcomes and belonging for children who became 'looked after' at home, or away from home (with kinship carers, foster carers or prospective adopters) when they were aged five and under. Phase One ran from 2014-18 and is designed to be the first phase in a longitudinal study following a large cohort of young children into adolescence and beyond. Phase One was funded by a legacy and was undertaken by a team from the universities of Stirling, York and Lancaster in conjunction with Adoption and Fostering Alliance (AFA) Scotland.

The Scottish government collects information from all 32 local authorities about children who are looked after in their area, the Children Looked After Statistics (CLAS data). The Scottish Children's Reporter Administration (SCRA) also collects information about children referred to SCRA, some of whom will appear in the CLAS data. The CLAS data and the SCRA data do not share a common identification number, and until now linking these two important data sets has never been attempted. Within the safe haven operated by the Administrative Data Research Network (ADRN) we were able to safely link CLAS and SCRA data on 1,000 children.

This strand of the study linked the two data sets in order to:

- Test the feasibility of linkage
- Test whether the data match/do not match as expected
- Allow a fuller analysis of child and process factors which might not be evident from only CLAS or SCRA data alone.

The study has four other strands which are outlined below:

Pathways to permanence for children who become looked after in Scotland (the *Pathways* strand)

This analysed data from the Children Looked After Statistics (CLAS) provided to the Scottish Government by all 32 local authorities on the total cohort of children who became looked after during the year 1 August 2012 - 31 July 2013 when they were aged five and under (n=1,836). Children who were looked after away from home at some point during 2012-13 formed the *away from home* group (n=1,355). Children who were looked after at home during this year formed the *at home* group (n=481). Some of the children in the *away from home* group were also looked after at home during 2012-13, but none of the *at home* group were looked after away from home 2012-13 or they would have appeared in the other group. However, some of the *at home* group became looked after away from home subsequently.

This strand of the study investigated children's pathways into and through the looked after system over four years from 2012-16, including the route and timescales to permanence.

The CLAS data on the 1,836 children who make up the full cohort of the *Pathways* strand formed one part of the linkage described in this report.

Children looked after away from home aged five and under in Scotland: experiences, pathways and outcomes (the *Outcomes* strand)

Questionnaires were sent to the kinship carers/foster carers/adoptive parents and social workers of a sample of 643 children from 19 participating local authorities who became looked after away from home in 2012-13 and remained (or were again) looked after away from home a year later.

Questionnaires were returned by 433 social workers and 166 carers or adoptive parents, providing

detailed information on the children's histories, circumstances, relationships, health and educational progress.

Decision making for children (the *Decision making strand*)

During 2015-17, 160 decision makers were interviewed across Scotland mainly in groups, but some individually. These included social workers and allied professionals, members of Children's Hearings, Reporters to the Children's Hearings, independent consultants, members of permanence panels, and a sheriff. This enabled us to identify from a range of perspectives the factors which influence decision making for children.

Perspectives on kinship care, foster care and adoption: the voices of children, carers and adoptive parents (the *Children and carers strand*)

Although the children in our cohort are young, we wanted to hear about their experiences. Play and talk sessions took place with a sample of 10 children aged between three and eight years, and 20 kinship carers, foster carers, and adoptive parents were interviewed. The focus was what helped children feel secure, and what carers/adoptive parents said they needed to enable them to meet children's needs.

Links

Final reports for all five strands of the *Permanently Progressing?* study, and summaries are now available:

<https://www.stir.ac.uk/about/faculties-and-services/social-sciences/our-research/research-areas/centre-for-child-wellbeing-and-protection/research/permanently-progressing/>

<https://afascotland.com/learning-zone/2-static-content/124-permanently-progressing>

<https://www.york.ac.uk/spsw/research/researchproject-permanentlyprogressing/>

<https://www.cfj-lancaster.org.uk/projects/permanently-progressing>

Ethical approval and data protection

Ethical approval for the full study was provided by the General University Ethics Panel of the Faculty of Social Science at the University of Stirling. A Data Sharing Agreement was drawn up between the Scottish Government and the University of Stirling. All CLAS data were anonymised by the Scottish Government before they were passed to the research team. The datasets were securely stored on a password-protected server at the University of Stirling.

Additional ethical approval was required for this strand of the study, and the Data Sharing Agreement with the Scottish Government was amended. The existing agreement allowed data analysis. The new agreement allowed data linkage. A Data Sharing Agreement was also drawn up with Scottish Children's Reporter Administration (SCRA).

The linkage met the requirements of the Data Protection Act 1998. The terms of our Data Sharing Agreement with SCRA meant that linkage had to be complete before the EU General Data Protection Regulation (GDPR) came into force on 25 May 2018.

The steps taken to ensure linkage was completed legally, safely, and ethically are described in detail in Chapter 4. The linkage and analysis of the linked data was permitted by the data owners (Scottish Government and SCRA) as the research team made use of the services of the Administrative Data Research Centre to facilitate the linkage, with de-identified data provided for analysis within the secure environment of a data 'safe haven'.

2. Legislative Context

The legislation and policy underpinning permanence vary across the United Kingdom and the context in which decisions about permanence in Scotland are made is complex. Decisions about children can be made within local authorities, Children's Hearings and courts, and children may be involved in all three systems at some point.⁴ The intention of this section is to lay out the formal settings where decisions about permanence are made with links to relevant legislation and policy, including changes introduced during the study period (2014-18). It is not intended to be a comprehensive exploration of current legislation and policy, but to familiarise the reader with the context relevant to the study and to situate the data linked within this strand. Key legislation which is relevant to the children in our study, to parents/carers and to professionals:

- Children (Scotland) Act 1995
- Adoption and Children (Scotland) Act 2007
- Children's Hearings (Scotland) Act 2011
- Children and Young People (Scotland) Act 2014

Under Section 22 of the Children (Scotland) Act 1995, the local authority is obliged to 'promote the welfare' of children in need. Part of this duty may involve providing accommodation, and the basis for this is set out in Section 25 of the Children (Scotland) Act 1995. Where children are accommodated under Section 25 they become 'looked after away from home', and their information will appear in the Children Looked After Statistics (CLAS data) which local authorities send annually to the Scottish Government.

Part 1 of the Children (Scotland) Act 1995, sets out parental responsibilities and rights, and Section 11 details the conditions in which a court can make an order which deprive adult(s) of parental responsibilities and rights, and transfer some or all of those responsibilities and rights to another adult, or decide they should be shared with another adult. Where the applicant is a family member, the order granted by a court is referred to as a Kinship Care Order, a term introduced under the Children and Young People (Scotland) Act 2014. This was enacted in August 2016 when our study was halfway through. When children become the subject of a Section 11 Order or a Kinship Care Order they are no longer 'looked after'.

One of the distinguishing features of the Scottish system is the role that Children's Hearings play. The Children's Hearings System (CHS) may be involved in decision making for a child at different stages. Where there are concerns about a child s/he may be referred to the Children's Reporter. Anyone may make a referral to the Reporter, and some professionals (police and social work) have a statutory responsibility to make a referral where they believe that a child may be in need of compulsory measures of intervention. In June 2013 the Children's Hearings (Scotland) Act 2011 came into force, replacing some aspects of Children (Scotland) Act 1995. The 'Grounds for Referral' are set out in the Children's Hearings (Scotland) Act 2011, but for children whose data were linked, the grounds for referral in the baseline year (2012-13) would have been under the Children (Scotland) Act 1995.

On the basis of the information s/he is given, the Reporter decides whether there is sufficient evidence and an apparent need for compulsory measures of supervision and if so, arranges a Children's Hearing. There are three underlying principles set out in the Children's Hearings (Scotland) Act 2011:

⁴ CELCIS (Centre for Excellence for Looked after Children in Scotland) produced a systems map, which is helpful. This can be accessed at <https://www.celcis.org/knowledge-bank/search-bank/child-protection-and-permanence-system-map/>

- The minimum intervention principle: an order should only be in place if it would be of more benefit to the child than if there were no order.
- The paramountcy principle: safeguarding and promoting the welfare of the child is 'the paramount consideration'.
- The child has a right to express a view in decisions relating to himself/herself (taking account of the child's age and maturity), and for these to be taken into account by the Hearing or sheriff.

Children and young people may come in to the Children's Hearings System after a referral, or following emergency child protection measures, the most common of which is a Child Protection Order (CPO) which has been granted by a sheriff following an application by (usually) the local authority under the Children's Hearings (Scotland) Act 2011. The CPO authorises certain actions including the removal or retention of a child in a place of safety.

A Children's Hearing is comprised of three volunteer Children's Panel Members who come to a decision based on written reports from professionals involved in the child and family's life (including social work, education and health) and discussion of the child's circumstances involving the child and his/her family/carers and professionals. Children's Hearings can address a range of matters but here we concentrate on those most relevant to this study.

Children's Hearings make a decision on whether a child requires to be on a statutory order, including an Interim Compulsory Supervision Order (ICSO) or a Compulsory Supervision Order (CSO), and whether the ICSO/CSO is either a) home-based, in which case the child becomes 'looked after at home', or b) away from the child's home, in which case s/he becomes 'looked after away from home'. The study cohort comprises children who started to be looked after between 1 August 2012 and 31 July 2013, aged five and under. In June 2013, the Children's Hearings (Scotland) Act 2011 was enacted. Prior to that date, where compulsory supervision was required, the Children's Hearing imposed a Supervision Requirement (at home or away from home). Children in our study who became looked after through the CHS in 2012-13 would have been subject to Supervision Requirements (SR). From June 2013, children who were looked after at home or away from home through the CHS would have been the subject of Interim Compulsory Supervision Orders (ICSO) or Compulsory Supervision Orders (CSO).

In addition to deciding whether statutory measures are necessary, where children are subject to ICSO/CSO. Hearings also make decisions about whether it is necessary to regulate contact, and if any other measures need to be attached to the statutory order. Children's Hearings have to consider whether it is necessary for them to appoint a Safeguarder for the child in order to make a decision. The Safeguarder prepares a report setting out anything which, in the opinion of the Safeguarder, is relevant to the consideration of the matter before the Children's Hearing, and will help the Hearing to make a decision which will safeguard and promote the child's welfare (see Hill et al, 2011; Gadda et al, 2015 on the role of Safeguarders).

Compulsory Supervision Orders must be reviewed by a Children's Hearing within a year of the date of making the order. An earlier review can take place if requested by the child or parent after three months, by the local authority at any time, or where the Hearing has specified an earlier date for review.

The Children's Hearings System interfaces with the court at different stages:

- If a 'Relevant Person'⁵ or child does not accept or is too young to understand the grounds for referral, these will be sent to the sheriff to establish whether the facts laid out can be proven. On the basis of the information, the sheriff may uphold some or all of the grounds for referral and if so, the child's case will return to the Children's Hearing.
- A child/relevant person can appeal a decision made by a Children's Hearing and this appeal is heard by the sheriff.
- Where a child is subject to an emergency order, granted by a sheriff (e.g. CPO), the Principal Reporter to the Children's Hearing must be informed and s/he arranges a Children's Hearing on the second working day after the child has been taken to a place of safety.
- Where a child is subject to a CSO and the Agency Decision Maker⁶ for the local authority has decided, following a Permanence Panel, that a Permanence Order or adoption is required and an application is to be made to court, the Children's Reporter must be notified. The Reporter will arrange for a Children's Hearing to take place for the purpose of providing advice to the sheriff about the local authority's plan for the child.

Where the local authority has applied to the Court for a Permanence Order (PO) or Permanence Order with authority to Adopt (POA) and the application is in process, a child can only be made subject to a CSO, or the CSO varied with the permission of the court. The Children's Reporter will arrange for a Hearing for the CSO to be varied/made and once the Hearing has decided what the best decision is for the child, a report will be prepared for the court. Once a sheriff has considered the report, s/he will decide whether to make or vary the CSO and remit it back to the Hearing for the decision to be made. This happens typically where a reduction in contact or move to permanent carers is part of the plan for the child. This process was introduced under the Adoption and Children (Scotland) Act 2007, Sections 95 and 96.

The Sheriff Court makes decisions in relation to parental responsibilities and rights. Part 1 of the Children (Scotland) Act 1995, sets out parental responsibilities and rights, and Section 11 details the conditions in which a court can deprive adult(s) of parental responsibilities and rights and transfer some or all of those responsibilities and rights to another adult, or decide they should be shared with another adult. Where the applicant is a family member, the order granted by the Court is referred to as a Kinship Care Order, a term introduced under the Children and Young People (Scotland) Act 2014. This was enacted in August 2016 when our study was half way through.

⁵ The following people are automatically considered to be a relevant person: Any parent (whether or not they have parental rights or responsibilities) and any other person who has parental rights and responsibilities (obtained through the courts). Foster carers and kinship carers are not automatically considered to be relevant persons, however, they can be deemed to be a Relevant Person. This decision is made by a Pre-Hearing Panel or a Children's Hearing. For more information see SCRA website www.scra.gov.uk.

⁶ The Agency Decision Maker is senior member of staff within the local authority who receives the permanence panel recommendation (and minute) and makes the decision.

The Sheriff Court can make a Permanence Order, or a Permanence Order with Authority to Adopt, or an Adoption Order transferring the parental responsibilities and parental rights in relation to a child to the adoptive parent(s). An adoption order may contain such terms and conditions as the court thinks fit, including in relation to post-adoption contact. The court cannot make an order unless it considers that that it would be better for the child that the order be made than not.

3. Sources of administrative data on looked after children

Children Looked After Statistics (CLAS data)

All local authorities in Scotland provide information on looked after children in their area to the Scottish Government each year, whether they are looked after through the Children's Hearings System or via Section 25 of the Children (Scotland) Act 1995. It is these administrative data which form the basis for the annual Children Looked After Statistics (CLAS data).⁷ As the 2015 data strategy document recognises "submitting, validating and publishing data requires a lot of work both from the Children and Families Statistics team and from local authorities" (Scottish Government, 2015, p.4). It goes on to state that it is important that data collection is accurate as it yields rich information. This can help evaluate how children are faring so decisions can be made about how to best deploy resources to improve children's lives. Part of the data strategy, and one of the priorities identified is that of maximizing the use of the data to answer policy questions, including how effective the Scottish Government's strategy of early engagement, early permanence and improving the quality of care has been.

For the purpose of the *Permanently Progressing?* study, we gained permission to access anonymised CLAS data from the Scottish Government on the total cohort of children in all 32 Scottish local authorities who:

- a) were aged five or under on 31 July 2013 (i.e. born 1 August 2007 - 31 July 2013)
and
- b) started to be looked after (at home or away from home) between 1 August 2012 and 31 July 2013.

Using this sampling procedure, there was a total cohort of 1,836 children in Scotland age five years or under who became looked after during a single year (2012-13).⁸

Of the 1,836 children, 1,355 children were looked after away from home (the *away from home* group) and 481 were looked after at home (the *at home* group). The Scottish Government provided the research team with anonymised child-level data on this cohort of children for the years 2012-13, 2013-14, 2014-15 and 2015-16 (with a final data point of 31 July 2016), covering a four-year period (1 August 2012 - 31 July 2016).

⁷ The Scottish Government publishes annual reports on looked after children and these can be accessed on the website at www.scot.gov.uk.

⁸ More details about the full cohort and their pathways over four years are provided in the *Pathways* report on the study website.

The CLAS data provide basic details about the local authority, child details, episodes, placements and legal reason for placements. Analysis of the data allowed us to study the characteristics and pathways of children including type of placements, reunifications to birth parents and subsequent re-entries to care, and time and route to permanence.⁹ The CLAS data is on an individual child, and thus it is not possible to link the pathway of one child within a family with that of his or her siblings.

The findings from our analysis of CLAS data for four years (2012-16) on the 1,836 children in our cohort is detailed in the *Pathways* report. Analysing this data has allowed us to report¹⁰ that despite 'early permanence' being identified by the Scottish Government as a priority, for those children where the route to permanence is adoption, on average it is taking two to three years.

Another priority identified in the 2015 Data Strategy document was the linkage of different forms of data collected about children. The document flagged up that in addition to the CLAS data, important information about children is held by other agencies, including health and education departments, and linking this information with CLAS data will help track progress and evaluate outcomes.

Scottish Children's Reporter Administration (SCRA) Data

Information is collected by Scottish Children's Reporter Administration (SCRA data)¹¹ on all children who are involved in the Children's Hearings System at each stage of the process outlined above, including where a referral does not result in the Reporter arranging a Hearing. Consequently, valuable additional data about the vast majority of the 1,836 children in our study cohort is held by the Scottish Children's Reporter's Administration (SCRA). As well as basic demographic detail, this dataset includes information about the grounds for referral to the Children's Reporter and the subsequent progression of children through the Children's Hearings System.

⁹ The Scottish Government (2015) defines four routes to permanence:

- *"Returning or remaining at home with or after support, where family functioning has stabilised and the parent(s) can provide a safe, sustainable home which supports the wellbeing of the child. This may require on-going support for the family.*
- *Permanence through a Permanence Order.*
- *A Section 11 order (for parental responsibilities and rights, residence or guardianship) under the Children (Scotland) Act 1995. From April 2016, where kinship carers have such an order it will be known as a kinship care order under Children and Young People (Scotland) Act 2014.*
- *Adoption, where the child has the potential to become a full member of another family."*

Although not one of the four routes defined by the Scottish Government, some children achieve stability and relational security, if not legal permanence, by remaining long term with consistent carers while on Compulsory Supervision Orders (Children's Hearings (Scotland) Act 2011) or Section 25 (Children (Scotland) Act 1995).

¹⁰ The *Pathways* report is available on the website.

¹¹ The SCRA website contains full official statistics, information about SCRA, and research reports. See <https://www.scra.gov.uk/>

4. Linking the administrative data

Data linkage can be described as “the process of combining information, believed to be on the same individual, from two different records” (Brownell and Jutte, 2013, p.21). The research team wanted to link the administrative data collected by Scottish Government (CLAS data) and by Scottish Children’s Reporter Administration (SCRA data) on the study cohort of 1,836 children who became looked after in 2012-13 aged five and under.

Objectives of data linkage

There were two overall aims to the linkage:

- Testing the feasibility and success of the linkage on the basis that linking these two datasets has never previously been attempted.
- To track the children’s histories from the first point of contact with the Children’s Hearings System (CHS). This may be before August 2012, as children may have started their journey through the CHS by becoming looked after prior to August 2012, or if they were referred to CHS but the Reporter’s decision was to not arrange a Hearing. Linking the SCRA and CLAS information for the four years provides additional data not available if only looking at SCRA or CLAS data, and allows a fuller analysis of both the child and process factors associated with pathways to permanence or lack of permanence.

Once we had established that linkage was feasible, there were several specific questions to be addressed:

- Did the CLAS and SCRA data link in the way we had expected?
 - How many children matched as we had expected?
 - How many children did not match as expected?
 - For children who did not match as expected, was it possible to identify the reasons for this?
 - What are the implications of this for our study, for the children themselves, and for wider issues surrounding service provision?
- What can the linkage tell us about the children that we could not know from CLAS alone?
 - Previous involvement with the Children’s Hearings System?
 - Why were people concerned about them?
 - How long did it take them to become looked after in 2012-13?
 - What was their journey through the Children’s Hearings System like?
 - Differences for those from the looked after *at home* or *away from home* group (as discussed in the *Pathways* strand)

We had planned to use the linkage to explore whether pathways through the CHS differed for children where legal permanence had been achieved by 2016, in comparison to children for whom legal permanence had not been achieved. However, due to time constraints we were not able to complete this aspect of our analysis, as we only had eight days in the safe haven. This is something which we would want to return to in future linkage as part of Phase Two.

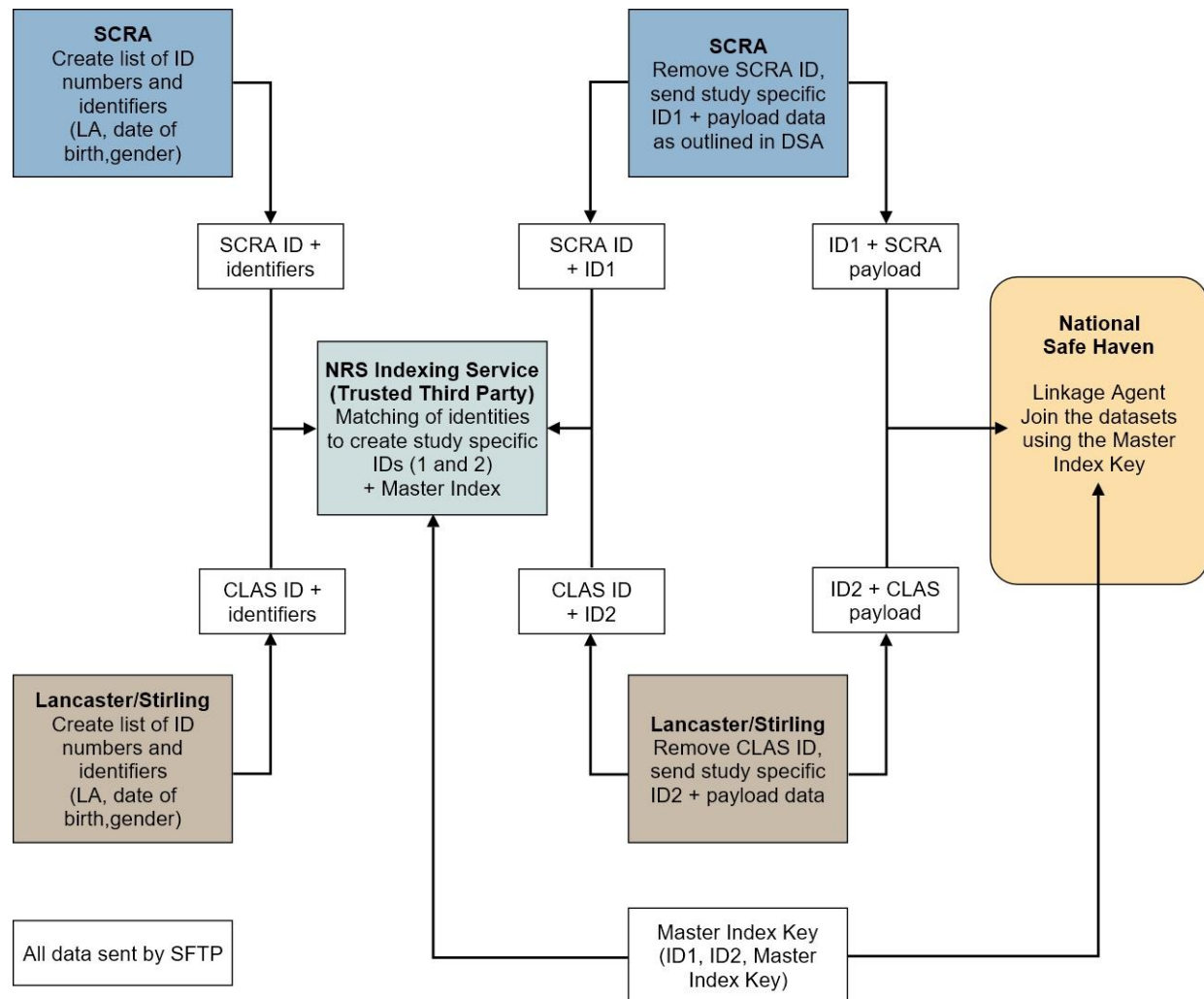
Edwards et al (2015) highlighted that linking together information from large administrative or survey data sets provides social scientists with opportunities to increase understandings of a range of issues. However, they also noted that linkage brings ethical concerns, including in relation to privacy. The CLAS data and the SCRA data includes sensitive information about children, and a core aim of the linkage was that this was completed in a manner which was ethical and maintained the anonymity of children in the two data sets. Harron et al (2017) identify three

key areas of data linkage which are designed to enable safe data linkage. These are the requirements placed on researchers, the role played by data access panels which approve (or not) linkage, and the secure physical or virtual setting in which linkage takes place. As we will describe, prior to data linkage the research team completed required training, the linkage was given ethical approval (General University Ethics Panel), and Data Sharing agreements were put in place to ensure that all data was processed carefully and according to data protection laws.¹² The linkage was completed through the Administrative Data Research Network (ADRN) which is “a partnership between universities, government departments, national statistics authorities and funders and researchers” (Harron et al, 2017, p.4).

In order to ensure that the research dataset combining information within the CLAS data with information held by SCRA would not identify children, the dataset was created through support from the Administrative Data Research Centre for Scotland (ADRC-S) (part of ADRN). ADRC-S facilitated the use of a ‘trusted third party’ (TTP), the National Records of Scotland (NRS), who was able to link together the different data sources in a way that ensured that the children and their families were not identified directly.

This created a new linked dataset (with the original identifiers removed) which was made available for the researchers to analyse within a safe haven. The dataset was created by linking derived variables from the CLAS and SCRA datasets for the cohort for the four years of data. As the datasets do not share a common identification number, linkage was achieved using date of birth, gender, and local authority at the time the child became looked after in 2012-13. This linkage involved the following process.

¹² Data Protection Act 1998.

Figure 1: Data linkage process¹³

- Derived variables from CLAS data already provided by Scottish Government indexed by CLAS ID, date of birth, gender, local authority, prepared by the research team, for the study cohort of 1,836 children (who became looked after in 2012-13 aged five or under).
- Variables derived from anonymised SCRA client data indexed by SCRA ID, date of birth, gender, local authority. Derived variables prepared by SCRA for all children aged five or under who had a referral to a Children's Hearing which led to them becoming looked after in 2012-13.
- Research team submitted CLAS IDs with date of birth, gender, local authority to the 'Trusted Third Party' (TTP) facilitated by the Administrative Data Research Centre (ADRC-S). SCRA submitted SCRA IDs with date of birth, gender, local authority from SCRA data to the TTP.
- TTP matched identifiers from CLAS and SCRA data, created a new Project ID, and a linkage key (between new ID and SCRA ID and CLAS ID).
- SCRA used linkage key to add new Project ID to SCRA payload data (derived variables), removed SCRA ID and transferred this dataset to the ADRC-S.

¹³ Adapted from a diagram provided by Amy Tilbrook (ADRN).

- Research team used linkage key to add new Project ID to CLAS payload data (derived variables), removed CLAS ID and transferred this dataset to the ADRC-S.
- Variables from CLAS and SCRA data indexed only by New-ID made available to research team for analysis only within the safe haven (operated by National Services Scotland, NSS) before the EU General Data Protection Regulation (GDPR) came into force.
- ADRC-S confirmed that data set destroyed in line with Data Sharing agreements.

The remainder of the report describes in detail the process of linkage, including seeking approval, and the findings. The *Permanently Progressing?* study is designed to be a longitudinal study following a cohort of children into adolescence and beyond, and while Phase One, of which this linkage forms one part, ran from November 2014 to December 2018, further data linkage is anticipated in Phase Two.

The process of linkage: would it be possible?

The study started in November 2014, with the potential linkage of data sets identified as an early aim if this proved feasible. There were a number of separate steps to enable linkage. As this linkage had never taken place before, no detailed outline existed as to the steps to be taken, exactly what each would involve, including the time it would take. Steps One to Sixteen (detailed below) took approximately eighteen months. The steps reflect the three aspects of data linkage which Harron et al (2017) describe and cover the requirements placed on researchers, the role of data access panels, and accessing the secure setting in which the linkage took place. However, they are set out chronologically to give a sense of the order in which specific steps occurred, and the complexity of the process. In doing so, the aim is to provide a 'route' for future linkage.

Step One

Meetings were held between the research team and data team at the Scottish Government and SCRA to agree that linkage could take place, and to agree the variables to be extracted/derived from SCRA data. Variables for inclusion in the linkage were chosen based on their relevance to the aims of the study and ensuring sufficient justification for their inclusion, so as not to unnecessarily compromise the privacy of individuals.

Please see Appendix 3 for list of variables.

Step Two

The research team made contact with the Administrative Data Research Network (ADRN) which agreed that it was interested in facilitating the data linkage.

Step Three

Previously, permission had been gained from Scottish Government to use the CLAS data for the *Pathways* strand of the *Permanently Progressing?* project, and Data Sharing Agreements and Privacy Impact Assessments were drawn up and put in place with the Scottish Government data team (reviewed annually). However, in order to access the CLAS data to link with the SCRA data an additional application was required, and this was submitted to Scottish Government data access panel which agreed that variables from the CLAS data could be linked to variables from the SCRA data.

Step Four

Following the data access panel, a revised Data Sharing Agreement (DSA) with Scottish Government was drawn up and signed by Scottish Government and the signatories at the Universities of Stirling, York, and Lancaster.

Step Five

The members of the research team who would be undertaking analysis of the linked dataset had previously completed Secure Users of Research data Environments (SURE) training. This was completed by the Principal Investigator.

Step Six

A Data Sharing Agreement was drawn up with Scottish Children's Reporter Administration and signed by SCRA and the signatories at the Universities of Stirling, York, and Lancaster.

Step Seven

Previously (March 2015), the research team had gained ethical approval from the University Ethics (GUEP) panel for the full study. An additional application was made, seeking permission to link CLAS and SCRA data, and this was agreed by GUEP.

Step Eight

A detailed application to link the CLAS and SCRA data, and for the linked dataset to be made available to the research team within the safe haven was submitted to the Administrative Data Research Network, and was considered and agreed by their panel.

Step Nine

A Memorandum of Understanding was drawn up between SCRA and ADRN and signed. This limited linkage to within the time frame of the Data Protection Act 1998, and meant that linkage, and analysis of the linked dataset, needed to take place before the EU General Data Protection Regulation (GDPR) came in to force on 25 May 2018.

Step Ten

Following the ADRN data panel a Data Processing Agreement with the electronic Data Research and Innovation Service (eDRIS)¹⁴ was drawn up and signed by National Services Scotland (NSS) and the signatories at University of Stirling, University of York and Lancaster University, to enable access to the safe haven.

Step Eleven

eDRIS Individual User Agreements between NSS and the two researchers who would be in the safe haven were required, and again these were countersigned by the signatories at the universities where the researcher was based (one from University of Stirling, one from Lancaster University).

Step Twelve

The research team securely transferred a list of CLAS IDs for the 1,836 cohort children, with date of birth, gender and local authority to the indexing team at National Records of Scotland (NRS) (the 'trusted third party'). SCRA transferred the same information, indexed by the SCRA ID, for all children aged five and under who had a referral to the Children's Hearing which led to them becoming looked after in 2012-13. The majority of children could be uniquely identified from their date of birth, gender and local authority. However, within each data set there were a number of 'pairs' with the same date of birth, local authority and gender, some of which could be identified (from additional information in the data, including date of placements, etc.) as twins and therefore both included. Other 'pairs' were identified as 'non-twin pairs' and 37 non-twin pairs/triplets from the CLAS data and 12 non-twin pairs from the SCRA data were excluded from the matching process.

¹⁴ For more information on eDRIS, see <https://www.isdscotland.org/Products-and-services/Edris/>.

Step Thirteen

The trusted third party then ran the matching process, creating a new Project ID, and linkage keys (between new ID and SCRA ID and CLAS ID) which were sent to the research team and to SCRA. At this stage, although we sent CLAS data on 1,836 children, attempts to link children's information was performed on 1,834¹⁵ children by NRS, with data on 2 children from CLAS absent from the linkage process. This was most likely caused by a computing error. However, by this point the team only had a limited time before GDPR and due to time constraints, the decision was made to continue, rather than hold up the process to ensure all 1,836 children from CLAS were included.

Step Fourteen

The research team used the Project ID – CLAS ID key to attach the Project ID to the CLAS payload data (removing the CLAS ID) and then securely transferred this to ADRC-S. SCRA undertook the same process to attach the Project ID to the SCRA payload data. On transfer to ADRC-S, the data were then held in quarantine for a week by ADRC, before the CLAS data set and the SCRA data set (both now indexed by the new Project ID) were made available to the research team within the safe haven. The quarantine period is a safeguard imposed by ADRC-S, but delayed the process.

Step Fifteen

On 15 May 2018, two members of the research team entered the safe haven, where they were able to link the CLAS and SCRA data, and undertake analysis of the combined dataset. This was only permissible until GDPR came into force (25 May 2018), and limited time in the safe haven to eight days. As the title suggests, no materials can be taken in, or out of the safe haven. All outputs have to be checked by ADRN before they are allowed to be released. This is to ensure that no outputs are disclosive.

Given the time taken by ADRN to check outputs, this meant that some of the outputs were released to the team after 25 May. Although our Data Sharing Agreement with the Scottish Government took us beyond GDPR, as did our agreement with ADRN, the option to go back in and check outputs and complete any additional analysis would have required an extension to our Data Sharing Agreement with SCRA, and the Memorandum of Understanding (MOU) between SCRA and ADRN. This was not feasible within the timescale of the study.

Step Sixteen

ADRN confirmed that they had destroyed the data (the individual data from CLAS and SCRA and the linked dataset).

¹⁵ The 49 non-twin pairs/triplets (37 from CLAS and 12 from SCRA) were included in the data sent to NRS but were identified as non-unique pairs that were ultimately excluded from the linkage. These children will be included in tables under 'CLAS only' or 'SCRA only' matching categories which are discussed later in the report.

5. Terminology

Where there are concerns about a child s/he may be referred to the Children's Reporter. For the purposes of this study, the **index referral** is the one which led to a child becoming looked after in 2012-13. A **previous referral** is one which was made before this time, which may or may not have led to the child becoming looked after (prior to 2012-13). In 2012-13 the grounds for referral were set out in the Children (Scotland) Act 1995. In June 2013 the Children's Hearings (Scotland) Act 2011 came into operation and amended and added new grounds for referral.

An **episode** of being looked after begins when a child becomes looked after (whether at home or away from home). Within an episode, a child can have **periods** of being looked after at home and also away from home, different placements (in most cases in foster care, including kinship foster care) or, in some cases, placements at home. Similarly, within each episode of being looked after a child can have a number of different legal statuses, and these can change either at the same time as a placement or independently of placement changes.

An episode of being looked after ends when the child is no longer looked after, at home or away from home.

6. Analysis

Much of the analysis presented in this report is descriptive. Frequencies and percentages (to one decimal place) are used to describe how many children had a certain characteristic or experience, for categorical variables such as placement type. Average (mean)¹⁶ and standard deviation¹⁷ are used to describe numerical variables, such as time from referral to becoming looked after.

Cross-tabulations and Chi-square tests are used to look at the relationship between two categorical variables (such as initial placement type). A p-value threshold of 0.05 was used throughout to indicate statistical significance, which is whether we can be 95% confident that any differences observed in the data are real differences and not simply a chance finding. Due to controversies surrounding the use of statistical significance tests and p-values to determine the substantive importance of research findings (see Colquhoun, 2014; Gorard, 2016; Nuzzo, 2014 for discussions on this issue), measures of effect size to indicate the magnitude of any observed effects are also used throughout this report. Cramer's V and Phi are measures of effect size used to indicate the strength (substantive significance) of any associations between categorical variables, with values of 0.1 indicating a small effect, 0.3 a medium effect, and 0.5 a large effect (see Cohen, 1969). Partial eta squared can be used as a measure of effect size for comparing average values between group (categorical) variables, with values of 0.010 indicating a small effect, 0.059 a medium effect, and 0.138 a large effect (Cohen, 1969 cited in Richardson, 2011).

Analyses were conducted using IBM SPSS Statistics for Windows, Version 24.0.

¹⁶ Average values, in this report are mean values. The mean is calculated by adding together a set of numbers and then dividing this sum by the total number of figures added together. Average values are used as a measure of central tendency when trying to summarise a set of results.

¹⁷ Standard deviation is used to help describe how close a set of values are to their average. The larger the standard deviation, the more spread out the values tend to be.

7. Did the CLAS and SCRA data link in the way we expected?

Before going on to describe our analysis of what the linked data tells us about children's experiences, the first findings are related to the linkage itself, and whether the data linked in the way we expected.

Overall, there were 1,834 records from CLAS¹⁸ and 1,396 records from SCRA in the datasets made available to us in the safe haven. Based on whether children had ever had a supervision requirement (SR)¹⁹ recorded in the CLAS data in 2012-13, we would have expected records for 1,287 (70.2%) of the 1,834 children to match to a SCRA record. We would also have expected all of the 1,396 children with SCRA records (except the excluded 12 non-twins pairs) to match to their respective CLAS records. Three quarters (976, 75.8%) of the 1,287 CLAS records matched as expected, whilst one quarter (311, 24.2%) did not. This also left 396 of the 1,396 SCRA records that did not match to a CLAS record.

Using date of birth, gender and local authority of children from their CLAS and SCRA information, we were able to successfully match these records for 1,000 children. Of these 1,000 children, 976 were those who matched as expected, whilst the additional 24 were those children who we had not expected to match but did (see Table 1). A successful match was one where all three of these characteristics were the same in both the CLAS and SCRA records, and where no other children had the same combination of characteristics – unless previously flagged as twins. These 1,000 children make up the analytical sample used throughout the majority of this report.

Table 1: The number of children with records where linkage was as expected or not and their 'matching category' (n=2,230)

	Matching category	Frequency	Overall %
As expected	CLAS only – no SR/CSO*	523	23.5
	Both CLAS (and had SR/CSO) and SCRA	976	43.8
	Total	1,499	67.3
Not as expected	CLAS - with SR/CSO, so should be in SCRA	311	13.9
	SCRA only, should be in CLAS	396	17.8
	Both CLAS and SCRA, but no SR/CSO (according to CLAS)	24	1.1
	Total	731	32.8
Overall Total		2,230	100.0

*Children who are looked after away from home under Section 25 of the Children (Scotland) Act 1995

Where a match was possible between SCRA and CLAS, children had two records. Where a match was not made, children had just one record. Overall, there were 2,230 children in the dataset, some with one record, and some with two records. It is likely that some children actually have

¹⁸ There were two children whose CLAS data was sent to ADRN but did not appear in the linkage, as described in step thirteen of the linkage process.

¹⁹ Children in our study who became looked after through the CHS in 2012-13 would have been subject to a warrant or Supervision Requirements (SR). From June 2013, children who continued to be looked after at home or away from home through the CHS would have been the subject of Interim Compulsory Supervision Orders (ICSO) or Compulsory Supervision Orders (CSO).

records in both data sets but a match was not made (due to some data inaccuracy) so appear twice within the total 2,230.

Overall, around two thirds (67.3%) of the 2,230 children had records which matched as would have been expected based on their matching category, i.e. they had a supervision requirement (SR) in the CLAS data and matched to SCRA records, or did not have a SR and did not match to SCRA records.

This leaves just under one third (32.8%) of children where we were unable to match CLAS and SCRA records, or where records matched unexpectedly. Included in these figures are the children with shared linkage characteristics (local authority, gender, and date of birth) that we were unable to identify as twins and were therefore excluded from the analysis (37 from the CLAS only data and 12 from the SCRA only data).

Of the children we were unable to match, it is likely that some of these with SCRA only and CLAS only data are in fact the same children. However, inconsistencies between details in the children's CLAS and SCRA records may have prevented their successful match, such as their gender, date of birth or the local authority when the SR/CSO was made. It is not possible from this data to identify which of the records contained inaccuracies.

A visual inspection was attempted to compare the records of the 311 children with 'CLAS only' records to the 396 children with 'SCRA but no CLAS data', but this proved difficult due to the way we received the SCRA records, with date of birth set to the first of the month for all children. Date of birth was used as one of the identification variables for creating the linkage key for matching CLAS and SCRA records. This meant the inclusion of this variable in the linked data set would risk the identification of children. As we were interested in age-related variables not available in the CLAS data (e.g. age at first referral) it was agreed that SCRA would provide all children's date of birth set to the first of the month and year of their birth date. This was to protect their identities. Researchers planning similar data linkage projects may wish to consider the implication of this for their analysis early on during the planning process.

It is possible that if we had included additional detail from the CLAS records on other key variables such as the date the supervision requirement in 2012-13 was made, we may have been able to compare this with the date this was recorded in SCRA. However, it is uncertain whether this would have produced results robust enough to be worth the time and effort required to carry this out. Moreover, from our own previous analysis of the CLAS data for the *Pathways* strand we were already aware that there were inconsistencies in the CLAS data.²⁰ That strand of the study found that in some cases the recorded legal reason for the child being looked after was inconsistent with the placement type. For example, some children described as looked after away from home were actually looked after at home. Some children were recorded as being 'freed for adoption' despite the fact that the Adoption and Children (Scotland) Act 2007 replaced this with Permanence Orders with Authority to Adopt (POA). In this report, the small number of children erroneously recorded in the data as 'freed for adoption' are grouped with others placed for adoption under a POA.

Of the 1,834 children from the CLAS cohort, we would have expected 547 (29.8%) *not* to match with a SCRA record, due to them not having had a supervision requirement recorded in the CLAS data during 2012-13.²¹ This was true for most of these children (523, 95.6%). However, 24 (4.4%) of the 547 were matched to SCRA records unexpectedly. These 24 children did not have a supervision requirement recorded in the CLAS data during 2012-13 but were selected by

²⁰ The *Pathways* strand analysed CLAS data for 1,836 children. The full report is available on website.

²¹ Children who were looked after away from home under Section 25 of the Children (Scotland) Act 1995.

SCRA as having had one in their records during this time. For 15 of these 24 children, they were later recorded in the CLAS data as having had a CSO after baseline year. This suggests possible erroneous or missing legal reason dates in the data. For the remaining nine of the 24 children, no SR/CSO was ever recorded in the CLAS data over the four years (2012-16). For these nine, it is likely that inaccurate recording of legal reasons in the CLAS data resulted in no SR/CSO being listed. Examples of errors for these children include children with ICSOs and/or CSOs in SCRA, but only recorded as accommodated under Section 25 or 'other'²² legal reasons in CLAS. It is possible that in these cases a child's CLAS data was not updated to reflect the CSO being made after being first accommodated 'voluntarily' (Section 25).

Local authority variation

At least one child from each of the 32 local authorities in Scotland was included in the sample of 1,834 children from the CLAS data whose records was submitted for linkage. In the final linked sample of 1,000 children there was at least one child from every local authority, with the exception of one of the smaller authorities. However, there were large variations across different local authorities in the rate at which the records matched as expected.

The rate at which CLAS and SCRA records matched for children as we expected varied across local authorities from just 53.8% to 96.6%. For our linked sample (used for the subsequent analysis), this means some local authorities will be better represented than others, and in some local authorities there are potentially high rates of missed matches as a result of inaccurate records.

The Scottish Government has been clear (Scottish Government, 2015) that it is important that the data collected is accurate as this may be used to plan and evaluate services. Consequently, the variation which was evident through the linkage process is likely to have implications for planning services around children's lives. The implications vary dependent on the size of the local authority. A smaller local authority with a low match rate may mean only a few children with inaccurate records, whereas a low match rate in a larger local authority will see many more children affected.

Variation by whether children were looked after at home or away from home

There was no variation in whether records matched depending on whether children in the linkage were from the looked after *at home* or *away from home* groups in the *Pathways* strand.

For the looked after *at home* group, 81.5% matched as expected and 18.5% did not. For the looked after *away from home* group, 81.8% matched as expected and 18.2% did not (see Table 2). Overall, this shows that of the 1,834 children included in the *Pathways* strand, their records matched (or not) as we would have expected in 81.7% of cases.

²² According to the Scottish Government's CLAS guidance notes, children with 'other' legal reasons may be those who had moved from one of the other UK countries (e.g. see <https://www2.gov.scot/Topics/Statistics/ScotXed/ChildrenandYoungPeople/LookedAfterChildren/SurveyDocumentation2016>).

Table 2. Number of children by looked after *at home* or *away from home* group with records where linkage was as expected or not (n=1,834)

Number of children	Looked after <i>at home</i> group		Looked after <i>away from home</i> group		Total children	
	n	%	n	%	n	%
Matched as expected	392	81.5	1,107	81.8	1,499	81.7
Not matched as expected	89	18.5	246	18.2	335	18.3
Total children	481	100.0	1,353	100.0	1,834	100.0

During our analysis of the CLAS data for the *Pathways* strand (n=1,836), children looked after away from home made up nearly three quarters of the sample (1,355, 73.8%), with the remaining 26.2% (481) looked after at home in the baseline year (2012-13). For this analysis of 1,000 children whose CLAS and SCRA information was linked, the *away from home* group made up 60.7% (607), whilst the *at home* group made up 39.3% (393) (see Table 3).

Table 3. Number of children in the *Pathways* strand (n=1,836) and the sample of linked children (n=1,000) who were in the *at home* and *away from home* groups

Number of children	Looked after <i>at home</i> group		Looked after <i>away from home</i> group		Total children	
	n	%	n	%	n	%
Pathways (from CLAS)	481	26.2	1,355	73.8	1,836	100.0
Linked CLAS and SCRA records	393	39.3	607	60.7	1,000	100.0

As the proportion of children who matched or did not match as expected was similar for the looked after *at home* and *away from home* groups (see Table 2), the difference in the proportion of children from each group in the linkage sample and the *Pathways* sample (see Table 3) can be assumed to be due to differences in their involvement in the CHS. All children who are looked after at home should have a Supervision Requirement and will therefore have been involved in the CHS and have a record with SCRA. For the *away from home* group, not all children will have gone through the CHS, as some of these will have been accommodated under Section 25 Children (Scotland) Act 1995. These children would therefore not have SCRA records. For more details on these children, see the section below.

Children with CLAS only data whom we did not expect to match

Table 4 indicates the first legal reason for the 523 children with CLAS only data (those who were identified as not having a SR/CSO in 2012-13 from the CLAS legal reason file, so were not expected to match and did not). The majority of these children had their first legal reason as either accommodated under Section 25 (84.1%) or as child protection measure (10.9%). Although children who were looked after away from home using Section 25 do not appear in the linked data, as their information is recorded in the CLAS data, their routes and time to permanence was tracked in the full *Pathways* cohort and details are contained in the report for that strand of the study.

Despite not having a CSO listed in the CLAS legal reason file for 2012-13, a small number of the 523 children (5, 1.0%) have a SR/CSO listed as their first legal reason. This was because these children had their first legal reason recorded *after* 2012-13, meaning their 'true' first legal reason is missing from the CLAS data.

Of the children with CLAS only data (523), just over half (286, 54.7%) were not recorded as ever having had a SR/CSO over the four years (2012-16), whilst the remaining children (237, 45.3%) are recorded in the CLAS as having a CSO subsequent to 2012-13 and are therefore likely to have had some involvement with the CHS.

Table 4: First legal reason for children with CLAS data only (n=523)

First legal reason	n	%
Section 25	440	84.1
SR/CSO (home or away)	5	1.0
Child protection measure	57	10.9
Other	21	4.0
Total	523	100.0

Summary

- Overall, there were 1,834 records from CLAS and 1,396 records from SCRA in the datasets made available to us in the safe haven, from 2,230 children.
- Using date of birth, gender and local authority from CLAS and SCRA information, we were able to successfully match records for 1,000 children.
- Two thirds (67.3%) of the 2,230 children had records which matched as expected.
- The rate at which CLAS and SCRA records matched for children as expected varied across local authorities from 53.8% to 96.6%.

8. What does analysis of the linked data tell us about the children?

This chapter presents findings from the analysis of the linked data set, addressing questions that cannot be studied using solely the CLAS or the SCRA data. The findings demonstrate that valuable information can be gained from linking the two data sets.

8.1 Previous involvement with the Children's Hearing System

How many children had a previous referral?

By linking the CLAS and SCRA records we were able to establish how many of our linked children had been referred to SCRA prior to the referral that led to them becoming looked after in 2012-13 (the index referral). For 582 (58.2%) of the 1,000 linked children, no previous referral was recorded in the SCRA data. However, we found that two fifths (418, 41.8%) of our 1,000 linked children had had a previous referral recorded by SCRA. Essentially, this tells us that people were already worried about a large proportion (two fifths) of the children before they became looked after in 2012-13.

The linkage also tells us that for most (367, 87.8%) of these 418 children, the previous referral did not lead to a Children's Hearing. As can be seen from Table 5, for many of the children, the Reporter's decision²³ was either to take no further action (32.3%) or to refer to the local authority (29.4%). In 15.3% of cases there was insufficient evidence to allow the case to move forward to a Hearing. The children in this cohort were all five and under when they became looked after in 2012-2013, however the figures for all children referred to SCRA in that year show that in 36.3% of cases the Reporter decided there was no indication that compulsory supervision was required (SCRA, 2013, p.15). In making their decision Reporters take into account the extent of concern, the nature of the incident (if a single incident) and the level of co-operation and impact of current or prior interventions. They are guided by the principle that all intervention needs to be proportionate and are assisted by the *Framework for Decision Making by Reporters* (SCRA, 2015).

²³ The Reporter to the Children's Hearing receives referrals for children and young people who are believed to require compulsory measures of supervision. The Reporter then decides whether the child or young person should be referred to a Children's Hearing. For details on all the functions of the Reporter please see <https://www.scra.gov.uk/about-scra/role-of-the-reporter/>

Table 5: Reporter's decision from prior referral (n=418)

Reporter's decision	n	%
Arrange Hearing	51	12.2
No action – family action	19	4.5
No action – current measures ²⁴	26	6.2
No action – insufficient evidence	64	15.3
No action – refer to local authority	123	29.4
No action – no action*	135	32.3
Total	418	100.0

**Includes a small number of children with missing detail on reason for no Hearing arranged*

For 12.2% (51) of the 418 children a Hearing was arranged. Of these 51 children, grounds were established for 34 children. Grounds were not established for 13 of the 51 children, and for four of these children, this detail was missing.

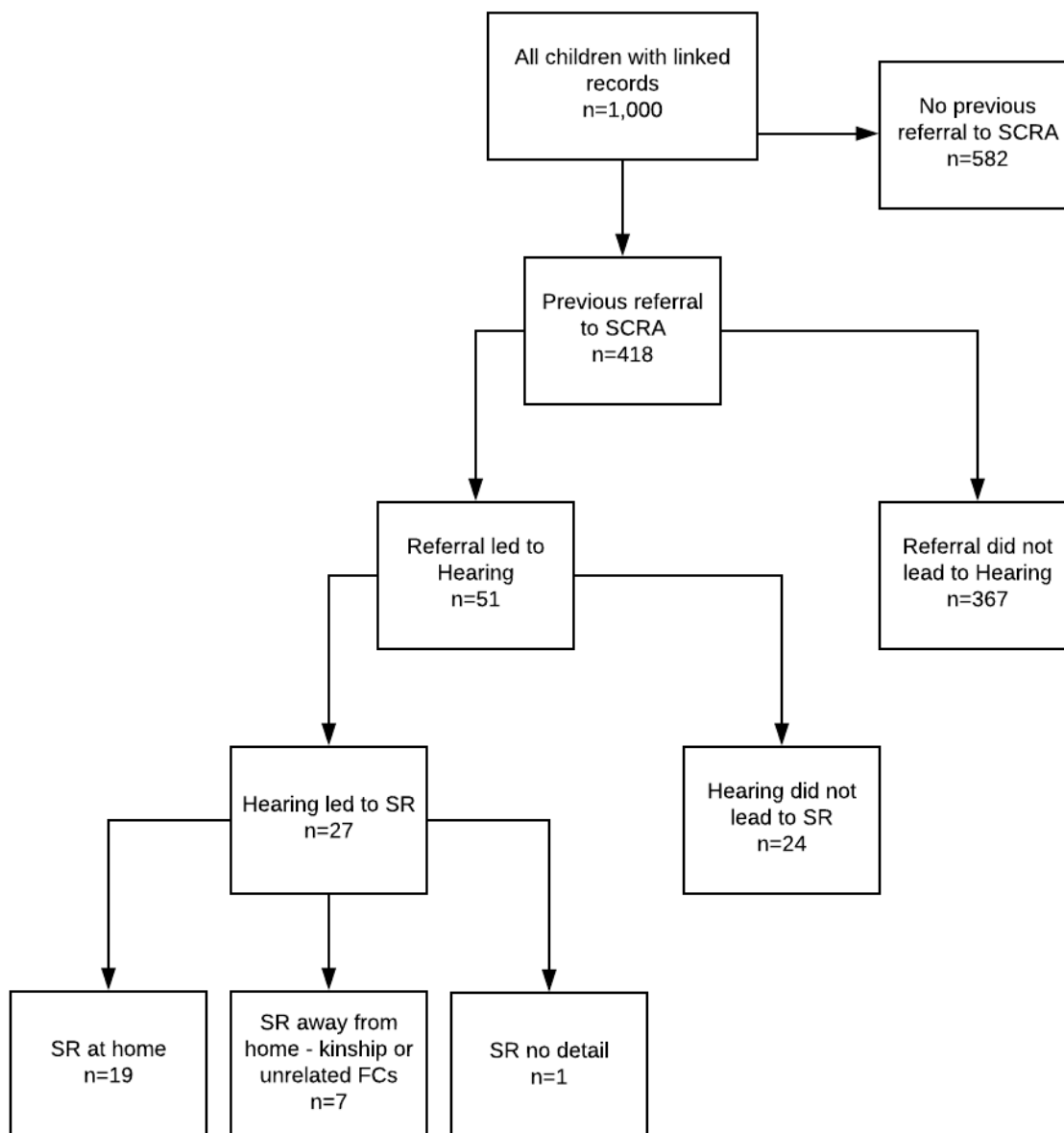
For 11 of the 51 children, a warrant under Children (Scotland) Act 1995 resulted from this previous referral. For 24 of the 51 children, the previous referral did not lead to a Supervision Requirement, while for 27 children the previous referral resulted in a Supervision Requirement.

Of the 27 children where a Supervision Requirement was made as a result of this previous referral, 19 of these were based at home, seven were away from home, and for one child the detail was missing on whether this was at home or away from home.

A visual representation of this breakdown is given below in Figure 2. What this illustrates is that although people were sufficiently worried about 418 of the 1,000 children to refer them to the Reporter, only 27 were made subject to a Supervision Requirement prior in this first referral. This is information which would not have been available from the CLAS data alone, and in the light of the expressed commitment to early engagement (Scottish Government, 2015) is significant.

²⁴ The child and/or their parents are in receipt of services including under Section 22 Children (Scotland) Act 1995.

Figure 2: Outcome of previous referral



Source of previous referral

From the SCRA records the source of children's previous referrals can be seen. In just under two thirds of cases these came from the police (265, 63.4%). In around one third (136, 32.5%) of these prior referrals the source of referral was through social work, whilst in a small number of cases (17, 4.1%) these previous referrals came from other, unknown sources.

A statistically significant association was found between the source of these referrals and whether they resulted in a supervision requirement (SR) (Chi-square (df1, $N = 401^{25}$) = 12.29, $p < 0.001$), although tests of the strength of this association showed it to be small (Phi = -0.175). A higher proportion of the previous referrals from social work led to a SR (12.5%) than those from the police (3.4%) (see Table 6). It may be possible that *either* social workers refer more serious cases *or* that they provide stronger evidence for formal action or both.

²⁵ Excludes those from other, unknown sources due to low numbers.

Table 6: Source of previous referral and whether Supervision Requirement was made (n=401*)

Source of previous referral	Supervision requirement made		Supervision requirement not made		Total children	
	n	%	n	%	n	%
Police	9	3.4	256	96.6	265	100.0
Social Work	17	12.5	119	87.5	136	100.0
Total	26	6.5	375	93.5	401	100.0

*Excludes those from other, unknown sources (17, 4.1%) due to small numbers

Characteristics of children with previous referral²⁶

From looking at the children's linked information, we can also see the age at which those who had a previous referral were referred (see Table 7). Three fifths of the children (243, 58.1%) were aged under a year old at the time of this previous referral, whilst one quarter (103, 24.6%) were aged between one and two years old.

Table 7: Age of children at previous referral (n=418)

Age of children	n	%
Under 1 year	243	58.1
1 year – under 2 years	103	24.6
2 years – under 3 years	47	11.2
3 years – under 6 years	25	6.0
Total	418	100.0

There was a relatively even split of males and females who had had a previous referral to the CHS. Of the 418 children, 48.3% (202) were boys and 51.7% (216) were girls.

Summary

- Two fifths (418, 41.8%) of the 1,000 linked children had had a previous referral recorded by SCRA.
- For most (367, 87.8%) of these 418 children, the previous referral did not lead to a Children's Hearing, while for 27 children the previous referral resulted in a Supervision Requirement.
- Two thirds of previous referrals came from the police (265, 63.4%), one third (136, 32.5%) from social work, and 17 (4.1%) from other sources.
- A higher proportion of previous referrals from social work led to a Supervision Requirement (12.5%) than from the police (3.4%).

²⁶ As we were only provided with the month and year of the children's birth in the SCRA data, we were unable to provide the same level of detail seen in the reports from other strands of the project. For example, we were unable to ascertain those who were under six weeks old at the time of their referral.

8.2 First and index referrals

As noted earlier, we have called the referral that led to the children becoming looked after in 2012-13 their index referral. As we have seen from the previous section, two fifths of our linked children (418, 41.8%) had a *previous* referral before their *index* referral. This *previous* referral was the first referral that these 418 children experienced.

However, for the remaining 582 children, the *index* referral that led to them becoming looked after in 2012-13, was also their *first* referral.

By linking the children's SCRA information with their CLAS records, we can see a number of details surrounding both their first and index referrals and these are described in the following section. We requested detailed data from SCRA for the children's first and index referrals only.

Although we have a count of the number of referrals (see Table 28) up to 31 March 2016, for referrals which occurred between a child's first and index referral, or those referrals which occurred after their index referral, we have no other information surrounding the details of these referrals.

Age of children at their first and index referrals

At the point of both their first (60.1%) and index (41.3%) referrals, children were most likely to be under a year old (see Table 8). More of the children were slightly older at index referrals. This is expected given that many children (418, 41.8%) had already had at least one previous referral before their index referral took place.

Table 8: Age of children at first and index referrals (n=1,000)

Age of children	First referral		Index referral	
	n	%	n	%
Under 1 year	601	60.1	413	41.3
1 year – under 2 years	192	19.2	171	17.1
2 years – under 3 years	113	11.3	171	17.1
3 years – under 4 years	63	6.3	136	13.6
4 years – under 6 years	31	3.1	109	10.9
Total	1,000	100.0	1,000	100.0

Source at first and index referral

For the majority of children, their first (58.7%) and index (69.2%) referrals came from social work (see Table 9). More police referrals occurred at first (36.0%) than index referrals (19.3%). A small number of referrals also came from the court (4.0%) or jointly from the police and social work (3.3%) during index referral.

This is slightly different to the distribution we saw earlier when looking at those with a previous referral, where the majority of referrals came from the police (see Table 6). However, this can in part be explained by the large number of children whose first referral was also their index referral (582, 58.2%), which by its very nature, must have led to a Supervision Requirement (SR). In addition, as we saw in the previous section, more of the prior referrals from social work led to a SR than those from the police. It is likely there were also many referrals during this time from the police, but if these did not lead to a SR during 2012-13, they would not have been children included in our linkage study.

Table 9: Source of first and index referrals (n=1,000)

Source of referral	First referral		Index referral	
	n	%	n	%
Court	0	0.0	40	4.0
Police	360	36.0	193	19.3
Social Work	587	58.7	692	69.2
Police and Social Work	0	0.0	33	3.3
Other	53	5.3	42	4.2
Total	1,000	100.0	1,000	100.0

Was a Warrant or Interim Compulsory Supervision Order granted as a result of first or index referrals?

For the majority of children (as Table 10 details) a warrant or Interim Compulsory Supervision Order was not made as a result of the first (73.7%) or index (62.3%) referrals. As expected, a slightly higher proportion of warrants/ICSOs were granted as a result of index (37.7%) than first (26.3%) referrals, as these (index) referrals led to a Hearing and ultimately a SR/CSO.

For 609 (60.9%) of the 1,000 linked children, their first referrals led to a SR. As we saw in the previous section, 27 (2.7%) of these were from a previous referral prior to their index referral, whilst for 582 (58.2%) of the children, this was also their index referral. This means that 391 (39.1%) of the 1,000 children did not have a SR made as a result of their first referral.

Table 10: Warrant/ICSO granted on first or index referral

Warrant/ICSO granted?	First referral		Index referral	
	n	%	n	%
Yes	263	26.3	377	37.7
No	737	73.7	623	62.3
Total	1,000	100.0	1,000	100.0

Other analysis showed that the majority of children (613, 61.3%) had either a warrant/ICSO or a SR/CSO granted on their first referral, whilst just over one quarter (259, 25.9%) had both a warrant/ICSO and a SR/CSO granted on their first referral.

Summary

- Most children (601, 60.1%) were under a year old when first referred to SCRA.
- For 159 children (15.9%) their initial route into the Children's Hearings System was through an emergency child protection measure.
- For most children, their first (58.7%) and index (69.2%) referrals came from social work. More police referrals occurred at first (36.0%) than index referrals (19.3%).

8.3 Why were people concerned about the children?

The CLAS data tells us how many children became looked after in 2012-13, and some of their characteristics (age, gender) but it does not tell us why they became looked after. As we have seen (see Figure 1) for 418 of the 1,000 children social workers and police had been sufficiently worried about them to make a previous referral. Linking the CLAS data with the information about the grounds for referral from the SCRA data provided some sense of why people were worried and/or continued to be worried.

Number and type of grounds for referral

At the time at which children became looked after in 2012-13, the Children (Scotland) Act 1995²⁷ was in force and set out the grounds for referral which can be single or multiple. The majority of children had one ground for referral during both their first (85.1%) and index (69.0%) referrals (see Table 11). However, during the index referrals, more children had two or more grounds for referral.

Table 11: Number of grounds for referral at first and index referral (n=1,000)

Number of grounds	First referral		Index referral	
	n	%	n	%
1	851	85.1	690	69.0
2	132	13.2	263	26.3
3+	17	1.7	47	4.7
Total	1,000	100.0	1,000	100.0

When we look at the grounds themselves (see Table 12 below), it is evident that during the children's first referrals, many of the children had grounds of 'lack of parental care' (77.1%). This is as would be expected given their age and the fact that the grounds contained in the Children (Scotland) Act 1995 likely to apply to young children were limited.²⁸ Given the age of the cohort, they were unlikely to have been referred due to a failure to attend school, or their involvement in offending. Rather, they were referred due to concerns that they would 'suffer unnecessarily' or that their 'health or development would be seriously impaired' due to a lack of parental care. In other words, professionals were worried about parental neglect.²⁹ During the index referral, nearly all children had grounds of lack of parental care (91.8%). Just over one quarter of children were referred as the victim of an offence³⁰ on their first referral (25.7%) and just under one quarter during index referral (22.0%).

²⁷ In June 2013, the Children's Hearings (Scotland) Act 2011 came into force, replacing some aspects of the Children (Scotland) Act 1995 including amending and expanding the grounds for referral.

²⁸ The full grounds for referral for Children (Scotland) Act 1995 and the Children's Hearings (Scotland) Act 2011 are set out in the respective acts, both of which can be accessed via www.legislation.gov.uk.

²⁹ SCRA's analysis of statistics shows that lack of parental care remains the most common grounds of referral (SCRA, 2018, p.5), <https://www.scra.gov.uk/wp-content/uploads/2018/07/Full-statistical-analysis-2017-18.pdf>

³⁰ A child in respect of whom any of the offences mentioned in Schedule 1 to the [1975 c. 21.] Criminal Procedure (Scotland) Act 1975 (offences against children to which special provisions apply) has been committed.

Table 12: Grounds for referral at first and index referral*

Grounds for referral	First referral		Index referral	
	n	%	n	%
Bad associations/moral danger	17	1.7	12	1.2
Lack of parental care	771	77.1	918	91.8
Child Victim	257	25.7	220	22.0
Member of same household as child victim	63	6.3	74	7.4
Member of same household as perpetrator	47	4.7	53	5.3

* As children can have more than one grounds for referral, totals do not equal 1,000 (100%)

Whether grounds were established during first and index referrals

During the children's first referral, in just over half of cases (53.5%) all grounds were established³¹ (see Table 13). For a relatively small proportion (7.0%), some of the grounds were established, and for 1.4% of children, none of the grounds were established. Where this detail is missing, this could represent some of the 367 children who had had a previous referral that did not lead to a Hearing, children whose grounds were accepted, or those for whom detail surrounding whether grounds were established was not available. During the index referral, all children must have had at least one ground for referral accepted or established for a SR/CSO to have been made. For the majority (86.7%), all grounds were established. For 12.0% of children, only some of the grounds were established. Similar to during the first referral, those classified here as 'missing' were either children who had already had their grounds accepted, or were children whose details surrounding whether all or some of the grounds were established was not specified.

Table 13: Whether grounds for referral were established at first and index referral (n=1,000)

Grounds for referral established?	First referral		Index referral	
	n	%	n	%
No - not established	14	1.4	n/a	n/a
Partial - some grounds established	70	7.0	120	12.0
Yes - all grounds established	535	53.5	867	86.7
Missing*	381	38.1	13	1.3
Total children	1,000	100.0	1,000	100.0

*Includes children with no Hearing in first referral and a small number with grounds already accepted or where no details on whether grounds for referral were established were provided.

Use of child protection measures

For the majority of children (841, 84.1%), the route from first referral into the CHS was not through the use of an emergency child protection measure, whilst for 159 children (15.9%) this was their initial route into the CHS. However, for the index referral, for around one quarter (253, 25.3%) of the children this was via CPO, leaving 74.7% (747) where child protection measures were not used. This is the same proportion as was seen for the full cohort of children who

³¹ If a relevant person or child does not accept or is too young to understand the grounds for referral these will be sent to the sheriff to establish whether the facts laid out can be proven. On the basis of the information, a sheriff may uphold some or all of the grounds, and the child's case will return to the Children's Hearing.

became looked after away from home tracked in the *Pathways* strand³², where there was variation in the use of CPOs by the age of the child, with greater use amongst those under six weeks old.

Detail on Supervision Requirements from the index referral

For two fifths (391, 39.1%) of the children, no Supervision Requirement/CSO³³ was granted as a result of their first referral. As only 27 children had a SR from a previous referral, meaning that their first referral was not their index referral, only details surrounding the SR of index referrals are given below in Table 14. For more information on the SR detail of the 27 children, please refer back to Figure 2.

Table 14: Supervision Requirement detail from index referral (n=1,000)

Supervision Requirement	Index referral	
	n	%
With approved foster carer	300	30.0
With parent/relevant person	524	52.4
With relative/friend - approved foster carer	44	4.4
With relative/friend - other	118	11.8
No detail given	14	1.4
Total children	1,000	100.0

As can be seen from Table 14, just over half of the 1,000 children (52.4%) were granted a SR/CSO with parents or relevant person. The remaining children were mostly granted a SR/CSO away from home, either with unrelated foster carers (30%), or with kin (4.4% as approved foster carer and 11.8% 'other'). For a small number of children, no detail was given on the SR/CSO.

From the data obtained, we were only able to see the detail of the first SR/CSO made during the index referral. As we know from analysis of the CLAS data in the *Pathways* strand, some of the children who were first looked after in 2012-13 on a SR/CSO with parents subsequently became looked after away from home.

Summary

- The majority of the children had grounds for referral of 'lack of parental care' during their first (77.1%) and index referral (91.8%).
- For the majority of children (86.7%), all grounds were established at their index referral
- For over half of the 1,000 children (52.4%) following their index referral a Children's Hearing decided they should be looked after at home, the remaining children were looked after away from home, with unrelated foster carers (30%), or kinship carers (4.4% as approved foster carers and 11.8% 'other').

³² The report from the *Pathways* strand which tracked 1,836 children is available on the study website.

³³ To remind: In June 2013, Compulsory Supervision Orders (CSO) replaced Supervision Requirements (SR). The baseline year included July 2013, and so we have used SR/CSO to include children who became looked after in July 2013.

8.4 How long did it take children from first referral to becoming looked after in 2012-13?

By linking information from SCRA to the children's CLAS records we can see how long it took from the time they were first referred to SCRA to becoming looked after in the CLAS (2012-13).

From the linkage we can see that for the 1,000 children, the average length of time this took was 12 months (standard deviation = 14.5 months).³⁴ We were also able to identify whether the time from first referral to becoming looked after in 2012-13 varied according to gender, age at first referral, the local authority³⁵ where the child lived, and whether he or she became looked after at home or away from home.

It is important to note that we do not have CLAS records for children prior to 2012-13. Some of the children were looked after at some point between the time of their first referral and when they became looked after in 2012-13. Based on the additional flag variable provided by the Scottish Government for whether children had previously been recorded as looked after in the CLAS data³⁶, we know that at least³⁷ 76 (7.6%) of the 1,000 children were looked after prior to 2012-13.

Did time vary by gender?

The average time from first referral to becoming looked after in 2012-13 was similar for girls (average = 12.5 months, standard deviation = 14.8 months) and boys (average = 11.5 months, standard deviation = 14.3 months). No statistically significant differences were found between the average time for girls and boys.

Did time vary by how old children were?

As can be seen from Table 15, the length of time from first referral to becoming looked after in 2012-13 increased with age. That is, the older the children were when they became looked after, the longer the average time between their first referral and becoming looked after. There was a statistically significant effect of age on the time from first referral to becoming looked after (2012-13) ($F(5, 994) = 163.13, p < 0.05$). This was a very large effect (Partial eta squared = 0.451), with all groups showing a statistically significant difference.

³⁴ We were unable to remove minimum and maximum values from the secure data environment (Safe Haven) due to the potential of identifying individuals from this data.

³⁵ This analysis used local authority at the time they became looked after in 2012-13. This may not have been the same local authority they lived in during their first referral to SCRA.

³⁶ See the *Pathways* report for further details. This is available on the website.

³⁷ The flag variable for whether they had been looked after prior to 2012-13 was missing for 17 (1.7%) of the 1,000 children.

Table 15: Average time in months from first referral to becoming looked after in 2012-13 by age-group when became looked after in 2012-13 (n=1,000)

Age group	n	Average time (months)	Standard deviation
Under 6 weeks ³⁸	151	-0.04	0.5
From 6 weeks to under 1 year	171	3.80	2.9
1 year – under 2 years	191	7.80	5.9
2 years – under 3 years	172	12.00	9.6
3 years – under 4 years	136	19.50	14.7
4 years – under 6 years	179	28.80	18.8
Total	1,000	12.00	14.5

Did time vary by local authority?

There was variation in the average time from the children's first referrals to becoming looked after in 2012-13 by local authority where the child lived. On average, the shortest time was four months and the longest time was just under two years (23.7 months). There was a statistically significant effect of local authority on time from first referral to becoming looked after in 2012-13 ($F(28, 962) = 2.85, p < 0.05$).³⁹ Tests for the strength of this effect revealed this to be of a medium effect size (Partial eta squared = 0.077). Tests conducted after this analysis to see which local authorities were contributing to this effect showed statistically significant differences between just one of the authorities and five of the others. For this one local authority, the average time it took from the children's first referral to becoming looked after in 2012-13 was quicker than these other authorities.

Time if became looked after at home or away from home

The average time that it took from first referral to SCRA to becoming looked after in 2012-13 was significantly longer for children from the looked after *at home* group ($F(1, 998) = 29.50, p < 0.05$) than the *away from home* group of the *Pathways* strand. This was a medium-sized effect (Partial eta squared = 0.092). For children who became looked after at home in 2012-13, the average time was 17.5 months (standard deviation = 15.2 months) from first referral, whilst this was 8.6 months (standard deviation = 12.9 months) for children who became looked after away from home. This difference can be expected as the concerns about children who became looked after away from home are likely to be greater, and parents whose children become looked after at home may be engaging more with services.

³⁸ Some children were recorded as looked after in the CLAS data before their first referral to the CHS (247, 24.7%). The majority of these 247 children were under six weeks old (146, 59.1%) or from six weeks to under one year (41, 16.6%) on the date they were recorded as looked after in the CLAS data 2012-13. Examples of why this might happen include when children are first accommodated under Section 25 (84, 34.0%) or when children are taken into emergency care through child protection measures (likely to be Child Protection Order) and this is recorded as occurring before the date they are recorded as first being referred (131, 53%). Some of these may also represent additional errors in recorded dates in the CLAS or SCRA records.

³⁹ Statistical tests excluded local authorities with very small numbers (less than five children).

Summary

- The average time between first referral and becoming looked after was 12 months, and was longer for older children, and those who became looked after at home.
- The average time it took for children to become looked after from first referral varied from four months to almost two years depending on the local authority in which they lived.

8.5 Differences for children looked after at home or away from home

One of the objectives of linking the CLAS and SCRA records was to see what additional information can be gained on children's pathways through the Children's Hearing System. The following section compares the two groups studied in the *Pathways* strand, but with the addition of the SCRA data.

Within the *Pathways* strand, the cohort of 1,836 children divided into two groups. Children who were looked after away from home at some point during 2012-13 formed the *away from home* group (n=1,355). Children who were looked after at home during this year formed the *at home* group (n=481). Further details on these children and their pathways through the looked after system using only their CLAS records can be found in the *Pathways* report.⁴⁰

For the 1,000 children whose data was linked, the *away from home* group made up 60.7% (607) and the *at home* group made up 39.3% (393). This means that of the 1,355 children in the *away from home* group, 607 (44.8%) were included in the 1,000 linked children. Of the 481 children in the *at home* group, 393 (81.7%) were included. More of the children in the *at home* group are included because all these children should have SCRA records when they were granted a SR/CSO at home, whereas some of the children who were looked after away from home will have been accommodated under Section 25 of the Children (Scotland) Act 1995 and not through the Children's Hearing System.

Earlier in the report, we were able to identify that of the 1,000 children with linked data, 481 had a previous referral. The following part of the report looks in more detail at the differences which the linkage highlighted, based on whether children were in the *at home* or *away from home* group.

Variation in whether children had a previous referral

By linking the children's CLAS and SCRA information, we can see that there was a statistically significant relationship between whether children were in the looked after *at home* or *away from home* groups and if they had had a previous referral (Chi-square (df1, N = 1,000) = 24.53, $p < 0.001$). A higher proportion of those in the looked after *at home* group had had a previous referral (51.4%) than those in the looked after *away from home* group (35.6%) (see Table 16). However, the strength of this association was small (Phi = -0.157). Although around half of the *at home* group and just over one third of the *away from home* group had had a previous referral, only a small number of these referrals had led to a SR being made. We cannot tell from linking the data if these previous referrals led to them becoming looked after outwith the Children's Hearing System (e.g. Section 25).

⁴⁰ The *Pathways* report is available on the website.

Table 16: Previous referrals for *at home* and *away from home* groups (n=1,000)

Previous referrals	<i>At home</i> group		<i>Away from home</i> group		Total children	
	n	%	n	%	n	%
Previous referral	202	51.4	216	35.6	418	41.8
No previous referral	191	48.6	391	64.4	582	58.2
Total children	393	100.0	607	100.0	1,000	100.0

Source of referral

The CLAS data tells us how many children became looked after, but not the process which led to this, or the professionals involved. By linking the CLAS and SCRA data we can see that there were statistically significant relationships between whether children were in the looked after *at home* or *away from home* groups from the *Pathways* strand and the source of both their first referral (Chi-square (df2, $N = 1,000$) = 50.21, $p < 0.001$) and index referral (Chi-square (df4, $N = 1,000$) = 82.54, $p < 0.001$).

First referral⁴¹

For children who became looked after *away from home*, around one quarter (27.3%) of first referrals came from the police, compared to around half (49.4%) of first referrals for those who were looked after *at home*. In contrast, a greater proportion of first referrals came from social work for children looked after *away from home* (66.7%) compared to 46.3% for children in the *at home* group (see Table 17). Tests showed this to be a small to medium effect (Cramer's $V = 0.224$).

Table 17: Source of first referral, for *at home* and *away from home* groups (n=1,000)

Source of first referral	<i>At home</i> group		<i>Away from home</i> group		Total children	
	n	%	n	%	n	%
Police	194	49.4	166	27.3	360	36.0
Social Work	182	46.3	405	66.7	587	58.7
Other	17	4.3	36	5.9	53	5.3
Total children	393	100.0	607	100.0	1,000	100.0

Index referral

For the index referral, over three quarters (77.8%) of referrals for children in the *away from home* group came from social work, and 10.7% from the police. This compares to figures for the *at home* group, for whom over half (56.0%) of index referrals came from social work and almost one third (32.6%) from the police (see Table 18). This shows that a greater proportion of index referrals came from social work for children who became looked after away from home than for children who became looked after at home, and the opposite was true in terms of referrals from the police. For children whose index referral was not also their first referral, the local authority may have been asked to provide services under Section 22 of the Children (Scotland) Act 1995.

⁴¹ For some children their first referral was also their index referral. For others, their first referral occurred prior to their index referral.

If concerns about welfare remain or increase, a child may then be referred back to the Reporter by his/her social worker and the Reporter will consider whether compulsory measures of intervention are necessary.

For the *at home* group, unlike the relatively even split between social work and police during first referral, more index referrals came from social work. Tests of the strength of this relationship showed the association between the source of the index referral and whether children were in the *at home or away from home* group to be a small to medium effect (Cramer's $V = 0.287$).

Table 18: Source of index referral, for *at home* and *away from home* groups (n=1,000)

Source of index referral	<i>At home</i> group		<i>Away from home</i> group		Total children	
	n	%	n	%	n	%
Court	9	2.3	31	5.1	40	4.0
Police	128	32.6	65	10.7	193	19.3
Social Work	220	56.0	472	77.8	692	69.2
Police and Social Work	16	4.1	17	2.8	33	3.3
Other	20	5.1	22	3.6	42	4.2
Total children	393	100.0	607	100.0	1,000	100.0

Age group at first referral

All of the children were aged five and under when they became looked after in 2012- 13. There was a significant association between whether they were in the *at home* group, or the *away from home* group and their age at first referral (Chi-square (df4, $N = 1,000$) = 11.29, $p < 0.05$). Two thirds (64.3%) of the children in the *away from home* group were under a year old at first referral compared to just over half (53.7%) of the *at home* group. A Cramer's V value of 0.106 shows a small effect size.

Table 19: Age at first referral, for *at home* and *away from home* groups (n=1,000)

Age group at first referral	<i>At home</i> group		<i>Away from home</i> group		Total children	
	n	%	n	%	n	%
Under 1 year	211	53.7	390	64.3	601	60.1
1 year – under 2 years	88	22.4	104	17.1	192	19.2
2 years – under 3 years	52	13.2	61	10.0	113	11.3
3 years – under 4 years	29	7.4	34	5.6	63	6.3
4 years – under 6 years	13	3.3	18	3.0	31	3.1
Total children	393	100.0	607	100.0	1,000	100.0

Reporter's decision on first referral⁴²

There was a statistically significant relationship between whether children were in the *at home* or *away from home* group and the Reporter's decision on first referral (Chi-square (df5, $N = 995$) = 16.56, $p < 0.001$). Within the *away from home* group, 70.0% of first referrals led to a Hearing, compared to 53.5% of first referrals for the *at home* group. In addition, for 10.1% of first referrals for the *away from home* group the Reporter made the decision to take no further action, compared to 17.9% of those from the *at home* group. Although this was a small effect (Cramer's $V = 0.183$), these results show that more of the *at home* group had referrals that did not lead to Hearings and had no further action than the *away from home* group.

Table 20: Reporter's decision on first referral, for *at home* and *away from home* groups (n=995)⁴³

Reporter's decision on first referral	<i>At home</i> group		<i>Away from home</i> group		Total children	
	n	%	n	%	n	%
Arrange Hearing	209	53.5	423	70.0	632	63.5
No action - current measures	12	3.1	14	2.3	26	2.6
No action - family action	12	3.1	7	1.2	19	1.9
No action - insufficient evidence	35	9.0	29	4.8	64	6.4
No action-no action	70	17.9	61	10.1	131	13.2
No action - refer to local authority	53	13.6	70	11.6	123	12.4
Total children	391	100.0	604	100.0	995	100.0

Grounds for referral

There was no statistically significant relationship between the number of grounds in first ($p = 0.803$, Cramer's $V = 0.021$) or index ($p = 0.542$, Cramer's $V = 0.035$) referral and whether children were in the *at home* or *away from home* group.

However, there was a relationship between some of the types of grounds during the children's first referral and whether they were in the *at home* or *away from home* group. More of the children in the *away from home* group had lack of parental care as grounds for referral (84.5%) during their first referral than did the children within the *at home* group (65.7%) (see Table 21) (Chi-square (df1, $N = 1,000$) = 48.09, $p < 0.001$). Tests for the strength of this relationship show it to be a small to medium effect (Phi = 0.219).

⁴² The report details Reporter's decision on first referral. As the index referral led to a CSO the Reporter's decision was to hold a Hearing.

⁴³ There were five children excluded from this analysis due to missing details on the Reporter's decision during their first referral.

Table 21: Grounds for first referral - Lack of parental care, for *at home* and *away from home* groups (n=1,000)

Grounds for first referral - Lack of parental care	<i>At home</i> group		<i>Away from home</i> group		Total children	
	n	%	n	%	n	%
Yes	258	65.7	513	84.5	771	77.1
No	135	34.4	94	15.5	229	22.9
Total children	393	100.0	607	100.0	1,000	100.0

This relationship was reversed when comparing the two groups on whether or not they had child victim as grounds for referral during their first referral (Chi-square (df1, $N = 1,000$) = 48.09, $p < 0.001$) (see Table 22). In this case, it was the *at home* group who had a higher proportion of children that had child victim as grounds for referral during this first referral (35.4%) than the *away from home* group (19.4%). This effect was smaller than seen for the relationship with lack of parental care (Phi = -0.178). For no other grounds during first referral was there a significant relationship between these and whether children were in the *at home or away from home* groups.⁴⁴

Table 22: Grounds for first referral – Child victim, for *at home* and *away from home* groups (n=1,000)

Grounds for first referral - Child victim	<i>At home</i> group		<i>Away from home</i> group		Total children	
	n	%	n	%	n	%
Yes	139	35.4	118	19.4	257	25.7
No	254	64.6	489	80.6	743	74.3
Total children	393	100.0	607	100.0	1,000	100.0

These figures show that in their first referral children in the *at home* group were more likely to have had 'child victim' as a ground, whilst the *away from home* group were more likely to have had 'lack of parental care'. This analysis looked at the grounds from their first referral, which for over half of the *at home* group and around one third of the *away from home* group was not the index referral which led to them becoming looked after in 2012-13. For many of these children, these first referrals did not lead to a SR/CSO.

The next step here would have been to repeat this same analysis for the grounds for referral from the children's index referral – that is, the referral that led to the SR/CSO and them becoming looked after in 2012-13 but unfortunately this was not possible within the limited time available. The rationale for analysing the grounds for first referral prior to analysing those for the index referral was chronology. However, the time in the safe haven was far less than expected, the analysis took longer than anticipated, and there was no opportunity to go back given the data sharing agreement with SCRA.

⁴⁴ *At home or away from home* group by first referral grounds: bad associations/moral danger ($p = 0.733$, Phi = 0.011); member of same household as child ($p = 0.163$, Phi = -0.044); member of same household as perpetrator ($p = 0.653$, Phi = 0.014).

Use of child protection measures⁴⁵ in first and index referrals

As one would expect given the immediacy of risk of harm required for a warrant or CPO to be made, there was a statistically significant relationship between whether children were in the *at home* or *away from home* group and whether a warrant was used in their first referral (Chi-square (df1, $N = 1,000$) = 103.60, $p < 0.001$) and index referral (Chi-square (df1, $N = 1,000$) = 185.42, $p < 0.001$). Around one quarter (25.4%) of the *away from home* group initially entered the Children's Hearings System via a warrant/CPO, compared with only 1.3% of the *at home* group (see Table 23). This was a medium-effect size (Phi = 0.322).

Table 23: Use of child protection measures – first referral, for *at home* and *away from home* groups (n=1,000)

Initial route from first referral a child protection measure?	<i>At home</i> group		<i>Away from home</i> group		Total children	
	n	%	n	%	n	%
Yes	5	1.3	154	25.4	159	15.9
No	388	98.7	453	74.6	841	84.1
Total children	393	100.0	607	100.0	1,000	100.0

During index referrals, for 40.4% of the *away from home* group this was a warrant, compared to 2.0% of the *at home* group (see Table 24). The strength of this relationship was medium to large (Phi = 0.431).

Table 24: Use of child protection measures – index referral, for *at home* and *away from home* groups (n=1,000)

Index referral a child protection measure?	<i>At home</i> group		<i>Away from home</i> group		Total children	
	n	%	n	%	n	%
Yes	8	2.0	245	40.4	253	25.3
No	385	98.0	362	59.6	747	74.7
Total children	393	100.0	607	100.0	1,000	100.0

Number of Hearings with outcome as Compulsory Supervision Order

There was a statistically significant relationship between whether children were in the *at home* or *away from home* groups and the number of Hearings where the outcome was a CSO up to 31 March 2016⁴⁶ (Chi-square (df1, $N = 1,000$) = 4.93, $p < 0.05$). Although for both groups the majority of children had just one Hearing with outcome as CSO (935, 93.5%), more of the *at home* group had two or more Hearings with a CSO outcome (8.7%) than those within the *away from home* group (5.1%) (see Table 25). The effect of this was small (Phi = -0.070).

⁴⁵ There are a range of child protection measures available, however in 2012-13 this was likely to be a warrant.

⁴⁶ The annual statistics for SCRA are collected up until 31 March rather than 31 July as seen in the CLAS. Hence, although we have data for children from their CLAS records up to 31 July 2016, most of the longitudinal variables from SCRA will be up until 31 March 2016 instead of the 31 July 2016.

Table 25: Number of Hearings where the outcome was a Compulsory Supervision Order to 31 March 2016⁴⁷, for *at home* and *away from home* groups (n=1,000)

Number of Hearings with outcome CSO	<i>At home</i> group		<i>Away from home</i> group		Total children	
	n	%	n	n	%	n
1	359	91.3	576	94.9	935	93.5
2+	34	8.7	31	5.1	65	6.5
Total children	393	100.0	607	100.0	1,000	100.0

Number of Hearings where grounds referred to a sheriff for proof

There was no statistically significant relationship between whether children were in the *at home* or *away from home* groups and if grounds were referred to a sheriff for proof up to 31 March 2016. At first sight, this was surprising as we anticipated that this would have been greater in the *away from home* group. However, it is likely to be linked to the young age of the children.⁴⁸

Number of Review Hearings which were continued

The maximum amount of time a CSO (at home or away from home) can remain in place without being reviewed is a year. However, a review might take place earlier at the request of the Hearing, the local authority, the child, or his/her parents. At a review, the Hearing can make a substantive decision (to continue the CSO, vary the CSO including varying contact arrangements, or terminate the order). Where panel members are unable to make a substantive decision at that point, the Hearing is continued.

There was a statistically significant association between whether children were in the *at home* or *away from home* group and the number of continued Review Hearings they experienced from first referral up until 31 March 2016 (Chi-square (df5, $N = 1,000$) = 15.31, $p < 0.05$). Within the *away from home* group, 48.9% had no Review Hearings continued up to 31 March 2016, whilst 9.1% had five or more. Within the *at home* group, 58.0% had no Review Hearings continued, with 3.8% having five or more (see Table 26). This shows that children from the *away from home* group were slightly more likely to have a greater number of Review Hearings continued, although this effect was small (Cramer's $V = 0.124$).

⁴⁷ This includes Hearings which may have been continued to allow the grounds to be established.

⁴⁸ If a relevant person or the child does not accept or is too young to understand the grounds for referral, these will be sent to the sheriff to establish whether the facts laid out can be proven.

Table 26: Number of continued Review Hearings to 31 March 2016, for *at home* and *away from home* groups (n=1,000)

Number of Review Hearings continued	<i>At home</i> group		<i>Away from home</i> group		Total children	
	n	%	n	%	n	%
0	228	58.0	297	48.9	525	52.5
1	75	19.1	117	19.3	192	19.2
2	37	9.4	72	11.9	109	10.9
3	23	5.9	35	5.8	58	5.8
4	15	3.8	31	5.1	46	4.6
5+	15	3.8	55	9.1	70	7.0
Total children	393	100.0	607	100.0	1,000	100.0

Number of Review Hearings with substantive outcomes

There was a statistically significant association between whether children were in the *at home* or *away from home* group and the number of Review Hearings where there was a substantive outcome⁴⁹ up to 31 March 2016 (Chi-square (df6, $N = 1,000$) = 60.24, $p < 0.001$). Children in the *away from home* group were more likely to have had Review Hearings with a substantive outcome - 9.2% of the *away from home* group had six Review Hearings with a substantive outcome compared to 2.8% of the *at home* group. The effect of this relationship was small to medium (Cramer's $V = 0.245$).

Table 27: Review Hearings with substantive outcome to 31 March 2016, for *at home* and *away from home* groups (n=1,000)

Number of Review Hearings with substantive outcomes	<i>At home</i> group		<i>Away from home</i> group		Total children	
	n	%	n	%	n	%
1 or less	90	22.9	63	10.4	153	15.3
2	94	23.9	97	16.0	191	19.1
3	86	21.9	140	23.1	226	22.6
4	65	16.5	129	21.3	194	19.4
5	32	8.1	93	15.3	125	12.5
6	11	2.8	56	9.2	67	6.7
7+	15	3.8	29	4.8	44	4.4
Total children	393	100.0	607	100.0	1,000	100.0

⁴⁹ Substantive outcomes: CSO continued, CSO varied (can include varying contact arrangements), CSO terminated.

Number of referrals (to 31 March 2016)⁵⁰

The number of referrals to the CHS up to 31 March 2016 varied depending on whether children were looked after *at home* or *away from home*, and this was statistically significant (Chi-square (df2, $N = 1,000$) = 27.88, $p < 0.001$). Within the *away from home* group, 34.9% had one referral up to 31 March 2016 and 41.7% had three or more referrals. Within the *at home* group, 21.6% had one referral and 57.8% had three or more referrals. This appears to show that the *at home* group had more referrals to the CHS, although the effect of this was relatively small (Cramer's $V = 0.167$).

Table 28: Number of referrals to 31 March 2016, for *at home* and *away from home* groups (n=1,000)

Number of referrals	<i>At home</i> group		<i>Away from home</i> group		Total children	
	n	%	n	%	n	%
1	85	21.6	212	34.9	297	29.7
2	81	20.6	142	23.4	223	22.3
3+	227	57.8	253	41.7	480	48.0
Total children	393	100.0	607	100.0	1,000	100.0

The following two tables show the total number of referrals broken down by whether the Reporter's decision was to arrange a Children's Hearing or not. Due to small numbers, no additional detail is provided for the frequency of children with more than three referrals where the Reporter decided to arrange a Hearing. As there are more children with a higher frequency of referrals where a Children's Hearing was not arranged, it was possible to provide more details where this was the Reporter's decision (up to 8+).

Number of referrals where the Reporter decided to arrange a Hearing

For children looked after at home, as might be expected given they had more referrals overall up to 31 March 2016, they also had more referrals than those in the *away from home* group where the Reporter decided to arrange a Hearing (Chi-square (df2, $N = 1,000$) = 16.56, $p < 0.001$).

From the *at home* group, 69.2% of children in the *at home* group had one referral that led to a Hearing, and 9.2% had three or more referrals leading to a Hearing.

For the *away from home* group, 76.4% had one referral that led to a Reporter arranging a Hearing, with 3.3% having three or more referrals which led to a Hearing. This was a small effect size (Cramer's $V = 0.129$).

⁵⁰ This is a count of all referral's children received from their first referral up until 31 March 2016. This includes their index referral.

Table 29: Number of referrals where the Reporter arranged a Children's Hearing to 31 March 2016, for *at home* and *away from home* groups (n=1,000)

Number of referrals	<i>At home</i> group		<i>Away from home</i> group		Total children	
	n	%	n	%	n	%
1	272	69.2	464	76.4	736	73.6
2	85	21.6	123	20.3	208	20.8
3+	36	9.2	20	3.3	56	5.6
Total children	393	100.0	607	100.0	1,000	100.0

Number of referrals with Reporter's decision not to arrange a Hearing

There was a significant association between whether the children were in the *away from home* or *at home* group and the number of referrals where a Reporter decided not to arrange a Hearing (Chi-square (df8, $N = 1,000$) = 35.30, $p < 0.001$), although the effect size was relatively small (Cramer's $V = 0.188$).

For 41.4% of children who were looked after *away from home*, on each occasion where they were referred to the Reporter, the decision of the Reporter was to arrange a Hearing. By comparison, for children who were looked after *at home*, 27.2% had a Hearing on each occasion when they were referred to the Reporter. For 3.3% of the children looked after *away from home* the Reporter decided not to arrange a Hearing on eight or more occasions when they were referred. For 7.9% of children who were looked after *at home*, the Reporter decided not to arrange a Hearing on eight or more occasions when they were referred.

Table 30: Number of referrals where Reporter did not arrange a Hearing to 31 March 2016, for *at home* and *away from home* groups (n=1,000)

Number of referrals	<i>At home</i> group		<i>Away from home</i> group		Total children	
	n	%	n	%	n	%
0	107	27.2	251	41.4	358	35.8
1	86	21.9	143	23.6	229	22.9
2	63	16.0	76	12.5	139	13.9
3	38	9.7	49	8.1	87	8.7
4	23	5.9	27	4.4	50	5.0
5	24	6.1	16	2.6	40	4.0
6	12	3.1	13	2.1	25	2.5
7	9	2.3	12	2.0	21	2.1
8+	31	7.9	20	3.3	51	5.1
Total children	393	100.0	607	100.0	1,000	100.0

Number of appeals

The *Decision making* strand⁵¹ of the study interviewed 160 people across Scotland involved in making decisions about permanence for children. Some participants expressed concern that appeals to a sheriff added delay to permanence processes. This was in line with previous research where participants voiced concern about delays associated with parental appeals (Gadda et al, 2015; Porter et al, 2016; Porter, 2017). As Table 31 indicates, while there was an appeal in almost one in five cases, the linkage of the CLAS and SCRA data showed that for most (81.2%) of the 1,000 children there were no appeals to a sheriff up to the end of March 2016.

There was a statistically significant association between whether children were in the *at home* or *away from home* group and the number of appeals (Chi-square (df2, $N = 1,000$) = 37.15, $p < 0.001$). In the *away from home* group, 75.5% had no appeals, 13.2% had one appeal and 11.4% had two or more appeals. For the *at home* group, 90.1% had no appeals, with 7.4% having one appeal and 2.5% having two or more. This means that children from the *away from home* group were more likely to have had an appeal than the *at home* group, although the effect size for this is relatively small (Cramer's $V = 0.193$).

Table 31: Number of appeals to a sheriff to 31 March 2016, for *at home* and *away from home* groups (n=1,000)

Number of appeals	<i>At home</i> group		<i>Away from home</i> group		Total children	
	n	%	n	%	n	%
0	354	90.1	458	75.5	812	81.2
1	29	7.4	80	13.2	109	10.9
2+	10	2.5	69	11.4	79	7.9
Total children	393	100.0	607	100.0	1,000	100.0

When looking at the number of appeals dismissed for those who did have an appeal, no statistically significant association was found between the groups and if they had had at least one appeal dismissed (Chi-square (df1, $N = 188$) = 0.792, $p = 0.374$), with measures of effect size also small (Phi = 0.065).

⁵¹ The *Decision making* report can be found on the project website.

Overall status four years after becoming looked after for linked children

Using the CLAS data from 2012-16, the *Pathways* strand of the study tracked pathways and timescales to permanence for all children aged five and under who became looked after at home or away from home in 2012-13. Table 32 shows the children's 'permanence group' by the end of year four.

Table 32: Children's permanence group at the end of year 4 (2016) (n=1,000)

Permanence group	n	%
Reunified/living with parents - with or without CSO	480	48.0
PO (kin or unrelated)	16	1.6
Section 11	81	8.1
Accommodated with no evident pathway: Section 25, CSO or ICSO (includes long-term)	240	24.0
Adoption pathway: POA/FFA/Direct petition, children on CSO with prospective adopters	163	16.3
No longer looked after - other/unknown destination accommodation	20	2.0
Total	1,000	100.0

Of the 1,000 linked children, almost half, (48.0%) had either remained with, or been reunified to birth parents. The next largest 'group' were the 240 children (24.0%) who were still looked after away from home, and for whom there was no evidence that they were on a pathway to permanence. A third group consisted of the 163 children (16.3%) who had either been adopted by 31 July 2016, or were placed with prospective adopters. The fourth largest group (8.1%) were children living with kinship carers (on Section 11).

The *Pathways* strand, which tracked all of the 1,836 children, showed a similar picture. The largest group of children had either remained with or been reunified with birth parents, the second group were those children where there was no apparent path to permanence, the third group had been adopted or were on an adoption pathways. The fourth group were those children living with kinship carers.

Summary

- More of those in the looked after *at home* group had had a previous referral (51.4%) than those in the looked after *away from home* group (35.6%).
- More index referrals came from social work for children who became looked after away from home (77.8%) than for children who became looked after at home (56.0%), and the opposite was true in terms of referrals from the police (32.6% for the *at home* group, compared to 10.7% for the *away from home* group).
- More of the children in the *away from home* group had 'lack of parental care' as grounds for referral (84.5%) during their first referral than did the children within the *at home* group (65.7%).
- More of the children in the *at home* group had 'child victim' as grounds for referral during their first referral (35.4%) than the *away from home* group (19.4%).
- One quarter (25.4%) of the *away from home* group initially entered the Children's Hearings System via a warrant/CPO, compared with only 1.3% of the *at home* group.
- Children in the *at home* group had more referrals to the Reporter up to March 2016.
- For most (81.2%) children there were no appeals to a sheriff up to the end of March 2016. However, overall there was an appeal for one in five children, and appeals were more likely where children were in the looked after *away from home* group.
- By July 2016, of the 1,000 linked children, almost half (48.0%) had either remained with or been reunified with birth parents, 240 children (24.0%) were still looked after away from home, 163 children (16.3%) had either been adopted or were placed with prospective adopters, and 81 children (8.1%) living with kinship carers (on a Section 11).

9. Discussion and implications of linkage

Information about the same children is held in different places. The Scottish Government collects information on all children who are looked after at home and away from home within all 32 local authorities. SCRA collects information on children who have any involvement in the Children's Hearings System in Scotland, some of whom will be looked after at home or away from home, and some of whom will not become looked after. As the linking of these two datasets had never previously been attempted, testing the feasibility and success of this linkage was the first aim – essentially was it possible?

Linkage of the data was ultimately possible, but the process from start to finish was more complex and time consuming than anticipated, and this had implications for the analysis we were able to undertake within the safe haven. Completion within the timescales we had (before the EU General Data Protection Regulation (GDPR) came into force, and within Phase One of the study, which ran from 2014-18) was challenging, and was only possible because of the commitment and interest demonstrated by key individuals in SCRA, in the data team at the Scottish Government, and in ADRN. This highlights the importance of establishing relationships and being clear about the rationale for the linkage and how this could be safely achieved. At the start of this report, the process of linkage, and the steps taken to ensure linkage was compliant with data protection legislation, and completed competently, safely and ethically was outlined. The rationale for detailing each step was to enable other researchers to accurately estimate the time and costs involved in any similar linkage in future.

A second aim was to explore whether the data would link as expected, and for children whose records did not match as expected, whether it was possible to identify the reasons, and any implications. Around two thirds (67.3%) of the 2,230 children had records which matched as expected (based on their matching category, i.e. they had a supervision requirement (SR) in the CLAS data and matched to SCRA records, or did not have a SR and did not match to SCRA records). However, this left just under one third (32.8%) of children whose CLAS and SCRA records did not match, or where records were matched for children unexpectedly. This has clear implications for the extent to which linked data, or even the individual datasets if they contain inaccuracies, can currently provide reliable information for policy makers and practitioners about looked after children and their circumstances.

Not only did some records not match as expected, but there was considerable variation across different local authorities in the rate at which records matched. This varied between local authorities from just 53.8% to 96.6%. For the analysis undertaken using the linked sample, this means that some local authorities will be better represented than others, and in some there are potentially high rates of missed matches, as a result of inaccurate records. This also has implications for individual local authorities, who may want to reflect on their own data collection procedures and quality assurance checks.

The balance between the time and effort social workers spend recording information and other areas of practice, including direct work with children and families has been subject to reflection and comment (Holmes et al, 2009; Whincup, 2017). Munro was critical of systems that put so much emphasis on recording that 'insufficient attention is given to developing and supporting the expertise to work effectively with children, young people and families' (Munro, 2011, p.7). The information recorded by social workers about children contributes to the data which local authorities then submit to the Scottish Government. The linkage shows that in some areas more than others, the information which is submitted annually to the Scottish government is not always accurate. The Scottish Government has been clear (Scottish Government, 2015) that data collected needs to be accurate if it is to be used to plan and evaluate services effectively. The variation which became evident through this linkage is likely to have consequences for how

services plan around children's lives. It may also have implications for the way in which information is collected and submitted by local authorities to the data analysis team at the Scottish Government.

At the moment, the data held by SCRA and the data held by CLAS on the same child does not share a common identification number. We linked data based on gender, local authority and date of birth, and the matching rate varied. In some countries a unique personal number is used across administrative contexts (see Harron et al, 2017). If a child who was within both data sets had a common identification number, the process of linkage would be simpler and would enable linkage of this important information about children's lives. This is an option which policy makers may want to consider.

Introducing changes to enable more accurate data linkage will provide details about some children, but will not provide a comprehensive picture of all children who are looked after away from home. Unless children who are looked after away from home using Section 25 of the Children (Scotland) Act 1995 have also been referred to the Reporter, or are subsequently referred to the Reporter, they will not appear in the SCRA data. For children who became looked after away from home in 2012-13, when they were aged five and under, the first legal status for one third was Section 25.⁵² These form an important group, and it is important, therefore that their experiences are the subject of ongoing research.

By linking the SCRA and CLAS information for the *away from home* and *at home* group an aim was to access information about children's pathways in order to enhance understanding about their experiences. This included whether children who appeared in the CLAS data in 2012-13 had previous involvement with the Children's Hearings system, and if so why people were worried about them.

Early engagement and early permanence are key priorities for practice set out by the Scottish Government (Scottish Government, 2015). The linkage showed that for 418 children of the 1,000 linked children professionals had previously been sufficiently worried about them to make a referral to the Reporter. It also showed that the worries had been relatively early in the children's lives. Almost 60% of the children who had a previous referral were under one year old at the time of that referral. The majority of those referrals had not led to the Reporter arranging a Children's Hearing at that point, however subsequent concerns led to the child becoming looked after in 2012-13. Research into that stage of decision making would be welcome.

The linkage also found that the pattern of referral varied, and that for children who were in the *away from home* group their first referral (which for some children would also have been their index referral) to the Reporter was more likely to be from social work, than the police. One possible explanation may be that social workers who refer are more likely to have had ongoing contact with the child and his/her family (under Section 22 of the Children (Scotland) Act 1995).⁵³ Thus, they may have more information about the family, including whether parents have co-operated and/or have responded to services, whereas police referrals are likely to be because of a specific incident. One of the determinants underpinning the Reporter's decision is willingness to co-operate and the impact of previous interventions.

In addition to generating information that would not have been available from only one of the data sets, the linkage provided details which challenged what we were told in another strand of

⁵² The *Pathways* strand found Section 25 of the Children (Scotland) Act 1995 was commonly used to place children in all age groups away from home.

⁵³ Section 22 of the Children (Scotland) Act states that local authorities shall promote children's welfare by providing a range and level of services appropriate to the child's needs.

the project. The *Decision making* strand interviewed 160 people across Scotland involved in making decisions about permanence for children. One of the themes from this strand was the part emotions and beliefs played. Some believed that appeals slowed down the permanence process for children, and importantly, took this into account in their decision making. The linkage of SCRA/CLAS data showed that, for the linked children at least, whilst one in five experienced appeals, the majority (80%) did not.

Although the process was complex, and the analysis on the linked dataset limited, this strand demonstrated for the very first time that linkage of CLAS and SCRA data was possible. The project also illustrated the potential benefits of the use of a safe haven facility in terms of providing a secure environment in which to access sensitive data. As data cannot be removed from the safe haven, this should provide considerable assurances to data owners and the general public regarding the handling and potential misuse of data. In addition, the analysis we were able to undertake provided information on children's experiences and pathways which it would not have been possible to glean from analysing only one data set. The linkage completed during Phase One, and the lessons learnt about the process will also inform any future linkage as part of Phase Two.

References

- Brownell, M. D. and Jutte, D. P. (2013). Administrative data linkage as a tool for child maltreatment research. *Child Abuse and Neglect*, 37 (2-3), pp. 120-124.
- Children and Young People (Scotland) Act 2014*. Available: <http://www.legislation.gov.uk/asp/2014/8/contents/enacted>
- Children (Scotland) Act 1995*. Available: <https://www.legislation.gov.uk/ukpga/1995/36/contents>
- Children's Hearings (Scotland) Act 2011*. Available: <https://www.legislation.gov.uk/asp/2011/1/contents>
- Cohen, J. (1969) *Statistical power analysis for the behavioural sciences*. New York: Academic Press.
- Colquhoun, D. (2014). An investigation of the false discovery rate and the misinterpretation of p-values. *Royal Society Open Science*, 1 (3).
- Edwards, R., Hughes, C. and Williams, M. (2015). *Data linkage: Ethical and social concerns*. [Online]. Available: <http://www.ncrm.ac.uk/news/show.php?article=5444>
- Gadda, A., Hill, M., Young, E. and Welch, V. (2015) *The appointment of Safeguarders in the Children's Hearings System: Research report and Action Plan*. Glasgow: CELCIS. www.celcis.org
- Gorard, S. (2016). Damaging real lives through obstinacy: Re-emphasising why significance testing is wrong. *Sociological Research Online*, 21 (1), pp. 1-14.
- Harron, K., Dibben, C., Boyd, J., Hjern, A., Azimae, M., Barreto, M. L. and Goldstein, H. (2017). Challenges in administrative data linkage for research. *Big Data & Society*, 4 (2).
- Hill, M., Lockyer, A., Morton, P., Batchelor, S. and Scotts, J. (2011) *The Role of Safeguarders in Scotland*. Edinburgh: Scottish Executive. Available: <https://lx.iriss.org.uk/sites/default/files/resources/121.%20The%20Role%20of%20Safeguarders%20in%20Scotland%20-%20Full%20Report.pdf>
- Holmes, L., McDermid, S., Jones, A. and Ward, H. (2009) *How Social Workers Spend Their Time: An Analysis of Key Issues that Impact on Practice pre- and post-Implementation of the Integrated Children's System*. London: Department for Children, Schools and Families.
- Munro, E. (2011) *The Munro review of child protection, final report: a child-centred system*. London: The Stationery Office.
- Nuzzo, R. (2014). Scientific method: statistical errors. *Nature News*, 506 (7487), pp. 150-152.
- Porter, R. (2017) *Contact Decisions in the Children's Hearings System*. Glasgow: CELCIS. www.celcis.org.
- Porter, R., Welch, V. and Mitchell, F. (2016) *The Role of the Solicitor in the Children's Hearings System: A study commissioned by the Scottish Legal Aid Board*. Glasgow: CELCIS. www.celcis.org
- Richardson, J. (2011) Eta squared and partial eta squared as measures of effect size in educational research. *Educational Research Review*, 6 (2), pp. 135-147. Available: <https://doi.org/10.1016/j.edurev.2010.12.001>.
- Scottish Executive (2002) *"It's everyone's job to make sure I'm alright": report of the Child Protection Audit and Review*. Edinburgh. Available: <https://www2.gov.scot/Publications/2002/11/15820/14009>.

Scottish Government (2015) *Looked After Children Data Strategy*. Edinburgh; Scottish Government.

Scottish Children's Reporters Administration (2013) *Online Statistical Analysis 2012-2013*. Stirling: SCRA. Available: <https://www.scra.gov.uk/wp-content/uploads/2016/08/1-SCRA-Statistical-Analysis-2012-13.pdf>.

Scottish Children's Reporters Administration (2015) *Practice Direction 6. Framework for Decision Making by Reporters Framework*. Stirling: SCRA. Available: <http://www.scra.gov.uk/wp-content/uploads/2016/03/Practice-Direction-06-Decision-Making-Framework.pdf>.

Scottish Children's Reporters Administration (2018) *Statistical Analysis 2017/2018*. Stirling: SCRA. Available: <https://www.scra.gov.uk/wp-content/uploads/2017/10/SCRA-Full-Statistical-Analysis-2016-17.pdf>.

Whincup, H (2017) What do social workers and children do when they are together: A typology of direct work. *Child & Family Social Work*, 22 (2), pp. 972-980.

Appendix 1: About the authors

Jade Hooper (Lead author)

Jade is a Research Assistant and PhD Candidate based in the Faculty of Social Science at the University of Stirling. She previously worked on a large, UK four-nation Nuffield Foundation funded project investigating child welfare inequalities and has experience in quantitative research and methodologies and the handling of sensitive administrative data. Jade was involved with the quantitative analysis of the Children Looked After Statistics and the Scottish Children's Reporter Administrative data.

Dr Linda Cusworth (Co-Investigator and co-author)

Linda is a Research Fellow in the Centre for Child and Family Justice Research at Lancaster University. She is an experienced quantitative social researcher, and has worked as a researcher in child wellbeing, child protection and family justice for over 15 years. She has a passion for the use of administrative data and linked data in family justice research.

Dr Helen Whincup (Principal Investigator and co-author)

Helen is a Senior Lecturer at University of Stirling, teaching primarily on the post-qualifying Masters in Applied Professional Studies (Child Welfare and Protection) and the Professional Supervision module. She is a qualified social worker with a practice background in children and families work, and practice and personal experience of adoption.

Appendix 2: Steering Group

Paul Bradshaw

Paul is Head of ScotCen Social Research, the Scottish arm of NatCen Social Research, one of the UK's largest independent social research agencies and a not for profit, charitable trust. In a research career spanning 20 years, Paul has led on wide range of projects including Growing Up in Scotland, a large-scale longitudinal study tracking the lives of multiple cohorts of children living in Scotland.

Chris Creegan (Chair)

Chris Creegan is an adopted person with a background in social research, including senior roles at the National Centre for Social Research. He was Chair of Scottish Adoption from 2008-15 and has served on permanency panels in Scotland and England.

Robin Duncan (Co-ordinates and minutes steering group)

Robin has been the director of Adoption and Fostering Alliance (AFA) Scotland since October 2016 and divides his time between AFA and managing Scotland's Adoption Register. Robin acts as coordinator for the steering group.

Fiona Lettice

Fiona is a Development Manager for Scottish Attachment in Action and was previously Development Manager for Adoption UK in Scotland. Fiona is an adoptive parent of two young adults. Fiona inputs into Strathclyde University Post Graduate Course on 'Securing Children's Futures' run by AFA. She is a member of the BeST Services Trial User-Professional Group, and the Trial Steering Committee Group at Glasgow University.

Kirstie Maclean

Kirstie is a retired social work manager and consultant who specialised in delivering, managing, reviewing and inspecting fostering and adoption services for most of her working career. She was Director of the Scottish Institute for Residential Care for three years. She is currently a trustee for Scottish Adoption and for the Dean and Cauvin Young People's Trust.

Fiona Spencer

Fiona worked in research and policy in the public and voluntary sectors. When working in government research her responsibilities included research in Scotland on children, young people, families and social work. Formerly a Visiting Professor at Strathclyde University, she is now retired and remains active in MS Society policy and research networks

Caroline Thomas

Caroline is an independent research consultant, with an Honorary Senior Research Fellowship at the University of Stirling. She has 30 years' experience of conducting, commissioning and managing child-welfare research.

Vivien Thomson

Vivien Thomson is a social work service manager with Falkirk Council. She has over 35 years' experience in the fields of adoption, fostering and kinship care. She is currently chair of the Social Work Scotland Corporate Parenting Sub Group and the Fostering and Adoption Practice Network, and represents SWS on the Permanently Progressing Steering Group.

Each member of the Steering Group brought a wealth of professional and/or personal experience to their role, and the study and the research team benefited from their insights.

Appendix 3: List of variables sent to the safe haven

Variables from the Children Looked After Statistics (CLAS) as derived by the research team.

Variable Label	Description/Classification
Pseudo identification number	
Local Authority	1 = Aberdeen City 2 = Aberdeenshire 3 = Angus 4 = Argyll and Bute 5 = City of Edinburgh 6 = Clackmannanshire 7 = Dumfries and Galloway 8 = Dundee City 9 = East Ayrshire 10 = East Dunbartonshire 11 = East Lothian 12 = East Renfrewshire 13 = Falkirk 14 = Fife 15 = Glasgow City 16 = Highland 17 = Inverclyde 18 = Midlothian 19 = Moray 20 = Na h-Eileanan Siar 21 = North Ayrshire 22 = North Lanarkshire 23 = Orkney Islands 24 = Perth and Kinross 25 = Renfrewshire 26 = Scottish Borders 27 = Shetland Islands 28 = South Ayrshire 29 = South Lanarkshire 30 = Stirling 31 = West Dunbartonshire 32 = West Lothian
Date of birth	Date
Gender	1 = Male 2 = Female
Ethnic group using last recorded or any previous year value if recorded as 'Not known'	10 = White 11 = Mixed or Multiple 12 = Asian, Asian Scottish or Asian British 13 = African, Caribbean or Black 14 = Other ethnic group 99 = Not known
Ever had a disability recorded 2012-16	0 = No

	1 = Yes
In looked after <i>away from home</i> group from <i>Pathways</i> strand	0 = No 1 = Yes
In looked after <i>at home</i> group from <i>Pathways</i> strand	0 = No 1 = Yes
Date first became looked after in 2012/13	Date
Age (groups) first became looked after in 2012/13	1 = Under 6 weeks 2 = From six weeks to 1 year 3 = 1 year – under 2 years 4 = 2 years – under 3 years 5 = 3 years – under 4 years 6 = 4 years+ (includes all 4 and 5 year olds)
Age first became looked after in 2012/13	In days
Placement type when first looked after in 2012/13	1 = At home with parents 2 = With friends or relative 3 = Foster care provided 4 = Foster care purchased 5 = With prospective adopters 6 = In other community 7 = In LA home 8 = In voluntary home 9 = Residential school 10 = In secure accommodation 11 = Crisis care 12 = Other residential
Legal reason when first looked after in 2012/13	1 = Away from home Under Section 25 2 = Parental Responsibilities Order 3 = CSO at home 4 = CSO away from home (excluding Res.Est.) 5 = CSO away from home (in a Res.Est.) 6 = CSO secure 7 = Warrant/Interim compulsory supervision order 8 = Child Protection Measure 9 = Criminal Court Provision 10 = Freed for Adoption 11 = Permanence order

	<p>12 = Permanence order with authority to place for adoption</p> <p>13 = Other Legal Reason</p>
Date first became away from home (2012-16)	Date
Age (groups) first became away from home (2012-16)	<p>1 = Under 6 weeks</p> <p>2 = From six weeks to 1 year 3 = 1 year – under 2 years</p> <p>4 = 2 years – under 3 years</p> <p>5 = 3 years – under 4 years</p> <p>6 = 4 years+ (includes all 4 and 5 year olds)</p>
Age first became away from home (2012-16)	In days
Date first became away from home in 2012/13	Date
Age (groups) first became away from home in 2012/13	<p>1 = Under 6 weeks</p> <p>2 = From six weeks to 1 year</p> <p>3 = 1 year – under 2 years</p> <p>4 = 2 years – under 3 years</p> <p>5 = 3 years – under 4 years</p> <p>6 = 4 years+ (includes all 4 and 5 year olds)</p>
Age first became away from home in 2012/13	In days
Whether looked after away from home at birth (date of birth = date first looked after away from home in 2012/13)	<p>0 = No</p> <p>1 = Yes</p>
Whether away from home within 7 days of birth (age first looked after away from home 2012/13 < = 7 days)	<p>0 = No</p> <p>1 = Yes</p>
Placement type when first became looked after away from home (2012-16)	<p>1 = At home with parents</p> <p>2 = With friends or relative</p> <p>3 = Foster care provided</p> <p>4 = Foster care purchased</p> <p>5 = With prospective adopters</p> <p>6 = In other community</p> <p>7 = In LA home</p> <p>8 = In voluntary home</p> <p>9 = Residential school</p> <p>10 = In secure accommodation</p> <p>11 = Crisis care</p> <p>12 = Other residential</p>
Placement type when first became looked after away from home in 2012/13	<p>1 = At home with parents</p> <p>2 = With friends or relative</p>

	<p>3 = Foster care provided</p> <p>4 = Foster care purchased</p> <p>5 = With prospective adopters</p> <p>6 = In other community</p> <p>7 = In LA home</p> <p>8 = In voluntary home</p> <p>9 = Residential school</p> <p>10 = In secure accommodation</p> <p>11 = Crisis care</p> <p>12 = Other residential</p>
Ever looked after at home (2012-16)	<p>0 = No</p> <p>1 = Yes</p>
Ever looked after and away from home (2012-16)	<p>0 = No</p> <p>1 = Yes</p>
Looked after at home prior to period of looked after away from home (2012-16)	<p>0 = No</p> <p>1 = Yes</p>
Legal reason when first became looked after away from home (2012-16)	<p>1 = Away from home Under Section 25</p> <p>2 = Parental Responsibilities Order</p> <p>3 = CSO at home</p> <p>4 = CSO away from home (excluding Res.Est.)</p> <p>5 = CSO away from home (in a Res.Est.)</p> <p>6 = CSO secure</p> <p>7 = Warrant/Interim compulsory supervision order</p> <p>8 = Child Protection Measure</p> <p>9 = Criminal Court Provision</p> <p>10 = Freed for Adoption</p> <p>11 = Permanence order</p> <p>12 = Permanence order with authority to place for adoption</p> <p>13 = Other Legal Reason</p>
Number of episodes of being looked after (2012-16)	Numeric count
Number of admissions to looked after away from home (2012-16)	Numeric count
Date last became looked after away from home	Date
Age last became looked after away from home	In days
Age (group) last entered period of looked after away from home	<p>1 = Under 6 weeks</p> <p>2 = From six weeks to 1 year</p> <p>3 = 1 year – under 2 years</p>

	<p>4 = 2 years – under 3 years</p> <p>5 = 3 years – under 4 years</p> <p>6 = 4 years+ (includes all 4 and 5 year olds)</p>
Date last away from home placement started (not period)	Date
Age last placement away from home started	In days
Age (group) last placement away from home started	<p>1 = Under 6 weeks</p> <p>2 = From six weeks to 1 year</p> <p>3 = 1 year – under 2 years</p> <p>4 = 2 years – under 3 years</p> <p>5 = 3 years – under 4 years</p> <p>6 = 4 years+ (includes all 4 and 5 year olds)</p>
Total duration of all periods of looked after away from home (2012-16)	In days
Total duration of all periods looked after at home (2012-16)	In days
Total duration of all periods looked after (home and away) (2012-16)	In days
Whether continuously looked after away from home since first looked after away from home (2012-16) (incl. those looked after at home first)	<p>0 = No</p> <p>1 = Yes</p>
Total number of placements (2012-16) (lines)	Numeric count
Total number of all placements away from home (2012-16) (lines)	Numeric count
Number of placement with parents (2012-16) (lines)	Numeric count
Number of placements in foster care purchased (2012-16) (lines)	Numeric count
Number of placements in foster care provided (2012-16) (lines)	Numeric count
Number of placements with prospective adopters (2012-16) (lines)	Numeric count
Number of placements with kin (2012-16) (lines)	Numeric count
Number of placements in LA home (2012-16) (lines)	Numeric count
Number of placements in voluntary home (2012-16) (lines)	Numeric count
Number of placements in other residential (2012-16) (lines)	Numeric count
Number of placements in other community (2012-16) (lines)	Numeric count
Number of placements in residential school (2012-16) (lines)	Numeric count
Number of placements in secure accommodation (2012-16) (lines)	Numeric count
Number of placements in crisis care (2012-16) (lines)	Numeric count
Number of placement changes (2012-16) (Total number of placements -1)	Numeric count

Last placement type	<p>1 = At home with parents</p> <p>2 = With friends or relative</p> <p>3 = Foster care provided</p> <p>4 = Foster care purchased</p> <p>5 = With prospective adopters</p> <p>6 = In other community</p> <p>7 = In LA home</p> <p>8 = In voluntary home</p> <p>9 = Residential school</p> <p>10 = In secure accommodation</p> <p>11 = Crisis care</p> <p>12 = Other residential</p>
Number of legal reasons as S25 (2012-16) (lines)	Numeric count
Number of legal reasons as CSO (away from home) (2012-16) (lines)	Numeric count
Number of legal reasons as CSO (at home) (2012-16) (lines)	Numeric count
Number of legal reasons as ICSO (2012-16) (lines)	Numeric count
Number of legal reasons as CP measures (2012-16) (lines)	Numeric count
Number of legal reasons as Freed for adoption (2012-16) (lines)	Numeric count
Number of legal reasons as PO (2012-16) (lines)	Numeric count
Number of legal reasons as POA (2012-16) (lines)	Numeric count
Number of legal reasons as other legal reasons (2012-16) (lines)	Numeric count
Number of legal reasons as Parental Responsibilities Order (2012-16) (lines)	Numeric count
Number of legal reasons as Criminal Court Provision (2012-16) (lines)	Numeric count
Last legal reason	<p>1 = Away from home Under Section 25</p> <p>2 = Parental Responsibilities Order</p> <p>3 = CSO at home</p> <p>4 = CSO away from home (excluding Res.Est.)</p> <p>5 = CSO away from home (in a Res.Est.)</p> <p>6 = CSO secure</p> <p>7 = Warrant/Interim compulsory supervision order</p> <p>8 = Child Protection Measure</p> <p>9 = Criminal Court Provision</p> <p>10 = Freed for Adoption</p> <p>11 = Permanence order</p> <p>12 = Permanence order with authority to place for adoption</p>

	13 = Other Legal Reason
Number of times discharged from looked after away from home (2012-16)	Numeric count
Number of times discharged from being looked after (2012-16)	Numeric count
Number of times reunified biological parents (looked after) (2012-16)	Numeric count
Number of times destination biological parents (not looked after) (2012-16)	Numeric count
Number of times destination adoptive parents (2012-16)	Numeric count
Number of times destination with friends or relatives (2012-16)	Numeric count
Number of destination accommodations in supported accommodation (2012-16)	Numeric count
Number of times destination former foster carers (2012-16)	Numeric count
Number of times destination homeless (2012-16)	Numeric count
Number of times destination other (2012-16)	Numeric count
Number of times destination Not known (2012-16)	Numeric count
Whether ever reunified with parent (looked after) (2012-16)	0 = No 1 = Yes
Whether ever reunified with parent (not looked after) (2012-16)	0 = No 1 = Yes
Whether reunified with parent (looked after) and later looked after away from home	0 = No 1 = Yes
Whether reunified with parent (not looked after) and later looked after away from home	0 = No 1 = Yes
Date exited being looked after (last time and no longer looked after)	Date
Date exited being looked after away from home (last time and no longer looked after)	Date
Last destination accommodation (if no longer looked after)	1 = Home with biological parents (not looked after) 2 = Home with newly adoptive parents 3 = Friends or relatives 4 = Own tenancy / independent living 5 = Supported accommodation 7 = Former foster carers 8 = In residential care 9 = Homeless

	<p>10 = In custody</p> <p>97 = Child died</p> <p>98 = Other</p> <p>99 = Not known</p>
Status at the end of Year 4 (on 31st July 2016)	<p>1 = Looked after away from home</p> <p>2 = Looked after (not away from home)</p> <p>3 = Not looked after</p>
End of year 4 status (on 31st July 2016) categories using legal reasons and placement information	<p>1 = Adopted, no longer looked after, last destination accommodation with newly adopted parents</p> <p>2 = PO still looked after, current legal reason PO</p> <p>3 = POA still looked after, current legal reason POA or FFA</p> <p>4 = S11 No longer looked after, last destination accommodation with friends or relatives</p> <p>5 = CSO with kin still looked after, current legal reason CSO and current placement with friends or relatives</p> <p>6 = CSO with foster carers still looked after, current legal reason CSO and current placement with foster carers</p> <p>7 = CSO with prospective adopters still looked after, current legal reason CSO and current placement with prospective adopters</p> <p>8 = At home, no longer looked after, last destination accommodation at home with parents</p> <p>9 = CSO at home still looked after, current legal reason CSO and current placement at home with parents</p> <p>10 = S25 with foster carers still looked after, current legal reason S25 and current placement with foster carers</p> <p>11 = S25 still looked after, current legal reason S25 and current placement of any other type</p> <p>12 = Other still looked after, current legal reason either CPM, criminal court provision or other legal reason</p> <p>13 = Other no longer looked after, last destination not known, other, missing, former foster carers, homeless or supported accommodation</p> <p>14 = CSO still looked after, current legal reason CSO, current placement in voluntary home, in residential school or other residential</p>
Overall status variable at end of year 4 (on 31st July 2016)	<p>1 = Reunified/living with parents - with or without CSO</p> <p>2 = PO (kin or unrelated)</p> <p>3 = Section 11</p> <p>4 = Away from home with No evident pathway: s25, CSO or ICSO (includes long-term)</p> <p>5 = Adoption pathway: POA/FFA/Direct petition, children on CSO with prospective adopters</p> <p>6 = No longer looked after - other/unknown destination accommodation</p>
Date entered end of year 4 status (on 31st July 2016)	Date

Age entered end of year 4 status (on 31st July 2016)	In days
Age (group) entered end of year 4 status (on 31st July 2016)	1 = Under 6 weeks 2 = From six weeks to 1 year 3 = 1 year – under 2 years 4 = 2 years – under 3 years 5 = 3 years – under 4 years 6 = 4 years+ (includes all 4 and 5 year olds)
Time to year 4 status (on 31st July 2016) - from first looked after away from home (2012-16)	In days
Time to year 4 status (on 31st July 2016) - from when last looked after away from home placement started (2012-16)	In days
Time to year 4 status (on 31st July 2016) - from when last looked after away from home period started (2012-16)	In days
Legal permanence obtained/established (2012-16)	1 = Achieved permanence (PO, s11, adopted, reunified/remained with parents, not on CSO) 2 = On a pathway/getting there (POA, placed with prospective adopters, plus CSO with parents) 3 = No apparent permanence plan/path (away from home on CSO, s25, emergency/interim order) 4 = No longer looked after - other or unknown destination accommodations
Date legal permanence obtained/established (2012-16)	Date
Age legal permanence obtained/established (2012-16)	In days
Age (group) legal permanence obtained/established (2012-16)	1 = Under 6 weeks 2 = From six weeks to 1 year 3 = 1 year – under 2 years 4 = 2 years – under 3 years 5 = 3 years – under 4 years 6 = 4 years+ (includes all 4 and 5 year olds)
Child has been looked after away from home prior to 2012/13	0 = No 1 = Yes
Child has been looked after at home prior to 2012/13	0 = No or unknown 1 = Yes
Ever on a CSO away from home in 2012/13	0 = No 1 = Yes
Ever on a CSO at home in 2012/13	0 = No 1 = Yes

Ever on an ICSO in 2012/13	0 = No 1 = Yes
----------------------------	-------------------

Variables from the Scottish Children's Reporter Administration (SCRA)

Variable Label	Description/Classification
Pseudo identification number	
Local authority when child became looked after in 2012/13	1 = Aberdeen City 2 = Aberdeenshire 3 = Angus 4 = Argyll and Bute 5 = City of Edinburgh 6 = Clackmannanshire 7 = Dumfries and Galloway 8 = Dundee City 9 = East Ayrshire 10 = East Dunbartonshire 11 = East Lothian 12 = East Renfrewshire 13 = Falkirk 14 = Fife 15 = Glasgow City 16 = Highland 17 = Inverclyde 18 = Midlothian 19 = Moray 20 = Na h-Eileanan Siar 21 = North Ayrshire 22 = North Lanarkshire 23 = Orkney Islands 24 = Perth and Kinross 25 = Renfrewshire 26 = Scottish Borders 27 = Shetland Islands 28 = South Ayrshire 29 = South Lanarkshire 30 = Stirling 31 = West Dunbartonshire 32 = West Lothian
Gender	1 = Male 2 = Female
Month and year of birth	Date (set to 1st day of month)
Date of first referral	Date
Age at first referral	In months

First referral - Initial route into Children's Hearing System Child Protection Order	0 = Blank 1 = No 2 = Yes
Number of grounds in first referral	Numeric count
First referral grounds - a. Beyond Control	Numeric count
First referral grounds - b. Bad associations/Moral danger	Numeric count
First referral grounds - c. Lack of parental care	Numeric count
First referral grounds - d. Child victim - incest; sexual offences or homosexual offences	Numeric count
First referral grounds - d. Child victim - offence involving bodily injury	Numeric count
First referral grounds - d. Child victim - offence involving sexual behaviour	Numeric count
First referral grounds - d. Child victim - s12 1937 Act	Numeric count
First referral grounds - d. Child victim - other	Numeric count
First referral grounds - d. Child victim of bodily injury	Numeric count
First referral grounds - e. MSH as child - bodily injury	Numeric count
First referral grounds - e. MSH as child - incest; sexual offences or homosexual offences	Numeric count
First referral grounds - e. MSH as child - offence involving bodily injury	Numeric count
First referral grounds - e. MSH as child - offence involving sexual behaviour	Numeric count
First referral grounds - e. MSH as child - lewd; indecent or libidinous practice or behaviour	Numeric count
First referral grounds - e. MSH as child - other	Numeric count
First referral grounds - e. MSH as child - s12 1937 Act	Numeric count
First referral grounds - f. MSH as perpetrator - bodily injury	Numeric count
First referral grounds - f. MSH as perpetrator - incest; sexual offences or homosexual offences	Numeric count
First referral grounds - f. MSH as perpetrator - lewd; indecent or libidinous practice or behaviour	Numeric count
First referral grounds - f. MSH as perpetrator - offence involving sexual behaviour	Numeric count
First referral grounds - f. MSH as perpetrator - s12 1937 Act	Numeric count
First referral grounds - f. MSH as perpetrator - offence involving bodily injury	Numeric count
First referral grounds - f. MSH as perpetrator - other	Numeric count

Source of first referral	1 = Court 2 = Education 3 = Health 4 = Health & Court 5 = Other 6 = PF 7 = Police 8 = Police & Court 9 = Police & Health 10 = Police & Social Work 11 = Relative 12 = Reporter 13 = Reporter; Police & Social Work 14 = Social Work 15 = Social Work & Court 16 = Social Work & Health 17 = Social Work & Police
Date of Reporter's decision on first referral	Date
First referral - Reporter's decision	1 = Arrange Hearing 2 = No Action - Current Measures 3 = No Action - Diversion 4 = No Action - Duplicate Referral 5 = No Action - Family Action 6 = No Action - Information only 7 = No Action - Insufficient evidence 8 = No Action - No Action 9 = No Action - Refer To Local Authority
Date of Hearing on first referral (if applicable)	Date
First referral - Grounds accepted	0 = Blank 1 = No = Not accepted 2 = Yes = all grounds accepted 3 = Yes = some grounds accepted
First referral - Grounds established	0 = Blank 1 = No = Not established 2 = Partial = some grounds established 3 = Yes = all grounds established
First referral - Date grounds established	Date
First referral - Whether warrant made	0 = Blank 1 = No 2 = Yes
First referral - Date warrant made	Date
First referral - CSO made	0 = Blank 1 = No 2 = Yes

First referral - Date CSO made	Date
First referral - Age CSO made	In months
First referral - CSO made between 1st Aug 2012 and 31st Jul 2013	0 = No CSO (from first referral) 1 = CSO (from first referral) made prior to baseline year 2 = CSO (from first referral) made in baseline year
First referral - CSO detail	0 = No CSO 1 = [None] 2 = Other Residential Placement 3 = With other approved foster parent 4 = With parent/relevant person 5 = With relative/friend = approved foster parent 6 = With relative/friend = other
Date of earliest index referral	Date
Age at earliest index referral	In months
Number of index referrals	Numeric count
Index referral include Child Protection Order	0 = Blank 1 = No 2 = Yes
Number of grounds in index referral	Numeric count
Index referral grounds - a. Beyond Control	Numeric count
Index referral grounds - b. Bad associations/Moral danger	Numeric count
Index referral grounds - c. Lack of parental care	Numeric count
Index referral grounds - d. Child victim - incest; sexual offences or homosexual offences	Numeric count
Index referral grounds - d. Child victim - offence involving bodily injury	Numeric count
Index referral grounds - d. Child victim - offence involving sexual behaviour	Numeric count
Index referral grounds - d. Child victim - s12 1937 Act	Numeric count
Index referral grounds - d. Child victim - other	Numeric count
Index referral grounds - d. Child victim of bodily injury	Numeric count
Index referral grounds - e. MSH as child - bodily injury	Numeric count
Index referral grounds - e. MSH as child - incest; sexual offences or homosexual offences	Numeric count
Index referral grounds - e. MSH as child - offence involving bodily injury	Numeric count
Index referral grounds - e. MSH as child - offence involving sexual behaviour	Numeric count
Index referral grounds - e. MSH as child - lewd; indecent or libidinous practice or behaviour	Numeric count
Index referral grounds - e. MSH as child - other	Numeric count

Index referral grounds - e. MSH as child - s12 1937 Act	Numeric count
Index referral grounds - f. MSH as perpetrator - bodily injury	Numeric count
Index referral grounds - f. MSH as perpetrator - incest; sexual offences or homosexual offences	Numeric count
Index referral grounds - f. MSH as perpetrator - lewd; indecent or libidinous practice or behaviour	Numeric count
Index referral grounds - f. MSH as perpetrator - offence involving sexual behaviour	Numeric count
Index referral grounds - f. MSH as perpetrator - s12 1937 Act	Numeric count
Index referral grounds - f. MSH as perpetrator - offence involving bodily injury	Numeric count
Index referral grounds - f. MSH as perpetrator - other	Numeric count
Source of index referral	1 = Court 2 = Education 3 = Health 4 = Health & Court 5 = Other 6 = PF 7 = Police 8 = Police & Court 9 = Police & Health 10 = Police & Social Work 11 = Relative 12 = Reporter 13 = Reporter; Police & Social Work 14 = Social Work 15 = Social Work & Court 16 = Social Work & Health
Date of Reporter's decision on index referral	Date
Index referral - Reporter's decision	1 = Arrange Hearing 2 = No Action - Current Measures 3 = No Action - Diversion 4 = No Action - Duplicate Referral 5 = No Action - Family Action 6 = No Action - Information only 7 = No Action - Insufficient evidence 8 = No Action - No Action 9 = No Action - Refer To Local Authority
Date of first Hearing on index referral	Date
Index referral - Grounds accepted	0 = Blank 1 = No - Not accepted 2 = Partial - some grounds accepted 3 = Yes - all grounds accepted

Index referral - Grounds established	0 = Blank 1 = No - Not established 2 = Partial - some grounds established 3 = Yes - all grounds established
Index referral - Date grounds established	Date
Index referral - Whether warrant made	0 = Blank 1 = No 2 = Yes
Index referral - Date warrant made	Date
Index referral - Date CSO made	Date
Index referral - Age CSO made	In months
Index referral - CSO detail	0 = No CSO 1 = [None] 2 = Other Residential Placement 3 = With other approved foster parent 4 = With parent/relevant person 5 = With relative/friend = approved foster parent 6 = With relative/friend = other
Number of referrals received up to 31st March 2016	Numeric count
Number of referrals with Reporter decisions to arrange a Children's Hearing up to 31st March 2016	Numeric count
Number of Reporter decisions Not to arrange a Children's Hearing up to 31st March 2016	Numeric count
Number of Hearings where grounds referred to Sheriff for proof up to 31st March 2016	Numeric count
Number of court applications where grounds established up to 31st March 2016	Numeric count
Number of continued ground Hearings up to 31st March 2016	Numeric count
Number of appeals to Sheriff up to 31st March 2016	Numeric count
Number of appeals dismissed up to 31st March 2016	Numeric count
Number of Hearings with outcome CSO made up to 31st March 2016 (including continued Review Hearings)	Numeric count
Number of continued Review Hearings up to 31st March 2016	Numeric count
Number of Review Hearings with substantive outcomes up to 31st March 2016	Numeric count

Linking two administrative datasets about looked after children: testing feasibility and enhancing understanding

*Published by the University of Stirling
Second Edition: November 2019*

ISBN 978-1-908063-50-2

Design, editing and photography by Martin Howard : work@veanhouse.co.uk

Faculty of Social Science,
Colin Bell Building
University of Stirling,
Stirling,
FK9 4LA

Adoption and Fostering
Alliance (AFA) Scotland,
Foxglove offices/GF2,
14 Links Place,
Edinburgh,
EH6 7EZ

Centre for Child & Family
Justice Research,
School of Law
Lancaster University,
C126 Bowland North,
Bailrigg,
Lancaster,
LA1 4YW

Department of Social Policy
and Social Work,
Alcuin College B Block
University of York,
York,
YO10 5DD