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45 million lost hours?

Understanding usage of the two-year-old free childcare offer

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Fairer Start Local

Working together so that all children
have a stronger start and a brighter future

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This report was produced by Nesta following work carried out in partnership with Leeds City Council, Stockport Metropolitan Borough Council, the Greater Manchester Combined Authority and City of York Council. Bury, Bolton, Stoke on Trent and North Yorkshire councils also participated in the

randomised control trial testing new communication approaches. The contents of this report are Nesta's analysis of the research conducted in partnership. The recommendations are Nesta's and do not intend to represent the views of our local authority partners.

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About Nesta

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Executive summary

4

1. Introduction

9

2. Project 1: a large-scale randomised control trial testing communication interventions to increase take-up of the two-year-old offer

11

3. Project 2: levels of attendance in ECEC

20

4. Recommendations

27

Conclusion

32

Endnotes

33

Executive summary

Children from low-income backgrounds in England are missing out on the full benefits of funded early childhood education and care (ECEC) at age two. At present, take-up of the government's ECEC entitlement scheme for two year olds is persistently hovering at 72%, and our research finds that those who do take up the offer have lower attendance rates than less disadvantaged children accessing the same childcare settings.

If the pattern of attendance found in our three partner Local Authorities is similar across England, we estimate that there could be as many as 16 million hours per year of missed ECEC learning for disadvantaged two year olds enrolled in the government's funded scheme. If we include the hours missed by eligible children whose families don't take up the two-year-old-offer, disadvantaged children in England could be missing out on as many as 45 million hours of ECEC learning per year. Without new efforts from central government, and more support for local authorities and the childcare sector, the two-year-old offer risks failing to fulfil its potential as a tool for closing educational disadvantage.

The current patchwork of programmes that make up childcare support in England has been criticised for being complicated and confusing, with calls for redesign to simplify the childcare offer for families. A central plank of policy is the two-year-old offer, which entitles children from low-income families to 15 hours of free childcare per week. It is a major government intervention supporting policy ambitions to close the disadvantage gap in the early years, costing just under £500m a year in 2020.

However, nearly a decade since its introduction, take up of the offer is relatively low at 72%. The introduction of the offer has not been associated with a step-change in the attainment of disadvantaged pupils at the end of reception year, with the gap in school readiness in England being relatively stable over the past few years and pre-pandemic.

The fairer start local partnership – Nesta, Leeds City Council, Stockport Metropolitan Borough Council, the Greater Manchester Combined Authority and City of York Council – together with the Behavioural Insights Team, undertook work to better understand engagement with the offer and test ways to improve its uptake. Our work focused on two key challenges.

1. Take-up of the offer remains low at just 72% nationally.
2. Little is known about the attendance rates of children enrolled in the offer.

Increasing uptake of the two-year-old offer – a randomised control trial across six local authorities

This project tested whether simple changes to the letter inviting parents to apply for the two-year-old offer would increase uptake. We ran a randomised control trial (RCT) across six local authorities measuring uptake of the offer following letters inviting parents (N = 4,704) to apply. In this trial, we designed two letters for comparison:

- > a 'business as usual letter' combining multiple standard practices from existing communications in these local authorities
- > an alternative letter incorporating social norms messaging and implementation intention – two concepts from the behavioural science literature that have been shown to increase responses to official communications.

There were no statistically significant differences found between the two letters in terms of applications or eventual uptake of the two-year-old offer. Given this result, it appears that behavioural science-informed tweaks to the letter may not make a difference compared with a good business as usual letter.

While this trial had a slightly lower sample than expected and encountered difficulties in matching all unique participant IDs to uptake data, we are confident in concluding that small nudges of this nature will be insufficient for making a substantial dent in the problem of low uptake. Having a good invitation letter is important, but it won't be enough on its own.

Understanding attendance rates for children enrolled in the two-year-old offer

The second project collected data that illustrated patterns of attendance for those children enrolled in the two-year-old offer. This research was undertaken with 52 early childhood education and care (ECEC) settings, tracking attendance for all of the two-year-old children registered in these settings for a seven-week period in the summer term 2022. We also ran workshops with parents and early years practitioners across our three partner local authorities. This produced a unique dataset from which we could identify patterns and gaps in attendance.

Our study found evidence that a disadvantage gap in ECEC attendance exists. On average across all settings, children eligible for the two-year-old offer had an attendance rate six percentage points lower than their non-funded peers (79% vs 85%), and were twice as likely to have very low levels of attendance below 70% (23% vs 11%). These findings

are consistent with attendance gaps for school-aged children where attendance is commonly identified as a factor in attainment gaps in education.

We estimate that, based on the average attendance rates found in our study and the assumption that the child takes up their full 15 hour entitlement, children receiving the two-year-old offer could each be missing out on nearly 120 hours of their total 570 hour entitlement across the course of a year. If that attendance rate is similar nationally, this would equate to around 16 million hours of ECEC missed in total across all 135,400 eligible children registered for the two-year-old offer in June 2022¹. If we include the hours missed by the 52,900 eligible children whose families don't take up the two-year-old-offer, disadvantaged children in England could be missing out on as many as 45 million hours of ECEC learning per year.

Implications and recommendations

Our work highlights (i) the limited potential for the current communication strategies used by LAs to increase uptake of the two-year-offer, and (ii) the possibility that attendance patterns in the early years are influencing attainment gaps.

The two-year-old offer has the potential to be transformative in supporting the development of children from disadvantaged backgrounds and reducing the outcome gap. However, if low uptake and low attendance persist, this potential will be unrealised.

Increasing uptake of the two-year-old offer – recommendations

Our work indicates that small-scale communication 'nudges' will not be sufficient to substantially increase uptake. To have a bigger impact on uptake, a system needs to be created in which

routine experimentation is easier, additional opportunities to engage families are taken, and more radical options are considered for achieving much higher uptake rates.

1. Introduce a unique identifier for all children from birth to be used across government departments, local authorities and the health system

Our research found that conducting routine experimentation and evaluation work to improve take up is harder than it should be, due in part to a lack of data linkage. A unique identifier would make it easier to match the data required for monitoring take up and conducting evaluations, and would help local areas

better understand their populations and how to target support. The initiative should be sponsored by a lead department, such as the Department of Health and Social Care (DHSC), and bring together other relevant government departments.

2. The Department for Education (DfE) should reconsider its recent guidance which prevents local authorities from auto-enrolling eligible families

Auto-enrolment could make the application process less burdensome and increase take up at minimal cost to central or local government. In order to implement an auto-enrolment system, local authorities would need

to receive assurance that this is compatible with GDPR interpretations within DfE. DfE should work with local authorities to explore means of enabling auto-enrolment within the existing GDPR framework.

3. Local authorities should trial text and email prompts to communicate with families and promote the offer

As of summer 2022, local authorities are given access to parents' emails and phone numbers when they receive their list of potentially eligible parents from the Department for Work and Pensions (DWP). This opens new opportunities for local authorities to increase

uptake. The use of timely text prompts is common in previous behavioural science work, such as the prompts used by the Behavioural Insights Team which sought to increase school attendance in Bristol.

4. DfE should consider whether wider-scale changes to childcare entitlements could make a bigger impact on take-up rates

Wider-scale changes to how childcare is administered may also lead to increases in take up. For instance, recent work from Kindred Squared and Frontier Economics estimates that replacing existing entitlements at two, three and four with a universal offer of 15 funded hours a week from ages two to four would cost just

£13m more than existing policies. By universalising the offer, navigating the system of entitlements would be drastically simpler, less stigmatised and easier to engage with. System changes such as this could bring about bigger increases in uptake than are currently possible with individual interventions.

Increasing attendance rates for children enrolled in the two-year-old offer

Our work has shown that even where take up of the two-year-old offer is high, there is a significant disadvantage gap in ECEC attendance. Alongside working to increase

take-up of the offer, there also need to be efforts to improve the attendance of those who do take up the offer.

1. DfE should provide support to the sector to improve data collection and sharing at local authority level

In the course of our study we found that routine, digital record keeping of attendance is not universal practice across the childcare sector. There is significant benefit to systematic collection of this data, but capacity constraints hold settings back. DfE should lead efforts to

lower the costs and increase the capacity of the sector to keep digital record keeping of attendance, and could maximise the use of any early years initiatives, such as Stronger Practice Hubs, that would offer a test bed for piloting or introducing digital attendance records.

2. Further larger-scale research could be funded by DfE to explore the relationship between Ofsted rating and attendance

Our research was able to identify a possible relationship between these two factors – Ofsted rating and attendance. However, we were not able to understand which mechanisms lead to increased attendance in

settings rated 'outstanding'. To understand more about this relationship, a larger-scale, dedicated research project would be required. This could be funded by DfE, or a consortium of large funders.

3. Further research could explore what works in increasing attendance, such as text message interventions used in other countries

To enhance our understanding of what works in driving up attendance rates, research funding organisations such as DfE should make the means available for a

series of rigorous experimental trials testing the impact of different interventions on attendance rates.

1. Introduction

In 2013 the government introduced 15 hours of funded childcare a week for disadvantaged two-year-old children in England. The aims of the policy were to improve the quality of education for disadvantaged children and encourage the best providers to expand into disadvantaged areas.

It is a major government intervention supporting policy ambitions to close the disadvantage gap in the early years, costing just under £500m a year in 2020. However, the latest evidence suggests that the scheme has had little impact on reducing the attainment gap between disadvantaged and non-disadvantaged children.

The fairer start local partnership – Nesta, Leeds City Council, Stockport Metropolitan Borough Council, the Greater Manchester Combined Authority and City of York Council – together with the Behavioural Insights Team, undertook work to explore two challenges associated with the offer, identified with local authority partners.

- 1. Take up is lower than desired.** Take up nationally sits at just 72%. While the pandemic caused reductions in engagement which have yet to recover, take up was still only 68% in 2019. Increasing engagement with the offer is an important step in improving the scheme's chances of making a dent in the disadvantage gap.
- 2. Little is known about attendance rates after initial sign up.** Across both DfE and local authorities, little is known about the ongoing attendance rates of those children who take up this offer. There is a lack of systematic national data collection on how many hours are actually attended by each child taking up their entitlement. Research to determine attendance rates is important for assessing whether this is a potential contributor to the scheme's overall lack of impact on reducing the outcome gap.

To address these two issues, the Fairer Start Local partnership ran two projects in 2022.

- 1.** A randomised control trial investigating how to increase uptake of the two-year-old childcare offer.
- 2.** An exploration of data collected from a large sample of ECEC providers to investigate attendance rates and disadvantage gaps in early years settings, with additional in-depth workshops with parents and practitioners.

In this report we summarise each project, outlining the background, research design, results and implications.

The fairer start local partnership

Nesta's fairer start's mission is to narrow the outcome gap between children growing up in disadvantage and the national average. This currently amounts to a 17 percentage point gap in school readiness in England².

The fairer start local partnership (AFSL) forms a key part of this mission, and was established in 2021 as a programme of long-term 'innovation partnerships' between Nesta, City of York Council, Leeds City Council, Stockport Metropolitan Borough Council and the Greater Manchester Combined Authority.

This means bringing together a local area's deep knowledge and new ideas – about their services, families, children, delivery contexts and more – with Nesta's capabilities

and experience of service innovation and improvement. The partnerships are formed around the shared mission of supporting the most disadvantaged children to reach school with a good level of social, emotional and cognitive development and were set up based on the principles of making a difference using measurable impact.

You can find information about more of our work together on our [fairer start local mission page](#).

In Project 1, a large-scale randomised control trial testing communication interventions to increase take up of the two-year-old offer, we also worked with Bolton, Bury, Stoke and North Yorkshire local authorities.

2. Project 1: a large-scale randomised control trial testing communication interventions to increase take up of the two-year-old offer

The UK government's scheme to support disadvantaged families with childcare costs (the two-year-old offer) provides 15 hours of free childcare a week to disadvantaged parents of two year olds in England, for 38 weeks of the year (ie, term time).

Eligibility for the two-year-old offer

Parents are eligible for the offer if they receive any of following benefits:

- > Income Support
- > income-based Jobseeker's Allowance (JSA)
- > income-related Employment and Support Allowance (ESA)
- > Universal Credit, and your household income is £15,400 a year or less after tax, not including benefit payments
- > the guaranteed element of Pension Credit
- > Child Tax Credit, Working Tax Credit (or both), and your household income is £16,190 a year or less before tax
- > the Working Tax Credit four-week run on (the payment you get when you stop qualifying for Working Tax Credit).

Children may also be eligible for funded early education if they:

- > are looked after by a local authority
- > have an education, health and care (EHC) plan
- > get Disability Living Allowance.

Families can begin receiving the support from the term after their child's second birthday and receive it until the end of the term in which they are three, up to a maximum of 570 hours per year. Local authorities are responsible for ensuring sufficient places are available for each eligible child in their local area, and for notifying parents of the scheme.

Despite the introduction of and publicity about this offer across the country, issues have remained with encouraging parents to take full advantage of funded childcare. Currently, uptake of the offer is at 72% nationally, having fallen to just 62% during the coronavirus pandemic.

On the back of these figures, many strategies have been put in place to try to increase this number at local authority level. These strategies vary in cost and format and include communications through social media, postcard-style advertising, efforts run through FamilyHubs, Parent Champions, QR codes in community spaces and even physically knocking on families' doors.

One way that most local authorities notify eligible families of the scheme is via a letter inviting them to apply. Letters are sent out seven times throughout the year to a list of eligible families received by the local authority from the Department for Work and Pensions (DWP). Evidence from behavioural science suggests that simple changes to these types of communications can result in disproportionate impacts and, for this reason, these letters can be a great vehicle for testing how different messages can affect uptake of the two-year-old offer. This also presented a cost and time-efficient opportunity to run a field experiment, as opposed to testing the effectiveness of wider, more intensive outreach approaches.

We sought to do this by using insights from behavioural science to motivate parents to increase applications and eventual attendance at ECEC settings. This study was conducted in the form of a randomised controlled trial (RCT) to test if using insights from behavioural science in the letter would increase applications for, and uptake of, the two-year-old offer.

This study was funded by Nesta and delivered by the Behavioural Insights Team (BIT) working with two other fairer start local partners (Leeds City Council and City of York Council) and four additional local authorities in England, namely Bolton Council, Bury Council, North Yorkshire County Council, and Stoke-on-Trent City Council. Work was carried out between March and April 2022.

Methodology

To evaluate how best to design the letter sent to parents informing them of their eligibility and inviting them to apply, we first needed multiple potential versions of these letters to test in our randomised control trial (RCT).

When attempting to use behavioural insights to redesign and hopefully improve the effectiveness of an existing process/ message, the 'business as usual' method usually serves as a good control for the redesign to be compared against. However, in this particular trial, six local authorities were willing to participate, all of whom had various existing letters that they used to invite parents to apply.

This meant that rather than a pure control letter, BIT instead designed a combined business as usual (BaU) letter, which incorporated best-practice elements from each of the local authorities' existing communications.

COUNCIL

Key point at the top

Dear {Parent first name},

Your two-year-old may be eligible for 15 hours of funded childcare

Intuitive description of the offer

The childcare place is for up to **15 hours each week for 38 weeks a year**.
You can take as many or as few of the 15 hours a week as you like.

Clear next steps for application

What to do next

Apply online. To apply, please visit www.council.gov.uk/fundedchildcare.
You can also visit a Start Well Centre or a childcare provider to have a check.

If you are eligible, you will receive a confirmation letter to your email address.

Take your confirmation letter and your child's birth certificate to a childcare provider of your choice.

Benefits of the offer

Reasons to apply

Childcare is a great way for children to learn, play and have fun with others their age;

- > helps with your child's speech and development
- > increases your child's confidence and independence
- > gives you time back for you for work, training or to spend with others

If you want to know more about the funding and how everything works, you can email families@council.gov.uk

Yours sincerely,
Director of Children's Services



The second letter, which the combined BaU would be compared against, was the Make a Plan (MaP) letter. This incorporated two behavioural insights aspects shown to be effective³ in the past.

1. A social norms message ("Join thousands of parents like you who have already taken up this offer")
2. A prompt to plan the steps needed to complete an application (an "implementation intention").

Social norms message

Prompt to plan steps for application ('implementation intentions')

Infographics to increase visual appeal

Dear {Parent first name},

Your two-year-old may be eligible for 15 hours of funded childcare

Join thousands of parents like you across the region who have already taken up this offer.

The childcare place is for up to 15 hours each week for 38 weeks a year. You can take as many or as few of the 15 hours a week as you like.

How to apply

1. Think about when you'll have 10 minutes in the next day or so to apply.
2. To complete the online form, make sure you have:
 - > your National Insurance number
 - > information about you and your child (dates of birth, address, email address and telephone number etc.)
3. then, visit www.council.gov.uk/fundedchildcare. You can also visit a Start Well Centre or a childcare provider to have a check

If you are eligible, you will receive a confirmation letter to your email address. Take your confirmation letter and your child's birth certificate to a childcare provider of your choice.

If you want to know more about the funding and how everything works, you can get help:

- ✉ Email families@council.gov.uk
- ☎ Call us on 01234 56789

Yours sincerely,
Director of Children's Services

The designed letters were sent out to families of eligible children across the six local authorities in March 2022. Parents were randomly assigned into two groups. One group received the business as usual letter, the other received the making a plan letter.

Parents are eligible for the offer, and therefore eligible for inclusion in our sample, if they met any of the eligibility criteria listed on [page 11](#) in this report. Local authorities identified eligible parents using the Department for Work and Pensions list, which is provided to local authorities six times a year.

After receiving the list, each local authority taking part in this project then went through the following steps.

- > cleaning the list (eg, to remove parents already known to be accessing the offer)
- > generating a unique ID for each parent
- > generating two postcode-level deciles of deprivation for each parent on the list, using a tool provided by BIT

- > anonymising the list and sharing a version containing only the unique IDs and the decile deprivations with BIT. This meant that BIT did not receive any information from the original Department for Work and Pensions (DWP) list for data protection purposes.

This process of identification, anonymising and sending letters resulted in a total sample of 4,704 parents/carers across the six local authorities. The sample size was lower than the expected total of between 5-6,000 and consequently the statistical power of the trial was reduced. In this context, 'power' refers to the likelihood of the trial being able to detect an effect that is truly there ie if one letter causes a small increase of 2% in applications at the population level, we will be less likely to see that 2% difference with a sample of size of 100 parents than 1,000 parents.



Once our sample of parents who had received letters was established, we collected two pieces of information for each parent.

1. whether they had submitted an application for the two-year-old offer within ~six weeks of the letters being sent
2. whether the parent's child takes up a childcare place in a childcare setting in the participating local authority within ~four months of the letters being sent.

In order to collect and use this data, BIT worked with the local authorities to devise a procedure whereby the unique IDs, created during the stage of identifying and randomising eligible parents into the trial, were matched onto the registers of children who had been signed up for ECEC.

We matched these datasets to conduct the analysis under the following process.

1. Matching the eligibility and application data.

- a. Because DfE's data sharing agreement prohibits local authorities from sharing eligibility data with third parties, we relied on the participating local authorities to match the two datasets themselves.
- b. To support the local authorities to do this, BIT provided a custom matching tool, whereby for each individual a letter was sent to, we looked at three variables to find a match in the applications list: (1) full postcode; (2) surname; (3) first line of address. If an entry was found for which all three variables match, it was counted as a successful match. If only one or two of the variables matched, it was flagged as a partial match and an analyst in the participating local authority manually checked whether it should be counted as a successful match.
 - i. This process included a practice run with multiple local authorities to address any unforeseen issues or confusion before any actual data needed to be matched.

- c. We used a different matching process in Leeds, as this area does not collect parent addresses and postcodes at the point of application.

2. Matching the applications and take-up data.

- a. For our analysis on uptake, each local authority shared an anonymised list of children taking up a place. This contained the unique ID or reference number for all children who took a place between the date each council sent their letters and 8 July.
- b. BIT then matched this list to the applications data using the unique IDs and reference numbers to conduct the analysis.

Note: while we are confident that our matching tool caught many valid matches, it is likely that it missed some (but it is difficult to observe how many), contributing to lower overall application rates and reduced statistical power. Other reasons for lower application rates in this sample versus national rates related to logistical constraints encountered by the project team, which resulted in (i) a short time window, that also extended over a holiday period and (ii) the letters being sent towards the end of term time, meaning parents who hadn't yet applied would have a lengthy period to wait before needing to register.

Results

Our outcome measures were:

1. Whether the parent had submitted an application for the two-year-old offer within ~six weeks of the letters being sent.
2. Whether the parent's child takes up a childcare place in a childcare setting in the participating local authority within ~four months of the letters being sent.

When testing for both of these outcomes, we controlled for the local authority the parent was in, the Index of Multiple Deprivation (IMD) employment decile of the parent's postcode, and the Income Deprivation Affecting Children Index (IDACI) for their postcode.

Applications result

In terms of the application rate for the free childcare offer, we did not find a statistically significant difference between the two letters. If there is an effect from the make a plan letter, it is more likely that this is negative (compared to the business as usual letter) than positive.

Our best estimate is that the combined business as usual letter leads to 1.2 percentage point more applications compared to the behavioural insights-informed letter, but we cannot rule out that this result is due to chance ($p = 0.19$).

Figure 1, below, visualises the percentage of applications seen in the business as usual and Make a Plan experimental arms.

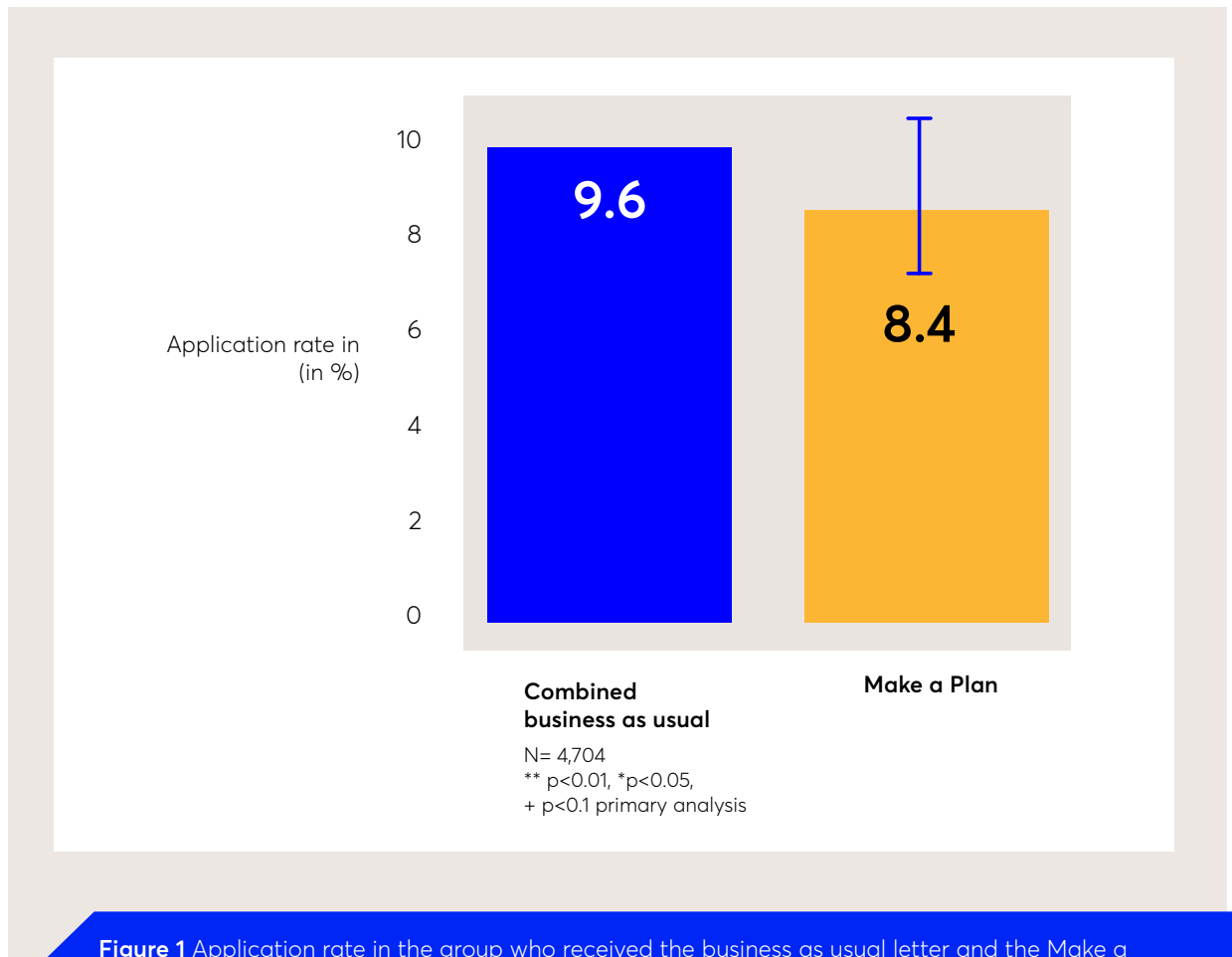


Figure 1 Application rate in the group who received the business as usual letter and the Make a Plan letter.

We also looked at the proportion of parents who took up a place within ~four months of the letters being sent and could be matched to a corresponding entry on the DWP list.

The take-up rate for the combined business as usual letter was 6.2%. Our analysis estimates that the effect of receiving the make a plan letter was a 0.3 percentage point reduction.

However, this result is also not statistically significant ($p = 0.69$). Thus, we did not find evidence that the letters lead to different take-up rates either.

Figure 2, below, visualises the percentage of parents that took up places in ECEC providers within four months of receiving either letter.

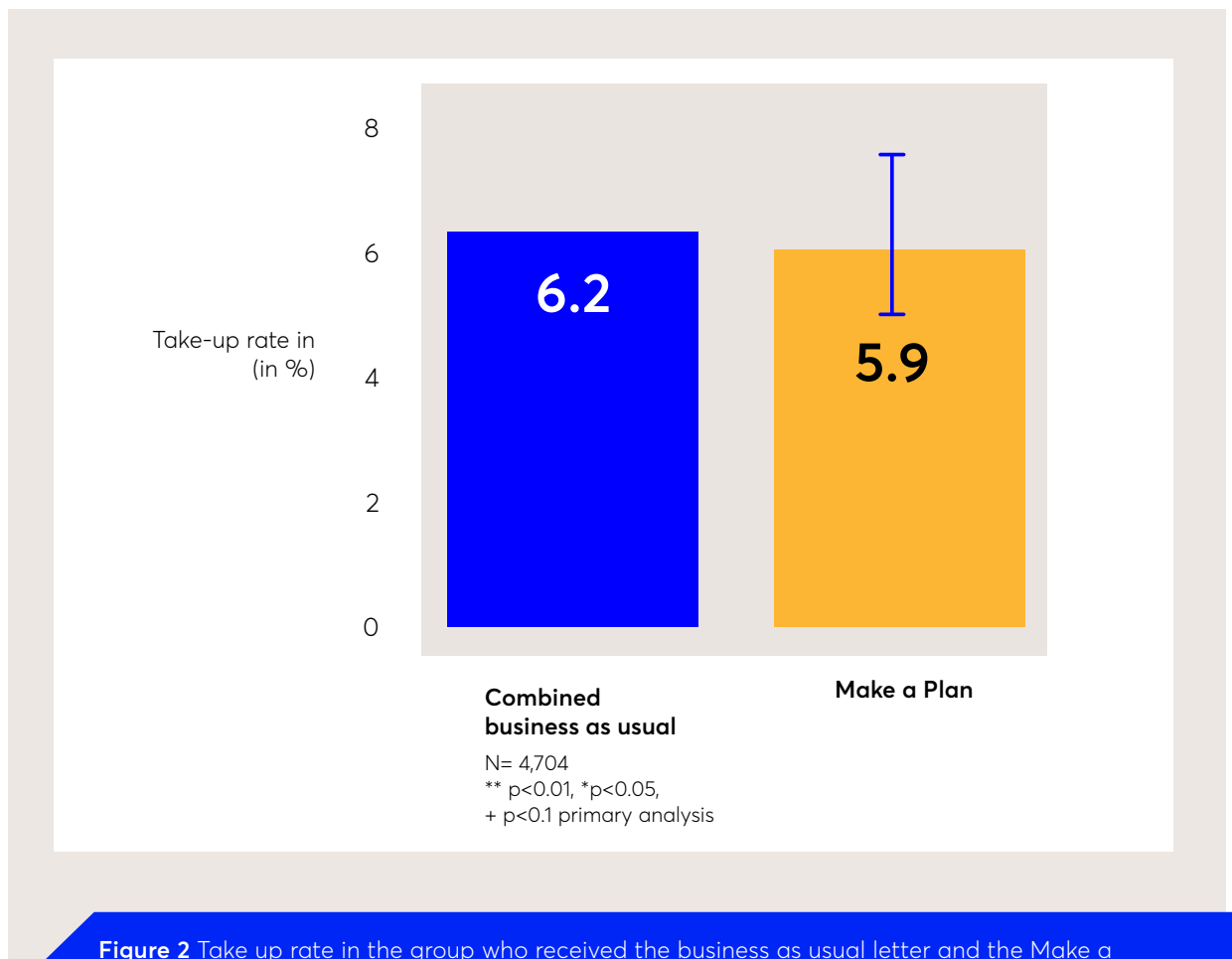


Figure 2 Take up rate in the group who received the business as usual letter and the Make a Plan letter.

What we've learned

The headline finding is that the overall application rate across experimental groups was lower than expected. Possible explanations for this include the Easter holidays falling during the application period, issues with providers in one of the local authorities in submitting application spreadsheets or our matching process missing some genuine matches.

The lack of a statistically significant effect may be in part because we were comparing the behavioural insights letter to a letter that incorporated the most effective elements of each council's existing letters. This reflects past efforts to improve the effectiveness of the letter across the six local authorities.

This RCT suffered from a number of setbacks, specifically issues around the data matching process, which reduced our ability to observe effects of the intervention. A high proportion of children being unable to be matched to their corresponding ECEC applications significantly reduces the power of the trial, and prevents us from learning as much as we can about what works for increasing uptake.

Given our null result, we recommend that local authorities either (a) continue to use their previous communications or (b) use the combined business as usual letter in future communications with parents.

With uptake of the scheme being persistently low levels of uptake of the scheme, it is important to explore ways of increasing the number of families accessing the two-year-old offer. Future work in this area could focus in particular on the methods beyond letters that local authorities use to remind parents they are eligible, recognising that some of these are highly resource intensive (eg, door knocking, text message reminders, phone calls), and the impact of using online application systems in local authorities which do not have them.

Looking at the process of running the intervention itself, this RCT is the largest field trial to date testing ways to increase access to the two-year-old childcare offer. It is a success in displaying the potential of delivering a trial across a diverse group of six local authorities, all of which were using distinct systems and application processes. While the results of this particular trial did not offer a clear path to increasing usage of the two-year-old offer, it has shown the potential of local authority partnership programmes, similar to fairer start local, to use and enable evidence-led approaches across multiple local authorities to run randomised controlled trials. It also highlights the importance of testing assumptions around what works.

3. Project 2: levels of attendance in ECEC

As set out in the introduction of this report, the two-year-old offer is a relatively large, expensive intervention, which is rooted in strong evidence for the effects of ECEC on child outcomes.

Project one outlined how this effect may be limited by low uptake. However, the link between uptake of places and positive consequences for disadvantaged children depends on these children actually attending the childcare providers they initially register with.

We identified an evidence gap in this relationship: very little is known on a national or a local authority level about how consistently children attend their scheduled hours once they have taken up the two-year-old offer, although settings do collect this information about children in their own setting.

There is no nationally collected data on children's attendance in the early years – attendance data is only available from statutory school age. While many ECEC settings implement their own strategies to boost engagement and attendance, the lack of national statistics on attendance makes it difficult to track how regularly children are attending ECEC, the impact of attendance on outcomes, and the effectiveness of interventions to increase attendance.

Our partner local authorities reported that they suspected there was considerable variation locally in hours attended from child to child, and were concerned that, if children taking up the two-year-old offer are not consistently attending their funded hours, this may be impacting on their outcomes.

From national statistics on school attendance, as illustrated by the Education Data Lab, we can see that there is a disadvantage gap in attendance in primary school education. Those eligible for free school meals are more likely to be absent from school to a problematic degree, with 12% of FSM pupils missing 20% of sessions, compared to 5.7% of their peers. This also comes with an association to the longstanding disadvantage gap in attainment at Key Stage 2 in the UK, where the gap appears to widen as absences increase.

Together with our local authority partners, we wanted to understand if there is a similar disadvantage gap in attendance in ECEC as there is in primary school education. We also wanted to find out more about families' experiences of the two-year-old offer and potential factors limiting or promoting regular attendance. The fact that attendance is not mandatory for children at this age perhaps contributes to families viewing attendance in ECEC as less important, leading to avoidable absences.

To aid our understanding of how attendance levels contribute to the nature of the attainment gap that is present at the end of reception year, we initially conducted a review of the available evidence on ECEC attendance. DfE's data on 'Attendance in education and early years settings during the coronavirus (COVID-19) pandemic' was the best available data. However, this data only captures a binary indicator of whether a child attended or not on any given date, but does

not indicate how many hours were attended (out of the hours they were signed up for) or an overall attendance rate.

In order to examine patterns of attendance in more granular detail, we were able to build on the close and trusted relationships between fairer start local partner local authorities and ECEC settings across Leeds, Stockport and York to generate a large, unique dataset tracking attendance for 802 children in 52 early years settings across seven weeks of data collection.

We believe this is one of the first datasets to track attendance in a systematic way.

We were also able to use the dataset for exploratory analysis relating to attendance patterns in the early years. Specifically, we were able to investigate attendance rates with a large sub-sample of children who were eligible for the two-year-old offer.



Methodology

Strand 1 – collecting attendance data

To investigate patterns of attendance, fairer start local council partners led the recruitment of settings across Leeds, Stockport and York. Participating settings were offered a voucher of £100-200 as an incentive to take part. The recruitment process prioritised ensuring that the type of settings recruited were representative of the setting mix across the three cities. Our study includes attendance data for around 30% of all funded two-year-olds in York and Stockport, and 10% of funded two-year-olds in Leeds.

We measured attendance rates in those settings for a seven-week period in summer 2022. Staff in each setting created anonymous IDs for each two-year-old child in their setting (ie names converted to Child 1, Child 2) to track planned hours (ie hours signed up for that week) and attended hours (ie hours actually attended) across the period.

As part of the data collection process, we also collected information on.

- > whether the child was eligible for the two-year-old offer
- > reason for eligibility
- > the Ofsted rating of the setting
- > the type of provider (eg, nursery, childminder, school) the child was attending
- > reason for absence (where known).

As part of the preparation for this project, we set parameters for 'good' and 'problematic' attendance in advance. A review of literature about attendance levels in pre-school settings revealed there is no commonly accepted threshold for 'poor' attendance. The project partnership decided to use the threshold set for 'persistent absence' in primary schools (where attendance is mandatory, unlike in early years settings). This meant any child attending less than 90% of their scheduled hours would be deemed as having 'poor attendance'. We also set an additional threshold for 'very poor attendance' at less than 80% in order to categorise different levels of 'poor' attendance.

Specific instructions on data collection were sent to settings before the collection period began, including a spreadsheet designed to convert child names to anonymous IDs. Once this was completed, settings filled in attendance on a series of weekly spreadsheets prepared by Nesta, with the same child IDs being carried over so patterns of attendance could be tracked.

Strand 2 – exploring parent and practitioner experiences with the two-year-old offer

We also wanted to delve deeper into their experiences of parents / carers of children eligible for the funded two-year-old entitlement – and potential factors limiting or promoting regular attendance. To do this we ran a series of face to face workshops.

Our goal was to recruit parents / carers for the workshops from three different groups (all of them eligible for the two-year-old offer): parents whose children attended regularly, those who attended infrequently and those who had stopped attending, so we could explore the differences between them. However, the majority of workshop participants identified as regular attenders so our research priorities pivoted to an exploratory workshop to find out more about:

- > experiences of early childhood education (ECEC) ie the benefits they have seen in their children
- > barriers and enabling factors to consistent participation
- > attitudes about the value and impact of ECEC
- > attitudes towards settings and relationships with practitioners
- > everyday experiences of being a parent, activities they do with their children
- > perceptions of their role as parents, aspirations for their children and understanding of child development.

We designed and facilitated workshops using creative and inclusive approaches to enable everyone in the room to share as freely as possible. These took place face to face in Brinnington (Stockport), Armley and Harehills (Leeds) and Tang Hall (York) in May and June 2022, with 31 (Stockport), 7 (Armley), 7 (Harehills) and 3 (York) parents / carers attending each workshop respectively.

We also ran workshops with early years practitioners – four in Stockport, three in Leeds, and four in York – to learn more about.

- > experiences of delivering and managing the two-year-old offer
- > insights around patterns of attendance or reasons for absence
- > engagement work in settings with parents/ carers around the offer, including to sustain attendance.

These workshops took place remotely via Zoom during May and June 2022.

Across all of the workshops, we spoke to a total of 48 parents and 11 practitioners. This research revealed some more insight into the attitudes of parents taking up the two-year-old offer.

Results

Strand 1 – attendance rates

Across all three local authorities, children attended 81% of the hours they were signed up for on average.

The average attendance rate for children taking up the two-year-old offer was 79%, and for non-eligible children the attendance rate was 85%. This headline result suggests a disadvantage gap in ECEC attendance exists. However, both rates are below the threshold the partnership set for 'good' attendance (90%).

Children taking up the two-year-old offer were more likely to have 'problematic' levels of absence: 63% of funded children attended fewer than 90% of their scheduled hours (compared with 56% of non-funded children). This attendance disadvantage gap widened as the thresholds got lower: 43% of funded children (compared with 29% of non-funded children) had attendance below 80%, and funded children were twice as likely to have attendance below 70% (23% compared with 11% of non-funded children). These children are spread across different areas and setting types. However, our analysis showed that settings with an 'outstanding' Ofsted rating had significantly higher attendance rates on average than settings with a 'good' rating,

including among children receiving the two-year-old offer. This finding is discussed in more detail on [page 26](#).

We can help make sense of what these attendance rates mean in practice by estimating how many hours of ECEC children would miss throughout the course of a year with these attendance rates. The average funded two-year-old in our study attended 79% of their scheduled hours. Over the course of a year, if the child is signed up to their full 15 hour entitlement, this attendance rate would mean they would miss out on nearly 120 hours of their total 570 hour entitlement. This would equate to around 16 million hours of ECEC missed in total across all 135,410 eligible children registered for the two-year-old offer⁴. If we include the hours missed by the 52,908 eligible children who don't take up the two-year-old offer, disadvantaged children in England could be missing out on as many as 45 million hours of ECEC learning per year.

We can also look at how many extra hours of ECEC children with different current attendance levels would gain throughout the year if their attendance improved (see Table 1 below). For example, a two year old signed up for 15 hours a week but currently only attending 70% of their hours would gain 114 hours of ECEC across the year if their attendance went up to 90%.

Table 1 Projected gains in ECEC hours attended at different attendance rates

Attendance rate	70%	75%	80%	85%	90%	95%	100%
Hours attended (per year)			456	484.5	513	541.5	570
Extra hours gained per year for a child with 80% attendance currently	N/A	N/A	N/A	+ 28.5	+ 57	+ 85.5	
Extra hours gained for a child with 70% attendance currently	N/A	+ 28.5	+ 57	+ 85.5	+ 114	+ 142.5	
Extra hours gained for a child with 65% attendance currently	+ 28.5	+ 57	+ 85.5	+ 114	+ 142.5	+ 171	

How significant is this for children's outcomes?

These missed hours in ECEC could be limiting disadvantaged children's development and early learning progress. Our review of the literature suggests that there is a link between attendance rates in ECEC and achievement in school. This relationship does vary between the types and quality of ECEC, as seen in the SEED Impact Study on ECEC, which provides the most granular evidence on the association of ECEC with children's outcomes in England, covering different provider types and usage levels.

More hours in ECEC is associated with improved cognitive and socio-emotional outcomes at age four. ECEC has benefits for all children regardless of socioeconomic status but the literature highlights that ECEC may be particularly important for the most disadvantaged children to help narrow the outcome gap.

There is evidence from the USA that attendance in pre-kindergarten predicts attendance in elementary school, and that pre-K children with poor attendance have poorer learning outcomes.

Strand 2 – parent/carer and practitioner experiences with the two-year-old offer

Our workshops with parents/carers and practitioners gave insights into views on and experiences of ECEC, including some of the challenges facing families, what was important to them for their children, and what could make a difference to help families engage with ECEC. Some common themes included:

- > improving the sign-up and onboarding process, through both a less confusing set of offers and making it easier to sign up for the specific setting they would like their child to attend

- > creating a culture within ECEC settings that emphasises trust building with parents and 'alongsidedness' rather than hierarchy
- > enabling more flexible and bespoke scheduling of hours to help with logistical hurdles, such as trying to work around school pick up for other children or health appointments
- > developing parents' understanding of how their child's brain develops and how they can support their children's learning
- > opportunities for ECEC practitioners to influence the home learning environment more, by modelling and scaffolding positive parenting behaviours and activities which promote child development.

What we've learned

Our analysis has offered some insights into the scale of the attendance gap as well as what could be influencing it, while the literature underlines the importance of this

gap given its relation to gaps in attainment later in life. Beyond the headline finding of the existence of the attendance gap, there are two key insights we learned through our exploratory analysis of this dataset.

1. Ofsted inspection rating is associated with attendance rates for eligible children

Across the whole sample, settings with an 'outstanding' rating from Ofsted had higher attendance than those with a 'good' rating. More importantly, children receiving the funded two-year-old offer in outstanding settings had eight percentage points higher attendance than funded children in good settings. This difference is large enough to almost close the attendance gap, with these children attending (83.2%) – almost as much as non-funded children overall (85.1%).

We cannot say confidently which practices at settings with an outstanding rating account for this variation,

but a hypothesis emerging from the user research and data analysis is that it may be related to the quality of relationship building between practitioners in settings and parents. Investigating what these settings are doing particularly well may be a promising avenue to find ways to increase attendance in other settings.

While recognising that setting quality is not limited to Ofsted rating, it is an available proxy measure for some aspects of quality and the analysis findings indicate that this could be something to explore further.

2. Limited understanding, among a subsection of parents, of the importance of the role of ECEC in their child's early learning and development may also contribute to low attendance

Findings from our workshops with parents and practitioners highlighted the importance of the home learning environment and parental attitudes towards ECEC as a potential factor in attendance. There were also themes of (i) having limited information about what to expect for their child's development, and the best ways to help their child learn and develop, and (ii) viewing childcare predominantly as a place for children to interact/socialise with other children and do things

they can't do at home, such as messy play, rather than perceiving it as particularly important for children's learning – which could produce a mindset that could be associated with poor attendance. Apart from this, our workshops also highlighted the recurring issue of selection bias in research of this type, as it was very difficult to recruit parents who weren't already taking up the offer.

4. Recommendations

Currently, in the UK, many parents who qualify for free early education and childcare for their two year olds do not apply or take up their places under this programme (DfE figures published June 2022 show an estimated 52,908 eligible two-year-olds are not taking up their 15-hour entitlement). Additionally, progress in narrowing the attainment gap in the UK has slowed over time.

Our research indicates that tweaks to existing communications about the two-year-old offer alone are not sufficient to substantially improve take up rates. Instead, we believe alternative approaches, bolder action and consideration of larger-scale policy changes are needed to bring about a step-change in take-up rates. Our work also highlighted the possibility that attendance patterns in the early years are influencing attainment gaps.

There is a need to focus on how to improve the attendance of those who do take up the offer, to ensure disadvantaged children are gaining the full potential of ECEC to help improve their development and progress.

Below, we set out recommendations arising from each piece of work and offer practical suggestions.



Increasing take up of the two-year-old offer

1. Introduce a unique identifier for all children from birth to be used across government departments, local authorities and the health system

Our RCT project revealed that conducting routine experimentation and evaluation work to improve take up is more challenging than it should be, due in part to a lack of data linkage. Introducing a unique identifier for all children from birth, used consistently across government departments, local authorities and the

health system would make it much easier to match the data required for monitoring take up and for conducting evaluations on new interventions. This initiative should be sponsored by a lead department, such as the Department of Health and Social Care (DHSC), and bring together other relevant government departments.

2. DfE should reconsider its guidance which prevents local authorities from auto-enrolling eligible families

Tweaks to existing communications are not likely to bring about a substantial increase in take-up rates. Alternative approaches, such as auto-enrolment would make the application process much easier for families.

The current system requires parents on the list of eligible families distributed by the DWP to apply for their two-year-old offer entitlement, which creates an administrative burden and serves only to double check their eligibility. While there may be a small number of families whose eligibility status changes between them appearing on the list held by DWP and when they take up the offer, anecdotal evidence from local authorities suggests this number is negligible, making the need for parents to apply largely redundant.

Auto-enrolment is a default switch⁵ that could make the process less burdensome for families and increase take up at minimal cost to central or local government. Auto-enrolment of this type has previously been tried in some local authority areas with anecdotal evidence that it boosted take up rates for the 15-hour offer. However, due to concerns relating to GDPR, DfE instructed local authorities to revert back to requiring parents to apply once more. In order to implement an auto-enrolment system, local authorities would need to receive assurance that this is compatible with GDPR interpretations within DfE. We would encourage DfE to work with local authorities to explore means of enabling auto-enrolment within the existing GDPR framework, to allow for the streamlining of the process.

3. Local authorities should trial text and email prompts to communicate with families and promote the offer

While tweaks to the existing invitation letter may not make much difference for take up, alternative communication strategies may have greater potential for impact. As of summer 2022, local authorities are given access to parents' emails and phone numbers when they receive their list of potentially eligible parents from DWP. This opens new opportunities for local authorities to increase uptake. The use of timely text prompts is common in previous behavioural science

work, such as the prompts used by the Behavioural Insights Team which sought to increase school attendance in Bristol. We encourage local authorities to trial the use of text and/or email prompts to parents encouraging them to register their child for childcare. To support local authorities in doing this, Nesta has published a toolkit which details how to design and run a trial to assess the impact of such interventions.

4. DfE should consider whether wider-scale changes to childcare entitlements could make a bigger impact on take-up rates

The recommendations listed above reflect the constraints of existing policy design. Wider-scale, system-level changes to how childcare is administered may also lead to increases in take up.

For example, recent work from Kindred Squared and Frontier Economics estimates that replacing existing entitlements at two, three and four with a universal offer of 15 funded hours a week from ages two to four would cost just £13m more than existing policies.

At present, parents must navigate a complicated system of differing entitlements at different ages, with different eligibility requirements. To promote the offer, local authorities must send different communications to different parents.

By making entitlements universal and consistent for all parents, the offer would become dramatically simpler for parents to understand and for local authorities to promote. It would also make it easier to introduce auto-enrolment of parents into the offer as, with a universal offer, there would be no uncertainty about eligibility. Additionally, universalism would remove any stigma attached to the two-year-old offer and could create important social norms around uptake. This could have real potential to unlock a step-change in take up rates.

We encourage DfE to consider system-level changes such as this, as this could bring about bigger increases in uptake than are currently possible with individual interventions.

Increasing attendance rates for children enrolled in the two-year-old offer

Our work has shown that even where take up of the two-year-old offer is high, there is a significant disadvantage gap in ECEC attendance. This means that, as well as working to increase take up of the offer, there also need to be efforts to improve the attendance of those who do take up the offer.

1. DfE should provide support to the sector to improve data collection and sharing at local authority level

There is value in systematically recording attendance data in early years settings at a local authority level. Settings already keep internal records of children's attendance, but many settings use manual/paper-based records, and the information is not systematically shared with local authorities. Doing so could have great value to help with the monitoring and promotion of attendance at a local level.

- > Use of digital record systems, including through tools such as Tapestry (or Studybugs, which has been used in schools), could make this easier for ECEC staff in their day-to-day roles
- > In addition, settings should ensure they find out and collect information on reasons for absences, as this could help identify any safeguarding issues.

Discussions with settings during the course of our study suggests there are capacity constraints within the childcare sector which act as a barrier to digital record

keeping and data sharing. DfE could lead efforts to tackle these capacity barriers. For instance:

- > lead shared procurement of digital tech to achieve economies of scale for settings
- > promote the use of apps in nurseries which have an attendance records function, as well as the standard observation and developmental records function
- > commission open source capacity-building toolkits on record keeping and other aspects of business administration
- > maximise the use of any early years initiatives, such as Stronger Practice Hubs, to pilot digital attendance records. This would be particularly useful where digital records would facilitate the delivery of research as well as settings' routine attendance monitoring.

A small amount of extra support from DfE could lead to outsize changes in practice across the childcare sector.

2. Further, large-scale research could be funded by DfE to explore the relationship between Ofsted rating and attendance

Our work identified a possible relationship between setting Ofsted rating and attendance. Children attending outstanding settings had higher attendance rates than those who didn't. However, it was beyond the scope of our research to identify the exact mechanisms at play in this relationship. To understand more about this relationship at a larger scale, a dedicated research

project would be required, to isolate the practices employed at high-quality settings which lead to higher attendance rates. This research could be funded by DfE, or a consortium of large funders, and could unlock valuable insights into strategies which increase attendance.

3. Further research could explore what works in increasing attendance, such as text message interventions used in other countries

There would be value in systematically testing out different approaches for improving attendance in settings, to find out more about the factors influencing attendance. This further cements the need for having data collection in place, as this will be required to view future changes in attendance patterns.

An example of an approach worth trialling would be the personalised text messages designed by the Behavioural

Insights Team for use in US preschools, or a similar text-based trial aiming to influence parents' attitudes to ECEC in Uruguay.

To enhance our understanding of what works in driving up attendance rates, research funding organisations such as DfE should make the means available for a series of rigorous experimental trials testing different interventions' impact on attendance rates.



Conclusion

The two-year-old offer is one of the government's biggest initiatives in the reduction of attainment gaps and ensuring that all children are ready for school.

High-quality ECEC has the potential to be transformative in supporting the development of children from disadvantaged backgrounds and in reducing the outcome gap. However, if low uptake and low attendance rates persist, this potential will be significantly weakened.

Maximising uptake of the two-year-old offer among eligible families has received a lot of focus across local authorities since its introduction. However, our research suggests only minimal gains will be made through tweaking current letter communications with parents – alternative and additional approaches therefore need to be adopted to improve uptake rates.

Additionally, our research on attendance rates within ECEC settings highlights a new dimension of this issue to consider: our finding that an 'attendance disadvantage gap' exists points to another potential factor limiting the impact of the two-year-old offer in improving outcomes for disadvantaged children. It also highlights the importance of systematically collecting attendance rates at a local and national level so that rates can be monitored.

Bolder joint action must be taken to make sure families can access and consistently engage with their entitlements to ECEC, and help ensure children growing up in disadvantage are able to reach their full potential.

Endnotes


1. Note that this estimate is based on the attendance rate found in our study across our three local authority partners in the A Fairer Start Local programme. These local authorities were not randomly sampled and do not constitute a nationally representative sample. This is a limitation in our ability to extrapolate our attendance findings to the whole of England. The figures included here should therefore be treated with caution as we do not provide a confidence interval for our estimate. They are a preliminary signal that more robust and systematic data on attendance in ECEC settings is urgently required.
2. School readiness is a key early years outcome, defined in the Early Years Foundation Stage Statutory Framework as 'the broad range of knowledge and skills that provide the right foundation for good future progress through school and life.' The outcome measure used to identify the 'gap' in school readiness is the proportion of children reaching a 'Good Level of Development' on the Early Years Foundation Stage Profile, where disadvantage is categorised by eligibility for free school meals in reception year.
3. For an example of social norms being harnessed effectively, see Hallsworth et al (2017). For a review of the effects of implementation intentions, see Gollwitzer and Sheeran (2006).
4. Note that this estimate is based on the attendance rate found in our study across our three local authority partners in the A Fairer Start Local programme. These local authorities were not randomly sampled and do not constitute a nationally representative sample. This is a limitation in our ability to extrapolate our attendance findings to the whole of England. The figures included here should therefore be treated with caution as we do not provide a confidence interval for our estimate. They are a preliminary signal that more robust and systematic data on attendance in ECEC settings is urgently required.
5. One frequently-cited example of the power of auto-enrolment is in pension schemes and saving behaviour, for example: <https://www.nber.org/system/files/chapters/c10341/c10341.pdf>

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