



Department
for Education

The role and contribution of maintained nursery schools in the early years sector in England

Research report

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Economics



¹ The weighting used for the statistics and analysis from the Early Years Providers Cost Study in this report was revised in April 2019 using data from the SCEYP 2018 to correct an issue in the original weighting based on the sampling frame.

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Glossary of terms

“**Additional and specialist services**” refers to activities in addition to the core delivery of childcare, such as specialist SEN support, parenting support and attending meetings with other child support professionals.

“**Childcare**” refers to all hours taken under the universal 15 hours Free Early Education Entitlement and the 30 hours free childcare and to any additional parent paid hours of similar provision. Such hours are also referred to “early education”.

“**Core running**” refers to activities essential to the general running of the setting but not directly attributable to a particular session or activity, such as setting administration, team meetings, liaison with families and other bodies.

“**Core hours**” refers to the time spent on core running activities.

“**ECEC**” refers to early childhood education and care

“**EYPP**” refers to the Early Years Pupil Premium which is the additional funding given to providers to support better outcomes for disadvantaged three and four year olds.

“**FEED**” refers to the free early education entitlement of 15 hours for disadvantaged two year olds and both the universal 15 hours and the 30 hours free childcare for three and four year olds.

“**IMD**” refers to the Index of Multiple Deprivation (2015), a UK government official measure of relative deprivation for small areas or neighbourhoods in England. The Index of Multiple Deprivation ranks every small area in England from 1 (most deprived area) to 32,844 (least deprived area).

“**MNS**” is an abbreviation used to denote Maintained Nursery Schools.

“**NC**” is an abbreviation used to denote Nursery classes

“**PVI**” refers to settings who have identified their business structure as private, voluntary or independent

“**SEND**” refers to special educational needs and disabilities and includes all children identified as having additional needs

“**Sessions**” in the context of childcare provision refers to the core delivery of childcare activities not including any of the activities described as “Additional and specialist services” above.

Executive summary

Introduction

Maintained Nursery Schools (MNS) were set up more than a century ago to provide early education and childcare to disadvantaged children in the most deprived areas of England. Although MNS are early education providers, they are legally constituted as schools. Like maintained schools, they have a head teacher, governing body, delegated budget and at least one teacher with qualified teacher status (QTS), but they differ from schools in having a dedicated head teacher who is an Early Years specialist. There are currently 392 MNS, although this number has declined from around 600 in 1988.

The aim of this study is to help build the evidence base for discussions on future policy developments for MNS. It examines how MNS differ from other Early Years providers, particularly in the quality of childcare offered and in the provision of additional and specialist services, and considers how the value that MNS offer compares to other provider types using existing evidence sources and analysis of new data on delivery costs from MNS and comparable providers.²

It is essential to note that consideration of the impacts of MNS and other types of provision on child outcomes and families are out of scope of this study and there is only brief reference to the evidence in this area.

The weighting used for the statistics and analysis from the Early Years Providers Cost Study in this report was revised in April 2019 using data from the SCEYP 2018 to correct an issue in the original weighting based on the sampling frame. These revisions made very little change to the findings in this report.

Methodology

Three sources of information were used to help address the research questions:

- A review of the existing literature and data sources on MNS.
- Primary data collection on the costs of delivering childcare and additional and specialist services from 120 Early Years settings, including 30 MNS.

² This analysis uses and builds on the evidence presented in a companion report which presents a broader analysis of costs and income across all types of Early Years providers (Paull & Xu, 2019).

- Primary data collection of qualitative information on the role and mission of MNS, their strengths and weaknesses, and the challenges they face from 30 Local Authorities (LAs), including 13 with MNS and 17 without any MNS.

These evidence sources were used to analyse the cost of providing childcare and additional and specialist services and to scrutinise the factors which may explain differences in the cost of delivery across different types of providers. The measures of structural quality used as a proxy for differences in impacts included:

- Average staff qualification, child-to-staff ratio and group sizes for the hourly cost per child of childcare for three and four year olds.
- Average staff qualification, staff hourly pay and group size for the cost per user hour for the additional and specialist services.

Characteristics of MNS Early Years provision

MNS have several distinctive characteristics which could explain differences in the hourly delivery cost with other types of Early Years providers. These include their child profile and the quality of their Early Years provision.

MNS have a higher fraction of children from disadvantaged backgrounds than other provider types:

- MNS are more likely to be located in disadvantaged areas than other provider types. Close to half (43%) are located in the areas in the most deprived quintile, compared to 32% of nursery classes and around 15% of other provider types.
- Around one in seven (15%) of children in MNS are in receipt of the Early Years Pupil Premium (EYPP) compared to 12% in nursery classes and significantly lower proportions in other provider types (6% in voluntary providers, 3% in private providers and 1% in childminders).
- A significant proportion of MNS (around a quarter) have a high intake (greater than 20%) of children in receipt of EYPP (compared to 4% of all settings).

MNS have a higher proportion of children with special educational needs (SEN)³ than other provider types:

- Around one in seven (14%) of children in MNS have SEN compared to 10% in nursery classes, 9% in voluntary providers and 4% in private providers.

³ SEN support is not limited to children with EHCP

- The levels of SEN support vary significantly among MNS. A small minority (12%) of MNS have fewer than 5% of children who receive SEN support, but the majority (62%) have more than 10% of children with SEN. A significant fraction of MNS (close to 20%) have more than 20% of children with SEN.

MNS childcare provision tends to have higher structural quality (characteristics associated with better child outcomes) than other provider types:

- Staff qualifications are, on average, higher in MNS and nursery classes than other provider types: 27% of MNS staff are qualified to degree level compared with 36% of staff in nursery classes, 12% in private providers, 10% in voluntary providers and 11% of childminders.
- Almost two thirds (63%) of MNS are rated as 'Outstanding' by Ofsted compared to 18% of other provider types. Of the 102 MNS inspected in 2016/17, those that were judged outstanding were reported by Ofsted to have 'exceptional leaders', who "focused relentlessly on the academic side of the provision, particularly teaching, learning, assessment and planning" (Ofsted, 2017).
- MNS have higher group sizes than other provider types (associated with higher quality) but also have higher child to staff ratios (associated with lower quality).

Overall, this suggests that MNS should have higher costs because higher proportions of children from disadvantaged backgrounds or with special educational needs (SEN) are typically associated with higher costs and higher staff qualifications are associated with higher staff pay and higher costs. On the other hand, higher child-to-staff ratios and larger group sizes are strongly associated with lower costs, suggesting that MNS should have lower costs. Hence, while higher quality is associated with higher cost, MNS have characteristics associated with both higher and lower quality and drive the hourly cost in opposite directions.

Cost of delivering childcare

The composition of childcare delivery costs is similar for MNS and other provider types:

- Staff costs are the largest cost category for MNS accounting for 79% of weekly costs, while venue costs account for 12% and other costs account for 9%.⁴

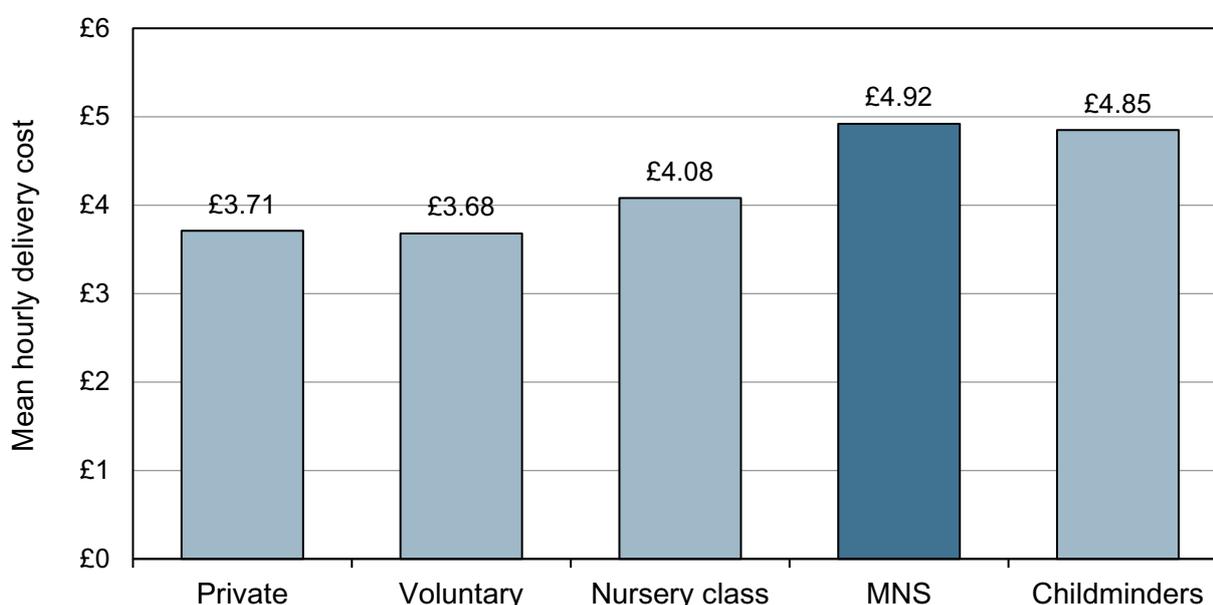
⁴ Other costs include items such as the cost of consumables (food, materials, toys), externally purchased services (LA services, HR and payroll, staff absence insurance, advertising) and training materials and courses.

- The division is very similar for other provider types, for example, staff costs account for 80% of total cost in nursery classes, while venue costs account for 11% and other costs account for 9%.

As shown in figure 1, **the hourly cost of delivering childcare is higher in MNS** than in other provider types:

- The mean hourly delivery cost for three and four year olds in MNS is 21% (£0.84) higher than for nursery classes, 33% (£1.21) higher than for private providers, 34% (£1.24) higher than for voluntary providers and 1% (£0.07) higher than for childminders.

Figure 1: Hourly delivery costs per child for three and four year olds



Source: Early Years Providers Cost Study, 2018

Notes: Sample sizes are 24 private providers, 18 voluntary providers, 26 nursery classes, 30 MNS and 19 childminders

Employer costs for staff are higher in MNS and nursery classes than other provider types:

- Much of the difference in the hourly cost is because each hour of childcare has a higher element for core costs in MNS (£1.58 of the total £4.92) than for nursery classes (£1.02 of the total £4.08), private providers (£0.73 of the total £3.71) and voluntary providers (£0.81 of the total £3.68). This higher core element is driven by (i) the average hourly employer cost for core staff being higher in MNS (£23), than in in nursery classes (£19) and private and voluntary settings (both £12) and (ii) staff in MNS spending more time on core running (measured as a percentage of total childcare hours delivered) than staff in other types of providers.

- The average hourly employer cost for session staff is also higher in MNS (£16) and nursery classes (£14) than for private providers (£10), voluntary providers (£9) and childminders (£8).

Controlling for the differences in child profile and structural quality, the hourly cost of delivering childcare is still higher for MNS:

- Multivariate regression analysis controlling for a broad range of potential cost drivers including location, child profile, structural quality and opening hours, indicates that the hourly delivery cost is higher for MNS than all other provider types including nursery classes for a given level of quality.

The differences in the hourly cost between MNS and other providers is extremely small (or non-existent) when controls for child-to-staff ratio and group size are *not* included in the model. This suggests either that MNS are not deriving the full benefit of lower costs from their higher child-to-staff ratios and group sizes or that they are benefitting from these factors but that the benefits are offset by other sources of higher costs.

The evidence suggests that the hourly cost of delivering childcare for three and four year olds in MNS may be lower than three years ago:

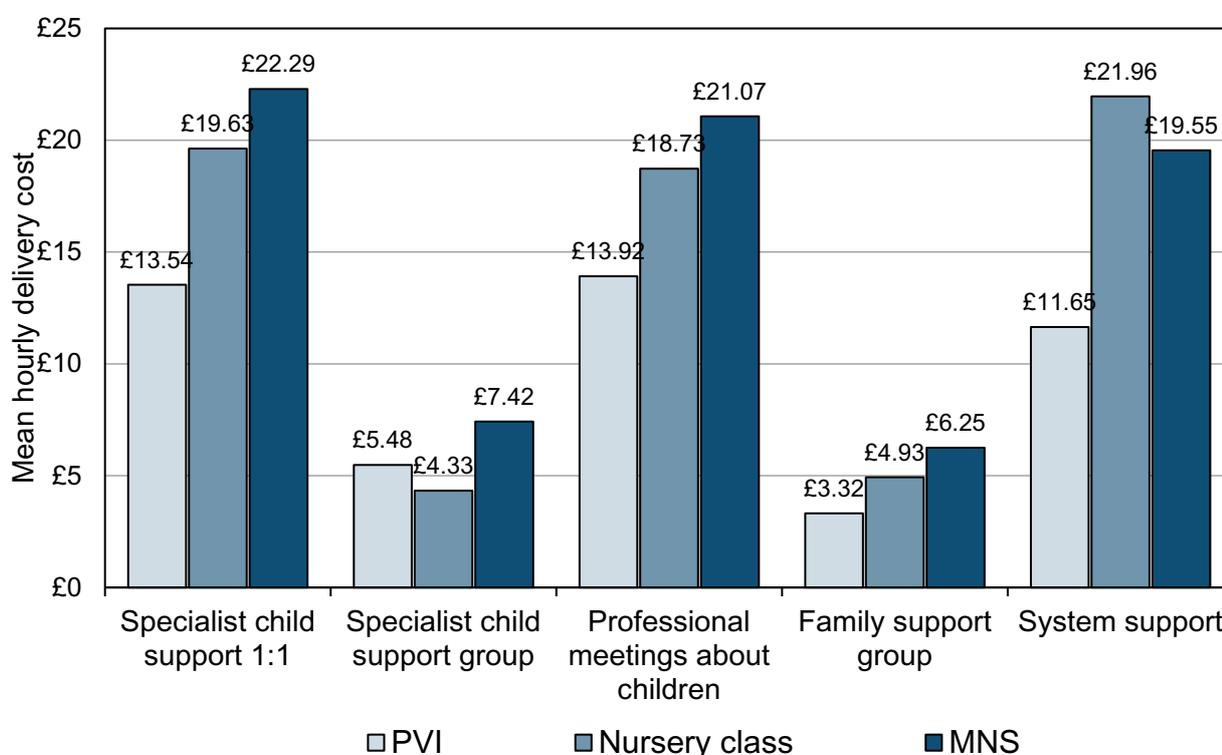
- The confidence intervals for the hourly costs for three and four year olds are wide for both studies and overlap between the two studies for all provider types, MNS included, reflecting the small sample sizes. The current estimate of the hourly cost is 20% lower than in 2015 (three years ago), while the current estimates of the hourly costs are between 7% and 18% higher than in 2015 for other types of providers. Because of the overlapping confidence intervals, the inferred 20% decrease in the mean hourly delivery cost for three and four year olds in MNS and the inferred increases for other provider types over the three years are not statistically significant. In other words, there is no statistically significant change in hourly costs over the three years from comparing hourly costs across the two studies.
- Any reduction in costs for MNS may be due to changes to improve efficiency: staff in a number of LAs reported that cost cutting initiatives had been put in place in recent years. For example, federations where multiple MNS share a headteacher have been introduced in some areas. In addition, some of the factors that have increased the costs of other provider types may not have affected MNS in the same way. For example, the introduction of the National Living Wage will have been less relevant for MNS because they have fewer workers paid at this level than other types of providers.

Provision of additional and specialist services

MNS offer a greater range and quantity of additional and specialist services than other Early Years providers:

- As well as childcare, Early Years providers offer a range of additional services such as specialist child support, family support and system support. Across all provider types, most settings (85%) report that they offer at least one type of additional service.
- But among providers offering any additional and specialist services, MNS are more likely than other provider types to offer a greater range of service types and to deliver more user hours in larger groups.

Figure 2: Mean hourly delivery cost for additional and specialist services



Source: Early Years Providers Cost Study, 2018

Notes: The cost for one-to-one family support by provider type is not shown due to sample sizes below six.

As shown in figure 2, **the cost of delivering these additional and specialist services is higher in MNS** than in other provider types:

- Although MNS have slightly higher delivery costs per user hour than nursery classes for most additional service types, the cost is only statistically significantly higher for group specialist child support.

- MNS have statistically significantly higher costs per user hour than private and voluntary providers for most of the additional service types.

As with the delivery cost for childcare, the higher cost for the delivery of additional and specialist services in MNS could be due to higher quality, reflected in higher average qualifications for the staff specifically delivering these services. In addition, differences in group sizes and the scale of provision (defined as the total number of user hours of the service delivered in the setting) would also influence both quality and cost of provision.

Multivariate regression analysis controlling for these factors suggests that **MNS do not have higher costs for the same quality level of additional and specialist services than nursery classes but there are some differences with PVI providers:**

- There is no strong evidence that the cost per user hour is higher for MNS than nursery classes.
- The cost per user hour is higher for MNS than PVI providers for all additional service types. But this is explained by a higher average wage for those staffing the services for three activity types and the associations are weak or based on a very small sample for the other two service types. To the extent that a higher average wage reflects higher quality of staff, this suggests that MNS do not have higher costs once these cost and quality drivers are accounted for.

Future challenges

The funding for MNS is currently undergoing major change and there is concern that MNS will not be viable without the supplementary funding they currently receive. There have been some initiatives to improve the financial position of MNS, including the use of federations and finding additional income streams. Some MNS also face challenges around the introduction of 30 hours free childcare, their relationships with children's centres and the demands on their provision for children with SEND.

The interviews with LAs also indicated an awareness of the need to evidence the value for money of MNS. However, the analysis in this report has shown that controlling for quality using a range of measures and for other cost drivers does not explain the higher hourly cost for MNS for the delivery of Early Years provision. This may be due to inadequacy in the measures to fully capture the differences in MNS provision. Or it may be that the *combination* of childcare and additional services drives overall effects that MNS have on child outcomes and considering Early Years provision and the other services separately may not fully capture the total added value of the complete package of care and services offered by MNS.

An assessment of the value for money therefore requires evidence on the impacts on child outcomes for MNS and other Early Years providers. However, the relevant identified evidence does not specifically apply to MNS or are small scale, unpublished studies with

weaknesses in the estimation strategy. Only further econometric work directly examining the impacts that MNS and other providers of childcare and the additional and specialist services have on child outcomes can shed more light on this question. As this report has highlighted, the profile of children attending MNS is very different from that of other provider types and any comparisons of outcomes would need to account for this difference in child composition. Analysis of National Pupil Database (NPD) data controlling for pupil characteristics and the home learning environment or further bespoke work directly measuring impacts for children using MNS and other provision could greatly improve understanding of the value for money of MNS.

1. Introduction

Maintained Nursery Schools (MNS) were set up more than a century ago to provide Early Years education and childcare to disadvantaged children in the most deprived areas of England. Although MNS are early education providers, they are legally constituted as schools. Like maintained schools, they have a head teacher, governing body, delegated budget and at least one teacher with qualified teacher status (QTS), but they differ from schools in having a dedicated head teacher who is an Early Years specialist. There are currently 392 MNS, although this number has declined from around 600 three decades ago.

The aim of this study is to help build the evidence base for discussions on future policy developments for MNS. The primary purpose is to answer the question:

“What is the value that maintained nursery schools (MNS) offer in comparison to other comparable provision?”

In addition to the core research question, the report considers a number of additional questions:

1. Do the services provided by MNS cost more than comparable provision by other types of provider?
2. Are cost differences explained by, the type of children and or families they deliver services to, and the quality of services they deliver?
3. What are the key issues faced by MNS at the moment and what are the future expectations (of LAs) for MNS?

To answer these questions, the report examines how MNS differ from other Early Years providers, particularly in the quality of childcare offered and in the provision of additional and specialist services. It also considers how the value that MNS offer compares to other provider types using existing evidence sources and analysis of new data on delivery costs from MNS and comparable providers.⁵ Evidence was gathered from secondary sources of existing information and through collection of substantial new primary data which involved:

- A review of the existing literature and data sources on MNS.
- Primary data collection on the costs of delivering childcare and additional and specialist services from 120 Early Years settings, including 30 MNS.

⁵ This analysis uses and builds on the evidence presented in a companion report which presents a broader analysis of costs and income across all types of Early Years providers (Paull & Xu, 2019).

- Primary data collection of qualitative information on the role and mission of MNS, their strengths and weaknesses, and the challenges they face from 30 LAs, including 13 with MNS and 17 without any MNS.

It is essential to note that consideration of the impacts of MNS and other types of provision on child outcomes are out of scope of this study and no direct evidence on the impacts of MNS on child outcomes was identified or collected.

The remainder of the report is organised as follows:

- Chapter 2 provides a description of the study approach and details on the data collection.
- Chapter 3 describes some of the key characteristics of MNS, including the profile of children that they serve.
- Chapter 4 considers the evidence on the quality of Early Years provision in MNS.
- Chapter 5 presents estimates of the cost of delivering childcare drawing on the primary data collection from Early Years providers.
- Chapter 6 examines the provision of additional and specialist services by MNS and the cost of their delivery, again drawing on the primary data collection from Early Years providers.
- Chapter 7 discusses the challenges currently faced by MNS.

An annex presents the regression results for the hourly delivery cost for the additional and specialist services.

The weighting used for the statistics and analysis from the Early Years Providers Cost Study in this report was revised in April 2019 using data from the SCEYP 2018 to correct an issue in the original weighting based on the sampling frame. These revisions made very little change to the findings in this report.

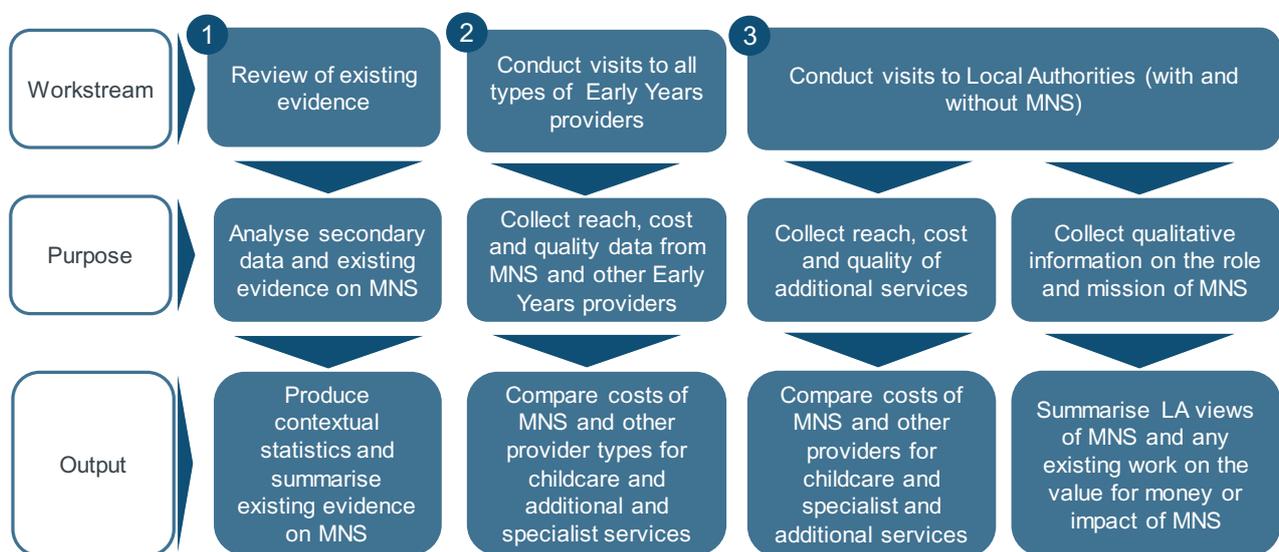
2. Methodology

This chapter describes the methodology and data sources used in this study. The first section provides an overview of the approach, while the second presents the review of the existing evidence. Sections three and four describe how the new primary data was collected from Early Years providers and from Local Authorities (LAs).

2.1 Overview

Figure 3 presents an overview of the three workstreams showing the purpose of each element and the output that they generated. Each of these workstreams is described in more detail below.

Figure 3: Summary of study methodology



Source: Frontier Economics

2.2 Evidence review

The first step of the study involved a rapid and light-touch review of the existing evidence on MNS to produce contextual statistics and to summarise current knowledge about MNS. It was also used to inform the design of the primary data collection. The key sources identified were:

- The Early Years Census and Ofsted administrative data sources which provided the most robust and comprehensive information on the numbers of Early Years providers and their location, children in attendance and quality.
- The Early Years (EY) register and Get Information About Schools (GIAS) services provided statistics on Ofsted ratings for different provider types.

- Evidence on MNS from the Study of Early Education and Development (SEED), the Millennium Cohort Study (MCS) and the Effective Pre-school, Primary and Secondary Education (EPPSE) study.
- Surveys undertaken by the charity Early Education (a support organisation for Early Years practitioners) which provided more detailed descriptions of the nature of services provided and management structures, including a survey in 2015 which received responses from 349 MNS.
- Grey literature including reports from central government departments, related bodies (such as the National Audit Office and Ofsted) and charities (such as the National Association of Head Teachers as well as Early Education).

2.3 Early Years provider visits

The first part of the primary data collection consisted of a large scale programme of visits to all types of Early Years providers to collect cost and income data. This data collection served a dual purpose to provide updated data as a follow-up to the data collected in 2015 as part of the Study of Early Education and Development (SEED)⁶ and to provide data on MNS for this study.

The sample of childcare providers was randomly selected from administrative sources covering all childcare providers in England. The sampling strategy was designed to meet both the requirements for the broader cost study and to ensure a sufficient number of MNS were recruited to enable specific analysis of MNS for this report. The final sample consisted of 30 MNS, 26 nursery classes within primary schools, 24 private providers, 18 voluntary providers and 22 are childminders. A good mix of providers across regions and areas with different levels of deprivation was achieved. The sample was weighted by the national distribution of provider type and region combinations to obtain nationally representative estimates from the balanced sample.

The data collection took place between March and July 2018 and each visit was undertaken by two researchers collecting information on:

- Childcare provision and the resources used for delivery to calculate an estimate of the hourly delivery cost per child for different ages of children.
- The provision of additional and specialist services covering activities over and above the core delivery of childcare (such as specialist SEN support, parenting support and attending meetings with other child support professionals) and the

⁶ This study is published alongside this report as Paull, G. & Xu, X. (2019), [Early Years Providers Cost Study 2018](#).

resources used for delivery to calculate an estimate of the delivery cost per user hour.

- Information on income sources and the amounts received from parent-paid fees, free entitlement funding and other income sources such as charitable donations and additional charges to parents.
- Background information on the setting including the structural quality measures of average staff qualification levels, child-to-staff ratios, group sizes, pay levels for staff delivering additional and specialist services.

A detailed description of the full study is available in Paull, G. & Xu, X. (2019), [Early Years Providers Cost Study 2018](#).

The weighting used for the statistics and analysis from the Early Years Providers Cost Study in this report was revised in April 2019 using data from the SCEYP 2018 to correct an issue in the original weighting based on the sampling frame. These revisions made very little change to the findings in this report.

2.4 Local Authority visits

The second part of the primary data collection involved visits to LAs to gather additional cost and quality data and qualitative information about the role, mission and value of MNS. The focus was on understanding what additional services are offered by MNS and how these are provided in local areas without any MNS as well as on collecting the general views of LA staff on the role of MNS and the challenges that MNS currently face. Obtaining this information required visits to both LAs which have MNS and to some LAs that do not.

A total of 53 LAs were invited to participate in the study on the basis of the following criteria:

- Geography: ensuring a good mix of LAs from all regions of the country.
- A mix of LAs with and without MNS⁷ to capture the perspectives of both.
- A mix of LAs with and without recent changes in the number of MNS to enable learnings about how the opening and closure of MNS may affect provision.

Visits were undertaken to 30 LAs, 13 of which had MNS and 17 of which did not have any MNS in their authority. A good regional mix was achieved: 30% of the LAs we visited

⁷ Information about whether or not an LA has MNS was obtained from 'Get Information about Schools' system as of January 2018.

were located in London and the South East, 37% in the Midlands and East of England, 27% in the North and 7% in the South West (see table 1).

Table 1: Sample statistics for LA visits

Local Authority characteristic		Number of LAs	Percentage of LAs
MNS status	Has MNS	13	43%
	No MNS	17	57%
Region	North	8	27%
	Midlands and East	11	37%
	London and South East	9	30%
	South West	2	7%

The data collection took place during July to early September 2018 with most of the visits conducted during the summer holidays. The information was collected using semi-structured face-to-face interviews with two researchers and took two hours on average. In all cases, at least two officers from the LA were present during the interview and the numbers of officers was much higher in some cases. Many interviews were conducted with the Head of Early Years officer and a range of other officers typically including the finance officer. The LA leads for specific services (such as SEN and family services) were also usually present, although this varied from visit to visit. Most qualitative information was provided during the interview but it was more difficult for LA staff to immediately provide quantitative data and most was supplied as a follow up email in the 2 to 3 weeks following the visit.

The information collected at the interviews covered several areas:

1. **Contextual information:** a series of questions about the characteristics of the local area (such as levels of deprivation and demographic profile); the nature of the provider landscape looks like; and any changes in recent years.
2. **Additional services offered:** a series of questions exploring what additional and specialist services (in addition to the core delivery of childcare and education) such as specialist SEN support, parenting support and attending meetings with other child support professionals are offered by MNS (if the area has MNS) or by other providers in the local area.
3. **Costs, reach and quality:** a series of questions seeking to obtain information about the cost of the additional services offered, their reach (that is, the number of children or families using the services) and quality (that is, the qualifications of the

staff delivering the services and whether the service is group based or one-to-one).

4. **Views of MNS:** a range of qualitative questions exploring the views of LAs on the role and mission of MNS; how MNS are different from other providers; and how the cost of provision in MNS differs from that of other provider types.
5. **Issues faced by MNS:** a range of qualitative questions exploring what key issues are faced by MNS currently and how these are likely to develop over time and further questions exploring what steps (if any) have been undertaken in the local area in the face of the challenges faced and the outcome of any such steps.

A number of difficulties were encountered with the collection of some data:

- The information that was required was not necessarily all stored in one place or easily available. Even when available, providing the data required processing which was time consuming for staff who are already very busy.
- Information was not always readily available for all the services of interest.
- Information was seldom available on a consistent basis to enable comparisons. For example, some LAs were only able to provide overall budgets for a service while others could provide detailed information on reach (such as the number of children or families using the service) and quality (such as the qualifications of staff delivering the service);
- Where cost data was provided, it was not always clear precisely what cost categories (such as staff, venue, or other costs) were included in estimates.

3. Maintained nursery schools in England

This chapter describes the role of MNS in the Early Years sector and the types of children that MNS serve. The first section presents evidence on the numbers and location of MNS and the views of LA staff on their value. The second section highlights how MNS serve disadvantaged children, while the third shows that MNS have a particular specialism in provision for children with SEND.

The key findings are:

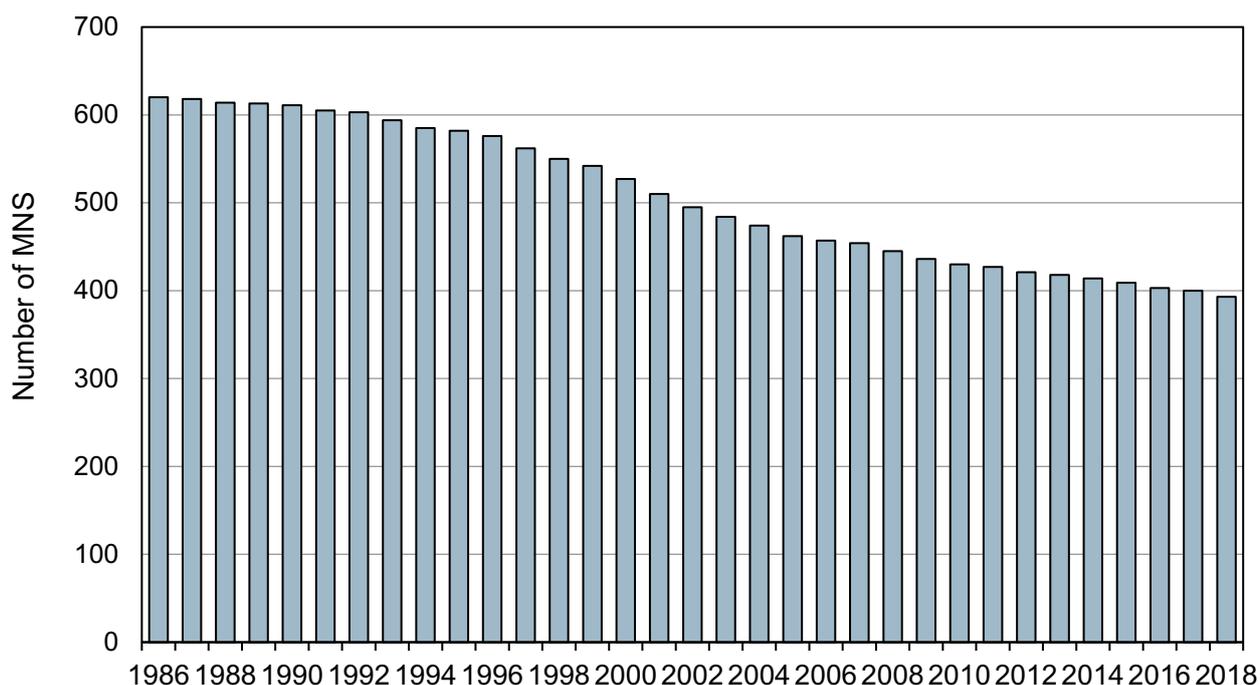
- There are currently 392 MNS and MNS account for 3% of funded places for three and four year old children in England. (section 3.1)
- The importance of MNS provision (in terms of their share of total funded provision) varies considerably around the country but two thirds (66%) of LAs have some MNS provision. (section 3.1)
- LA staff have very positive views about MNS and their role is often seen as wider than just delivering Early Years provision. (section 3.1)
- On average, MNS have higher proportions of children from disadvantaged backgrounds than other types of providers. (section 3.3)
- On average, MNS have higher proportions of children with SEND than other types of providers. (section 3.3)

3.1 The role of MNS in Early Years provision

Maintained Nursery Schools (MNS) were set up more than a century ago to provide Early Years education and childcare to disadvantaged children in the most deprived areas of England. Although MNS are early education providers, they are legally constituted as schools. Like maintained schools, they have a head teacher, governing body, delegated budget and at least one teacher with qualified teacher status (QTS), but they differ from schools in having a dedicated head teacher who is an Early Years specialist. There are currently 392 MNS, although this number has declined from around 600 three decades ago (see figure 4).

According to the January 2018 School Census, MNS delivered the free early education entitlement to 33,470 three and four year olds and 7,510 two-year-olds. While all MNS deliver the offer to three and four year olds, two thirds also provide free entitlement places for two-year-olds. In almost all (95%) of MNS in the Early Years Providers Study, more than half of children were two year olds benefitting from free entitlement places or three and four year olds using the universal free entitlement hours (see table 2).

Figure 4: Number of MNS in England 1987-2018



Source: Early Education (2015) and Frontier updates using GIAS data

Table 2: Proportion of children in receipt of the free early education entitlement

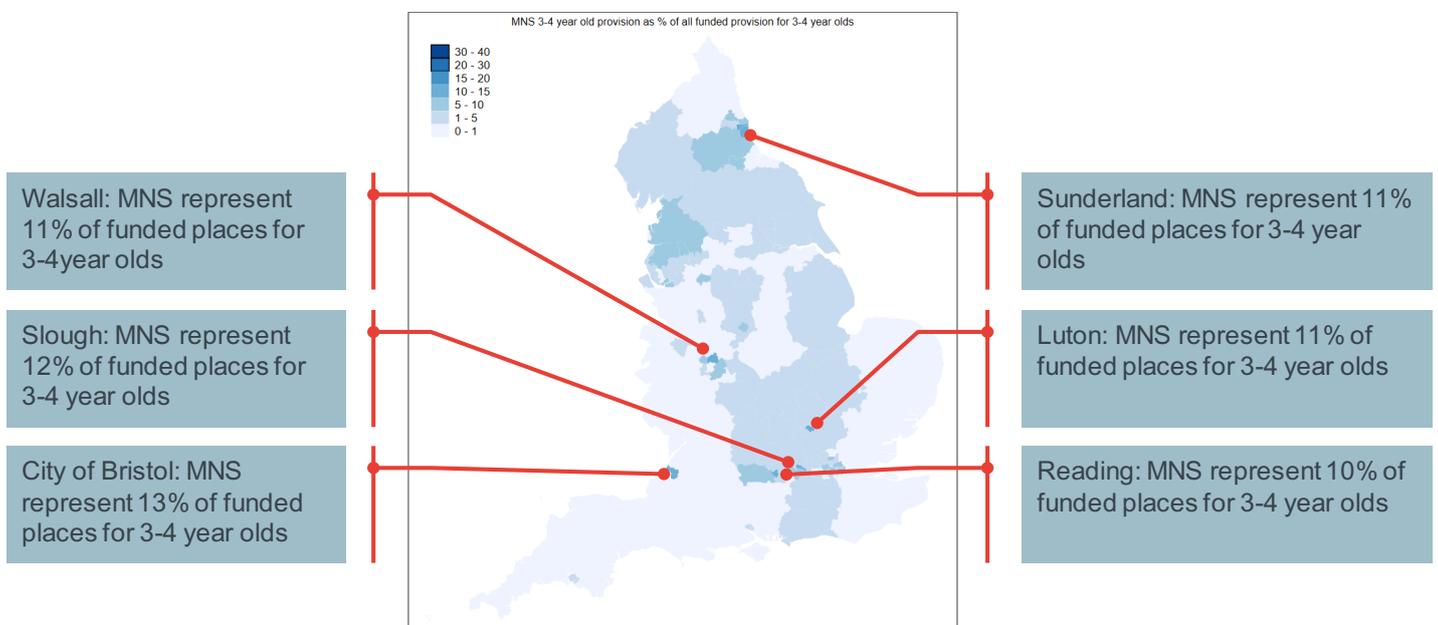
Proportion of children	Private	Voluntary	Nursery class	MNS	Childminders
0%	0%	6%	0%	0%	26%
1% to 10%	0%	0%	0%	0%	6%
11% to 20%	2%	0%	0%	0%	17%
21% to 30%	8%	0%	0%	0%	19%
31% to 40%	8%	0%	0%	5%	14%
41% to 50%	9%	21%	4%	0%	12%
Over 50%	74%	74%	96%	95%	6%
Total	100%	100%	100%	100%	100%
Number of settings	24	18	26	30	22

Source: Early Years Providers Cost Study, 2018

Notes: The proportion is the number of two year olds in receipt of the free early education entitlement and the number of three and four year olds in receipt of the universal 15 hours divided by the total number of children who attend the setting. The columns do not always sum to exactly 100% due to rounding.

Across all of England, MNS provide around 3% of free early education entitlement places for three and four year olds in England (House of Commons, 2017) but this varies from area to area. Reflecting their original purpose, almost two thirds (64%) are located in the 30% most deprived areas (Early Education, 2018a). MNS are concentrated in a smaller number of LAs with the highest numbers in Birmingham (27), Lancashire (24) and Hertfordshire (14) and they deliver a higher proportion of funded places for three and four year olds in the City of Bristol (13%), Slough (12%), Walsall (11%), Sunderland (11%) and Reading (10%). Provision may also be more concentrated within LAs: around 30% of provision is delivered by MNS in some conurbations in one LA in the North West. Around two thirds (66%) of LAs have some MNS provision, but MNS deliver a far lower proportion of total free entitlement provision in many areas and around a third have no MNS provision (see figure 5).

Figure 5: MNS provision as percentage of all free early education entitlement provision for three and four year olds



Source: Frontier analysis of “Provision for children under 5 years of age in England: January 2018” data.

Notes: The six highlighted areas are those where MNS deliver the highest share of total provision.

While most MNS operate in term time only, most offer some form of extended provision outside of the principal hours. According to a survey of 349 MNS in 2015, 71% offer some type of extended care with 66% offering a breakfast club, 57% an after-school club and 40% a holiday club (Early Education, 2015). The extension of the free entitlement from 15 to 30 hours for three and four year olds with working parents in September 2017 may have subsequently increased the offer of extended hours care.

The interviews with LA staff⁸ showed that LA officials generally have very positive views of MNS and some viewed MNS as absolutely indispensable. Specifically:

- The performance of MNS is generally regarded as excellent and MNS are perceived to be better resourced than other provider types.
- Their specialism in SEND and ability to serve children from disadvantaged backgrounds is valued as a particular strength. In particular, some LA staff commented that MNS were willing to take children which other provider types have said they are unable to cater for.
- MNS are viewed as centres of excellence and their role is often seen as wider than just delivering Early Years provision but also includes being thought leaders and catalysts for spreading best practice in different areas (such as how to make best use of outdoor resources or SEND support).

On the other hand, some LAs expressed some scepticism as to whether MNS are really so different from other provider types. In some cases MNS are located in areas which were previously deprived but have become more affluent over time so that the current profile of children is similar to that of other provider types.

Given their organisational structure and purpose, it is not surprising that the provision delivered by MNS differs from that of other Early Years providers in several ways:

- MNS tend to be located in deprived areas and serve more disadvantaged children.
- MNS have a specialism in providing for children with SEND.
- There are indications that the services provided by MNS are of higher quality.
- MNS offer a range of additional and specialist services (including SEND support, family support, system leadership and training) over and above Early Years education and childcare. This long-standing integrated approach to service provision has naturally led to many MNS partnering with children's centres (Dickens et al, 2012). In a 2014 survey, 42% were linked to children's centres and less than half were operating on a standalone basis. The remainder (16%) were integrated with another school or setting (Early Education, 2014).

⁸ It should be noted that these are the views expressed by LA staff and are based on a number of factors such as the experience and knowledge of staff as well as specific research which may have been carried out by the LAs.

The first two aspects are explored in more detail in the following two sections, while the quality aspect is examined in depth in chapter 4 and the provision of additional and specialist services is described in chapter 6.

3.2 Providing for disadvantaged children

Reflecting their location in deprived areas, previous evidence has shown that MNS deliver services to a higher proportion of vulnerable children and families than other Early Years providers (Early Education, 2015). These include children who are eligible for Free School Meals (FSM), have English as an Additional Language (EAL), have SEND or are from BME backgrounds. According to Blanden et al., 2017, MNS are more likely than other provider types to be used by FSM children, children from disadvantaged areas and EAL students.

The interviews with LA staff confirmed that MNS are predominantly located in deprived areas in line with their original purpose, but it was also noted that there are some cases where the local area has become gentrified and the level of disadvantage where MNS are located have consequently diminished.

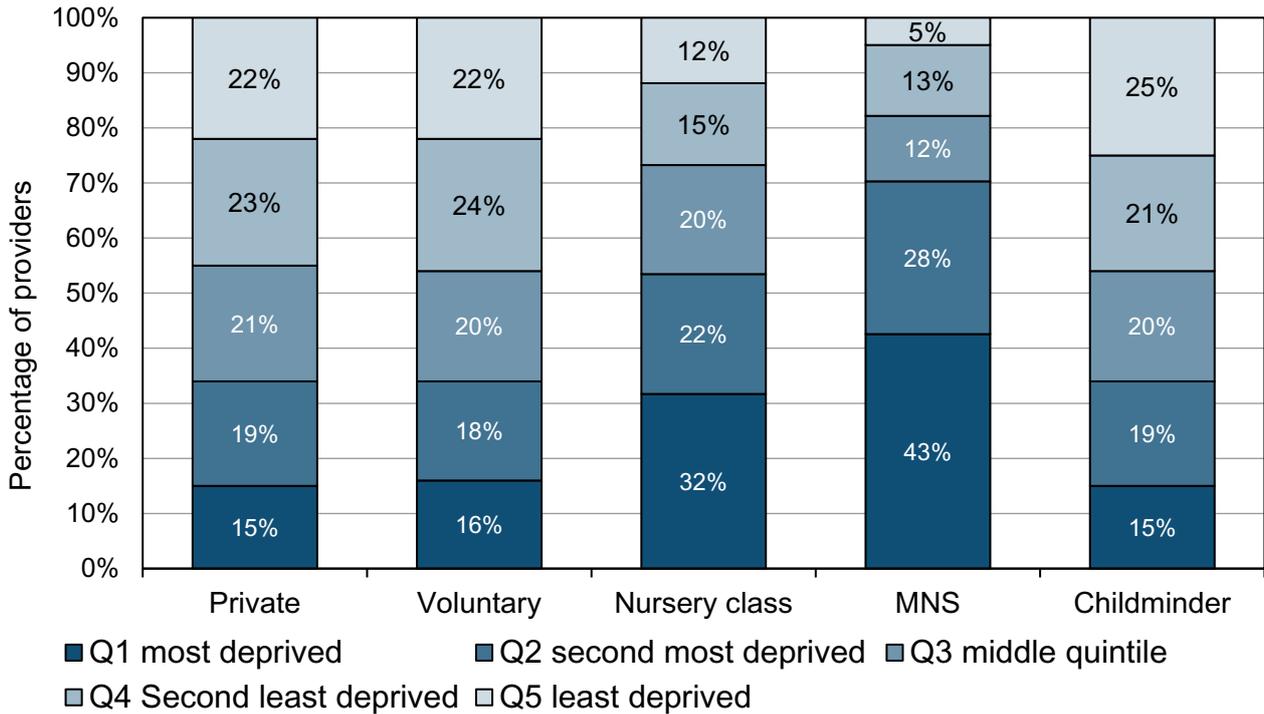
Two measures were used to consider how MNS provision for disadvantaged children differs from other types:

- The level of deprivation in the area in which the setting is located (using the 2015 Index of Multiple Deprivation for the Lower Super Output Area⁹). This is an imperfect measure of the level of disadvantage because the child profile within a setting may not reflect that of the local area.
- The proportion of children in the setting who are in receipt of the Early Years Pupil Premium (EYPP). This is a more direct measure of disadvantage as it directly captures the characteristics of children in a setting.

MNS are considerably more likely than other provider types to be located in areas in the more deprived quintile (see figure 6): almost half (43%) are located in the most deprived quintile compared to 32% of nursery classes, 15% of private providers, 16% of voluntary providers and 15% of childminders. A small fraction of MNS (5%) are located in areas in the least deprived quintile. Data for MNS from GAIS indicates a similar picture with 48% of MNS located in the most deprived quintile. Hence, although MNS provide services to a small proportion of children overall, they play a significant role in deprived areas.

⁹ <https://www.gov.uk/government/statistics/english-indices-of-deprivation-2015>

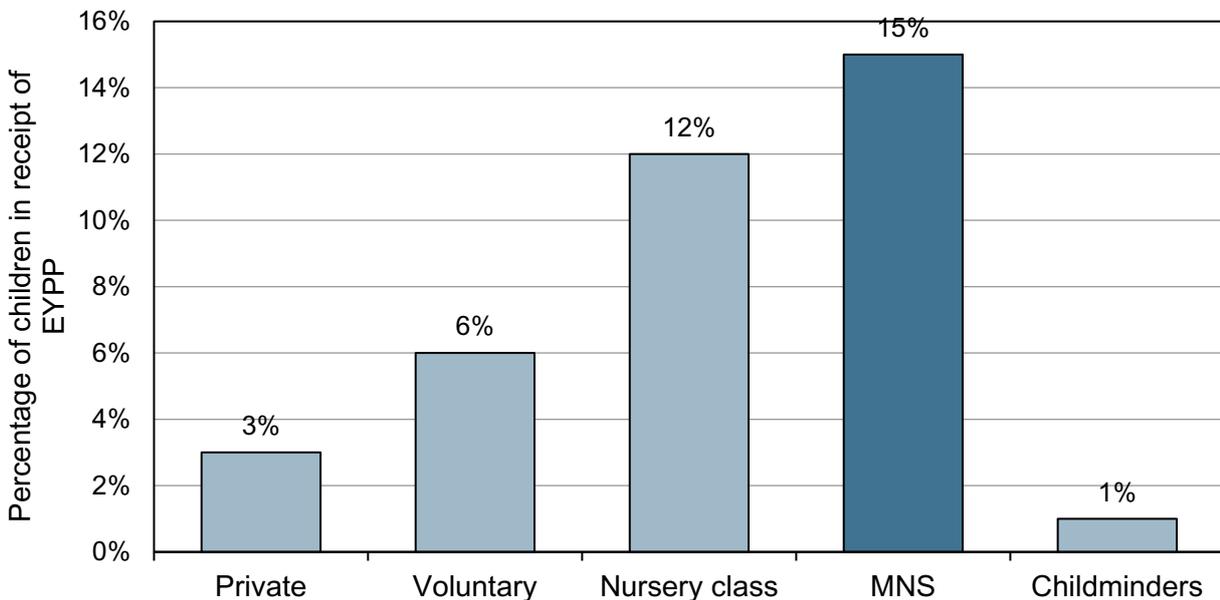
Figure 6: Levels of disadvantage based on area deprivation (IMD)



Source: Survey of Childcare and Early Years Providers, 2018

Notes: Sample sizes are 3,169 private providers, 2,067 voluntary providers, 643 nursery classes, 196 MNS and 920 childminders.

Figure 7: Levels of disadvantage based on proportion of children receiving EYPP



Source: Survey of Childcare and Early Years Providers, 2018

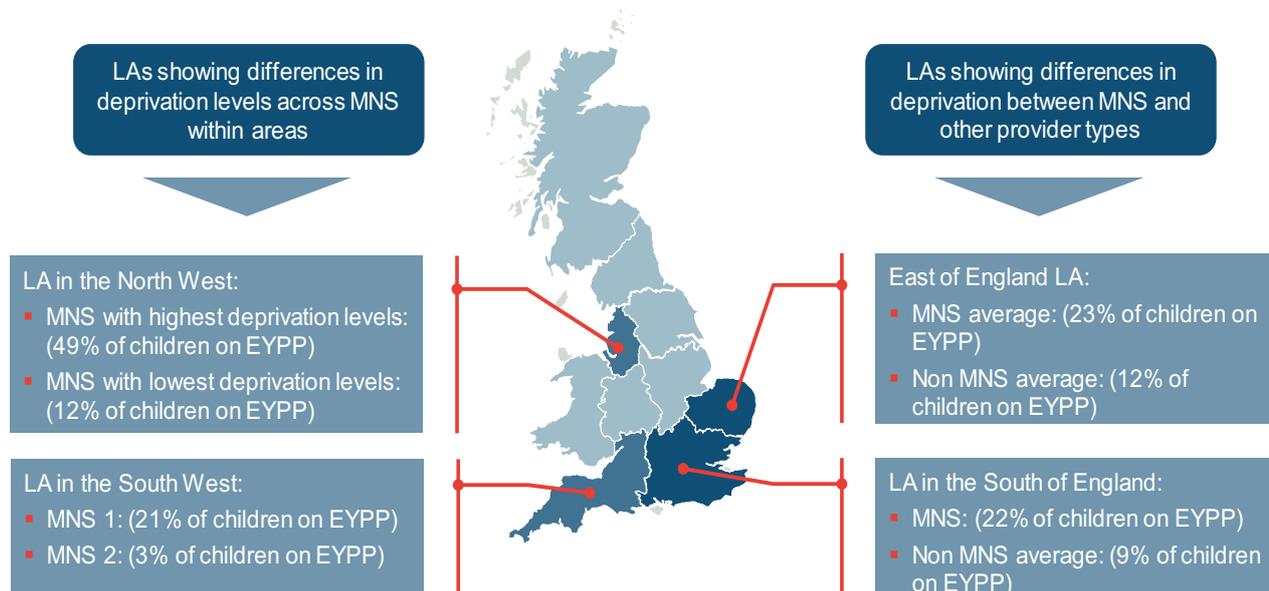
Notes: Sample sizes are 1,678 private providers, 1,112 voluntary providers, 278 nursery classes, 116 MNS and 866 childminders.

Figure 7 presents the average proportion of children in receipt of EYPP for different provider types and shows that MNS have the most disadvantaged intake. Specifically, 15% of children in MNS are in receipt of EYPP compared to 12 % in nursery classes and significantly lower proportions in other provider types (6% in voluntary providers and 3% in private providers).

It is worth noting that although MNS are more likely than other provider types to have higher proportions of disadvantaged children, they represent only a small fraction of all provision for children. According to Early Years data¹⁰ 94,000 of three and four year olds in England are in receipt of EYPP. Given that MNS provide a total of 33,400 places for this age group, most children in receipt of EYPP must attend other provider types. However, the geographic concentration of MNS means that there are areas of the country where MNS are an important provider of provision for children in receipt of EYPP.

The data provided by LAs indicated that some MNS have proportions far higher than the national average and that the proportion of disadvantaged children varies across MNS within localities. This point is illustrated in figure 8 which is based on data provided by LAs. Within one LA in the North West, the proportion is almost half (49%) in one MNS and only 12% in another. Where comparisons with other provider types within a locality can be made, figure 8 shows that MNS have a higher proportion of disadvantaged children than other provider types.

Figure 8: Variation in levels of disadvantage by LA and MNS

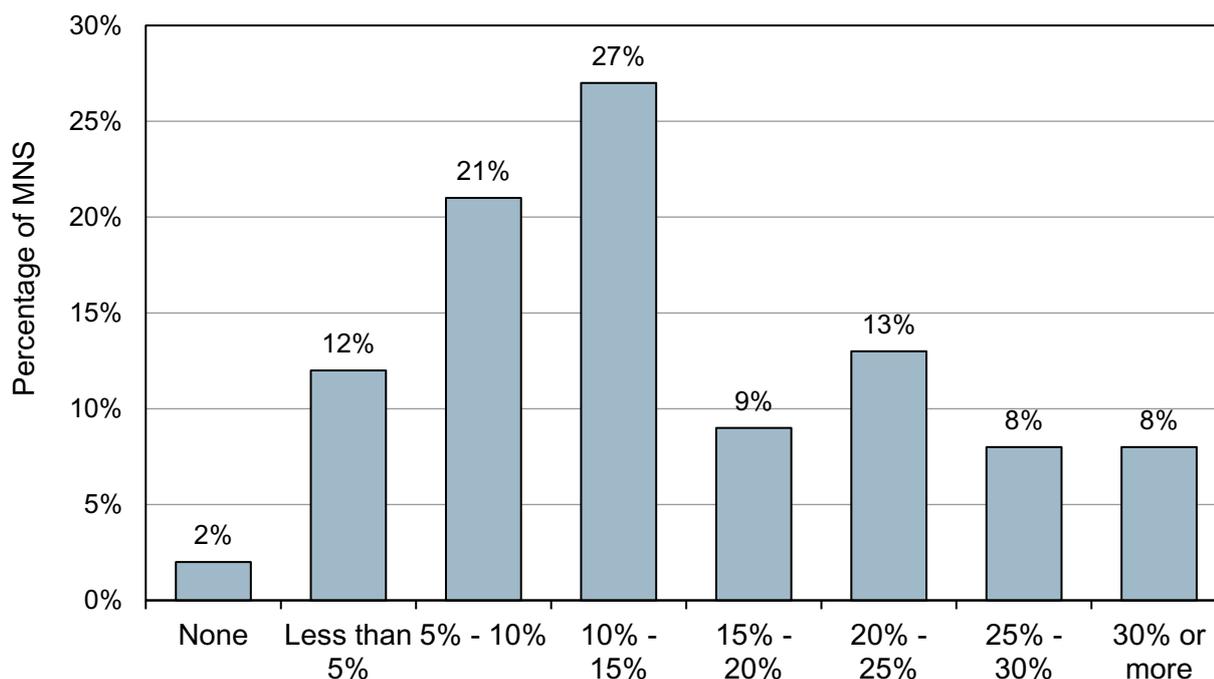


Source: Frontier analysis of data collected from LAs.

Notes: Levels of disadvantage are measured as the proportion of children in receipt of EYPP.

¹⁰ <https://www.gov.uk/government/statistics/education-provision-children-under-5-years-of-age-january-2018>

Figure 9: Distribution of proportion of children in receipt of EYPP across MNS



Source: Survey of Childcare and Early Years Providers, 2018

Notes: Sample size is 116 MNS. Bands are greater or equal than the lower point and strictly less than the higher point.

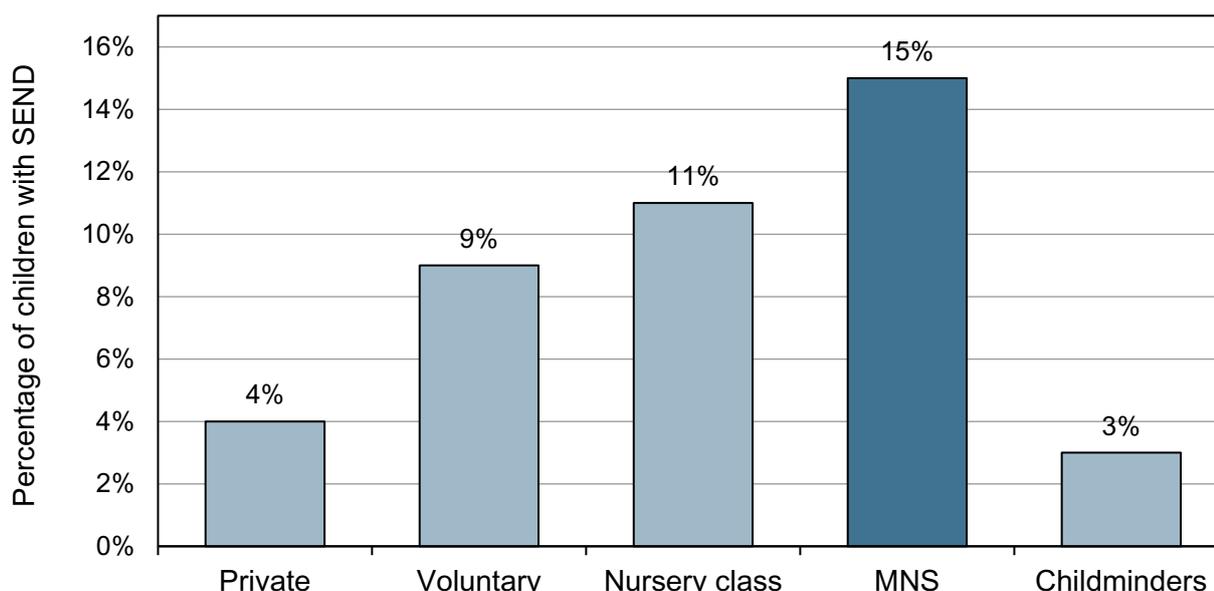
Data from the Survey of Childcare and Early Years Providers (SCEYP) for 2018 show that almost all MNS (98%) have at least one child in receipt of EYPP, but the proportion of children in receipt of EYPP varies considerably across MNS (figure 9). While more than half of MNS have less than 15% of children in receipt of EYPP, 16% have a quarter or more of children in receipt of EYPP. On the other hand, many MNS have a proportion which is similar to that for other provider types: around a third (35%) of MNS have less than 10% of their children in receipt of EYPP is 10%, a proportion close to the average for nursery classes.

3.3 Providing for children with SEND

Previous evidence (London Councils (2018)) found that MNS have higher proportions of disadvantaged children, and a higher number of children with SEN and a greater proportion of children with the most complex needs. A number of unpublished local area studies also report that MNS have higher proportions of children with SEND and children from disadvantaged backgrounds.

MNS have a higher proportion of children with SEND than other provider types: 15% of children in MNS have SEND compared with 11% for nursery classes, 9% for voluntary providers, 4% in private providers and 2% for childminders (figure 10).

Figure 10: Proportions of children with SEND by provider type



Source: Survey of Childcare and Early Years Providers, 2018

Notes: Sample sizes are 1,951 private providers, 1,210 voluntary providers, 623 nursery classes, 234 MNS and 1,232 childminders. The measure of SEND is the proportion of children with special educational needs or disabilities, including those with and without formal support in place, as well as those who are not yet formally diagnosed but who staff have identified as potentially having SEND. More broadly, the measurement of additional needs is particularly challenging for children of this age and the proportion with SEND should be considered as a proxy measure for total need.

Table 3: Proportion of school-based providers attended by children with disabilities

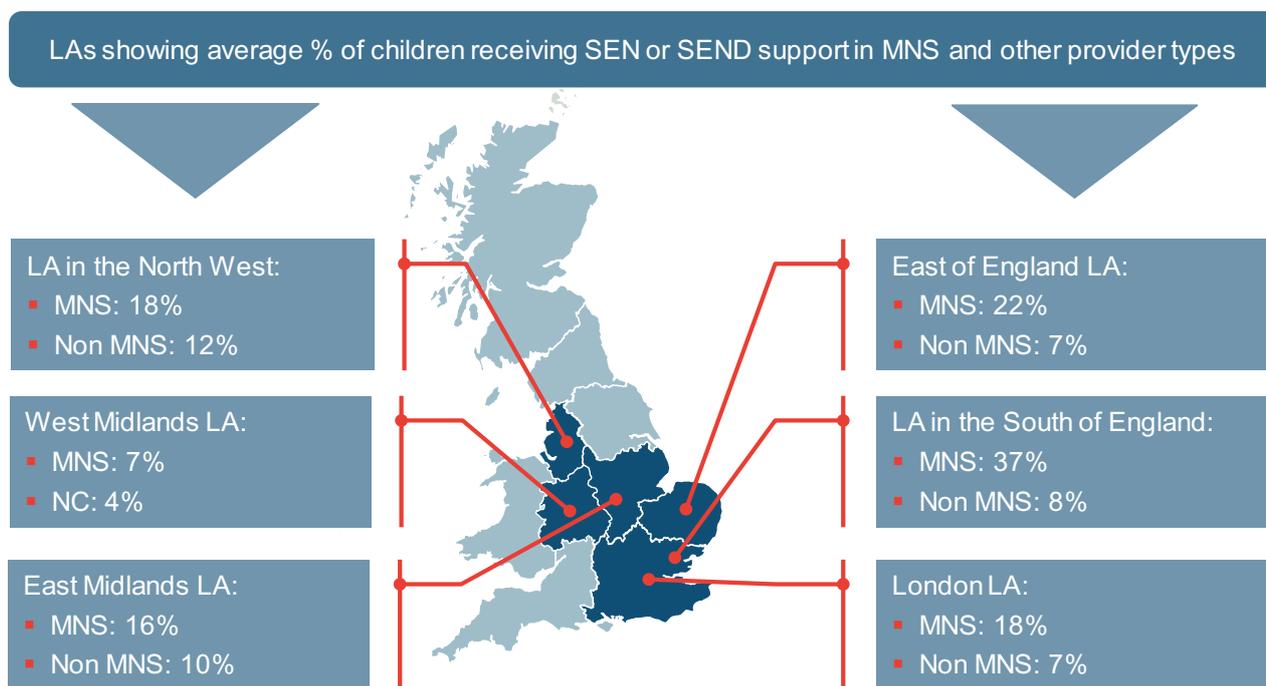
Proportion of schools	MNS	Primary schools with reception and nursery classes	Primary schools with reception but no nursery classes
Attended by children with minor disabilities	72%	56%	36%
Attended by children with moderate disabilities	69%	52%	30%
Attended by children with severe disabilities	49%	25%	12%
Not currently attended by children with disabilities	6%	19%	42%

Source: Table 4.20b from Childcare and Early Years Providers Survey 2013

Evidence from the Childcare and Early Years Providers Survey in 2013¹¹ also shows that MNS have higher proportions of children with disabilities, and particularly more severe disabilities, than primary schools with nursery and reception classes (table 3). For example, almost half (49%) of MNS were attended by children with severe disabilities compared with 25% of primary schools with nursery classes.

The data provided by LAs also indicated that MNS have a higher proportion of children with SEND compared with other provider types (figure 11). The difference is quite stark in some LAs. For example, in one LA in the East of England, almost a quarter (22%) of children in MNS had SEND compared to 7% of children in other providers.

Figure 11: Variation in levels of SEND by provider type and LA

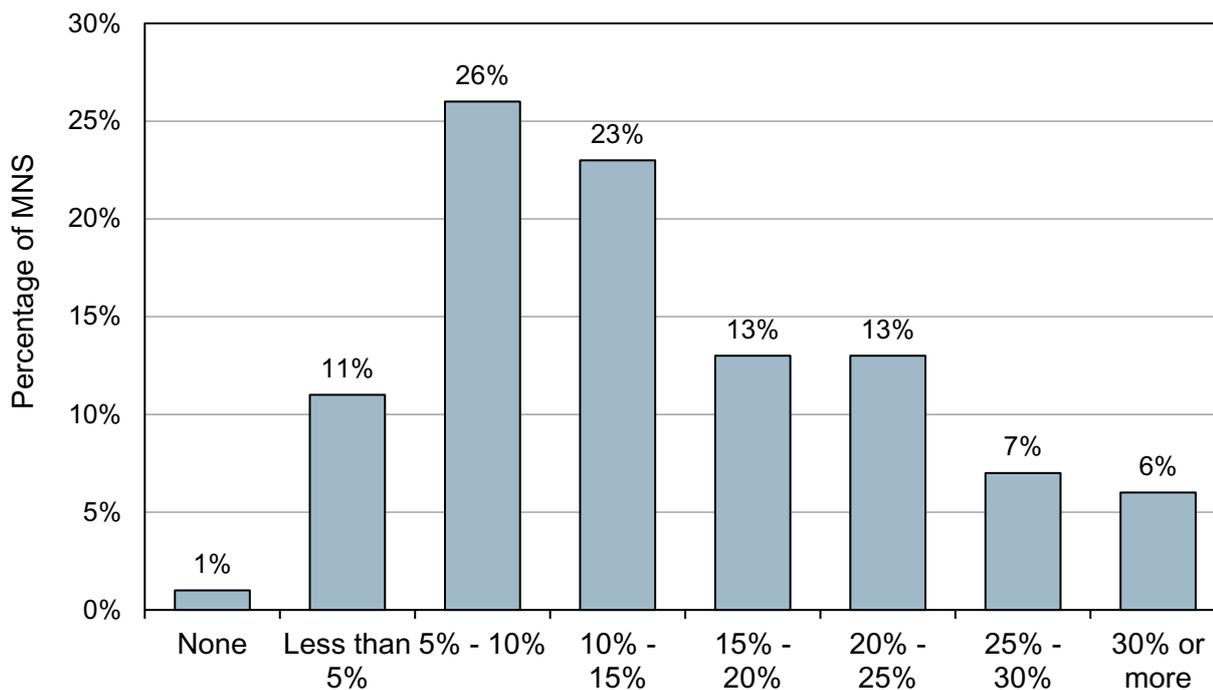


Source: Frontier analysis of data collected from LAs.

The proportion of children with SEND varies significantly across MNS (figure 12). A significant minority (12%) have fewer than 5% of children reported as having SEND. For almost half of MNS (49%), the proportion of children with SEND is between 5% and 15%, while more than a quarter of children are reported to have SEND in 13% of MNS.

¹¹ Available at: <https://www.gov.uk/government/statistics/childcare-and-early-years-providers-survey-2013>

Figure 12: Distribution of proportion of children with SEND across MNS



Source: Survey of Childcare and Early Years Providers, 2018

Notes: Sample size is 234 MNS. Bands are greater or equal than the lower point and strictly less than the higher point. The measure of SEND is the proportion of children with special educational needs or disabilities, including those with and without formal support in place, as well as those who are not yet formally diagnosed but who staff have identified as potentially having SEND.

4. The quality of Early Years provision

This chapter reviews the evidence on the quality of Early Years provision in MNS. The first section reviews different types of quality measures, while the second to fourth sections present the evidence for structural quality measures, process quality measures and Ofsted ratings.

The key findings are:

- Most measures of structural quality (staff qualifications, workforce development) indicate substantially higher quality in MNS and nursery classes than other provider types, although child-to-staff ratios are higher in MNS and nursery classes which is associated with lower quality. (section 4.2)
- No strong evidence that process quality is higher in MNS was identified. (section 4.3)
- Ofsted ratings indicate substantially higher quality in MNS. (section 4.4)

4.1 Quality measures

There is broad agreement on what constitutes good quality childcare and good quality Early Years provision has been described as that “which best advances children’s cognitive, social and behavioural development” (Gambaro, Stewart and Waldfogel, 2015). The consensus among academic experts in quality measurement is that two broad dimensions are critical facilitators of children’s development and learning (La Paro et al., 2012; Vandell and Wolfe, 2000)¹²:

- **Process quality.** This includes the quality of the curriculum and pedagogical practices and how they support positive relationships and children’s emotional development. Indicators of process quality focus on the more dynamic aspects of early childhood education and care
- **Structural quality.** This includes such factors as adult-child ratios, caregiver qualifications, group size and characteristics of the physical space. Indicators of

¹² A review of research on the effects of Early Years education on child development, drawing mainly on studies from the EU and the US since 2000, identified the characteristics which have proven to be central to advancing children’s development and therefore define good quality Early Years education (Melhuish et al, 2015). These factors were wide ranging and included the way in which provision was organised and care was given (capturing both structural and process quality). They included adult-child interaction that is responsive, affectionate and readily available; well-trained staff who are committed to their work with children; a developmentally appropriate curriculum with educational content; ratios and group sizes that allow staff to interact appropriately with children; supervision that maintains consistency in the quality of care; staff development that ensures continuity, stability and improving quality; and facilities that are safe, sanitary and accessible to parents.

structural quality are often the more regulated aspects of classrooms and programs.

In addition to these two types of quality measures, evidence is also presented for Ofsted inspection ratings.¹³

Of the 102 MNS inspected in 2016/17, those that were judged outstanding were reported by Ofsted to have ‘exceptional leaders’ (Ofsted, 2017), who ‘focused relentlessly on the academic side of the provision, particularly teaching, learning, assessment and planning’ (page 21).

4.2 Structural quality

It has been argued that the quality of Early Years provision provided by MNS tends to be higher than that offered by other providers for two reasons:

- The Early Years Foundation Stage (EYFS) is delivered by more highly qualified staff in MNS than in other providers, with the majority of head teachers and Early Years coordinators qualified to at least Level 6 (Mathers and Smees, 2014; Hillman and Williams, 2015).
- Having a dedicated head teacher who is an Early Years specialist aids effective delivery of play-based age-appropriate education (Early Education, 2014).

Previous evidence has shown that the structural quality of childcare provision is higher for MNS than other types of providers:

- Several reports document that the structural quality of MNS is higher than for other types of Early Years providers because the staff are more highly qualified (Brind et al., 2014). MNS have a dedicated head teacher who is usually a specialist Early Years leader (Early Education, 2015) and the majority of staff are qualified to level 6 compared to around half the staff in PVI settings (Mathers and Smees, 2014; Hillman and Williams, 2015). In the good practice case studies carried out as part of the Study of Early Education and Development¹⁴, higher qualifications were particularly valued by nursery managers and LA staff and the presence of a

¹³ Ofsted inspects the following domains of provision: effectiveness of leadership and management, quality of teaching, learning and assessment, personal development, behaviour and welfare, and outcomes for children and grades settings as outstanding, good, requires improvement or inadequate.

<https://www.gov.uk/government/publications/common-inspection-framework-education-skills-and-early-years-from-september-2015>

¹⁴ <https://www.gov.uk/government/collections/study-of-early-education-and-development-seed>

qualified teacher was perceived to improve the focus on teaching and learning and the quality of curriculum planning and assessment (Callanan, 2014).¹⁵

- As well as better qualified staff overall, MNS are required to have a qualified Early Years Special Educational Needs Coordinator (SENCO) teacher who provides support, advice and training for non-expert staff to support high quality early education and care for children with SEND. MNS also have SEN policies and accessibility plans (Butler, 2016).
- The role of MNS in system leadership has promoted ongoing staff development. In the survey of 349 MNS (Early Education, 2015), 65% of MNS responding to the survey reported that they played a role in training new entrants to the profession and 34% reported identifying and developing leadership potential.

New data from the Survey of Childcare and Early Years Providers (SCEYP) for 2018 and the data collected from the 120 Early Years providers was used to consider the structural quality of MNS provision along three key dimensions:

- Staff qualifications: including average staff qualification levels (NVQ levels) and the proportion of staff with degree level qualifications or higher.
- Workforce development: including expenditure on training, frequency of Continuing Professional Development (CPD), frequency of staff supervision, training plans and budgets.
- Ratios and group sizes: including child-to-staff ratios (for different age groups) and average group sizes (for different age groups).

Although nursery classes have the highest qualified staff, both for the proportion of highly qualified staff and for average staff qualification level¹⁶, both nursery classes and MNS have considerably better qualified staff than the other provider types (table 4). For example, while an average of 38% and 27% of staff in nursery classes and MNS are qualified to degree level, only around 10% of staff are qualified to the same level in other provider types.

¹⁵ The recent quality report from SEED (Melhuish and Gardiner, 2017) did not compare the structural quality indicators for MNS and other types of provision.

¹⁶ The average staff qualification is the mean of the NVQ levels for all staff. For example, a setting with an average level of 3.5 could have half of its staff with level 3 and half of its staff with level 4.

Table 4: Staff qualifications by provider type

	Average staff qualification level	Proportion of staff qualified to degree level	Number of settings
Private	3.2	12%	3,107
Voluntary	3.2	11%	1,998
Nursery class	4.0	38%	636
MNS	3.6	27%	263
Childminder	2.6	10%	1,073
All settings	2.9	13%	7,209

Source: Survey of Childcare and Early Years Providers (SCEYP), 2018

The measures for workforce development reveal similar patterns. Nursery classes and MNS are substantially more likely to have at least monthly CPD and staff supervision and to have a training budget than private and voluntary providers and almost all nursery classes and MNS report having a training plan (table 5). However, data from the SCEYP for 2018 shows that the average weekly training expenditure per member of paid staff is £5.13 for MNS which is higher than for voluntary providers (£3.00) but lower than that for nursery classes (£7.58) and private providers (£8.19).

Table 5: Staff training measures by provider type

Percentage of settings with:	At least monthly CPD	At least monthly staff supervision	A training plan	A training budget	Number of settings
Private	37%	176%	100%	49%	24
Voluntary	10%	256%	79%	48%	18
Nursery class	57%	545%	97%	90%	26
MNS	51%	34%	100%	88%	30
All settings	35%	26%	95%	58%	98

Source: Early Years Providers Cost Study, 2018

The ratio of staff to children is another key aspect of structural quality which makes MNS distinctive. Statutory ratios permit more children per staff member for MNS: with a degree-qualified teacher present, MNS are required to have an adult-child ratio of 1:13

for three and four-year-old children¹⁷ while other settings without such a teacher are required to have a ratio of 1:8.¹⁸ A study of Early Years provision attended by children in the Millennium Cohort Study found that once the type of provision was accounted for, higher numbers of children per staff member led to lower quality (Mathers, Sylva and Joshi, 2007). Table 6 shows that actual (not statutory) child-to-staff ratios are higher for MNS than other providers (suggesting that this could drive down quality) but average group sizes are substantially higher which have been associated with higher process quality (Mathers, Sylva and Joshi, 2007).

Table 6: Average ratios and group sizes by provider type

	Mean child-to-staff ratio for three and four year olds	Number of settings	Mean group size for three and four year olds	Number of settings
Private	7.1	1,717	22	24
Voluntary	6.8	1,112	24	18
Nursery class	9.0	306	24	26
MNS	10.5	118	40	30
All settings	7.6	3,341	23	98

Sources: Survey of Childcare and Early Years Providers (SCEYP), 2018 and Early Years Providers Cost Study, 2018

Notes: Child-to-staff ratios are from the SCEYP and the group sizes from the Early Years Providers Cost Study

4.3 Process quality

Only one study with evidence on process quality for MNS using the ECERS measure¹⁹ was identified. The Effective Pre-School, Primary and Secondary Education project (EPPSE) which included 20 nursery schools in its sample of 141 settings found these

¹⁷ For two-year-olds, MNS and most providers are required to operate on a maximum of four children per staff member (Brind, et al, 2015).

¹⁸ A full description of statutory ratios is available in the “Statutory framework for the Early Years foundation stage” available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/596629/EYFS_STATUTORY_FRAMEWORK_2017.pdf

¹⁹ The most robust measure of process quality is the Early Childhood Environment Rating Scale (Harms et al, 1998) which measures seven aspects of provision through detailed and systematic observations completed by specially trained researchers. The ECERS-R has been used in large-scale longitudinal studies in England over the past twenty years along with an extension covering literacy, mathematics, science and diversity (ECERS-E). However, ECERS scores have tended to be only weakly correlated with Ofsted grades (Sammons et al., 2017).

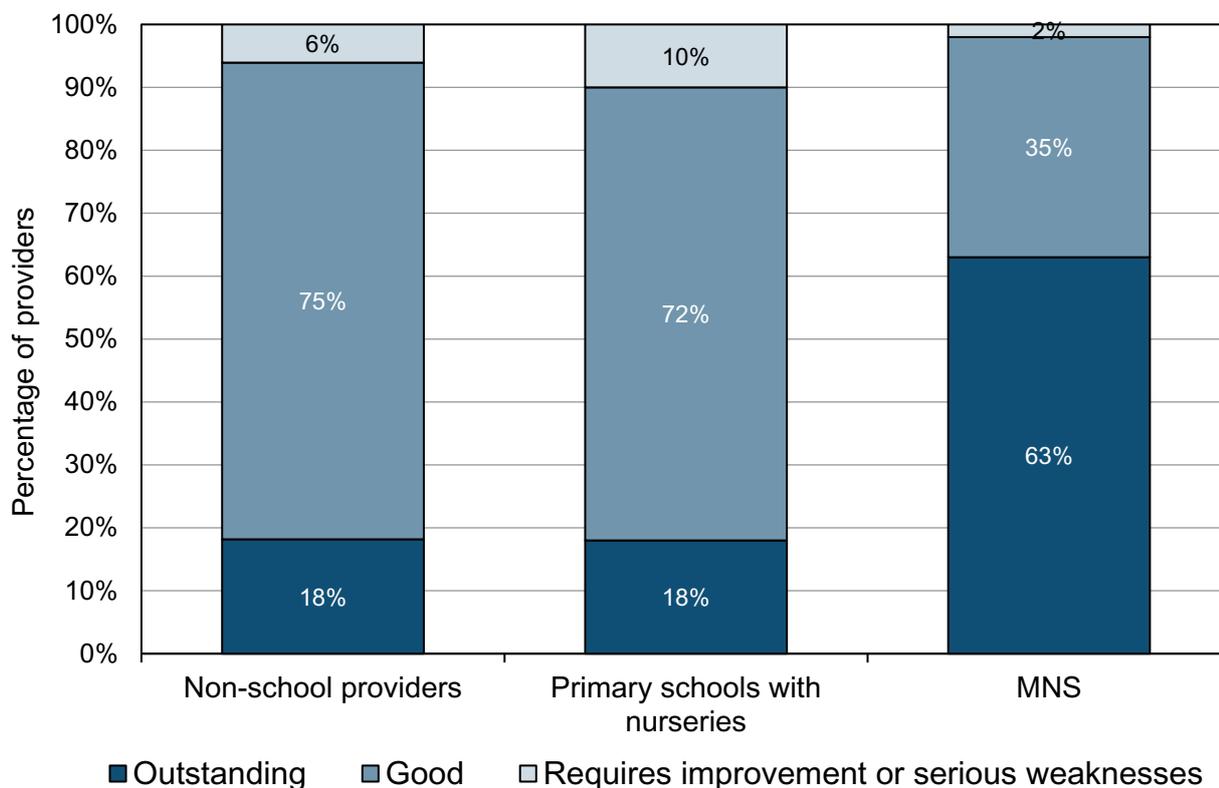
nursery schools to have consistently higher quality across the seven dimensions of ECERS compared to other types of provision (Sylva et al., 1999). MNS tended to score slightly higher than nursery classes within maintained schools and considerably higher than playgroups, private day nurseries and LA centres. However, this study is small-scale and now out-of-date.

The most recent assessment of Early Years quality is the recently published quality report from the Study of Early Education and Development (Melhuish and Gardiner, 2017). However, as there were only 13 MNS in the sample of 598 settings with quality assessment for three and four year olds, the analysis had to combine the MNS with 110 nursery classes in maintained schools and found that this combined group scored consistently higher across the quality measures than private and voluntary settings but scored slightly lower than the children’s centres.

4.4 Ofsted ratings

The Ofsted ratings (as of October 2018) of different provider types are shown in figure 13.

Figure 13: Ofsted ratings by broad provider type



Source: Frontier analyses of Early Years register data and GIAS data, October 2018.

Note: Sample sizes are 79,721 non-school providers, 7,735 primary schools with nursery provision and 298 MNS. Columns may not sum to exactly 100% due to rounding.

This data shows that MNS are much more likely than other provider types to be rated as 'Outstanding': 63% of MNS are rated as Outstanding compared with 18% of other provider types. Given that other evidence (Mathers & Smees, 2014, NAO, 2016) has indicated that Early Years provision tends to be lower quality in deprived areas,²⁰ it is particularly striking that MNS achieve such positive ratings, in spite of being heavily concentrated in deprived areas.

²⁰ On average, children from poorer areas experience provision of lower quality: 18% of settings in the most deprived areas were rated as less than good compared to 8% in the least deprived areas (NAO, 2016).

5. Delivery costs for Early Years provision

This chapter presents analysis of the delivery cost of Early Years provision for MNS and other types of providers, primarily using data from the Early Years Providers Cost Study. The first section reports previous evidence on delivery costs for MNS, while the second presents new evidence on total costs and income and the third on the hourly cost of delivery for three and four year olds. The fourth section summarises the views of LA staff on the reasons for higher costs for MNS than other providers, while the final section presents the findings from regression analysis identifying the key cost drivers.

The key findings are:

- There was limited previous research and evidence on the delivery cost of childcare provision in MNS and other provider types. (section 5.1)
- Staff costs are by far the most significant cost category accounting for three quarters of total costs in all provider types. (section 5.2)
- The mean hourly delivery cost for three and four year olds are higher for MNS than other provider types. The average hourly delivery cost in MNS is £4.92 which is 84p higher than for nursery classes, £1.21 higher than for private providers, £1.24 higher than for voluntary providers and £0.07 higher than for childminders. (section 5.3)
- MNS staff costs are most similar to staff costs for nursery classes but both are higher than staff costs in other provider types, largely due to higher mean hourly core staff costs. (section 5.3)
- The main driver of higher costs for MNS was reported by LA staff to be the costs of better qualified staff. (section 5.4)
- Regression analysis controlling for other characteristics indicates MNS have higher hourly costs than other provider types. (section 5.5)
- Costs for MNS will be also higher than other provider types because of their higher proportion of children with SEND and their higher levels of staff qualifications, but their higher child-to-staff ratios and group sizes should help to reduce hourly costs. (section 5.5)

5.1 Previous evidence on delivery cost for Early Years provision

The previous evidence on delivery costs for MNS was very limited. The small SEED study using data from 2015 with 11 MNS in a sample of 160 Early Years providers found

that the delivery cost per child per hour for childcare was higher for MNS than other providers (Blainey & Paull, 2017):

- The mean hourly delivery cost for three and four year olds in MNS was £6.65 (with confidence intervals of £5.18 to £8.13). In spite of the small sample sizes, the cost for MNS was statistically significantly higher than the mean hourly costs for private providers (£3.12), voluntary providers (£3.45), nursery classes in schools (£3.96) and childminders (£4.77).
- There was a similar picture for two year olds in MNS (based on a sample of just 7): the mean hourly cost was £6.45 for MNS (confidence intervals of £4.65 to £7.51) which was statistically significantly higher than for private providers (£3.80) and for voluntary providers (£4.01).

Other studies presenting or estimating costs for other types of Early Years providers were reviewed in Blainey & Paull (2017) but none provided estimates for MNS. For example, the DfE review of costs (DfE, 2015) did not present a representative unit cost for MNS because MNS "... form a relatively small share of provision at a national-level. This meant that data from sample surveys, such as those underpinning the economic costing model, tends to be limited by small sample sizes and less robust".

Two main reasons have been suggested to explain the higher delivery costs for MNS:

- The higher salaries and pension costs of staff as a result of MNS having graduate-level staff and head teachers (DfE, 2014).
- The additional resources required to care for a higher proportion of children with SEND. As a result of the interviews with providers and roundtable events, the DfE review (2015) concluded that staff can spend up to two hours additional non-contact time a week to liaise with parents, LAs, schools and other agencies for children with SEND. MNS may also incur additional costs associated with employing specialists such as speech and language therapists.

Other reasons have also been suggested for the higher costs (Early Education, 2015):

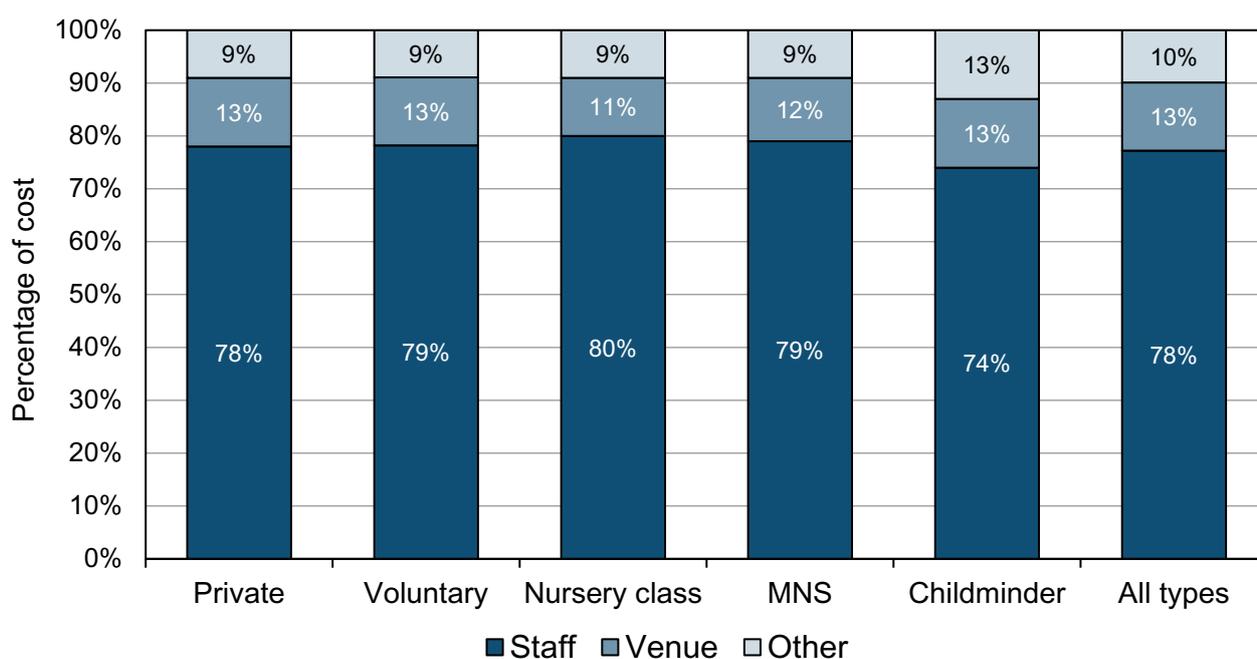
- More frequent and demanding Ofsted inspections.
- The requirements of some LAs for MNS to purchase certain service level agreements restricting their purchasing options.
- More restricted access to funding which means that MNS cannot access the same capital funding as schools as are not able to raise funds in the way as PVI's.

5.2 Total costs and income

This section uses the data collected from the 120 Early Years settings (including 30 MNS) to present key statistics on the total costs and income for MNS and other types of early year providers.

The average weekly cost across all provider types is just under £3,500. There is substantial variation in the average total weekly costs: MNS have a mean total weekly cost of just over £13,000, whilst the mean weekly cost is £4,300 for private providers, £2,500 for voluntary providers, £3,200 for nursery classes and £800 for childminders. This variation reflects the average size of these different types of providers (as well as other factors): the average number of registered places in MNS is 95 places compared to 51 for private providers, 37 for voluntary providers, 37 for nursery classes and 7 for childminders. The mean weekly income across all provider types is around £4,600 and the variation across provider types mirrors that of costs and the differences in setting size.

Figure 14: Breakdown of costs by type of cost



Source: Early Years Providers Cost Study, 2018

Notes: Sample sizes are 24 for private providers, 18 for voluntary providers, 26 for nursery classes, 30 for MNS, 22 for childminders and 120 for all types. Columns may not sum to exactly 100% due to rounding.

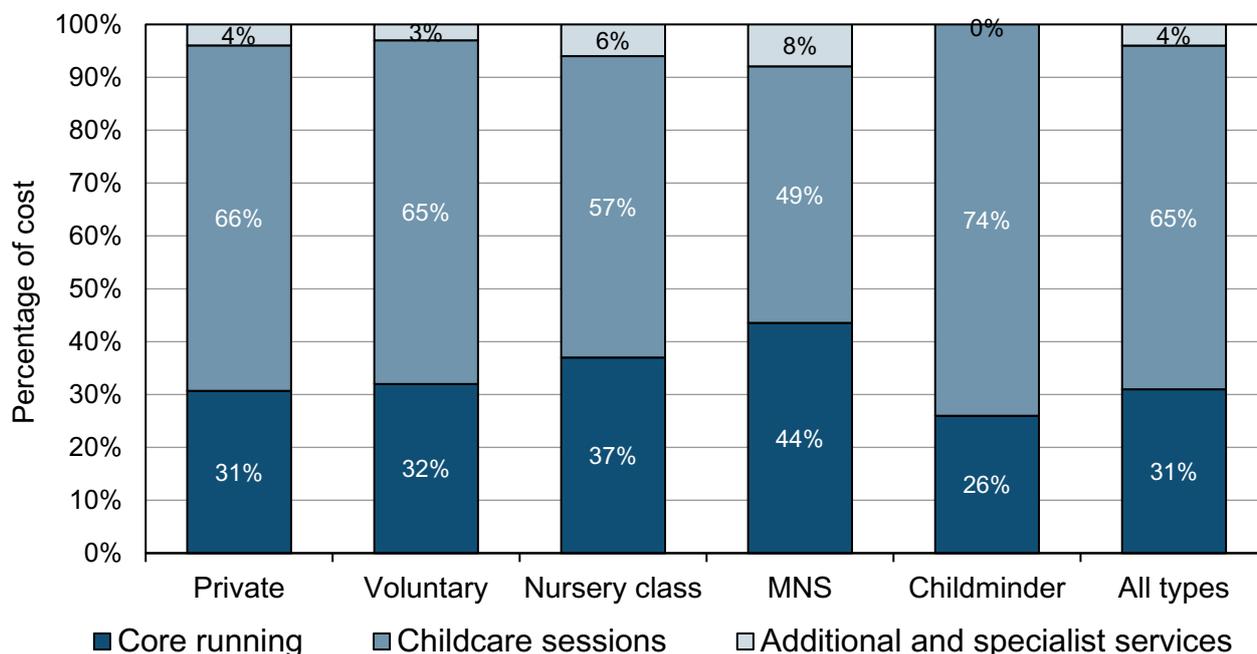
The composition of costs is not notably different across provider types as shown in figure 14. Staff costs represent the largest cost category for all provider types ranging from 74% of total costs for childminders to 80% of total costs for nursery classes. Venue costs account for between 11% and 13% of total costs. The remaining 10% of costs include such items as the cost of consumables (food, materials, toys), externally purchased services (LA services, HR and payroll, staff absence insurance, advertising) and training

materials and courses. The similar cost profiles (in terms of composition) across the provider types indicate that cost differences are not driven by a single cost category (such as staff costs).

On average across all provider types, 65% of total costs can be attributed to the delivery of specific childcare sessions, but only 4% to the delivery of additional and specialist services (figure 15). The remaining 31% constitutes “core running” costs which include the cost of staff time for setting management and administrative tasks, venue costs for spaces without specific session or activity use (such as toilets, hallways and storage) and the cost of consumables which are broadly used for all sessions and activities.

The average share of costs for core running is higher for MNS and nursery classes, even allowing for the higher proportions that these types of providers spend on additional and specialist services. This could be explained by additional and specialist services requiring more core management per user hour than childcare sessions, both because the activities are more diverse and because there are far fewer user hours than childcare session hours. Childminders have a lower share of costs attributable to core running than the other provider types (and were not asked about additional and specialist services on the presumption that they would not run such services).

Figure 15: Breakdown of costs by use



Source: Early Years Providers Cost Study, 2018

Notes: Sample sizes are 24 for private providers, 18 for voluntary providers, 26 for nursery classes, 30 for MNS, 22 for childminders and 120 for all types. Childminders were not asked about additional and specialist services. Columns may not sum to exactly 100% due to rounding.

Table 7 shows the breakdown of settings’ income across different sources. Across all settings, just over half (56%) of income comes from free early education entitlement funding, and 38% of income comes from parent fees. Compared to private providers,

nursery classes, and voluntary providers and MNS receive a higher share of funding from the free entitlement relative to parent-paid fees. Just over three quarters (77%) of childminders' weekly incomes comes from parent-paid fees and less than a quarter comes from free entitlement funding. The lower proportion of income from parent-paid fees for MNS may be due to the greater likelihood that they are located in disadvantaged areas where demand for paid additional hours may be lower.

Table 7: Total weekly incomes by source and provider type

	Private	Voluntary	Nursery class	MNS	Child-minders	All types
Parent paid fees	39%	25%	18%	17%	77%	38%
Free entitlement funding	56%	67%	78%	60%	20%	56%
Additional charges	2%	1%	1%	1%	2%	1%
Charitable donations	<1%	3%	1%	<1%	0%	1%
Other income	3%	5%	9%	21%	1%	4%
Total	100%	100%	100%	100%	100%	100%
Number of settings	24	18	26	30	22	120

Source: Early Years Providers Cost Study, 2018

Notes: <1% indicates percentages between 0 percent and 0.5 percent. Columns may not sum to 100 percent due to rounding. Other income includes specific services which have been commissioned by LAs (such as area SEN support and Initial Teacher Training).

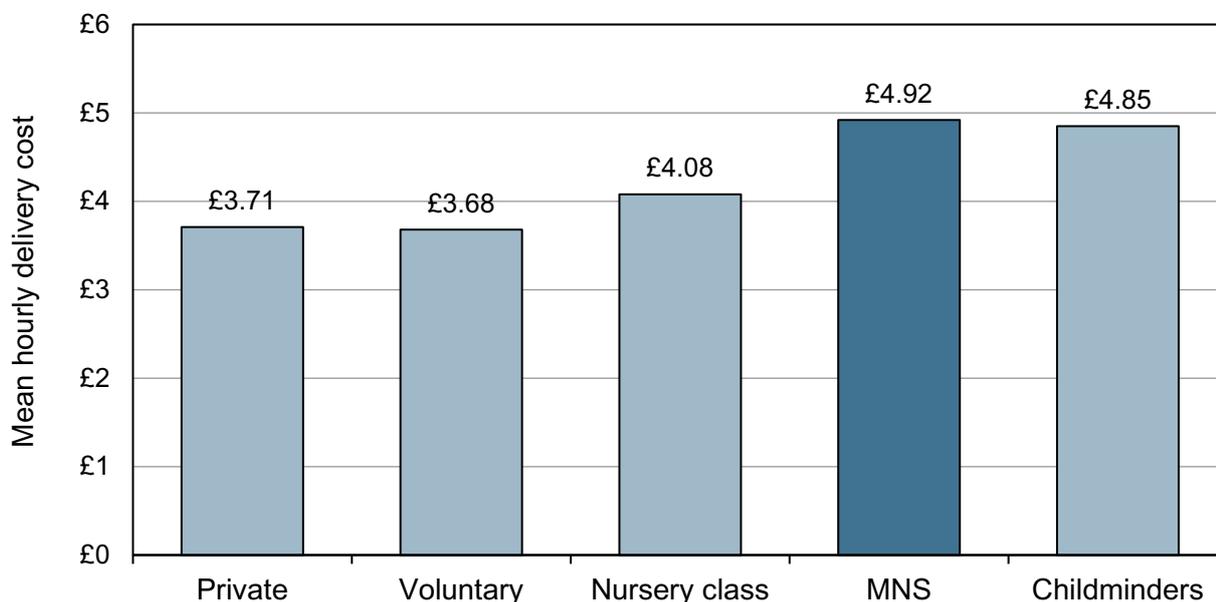
5.3 Hourly delivery cost for three and four year olds

The data collected from the 120 Early Years providers was used to estimate an hourly delivery cost for different ages of children.²¹ The mean hourly cost for three and four year olds was £3.95, but this varied substantially across provider types (see figure 16). The hourly delivery cost is highest for MNS and childminders and lowest for private providers and voluntary providers, with that for nursery classes lying in-between. The hourly cost for MNS is 21% (£0.84) higher than for nursery classes, 33% (£1.21) higher than for private providers, 34% (£1.24) higher than for voluntary providers and 1% (£0.07) higher than for childminders. However, only some of these differences are statistically

²¹ See section 2.3 in Paull & Xu (2019) for details on the methodology used to estimate the hourly costs.

significant: the cost for MNS is greater than for nursery classes, private providers and voluntary providers but not for childminders.

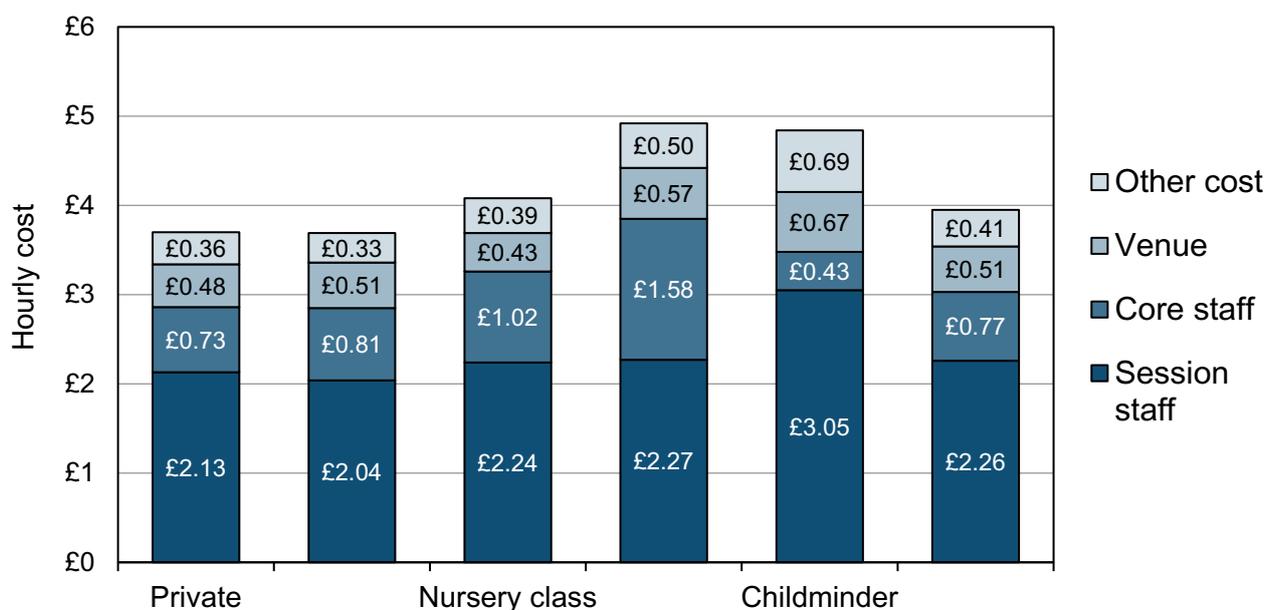
Figure 16: Hourly delivery costs per child for three and four year olds



Source: Early Years Providers Cost Study, 2018

Notes: Sample sizes are 24 private providers, 18 voluntary providers, 26 nursery classes, 30 MNS and 19 childminders.

Figure 17: Hourly delivery cost for three and four year olds by source and provider type



Source: Early Years Providers Cost Study, 2018

Notes: Sample sizes are 24 private providers, 18 voluntary providers, 26 nursery classes, 30 MNS and 19 childminders. Columns may not sum to the totals shown in figure 16 due to rounding.

Figure 17 breaks down the mean hourly costs into staff session costs (time specifically allocated to a session), staff core costs (time not directly attributable to specific sessions such as administration), venue costs and other costs. The figure shows:

- The higher costs for nursery classes and MNS are largely due to higher mean hourly core staff costs: these are £1.02 and £1.58 for nursery classes and MNS respectively compared to £0.73 for private providers and £0.81 for voluntary providers.
- Staff session costs are notably higher for childminders, but core staff costs are lower than most other provider types.

Table 8: Employer cost and staff utilisation

	Private	Voluntary	Nursery class	MNS	Child-minder	All types
Mean hourly employer cost for core running staff	£12.24	£12.00	£19.17	£22.73	£8.45	£12.96
Core hours as % of total childcare hours	6.5%	6.8%	5.8%	7.2%	6.0%	6.4%
Mean hourly employer cost for session staff	£10.29	£8.98	£14.44	£16.26	£8.44	£10.58
Mean child-to-staff ratio for three and four year olds	7.8	7.0	8.5	10.4	2.9	7.2
Number of settings	24	18	26	30	22	120

Source: Early Years Providers Cost Study, 2018

Notes: The mean hourly employer cost is weighted by the hours that each staff member spends on core running or on specific sessions. The mean hourly employer cost for childminders are mainly imputed values (as described in the cost report). Four childminders did not report a child-staff ratio and the ratio is drawn from 18 childminders.

Table 8 shows how these differences in staff cost relate to differences in the hourly employer cost and the utilisation of staff across provider types:

- Mean hourly employer costs for core staff are substantially higher for nursery classes and MNS which drives the higher hourly core staff cost. In addition, more

hours are spent on core running per childcare hour (core hours constitute 7.2% of total childcare hours) which also increases the core staff cost.²²

- Mean hourly employer costs for session staff are also higher among nursery classes and MNS, but this is offset by higher mean child-to-staff ratios for these provider types. Consequently, hourly session staff costs in MNS are not higher than those in other provider types.
- Mean hourly employer costs are lower for childminders than other provider types and, as would be expected, almost identical for core running and session staffing. Combined with the lower proportion of time spent on core running for childminders (6.0%), this means that the core staff cost is lower than for other provider types. However, the lower employer cost for session staffing is outweighed by the low child-to-staff ratio for both age groups, resulting in a higher mean hourly session staff cost for childminders than for other provider types as shown in figure 17.

The hourly costs presented here for 2018 were compared with findings from a similar study which collected data in 2015 and was published as part of the Study of Early Education and Development (SEED) in 2017 (Blainey and Paull (2017)). The confidence intervals for costs for three and four year olds are wide for both studies and overlap between the two studies for all provider types and for all settings combined, reflecting the small sample sizes. Across all settings, because of the overlapping confidence intervals, the inferred 11% increase in the mean hourly delivery cost for three and four year olds over the three years is not statistically significant. In other words, there is no statistically significant change in hourly costs over the three years from comparing hourly costs across the two studies.²³

The estimated increase is higher for private providers (18%) and lower for nursery classes (13%), childminders (9%) and voluntary providers (7%), but the hourly cost for MNS is estimated to have fallen substantially (by 20%). However, the estimated change for MNS should be treated with a high level of caution because the sample size for this provider type was particularly small (only 10 MNS) in the 2015 SEED data.

5.4 LA views on the drivers of cost

LA staff consistently reported that MNS Early Years provision is more costly than that delivered by other types of providers. The main driver of the extra cost was reported to

²² One possible explanation for the higher core cost for MNS and nursery classes could be their greater involvement in additional and specialist services (described in chapter 6). Although a share of core running has been allocated to the additional and specialist services based on childcare and user hour numbers, this will only approximate the actual division and there could be some overstatement in the core running costs for childcare for these provider types.

²³ See section 5.3 in the cost study (Paull & Xu, 2019) for a complete exposition of the comparisons.

be staff costs and, specifically, the requirements on MNS to employ a headteacher, qualified teachers and a SENCO. These requirements are not placed on other provider types, for example, PVI providers are only required to have to have a staff member qualified to level 3, which is a lower threshold than the Qualified Teacher Status (QTS) level applied to MNS.

Other reasons given for the higher delivery costs for MNS included:

- Higher staff employer on-costs in MNS than other provider types because MNS are more likely to pay higher pension contributions and other benefits.
- Some LAs are committed to paying staff the National Living Wage which increases the pay of support staff in MNS and increases staff costs.
- Higher cost of premises and lack of economies of scale (although only reported by a minority of LAs)
- Lower child-to-staff ratios than in nursery classes: some areas reported that MNS operate with a ratio of ratio of 10:1 in MNS while the ratio is closer to 13:1 in nursery classes.
- A higher fraction of children with SEND and from deprived backgrounds.
- Lack of flexibility in staff contracts means that staffing cannot be reduced during periods when occupancy is pupil is lower (such as earlier in the school year) and the hourly cost is therefore higher. It is argued that more flexible contracts for other types of providers means that they can reduce their staffing when fewer children are in attendance and avoid a rise in cost.

As seen in the previous section, these views regarding higher staff costs for MNS are supported by the higher average employer cost for staff than all other provider types. The higher cost of premises are also supported by the evidence in figure 9 showing slightly higher venue costs for MNS over all other provider types except childminders.

5.5 Regression analysis of key drivers of hourly cost

This section presents findings from regression analysis identified the factors that have statistically significantly associations with hourly cost controlling for other influences. For example, cost may be higher both for MNS and for settings using more qualified staff but the raw associations could be confounded because MNS tend to have more qualified staff. The regression analysis distinguishes whether it is being an MNS or whether it is the more qualified staff that is the “key driver” or whether both factors are independently important.

The factors included in the preferred regression model explain 71% of the variation in hourly costs. Full regression results and a more detailed description of the methodology are presented in Paull, G. & Xu, X. (2019), Early Years Providers Cost Study 2018.

Table 9 presents a summary of the statistically significant findings (in order of analysis and not size of effect).

Table 9: Key drivers of hourly delivery costs for three and four year olds

Statistically significant associations	Hourly cost for three and four year olds
Provider type	MNS > all others Private, voluntary > childminder
Region	North west, south east > north east, Midlands London > north east, Midlands, south east, south west
Deprivation quintile	Least deprived (Q5), average (Q3) > less deprived (Q4)
Rurality	---
Setting size	Middle > small
Chain / multisite	---
Youngest age	2YO > under 2 3-4YO > under 2
Proportion SEND	Increases with SEND proportion
Proportion EYPP	No EYPP > low EYPP, high EYPP
Daily opening hours	Decreases with more opening hours
Continuous opening	---
Open year round	Year open > term open
Average staff qualification	High > low, middle
Child-to-staff ratio	Decreases with higher ratio
Average group size	Decreases with higher group size

Source: Early Years Providers Cost Study, 2018

Notes: Includes statistically significant relationships at least at the 10% level. "---" indicates no statistically significant relationship.

The key findings for provider type are:

- The hourly cost is higher for MNS than all other provider types and is lower for childminders than for all other types except nursery classes.
- The point estimates of the mean difference between MNS and other provider types ranges from £2.33 to £4.02.

This confirms the patterns for MNS observed in the raw differences and indicates that the higher hourly costs for MNS are not explained by the characteristics considered here, including the measures aiming to capture quality. However, there are three points to note about this finding:

- As noted above, MNS have greater involvement in additional and specialist services than other provider types. If the share of core running allocated to childcare is overstated, this will spuriously increase childcare costs more for MNS than other provider types.
- As explored in Chapter 6 for additional and specialist services, staff qualification may not completely capture staff quality and higher hourly employer costs for MNS could reflect higher quality and better paid staff within qualification level (such as staff with more experience²⁴). A more direct measure of staff quality could potentially explain more of the difference in costs between MNS and other providers.
- Different specifications of the regression models indicate that the differences in the hourly cost between MNS and other providers is considerably smaller when controls are not included for the average child-to-staff ratio and group size. This suggests either that MNS are not deriving the full benefit of lower costs from their higher child-to-staff ratios and group sizes or that they are benefitting from these factors but that the benefits offset by other sources of higher costs.

The findings for other key drivers are:

- London has a higher average hourly cost than all other regions, while the Midlands has the lowest cost. There are no substantial differences in the hourly cost between rural and urban areas, but there are some indications that the hourly cost is higher in less deprived areas. This most likely reflects higher costs in London and less deprived areas for resources such as staff and property rents, but could also reflect higher parental demand for childcare and ability to pay higher fees due to greater affluence in these areas.
- While there are no consistent patterns in the hourly cost by provider size, regression analysis controlling for other factors indicates that being middle-sized (as measured by the number of registered places) is associated with a higher cost.

²⁴ If staff at MNS stay in their jobs for longer (lower churn than other providers) they would accrue more experience and correspondingly higher pay.

- Settings with children under the age of two have a higher hourly cost for three and four year olds, but the presence of children under age two is associated with a *lower* hourly delivery costs once other related characteristics are controlled for.
- The hourly cost is higher for settings with no children in receipt of the Early Years Pupil Premium (EYPP). Again, this most likely reflects higher costs in less deprived areas for resources such as staff and property rents, but could also reflect higher parental demand for childcare and ability to pay higher fees due to greater affluence in these areas.
- The hourly cost is higher for settings with a higher proportion of children with SEND. For each additional percentage point of SEND hourly costs increase by £0.05.
- The hourly cost is lower for settings which open for more hours each day.
- Higher staff qualifications is associated with higher delivery costs: the point estimates indicate average differences of £1.14 between settings with an average qualification greater than 3.5 and those with an average qualification of less than 3 and of £0.72 between settings with an average qualification of higher than 3.5 and those with an average qualification of 3 to 3.5.
- The hourly cost is lower for settings with higher child-to-staff ratios: the point estimate indicates that the cost falls by an average of £0.15 for each additional child.
- The hourly cost is lower for settings with larger average group sizes: the point estimates indicate that the cost falls by an average of £0.09 for each additional three or four year old child.

This shows that costs for MNS will be also higher than other provider types because of their higher proportion of children with SEND and their higher levels of staff qualifications. On the other hand, as mentioned above, their higher child-to-staff ratios and group sizes should help to reduce hourly costs for MNS.

6. Additional and specialist services

This chapter describes the provision and delivery cost of additional and specialist services by MNS and other types of Early Years providers. The first section summarises the previous evidence on these services, while the second section presents the information on these services obtained from the LA interviews. Drawing primarily on data from the Early Years Providers Cost Study, the third section present the prevalence and intensity of provision of the services, while the fourth and fifth sections examine the delivery cost per user hour and the key drivers of this cost.

The key findings are:

- The previous evidence showed that MNS offer a broad range of additional and specialist services. (section 6.1)
- Only very limited information could be collected from LAs on the provision and delivery costs for the services. (section 6.2)
- As well as offering preschool childcare, MNS provide a range of additional and specialist services including specialist support for children with special educational needs and disabilities (SEND) and family support. (section 6.3)
- Among providers offering any additional and specialist services, MNS are more likely than other provider types to offer a greater range of activity types, to deliver more user hours in larger groups and to spend a slightly greater share of their delivery costs on additional and specialist services. (section 6.3)
- The mean delivery cost per user hour varies substantially across the six types of activities considered: it is highest for one-to-one support for families (£21.78) and for children (£16.23) and for meetings with professionals focused on specific children (£16.03) and system support (£14.27) and substantially lower for group specialist support for children (£5.43) and group family support (£3.94). (section 6.4)
- Controlling for other characteristics, there is no strong evidence that the cost per user hour is higher for MNS than nursery classes. The cost per user hour is higher for MNS than PVI providers for all additional service types, but this is explained by a higher average wage for those staffing the services for three activity types and the associations are weak or based on a very small sample for the other two service types. (section 6.5)

6.1 Previous evidence on additional and specialist services

MNS have been described as ‘hubs’ (Early Education, 2014) to denote the provision of specialist children and family services beyond early education:

“The most distinctive features of maintained nursery schools are their specialist nature, highly qualified staff and role as a hub for services to local families and communities. Over the years many have also taken on the running of children’s centres, working with health visitors, speech therapists, social services and other services for families. Some offer wraparound care and after school activities. Many are involved in the training and development of the Early Years workforce.” (Early Education, 2014).

Previous evidence suggests four types of additional and specialist services provided by MNS:

- **Family support**²⁵: Most MNS offer family support services either on their own or in collaboration with children’s centres where they are linked or co-located. The 2015 MNS survey found that 78% offered parenting programmes or family support, 60% provided outreach services to parents and 71% supported children’s centres in delivering a wide range of family support services (Early Education, 2015). MNS also provided opportunities for family learning and volunteering which can support parental employment (Early Education, 2015).
- **Referral to other services**: MNS undertake networking activities with a range of other services including health services (such as speech and language therapists, physiotherapists, health visitors, midwives, antenatal and perinatal teams, dentists, mental health services, and Family Nurse Partnership), early intervention teams, housing, police and local schools. Some also have links with PVI Early Years providers and with community and arts organisations, libraries, universities and training providers (Early Education, 2015). In addition, a long history and established relationships with LAs and children centres has meant that MNS have the infrastructure to enable access to a broad range of advice and specialist support to meet complex needs (Mathers & Smees, 2014).
- **Specialist SEND support**: Research suggests that MNS have particular areas of knowledge and specialism in supporting children with SEND (Early Education, 2015).
- **System leadership and workforce development**: According to a survey of 127 MNS in 2013/14, 80% were involved in delivering training and placements and 20% in delivering system leadership activity in their area (in association with the National College for Teaching and Leadership, Teaching School partnerships, local networks of Early Years and primary schools and LA Early Years teams) (Early Education, 2014). MNS also played a role in Initial Teacher Training (ITT), ongoing

²⁵ To note, although the range of family support services goes beyond the standard Early Years provision, it is reported to align with the aims of the Early Years Foundation Stage (EYFS) to encompass the wider social, emotional and health needs of young children (Holmes, 2012).

quality improvement and monitoring to assess the impact of Early Years Pupil Premium (Early Education, 2015). In addition, it has been suggested that MNS provide ad hoc support and advice to schools which is not specifically commissioned and is viewed as a 'hidden' costs of pro-bono services.

No existing evidence was identified on the quality of the additional and specialist services provided by MNS (or even the types of appropriate measures or tools that could be used to robustly capture quality for these types of services) or on the cost of delivering additional and specialist services in MNS and other Early Years provider types.

6.2 LA information on additional and specialist services

The interviews with LAs were used to gather three types of information on the additional and specialist services offered by MNS.

First, information was collected on the types of additional and specialist services offered by MNS in order to check whether the list compiled from the literature review and from the data collection from Early Years providers was comprehensive. No omissions were identified in this process.

Second, information was gathered on how these services were delivered in areas without MNS. The approaches varied across areas and types of service:

- Some LAs had direct provision of some services (for example, SEND support, CPD support and system leadership).
- Some LAs delivered some services through other providers who may or may not be under LA control (for example, family support services through Children's Centres or family hubs).
- Some LAs procured some services through competitive tenders delivered by private or public providers (for example, speech and language therapy).

Finally, information was requested on cost data for services delivered through other approaches in order to draw comparisons with delivery costs for MNS and other Early Years providers. However, making direct comparisons of these costs based on LA data proved extremely challenging due to the limited availability of data and differences in the way information is collected and stored. Cost information was obtained from a handful of LAs on some services of interest, but this was not sufficient to undertake a comparison of costs and quality. Where some comparisons for specific services were possible, the data generally supported the findings presented from the Early Years providers.

6.3 The provision of additional and specialist services

Many MNS provide services in addition to the core delivery of childcare, although such provision is at the discretion of LAs and is not required by the Department for Education.

Table 10: Types of additional and specialist services

Category	Examples of specific activities
Specialist child support 1:1	Support for SEND including, speech and language therapy, phonics, attention skills, educational psychologist, social development group, intensive interaction, physiotherapy, autism, hearing impaired support, sight support. Other specialist support including English as an additional language group, pupil premium session, motor skills, sensory activities, speech and language, communication.
Specialist child support group	
Meeting with support professionals about children	Safeguarding / child protection meetings, social care reviews, team around the family, SALT support, SENCO meetings, meetings with Local Authority staff.
Family support 1:1	Parent reviews, parenting classes and advice (health education, family learning, phonics, child development, behaviour management), parent counselling, home visits, transition to school, antenatal / perinatal support. Family bonding including stay and play, parent toddler groups, mother baby group / massage, dads' clubs, gardening / farm sessions.
Family support group	Group meetings with parents, e.g. parenting classes, school admissions/ transition support, parent meetings, health education
System support	Working groups and networking (with Local Authority staff, SENCOs, school transition, primary heads, nursery heads, area and partnership meetings) and CPD and training delivery (SEND, first Aid, health and safety, food hygiene, safeguarding).

Source: Early Years Providers Cost Study, 2018

Data on the provision and cost of additional and specialist services was collected from group based settings in the Early Years Provider Costs Study.²⁶ These services were defined to mean any service outside the core delivery of childcare and early education such as specialist support for children, family support and system leadership. Childminders were not asked about these activities as they would not typically separate out any such specialist or family support from the day-to-day care of children. It should also be noted that some providers did not view these activities as additional but as a key part of their purpose and formal remit. In addition, as the proportions of providers offering some types of activities were quite low, private and voluntary providers were combined into a single PVI (private, voluntary and independent) group for the analysis in this chapter. A list of the activities included in each activity type is shown in table 10.

Most settings (85%) reported that they offer some additional and specialist services in addition to delivering childcare. This does not vary substantially across provider type: 84% of private settings, 90% of nursery classes and 87% of MNS report offering some additional and specialist services. However, nursery classes and MNS offer a greater range (more types of activities) than PVI providers (table 11).

Table 11: Number of types of activities offered

Number of types of activities	PVI	Nursery class	MNS	All types
None	16%	10%	13%	15%
1	33%	20%	4%	30%
2	24%	13%	23%	22%
3	14%	41%	21%	19%
4 or more	13%	16%	39%	15%
Total	100%	100%	100%	100%
Number of settings	42	26	30	98

Source: Early Years Providers Cost Study, 2018

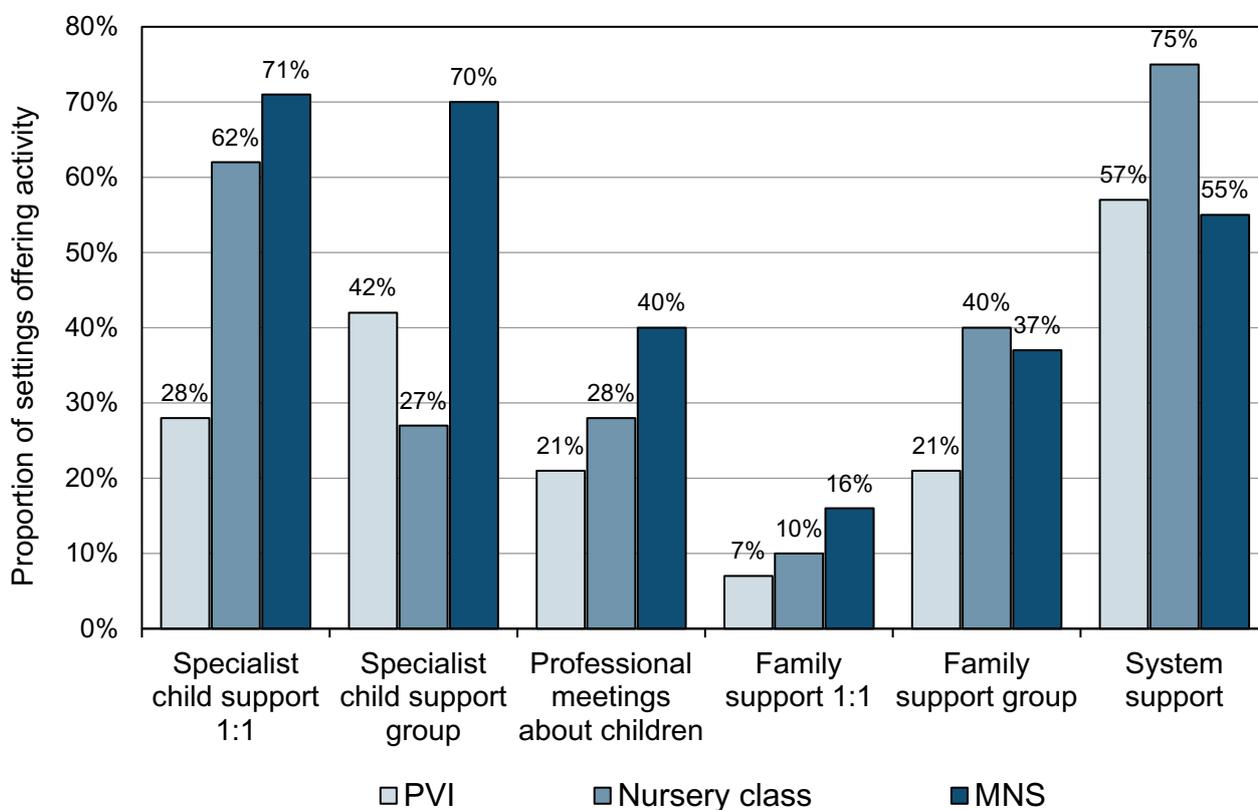
Notes: PVI includes private, voluntary and independent settings.

The most common type of additional activity is “system support” covering a broad range of networking meetings and training and CPD support, undertaken by 61% of all providers. Substantial proportions of settings provide SEND and other specialist support for children, either one-to-one (36% of providers) or in groups (40% of providers). In

²⁶ Full details on this data collection and the derivation of an estimate of the cost per user hour can be found in chapter two in Paull & Xu (2019).

around a quarter of settings (23%), staff also spend time in meetings with other professional concerning specific children in their setting, for example safeguarding or child protection meetings or social care reviews. Many settings (8%) also offer one-to-one family support, either informally or through formal events such as parent reviews, while a quarter (25%) group family support, such as parenting classes or parent meetings or family bonding sessions such as stay and play sessions. This includes formal meetings with parents and time that is specifically set aside to offer support to parents, for example, headteachers of nursery managers setting aside time to meet parents in the afternoon or take phone calls from parents. It does not include time spent informally speaking to parents during the course of the day which settings did not report as an additional activity.

Figure 18: Proportions of settings offering each activity type



Source: Early Years Providers Cost Study, 2018

Notes: Sample sizes are 42 for PVI providers, 26 for nursery classes and 30 for MNS.

Figure 18 shows that the proportion of providers offering each type of activity is highest for MNS, with the exception of system support activities. However, the only statistically significant differences are for specialist child support:

- Nursery class settings and MNS are more likely to offer one-to-one specialist child support than PVI providers.

- MNS are more likely to offer group specialist child support than PVI or nursery class providers.

Although the proportion undertaking meetings with other professional about specific children is higher for MNS than the other two types of providers, the difference is not statistically significant.

Table 12 Percentage of settings providing additional and specialist services by provider type

Type of additional activity	Private	Voluntary	Nursery classes	MNS	All types
No additional and specialist services	55%	54%	40%	14%	51%
Specialist services for children only	19%	20%	6%	6%	17%
Specialist family support only	3%	3%	16%	4%	5%
Specialist family support and specialist services for children	5%	7%	7%	5%	6%
System leadership only	3%	3%	6%	10%	3%
System leadership and specialist services for children	7%	6%	5%	15%	7%
System leadership and specialist family support	1%	1%	9%	7%	2%
All three services	7%	6%	11%	40%	8%
Number of settings	3,446	2,183	661	238	6,528

Source: Survey of Childcare and Early Years Providers (SCEYP), 2018

Analysis of data from the Survey of Childcare and Early Years Providers (SCEYP) for 2018 also indicates that MNS are more likely than other provider types to offer additional and specialist services (table 12). The survey asked providers whether they provide any of the following services:

- Specialist family support, for example, dedicated sessions with parents on their own or with their children;

- System leadership, for example, providing training or CPD for other providers, support to the local authority, or leading quality improvement in an area;
- Specialist services for children, for example, providing specialist support for children who have been referred by the local authority / other providers;

Some 40% of MNS reported that they offered all three types of additional and specialist services compared to 11% for nursery classes and 7% for private providers and 6% for voluntary providers.

Table 13 presents the average user hours delivered per week within each setting for each activity type. A user hour is defined as one hour of an activity for one user. For example, a 20 minute one-to-one meeting would constitute one-third of a user hour, while a two hour session for four children would constitute eight user hours. The lower panel in the table shows the number of providers in each activity category and provider type to highlight that many of these subsamples are quite small. Indeed, one-to-one family support has only four settings for each provider type and the statistics for these three groups are suppressed in the following tables and figures.

Table 13: Total user hours for each activity type

Mean total user hours (number of settings)	PVI	Nursery class	MNS	All types
Specialist child support 1:1	9 (14)	9 (16)	25 (20)	10 (50)
Specialist child support group	21 (15)	27 (8)	90 (22)	25 (45)
Professional meetings about children	1 (9)	3 (7)	29 (12)	3 (28)
Family support 1:1	* (4)	* (4)	* (4)	3 (12)
Family support group	20 (10)	8 (10)	34 (12)	17 (32)
System support	8 (22)	6 (19)	28 (17)	8 (58)

Source: Early Years Providers Cost Study, 2018

Notes: PVI includes private, voluntary and independent settings. * indicates a suppressed statistic due to a sample size of less than six.

Unsurprisingly, across all settings that deliver the activity, the average number of weekly user hours is highest for the two group activities: specialist child support (25 user hours

each week) and family group support (17 user hours each week). An average of 10 user hours is provided for one-to-one specialist child support and 8 user hours for system support, while the lowest weekly user hours are for potentially the rarer activities of meetings with professionals about specific children (3 user hours) and for one-to-one family support (3 user hours).

MNS are not only more likely to offer most of the types of additional and specialist services, but they also deliver more user hours on average if they do offer an activity. The mean numbers of hours are substantially higher for MNS than the other provider types for all six activity types and are statistically significantly higher for four:

- User hours for meetings with professional about specific children are higher for MNS than PVI (although only at the 10% level).
- User hours for group family support are lower for nursery classes than for PVI providers and MNS.
- User hours for system support are higher for MNS than PVI and nursery classes.

Overall, provision levels vary substantially across the six categories of additional and specialist services considered here. MNS are more likely than other provider types to offer additional and specialist services and to deliver more user hours in larger groups if offered. This largely reflect that MNS settings are of a larger scale than other provider types, but could also partly reflect their broader remit to offer services beyond childcare and that they tend to serve children and families more likely to need specialist services. Nursery classes are more likely to offer most activities than PVI providers with some tendency to also offer them in larger groups.

Table 14: Proportions of children with EYPP and SEND by provision

	Two or fewer additional and specialist services offered		Three or more additional and specialist services offered		Number of settings
	% EYPP	% SEND	% EYPP	% SEND	
PVI	3%	5%	6%	5%	42
Nursery Class	8%	5%	13%	10%	26
MNS	11%	10%	14%	12%	30

Source: Early Years Providers Cost Study, 2018

Notes: PVI includes private, voluntary and independent settings.

The number of additional and specialist services offered is correlated with the proportion of children in receipt of EYPP and with SEND (table 14). For example, MNS which offer two or fewer additional and specialist services have on average 11% of disadvantaged children compared to 14% in MNS which offer more than two additional and specialist

services. Similarly, MNS which offer fewer activities have a lower proportion of children with SEN: those with two or fewer additional and specialist services have 10% of children with SEN compared to 12% for those offering three or more additional and specialist services. It is worth noting that these are simple correlations which do not imply a causal relationship.

6.4 Delivery cost for additional and specialist services

The mean delivery cost per user hour varies substantially by the activity type (table 15). The cost is highest for the one-to-one support for families (£21.78) and for one-to-one specialist child support (£16.23) and for meetings with professionals focused on specific children (£16.03) (because they tend to involve senior staff and generally only address one child within a meeting). The mean cost is also quite high for system support (£14.27), but substantially lower for the two group activities of specialist support for children (£5.43) and family support (£3.94). Across all activity types, bar one the mean hourly user cost is higher than the median, which reflects a relatively small number of settings with very high costs.

The confidence intervals for the mean estimates (showing the range which contains the true population mean with 95% confidence) are wide due to small sample sizes and the considerable variation in costs across the sample. Nevertheless, the absence of overlap in the ranges indicates, even for this small sample, that the group activities are delivered at lower cost per user hour than the other types of activities.

Table 15: Delivery cost per user hour

	Mean	Median	95% confidence intervals for the mean	Number of settings
Specialist child support 1:1	£16.03	£12.54	£12.40 - £19.67	50
Specialist child support group	£5.43	£5.41	£4.14 - £6.72	45
Professional meetings about children	£15.41	£13.84	£11.69 - £19.13	28
Family support 1:1	£21.78	£24.93	£14.89 - £28.67	12
Family support group	£3.94	£2.88	£2.81 - £5.07	32
System support	£14.27	£10.99	£11.12 - £17.41	58

Source: Early Years Providers Cost Study, 2018

Variation in the mean hourly cost was examined across the following characteristics:

- Provider type

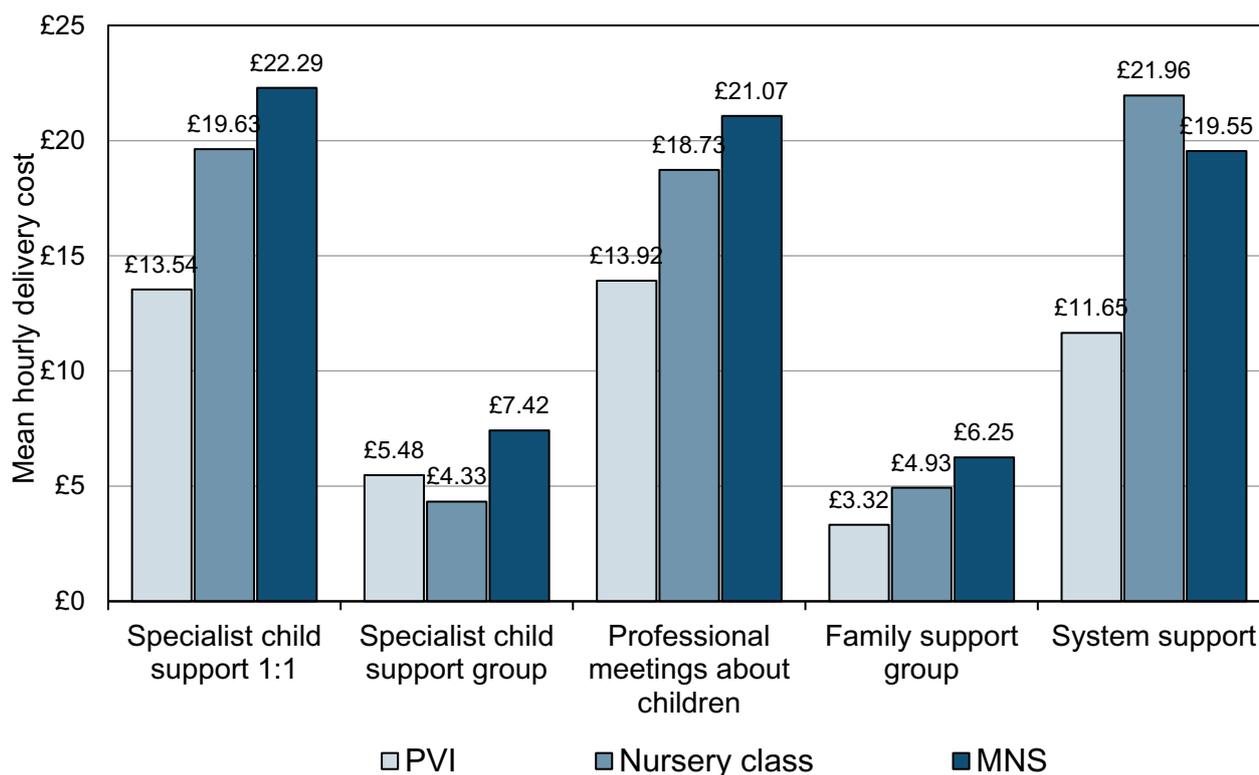
- Average qualification level for staff delivering the activities
- Average wage (measured as hourly employer cost) for staff delivering the activities
- Average group size
- Scale of provision (measured as total weekly user hours)

Average qualification level and group size could be related to the quality of the activity provided in the sense that activities delivered by more highly qualified staff and in small groups may be more effective in achieving their objectives (such as improving child outcomes). In comparing cost across provider types, it is important to allow for potential differences in quality. Average group size and scale of provision may also capture efficiency of delivery: larger group sizes and larger scale may reduce costs which are important to consider when comparing costs across provider types. Finally, the average wage may capture several influences on cost including higher quality of staffing (not captured in qualification level); local labour market context or different staff remuneration policies.

The relationships between the hourly user cost for each type of additional activity and each of these factors are considered below, first independently and then in a combined regression analysis to identify the key drivers. A more limited set of factors were considered than for the childcare cost as the sample sizes are smaller and because the primary objective is to compare costs across provider types while controlling for quality.

Figure 19 presents the variation in cost per user hour across provider type for five of the six activity types (the sample for one-to-one family support is too small to present the cost for each provider type).

Figure 19: Mean hourly delivery cost for each activity type



Source: Early Years Providers Cost Study, 2018

Notes: Sample sizes are as in table 13. The cost for family support 1:1 by provider type has been suppressed due to sample sizes below six.

The figure shows that mean costs are generally higher for MNS than other types of providers. Indeed, there are statistically significant differences across provider types for four of the five activity types:

- The cost for one-to-one specialist child support is higher for MNS than PVI providers.
- The cost for group specialist child support is higher for MNS than nursery class providers.
- The cost for group family support is higher for MNS than PVI providers.
- The cost for system support is higher for MNS and nursery classes than PVI providers.

One reason that the cost of specialist care for children is higher for MNS than for other provider types could be because MNS serve children with more challenging special needs (as indicated in section 3.4).

Table 16 presents the hourly delivery cost by three levels of average staff qualifications²⁷. The sample sizes in the bottom panel of the table indicate that the average cost has been suppressed in three cells due to small sample sizes.

Table 16: Hourly delivery cost by average staff qualification

Mean hourly delivery cost (Number of settings)	Average staff qualification			All levels
	Level 3 or less	Between level 3 and level 6	Level 6 or higher	
Specialist child support 1:1	£12.66 (14)	£14.99 (18)	£20.21 (16)	£16.08 (48)
Specialist child support group	£5.05 (9)	£5.61 (17)	£5.44 (19)	£5.43 (45)
Professional meetings about children	£13.10 (6)	* (2)	£16.97 (20)	£15.41 (28)
Family support 1:1	* (2)	* (3)	£24.36 (7)	£21.78 (12)
Family support group	£4.33 (7)	£3.11 (10)	£4.45 (14)	£4.05 (31)
System support	£11.17 (9)	£13.75 (34)	£18.40 (12)	£14.67 (55)

Source: Early Years Providers Cost Study, 2018

Notes: PVI includes private, voluntary and independent settings. The costs for some groups have been suppressed due to sample sizes below six.

As would be expected, settings where activities are completely staffed at graduate level (level 6 or above) have notably higher costs per user hour, while the average cost for those with the middle level of average staff qualification is higher than those with the lowest average level of staff qualification for three of the four activities where this can be compared. However, differences across qualification were statistically significant for only two of the activity types²⁸:

²⁷ Average staff qualification is calculated as the average qualification level for each staff hour, that is, the staff qualification levels are weighted by the time they spend on the activity.

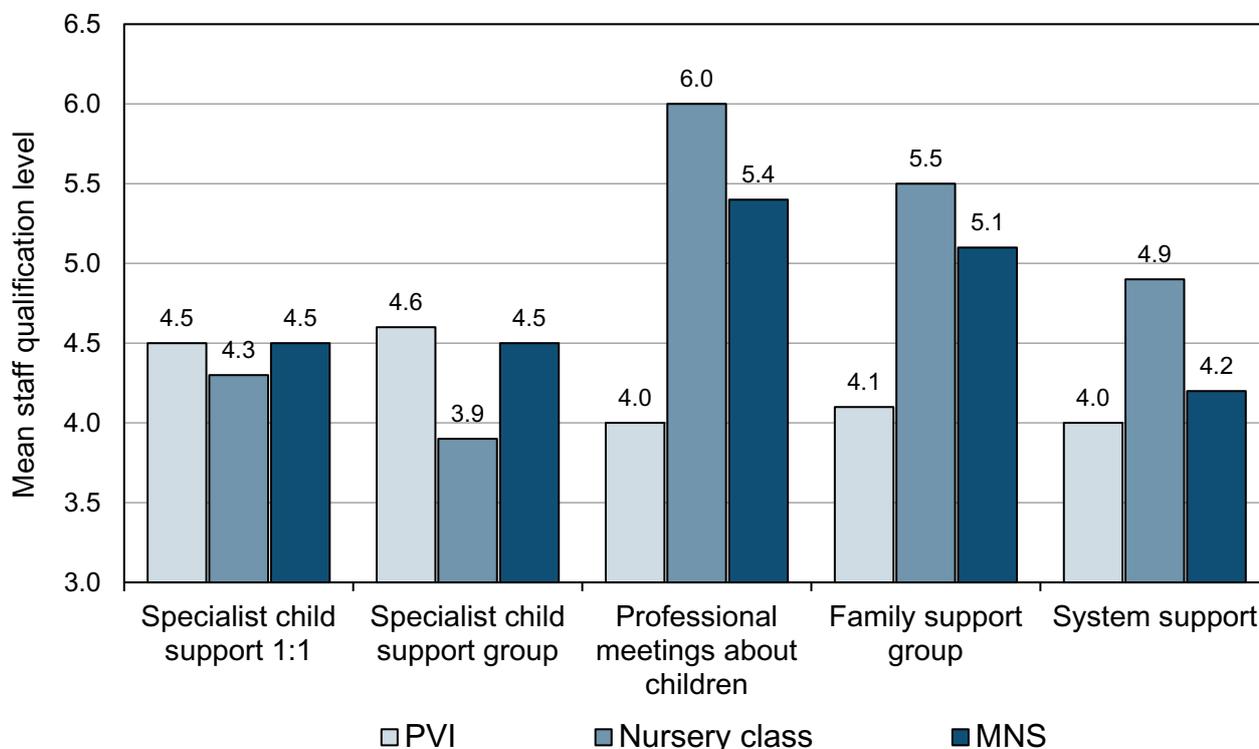
²⁸ Differences were tested using both the three categories shown in table 16 and as a linear specification with the ungrouped mean qualification level.

- The cost for one-to-one specialist child support is higher for settings using high average staff qualifications than for those using low average staff qualifications. There is an average increase in cost of £7.55 for each increase of one level.
- The cost for system support is higher for settings using high average staff qualifications than for those using low average staff qualifications (but only at the 10% significance level). There is an average increase in cost of £2.19 for each increase of one level (but only at the 10% significance level).

One explanation of higher costs for MNS could be higher staff qualification levels. However, as shown in figure 20, only two activity types have notable differences in the average qualification level by provider type and the statistically significant differences only included a higher level for MNS for one of them:

- The mean qualification level for staffing for meetings with professionals about specific children is higher for nursery classes and MNS than for PVI providers.
- The mean qualification level for staffing for group family support is higher for nursery classes than for PVI providers.
- The mean qualification level for staffing for system support is higher for nursery classes than for PVI providers and MNS (but only at the 10% significance level).

Figure 20: Mean staff qualification for each activity type



Source: Early Years Providers Cost Study, 2018

Notes: Sample sizes are as in Table 12. The mean level for family support 1:1 by provider type has been suppressed due to sample sizes below six.

The lack of variation in qualification level between types of providers may seem surprising, but it should be kept in mind that this is only for specific staff involved in delivering the additional and specialist services and may not reflect the qualification levels of staff only involved in the delivery of childcare.²⁹

There is a possibility that variation in wage levels within qualification level may capture additional variation in the quality of staff which could be related to the delivery cost for additional and specialist services. Table 17 shows that the average wage (measured as hourly employer cost) is highest for MNS and lowest for PVI providers. Indeed, these differences are statistically significant for two of the qualification groups:

- The mean wage for activities with an average qualification level of less than 3 is higher for MNS than for PVI providers (but only at the 10% significance level).
- The mean wage for activities with an average qualification level of 3 to 5 is higher for nursery classes and MNS than for PVI providers.
- The mean wage for activities with an average qualification level of 6 or higher is higher for nursery classes and MNS than for PVI providers.

Table 17: Qualifications and wages for additional and specialist services staffing

Average hourly employer cost (Number of settings)	PVI	Nursery class	MNS	All types
Qualification level less than level 3	£8.17 (25)	£9.81 (10)	£13.47 (12)	£8.82 (47)
Qualification level 3 to 5	£10.09 (21)	£13.16 (23)	£13.99 (40)	£10.83 (84)
Qualification level 6 or above	£15.01 (25)	£28.50 (29)	£30.99 (34)	£18.65 (88)

Source: Early Years Providers Cost Study, 2018

Notes: PVI includes private, voluntary and independent settings.

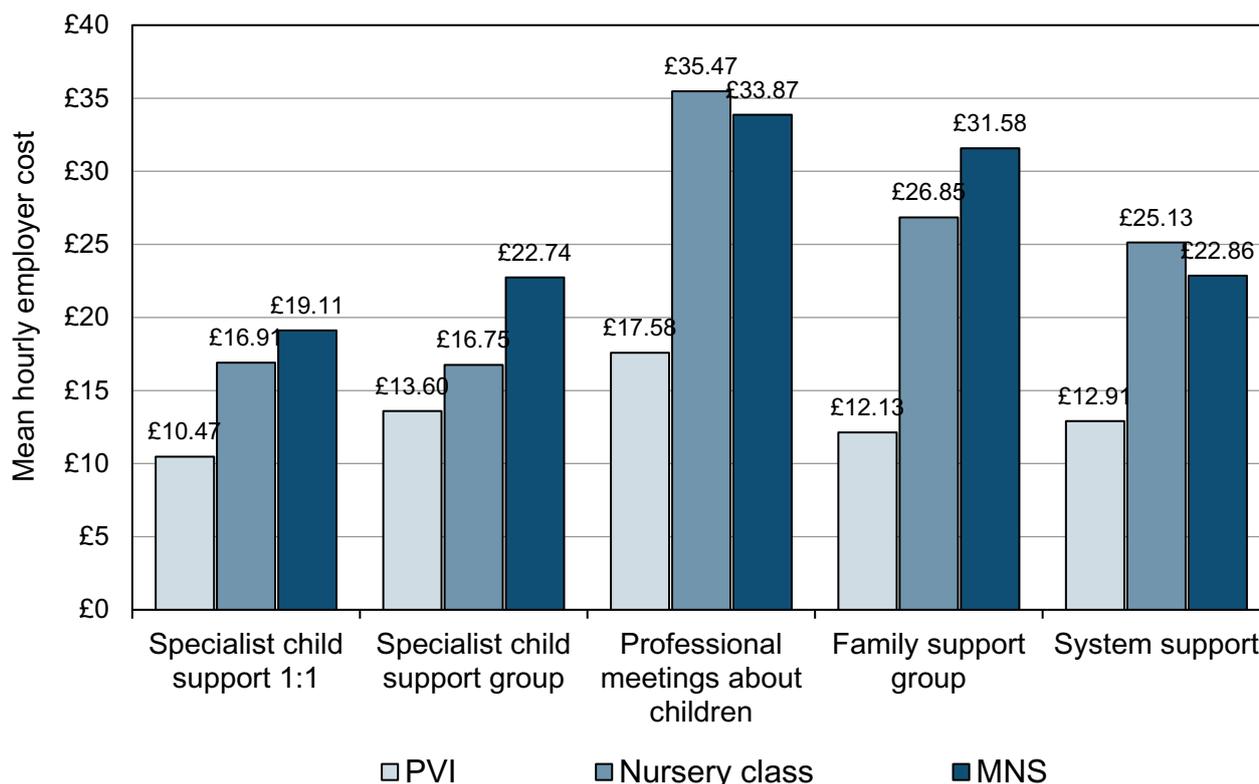
Figure 21 shows how the differences in the average wage within qualification level across provider types feed through into substantial differences in the average wage for each

²⁹ Similar analysis using a division by whether the activity was “graduate-led” defined as an activity having more than 60% of the staff hours delivered by staff with at least level 6 qualifications yielded no statistically significant results.

activity type. It is notable that the main gaps are between PVI providers on the one hand and nursery classes and MNS on the other. Almost all are statistically significant:

- For group specialist child support, the mean wage is higher for MNS than for PVI providers.
- For the remaining four activity types shown in the figure, the mean wage is higher for nursery classes and MNS than for PVI providers.

Figure 21: Mean hourly employer cost for staffing for each activity type



Source: Early Years Providers Cost Study, 2018

Notes: Sample sizes are as in Table 12. The mean employer cost for family support 1:1 by provider type has been suppressed due to sample sizes below six.

The cost per user hour is mechanically linked to the number of users per group: halving the group size would double the associated hourly user cost if the resources required to deliver the activity to the larger group did not change. In practice, it is more likely that costs will change in a more discrete manner as group sizes reach a point where another member of staff or a larger room is required to serve more users. Hence, cost per user would be expected to decline with group size but not necessarily in a purely linear way.

For all four activities which are not one-to one by definition, middle sized groups have notably lower costs than small groups, but larger groups do not always have lower costs

than the middle-sized ones (table 18). There are statistically significant differences in the cost across group size for three of the activities³⁰:

- For group specialist child support, the cost is highest for small groups and lowest for large groups and the cost decreases by an average £0.66 for each additional user in the group.
- For professional meetings about children, the cost for small groups is higher than for middle-sized groups.
- For group family support, the cost for small groups is higher than for middle-sized and large groups and the cost decreases by an average £0.13 for each additional user in the group.
- For system support, the costs for small and middle-sized groups are higher than for large groups and the cost decreases by an average £0.58 for each additional user in the group.

The expected relationship for these three types of activities is not surprising as they are activities which generally have clearly defined and varying group sizes. The lack of a similar relationship for the meetings with other professionals about specific children most likely reflects that user number is not well defined for this activity and that numbers tend to be small in most cases.

Table 18: Hourly delivery cost by average group size

Mean hourly delivery cost (Number of settings)	Average group size			All levels
	Small	Medium	Large	
Specialist child support group	£7.23 (18)	£4.41 (14)	£2.92 (13)	£5.43 (45)
Professional meetings about children	£18.20 (11)	£12.18 (8)	£13.38 (9)	£15.41 (28)
Family support group	£6.01 (13)	£2.63 (9)	£2.83 (10)	£3.94 (32)
System support	£17.96 (22)	£14.48 (17)	£9.42 (19)	£14.27 (58)

Source: Early Years Providers Cost Study, 2018

³⁰ Again, differences were tested using both the three categories shown in table 18 and as a linear specification with the ungrouped group size.

Notes: Small, medium and large group size are defined as being in the lowest, middle and highest third by group size within each activity type.

The scale of provision, defined here as the number of total user hours of a particular types delivered across all sessions and meetings, may also affect the cost per user hour if there are economies of scale in delivery within the setting. Table 19 shows that for most activity types (those other than group family support), the cost per user hour tends to be substantially lower for settings with provision in the large scale group over those with provision in the small scale group (with the user cost for the medium group closest to that for the small scale group for three activity types and closer to the large group for one type). However, the differences are only statistically significant for one activity type:

- The cost per user hour for system support is higher for settings with provision in the lower and medium-sized groups than in the large group (but only at the 10% significance level).

Table 19: Hourly delivery cost by scale of provision

Mean hourly delivery cost (Number of settings)	Scale of provision			All levels
	Small	Medium	Large	
Specialist child support 1:1	£17.93 (17)	£16.76 (17)	£12.76 (16)	£16.03 (50)
Specialist child support group	£6.00 (15)	£4.91 (15)	£5.02 (15)	£5.43 (45)
Professional meetings about children	£16.37 (10)	£16.26 (9)	£11.52 (9)	£15.41 (28)
Family support 1:1	* (5)	* (3)	* (4)	£21.78 (12)
Family support group	£4.39 (11)	£3.25 (11)	£4.44 (10)	£3.94 (32)
System support	£16.20 (20)	£15.42 (19)	£9.97 (19)	£14.27 (58)

Source: Early Years Providers Cost Study, 2018

Notes: The costs for some groups have been suppressed due to sample sizes below six. Small, medium and large scale provision are defined as being in the lowest, middle and highest third by user hours within each activity type.

6.5 Regression analysis of key drivers of the delivery cost for additional and specialist services

This section presents findings from regression analysis which identifies which factors are statistically significantly associated with variation in the cost per user hour for each activity type controlling for the associations with other factors which may confound the observed relationships. For example, cost may be higher both for MNS and for activities using more qualified staff but the associations could be confounded because MNS tend to have more qualified staff. The regression analysis distinguishes whether it is being an MNS or whether it is the more qualified staff which is the key association (and the “key driver”) or whether each are important to some degree.

The following points should be noted about this regression analysis:

- The term “key driver” used here does not mean any sense of causation but only that the factor has an association which is not due to an association with other drivers.
- Two models have been estimated for each activity type: one excluding the average wage level and one including it. Both models are presented because of the uncertainty in interpretation of the association for the average wage: the influence of the average wage could be an external driver of cost (such local labour market conditions) or could simply reflect other cost drivers already included in the model (in particular, average qualification level but possibly also provider type). In the latter case, the addition of the average wage variable simply means that differences in costs are operating through impacts on the wage rather than being driven by the wage.
- Average staff qualification, group size, scale of provision and average wage are all included as single linear terms in the models. Inclusion of a quadratic term or inclusion as grouped variables as presented above did not qualitatively change the findings.
- Findings are presented for one-to-one family support as the total sample size exceeds six, but it should be kept in mind that the numbers of observations within some explanatory categories are small. Hence, the findings for this activity type should be treated with some caution.

Table 20 presents a summary of the statistically significant findings. Full regression results for each model are available in the Annex.

The table shows for that the key differences across provider types are:

- The cost per user hour is higher for MNS than nursery classes for two activity types, but the difference is only statistically significant at the 10 percent level once

variation in the average wage is taken into consideration. Hence, there is no strong evidence that the user cost for additional and specialist services is higher for MNS than nursery classes.

- The cost per user hour is higher for MNS than PVI providers for all activity types. For three types (one-to-one and group specialist support for children and system support), the higher cost is explained by a higher average wage for those staffing these activities which could reflect higher quality. For two of the remaining activity types, the finding is only significant at the 10% level (for group family support) or is based on a very small sample (for one-to-one family support). Hence, the user cost for additional and specialist services is higher than for PVI providers but it is not possible to rule out that this is explained by differences in the quality of staffing for most activities.

Table 20: Key drivers of delivery cost per user hour

Type of activity	Model	Potential drivers				
		Provider type	Staff qual.	Group size	Scale	Wage
Specialist child support 1:1	Without wage	MNS > PVI ***	(+) *	n/a		n/a
	With wage			n/a		(+) **
Specialist child support group	Without wage	MNS > PVI *** MNS > NC ***		(-) ***		n/a
	With wage	MNS > NC *		(-) ***		(+) ***
Professional meetings about children	Without wage	MNS > PVI **		(-) ***	(-) **	n/a
	With wage	MNS > PVI **		(-) ***	(-) **	(+) ***
Family support 1:1	Without wage	MNS > PVI ***		n/a	(+) ***	n/a
	With wage	MNS > PVI ** MNS > NC *		n/a	(+) ***	
Family support group	Without wage	NC > PVI * MNS > PVI ***		(-) ***		n/a
	With wage	MNS > PVI *		(-) ***		
System support	Without wage	NC > PVI * MNS > PVI ***				n/a
	With wage					

Source: Early Years Providers Cost Study, 2018

Notes: *** indicates a statistically significant relationship at the 1% level, ** at the 5% level and * at the 10% level.

For other factors, the statistically significant findings are:

- There is are no strong relationships between user cost per hour and average staff qualification for any activity type.
- Larger group sizes have lower costs per user hours for three of the four activity types which are not one-to-one by definition.
- Larger scale of provision (more total user hours) is associated with a lower cost per user hour for meetings with other professionals about specific children, while it is associated with a higher cost per user hour for one-to-one family support (although the latter is based on very small sample sizes).
- A higher wage is associated with a higher user cost per hour for the three types of activities focused on children which may reflect a higher intensity use of staff for these activities than for the other activity types. For these three activity types, this finding suggests that the user cost may be higher in some settings because higher quality staff are used or because wage costs are higher for other reasons such as local labour market context or the settings' approach to remuneration.

7. Current challenges and the future of MNS

This chapter considers the current challenges facing MNS. The first section describes ongoing changes in the funding for MNS, while the second and third sections presents the views of LA staff on the financial challenges and the initiatives being undertaken to improve the financial position of MNS. The fourth section highlights a number of other specific ongoing issues, while the final section concludes on the need for further evidence to assess the value for money that MNS offer.

The key findings are:

- MNS currently benefit from supplementary annual funding of about £60m which is being paid to LAs to enable them to protect MNS funding levels following the introduction of the Early Years Funding Formula in 2017 (section 7.1)
- The financial position of MNS is seen as precarious by LAs and there is general concern that MNS will not be viable without the supplementary funding that MNS currently receive. (section 7.2)
- There have been some initiatives to improve the financial position of MNS, including the use of federations and finding additional income streams. (section 7.3)
- Some MNS currently face challenges around the introduction of 30 hours free childcare, their relationships with children's centres and the demands placed on them for provision for children with SEND. (section 7.4)
- There is no robust evidence on the impacts of MNS on outcomes for families and children and further evidence is required in this area in order to allow the value for money of MNS to be assessed. (section 7.5)

7.1 Funding changes

The services that MNS deliver and the funding they receive is determined by each Local Authority (LA) and this may include funding from wider LA resources if the MNS delivers services beyond the early years entitlements. MNS receive funding for the free early education entitlement in the same way as other Early Years providers except that they may also benefit from supplementary annual funding of about £60m which is being paid to LAs to enable them to protect MNS funding levels following the introduction of the Early Years National Funding Formula in 2017 until at least 2019-20.

MNS may continue to receive additional government funding beyond the free entitlement base rate through:

- A mandatory deprivation supplement and discretionary supplements for English as an Additional Language (EAL); quality covering system leadership or staff qualifications; flexibility; and rurality.
- The Early Years Pupil Premium (EYPP) (up to £302 per year for each disadvantaged child);
- The Disability Access Fund (£615 each year for three or four year old child using the universal free entitlement and in receipt of Disability Living Allowance);
- LA SEN Inclusion Funds (to support children with lower levels of SEND) and High Needs funding

Given the nature of MNS and that they serve more disadvantaged areas, it is likely that they tend to benefit more from these supplements and additional funding streams than other types of providers.

7.2 Financial concerns

The interviews with LA staff showed that the greatest concern for MNS is the uncertainty about funding and the supplementary funding beyond 2020 in particular. There is a consistent view among LA staff that without the supplementary funding MNS currently received, MNS will be unviable beyond 2020. This is particularly pertinent since the financial position of MNS is generally seen as precarious by LAs.

As one LA in the Midlands described its:

“The financial position of MNS is very weak – they live from hand to mouth. If the supplement drops, the LA will not be able to continue to subsidise that.”

Another LA in the South West of England reported that:

“If the supplementary funding disappears, they would not be able to run on a PVI rate.”

There were also reports of some MNS being in deficit even with the supplementary payment in place. For example, one London LA reported that:

“The position of MNS is mixed. Two are in deficit and three are in surplus. This includes supplementary funding. The reason for this is not clear and is currently being investigated. It should be noted, however, that the structure of staffing is different. They are moving through their federation journey at different rates and their spending habits are different.”

A recent review of the financial position of MNS by one LA in the North of England showed that only a third of MNS had no significant financial issues:

- A quarter of MNS in the LA had either a structural deficit (a deficit beyond recovery and school is unviable) or a significant deficit (a deficit requiring intensive intervention and focused report to recover).
- A further 46% are in a vulnerable position indicating that they are either quickly going through their reserves, losing significant pupil numbers or moving to the brink of deficit.

LAs voiced their concerns about the reliance on MNS to serve more disadvantaged children and children with SEND. One LA in London stated:

“There is no desire to change. MNS are doing a good job especially for SEN. It should also be remembered that special schools have no Early Years provision and this is a gap that would need to be filled if MNS disappeared.”

LA staff indicated that *uncertainty* about funding is a key concern for the future. For example, one LA in the North of England told us:

“Uncertainty over future funding is a big factor. MNS are reluctant to make changes to their operation until they know what decision DfE make regarding the continuation of the supplement.”

Recognising that changes may be required, there is an emphasis on the need for clarity from the centre in order to give LAs sufficient time to prepare for any changes. Some LAs reported that there is a lead time (some reported of two years) required for the necessary preparations to be made. For example, an LA in the Midlands stated:

“If the supplement does not continue, we will have to look at federations and amalgamations but we need to keep the places and we need to maintain the quality (These have outstanding ratings). There may be individual solutions for individual schools. We are anticipating change and we will cope with whatever comes. We believe DfE should be asking – ‘What is the minimum needed to keep the MNS going. The most important thing is that we get an answer as soon as possible.’”

7.3 Initiatives to improve finances

Given the uncertainty about future funding, some LAs reported that initiatives to reduce costs were underway:

- The most commonly reported measure is federation which effectively involves two or more settings sharing a head teacher (typically between MNS rather than with other provider types). The evidence is mixed on whether federation reduces costs as the reduction in head teachers can mean that other staff have to be employed instead. For example, an LA in the Midlands reported that two federations were created between four MNS but savings did not materialise at the level expected

because additional site leaders had to be appointed. Another LA in the Midlands reported:

“Federated MNS are not necessarily in a better financial position (than other provider types). This is because, even though they share a head, a deputy has to be present in the other location.”

- Some LA staff reported that MNS in their areas were looking at ways to diversify and boost their revenues. For example, one LA in the South of England reported that MNS were obtaining teaching school status which substantially boosted income while also helping to improve the supply of qualified teachers in the local area.
- There are reports of MNS offering wraparound care in order to compete more effectively with other provider types.

More broadly, it was suggested by LA staff that the variety of MNS business models implies the need for case by case reform and not for a single, funding driven solution. In addition, there were no reports of any plans to reduce or indeed increase MNS provision in the future although clearly this could change depending on what decisions DfE makes about funding.

The degree of proactivity by LAs varied considerably. On the other hand, some LAs are very actively looking for ways to work closely with MNS to address financial problems immediately. For example, one LA in the North of England reported:

“A Task Group has been set up which meets monthly. It involves players from the different services who support MNS to look at what they can do to increase the viability of MNS. The hope is that one strategic solution could be found and the group has been encouraged to be bold and innovative.”

Another LA in the South of England was holding regular meetings between the Head of Early Years at the LA and the head teachers at the MNS to look for opportunities to improve the financial health of the schools. As a result of the discussions, the LA and the MNS had reached an agreement for one of the MNS headteachers to provide SEN support to all providers in the local area at a cost lower than that of employing a full-time staff member at the LA.

On the other hand, many LAs (and MNS within those LAs) appear to be adopting a wait-and-see approach rather than preparing active plans to deal with any anticipated changes from 2020 onwards.

7.3 Other challenges

The existing evidence suggests that there are several other issues currently affecting the future of MNS including:

- **Introduction of 30 hours free childcare for three and four year old children of working parents.** It is not yet clear what impact the introduction of the 30 hours policy in September 2017 will have on the financial position of MNS. Concerns were raised in advance of the introduction of the policy about capacity, the need for capital funding, impacts on quality and sustainability to cover costs (NAHT, 2016).
- **The relationship between MNS and children's centres.** The 2014/15 Early Education survey highlighted the extent of co-location and partnership with children's centres and that they offered a similar range of family support services such as parenting programmes, outreach and referral to specialist services. It was unclear the extent to which MNS were affected by LA funding cuts to children's centres and the changes in their management structures.
- **Funding for children with SEND.** According to a recent survey of providers (Early Education, 2018b), MNS are experiencing an increase in the numbers of children with SEND transferring to MNS from other providers who cannot meet their needs. MNS also reported that funding changes associated with the EYNFF (see section 7.1 for a summary of the funding) were exacerbating the increasing financial pressures in providing support for children with additional needs. The survey responses indicates that only 4% of MNS felt that the EYNFF had improved the availability of SEND funding while 37% reported that less funding was available or that there was a shortfall in respect of children eligible for the 30 hours. Furthermore, MNS reported that, on average, they spend £17,000 more on SEND support than they receive in funding in order to meet children's needs but they were concerned that the scope for cross subsidisation was declining significantly.

7.4 Assessing value for money

The interviews with LAs indicated an awareness of the need to evidence the value for money of MNS. However, the analysis in this report has shown that controlling for quality using a range of measures and for other cost drivers does not explain the higher hourly cost for MNS for the delivery of Early Years provision. This may be due to inadequacy in the measures to fully capture the differences in MNS provision. Or it may be that the *combination* of childcare and additional services drives overall effects that MNS have on child outcomes and considering Early Years provision and the other services separately may not fully capture the total added value of the complete package of care and services offered by MNS.

An assessment of the value for money therefore requires evidence on the impacts on child outcomes for MNS and other Early Years providers. However, the relevant identified

evidence does not specifically apply to MNS or are small scale, unpublished studies with weaknesses in the estimation strategy:

- The EPPSE project found that attendance at some types of pre-school was associated with better child outcomes (Sylva et al, 2004). However, it should be noted that this evidence is based on pre-school experience in the mid-1990s in six LAs and that MNS constituted only a small proportion of the sample of settings (20 of 141).
- A small-scale unpublished study of children attending MNS in the South West of England indicated that outcomes were consistently higher for the children attending MNS. The analysis appeared to compare the outcomes across the different dimensions of the Early Years Foundation Stage Profile (2016) with average scores for the locality and nationally, but without any statistical controls for children's characteristics at entry to pre-school.
- Other unpublished studies provided by LAs support the finding that MNS are associated with better outcomes for children. For example, analysis comparing the proportion of children achieving a Good Level of Development (GLD) found that disadvantaged children and children with SEN who attended MNS had better average outcomes than the area average for comparable children. However, these studies did not control for children's characteristics beyond the levels of disadvantage and SEN.

It should be noted that none of these studies drew any distinction between the use of only Early Years education in MNS and the additional and specialist services provided by MNS. This means that any beneficial impacts found may have been due, wholly or partially, to those other services rather than the Early Years education experience.

Only further econometric work directly examining the impacts that MNS and other providers of childcare and the additional and specialist services have on child outcomes can shed more light on this question. As this report has highlighted, the profile of children attending MNS is very different from that of other provider types and any comparisons of outcomes would need to account for this difference in child composition. Analysis of National Pupil Database (NPD) data controlling for pupil characteristics and the home learning environment or further bespoke work directly measuring impacts for children using MNS and other provision could greatly improve understanding of the value for money of MNS.

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Annex: Hourly cost of additional activities

Table 21 through to table 26 present the regression results for the hourly cost of each of the types of additional and specialist activities. The findings from these regressions are discussed in section 6.5.

Table 21: Regression results for cost of one-to-one specialist child support

Dependent variable: cost per user hour		Model 1: without average wage		Model 2: with average wage	
		coeff.	s.e.	coeff.	s.e.
Provider type (ref = PVI)	Nursery class	5.76	(4.04)	1.52	(3.34)
	MNS	9.87***	(2.64)	3.91	(2.61)
Average staff qualification		2.21*	(1.14)	1.29	(1.40)
Scale (total number of user hours)		-0.08	(0.06)	-0.09	(0.06)
Average staff wage		----	----	0.66**	(0.31)
Constant		4.67	(4.54)	2.28	(4.16)
Number of observations		48		48	
R-squared		0.19		0.27	

Source: Early Years Providers Cost Study, 2018

Notes: A dash indicates a variable omitted from the model. A single star indicates a statistically significant coefficient at the 10% level, two stars at the 5% level and three stars at the 1% level.

Table 22: Regression results for cost of group specialist child support

Dependent variable: cost per user hour		Model 1: without average wage		Model 2: with average wage	
		coeff.	s.e.	coeff.	s.e.
Provider type (ref = PVI)	Nursery class	0.19	(0.73)	-0.98	(0.69)
	MNS	3.42***	(1.01)	0.84	(1.13)
Average staff qualification		0.16	(0.33)	-0.37	(0.34)
Average group size		-0.72***	(0.17)	-0.75***	(0.17)
Scale (total number of user hours)		0.00	(0.01)	0.01	(0.01)
Average staff wage		----	----	0.26***	(0.07)
Constant		8.18***	(1.62)	7.21***	(1.54)
Number of observations		45		45	
R-squared		0.40		0.48	

Source: Early Years Providers Cost Study, 2018

Notes: A dash indicates a variable omitted from the model. A single star indicates a statistically significant coefficient at the 10% level, two stars at the 5% level and three stars at the 1% level.

Table 23: Regression results for cost of professional meetings about children

Dependent variable: cost per user hour		Model 1: without average wage		Model 2: with average wage	
		coeff.	s.e.	coeff.	s.e.
Provider type (ref = PVI)	Nursery class	8.81	(5.39)	6.56	(3.88)
	MNS	15.00**	(6.35)	11.88**	(4.82)
Average staff qualification		0.36	(1.40)	-1.36	(1.03)
Average group size		-1.52***	(0.47)	-1.38***	(0.48)
Scale (total number of user hours)		-0.19**	(0.07)	-0.17**	(0.06)
Average staff wage		----	----	0.29***	(0.07)
Constant		15.55***	(5.55)	17.04***	(4.90)
Number of observations		28		28	
R-squared		0.28		0.43	

Source: Early Years Providers Cost Study, 2018

Notes: A dash indicates a variable omitted from the model. A single star indicates a statistically significant coefficient at the 10% level, two stars at the 5% level and three stars at the 1% level.

Table 24: Regression results for cost of one-to-one family support

Dependent variable: cost per user hour		Model 1: without average wage		Model 2: with average wage	
		coeff.	s.e.	coeff.	s.e.
Provider type (ref = PVI)	Nursery class	13.31	(7.49)	20.80	(12.77)
	MNS	20.12***	(5.63)	32.34**	(13.01)
Average staff qualification		-1.50	(2.13)	-0.95	(2.40)
Scale (total number of user hours)		3.40***	(0.96)	3.47***	(0.95)
Average staff wage		----	----	-0.38	(0.35)
Constant		15.14	(8.96)	16.36	(10.20)
Number of observations		12		12	
R-squared		0.53		0.58	

Source: Early Years Providers Cost Study, 2018

Notes: A dash indicates a variable omitted from the model. A single star indicates a statistically significant coefficient at the 10% level, two stars at the 5% level and three stars at the 1% level.

Table 25: Regression results for cost of group family support

Dependent variable: cost per user hour		Model 1: without average wage		Model 2: with average wage	
		coeff.	s.e.	coeff.	s.e.
Provider type (ref = PVI)	Nursery class	2.64*	(1.32)	2.40	(1.50)
	MNS	3.25***	(0.84)	2.53**	(1.10)
Average staff qualification		-0.12	(0.29)	-0.37	(0.55)
Average group size		-0.18***	(0.06)	-0.19***	(0.05)
Scale (total number of user hours)		-0.00	(0.02)	-0.00	(0.02)
Average staff wage		----	----	0.05	(0.06)
Constant		6.58***	(1.69)	7.13***	(1.92)
Number of observations		31		31	
R-squared		0.41		0.42	

Source: Early Years Providers Cost Study, 2018

Notes: A dash indicates a variable omitted from the model. A single star indicates a statistically significant coefficient at the 10% level, two stars at the 5% level and three stars at the 1% level.

Table 26: Regression results for cost of system support

Dependent variable: cost per user hour		Model 1: without average wage		Model 2: with average wage	
		coeff.	s.e.	coeff.	s.e.
Provider type (ref = PVI)	Nursery class	8.33*	(4.23)	4.19	(4.31)
	MNS	8.69***	(2.40)	4.02	(4.33)
Average staff qualification		1.05	(0.75)	-0.93	(1.38)
Average group size		-0.48	(0.32)	-0.35	(0.25)
Scale (total number of user hours)		0.03	(0.10)	0.00	(0.11)
Average staff wage		----	----	0.52	(0.43)
Constant		11.18***	(3.16)	11.35***	(3.59)
Number of observations		56		56	
R-squared		0.27		0.39	

Source: Early Years Providers Cost Study, 2018

Notes: A dash indicates a variable omitted from the model. A single star indicates a statistically significant coefficient at the 10% level, two stars at the 5% level and three stars at the 1% level.



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