September 2024 | Report

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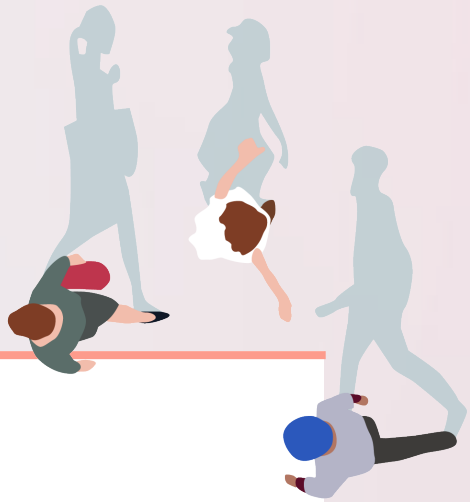

THE SOCIAL WORKERS IN SCHOOLS (SWIS) TRIAL

An evaluation of school-based social work: Follow-up report

September 2024

Acknowledgements

We are grateful to a large group of people who have contributed to making this trial a success. We would especially like to thank our colleagues in the local authorities who once again worked hard to supply data and answer queries and ensure we had the data we needed to complete this follow-up analysis.

During this follow-up period, the evaluation continued to be efficiently managed by our collaborators at Foundations, following the merger in 2022 of What Works for Children's Social Care (the original funder of the SWIS trial) and the Early Intervention Foundation. Working closely with Ben Moffat, Natalia Coe, Pedro Natho, Soraya Rusmaully and Arnaud Vaganay at Foundations has been enjoyable and their input has been invaluable. Similarly, the efforts of Helen Bell, Mark Rothen and Chris Knox at the Department for Education, and Nadya Munkueva from the Office for National Statistics have ensured smooth access to data from the National Pupil Database. As we noted in our previous report, colleagues at What Works for Children's Social care were instrumental in facilitating the set-up and running of the SWIS programme, and it would not have happened without their commitment and enthusiasm.

We are very thankful for the excellent academic support we received from our colleagues Debbie Harris and Fiona Heaton (2). We would like to thank the anonymous peer reviewers, feedback from whom has served to improve the quality of the report significantly.

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Trial registration

The trial was registered retrospectively with the International Standard Randomised Controlled Trial Number registry on 13 November 2020 (ISRCTN90922032). Department for Education, England, via What Works for Children's Social Care (now Foundations). The authors have declared that no competing interests exist.

Data use statement

This work contains statistical data from the Office for National Statistics (ONS) which is Crown Copyright. The use of the ONS statistical data in this work does not imply the endorsement of the ONS in relation to the interpretation or analysis of the statistical data. This work uses research datasets which may not exactly reproduce National Statistics aggregates.

About What Works for Early Intervention and Children's Social Care

What Works for Children's Social Care (WWCSC) and the Early Intervention Foundation (EIF) are merging. The new organisation is operating initially under the working name of What Works for Early Intervention and Children's Social Care.

Our new single What Works centre will cover the full range of support for children and families from preventative approaches, early intervention and targeted support for those at risk of poor outcomes, through to support for children with a social worker, children in care and care leavers.

To find out more visit our website at: **www.whatworks-csc.org.uk**

About CASCADE and partners

The wider study was led by the Centre for Children's Social Care Research and Development (CASCADE) in collaboration with the Centre for Trials Research at Cardiff University and the Health Economics and Policy Evaluation Group at Oxford. The analysis included in this follow-up report is a product of work by CASCADE and the Centre for Trials Research.

CASCADE's mission is to improve the wellbeing, safety and rights of children and their families, by generating new knowledge about children's social care and sharing new and existing knowledge in ways that help services.

The Centre for Trials Research and CASCADE are funded by the Welsh Government through Health and Care Research Wales.

CASCADE at: https://cascadewales.org

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Glossary of terms

Acronym	Full term	Brief explanation
N/A	Attainment 8	The average of an individual student's achievement in up to 8 qualifications that includes English language and/or English language; maths (double weighted); 3 qualifications that count in the English Baccalaureate and 3 other GCSE or non-GCSE qualifications on the DfE approved list.
N/A	Boxplot	A method for graphically demonstrating the locality, spread and skewness groups of numerical data through their quartiles (a division of the data points into four parts).
CI	Confidence interval	A range of values that describes the uncertainty surrounding an estimate. Larger range indicates more uncertainty.
CiN	Child in Need	Legally defined in the Children Act 1989 as a child who is unlikely to achieve or maintain a reasonable level of health or development, or whose health and development is likely to be significantly or further impaired, without the provision of services; or a disabled child.
CLA	Child Looked After (sometimes referred to as LAC, looked after child)	A legal definition for when a child is being cared for by their local authority if they are in care for a continuous period of more than 24 hours.
CP	Child Protection	Statutory services provided for children who are thought to be suffering or likely to suffer significant harm.
CSC	Children's Social Care	Children's social care services is the department within the local authority that is responsible for supporting and protecting vulnerable children.
EWO	Education Welfare Officer	Education welfare officers make sure that children attend school and get the support they need.
EBacc	English Baccalaureate	A set of subjects at key stage 4: English, maths, science, a language, and history or geography

FSM	Free school meals	Children are eligible for free school meals in England if they meet certain criteria, such as their family being in receipt of certain benefits. This is often used as a proxy measure of poverty.
N/A	Histogram	A histogram is a graph that provides a visual representation of the distribution of numerical data. It is a type of bar chart that shows the frequency or number of observations within different numerical ranges.
IPE	Implementation and process evaluation	A type of evaluation that explores whether programme activities have been implemented as intended and how they operate.
LA	Local authority	The lowest level of elected government in England, local authorities are typically responsible for delivering Children's Social Care Services.
N/A	Logic model	A visual way to illustrate the chain of causes and effects leading to an outcome of interest.
NPD	National Pupil Database	The source of education attendance and attainment for all school children in England, controlled by the Department for Education.
ONS SRS	Office for National Statistics Secure Research Service	The Secure Research Service gives accredited researchers secure access to de-identified data for approved research projects.
N/A	Poisson regression model	A statistical model that is used to analyse count data.
Section 17 (s.17) assessment	Assessment under Section 17 of the Children Act 1989	An assessment to identify the needs of a child and the most appropriate support for the family in safeguarding them.
Section 47 (s.47)	Section 47 of the Children Act 1989 enquiry	An enquiry carried out to assess whether and what action is needed to safeguard a child who may be suffering, or likely to suffer significant harm.
SWIS	Social Workers in Schools	An intervention that aims to embed social workers within secondary schools to undertake statutory social work with children and families.

	Unauthorised absence	The number of sessions missed due to unauthorised absence per term (Autumn, Spring, Summer) out of the number of sessions possible per term, reported as a percentage. Available via the absence dataset.

EXECUTIVE SUMMARY

Introduction and background

'Social Workers in Schools' (SWIS) is a social care intervention that is based in an educational setting. The rationale behind SWIS was that, by embedding social workers within secondary schools, it might be possible to reduce the need for some social care services. It was envisaged that social workers would do this by undertaking statutory social work with children and families, increasing opportunities for preventative work, and improving inter-agency collaboration between education and children's social care (CSC). A set of pilot studies had previously shown signs of promise (Westlake et al., 2020a). The trial was designed to test these assumptions rigorously and evaluate the effectiveness of SWIS.

SWIS was delivered over two full academic years (September 2020 to July 2022). The primary outcome, and most of the secondary outcomes, were related to changes in the need for CSC services. Schools were randomised to yield two groups – one which had a SWIS social worker allocated to them and one which did not. We collected data on the two groups of schools and compared average rates of outcomes between them to determine the effect of SWIS.

In the previous report from the trial, published in April 2023, we presented the main results of our analysis of impact which found little evidence of a beneficial effect on the primary and secondary social care outcomes. We also reported the results of cost-effectiveness and cost-consequences analysis, and implementation and process evaluation (IPE) findings, which explored how SWIS was implemented and experienced (Westlake et al., 2023).

In this final report, we turn our attention to educational outcomes and care outcomes over the longer term. This encompasses the impact of SWIS on measures of school attendance (percentage of unauthorised absences), 'Key Stage 4' educational attainment, and care outcomes in the 2022/23 academic year. This concludes the analysis set out in the study protocol that was published prior to data collection (Westlake et al., 2020a, 2022).

Summary of previous findings

When evaluating impact, we found no evidence of benefit from SWIS on any outcomes. The primary outcome, the rate of section 47 enquiries, was estimated as 5.5% higher in the SWIS arm than in the control arm, but this effect was not statistically significant. Likewise, we found no statistically significant effects on any of the secondary outcomes (CSC referrals, section 17 assessments, children entering care and mean number of days spent in care per child entering care).

In the implementation and process evaluation we concluded SWIS was implemented relatively well, despite the difficulties brought about by the recruitment crisis in CSC and the COVID-19 pandemic (Lepper, 2022). SWIS was generally well received by social workers, school staff and students. The non-statutory work was particularly valued, and those involved noted that accessibility of social workers and opportunities for informal interactions

were important. Most of the students we interviewed reported feeling positively overall about SWIS, feeling they trusted the social worker, and that the social worker understood them better than any school staff. Further work on the theory of change and logic model also supported the work of the pilots, suggesting the intervention was delivered broadly as intended but without the intended impact. Costs were also higher in the intervention arm than the control, meaning we could not conclude SWIS was cost-effective.

Objectives and research questions

This report contributes the final part of the impact analysis specified in the protocol. The research questions are:

- What was the impact of SWIS on the number of days children spend in care (across three academic years, from September 2020 to July 2023)?
- What was the impact of SWIS on educational attendance (recorded termly across two academic years, starting in September 2020) and attainment (recorded in June 2021 and 2022)?

Design and sample

This trial was set up to evaluate the effectiveness of the SWIS intervention on the need for CSC services, across 21 local authority areas in England. It was a pragmatic cluster RCT with two arms – a social worker assigned to and present in a school (intervention) versus usual CSC services alone (control), with mainstream secondary schools as the unit of randomisation.

Our strategy for randomisation is detailed elsewhere (Westlake et al., 2020a, 2023), but in summary, schools were randomised in clusters of up to 16 schools, with each local authority acting as a cluster. Mainstream schools were allocated to the SWIS intervention or usual practice in a 1:1 ratio.

All analyses were ‘intention to treat’ (i.e. schools were analysed in the groups to which they were randomised, regardless of level of adherence to the intervention) apart from the sensitivity analysis excluding non-compliant schools. For all analyses, school-level data was used, combined, and totalled over the whole school irrespective of the month or the year group. All completed analyses were pre-specified in the trial protocol and statistical analysis plan.

Results

We found no evidence of benefit from the SWIS intervention on the secondary outcomes; none of the intervention effect estimates were statistically significant at the 5% level of significance. Sensitivity analyses using multilevel Poisson and linear regression models with local authority random effects produced similar results and the same conclusions.

All 21 local authorities re-engaged with the study and participated in follow-up data collection activities. However, various discrepancies were identified in the submissions. The majority of local authorities (n=18) submitted data with discrepancies that were subsequently resolved. Two submitted data with no discrepancies, and one submitted data with discrepancies that were not possible to resolve, and therefore the data from this local authority was unable to be used in the final analysis. We do not consider this to affect our confidence in the results.

Discussion

In the previous report we concluded that this study showed no evidence of benefit from SWIS in relation to reducing the number of children entering care, or the number of days children spent in care, as well as the various other child protection indicators we measured. This follow-up analysis does not change that conclusion; it adds further weight to the notion that SWIS was not effective in achieving the social care outcomes policymakers intended it to change, within the time horizon of the original analysis or over the additional 12 months reported in this follow-up.

The analysis of educational outcomes presented in this report tells a similar story. Again, there was no evidence of benefit from SWIS on any of the educational outcomes we measured: the intervention did not seem to make any significant differences to educational attendance or attainment at Key Stage 4.

While this may not be the outcome advocates of SWIS had hoped for, it is at least an unambiguous and conclusive result. This was a robust RCT involving more than 250 schools, informed by pilot work, with sufficient sample size to detect meaningful effect size of the primary outcome. Throughout the study there have been low levels of loss to follow-up; indeed, all local authorities engaged with this final data extract and transferred data to the trial team. There were some discrepancies in the follow-up data obtained from local authorities, and some missing data within the educational datasets, though these were minor issues and do not detract from the analysis.

Randomised controlled trials offer the best way of testing whether an intervention has an effect on an outcome or set of outcomes. The study itself was very successful in achieving its aims. In light of this and considering the range of findings we presented in this and the previous report, we are confident that SWIS was not effective on any outcomes we measured.

Conclusions and Recommendations

The SWIS trial has a unique place in the (albeit still modest) canon of experimental research in social work. Following the publication of the primary analyses in 2023, we are more confident that it is the largest Children's Social Care (CSC) RCT in the world, involving around 280,000 children and young people. The completeness of data capture, even at this follow-up stage, is also unusual.

The results presented in this report reinforce the overall conclusions of a null finding we drew in the previous report, when we presented evidence in relation to the primary outcome and some secondary social care outcomes. This supports the Department for Education's decision to cease funding SWIS and not to scale up further. Moreover, the findings in relation to educational outcomes support previous research in education that suggests interventions need to be precisely targeted on education in order to act upon educational metrics.

A final recommendation from this study is that we should continue attempts to identify, develop, and robustly evaluate interventions that may be effective in helping children and reducing the need for social care services. Likewise, finding ways to improve educational outcomes, especially for disadvantaged children and young people, should also remain a driving objective.

INTRODUCTION

'Social Workers in Schools' (SWIS) is a social care intervention that is based in an educational setting. The rationale behind SWIS was that, by embedding social workers within secondary schools, it might be possible to reduce the need for some social care services. It was envisaged that social workers would do this by undertaking statutory social work with children and families, increasing opportunities for preventative work, and improving inter-agency collaboration between education and children's social care (CSC). A set of pilot studies, summarised below, had previously shown signs of promise (Westlake et al., 2020a). The trial was designed to test these assumptions rigorously and evaluate the effectiveness of SWIS.

SWIS was delivered over two full academic years (September 2020 to July 2022). The primary outcome, and most of the secondary outcomes, were related to changes in the need for CSC services. Schools were randomised to yield two groups – one which had a SWIS social worker allocated to them and one which did not. We collected data on the two groups of schools and compared average rates of outcomes between them to determine the effect of SWIS.

In the previous report from the trial, published in April 2023, we presented the main results of our analysis of impact which found little evidence of a beneficial effect on the primary and secondary social care outcomes. We also reported the results of cost-effectiveness and cost-consequences analysis, and implementation and process evaluation (IPE) findings, which explored how SWIS was implemented and experienced (Westlake et al., 2023).
In this final report, we turn our attention to educational outcomes and care outcomes over the longer term. This encompasses the impact of SWIS on measures of school attendance (percentage of unauthorised absences), 'Key Stage 4' educational attainment, and care outcomes in the 2022/23 academic year. This concludes the analysis set out in the study protocol that was published prior to data collection (Westlake et al., 2022, n.d.).

Scope and structure of this report

In this report we focus on the methods and findings from the analysis of educational outcomes and the follow-up analysis of care outcomes, and the conclusions that they lead us to. The remainder of this introductory chapter reminds readers of the history of SWIS in England, with a summary of the pilot studies and the results of the main trial analyses. Then, we outline the rationale for the current analysis, before presenting the results and our reflections on them in the following chapters.

The SWIS research programme: 2018–2024

Intervention development and pilot evaluation (2018–2020)

Three pilot studies were launched in 2018, in the local authorities of Stockport, Lambeth, and Southampton. The main focus of the pilots was to understand, qualitatively, the nature of SWIS and how it was implemented across a diverse range of schools and localities, and to create an initial programme theory and logic model for the intervention. A secondary objective was to test for indicative evidence of impact, using quasi-experimental methods. Both the qualitative theory-building and the quantitative impact analysis suggested SWIS was a promising intervention. Those involved – students, school staff, and social workers – felt it was generally positive, and there appeared to be some reductions in the need for child in need assessments and child protection investigations in schools who had SWIS compared to matched comparator schools who did not (Westlake et al., 2020a).

Full-scale RCT (2020–2024)

Following the SWIS pilot studies, funding became available for 21 local authorities in England to participate in a full-scale randomised controlled trial (RCT), and this group was chosen by What Works for Children's Social Care[1] (WWCSC) via competitive tender from a much larger group of applicant authorities. At the start of the RCT, England, alongside most of the rest of the world, was already dealing with the presence of the COVID-19 pandemic. However, over the course of the project, the full impact of COVID-19 materialised. Originally, the trial was intended to span one academic year (2020/21), but due to the disruption, the Department for Education extended the scale-up period twice, first to March 2022, and then to July 2022. The decision to extend to March 2022 was confirmed in August 2021, and the second extension was confirmed in March 2022.

The SWIS trial sought to evaluate how successfully it met the objectives of the SWIS intervention, through three complementary strands of analysis. First, an IPE explored *how* SWIS worked. This included how it was perceived and experienced by those involved, including children and young people. Second, an impact evaluation examined how SWIS schools fared in comparison with non-SWIS schools in relation to several key indicators. This included child protection, care, and educational outcomes, and focused on *whether* the SWIS intervention worked to reduce the need for services. Third, an economic evaluation measured the extent to which SWIS represented value for money.

Summary of previous findings

When evaluating impact, we found no evidence of benefit from SWIS on any outcomes (Westlake et al., 2023). The primary outcome, the rate of section 47 enquiries, was estimated as 5.5% higher in the SWIS arm than in the control arm, but this effect was not statistically significant. Likewise, we found no statistically significant effects on any of the secondary outcomes (CSC referrals, section 17 assessments, children entering care, and mean number of days spent in care per child entering care).

[1] In 2022, *What Works for Children's Social Care* merged with the *Early Intervention Foundation* to become a new organisation called *Foundations, the What Works Centre for Children and Families*.

In the implementation and process evaluation we concluded SWIS was implemented relatively well, despite the difficulties brought about by the recruitment crisis in CSC and the COVID-19 pandemic (Lepper, 2022). When various elements of implementation were taken into account, the majority of schools that were included in our rating system received a 'gold' rating, which suggests implementation was broadly successful.

As we found in the pilots, SWIS was generally well received by social workers, school staff, and students. The non-statutory work was particularly valued, and those involved noted that accessibility of social workers and opportunities for informal interactions were important. Most of the students we interviewed reported feeling positively overall about SWIS, feeling they trusted the social worker, and that the social worker understood them better than any school staff. Further work on the theory of change and logic model also supported the work of the pilots, suggesting the intervention was delivered broadly as intended but without the intended impact. Costs were also higher in the intervention arm than the control, meaning we could not conclude SWIS was cost-effective.

The current analysis

Longer-term follow-up of care outcomes

Given that we found a null result in relation to care outcomes in the previous analysis, it is reasonable to question why we might expect them to have changed over a longer follow-up period. We offer two reasons. First, care outcomes are at the far end of the pipeline of child protection measures, further downstream than section 47 child protection enquiries (the primary outcome in this study), and much further downstream than referrals and child in need assessments (other outcomes we examined). As such, it is plausible that any discernible effects on the rates of children entering care may be delayed. Whereas an effective intervention might exert downward pressure on rates of referrals in the short term, this is not likely to carry through to care outcomes until the medium or long term. This was the original rationale for including a longer-term follow-up in the protocolised plan, and following through on that plan is the second reason for conducting this analysis. The normalisation of protocols for RCTs in Children's Social Care is a relatively recent and welcome development, and it places the onus on researchers to carry out all analysis that was originally planned regardless of any previous results.

Nevertheless, as we noted in the previous report, there was no sign of 'green shoots' in relation to any of the outcome metrics – no indication of modest reductions towards the end of the previous trial period. These might have been expected if delayed or longer-term impacts were likely to follow. This may be seen to lower expectations of a positive result in the follow-up analysis, though effects can happen non-linearly when there is substantial complexity in both intervention and setting (Mouton, 2009; Petticrew, 2011).

Educational attainment and attendance

It is similarly important to justify the inclusion of educational outcomes. As noted above, a notable feature of the intervention is that SWIS straddled CSC and education; it was a social work intervention embedded within an education setting. The impetus for testing whether

SWIS had an impact on educational outcomes came from policymakers, but we propose a few good reasons to include this.

The first is based on findings from the pilot studies described above. While educational outcomes were not a focus of these studies, they uncovered examples whereby SWIS workers were actively trying to reduce attendance problems. For instance, "helping students maintain attendance" was observed as part of the role in several schools and there were examples of social workers physically collecting children and taking them to school. The following excerpt, from the pilot report (p. 42) illustrates this:

> *"And so if I were that young person's social worker I would be almost saying 'right [its] 8:30am, hello, what are we doing today, are we coming to school? Get your coat, get your bag, I'm going to take you in.' And actually that's what, with some of the attendance problems at [other school], that's what one of the social workers has done. She's done her journey, picked the little lad up and brought him into school…" (Social worker, observation recording of a termly review, p. 42)*

Although we expressed some concerns about this making the SWIS role too broad and indistinct from the role of Education Welfare or Attendance officers, we highlighted the possibility that school attendance might improve in schools with SWIS. The following excerpt is from the theory of change developed during the pilot studies:

> *"Frequent interactions with the social worker enable the young person to trust the social worker and to feel understood and supported. This can lead to improved school attendance and participation, better management of a young person's risks and improved outcomes." (p. 7)*

A second reason to explore this is the fact educational attendance and attainment are such high-profile issues. They have rarely been far from the top of the policy agenda since Tony Blair spoke of "Education, education, education" in his famous priority-setting speech in 1996 (Blair, 1996). This continues to be the case, and attendance is especially under the spotlight at the time of writing due to the decline in rates of school attendance during the period the SWIS trial has been running. Department for Education figures suggest the proportion of children persistently absent from school has doubled since the COVID-19 pandemic, to more than one in five (Department for Education, 2024b). In response, a number of initiatives have been established. In December 2021 the Attendance Action Alliance was launched to raise attendance. The group includes national leaders from different professions, and includes the Chief Social Worker for Children and Families and the President of the Association of Directors of Children's Services (UK Government, 2021). The Secretary of State for Education has also launched an expansion of attendance hubs designed to get children with low attendance records into school regularly, and said "tackling attendance is my number one priority" (Adams & Stacey, 2024; Department for Education, 2024a).

The international literature suggests school-based social workers may be effective in improving educational outcomes, though the results are mixed (Franklin et al., 2009), and people working in the sector have suggested improving attendance and discipline are the most important outcomes of school-based social work (Bye et al., 2009). In the UK, studies by the EEF have demonstrated that both attendance and attainment can be improved by

interventions (Edovald & Nevill, 2021). A wide range of types of intervention have targeted attendance, including strategies based on targeting specific barriers such as bullying and motivation, and approaches that offer benefits and punishments (Education Endowment Foundation, 2022). Overall, while there is some promising evidence, the general standard of the evidence is poor.

Even for those who may be unconvinced in the rationale for SWIS changing educational outcomes, a final reason to explore it relates to the fiduciary obligation to make the most of publicly funded research. Even though educational outcomes were not a primary focus for the study, the cost of adding this analysis was marginal, and doing so was a way of maximising the investment in the trial.

That said, the education literature suggests that interventions hoping to improve educational outcomes tend to need to be precisely targeted on these outcomes. It would therefore be bold to expect an intervention like SWIS to have an effect because it did not explicitly intend to. Alongside the SWIS pilot findings, particularly around a perceived reduction in absenteeism, this creates some ambiguity that the trial is well placed to address.

The local authorities and schools

This analysis is based on the same local authorities and schools as that of the previous report, and includes all authorities and schools involved in the scale-up. As we noted previously, the group represents different regions within England and comprises large rural counties, metropolitan districts, unitary authorities, and inner-city boroughs. The schools included exhibit a range of sizes, different governance structures, and varied Ofsted ratings (Westlake et al., 2023).

Research questions

This report contributes the final part of the impact analysis specified in the protocol. The research questions are:

- What was the impact of SWIS on the number of days children spend in care (across three academic years, from September 2020 to July 2023)?
- What was the impact of SWIS on educational attendance (recorded termly across two academic years, starting in September 2020) and attainment (recorded in June 2021 and 2022)?

METHODS

Design

This trial was set up to evaluate the effectiveness of the SWIS intervention on the need for CSC services. It was a pragmatic cluster RCT with two arms – a social worker assigned to and present in a school (intervention) versus usual CSC services alone (control), with mainstream secondary schools as the unit of randomisation.

The trial started on 2 September 2020 and the main report, published in April 2023 (Westlake et al., 2023), covered outcomes assessed up to 23 months from this date (31 July 2022). This is the second and final report, to present the 35-month follow-up for one social care outcome (days spent in care), and educational attendance and attainment outcomes assessed during the 2020/21 and 2021/22 academic years.

We conducted an extensive IPE to explore how the scale-up was implemented across the local authorities and the extent to which this was as intended. The impact evaluation was supplemented with an economic evaluation to consider the cost-effectiveness and cost-consequences of providing the intervention compared with usual CSC services. These have been reported and no further work was carried out in this follow-up phase.

Ethical approval and research governance

Cardiff University School of Social Sciences Research Ethics Committee granted ethical approval for the trial on 26 August 2020 (Ref: SREC/3865). The trial was registered with the International Standard Randomised Controlled Trial Number registry (ISRCTN) under the reference number ISRCTN90922032 (https://www.isrctn.com/ISRCTN90922032). A summary of the changes made to the original protocol can be found in Version 3 (Westlake et al., 2022). When the trial was extended, ethical approval was updated and amended (on 24 May 2021 and 29 March 2022). Data sharing agreements were established with all participating local authorities and updated each time the trial was extended. A data processing addendum between the Department for Education and Foundations was agreed and signed, enabling the research team access to de-identified routinely collected education data. Analysis was carried out in the Secure Research Service, part of the Office for National Statistics and all outputs were reviewed to ensure they could not identify an individual. Some histograms and boxplots could not be included for the education outcomes due to statistical disclosure control.

Trial setting and participants

The trial was conducted in mainstream secondary schools in England across 21 local authority areas. Eligibility criteria for participating schools were that they were a mainstream school within the selected local authority and able to submit data for the trial. Mainstream secondary schools are places of education for young people aged between 11 and 16 or 18 depending on the type of school provision (school years 7 to 11 or 13). Mainstream schools are funded by the government and provide free education for children, although a number of models exist, such as academies, free schools, and faith schools. All students attending the schools were eligible for the trial. All students were included in the routinely collected data submitted by schools to the Department for Education as part of their mandatory return (not trial specific) and made available from the National Pupil Database (NPD).

Intervention

The SWIS intervention physically located social workers within schools with the aim to build better working relationships with school staff, students, and families. Rather than working with students and families from a local authority office base and liaising with and providing advice to education professionals remotely, the social worker was embedded in the school (Westlake et al., 2022, 2020; see Appendix).

The control group received CSC services as usual. Children who were deemed by school staff to require the involvement of CSC were referred to the local authority, usually via telephone call or email to a multi-agency safeguarding hub or a referral and assessment team. Children judged by CSC to meet the threshold for involvement were allocated a social worker as usual, but social workers were not based in the school.

Impact analysis and methods

Outcomes

- Number of days in care over 35 months
- Educational attendance (percentage of unauthorised absences)
- Education attainment.

Covariates

- Allocation – trial allocation (intervention or control)
- School size – total number of enrolled students in each school
- Percentage of students eligible for free school meals in each school
- Number of days in care in the year 2018/19

- Educational attendance (percentage of unauthorised absences) in the year 2018/19
- Educational attainment in the year 2018/19.

Year 2018/19 was the baseline.

National Pupil Database (NPD) outcomes

For all students attending participating schools, the following data from NPD was requested and made available anonymised at an individual level before aggregating it to school level for the analysis. One application was made in spring 2023 requesting data to address the following outcomes.

Educational attendance: unauthorised absences (%)

This was the percentage of sessions children were absent without being authorised, out of the number of sessions possible, per school. Educational attendance was available via the absence dataset. It was defined by the number of sessions missed due to unauthorised absence per term (autumn, spring, summer) out of the number of sessions possible per term.

Educational attainment at Key stage 4

Key stage 4 (age 14–16) is the last period of compulsory education in England, at the end of secondary school when most children are 16 years of age, most pupils take General Certificate of Secondary Education (GCSE) examinations in English, maths and additional subjects (nine in total). The following outcomes are reported for all pupils completing GCSE exams in 2021 and 2022 or subject to equivalent grading exercise (a subset of those pupils included in the trial):

- Attainment 8, a score calculated by adding up the points assigned for a pupil's grades across eight subjects, with English and maths counted twice. We calculated the mean attainment 8 score per school. This was a continuous variable.
- English Baccalaureate (EBacc) Average Point Score, a score calculated by averaging the points assigned across five subject areas (English language and literature, maths, the sciences, a language, and geography or history) including all results at all grades. We calculated the mean EBacc Average Point Score per school. This was a continuous variable.
- Percentage English and maths, grade 5 and above. First, we created a binary variable coded 1 if the pupil achieved a level 5 or higher in both English and maths, and coded 0 otherwise. Then, we calculated the percentage of students that achieved grade 5 and above in English and maths per school. This was a continuous variable.

Recruitment procedure and consent considerations

Participating local authorities were chosen through a competitive tender process managed by the funder (WWCSC). Each chosen local authority invited schools and gained the agreement from up to 16 schools to be put forward for randomisation.

Individual-level data was not provided to the trial team, therefore consent from individuals or schools was not required for the impact evaluation. All outcomes were counted and then combined to school-level totals by the local authorities before securely transferring to the trial team. We relied on local authorities to provide us with accurate data; data cleaning checks were performed by the trial data manager following each return, to ensure there was no missing data and to search for any outliers. Any data queries and anomalies were raised with local authorities.

Randomisation[2]

The recruitment of schools was completed for each local authority before that list of schools was passed on to the trial statistician for randomisation. The statistician was not involved in the recruitment of schools. Schools were considered recruited when the local authority confirmed that they had agreed to take part, and randomised in clusters of up to 16 schools, with each local authority acting as a cluster. Mainstream schools were allocated to the SWIS intervention or usual practice in a 1:1 ratio while minimising covariate imbalance (balancing covariates are listed below) within and across clusters using a balancing method for clusters (Carter & Hood, 2008). This was implemented in R version 3.6.0 (R Core Team, 2020) using code provided as supplementary material to Carter and Hood (2008). For the first cluster, the standard imbalance metric (Equation 1 in Carter & Hood, 2008) was used. The allocation of subsequent clusters was conditional on clusters already allocated, using a modified imbalance metric (Equation 2 in Carter & Hood, 2008).

The trial statistician had sole access to the imbalance metrics for schools already randomised during the randomisation process, thus minimising the risk of allocations for new local authorities being predictable. Balancing variables were school size (total number of students enrolled in year 7 and upward) and percentage of students eligible for free school meals. Both balancing variables were weighted equally and adjusted for in the final statistical analysis by including them as covariates in the regression models. The rationale for selecting these variables is reported in detail elsewhere (Westlake et al., 2022). Briefly, school size and number of students is likely to have an effect on how the social worker works within the school, and eligibility for free school meals is a reliable indicator that a child is from a low-income household.

The trial statistician notified the trial team of the allocation once the schools in a local authority were randomised, and they communicated this to the funder (the grant manager)

[2] Material from this section is reproduced from the main report, published previously (Westlake et al., 2023).

via email. The funder then indicated the allocation of schools to local authorities. The statistician performing the analysis was not involved in the randomisation.

Data collection and management

A data lead was identified at each local authority and supplied with a trial specific proforma (in Microsoft Excel) for returning the trial outcome. A single request was made in the follow-up period to update the trial proforma with days in care totals up to 31 July 2023 for children who had entered care from 1 September 2020 to 31 July 2022. The data lead updated the proforma which contained the total number of days in care as well as the breakdown of days in different placement types and days the child was missing. Data was reported by school, school year group, and by month and returned to the trial team. Data was combined, and no individual-level data was sent.

Data cleaning and transfer

The trial data manager resolved all queries with local authorities once the data was returned. All data was stored on Cardiff University servers in restricted folders available only to those on the trial team who required access.

Education data

Education attainment and attendance data collected and maintained by the National Pupil Database (NPD), Department for Education was accessed by the study team via their Secure Research Service (SRS) – a remote access data safe haven (hosted by the Office for National Statistics (ONS)) as per their data sharing processes (DfE, 2024).

The study team provided ONS SRS with the list of SWIS trial schools to be identified (URN/school number) with a single flag (0 or 1) to distinguish between control and intervention group schools. Additional variables ingested to supplement the routine data included:

- Local authority details
- Schools that received the Supervision for DSL scale-up study (Stokes et al., 2021), a separate but relevant study that took place at the same time as the SWIS trial and in some of the same schools
- Free school meal percentage
- Number of students.

Datasets and years requested and provided were:

- School Level Data: Absence
- School Level Data: Key Stage 4 Performance Tables [2016/17 to 2021/22]
- Absence [2005/06 to 2021/22]

- Key Stage 4 [2001/02 to 2021/22]
- Child Looked After [2005/06 to 2020/21]
- Child In Need [2008/09 to 2020/21]
- School Census Pupil [2001/02 to 2022/23].

Sample size[3]

At the trial design stage, the funder advised that a minimum of 280 mainstream schools would be available to be randomised. Assuming an average of 925 students per school, an average base rate of 12.6 section 47 enquiries per 1,000 students per school year under usual practice conditions, and a between-cluster coefficient of variation of 0.45 of the primary outcome (section 47 rate) within arms (these estimates were all based on comparator school data from the three pilot studies in Lambeth, Stockport, and Southampton) (Westlake et al., 2020b), randomising 140 mainstream schools to each group provided 80% power to detect a decrease in rates from 12.6 to 10.48 per 1,000 pupils per school year (i.e. a rate ratio of 0.832). This was based on a two-sided 5% type I error level when using a Poisson regression model accounting for cluster randomisation. The power was calculated in R version 3.6.0 (R Core Team, 2020) based on the sample size formula reported in Hayes and Bennett (1999).

The minimum detectable effect size with 80% for 268 mainstream schools was a decrease in section 47 rates from 12.6 to 10.43 per 1,000 pupils per school years (i.e. a rate ratio of 0.828).

Statistical methods

The analysis procedures described in this section involve modelling the outcome data using a statistical method called regression which 'corrects' any estimates of the intervention effect for potential confounding factors. All analyses described below were 'intention to treat' (i.e. schools were analysed in the groups to which they were randomised, regardless of level of adherence to the intervention) apart from the sensitivity analysis excluding non-compliant schools. Statistical tests and confidence intervals were two-sided. There was less than 5% missing data in the outcomes and baseline covariates therefore no imputation was performed. For all analyses, school-level data was used, combined, and totalled over the whole school irrespective of the month or the year group. All analyses were performed in Stata version 17 (StataCorp LLC, 2021). All completed analyses were pre-specified in the trial protocol and statistical analysis plan.

Descriptive analysis

Baseline demographics for schools, outcome rates at baseline and over 23 months (for educational attendance and attainment) or 35 months (for number of days in care), overall and by arm, were summarised by means and standard deviations for continuous normally

[3] Material from this section is reproduced from the main report, published previously (Westlake et al., 2023).

distributed variables. They were summarised by medians and interquartile ranges for continuous skewed variables, and by frequencies and percentages for categorical variables. Histograms and boxplots were used to assess the normality assumptions (see Appendix). Outcomes were standardised per year per 1,000 students where appropriate (i.e. for rates) to allow for a fair comparison between arms and across time points.

Primary analysis

The primary outcome analysis was reported in the main report (Westlake et al., 2023).

Secondary analysis

For days spent in care, educational attainment and attendance, first, to estimate an unadjusted effect, we fitted a linear regression model with cluster robust standard errors (Mansournia et al., 2021) with the outcome as the dependent variable and allocation as the explanatory variable, and calculated Glass's Delta. Then a multivariable linear regression model with cluster robust standard errors to reflect the clustering structure (schools within local authorities) was used to compare outcomes between SWIS schools and control school. An adjusted analysis takes into account differences in baseline characteristics between groups that may influence the outcome. The adjusted model was fitted using the outcome as the dependent variable and allocation as the explanatory variable and accounted for the following covariates:

- Outcome for the 2018/19 academic year (baseline), if available
- Percentage of students eligible for free school meals
- Number of students enrolled per school.

The latter two covariates were included to account for their status as balancing variables in the randomisation (Kahan & Morris, 2012). Schools were excluded from adjusted analyses if outcome data for the 2018/19 academic year (baseline) were missing. The intervention effects estimated from both models were presented as point estimates with cluster robust standard errors, 95% confidence intervals and p-values.

For the rate of children taken into care, we followed the same approach as outlined above, but using a Poisson rather than a linear regression model, with the number of students per school as the exposure scaling variable (because we would expect more outcome events in schools with more students), to estimate unadjusted and adjusted intervention effects (model coefficients on the logarithmic scale transformed into incidence rate ratios). Glass's Delta (used to calculate effect sizes) was not calculated because it is only defined for continuous variables. The p-values generated from the secondary outcome analyses were adjusted for multiplicity using Hochberg's step-up procedure.

Sensitivity analysis

We fitted two-level mixed-effects models with random local authority effects and reported the intraclass correlation coefficient (ICC). The p-values generated from the sensitivity analyses were adjusted for multiplicity using Hochberg's step-up procedure.

Subgroup analysis

For educational attainment and attendance, a subgroup analysis explored the possibility that effects of the intervention varied by the percentage of students eligible for free school meals. We repeated the multilevel linear regression secondary analysis and additionally included an interaction term between allocation and percentage of students eligible for free school meals. The p-values generated from the subgroup analyses were adjusted for multiplicity using Hochberg's step-up procedure.

FINDINGS

Impact evaluation

In this section we present the results of our analysis of how SWIS affected CSC and education outcomes. We begin by setting out the flow of participants as they were enrolled into the study and randomised to be allocated to each arm of the trial. We move on to summarise data discrepancies that were identified. Then we present a descriptive analysis, followed by the main analysis of the remaining secondary outcomes (the primary outcome and other secondary outcomes having already been presented in Westlake et al, 2023).

Enrolment and allocation

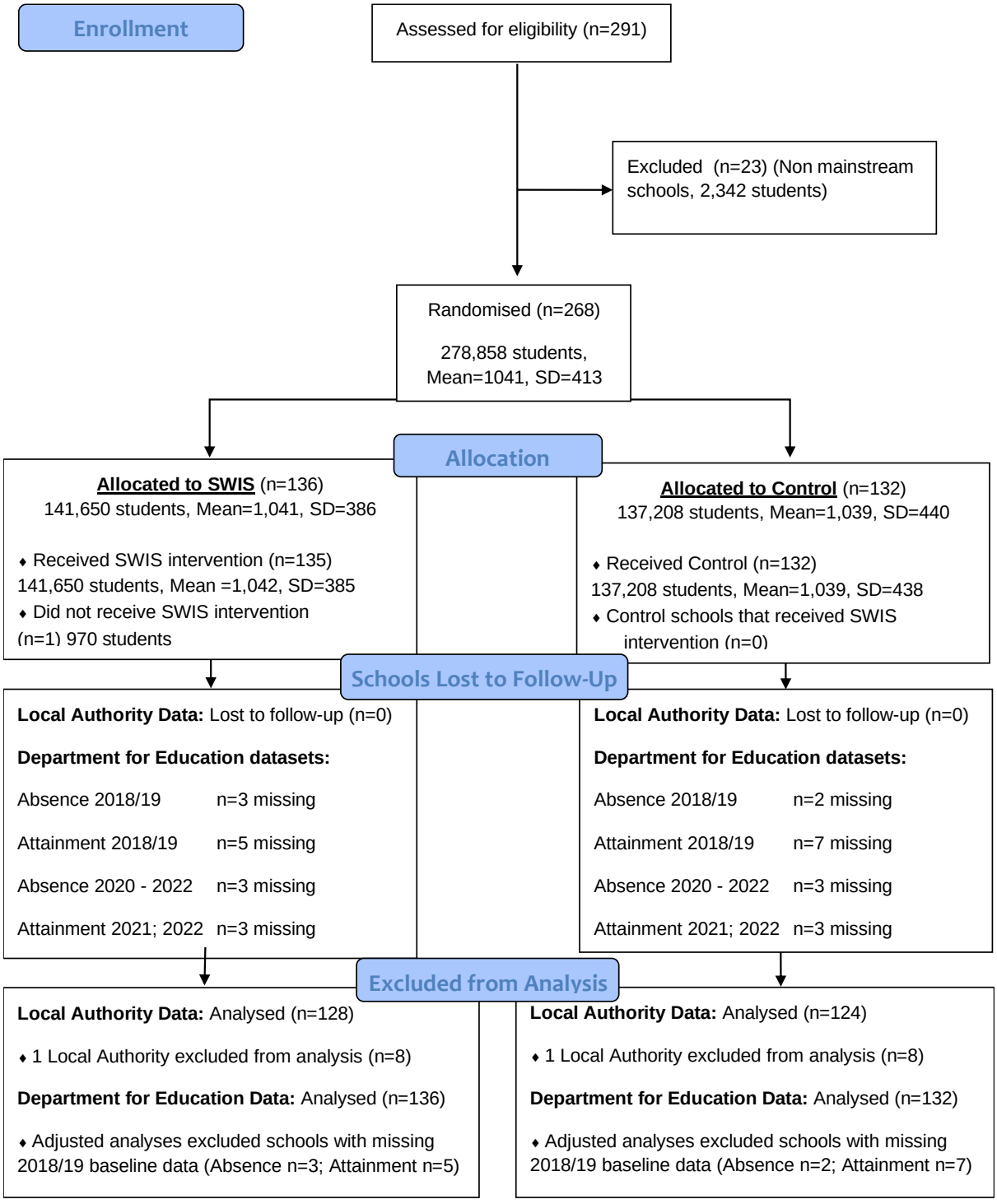
As shown in Figure 1, at enrolment to the trial, 291 schools were assessed for eligibility and 23 schools were excluded from the trial due to being non-mainstream.[4] A total of 268 schools were randomised, within which there were 277,835 students (with a mean number of 1,041 and a standard deviation of 413).

At allocation, 136 of these schools were randomised to the SWIS intervention. There were 141,650 students (with a mean number of 1,041 per school and a standard deviation of 386) in the intervention arm. A total of 135 of these schools received the SWIS intervention (140,680 students, with a mean of 1,042 and a standard deviation of 386). One school with 970 students did not receive the SWIS intervention as the local authority was not able to recruit a social worker for this school. The other 132 schools were randomised to the control, and these included 137,208 students (with a mean number of 1,039 and a standard deviation of 440). All control schools continued with 'business as usual' practice.

In the SWIS and control arm, zero schools were entirely lost to follow-up or discontinued the intervention. Some schools were not included in all analyses either due to data concerns or because they were missing from the Department for Education data extracts. All 136 schools in the SWIS arm and all 132 schools in the control arm were included in some outcome analysis. The school pupil numbers reported here were collected from publicly available data at baseline.

[4] Non-mainstream schools were randomised using simple randomisation (as opposed to minimisation as used when randomising the mainstream schools), as a fair way of deciding which would receive the intervention, but were excluded from the trial.

Figure 1. CONSORT diagram for the SWIS trial follow-up (mainstream schools)
Shows the details of the schools at different stages of the SWIS trial, from enrolment of schools into the trial, allocation to the SWIS or Control Arm, follow-up and analysis



Follow-up data collection and cleaning

All 21 local authorities re-engaged with the study and participated in follow-up data collection activities. However, various discrepancies were identified in the submissions when comparing the submissions to the previously collected data as part of data cleaning checks.

This process included checking for:

- New cases in dataset not previously reported, or previously reported cases no longer reported in follow-up dataset
- Changes to the distribution of days in placement type or changes to the number of days the child was reported as being missing
- Decreases to the total number of days in care reported
- Unexpected numbers of days in care reported for cases marked as being open.

The data manager liaised with data leads at local authorities to resolve queries and make appropriate corrections to the follow-up data. While the majority of discrepancies were corrected, a number remained which were deemed to be the most accurate reflection of the data available. These discrepancies between the baseline and follow-up data have been retained in the dataset as changes and are discussed in further detail below.

The majority of local authorities (n=18) submitted data with discrepancies that were subsequently resolved. Two submitted data with no discrepancies, and one submitted data with discrepancies that were not possible to resolve, and therefore the data from this local authority was unable to be used in the final analysis. Local authorities reported that the discrepancies arose from a variety of issues, including changes in staff, new reporting practices or procedures with different reporting software, and retrospective changes updated by external agencies or providers.

A total of 141 cases were found to contain discrepancies across the 18 local authorities where resolvable discrepancies existed. Similar patterns were found across all local authorities when discrepancies were coded and categorised into those with errors or reported changes. The greatest discrepancy was the error in reporting days in care (n=56). Local authorities told us miscalculations (increase or decrease) occurred as a result of:

- Manual data entry errors
- Incorrect reports generated with wrong cut-off dates
- Records amended since last data return.

Changes in reporting days in care (n=7) were attributed to:

- Children being removed periodically from care (e.g. due to offending)
- Confusion regarding the legal status of a child.

The second greatest discrepancy was the error in reporting placement type (n=31). Local authorities told us miscalculations (increase or decrease) occurred as a result of:

- Manual data entry errors

- Miscalculation or missed from previous data return
- Duplication or typographical error.

Changes in reporting placement type (n=7) were attributed to:

- Changes in how court-ordered placements are categorised
- Confusion regarding the legal status of a child
- Retrospective changes by an external agency or provider.

One local authority did not provide an explanation for any changes to reported placement types.

Twenty-two errors were found in reports of new cases (n=22). These were found to have occurred as a result of:

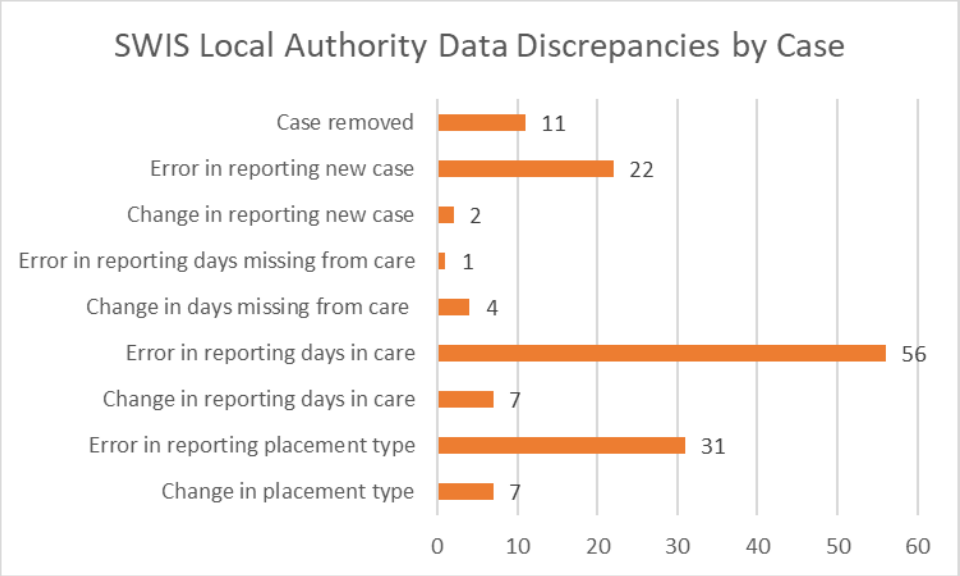
- Data entry errors
- System recording issues
- Omissions from previous data returns.

Two changes in reporting new cases (n=2) were attributed to manual data matching. Eleven cases were found to be removed from datasets (n=11). These were reported as:

- Data entry errors
- No record of case on file
- Child was in residential school
- Child left school before care started.

The least number of discrepancies was found in the days missing from care category. Four changes were recorded (n=4) due to data duplications, and one error was recorded (n=1) as being omitted from the previous return.

Figure 2. Diagram of SWIS local authority data discrepancies by case
Shows the number of case categories (e.g. errors or changes) with discrepancies



The decision not to include data from one local authority in the final analysis was made after the usual query process between the trial data manager and local authority data leads did not clarify most of the queries raised when the data was reviewed. In most cases reported, the total number of days in care and days in placement type differed significantly from what had previously been reported and were contradictory to each other. Sixteen cases were missing from what was previously reported and three new cases were reported. These discrepancies could not be reconciled, and no explanation was provided for the changes. Due to a lack of confidence in the data from this local authority, we took the decision to exclude it from the final analysis.[5]

We continue to have confidence in the data provided by the other 20 local authorities. While discrepancies were also discovered in those data, they were reconciled and resulted in a consistent dataset for analysis.

Descriptive analysis

Descriptive statistics of the baseline covariates are presented in Table 1 (excluding schools in the local authority that was removed due to unresolvable discrepancies in the data returned) and in Table 2. This confirms that good balance was achieved between arms in the randomisation balancing variables (school size and percentage of students eligible for free school meals).

For care and educational outcomes, we present the unstandardised outcomes (over 35 and 23 months, respectively). For care data, we also present the outcomes per year per 1,000

[5] The primary analysis included in the main trial report (tables 15 and 16) have been re-run, excluding this local authority. The p-values remained non-significant and the confidence intervals still included 0. (Unadjusted analysis: mean difference -18.179, p-value 0.428; adjusted analysis: mean difference -20.009, p-value 0.374).

students, as we would expect schools with more students to experience more outcome events.

Table 1. Descriptive statistics of school demographics and care outcomes at baseline (academic year 2018/19), unstandardised (i.e. per school across the entire study period) and per year per 1,000 students

	Unstandardised			Per year per 1,000 students		
	SWIS	Control	Total	SWIS	Control	Total
	Mean (SD) or median [IQR]					
Number of schools randomised, N	128	124	252	-	-	-
Size (number of students enrolled)	1042.8 (388.8)	1038.5 (427.1)	1040.7 (407.3)	-	-	-
% eligible for free school meals	23.2 (9.8)	23.2 (11.3)	23.2 (10.5)	-	-	-
Number of children entering care	1 [0, 3]	1 [0, 2]	1 [0, 2]	1.2 [0, 3.1]	1.0 [0, 2.3]	1.2 [0, 2.8]
Total number of days in care*	331 [149, 827]	351 [115, 852]	345 [130, 852]	317.8 [147.6, 762.6]	338.5 [91.7, 956.2]	326.7 [121.6, 849.9]
Number of days in care per child taken into care*	148.6 [76.8, 322.5]	148.3 [65, 302]	148.3 [69, 314]	147.1 [63.9, 339.7]	121.0 [67.7, 400.9]	138.3 [64.9, 380.8]

***Based on 92 schools in the SWIS arm and 81 schools in the control arm that had students who entered care. Excludes one local authority due to data discrepancies.

School size and percentage of students eligible for free school meals at baseline were approximately normally distributed, so are summarised by the mean and standard deviation (SD). Care outcomes at baseline were positively skewed, so are summarised by the median and interquartile range (IQR) (Table 1); see histograms and boxplots in the Appendix.

Table 2: Descriptive statistics of school demographics and educational outcomes at baseline (academic year 2018/19)

	SWIS	Control	Overall
	Mean (SD)		
Number of schools randomised, N	136	132	268
% eligible for free school meals	24.1 (10.7)	24.2 (12.1)	24.2 (11.4)
Number of students enrolled	1041.5 (386.5)	1039.5 (439.9)	1040.5 (412.9)
% of unauthorised absences	2.07 (1.29)	2.08 (1.20)	2.07 (1.24)

Mean attainment 8 score	45.83 (7.81)	45.12 (6.80)	45.48 (7.33)
Mean EBacc Average Point Score	3.97 (0.86)	3.91 (0.75)	3.94 (0.81)
% of students achieved grade 5+ in English and Maths	34.73 (14.92)	33.93 (13.19)	34.34 (14.08)

Source: ONS

School size, percentage of students eligible for free school meals and educational outcomes at baseline were approximately normally distributed, so are summarised by the mean and standard deviation (SD) (Table 2).

Table 3. Descriptive statistics of care outcomes over 35 months (academic years 2020/21 and 2021/22), unstandardised (i.e. per school across the entire study period) and per year per 1,000 students

	Unstandardised			Per year per 1,000 students		
	SWIS	**Control**	**Total**	**SWIS**	**Control**	**Total**
	Mean (SD) or median [IQR]					
Number of schools randomised, N	124	128	252	-	-	-
Number of children entering care	3 [1, 5]	3 [1, 6]	3 [1, 5]	1.2 [0.5, 1.8]	1.1 [0.4, 1.8]	1.1 [0.5, 1.8]
Total number of days in care*	1516.5 [711.5, 2386.5]	1382.5 [677, 2327.5]	1447.5 [698.5, 2352.5]	494.2 [270.4, 780.1]	433.8 [255.1, 777.0]	455.3 [262.6, 778.0]
Number of days in care per child taken into care*	387.8 [277.2, 509.0]	408.0 [282.5, 563.5]	401.6 [280.7, 531.0]	124.8 [80.3, 174.5]	127.4 [81.8, 218.4]	126.0 [80.8, 194.0]

***Based on 112 schools in the SWIS arm and 104 schools in the control arm that had students who entered care. Excludes one local authority due to data discrepancies.

Care outcomes at 35 months were positively skewed, so are summarised by the median and interquartile range (IQR) (Table 3); see histograms and boxplots in the Appendix.

Table 4. Descriptive statistics of educational outcomes over 23 months (academic years 2020/21 and 2021/22)

	SWIS	Control	Overall
	Mean (SD)		
Number of schools randomised, N	136	132	268

% of unauthorised absences	3.38 (2.28)	3.48 (2.10)	3.43 (2.19)
Mean attainment 8 score	48.91 (7.61)	48.47 (6.94)	48.70 (7.28)
Mean EBacc Average Point Score	4.28 (0.85)	4.23 (0.77)	4.25 (0.81)
% of students achieved grade 5+ in English and maths	44.53 (14.11)	43.23 (14.098)	43.89 (14.09)

Source: ONS

Educational outcomes at 23 months were approximately normally distributed, so are summarised by the mean and standard deviation (SD) (Table 4).

Outcome analysis

We found no evidence of benefit from the SWIS intervention on the secondary outcomes; none of the intervention effect estimates were statistically significant at the 5% level of significance (Tables 5–16). Sensitivity analyses using multilevel Poisson and linear regression models with local authority random effects produced similar results and the same conclusions as the models above.

The results from the subgroup analysis of the interaction effects between SWIS and percentage of students eligible for free school meals on educational attendance and attainment showed that for each unit increase in the percentage of students eligible for free school meals, the percentage of students who achieved grade 5+ in English or maths increases by 0.187 percentage points (95% CI: 0.054 to 0.320) in the SWIS arm compared to the control arm. However, it was necessary to adjust for multiplicity using the Hochberg step-up procedure to control the family-wise error rate across the subgroup analyses performed for the percentage eligible for FSM on educational outcomes (testing 12 individual hypotheses). After this adjustment, none of the p-values (main effects or interaction terms) are statistically significant at the 5% level of significance (Tables 23–26).

School size, percentage of students eligible for free school meals and outcome values in the year 2018/19 (baseline) were used as covariates in all adjusted models and are not the focus of our interest; we are only interested in the intervention effect (SWIS).

Detailed results and tables are provided below.

Number of children entering care

Unadjusted analysis

The rate of children entering care is estimated to be 12.2% higher in the SWIS arm compared to the control arm. However, the 95% CI includes 1; therefore, the effect is not statistically significant at the 5% level of significance.

Table 5. Unadjusted Poisson regression analysis of the rate of children entering care over 35 months (academic years 2020/21 and 2021/22) (N=252)

	IRR	SE	95% CI	p-value
Control	Reference			
SWIS	1.122	0.114	0.920, 1.368	0.257

Note: IRR is the incidence rate ratio, SE is the cluster-robust standard error, and CI is the confidence interval.

Adjusted analysis

The rate of children entering care is estimated to be 9.9% higher in the SWIS arm compared to the control arm after adjusting for percentage of students eligible for free school meals, baseline number of children entering care and school size. However, the 95% CI includes 1; therefore, the effect is not statistically significant at the 5% level of significance.

Table 6. Adjusted Poisson regression analysis of the number of children entering care over 35 months (academic years 2020/21 and 2021/22) (N=252)

	IRR	SE	95% CI	p-value
Control	Reference			
SWIS	1.099	0.119	0.890, 1.358	0.380
% FSM	1.017	0.119	1.004, 1.031	0.009
Number of children entering care 2018/19	1.065	0.024	1.019, 1.114	0.005
School size	0.999	<0.001	0.999, 1.000	0.001

Note: IRR is the incidence rate ratio, SE is the cluster-robust standard error, CI is the confidence interval, and % FSM is the percentage of students eligible for free school meals.

Number of days spent in care per child entering care

Unadjusted analysis

The mean number of days spent in care per child entering care is estimated to be 29.848 days lower in the SWIS arm compared to the control arm. However, the 95% CI includes 0; therefore, the difference is not statistically significant at the 5% level of significance. The Glass's Delta is 0.145 (-.0169, 0.458), which shows that the average days spent in care per child entering care in the SWIS and control arms differs by approximately 0.145 standard deviations.

Table 7. Unadjusted linear regression analysis of the number of days spent in care per child entering care over 35 months (academic years 2020/21 and 2021/22) (N=158)

	Mean difference	SE	95% CI	p-value
Control	Reference			
SWIS	-29.848	37.132	-107.567, 47.870	0.431

Note: SE is the cluster-robust standard error, and CI is the confidence interval. Excluded schools with 0 students entering care during the trial period or baseline period.

Adjusted analysis

The number of days spent in care per child entering care is estimated to be 29.337 days lower in the SWIS arm compared to the control arm after adjusting for percentage of students eligible for free school meals, baseline number of days spent in care per child entering care and school size. However, the 95% CI includes zero; therefore, the difference is not statistically significant at the 5% level of significance. Only schools reporting at least one student entering care during the trial period (N=158) were included in this analysis.

Table 8. Adjusted linear regression analysis of the number of days spent in care per child entering care over 35 months (academic years 2020/21 and 2021/22) (N=158)

	Mean difference	SE	95% CI	p-value
Control	Reference			
SWIS	-29.337	37.505	-107.835, 49.161	0.444
% FSM	-2.083	1.405	-5.025, 0.858	0.155
Days in care per child entering care 2018/19	-0.009	0.056	-0.127, 0.108	0.871
School size	-0.031	0.030	-0.093, 0.032	0.314

Note: SE is the cluster-robust standard error, CI is the confidence interval, and % FSM is the percentage of students eligible for free school meals. Excludes schools with 0 students entering care during trial period or baseline period.

Educational attendance – unauthorised absences (%)

Unadjusted analysis

The percentage of unauthorised absences was estimated to be 0.104 percentage points lower in the SWIS arm compared to the control arm. However, the 95% CI includes zero; therefore, the result is not statistically significant at the 5% level. A Glass's Delta of 0.049 (95% CI: -0.19, 0.29) means the percentage of unauthorised absences in the SWIS arm and the control arm differ by approximately 0.05 standard deviations.

Table 9 – Unadjusted linear regression analysis of the effect of SWIS on the percentage of unauthorised absences over 23 months (academic years 2020/21 and 2021/22) (N=262)

	Mean difference	SE	95% CI	p-value
Control	Reference			
SWIS	-0.104	0.192	-0.504, 0.296	0.594

Source: ONS

Note: SE = standard error, CI = confidence interval.

Adjusted analysis

After adjusting for the baseline percentage of unauthorised absences, percentage of students eligible for free school meals, and school size, the percentage of unauthorised absences was estimated to be 0.080 percentage points lower in the SWIS arm compared to the control arm. However, the 95% CI includes zero; therefore, the result is not statistically significant at the 5% level.

Table 10 – Adjusted linear regression analysis of the effect of SWIS on the percentage of unauthorised absences over 23 months (academic years 2020/21 and 2021/22) (N=262)

	Mean difference	SE	95% CI	p-value
Control	Reference			
SWIS	-0.080	0.170	-0.434, 0.273	0.641
% Unauthorised absences in 2018/19	1.358	0.094	1.162, 1.554	<0.001
% eligible for FSM	0.016	0.012	-0.009, 0.041	0.198
Number of students enrolled	-0.0002	0.0002	-0.0006, 0.0002	0.341

Source: ONS

Note: SE = standard error, CI = confidence interval, FSM = free school meals.

Educational attainment: Attainment 8 score

Unadjusted analysis

The mean attainment 8 score was estimated to be 0.438 points higher in the SWIS arm compared to the control arm. However, the 95% CI includes zero; therefore, the result is not statistically significant at the 5% level. A Glass's Delta of -0.063 (95% CI: -0.305, 0.179) means the mean attainment 8 score in the SWIS arm and the control arm differ by 0.063 standard deviations.

Table 11 – Unadjusted linear regression analysis of the effect of SWIS on the mean attainment 8 score over 23 months (academic years 2020/21 and 2021/22) (N=262)

	Mean difference	SE	95% CI	p-value
Control	Reference			
SWIS	0.438	0.700	-1.018, 1.900	0.537

Source: ONS

Note: SE = standard error, CI = confidence interval.

Adjusted analysis

After adjusting for the baseline mean attainment 8 score, percentage of students eligible for free school meals, and school size, the mean attainment 8 score was estimated to be 0.239 points lower in the SWIS arm compared to the control arm. However, the 95% CI includes zero; therefore, the result is not statistically significant at the 5% level.

Table 12 – Adjusted linear regression analysis of the effect of SWIS on the mean attainment 8 score over 23 months (academic years 2020/21 and 2021/22) (N=256)

	Mean difference	SE	95% CI	p-value
Control	Reference			
SWIS	-0.239	0.383	-1.039, 0.561	0.541
Mean attainment 8 score in 2018/19	0.882	0.037	0.804, 0.960	<0.001
% eligible for FSM	-0.012	0.018	-0.050, 0.026	0.506
Number of students enrolled	0.001	0.0006	0.0002, 0.0028	0.026

Source: ONS

Note: SE = standard error, CI = confidence interval, FSM = free school meals. Excludes 12 schools missing baseline attainment data.

EBacc Average Point Score

Unadjusted analysis

The mean EBacc Average Point Score was estimated to be 0.053 points higher in the SWIS arm compared to the control arm. However, the 95% CI includes zero; therefore, the result is not statistically significant at the 5% level. A Glass's Delta of -0.069 (95% CI: -0.311, 0.173) means the mean EBacc score in the SWIS and control arm differ by approximately 0.069 standard deviations.

Table 13 – Unadjusted linear regression analysis of the effect of SWIS on the mean EBacc Average Point Score over 23 months (academic years 2020/21 and 2021/22) (N=262)

	Mean difference	SE	95% CI	p-value
Control	Reference			
SWIS	0.053	0.074	-0.101, 0.208	0.480

Source: ONS

Note: SE = standard error, CI = confidence interval.

Adjusted analysis

After adjusting for the baseline mean EBacc Average Point Score, percentage of students eligible for free school meals, and school size, the mean EBacc score was estimated to be 0.009 points lower in the SWIS arm compared to the control arm. However, the 95% CI includes zero; therefore, the result is not statistically significant at the 5% level.

Table 14 – Adjusted linear regression analysis of the effect of SWIS on the mean EBacc Average Point Score over 23 months (academic years 2020/21 and 2021/22) (N=256)

	Mean difference	SE	95% CI	p-value
Control	Reference			
SWIS	-0.009	0.044	-0.100, 0.082	0.835
Mean EBacc Average Point Score in 2018/19	0.925	0.030	0.862, 0.988	<0.001
% eligible for FSM	0.003	0.002	-0.0008, 0.007	0.106
Number of students enrolled	0.0001	0.00007	-6.68e-06, 0.0003	0.061

Source: ONS

Note: SE = standard error, CI = confidence interval, FSM = free school meals. Excludes 12 schools missing baseline attainment data.

Achieved grade 5 or above in English and maths (%)

Unadjusted analysis

The percentage of students that achieved grade 5 or above in English and maths was estimated to be 1.305 percentage points higher in the SWIS arm compared to the control arm. However, the 95% CI includes zero; therefore, the result is not statistically significant at the 5% level. A Glass's Delta of -0.093 (95% CI: -0.335, 0.150) means the percentage of grade 5+ in the SWIS and control arm differ by approximately 0.093 standard deviations.

Table 15 – Unadjusted linear regression analysis of the effect of SWIS on the percentage of students with grade 5 or over in English and maths over 23 months (academic years 2020/21 and 2021/22) (N=262)

	Mean difference	SE	95% CI	p-value
Control	Reference			
SWIS	1.305	1.320	-1.450, 4.059	0.335

Source: ONS

Note: SE = standard error, CI = confidence interval.

Adjusted analysis

After adjusting for the baseline percentage of students who achieved grade 5+ in English and Maths, percentage of students eligible for free school meals, and school size, the percentage of students was estimated to be 0.558 percentage points higher in the SWIS arm compared to the control arm. However, the 95% CI includes zero; therefore, the result is not statistically significant at the 5% level.

Table 16 – Adjusted linear regression analysis of the effect of SWIS on the percentage of students with grade 5 or over in English and maths over 23 months (academic years 2020/21 and 2021/22) (N=256)

	Mean difference	SE	95% CI	p-value
Control	Reference			
SWIS	0.558	0.847	-1.208, 2.324	0.517
% grade 5+ in English and maths in 2018/19	0.853	0.045	0.759, 0.947	<0.001
% eligible for FSM	-0.013	0.066	-0.151, 0.125	0.843
Number of students enrolled	0.002	0.002	-0.002, 0.006	0.302

Source: ONS

Note: SE = standard error, CI = confidence interval, FSM = free school meals. Excludes 12 schools missing baseline attainment data.

Sensitivity analyses

Multilevel Poisson regression with local authority random effects and cluster-robust standard errors

The rate of children entering care is estimated to be 12.3% higher in the SWIS arm compared to the control arm after adjusting for percentage of students eligible for free school meals, baseline number of children entering care and school size. However, the 95% CI includes 1; therefore, the effect is not statistically significant at the 5% level of significance.

Table 17. Multilevel Poisson regression analysis with local authority random effects for the number of children entering care over 35 months (academic years 2020/21 and 2021/22) (N=252)

	Mean difference	SE	95% CI	p-value
Fixed effects				
Control	Reference			
SWIS	1.123	0.117	0.916, 1.378	0.265
% FSM	1.032	0.007	1.018, 1.046	<0.001

Number of children entering care in 2018/19	1.016	0.022	0.974, 1.059	0.462
School size	1.000	<0.001	0.999, 1.000	0.126
Variance components				
Variance of random intercepts	0.182	0.109	0.057, 0.588	

Note: IRR is the incidence rate ratio, SE is the cluster-robust standard error, CI is the confidence interval, and % FSM is the percentage of students eligible for free school meals.

The number of days spent in care per child entering care is estimated to be 29.336 days lower in the SWIS arm compared to the control arm after adjusting for percentage of students eligible for free school meals, baseline number of days spent in care per child entering care and school size. However, the 95% CI includes zero; therefore, the difference is not statistically significant at the 5% level of significance. The ICC is 0.007 (95% CI: <0.001, 0.9997), which shows the proportion of the total variance in days spent in care that is accounted for by the clustering in local authorities is low.

Table 18. Multilevel linear regression with local authority random effects for the number of days spent in care per child entering care over 35 months (academic years 2020/21 and 2021/22) (N=158)

	Mean difference	**SE**	**95% CI**	**p-value**
Fixed effects				
Control	Reference			
SWIS	-29.336	36.975	-101.806, 43.135	0.428
% unauthorised absences in 2018/19	-2.012	1.391	-4.737, 0.714	0.148
% eligible for FSM	-0.009	0.056	-0.119, 0.100	0.868
Number of students enrolled	-0.030	0.030	-0.089, 0.028	0.310
Variance component				
Variance of random intercepts	239.203	1580.639	0.0006, 101000000	
Residual variance	1.464	0.256	1.039, 2.062	

Note: SE is the cluster-robust standard error, CI is the confidence interval, and % FSM is the percentage of students eligible for free school meals. Excludes schools with 0 students entering care during trial period or baseline period.

The percentage of unauthorised absences is estimated to be 0.078 percentage points lower in the SWIS arm compared to the control arm, after adjusting for the baseline percentage, percentage of students eligible for free school meals, and school size. However, the 95% CI

includes zero; therefore, the result is not statistically significant at the 5% level. An ICC of 0.063 (95% CI: 0.007, 0.390) shows the proportion of the total variance in percentage of unauthorised absences explained by the clustering of local authorities is relatively low.

Table 19. Multilevel linear regression with local authority random effects for the percentage of unauthorised absences over 23 months (academic years 2020/21 and 2021/22) (N=262)

	Mean difference	SE	95% CI	p-value
Fixed effects				
Control	Reference			
SWIS	-0.078	0.164	-0.400, 0.244	0.636
% unauthorised absences in 2018/19	1.295	0.093	1.112, 1.478	<0.001
% eligible for FSM	0.024	0.012	0.0002, 0.047	0.048
Number of students enrolled	-0.0002	0.0002	-0.0006, 0.0002	0.337
Variance component				
Variance of random intercepts	0.098	0.103	0.012, 0.769	
Residual variance	1.464	0.256	1.039, 2.062	

Source: ONS
Note: SE = standard error, CI = confidence interval, FSM = free school meals.

The mean attainment 8 score is estimated to be 0.239 points lower in the SWIS arm compared to the control arm, after adjusting for baseline score, percentage of students eligible for free school meals, and school size. However, the 95% CI includes zero; therefore, the result is not statistically significant at the 5% level. An ICC of 0.069 (95% CI: 0.022, 0.201) shows the proportion of the total variance in attainment 8 score explained by the clustering of local authorities is relatively low.

Table 20. Multilevel linear regression with local authority random effects for the mean average attainment 8 score over 23 months (academic years 2020/21 and 2021/22) (N=256)

	Mean difference	SE	95% CI	p-value
Fixed effects				
Control	Reference			
SWIS	-0.239	0.374	-0.972, 0.494	0.523
Mean attainment 8 score in 2018/19	0.862	0.038	0.787, 0.937	<0.001

% eligible for FSM	-0.029	0.022	-0.072, 0.014	0.182
Number of students enrolled	0.001	0.0006	0.0002, 0.0025	0.019
Variance component				
Variance of random intercepts	0.496	0.301	0.151, 1.631	
Residual variance	6.654	0.544	5.668, 7.810	

Source: ONS
Note: SE = standard error, CI = confidence interval, FSM = free school meals. Excludes 12 schools missing baseline attainment data.

The mean EBacc Average Point Score is estimated to be 0.009 points lower in the SWIS arm compared to the control arm, after adjusting for baseline score, percentage of students eligible for free school meals, and school size. However, the 95% CI includes zero; therefore, the result is not statistically significant at the 5% level. An ICC of 0.038 (95% CI: 0.005, 0.228) shows the proportion of the total variance in EBacc score explained by the clustering of local authorities is low.

Table 21. Multilevel linear regression with local authority random effects for the mean EBacc Average Point Score over 23 months (academic years 2020/21 and 2021/22) (N=256)

	Mean difference	SE	95% CI	p-value
Fixed effects				
Control	Reference			
SWIS	-0.009	0.043	-0.093, 0.075	0.833
Mean EBacc score in 2018/19	0.912	0.032	0.848, 0.975	<0.001
% eligible for FSM	0.003	0.002	-0.002, 0.007	0.229
Number of students enrolled	0.0001	<0.001	-5.05e-07, 0.0003	0.051
Variance component				
Variance of random intercepts	0.003	0.003	0.0004, 0.02329	
Residual variance	0.082	0.006	0.071, 0.095	

Source: ONS
SE = standard error, CI = confidence interval, FSM = free school meals. Excludes 12 schools missing baseline attainment data.

The percentage of students who achieved grade 5+ in English and maths is estimated to be 0.556 percentage points higher in the SWIS arm compared to the control arm, after adjusting for baseline percentage of grade 5+ in English and maths, percentage of students eligible for free school meals, and school size. However, the 95% CI includes zero; therefore, the result is not statistically significant at the 5% level. An ICC of 0.079 (95% CI: 0.020, 0.262) shows the proportion of the total variance in percentage of students achieving grade 5+ in English and maths explained by the clustering of local authorities is relatively low.

Table 22. Multilevel linear regression with local authority random effects for the percentage of students who achieved grade 5+ in English and maths over 23 months (academic years 2020/21 and 2021/22) (N=256)

	Mean difference	SE	95% CI	p-value
Fixed effects				
Control	Reference			
SWIS	0.556	0.829	-1.069, 2.180	0.503
% grade 5+ in English and maths in 2018/19	0.911	0.046	0.720, 0.902	<0.001
% eligible for FSM	-0.074	0.074	-0.220, 0.071	0.317
Number of students enrolled	0.002	0.002	-0.002, 0.005	0.335
Variance component				
Variance of random intercepts	3.544	2.361	0.960, 13.080	
Residual variance	41.328	5.897	31.245, 54.665	

Source: ONS

Note: SE = standard error, CI = confidence interval, FSM = free school meals. Excludes 12 schools missing baseline attainment data.

Subgroup analysis of the interaction effects between SWIS and percentage of students eligible for free school meals on educational attainment unauthorised absences

We now explore whether the intervention effects of SWIS vary according to percentage of students eligible for free school meals. We found no evidence of interaction effects between allocation and percentage eligible for free school meals with regards to the percentage of unauthorised absences, attainment 8 score, or EBacc Average Point Score; the 95% CIs include zero; therefore, are not statistically significant at the 5% significance level (Tables 23–25).

Table 23. Linear regression analysis exploring the interaction effects between percentage eligible for free school meals and the intervention on the percentage of unauthorised absences over 23 months (academic years 2020/21 and 2021/22) (N=262)

	Mean difference	SE	95% CI	p-value	Adjusted p-value

SWIS	-0.510	0.365	-1.272, 0.252	0.178	0.751
% eligible for FSM	0.008	0.017	-0.027, 0.043	0.624	0.751
SWIS x FSM interaction	0.018	0.018	-0.019, 0.055	0.326	0.751
% Unauthorised absences in 2018/19	1.356	0.095	1.158, 1.554	<0.001	-
Number of students enrolled	-0.0002	0.0002	-0.0006, 0.0002	0.344	-

Source: ONS

Note: SE = standard error, CI = confidence interval, FSM = free school meals. P-values adjusted for multiplicity using the Hochberg step-up procedure.

Table 24. Linear regression analysis exploring the interaction effects between percentage eligible for free school meals and the intervention on the mean attainment 8 score over 23 months (academic years 2020/21 and 2021/22) (N=256)

	Mean difference	SE	95% CI	p-value	Adjusted p-value
SWIS	-0.484	0.655	-1.850, 0.882	0.468	0.751
% eligible for FSM	-0.017	0.020	-0.060, 0.026	0.416	0.751
SWIS x FSM interaction	0.010	0.028	-0.047, 0.068	0.716	0.751
Mean attainment 8 score in 2018/19	0.882	0.038	0.803, 0.960	<0.001	-
Number of students enrolled	0.001	0.0006	0.0002, 0.0028	0.026	-

Source: ONS

Note: SE = standard error, CI = confidence interval, FSM = free school meals. P-values adjusted for multiplicity using the Hochberg step-up procedure.

Table 25. Linear regression analysis exploring the interaction effects between percentage eligible for free school meals and the intervention on the mean EBacc Average Point Score over 23 months (academic years 2020/21 and 2021/22) (N=256)

	Mean difference	SE	95% CI	p-value	Adjusted p-value

SWIS	-0.031	0.077	-0.192, 0.130	0.692	0.751
% eligible for FSM	0.003	0.002	-0.002, 0.008	0.235	0.751
SWIS x FSM interaction	0.0009	0.003	-0.005, 0.007	0.751	0.751
Mean EBacc score in 2018/19	0.925	0.031	0.861, 0.989	<0.001	-
Number of students enrolled	0.0001	0.00007	-7.13e-06, 0.0003	0.062	-

Source: ONS

Note: SE = standard error, CI = confidence interval, FSM = free school meals. P-values adjusted for multiplicity using the Hochberg step-up procedure.

We found evidence of an interaction effect between allocation and percentage eligible for FSM with regards to the percentage of students who achieved grade 5+ in English and maths. For each unit increase in the percentage of students eligible for free school meals, the percentage of students who achieved grade 5+ in English or maths increases by 0.187 percentage points [95% CI: 0.054, 0.320] in the SWIS arm compared to the control arm. However, after adjustment for multiplicity using the Hochberg step-up procedure to control the family-wise error rate, the p-values are no longer statistically significant at the 5% level of significance (0.035 adjusted to 0.385, and 0.008 to 0.096).

Table 26 – Linear regression analysis exploring the interaction effects between percentage eligible for free school meals and the intervention on the percentage of students with grade 5+ in English and maths over 23 months (academic years 2020/21 and 2021/22) (N=256)

	Mean difference	SE	95% CI	p-value	Adjusted p-value
SWIS	-3.954	1.752	-7.609, -0.299	0.035	0.385
% eligible for FSM	-0.099	0.070	-0.246, 0.047	0.174	0.751
SWIS x FSM interaction	0.187	0.064	0.054, 0.320	0.008	0.096
% grade 5+ in English & maths in 2018/19	0.854	0.045	0.760, 0.949	<0.001	-
Number of students enrolled	0.002	0.002	-0.002, 0.005	0.299	-

Source: ONS
Note: SE = standard error, CI = confidence interval, FSM = free school meals. P-values adjusted for multiplicity using the Hochberg step-up procedure.

STRENGTHS AND LIMITATIONS

Strengths

The study as a whole, and this follow-up analysis in particular, has various strengths. This was a robust RCT involving more than 250 schools, informed by pilot work, with sufficient sample size to detect meaningful effect size of the primary outcome. By following up the schools for an additional 12 months for the Days in Care outcome we can be confident that any delayed intervention impact had time to mature a further 12 months. At this stage, we continued to have low levels of loss to follow-up; indeed, all local authorities engaged with this final data extract and transferred data to the trial team.

Through accessing the educational data from the Department for Education, we could be confident that the records of attendance and attainment were as objective and up to date as possible. Finally, as already mentioned, despite the educational outcomes not being a primary focus for the study, the cost of adding this analysis was marginal, and doing so was a way of maximising the investment in the trial, upholding the fiduciary obligation to make the most of publicly funded research.

Limitations

The main challenge experienced for this follow-up was receiving data from local authorities that contradicted previously received and reported data. For most discrepancies, there was a plausible explanation, and ultimately this is an inherent challenge of working with any routinely collected data. When extracts are received from a live database with ongoing data entry from the local authority staff, issues such as these are common.

The changes to the data had no impact on the results of the analysis; however, it does pose a question of reproducibility if subsequent data extracts were requested from these same local authorities. It was unfortunate that one local authority could not be included in the analysis, the process for understanding how data had changed could not be resolved in the time frame available. Data was also missing for some schools within the education datasets. These were not due to data matching errors (indeed all schools were identified and matched to), there was simply no data from the year requested. This is most likely due to new school data return systems. That said, we did re-run the analysis of days in care that was undertaken previously, and reached the same conclusions.

At a more conceptual level, there is some distance between a school level social care intervention and the educational outcomes we have analysed here, and there are gaps in the theory of change that might link SWIS to educational outcomes. This is particularly true of attainment measures, which were not included in the pilot studies.

These relatively minor challenges do not substantially detract from the general value of using routinely collected data in impact studies, though our experiences do highlight the need to strive for high-quality data reporting across public services.

DISCUSSION

In the previous report we concluded that this study showed no evidence of benefit from SWIS in relation to reducing the number of children entering care, or the number of days children spent in care, as well as the various other child protection indicators we measured. This follow-up analysis does not change that conclusion; it adds further weight to the notion that SWIS was not effective in achieving the social care outcomes policymakers intended it to change, within the time horizon of the original analysis or over the additional 12 months reported in this follow-up. This is notwithstanding the broadly positive findings from the IPE which were included in the previous report, particularly around how the intervention was perceived and experienced. Professionals from education and social care, as well as children and young people, all gave examples of how social workers were making a positive contribution to the schools they were based in. Those involved clearly felt SWIS was beneficial in various ways, yet this did not translate to the policy-relevant outcomes we measured.

The analysis of educational outcomes presented in this report tells a similar story as that of the social care outcomes. Again, there was no evidence of benefit from SWIS on any of the educational outcomes we measured: the intervention did not seem to make any significant differences to educational attendance or attainment at Key Stage 4. As noted earlier, there were also gaps in the theory of change that might link SWIS to educational outcomes – particularly attainment.

While this may not be the outcome advocates of SWIS hoped for, it is at least an unambiguous and conclusive result. Many practitioners involved in SWIS expressed disappointment when our main findings were published, and some local authorities have continued to deliver SWIS after the Department for Education discontinued funding for the intervention. Randomised controlled trials such as this study offer the best way of testing whether an intervention has an effect on an outcome or set of outcomes, but these authorities clearly feel SWIS has benefits that are separate from the outcomes the trial examined. The study itself was very successful in achieving its aims, particularly around recruitment and retention of schools and of data capture. In light of this and considering the range of findings we presented in this and the previous report, we are confident that SWIS was not effective on any outcomes we measured.

CONCLUSIONS AND RECOMMENDATIONS

The results presented in this report reinforce the overall conclusions of a null finding we drew in the previous report, when we presented evidence in relation to the primary outcome and some secondary social care outcomes. This supports the Department for Education's decision to cease funding SWIS and not to scale up further. Moreover, the findings in relation to educational outcomes support previous research in education that suggests interventions need to be precisely targeted on education in order to act upon educational metrics.

The 'Social Workers in Schools' (SWIS) trial has a unique place in the (albeit still modest) canon of experimental research in social work. Following the publication of the primary analyses in 2023, we are more confident that it is the largest Children's Social Care (CSC) RCT in the world, involving around 280,000 children and young people. The completeness of data capture, even at this follow-up stage, is also unusual.

A final recommendation from this study is that we should continue attempts to identify, develop, and robustly evaluate interventions that may be effective in helping children and reducing the need for social care services. The relatively positive qualitative findings reported in the previous report suggests there is a need for greater support within schools. Likewise, finding ways to improve educational outcomes, especially for disadvantaged children and young people, should also remain a driving objective.

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APPENDIX

Impact analysis histograms and boxplots

Figure A1. Histogram: Number of students enrolled in each school

Histogram showing the distribution of the number of students enrolled in each school

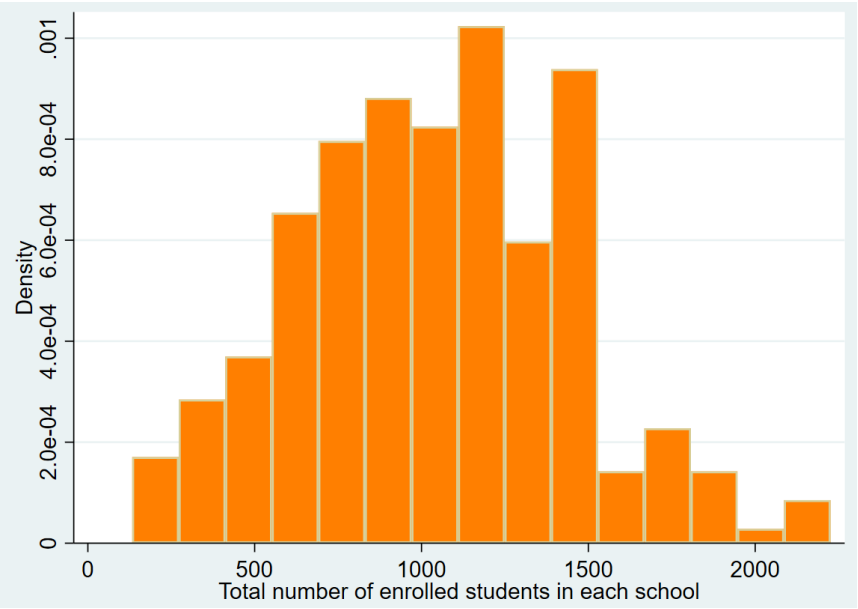


Figure A2. Histogram: Percentage of students eligible for free school meals

Histogram showing the distribution of the percentage of students eligible for free school meals

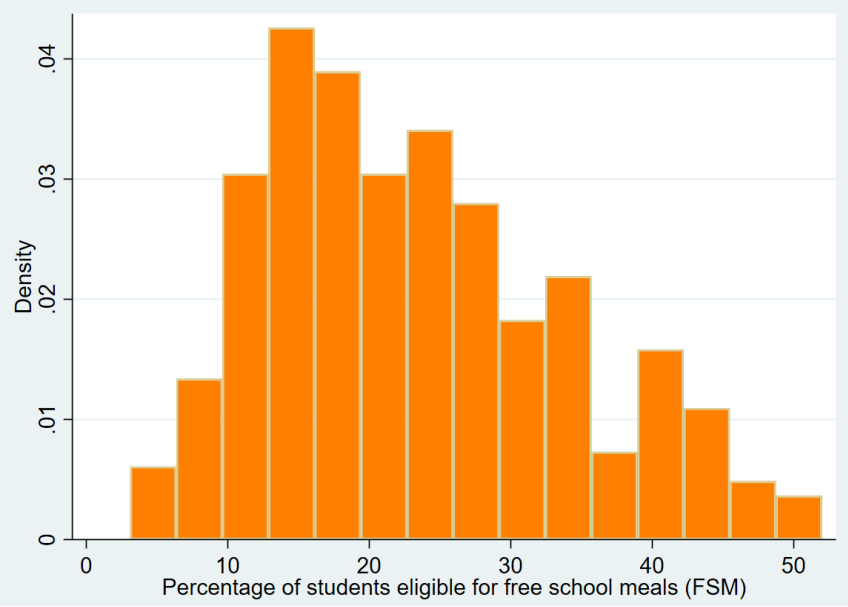


Figure A3. Histogram: Baseline rate of children/young people entering care

Histogram showing the distribution of the rate of children/young people entering care in the year 2018/19 per 1,000 students

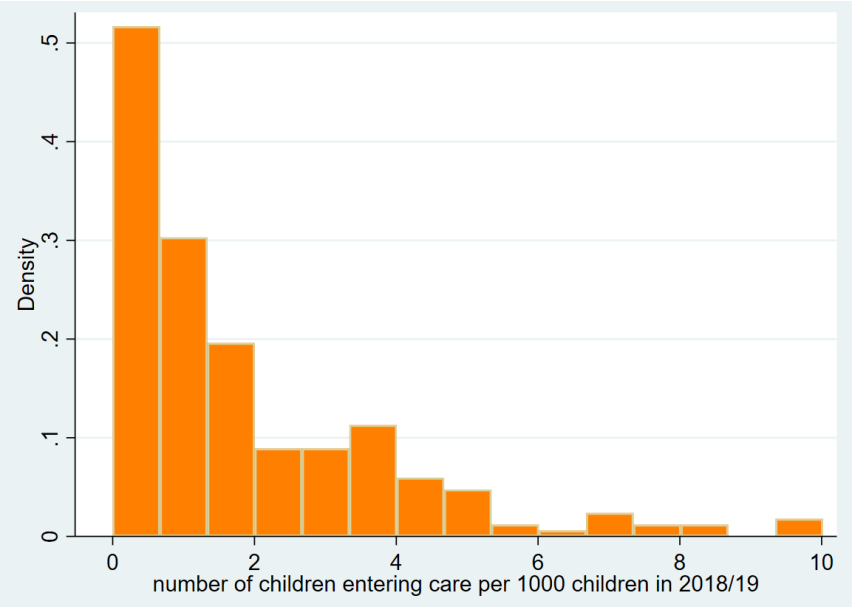


Figure A4. Histogram: Baseline days spent in care per child entering care

Histogram showing the distribution of the days spent in care per child entering care in the year 2018/19 per 1,000 students

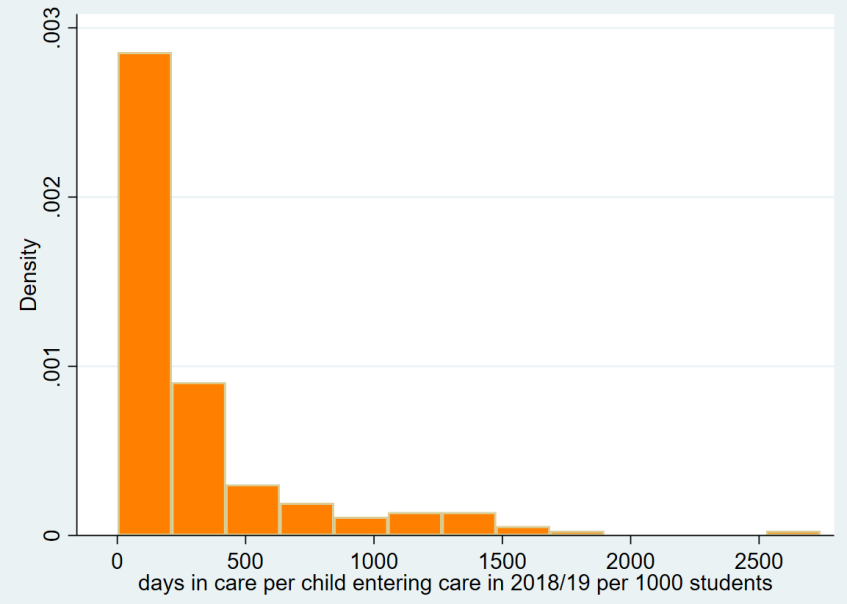


Figure A5. Boxplot: Baseline number of students enrolled in each school by arm

Boxplots showing the distribution of the number of students enrolled in each school in the year 2018/2019 per 1,000 students in intervention arm and control arm

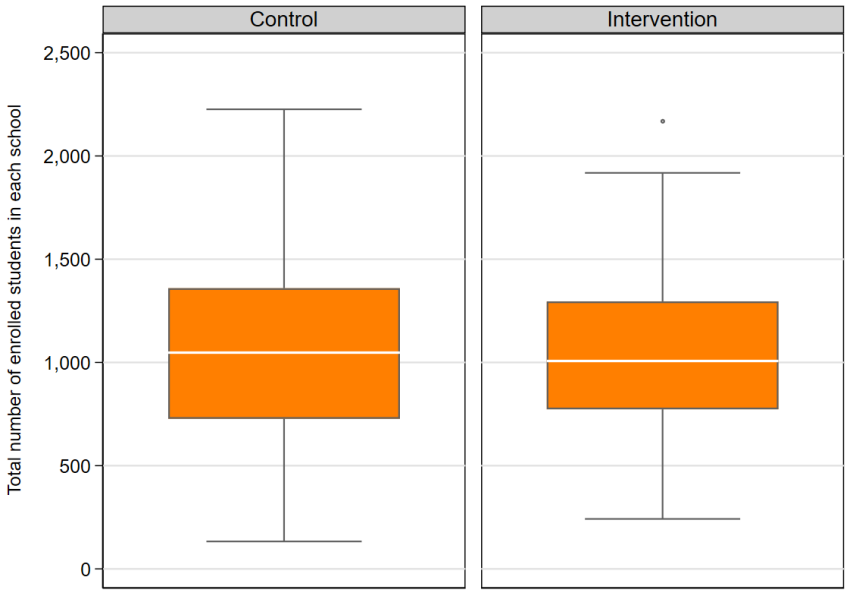


Figure A6. Boxplot: Baseline percentage of students eligible for free school meals by arm

Boxplots showing the distribution of the percentage of students eligible for free school meals in the year 2018/2019 per 1,000 students in intervention arm and control arm

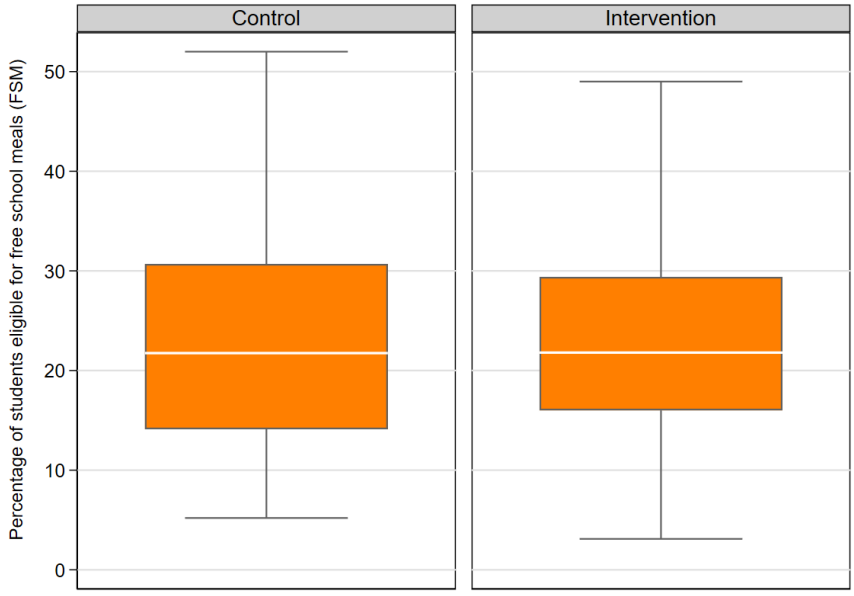


Figure A7. Boxplot: Baseline rate of children/young people entering care by arm
Boxplots showing the distribution of the rate of children/young people entering care in the year 2018/2019 per 1,000 students in intervention arm and control arm

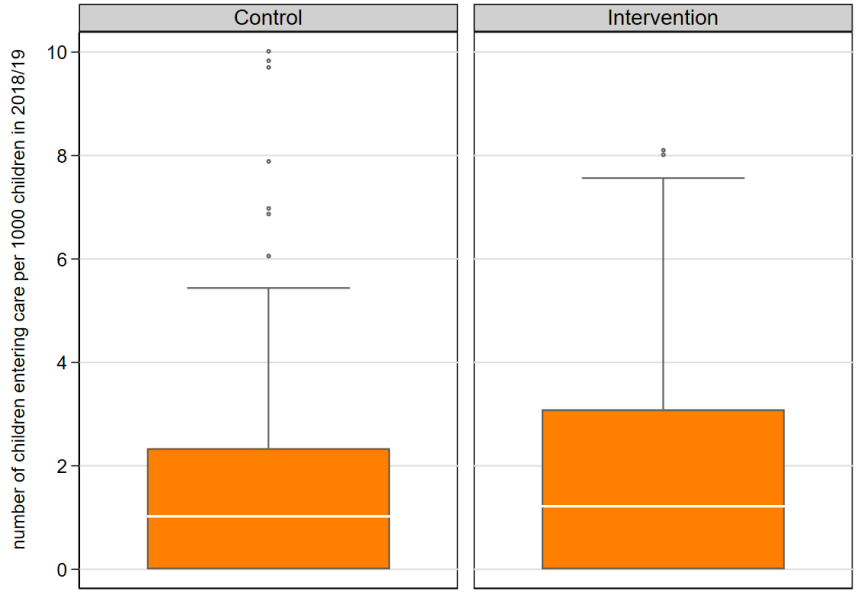
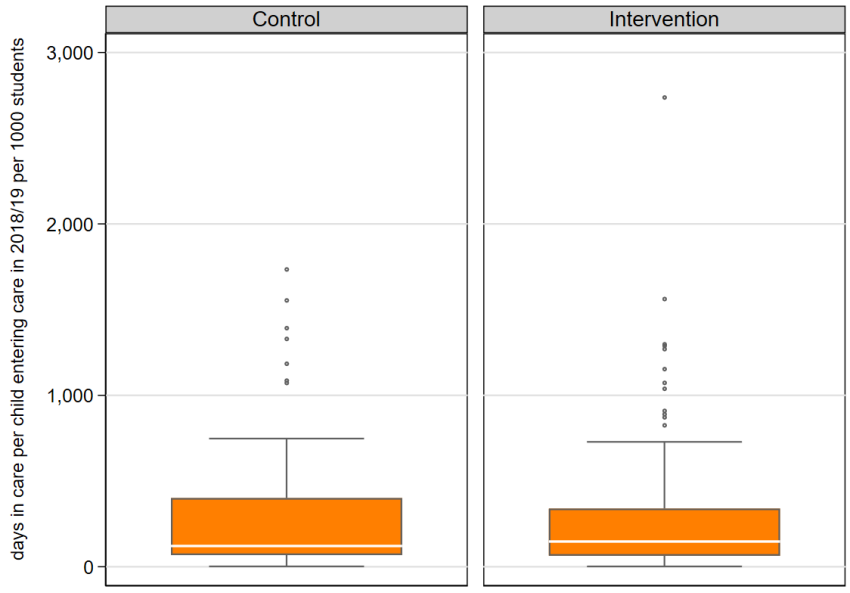


Figure A8. Boxplot: Baseline number days spent in care per child entering care by arm
Boxplots showing the distribution of the number days spent in care per child taken into care in the year 2018/2019 per 1,000 students in intervention arm and control arm



What Works *for* Children's Social Care

EARLY INTERVENTION FOUNDATION

Coming together as What Works for Early Intervention & Children's Social Care

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