



INSTITUTE *of*
HEALTH EQUITY



**REDUCING INEQUALITIES
IN HEALTH FROM AN
EARLY AGE - ENSURING
THE BEST START IN LIFE IN
NORTHUMBERLAND**

CONTENTS

ACKNOWLEDGEMENTS	3
GLOSSARY AND KEY CONCEPTS	4
EXECUTIVE SUMMARY	7
RECOMMENDATIONS	10
INTRODUCTION	16
CONTEXT: INEQUALITIES IN ATTAINMENT OF A GOOD LEVEL OF DEVELOPMENT AT AGE 5	18
Reducing socio-economic inequalities in attainment at age five	19
Northumberland-specific sex and income inequalities in early child development	20
Good level of development compared to statistical neighbours	21
HELPING FAMILIES ON LOW TO MIDDLE INCOMES	24
Child poverty in Northumberland	25
The official child poverty figures underestimate the number of families in need	27
Reducing the number of children living in low to middle income households in Northumberland	27
Mitigation for children and families living on low to middle incomes in Northumberland	27
The voice of residents: Applying a poverty lens across services	31
RECOMMENDATIONS: HELPING THOSE ON LOW AND MIDDLE INCOMES	32
SUPPORTING CHILDREN WITH ADDITIONAL NEEDS	33
Supporting children whose first language is not english	34
Local voice	34
Children with special educational needs	35
RECOMMENDATIONS: SUPPORTING THOSE WITH ADDITIONAL NEEDS	36
IMPROVING THE HOME LEARNING ENVIRONMENT	37
Consistent messaging	39
RECOMMENDATIONS: IMPROVING THE HOME LEARNING ENVIRONMENT	40
BETTER DATA AND ACCESS TO SERVICES	41
Service provision in Northumberland	42
Improved data to reduce inequalities	42
RECOMMENDATIONS: BETTER ACCESS TO SERVICES	45
RECOMMENDATIONS: IMPROVE DATA	46
FURTHER WORK REQUIRED	47
THE SCALE OF ACTION NEEDED TO CLOSE THE ATTAINMENT GAP AND INDICATORS	50
The scale of action needed to close the attainment gap	51
Indicators	54
Improving the home learning environment	54
Reduce child poverty and mitigate against its effects	54
Increase uptake of early years education and childcare/health visiting to households with lower to middle incomes	54
ANNEXES	55
Annex 1. Stakeholders and consultation partners: Steering & Focus Groups:	56
Annex 2. Effect sizes associated with improving the home learning environment and attending childcare.	59
Best sources of information on the factors associated with good child development at age five in England	59
An 'evidence-to-policy' challenge	59
Interventions to increase early childhood development	60
REFERENCES	63

ACKNOWLEDGEMENTS

AUTHORS

Angela Donkin and Alex Jones
Institute of Health Equity

AUTHORS’ ACKNOWLEDGEMENTS

Our thanks to the Northumberland County Partnership, the Northumberland Health and Wellbeing Board, the Institute of Health Equity (IHE) Best Start in Life Steering Group, focus group members, the Inequalities Cross Party Working Group, the VCSE Inequalities Task Force representatives, wider VSCE representatives, and everyone that we consulted as part of this process. We greatly appreciate the time and insight that you have contributed. Annex A provides further details.

GLOSSARY AND KEY CONCEPTS

This glossary explains the technical terms, acronyms and organisations referred to throughout the report.

ACEs – Adverse Childhood Experiences Stressful or traumatic events in childhood, such as exposure to domestic abuse, neglect or household substance misuse. Research shows that ACEs can have lasting negative effects on health and development.

Ages and Stages Questionnaire (ASQ-3) A screening tool used by health visitors and other professionals to assess a child's development at key ages. Parents answer questions about what their child can do, helping to identify children who may need extra support.

BSIL – Best Start in Life An umbrella term for the range of policies, services and programmes aimed at supporting children and families from pregnancy through to the end of the early years, to give every child the best possible foundation for later life.

CIPFA Nearest Neighbours Local authority areas judged to be statistically similar to Northumberland – in terms of population size, deprivation levels and other characteristics – used for benchmarking performance. The Chartered Institute of Public Finance and Accountancy (CIPFA) produces this grouping.

DfE – Department for Education The UK government department responsible for education and children's services in England, including the collection and publication of data on child development outcomes.

EAL – English as an Additional Language A term used to describe children and young people whose first or home language is not English. EAL children may face additional challenges in early years settings and may need additional language support.

Early Help Partnership A multi-agency group in Northumberland that brings together organisations providing support to children and families at an early stage, before problems escalate. The report recommends refreshing this partnership to include VCSE organisations and parents.

Early Learning Goals (ELGs) Seventeen specific statements describing what children are expected to know and be able to do by the end of the Reception year (age 5). They are grouped across seven areas of learning within the Early Years Foundation Stage framework. Each child is assessed as either 'expected' (meeting the goal) or 'emerging' (not yet meeting it).

Early Years Foundation Stage (EYFS) The statutory framework governing learning, development and care for children from birth to age 5 in England. It sets out the standards that all early years providers must meet, including nurseries, childminders and Reception classes.

EYEC – Early Years Education and Childcare Formal provision for children from birth to age 5, including nursery schools, nursery classes, childminders and other registered settings. The report uses this term deliberately (rather than just 'childcare') to emphasise the educational value of this provision.

EHC Plan – Education, Health and Care Plan A legal document produced by the local authority that describes a child's special educational needs, the support they require, and the outcomes sought. EHC Plans replaced the previous 'Statement of Special Educational Needs'.

EPC C – Energy Performance Certificate C A standard for home energy efficiency. Homes rated EPC C or above are considered reasonably well insulated. The report recommends insulating the homes of low-income families who are currently below this standard, to reduce fuel poverty and household stress.

Family Hubs Community-based centres that bring together a range of services for families with children from birth to age 19 (or 25 for young people with SEND). In Northumberland they provide parenting support, health services, childcare and social activities, and include outreach to rural communities.

FSM – Free School Meals A benefit available to pupils from low-income families. In this report, FSM eligibility is used as a proxy measure for low household income, because income data is not directly available for all children. Children are eligible if their household receives certain income-related benefits.

GLD – Good Level of Development The headline measure of child development at age 5. See the dedicated explanation on the following pages for a full, plain-English description of how this is calculated.

Health Visitor A qualified nurse or midwife with additional specialist training who works with families from pregnancy to when a child starts school. Health visitors carry out developmental checks, offer advice on parenting and child development, and can refer families to other services.

HLE – Home Learning Environment The learning experiences and interactions that take place in a child's home, such as reading together, singing, playing, storytelling and visiting the library. Research consistently shows that a stimulating home learning environment is one of the strongest predictors of good development at age 5.

IDACI – Income Deprivation Affecting Children Index A measure of the proportion of children aged 0-15 living in low-income households in each small geographic area (LSOA). It forms part of the wider Index of Multiple Deprivation and is used to identify areas where children are most affected by poverty.

IHE – Institute of Health Equity An organisation based at University College London, led by Professor Sir Michael Marmot. The IHE conducts research on health inequalities and their social determinants, and advises national and local governments on policy. It commissioned and delivered this report.

IMD – Index of Multiple Deprivation England’s official measure of relative deprivation. It combines information across seven domains (including income, employment, health, education and crime) to rank every small area (LSOA) in England from most to least deprived.

JRF – Joseph Rowntree Foundation An independent social change organisation that researches the causes of poverty in the UK and funds action to address them. The JRF publishes the Minimum Income Standard (MIS), which is referenced throughout this report.

LSOA – Lower Layer Super Output Area Small geographic areas used for statistical reporting in England and Wales. Each LSOA contains around 400–1,200 households. They allow data to be reported at a neighbourhood level rather than just at local authority level.

MCS – Millennium Cohort Study A large-scale longitudinal study following around 19,000 children born in the UK between 2000 and 2002. It has collected detailed data on health, development, education and family circumstances at multiple points in time, making it a key source of evidence on factors affecting child development.

MIS – Minimum Income Standard A benchmark of the income needed to reach a minimum socially acceptable standard of living in the UK, published by the Joseph Rowntree Foundation. It is based on research with members of the public about what people need to participate in society. The report uses MIS to highlight that many families above the official poverty threshold are still struggling financially.

NCC – Northumberland County Council The local government authority for Northumberland, responsible for a wide range of public services including children’s services, public health and social care.

NCP – Northumberland County Partnership A partnership of public sector, voluntary and community organisations in Northumberland with a shared mission to reduce inequalities in healthy life expectancy by 2044. The NCP commissioned this report.

OHID – Office for Health Inequalities and Disparities Part of the UK Department of Health and Social Care, OHID publishes data and research on health inequalities in England, including the Fingertips public health data platform referenced in this report.

Real Living Wage A voluntary hourly pay rate, calculated annually by the Living Wage Foundation, based on the actual cost of living. It is higher than the government’s statutory National Living Wage. The report recommends Northumberland employers adopt the Real Living Wage as a step towards reducing child poverty.

Reception Year The first year of primary school in England, typically for children aged 4–5. It is the final year of the Early Years Foundation Stage, at the end of which children are assessed against the 17 Early Learning Goals.

S23 Notifications Referrals made under Section 23 of the Children and Families Act, used to notify local authorities when a child under compulsory school age may have (or may be developing) special educational needs. The report recommends greater use of S23 notifications to identify children who may benefit from early support.

School Readiness Passport A local Northumberland initiative to create a shared record of a child’s development journey from birth to school entry, drawing together information from health visitors, early years settings and family hubs. The report recommends building on this system to create a comprehensive longitudinal data set.

SEED – Study of Early Education and Development A study of around 3,930 children and their families in England, purposefully sampled across income bands, examining the effects of different types of childcare and home learning environments on early childhood development. Key findings from this study are used in Annex 2 of the report.

SEND – Special Educational Needs and Disabilities A term covering a wide range of conditions where a child has learning difficulties or disabilities that make it harder for them to learn than most children of the same age. Children with SEND may require additional or different provision in early years settings and schools.

Social Determinants of Health The conditions in which people are born, grow, live, work and age that shape health outcomes. These include income, education, housing, employment and access to services. The report focuses on improving these conditions in Northumberland to reduce inequalities in health.

Statistical Significance A measure of the confidence that a difference or relationship observed in data is genuine and not simply due to chance. In this report, differences described as ‘statistically significant’ are very unlikely to have arisen by chance alone.

VCSE – Voluntary, Community and Social Enterprise Organisations that are not part of central or local government and do not primarily operate for profit, including charities, community groups and social enterprises. The report highlights the important role VCSE organisations play in supporting families in Northumberland.

Two-Year Integrated Review A developmental check carried out when a child is aged two to two-and-a-half, combining the health visitor’s assessment with information from early years providers. It aims to identify children who may need additional support at an early stage.

UNDERSTANDING ‘GOOD LEVEL OF DEVELOPMENT’ AT AGE 5

The ‘Good Level of Development’ (GLD) is the main measure used in England to assess how well children are developing by the time they finish Reception – their first year of primary school, usually around the age of five.

HOW IS IT ASSESSED?

Unlike a formal test or exam, GLD is not something children sit. Instead, their Reception class teacher observes them throughout the school year – watching how they play, communicate, read, count, and interact with others. At the end of the year, the teacher makes a professional judgement about each child’s level of development. This is called the Early Years Foundation Stage (EYFS) Profile.

WHAT IS BEING ASSESSED?

Children are assessed against 17 Early Learning Goals (ELGs) – specific statements that describe what children should be able to know and do by the end of Reception. These 17 goals are grouped into 7 areas of learning:

1. **Communication and Language** – including listening, attention and understanding, and speaking.
2. **Personal, Social and Emotional Development** – including self-regulation, managing self, and building relationships.
3. **Physical Development** – including gross motor skills (large movements) and fine motor skills (small, precise movements).
4. **Literacy** – including comprehension, word reading, and writing.
5. **Mathematics** – including number and numerical patterns.
6. **Understanding the World** – including past and present, people, culture and communities, and the natural world.
7. **Expressive Arts and Design** – including creating with materials, and being imaginative and expressive.

WHAT DOES ‘EXPECTED’ MEAN?

For each of the 17 goals, the teacher judges whether the child has reached the ‘expected’ level – meaning they are broadly doing what a typically developing five-year-old would be expected to do. If a child has not quite reached that level, they are described as ‘emerging’.

HOW IS GLD CALCULATED?

A child is said to have achieved a Good Level of Development if their teacher judges them to be at the ‘expected’ level in at least 12 of the 17 Early Learning Goals. Specifically, these 12 goals must include all goals in the three ‘Prime’ areas of learning (Communication and Language, Personal Social and Emotional Development, and Physical Development) plus all goals in Literacy and Mathematics.

In short: a child achieves GLD if their teacher judges them to be on track across communication, language, personal and social skills, physical development, early reading and writing, and early maths – covering 12 of the 17 goals in total.

WHY DOES GLD MATTER?

Research consistently shows that children who reach a Good Level of Development by age five are more likely to do well in school, achieve better qualifications, find good employment and enjoy better health in later life. Closing the gap in GLD between children from different income backgrounds is therefore one of the most effective long-term strategies for reducing health inequalities.

EXECUTIVE SUMMARY

This report, commissioned by the Northumberland County Partnership (NCP) and delivered by the Institute of Health Equity (IHE), includes an overview of inequalities in early years development in Northumberland and reports on recommendations to reduce these.

Reducing inequalities in early development is an effective way to reduce inequalities in later educational attainment, in work outcomes and in health. The project included thorough discussions with stakeholders, and both the Northumberland Health and Wellbeing Board and the NCP have approved the recommendations. This work aligns with the Starting and Growing Up Well core theme of the Northumberland Joint Health and Wellbeing Strategy Review 2023-2028 Update, setting out priority areas to support the outcomes for all children and young people in Northumberland to be happy, healthy and have the opportunity to reach their potential.

NORTHUMBERLAND DEMONSTRATES GOOD OVERALL PERFORMANCE, BUT MORE FOCUS IS NEEDED TO REDUCE INEQUALITIES IN OUTCOMES AT AGE FIVE

- In Northumberland, slightly more children are likely to reach a Good Level Of Development (GLD) at age five, compared to the England average.
- Nationally, data from the most recent 'Early years foundation stage profile results' from the Department of Education, identify that there is a strong and statistically significant association between a child not achieving a Good Level Of Development (GLD) and that child being eligible for Free School Meals (FSM). At a national level (England), children who are eligible for FSMs are 77% more likely not to achieve a Good Level Of Development at age five than children who are not eligible for FSMs.
- In Northumberland, the difference in development between FSM eligible and ineligible children is more extreme. Eligible children are more than twice as likely not to achieve a Good Level Of Development than ineligible children. Moreover, unlike at the national level, this is driven by a particularly low proportion of eligible boys achieving a Good Level Of Development. [1]

IMPROVING EDUCATIONAL OUTCOMES FOR LOW-INCOME CHILDREN IS AN ACHIEVABLE GOAL

- We looked at a range of scenarios. For example, if Northumberland increased the percentage of boys achieving a GLD at age five to the national average for boys eligible for FSM, from 31% to 43.5%, that would require just 170 boys in low-income households making the transition from not good to good levels of development.
- If Northumberland were to match the ambition that has been set by National Government, of 78.2% of children attaining a Good Level Of Development overall, with an increase (from 45.8%) to 57.1% of children eligible for FSM, then an additional 292 children eligible for FSM would need to meet the GLD criteria. To also raise the total proportion of children achieving a Good Level Of Development from our expected 67% to the target 78.2% would require a further 918 children to meet the criteria, whether they are eligible for FSMs or not. In total, meeting and sustaining this government target will require an extra 1,210 of the current cohort of zero to three-year-olds to achieve good learning development by age five, on top of the 7,282 we already expect to meet the target.
- However, the national target maintains the gap at the same level. For Northumberland to reduce inequalities in health in the longer term improved early years interventions are required to sustainably reduce health inequalities in Northumberland.
- In addition to meeting national targets to increase the numbers of children reaching a Good Level Of Development by age 5, the NCP will go further and significantly reduce inequalities in outcomes between children in more deprived circumstances and children in less deprived circumstances by 2044.

REDUCING CHILD POVERTY TO BE A CROSS PARTNERSHIP MULTI-DISCIPLINARY MISSION

- This report comes after two others: 'Reducing inequalities in health in Northumberland through Work', [2] and 'Reducing Inequalities in health in Northumberland through Housing'. [3] Enacting the recommendations in the Work report are critical to reduce the numbers of children living in homes with insufficient incomes and therefore in reducing stress on families and improving their ability to provide a positive and enriching home learning environment. The recommendations in the Housing report will help to mitigate against the negative effects of living in poverty. It is therefore critical that reducing child poverty and mitigating against it is seen as a cross partnership multi-disciplinary mission.
- To reduce and mitigate against child poverty, a strong accountability and support system will need to be in place to drive forward action and help multi-disciplinary teams to achieve their objectives.
- In the Work report we also recommend a strengthened social value system. We need this system to help provide further financial support to voluntary, community and social enterprise (VCSE) organisations that are effective in reducing stress on families and providing helpful resources.

IMPROVING THE HOME LEARNING ENVIRONMENT

- The number of health visitor visits achieved in Northumberland is higher than the national average which is positive because it is this workforce who help to promote activities such as reading to children, singing songs, playing, and visiting the library. These are important aspects of a good home learning environment and are the most effective way of reducing inequalities in outcomes.
- In addition, Family Hubs and other services reinforce this work and provide services to encourage parents to interact positively with their young children.
- However, despite the availability of services, there are families who are not taking up the offer to help children achieve the best start in life so we recommend further work on understanding barriers and improving uptake. Specifically, we need to test out effective messages and have consistent messaging across services.

BETTER DATA AND SERVICES

- While there is good availability and use of services such as health visitors, family hubs and early years education and childcare, there are localities where the results for children eligible for FSM are at least 10 percentage points behind the England average. In addition, there was a desire from the focus group and steering group to have better information on the efficacy of the existing services.
- It is important to understand if variation could be related to low service use or service quality and we make recommendations to improve the use of data to grow this understanding. This is to enable policy makers to better understand variation of engagement at ward level and family demographics so that we can track the impact of services.
- Parents did raise issues related to the accessibility of childcare which should help to inform service design, however the main recommendation is to more systematically embed the voice of residents in service design.



RECOMMENDATIONS

HELPING THOSE ON LOW AND MIDDLE INCOMES

Child poverty reduction to become a NCP cross-cutting mission

NCP organisations to commit to alleviating child poverty using their levers as employers, procurers, service providers, landlords – leading this by adopting and progressing the housing and work recommendations, including for example:

- building more social housing.
- improving the affordability of housing.
- insulating the homes of all those below the Joseph Rowntree Foundation (JRF) minimum income standard and not insulated to EPC C.
- increasing the numbers working full time, at or above the real living wage.
- increasing employment rates in areas of high deprivation (through more jobs/transport schemes).

Also:

- To work across the NCP to:
 - > Maximise uptake of benefits among those eligible.
 - > Target and increase investment in 'left behind neighbourhoods'.

Use social value commitments to support VCSE organisations mitigating poverty

- Work with partners from the voluntary, charity and social enterprise sectors (VCSE) to understand and review services offering help to those in poverty by reviewing their ability to a) improve resources available, b) reduce stress on families and c) reach areas in need.
- Work with Northumberland County Council (NCC) Procurement Services team to develop a framework/prospectus of effective VCSE programmes to enable them to expand an impactful offer with additional funds/support from businesses tendering for work with NCP.
- Set up a cross-cutting steering group to create a proactive system that manages the community resilience fund, social return on investment funds and any other funds to help more families earlier.
- Work with Thriving Together to support a 10-year plan with the VCSE to address long term support and engagement with the VCSE.

The workforce knows what is on offer to ensure that those who need help, get help

- Ensure that everyone who is in contact with those in poverty are aware of the offers available by VCSE and NCC to help those in poverty.
- Review the use/quality of Frontline platform and Family Information Service Directory to ensure that there is simple access to a comprehensive list for those who need this information the most.

SUPPORTING THOSE WITH ADDITIONAL NEEDS

Support those where English is an additional language (EAL)

- Collect data on how long children where English is an additional language (EAL) have lived in the UK to contextualise performance. Data team to coordinate EAL data and match it with GLD and progression metrics.
- Use the newly developed dashboard tracking progress from GLD to Key Stage 2 to see if EAL children catch up by Year 1 or Year 2.
- Ensure migrants are included in lived experience conversations given potential additional barriers to utilising services (language courses/cultural norms).
- Ensure that migrant families attending English language classes can access good quality childcare for their children.
- Review the use of Citizen Ceremonies as a way of further engaging communities with services.

Support those with Special Educational Needs and Disabilities (SEND)

- Ensure all relevant partners utilise S23 notifications to enable early identification and planning for potential special education needs and disabilities in children.
- Review information added to S23 notifications, and at other checkpoints for children aged two to five, to determine if more can be done to collect information on early years education and childcare use and to encourage uptake.
- Reach even more parents of children with additional needs to include in lived experience conversations. This is essential to understanding and removing the barriers that families face, alongside providing support to access wider community SEND services and support.
- Establish clear pathways and communications for families and professionals on the services available to support children with emerging or identified needs, endeavouring to ensure that families can access the right support at the right time within a graduated response.

IMPROVING THE HOME LEARNING ENVIRONMENT

The Early Help Partnership to develop consistent effective messages

- The Early Help Partnership to be refreshed to include delivery partners, the VCSE and parents. The Partnership to review current messaging from all providers and co-create parent friendly communications (considering health literacy evidence base) around the school readiness pathway in Northumberland and ensure messages have consistency across delivery partners and platforms.
- Organisations to use a range of media and consider developing non-digital, parent friendly guidance materials that can be shared through places that parents/carers visit.
- Use phrase 'early education and childcare' rather than just 'childcare'.
- Materials should be tested for their ability to increase behavioural intent to improve parenting and clearly outline the milestones children should be achieving at key points in their school readiness journey and the role of parents in providing the opportunities and experiences needed to enable them to be met. Ongoing monitoring of the efficacy of messaging is needed to ensure that it is driving the behaviour changes needed.
- The importance of sending children to early years education and childcare in this journey should also be communicated, but as an extra step, not an alternative to engaging with other services such as family hubs.

The Refreshed Early Help Partnership to consider the best methods for engaging parents

- The Refreshed Early Help Partnership to also identify best methods for engaging parents with these messages wherever parents choose to go, in a way that ensures they can both attend a parenting course in a Family Hub and use early years education and childcare.
- The Early Help Partnership to coordinate training of practitioners from all services regarding key messages including timing of messages.
- Assigned team to coordinate all communications around best start in life (BSIL) from integrated services.
- The efficacy of this coordinated messaging and engagement to be regularly evaluated and continually improved.

BETTER ACCESS TO SERVICES

Increase uptake where those eligible for free school meals are falling significantly behind English average in terms of Good Level Of Development

- Results for children in many areas of the South-East of Northumberland are significantly behind the English and Northumberland average, and the NCP should drive forward work in partnership with local families not utilising provision to inform/co-design any changes needed to ensure the uptake of health visitor visits and early years education and to mitigate against barriers.
- Results for boys in Northumberland eligible for FSM are significantly behind the English average. Further focus groups with providers and parents may help to provide additional context that could inform why this might be, which should inform the messaging being developed and service delivery.
- Good practice, from areas where children on FSM have higher levels of development, should be shared to help inform other areas, such as Early Years provider networks and school improvement teams.

Help Early Years Education settings provide a service that is accessible for all

- NCP via early years provider networks and school improvement colleagues to work together to improve accessibility, by for example:
- Early years education and childcare settings providing flexible hours/locations so parents can pick up/drop off other children/attend work/skills training.
 - NCC/VCSE to provide 'Hand holding' services to help households apply for a 'code' and choose the right provision for them.
 - Considering innovative transportation solutions to help parents access early years education and childcare where there is no local provision.
 - Add new services where needed according to evidence.

Free, funded and safe childcare provision

- Continue to ensure sufficient free provision of childcare for families on low/middle incomes.
- Ensure that there are no additional costs for food or resources to those on low incomes. Support should be provided to childcare providers to ensure that this does not act as a disincentive to take children from lower income families.
- Nurseries to be very clear regarding safety procedures and routines to reduce anxiety in parents and carers.

Using joined up data to strengthen service provision

A Northumberland Systemwide Intelligence Group has been established to strengthen a shared, systemwide approach to data and insights across Northumberland, bringing together key partner organisations. The group should play a central role in advancing data sharing, data linkage, population health management, and other priority areas that underpin robust, evidence-based decision making. It will act as a catalyst to enable the development and delivery of the data recommendations outlined below:

- A BSIL data group to produce a shared dashboard and map(s) to illustrate at the lowest geographical level available, results from the Ages and Stages questionnaire by granular domains, level of development by eligibility for FSM and other indicators such as domestic abuse, obesity and low birthweight statistics. This should be presented alongside information on deprivation level, services available and uptake. Ensure join up with Neighbourhood Health work through the Systems Wide Intelligence Group.
- Establish a targeted offer for all family support (delivered by health, family hubs and VCSE) which reflects the needs of communities in response to this shared data with a focus in the short term on improving the offer for more deprived households.
- Review and monitor the targeted offer to ensure it is meeting needs.
- Given that GLD outcomes are often worse for children eligible for FSM in less deprived areas than in more deprived areas, NCC to review the GLD scores in those areas and determine whether service improvement is required.

Create a longitudinal data set (from 24 weeks) of all children in Northumberland

- Build one single data system (and data sharing agreements) for informing the delivery of services, outreach of services, monitoring progress and impact of services, building on established systems (i.e. School Readiness Passport) and including birth registration, address and household income information.
- Link with Community Services/Stronger Communities regarding the gathering birth registration data.
- Quality assure the effectiveness and impact of agreed processes at statutory checkpoints, with a specific focus on the two-year integrated review.

Improve knowledge of lived experience

- More information is needed on the lived experience of the client group regarding barriers and facilitators to utilising existing services.
- Improve management information to ensure that there are feedback loops so practitioners can report on barriers that people mention during visits and services can address these.
- NCC to formalise a dynamic method to ensure that the voices of those on low and middle incomes have a positive influence on service design, with an aim of improving services so that they both a) address need and b) reduce stress.



INTRODUCTION

Given increasing inequalities in health, the new Northumberland County Partnership (NCP) has been set up with a mission to reduce inequalities in healthy life expectancy by 2044 through equitable improvements to the social determinants of health.

This report focuses on ensuring children have the best start in life. There is a wealth of evidence to suggest that good early years experiences can reduce inequalities in later outcomes and therefore reduce health inequalities in Northumberland. [4]

Northumberland already has many effective services in this area, but outcomes for children eligible for free school meals (FSM) at the end of reception are slightly behind the English average and there is also variation between areas within Northumberland, suggesting focus areas for improvement. To further determine opportunities for improvement, we liaised with stakeholders across the system through steering groups and focus groups with experts in particular fields. A list of those who participated can be found in Annex A. Specifically, we liaised with experts on the following topics:

- Reducing child poverty and mitigation strategies to reduce financial stress on families
- Community assets, strength-based activities and support around families
- Improving access to good quality Early Years Education and Childcare

These topics were chosen because there is evidence that action in these areas can help to reduce the gap in attainment between children eligible for FSM and those that are not eligible.

The report provides background information for attainment inequalities at age five in Northumberland and then moves on to discuss specific recommendation areas, namely:

- Helping families on low to middle incomes
- Supporting children with additional needs
- Improving the Home Learning Environment
- Better data and services

In the final chapter we quantify how many children need to transition from 'emerging' to 'expected' levels against early learning goals to meet a variety of scenarios.



CONTEXT: INEQUALITIES IN ATTAINMENT OF A GOOD LEVEL OF DEVELOPMENT AT AGE 5

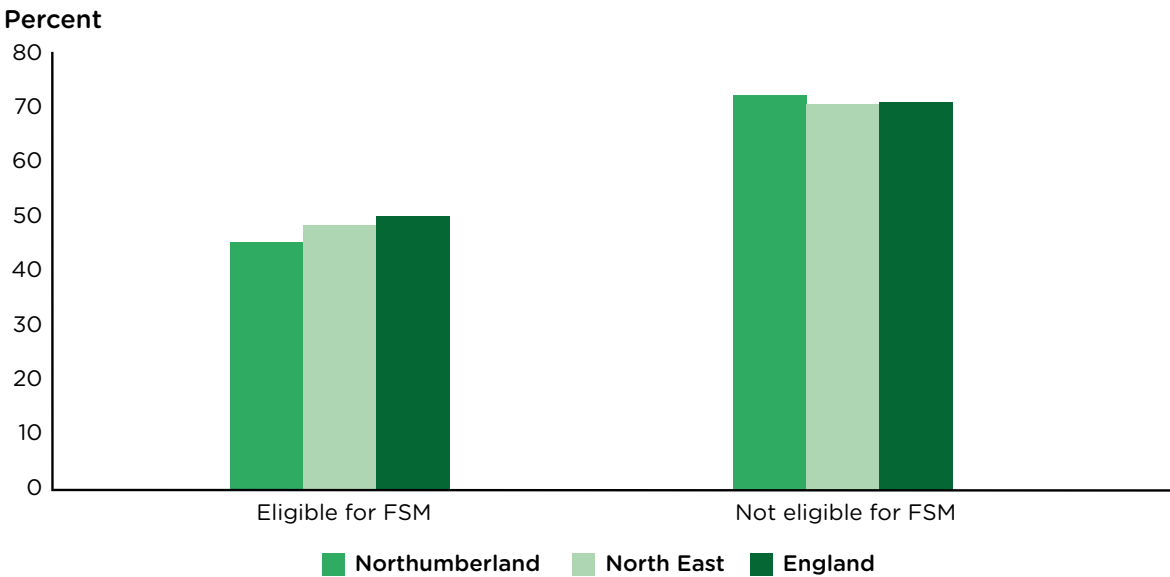
REDUCING SOCIO-ECONOMIC INEQUALITIES IN ATTAINMENT AT AGE FIVE

The early years foundation stage profile results present teacher assessments of child development at the end of the early years foundation stage (EYFS). This typically means the summer term of the academic year in which a child turns five (reception year). There are 17 early learning goals (ELGs) across 7 areas of learning. [5]

In 2024/25, 68.3% of children in England were reported to have a ‘good’ level of development. This means that they were at the expected level in 12 of the 17 areas. While the percentage reaching a Good Level Of Development is marginally higher in Northumberland than England as a whole (including in each individual area of learning), the proportion of children achieving a Good Level Of Development has plateaued at around 69% over the last three years.

Eligibility for FSMs can be used as a proxy for low household income. The benefit is available to pupils who, either directly or indirectly, are in receipt of another income related benefit, suggesting that they are part of a low-income household. [6]

Figure 1. Children achieving a Good Level Of Development at age 5 and eligibility for free school meals, percent, Northumberland, North East, and England 2024/2025



Source: Early years foundation stage profile results data, Department for Education (DfE), 2026.

Based on data from the most recent ‘early years foundation stage profile results’, there is a strong and statistically significant association between a child not achieving a Good Level Of Development and that child being eligible for FSMs (as illustrated in Figure 1). At a national level (England), children who are eligible for FSMs are 77% more likely not to achieve a Good Level Of Development at age five than children who are not eligible for FSMs.

But in Northumberland, the difference in development between eligible and ineligible children is more extreme. Eligible children are more than twice as likely not to achieve a Good Level Of Development than ineligible children. Moreover, unlike at the national level, this is driven by a particularly low proportion of eligible boys achieving a Good Level Of Development.

FSMs are available to pupils in receipt of, or whose parents are in receipt of, one or more of the following:

- Universal Credit (provided the annual net earned income is not more than £7,400)
- Income Support
- Income-based Jobseeker’s Allowance
- Income-related Employment and Support Allowance
- Support under Part VI of the Immigration and Asylum Act 1999
- The guarantee element of Pension Credit
- Child Tax Credit (provided you’re not also entitled to Working Tax Credit and have an annual gross income of no more than £16,190)
- Working Tax Credit run-on – paid for four weeks after you stop qualifying for
- Working Tax Credit

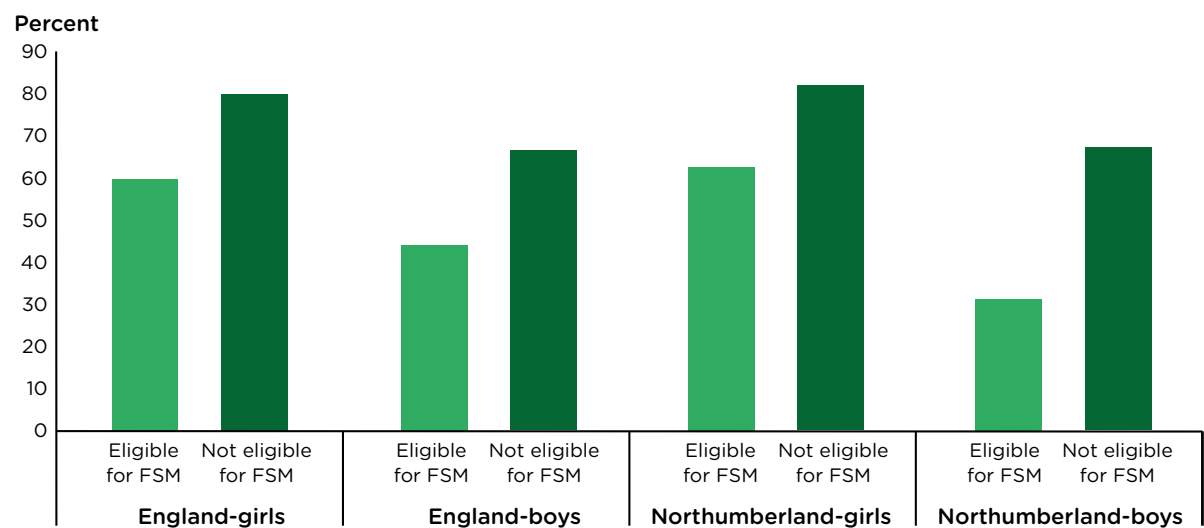
In addition, the following pupils will be protected against losing their free school meals:

- Since 1 April 2018, all existing free school meals claimants have continued to receive free school meals whilst Universal Credit is rolled out. This applies regardless of any change in household circumstances, including if their earnings rise above the threshold during that time. Protections will remain in place until the end of the 2025/26 school year.
- From the start of the 2026/27 school year, the Department for Education will extend entitlement to free school meals to include all children from households in receipt of Universal Credit. It is our intention to end transitional protections alongside this change in threshold, with eligibility for all pupils reverting to whether they meet the eligibility criteria, regardless of whether they were previously protected. We will issue further guidance ahead of September 2026.
- Free school meals are also available to all children in government schools in years reception, one and two.

NORTHUMBERLAND-SPECIFIC SEX AND INCOME INEQUALITIES IN EARLY CHILD DEVELOPMENT

Nationally, 43.5% of boys who are eligible for FSMs achieve a Good Level Of Development at age five. In Northumberland, just under 31% of eligible boys meet this target. In contrast, 59.3% of girls who are eligible for FSMs meeting this target at a national level, compared to 62% in Northumberland, as illustrated in Figure 2.

Figure 2. Children achieving a Good Level Of Development at age five by eligibility for free school meals, by sex, percent, Northumberland and England, 2024/2025



Source: Early years foundation stage profile results data ,DfE, 26.

When observed over time, this sex and income-based inequality fluctuates, but is nonetheless present (see Figure 3). The absolute difference in the percentage of children achieving a Good Level Of Development between those eligible for FSMs and those who are ineligible, is around 20% for both boys and girls at the national level, and the same for girls in Northumberland. For example, in 2024/25, 80% of ineligible girls achieved a Good Level Of Development by age five, compared to 60% of eligible girls (20 percentage point difference). 66% of ineligible boys achieved this, compared to 44% of eligible boys. By comparison, the absolute difference between eligible and ineligible boys in Northumberland has been closer to 30-35 percentage points in three of the four years covered by this data set. In each of these three years, the relative difference in Northumberland (between eligible and ineligible boys) is statistically significantly larger than that at England level.

Figure 3. Absolute difference in children achieving a Good Level Of Development, by free school meal eligibility, percentage points, Northumberland and England, 2024/25



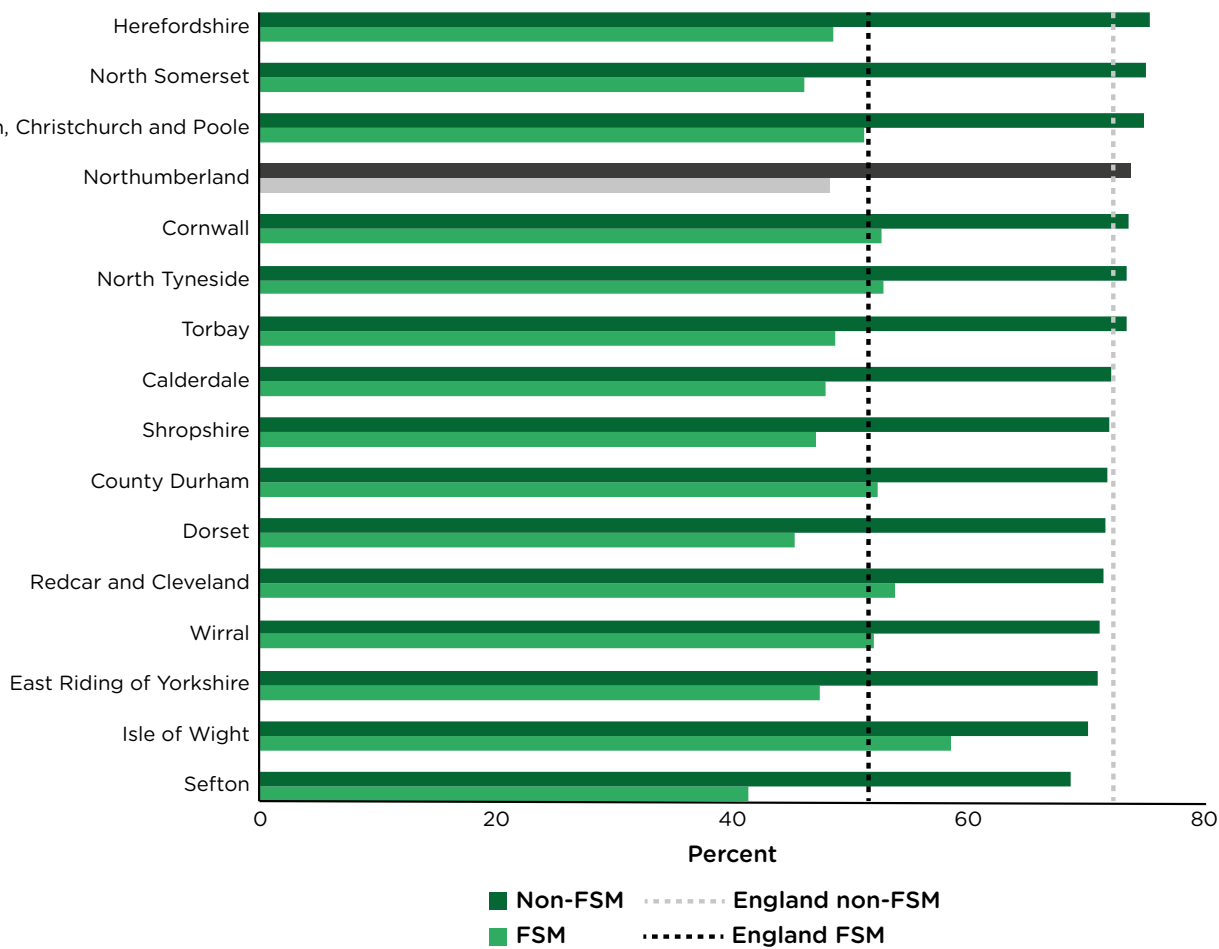
Source: Early years foundation stage profile results data, DfE, 2026

To summarise, the income-related child development inequality is larger in Northumberland than in England as a whole. This appears to be driven by a particularly low level of development among young boys in low-income households. This difference is statistically significant, and early signs suggest this trend may be stable over time (except for 2022/23).

GOOD LEVEL OF DEVELOPMENT COMPARED TO STATISTICAL NEIGHBOURS

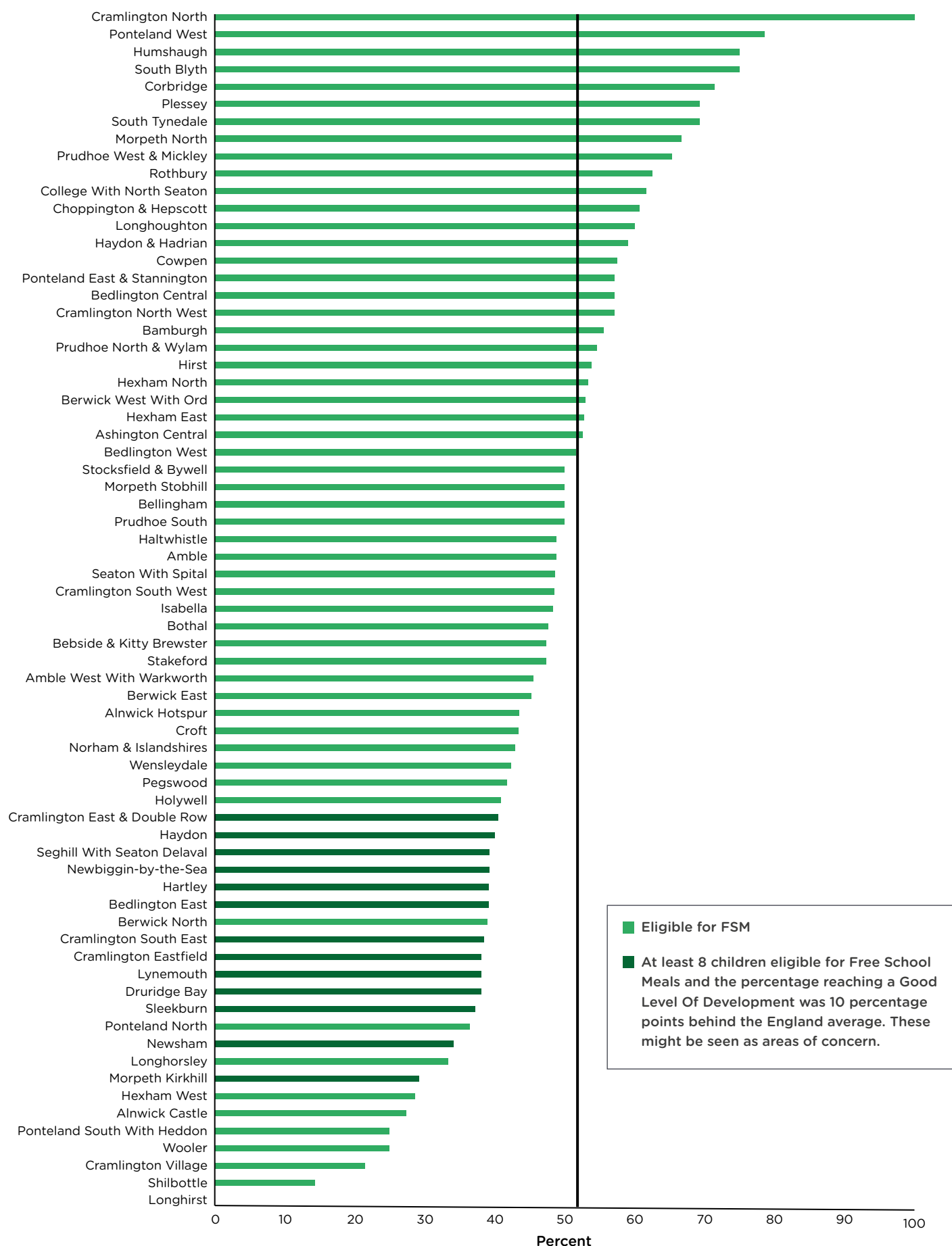
Figure 4 illustrates the percentage of children reaching a Good Level Of Development in Northumberland compared to regions that are similar, and to the England average. In general Northumberland's children do slightly better than the English average, but slightly worse than the English average if they are eligible for FSM. There are some areas that seem to be doing better for children on FSM and so it could be informative to look at the service delivery model in these areas, such as the Isle of Wight.

Figure 4. Pupils reaching a Good Level Of Development at the end of reception, percent, Northumberland, CIPFA nearest neighbours, and England, 2023/24



Source: DFE, 2026.

Figure 5. Children eligible for free school meals reaching a Good Level Of Development by the end of reception, percent, Northumberland wards and England, 2022-25



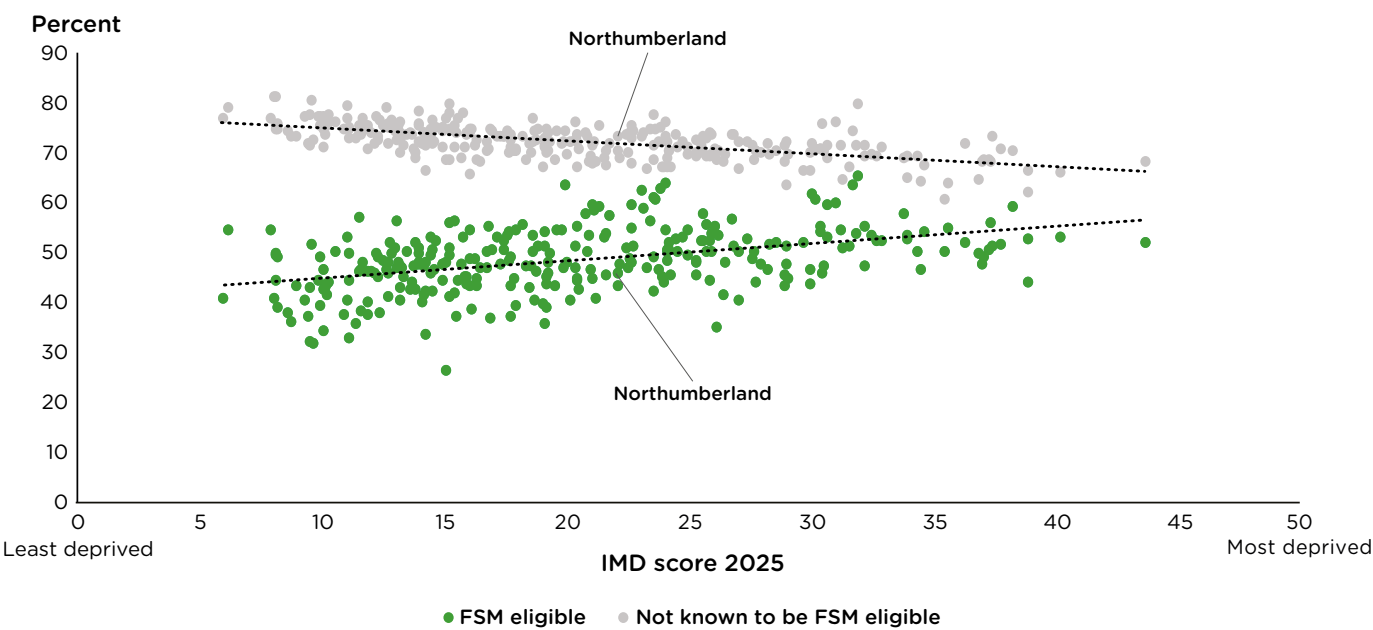
Source: Data supplied by NCP

Figure 5 illustrates variation in outcomes by ward, with children eligible for FSM highlighted in green. There are wards where children eligible for FSM are doing better than the English average and wards where they are doing worse.

However, in some of these areas the numbers eligible for FSM is very low and so Figure 5 shows priority areas where the results were at least 10 percentage points behind the English average, and where there were at least eight children eligible for FSM (dark green bars). All these areas are in the South-East of the County, and it is therefore warranted to look at the delivery of services to these areas, uptake, and the quality of services.

This deep dive into some of the poorest performing areas does not negate the need to improve outcomes for all of those eligible for FSM across the county to reduce the attainment gap. However, it may be a useful place to start, and then to roll out the learning and service changes to other areas where warranted. More generally, we know that many households will be struggling to make ends meet yet will not be eligible for help. Northumberland should create an offer for children and households that are above the threshold for benefits but struggling. This will help to reduce inequalities in outcomes in the longer term.

Figure 6. Pupils achieving a Good Level Of Development, percent, by FSM eligibility and deprivation (IMD score 2025), English lower tier local authorities, 2024/25



Source: DfE, 2026

Another factor to consider is that within England there is a relationship between the level of deprivation and GLD scores for children at the end of reception that differs according to whether children are eligible for FSM or not, as illustrated by Figure 6. Children who are not from a deprived household do less well in more deprived areas, and children who are eligible for FSM do less well in less deprived areas. It is possible that many of the children living in more deprived areas that are not on FSM could be living in families that are missing this entitlement but are still struggling financially and this is the reason they do less well, however the fact that children on FSM do better is of interest. It is likely that services are more available to those families and have more experience in supporting disadvantaged students than in less deprived areas. Further work to investigate the availability of services to those who are on FSM in less deprived areas is therefore warranted.



HELPING FAMILIES ON LOW TO MIDDLE INCOMES

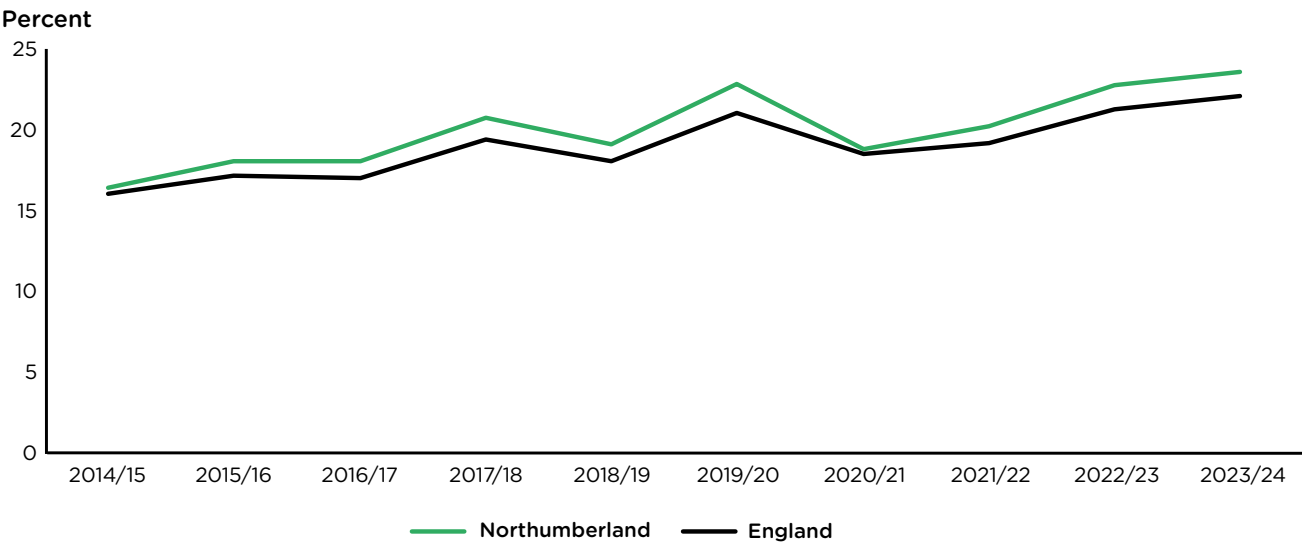
CHILD POVERTY IN NORTHUMBERLAND

Not having enough money can have a negative impact on children’s current and future outcomes, and this is generally through three pathways: a lack of resources to afford essentials such as healthy food, activities and decent housing; through the negative consequences of higher levels of household stress; and through poor self- esteem leading to higher levels of poor mental health. Not disaggregating by sex, children who are not eligible for FSMs in Northumberland are 60% more likely than children who are eligible for FSMs to achieve a Good Level Of Development by age five. If the incomes of all relevant households could be raised to the JRF minimum income standard we would expect an increase in child development.

It is therefore concerning that child poverty rates have been rising in the country, and in Northumberland, as illustrated by Figure 7. In 2014/15, 16.5% of Northumbrian children were in households in relative low income², before housing costs, by 2023/24 this figure had increased to 23.6%, a 43% increase.

This is putting considerable strain on families, and on the services working to support them.

Figure 7. Children in relative low-income families, before housing costs, percent, Northumberland, and England, 2014/15 to 2023/24

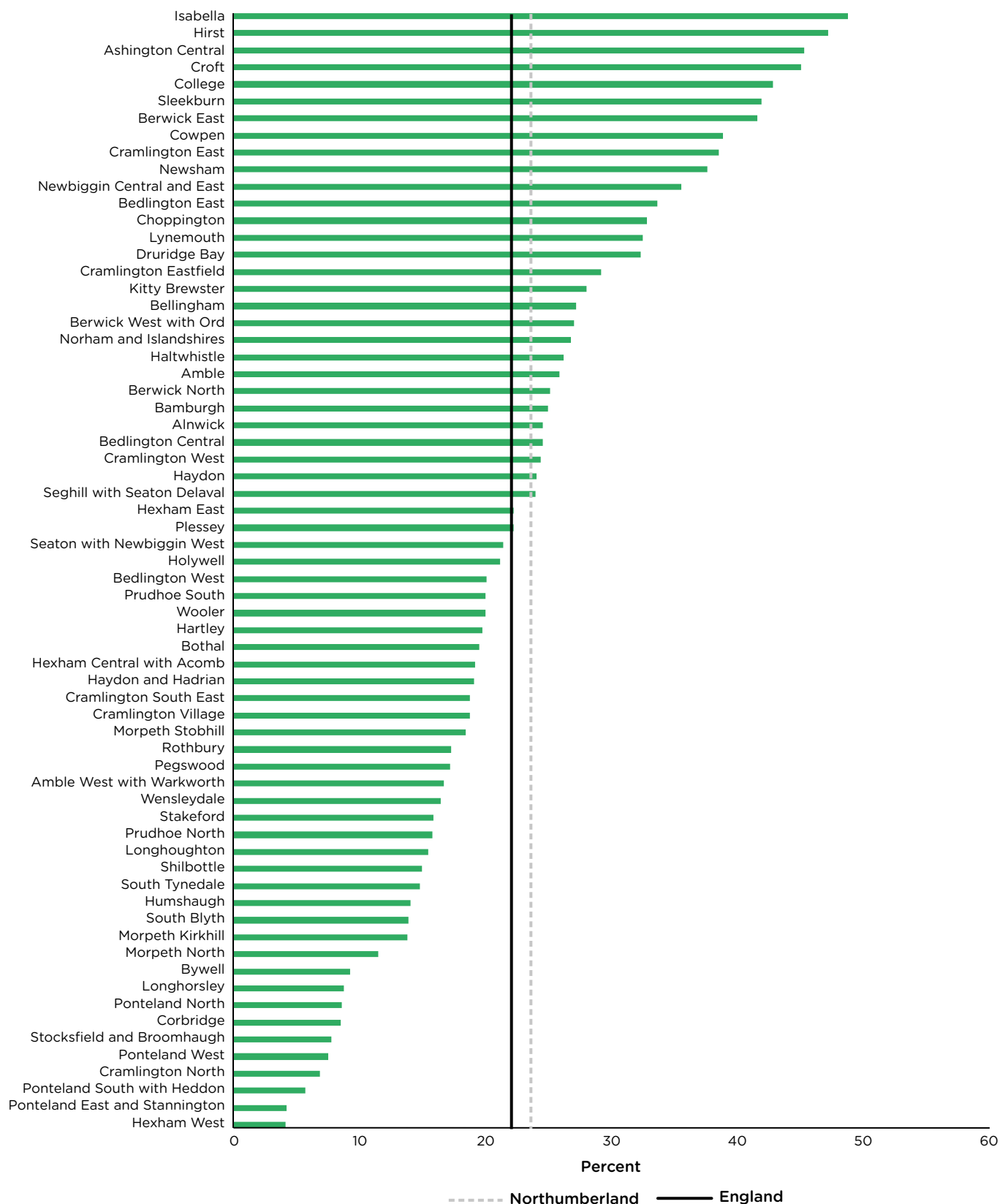


Source: Department for Work and Pensions

Within Northumberland there are variations in the levels of poverty by ward as demonstrated by Figure 8. All areas have some children who are living in relative poverty, but the percentage varies greatly, from 4.1 percent in poverty in Hexham West to 48.8 percent in Isabella in 2023/24.

²Below 60% median income

Figure 8. Children in relative low-income families, before housing costs, percent, Northumberland wards, Northumberland, and England, 2023/24



Source: DWP

THE OFFICIAL CHILD POVERTY FIGURES UNDERESTIMATE THE NUMBER OF FAMILIES IN NEED

Over the last 20 years, wages stagnated and are only just beginning to pick up with inflation; the value of the basic unemployment benefit fell to a 40-year low in real terms; and finally, inflation, and scarcity of fuel, have resulted in the cost-of-living increasing substantially. [7]

According to the Minimum Income Standard (MIS) for 2025, a couple with two children needs to earn £74,000 a year, which is approximately a third more than they needed two years previously (in 2023 it was £50,000). [8] Unlike couples without children, having two adults working full-time on the National Living Wage does not give the household enough income to reach MIS. In this scenario, they have 82 percent of MIS and are not able to fully meet their needs for a minimum socially acceptable standard of living. If just one person in the household is working on the National Living Wage, they reach 66% of the MIS.

The Minimum Income Standard (MIS) provides a vision of the living standards that we, as a society, agree everyone in the UK should be able to meet.

The latest data on the sufficiency of incomes across the UK found that, in 2024, the majority of UK children (52.6 percent, 7.7 million) were living in households with incomes below the MIS. This figure is the highest since this series of data started to be collected: in 2008, 39.9 percent of children were in households below the MIS, 5.2 million. In 2023/24, 84.2 percent of children in lone-parent families were growing up in households with inadequate incomes, compared to 42.7 percent in couple-parent families. Among working-age households, in-work income inadequacy continues to rise, and the majority of households below MIS are those where at least one person is in work. Lone parents are especially vulnerable, with more than half of these households (59.5 percent) having an income below MIS even if they are working full-time. [9]

Work to support families that just focuses on those who are 'officially' in relative or absolute poverty will therefore potentially miss many families that would benefit from additional support.

REDUCING THE NUMBER OF CHILDREN LIVING IN LOW TO MIDDLE INCOME HOUSEHOLDS IN NORTHUMBERLAND

IHE's previous strand of work with the NCP on reducing inequalities in health through work, include a range of recommendations which, if enacted, will help to reduce child poverty. [10] These recommendations centre on supporting more people into full time work paying the Real Living Wage so that they reach the JRF minimum income standard; and increasing the employment rate. As set out in the previous section, the majority of those in poverty are in work and so employers in Northumberland play a central role in reducing child poverty. Where work is not accessible/available, then the NCP should work together with the VSCE to maximise uptake of income related benefits.

Because the actions recommended in the 'Reducing Health Inequalities in Northumberland through Work' report are central to reducing child poverty, it will be important that there is an accountability framework for these measures developed in partnership with NCC and other key stakeholders to ensure progress against the recommendations. Reducing child poverty is a priority outcome in the Local Outcomes Framework for local government and such an accountability framework will help Northumberland achieve that, while also aligning with its 'Land of Opportunity mission'.

MITIGATION FOR CHILDREN AND FAMILIES LIVING ON LOW TO MIDDLE INCOMES IN NORTHUMBERLAND

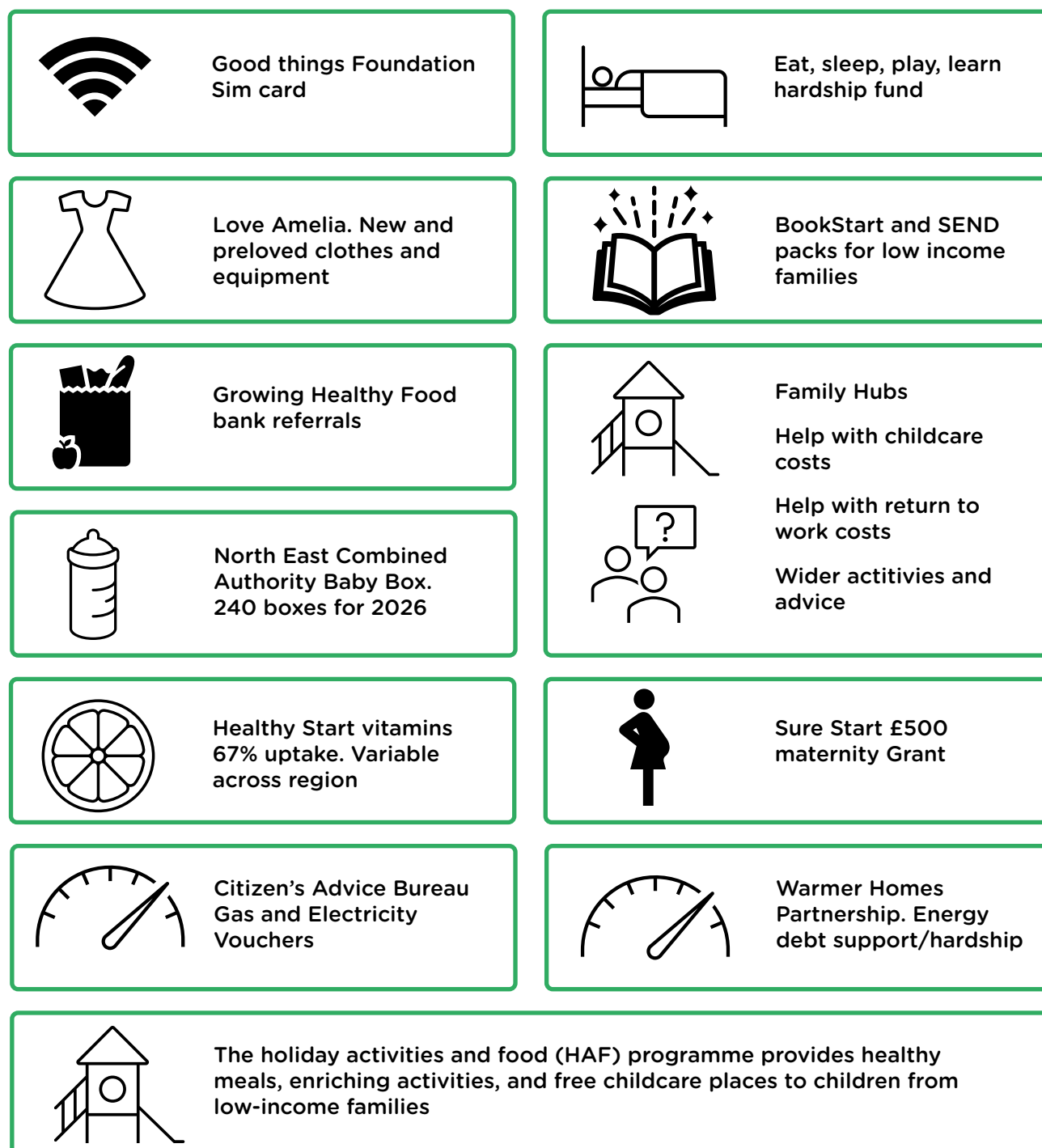
While the NCP should aim to increase economic security in the county, support for those currently in poverty needs to run alongside.

The 'Reducing inequalities in health in Northumberland through Housing' report sets out a range of recommendations to improve the quality and affordability of housing in Northumberland. [11] It includes targets to increase the availability of affordable housing and to retrofit the homes of those living below the JRF MIS and insulated to below the EPC C level. The recommendations from this report also include action to reduce homelessness. Achieving these recommendations will help to mitigate against the negative impacts of poverty and therefore should be included in the Child Poverty accountability framework.

However, there are additional elements of child poverty mitigation that we have not yet studied, and the rest of this section investigates this work and provides recommendations for further action.

Pragmatic gifts in kind can help to mitigate against the negative effects that material deprivation can have on health and social outcomes. As Figure 9 outlines, there is a plethora of available support in Northumberland. In addition, as Box 1 illustrates there are some useful ways in which the system is joining up to help families in need.

Figure 9. Poverty Mitigation in Northumberland – goods in kind



Box 1. Single Point of Contact Referral system

The Northumberland Growing Healthy 0-19 Service visit the home of families across the county and sometimes observe living conditions such as damp/mould. There were complex communication systems with housing partners across all sectors for all tenures of housing. Using Northumberland Frontline as an existing asset, as a collective we developed an approach that enables residents, health and housing to communicate through a simple single point of contact (SPOC) referral system.

Since implementing the SPOC referral process, frontline health professionals are more confident in being able to report repairs, residents have increased satisfaction, and housing partners gain access to more properties.

Example

A practitioner visited a family to carry out a three to four-month core contact. The family lived in a two bedroom, privately-rented property. When completing the Home Environment Assessment, there was damp and mould observed in the kitchen, the bathroom and both bedrooms. The home was also observed to be cold. The parents advised that the boiler was broken, and they were unable to warm the property. As a result, the family were living and sleeping in the lounge area as they had an oil filled radiator to heat the room.

The parents advised that they had contacted the landlord on several occasions to report the mould and the boiler, but they had not received any contact or any resolution.

Both parents were extremely anxious about the impact the home conditions may have on the health of their child and that they felt 'powerless' to change their situation. The parents had registered with HomeFinder to enable them to bid on Local Authority properties but were repeatedly unsuccessful.

Due to the level of concern and assessing the home was not habitable in its current condition, a referral was made to Environmental Health. This resulted in a rapid inspection of the property.

Using the SPOC process, a referral was also made to Private Sector Housing Team, Northumberland County Council to intervene with the landlord. This was to ensure that any work needed to meet a reasonable level of housing was implemented under the legal framework.

The 0-19 Practitioner utilised the housing process to write a letter of support to HomeFinder which detailed the level of concern observed. Due to the concerns about financial pressures of the current housing situation, a referral was made to the Citizens Advice Energy Team using the SPOC process. This was to request short term energy resolution support, and to support longer term financial stability.

Citizens Advice issued Emergency Fuel Vouchers to support the funding of energy in the home. They also offered further assessment and support with regards to managing finances to improve financial wellbeing.

Environmental Health and the Private Sector Housing team worked together to highlight the level of concern around the property directly with the landlord who was then required to demonstrate actions to resolve the home concerns within clear timescales.

The family were granted priority banding when bidding on Local Authority Housing and were successful in securing a new home. The practitioner visited the family in their new home, and both parents expressed their thanks for the support and intervention offered.

The breadth of items and support that is available to residents in Northumberland could significantly reduce stress on budgets and support the health and longer-term outcomes of children. However, the evidence suggests that uptake for initiatives to provide goods (clothes, vouchers, baby boxes etc.) were relatively low, given the increased level of poverty. It is evident that many more families might benefit from these than are currently in receipt.

Much support is for those in severe hardship, and BSIL practitioners act as a gateway to this support. This works well for many families as illustrated in Box 2 below.

Box 2. The Eat Sleep Play Learn Fund

The Eat Sleep Play Learn (ESPL) Fund provides flexible support for children and young people whose ability to eat well, sleep safely, play and learn is impacted by financial hardship or unmet need. The fund takes a relational and holistic approach, beginning with a conversation with a trusted partner before progressing to an application. This approach helps practitioners understand the wider circumstances of families and identify the most appropriate and sustainable support, often unlocking additional entitlements or connections to local services. The fund sits neutrally within the Local Authority, which helps create a more accessible and trusted entry point for families seeking support.

In one case, a primary school identified an older pupil who was regularly arriving at school tired and struggling to concentrate in lessons. Through conversations with the family, it emerged that the child and their younger sibling (under five) were sleeping in unsuitable arrangements, which was significantly affecting their ability to rest.

Through the ESPL Fund, the family was supported with appropriate beds and bedding for both children, ensuring they had safe and comfortable sleeping spaces. Following this support, the school reported improvements in the older child's energy levels, engagement and ability to focus on learning, demonstrating how relatively small, targeted interventions can have a direct impact on a child's wellbeing and educational outcomes.

In another example, a family contacted the Holiday Activities and Food (HAF) mailbox seeking support. Their children were electively home educated, meaning they were not automatically eligible for HAF provision. A member of the team visited the family to better understand their situation and referred them to Citizens Advice Northumberland for financial advice. The family received a discretionary HAF voucher, enabling the children to access holiday activities, and ESPL funding provided a short-term transport solution so the children could attend while the family vehicle was being repaired.

Alongside responding to individual needs, the ESPL Fund benefits from strong monitoring and data collection, enabling the identification of emerging trends across referrals. This insight supports opportunities to work with corporate social responsibility (CSR) partners and local organisations, allowing resources to be pooled and economies of scale to be developed. For example, partnerships around beds and flooring are helping ensure practical support can reach more children quickly and effectively and ensuring best value for money.

As Box 2 demonstrates, the insight from the Eat Sleep Play Learn Fund has helped to support opportunities to work with local businesses to provide flooring and beds at the best possible prices.

The Eat Sleep Play Learn Fund is a discretionary hardship fund designed to support children and families experiencing short-term financial crisis or acute hardship. It aims to alleviate immediate pressures by covering essential needs related to a child's wellbeing, focusing on the themes, eating, sleeping, playing and learning.

This fund is intended to fill temporary gaps in existing support and should not be used as a long-term or repeat source of funding. Professionals applying on behalf of families must ensure that all other statutory, charitable, or community-based avenues have been explored before submitting a request.

Moving to a more proactive approach of automatic entitlement and delivery could help to mitigate against stress for families which would be a positive outcome. However, the costs associated with a wider delivery model could be substantial. Work to review the effectiveness of this offer, alongside scaling up effective interventions with the help of social value commitments from local businesses could help to close the gap between need and delivery. The NCP should review the opportunity to contribute to impactful interventions as per recommendations.

Another facet to this is the knowledge of BSIL practitioners regarding what is available. Goods in kind and financial help should be listed on Frontline, and practitioners should be informed. However, it was clear in our focus groups with practitioners and wider stakeholders, that not everyone was aware of this wide-ranging offer. Work to review the Frontline platform and its use is therefore warranted with a view to looking at innovative new methods if needed.

THE VOICE OF RESIDENTS: APPLYING A POVERTY LENS ACROSS SERVICES

In the process of conducting this work, we spoke to residents on low incomes that were not taking up services. This work was not conducted at a scale that was sufficient to be representative of the whole of Northumberland, and so while we do follow up on some of the barriers identified later in the report, the main message from this work was that the findings were insightful and identified barriers that could be overcome through service design that responded to their lived experiences. Therefore, more work to embed the voice of those living on low to middle incomes in Northumberland and to enable there to be feedback loops so frontline staff can inform their conversations with residents is an important recommendation.

Northumberland should build on the learning from multiple approaches of working with lived experience perspectives in service design, including, but not limited to Poverty Truth Commissions. We would suggest that any system is broad enough to include the wider group of families below the JRF MIS, those families with children with SEND, and migrants; and ensures that there is a clear pathway from insights to action.

Cheshire West and Chester Council set up a Poverty Truth Commission to formalise hearing from residents and to improve service delivery. Their example is set out in Box 3.

Box 3. The Cheshire and Merseyside Poverty Truth Commission

Cheshire West and Chester Council (CW&C) pioneered an innovative and long-term approach to tackling poverty, grounded in a belief that those with lived experience must be at the heart of service design, strategy, and change. Initially a two-year initiative, this approach has evolved into an embedded and ongoing model of co-production and collaboration, with the Poverty Truth Commission (PTC) at its core. From Poverty Truth Commission to Embedded Service launched in 2017, the first West Cheshire Poverty Truth Commission was the first in the UK to be led by a Local Authority. Its purpose was to create space for those with lived experience—known as Community Inspirers—to share their direct experience of living in poverty, enabling authentic conversations that challenge stereotypes and work alongside CW&C council leaders and business leaders to influence policy and practice. This was never intended to be a short-term project. Rather than ending with a set of recommendations, CW&C committed to embedding the PTC's ethos into council practice. The model has evolved into a permanent, embedded service sitting within the Public Health team, aligning closely with the borough's efforts to reduce health inequalities and address the social determinants of health. The Commission's focus on listening, removing stigma, and fostering human connection has led to significant impacts. For every £1 spent, the second Poverty Truth Commission generated £9.17 in social value—over £1.6 million overall — highlighting its impact across housing, health, and community services.

HELPING THOSE ON LOW AND MIDDLE INCOMES

Child poverty reduction to become a NCP cross-cutting mission

NCP organisations to commit to alleviating child poverty using their levers as employers, procurers, service providers, landlords – leading this by adopting and progressing the housing and work recommendations, including for example:

- building more social housing.
- improving the affordability of housing.
- insulating the homes of all those below the Joseph Rowntree Foundation (JRF) minimum income standard and not insulated to EPC C.
- increasing the numbers working full time, at or above the real living wage.
- increasing employment rates in areas of high deprivation (through more jobs/transport schemes).

Also:

- To work across the NCP to:
 - > Maximise uptake of benefits among those eligible.
 - > Target and increase investment in ‘left behind neighbourhoods’.

Use social value commitments to support VCSE organisations mitigating poverty

- Work with partners from the voluntary, charity and social enterprise sectors (VCSE) to understand and review services offering help to those in poverty by reviewing their ability to a) improve resources available, b) reduce stress on families and c) reach areas in need.
- Work with Northumberland County Council (NCC) Procurement Services team to develop a framework/prospectus of effective VCSE programmes to enable them to expand an impactful offer with additional funds/support from businesses tendering for work with NCP.
- Set up a cross-cutting steering group to create a proactive system that manages the community resilience fund, social return on investment funds and any other funds to help more families earlier.
- Work with Thriving Together to support a 10-year plan with the VCSE to address long term support and engagement with the VCSE.

The workforce knows what is on offer to ensure that those who need help, get help

- Ensure that everyone who is in contact with those in poverty are aware of the offers available by VCSE and NCC to help those in poverty.
- Review the use/quality of Frontline platform and Family Information Service Directory to ensure that there is simple access to a comprehensive list for those who need this information the most.

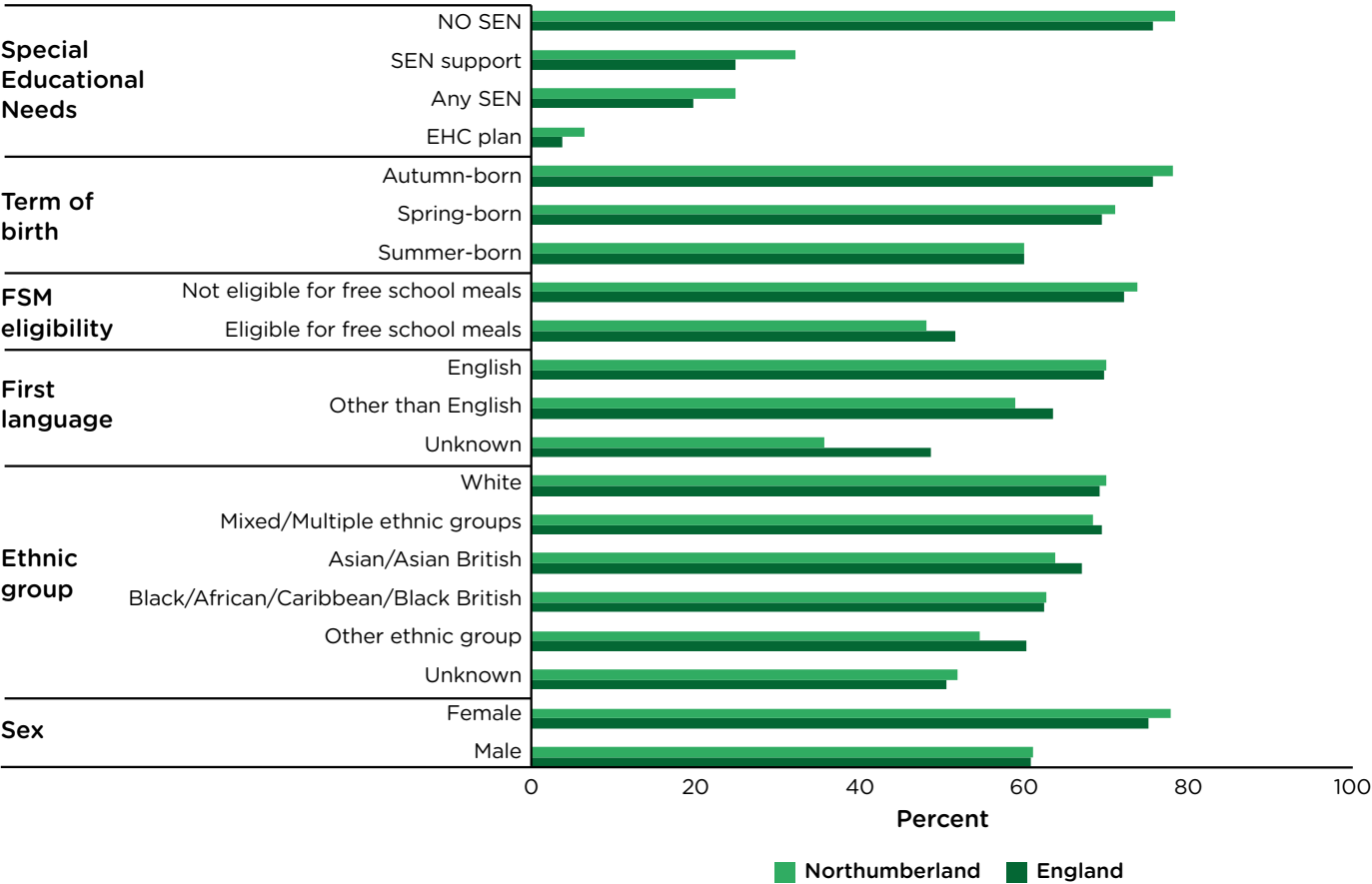


SUPPORTING CHILDREN WITH ADDITIONAL NEEDS

SUPPORTING CHILDREN WHOSE FIRST LANGUAGE IS NOT ENGLISH

Figure 10 further investigates the percentage of children in various subgroups that reach a Good Level Of Development at age five. Children in Northumberland fare slightly better than the English average, with the exception of children eligible for FSM, children from ethnic minority groups, and whose first language is not English.

Figure 10. Pupils reaching a Good Level Of Development at the end of reception, by various characteristics, percent, Northumberland, and England, 2023/24



Sources: DFE, 2026

LOCAL VOICE

Professionals working in this area have cited a recent increase in migrants into the county and feel that the reason that the GLD results are low for those with English as a second language are low is potentially because of the small amount of time they have been in the country, compared to more settled ethnic populations in other areas of England. Given this, there are recommendations that will help to improve understanding of this data.

In addition, we spoke to the manager of the Lighthouse project in Newsham (a community hub), they alerted us to the fact that new migrants must attend English language classes to be able to stay in the country, but that the hours and placement of these meant that families would find it very hard to also put their children into good quality EYEC and that an intervention was needed to address this.

CHILDREN WITH SPECIAL EDUCATIONAL NEEDS

Figure 11. Pupils with SEN support in schools, percent, Northumberland and England, from 2020/21 to 2024/25 Academic years

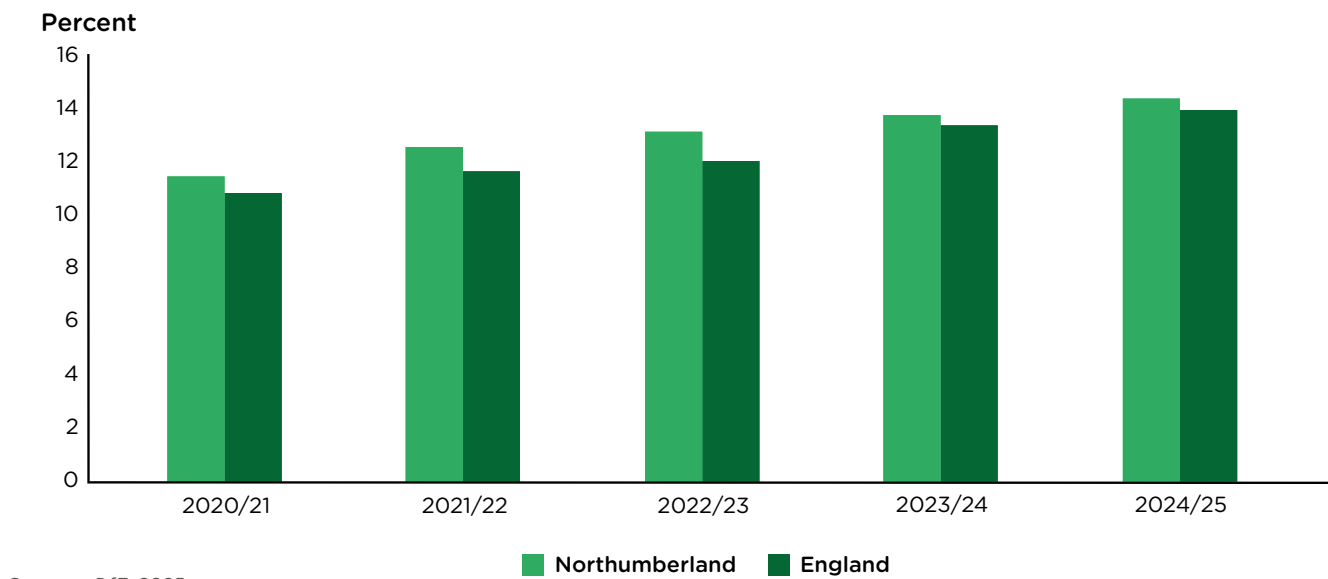
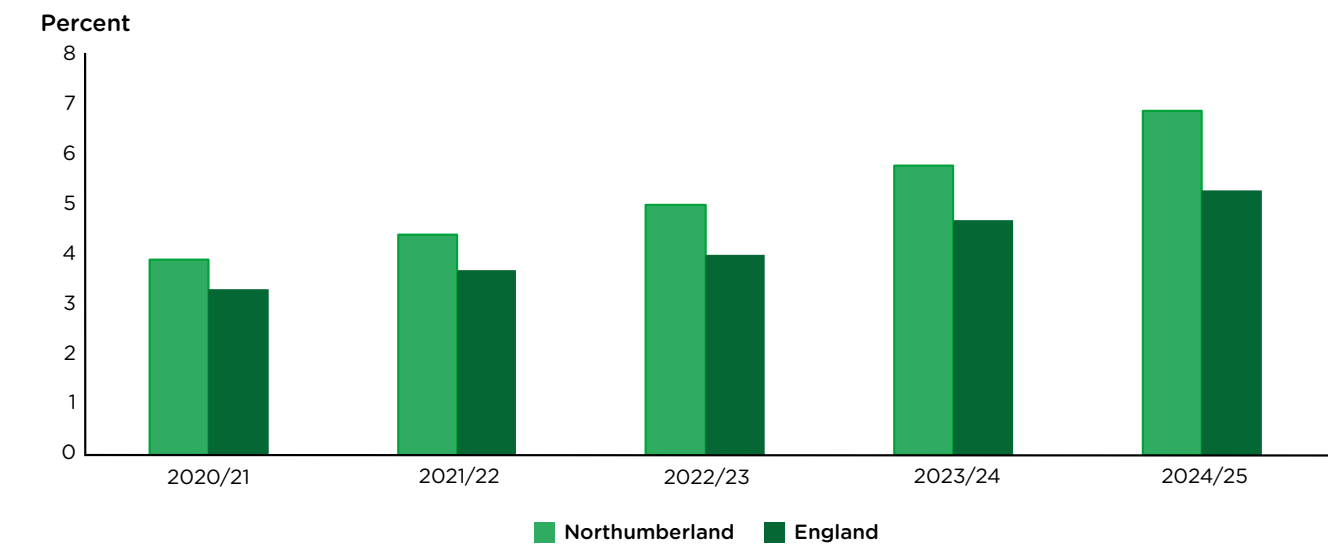


Figure 12 Pupils with Educational, Health and Care (EHC) plans (All schools), percent, Northumberland and England, 2020/2021 to 2024/2025



Figures 11 and 12 illustrate a gradual increase in the numbers of children with identified Special Educational Needs or Disabilities (SEND), and a more rapid increase in the numbers of children with Education and Health Care Plans (EHPs) than the national average.

Children with special educational needs do better at age five in terms of reaching a Good Level Of Development in Northumberland than in England. However, the rates of those with SEND have been increasing, putting pressure on services and budgets. Professionals in the area were concerned that children with behavioural issues that could be addressed with early intervention packages or children who were developing at a slightly slower speed might be being overly medicalised with a SEND diagnosis. There was a desire for a better shared understanding across all professionals working in this area of what behaviours/outcomes/ actions would justify a SEND diagnosis, and which could be addressed differently and how.

However, from an inequality in health perspective, we need to be aware that there may be some economic benefit attached to SEND diagnoses. Therefore, reducing SEND diagnosis in children from low-income families may not result in a reduction in inequalities in health.

Another area of concern to some professionals was access and uptake of free EYEC provision by families with children with SEND. While nurseries should provide places for children with SEND, there had been concern over accessibility for this group, with 46% of parents with a child with SEND stating that they could not find a childcare provider that could meet their child's additional needs. [12]

RECOMMENDATIONS

SUPPORTING THOSE WITH ADDITIONAL NEEDS

Support those where English is an additional language (EAL)

- Collect data on how long children where English is an additional language (EAL) have lived in the UK to contextualise performance. Data team to coordinate EAL data and match it with GLD and progression metrics.
- Use the newly developed dashboard tracking progress from GLD to Key Stage 2 to see if EAL children catch up by Year 1 or Year 2.
- Ensure migrants are included in lived experience conversations given potential additional barriers to utilising services (language courses/cultural norms).
- Ensure that migrant families attending English language classes can access good quality childcare for their children.
- Review the use of Citizen Ceremonies as a way of further engaging communities with services.

Support those with Special Educational Needs and Disabilities (SEND)

- Ensure all relevant partners utilise S23 notifications to enable early identification and planning for potential special education needs and disabilities in children.
- Review information added to S23 notifications, and at other checkpoints for children aged two to five, to determine if more can be done to collect information on early years education and childcare use and to encourage uptake.
- Reach even more parents of children with additional needs to include in lived experience conversations. This is essential to understanding and removing the barriers that families face, alongside providing support to access wider community SEND services and support.
- Establish clear pathways and communications for families and professionals on the services available to support children with emerging or identified needs, endeavouring to ensure that families can access the right support at the right time within a graduated response.



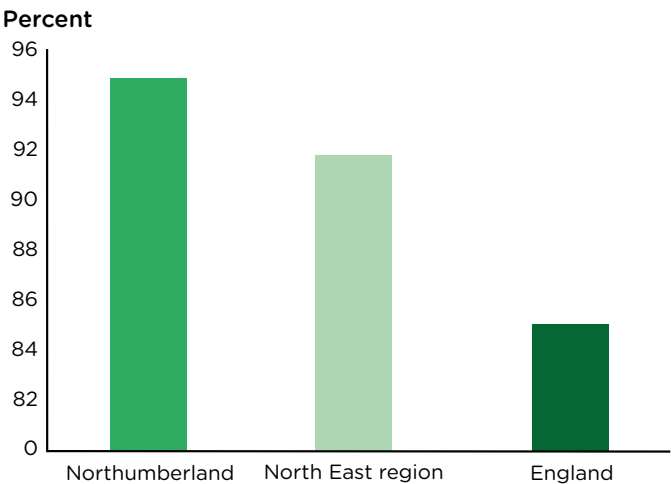
IMPROVING THE HOME LEARNING ENVIRONMENT

Improving the home learning environment is one of the most effective interventions to reduce inequalities in attainment at age five (see Annex 2 for a review of recent literature).

The Growing Healthy Northumberland 0-19 service provides health visitor contacts with families after birth to provide advice and support, including on how to support the development of children and a good home learning environment. There is also an app that sends out notifications at specific times to remind parents of key things they should be doing.

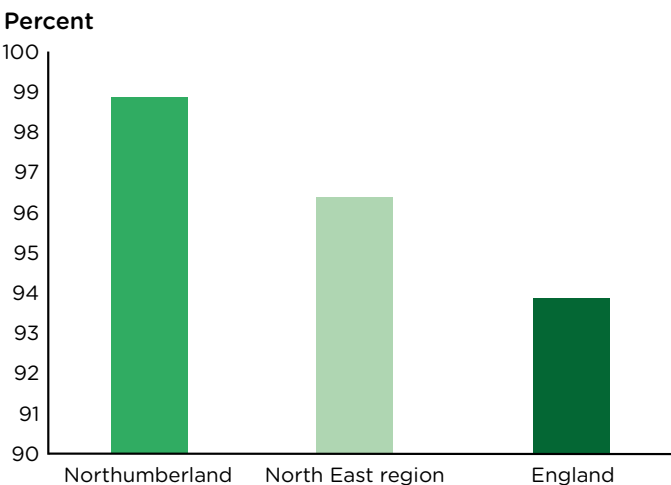
However, despite the fact that the number of health visits in Northumberland is higher than the England average as demonstrated by the examples in Figures 13 and 14, stakeholders expressed concern that many parents were still not engaging with their children as well as they could and were relying on external services to ‘develop’ children.

Figure 13. Infants receiving a 6-to-8-week review, percent, Northumberland, North-East and England, 2024-2025



Sources: Office for Health Improvement and Disparities, OHID 2026

Figure 14. Children aged 2 to 2 and a half years receiving ASQ-3 as part of the Healthy Child programme or integrated review, percent, Northumberland, North East and England, ADD YEAR



Sources: Office for Health Improvement and Disparities, OHID 2026

Box 4. Family Hubs and integrated support for families

Family Hubs are local, “one-stop-shop” centres providing integrated support for families with children aged 0–19 (up to 25 for special educational needs).

They bring together services like midwifery, health visiting, parenting classes, mental health support, and advice on childcare, money, and employment to help families thrive. Family Hubs work in partnership with families and different services in the community, providing information, advice and guidance and support families, children and young people. The hubs offer a range of free activities, group sessions and parenting packages, open to anyone who cares for or is expecting a child (pre-birth to 19 years and up to 25 years for SEND). Sessions are available online and in-person to ensure they fit in around families and commitments at work or home.

Box 5. Libraries supporting families and the learning environment

Libraries provide a child friendly environment that is completely free to visit and open to all. The spaces support shared reading, early communication, and positive family interactions in a safe public setting.

Their offer to families includes:

- **Books to borrow** for all ages at no cost, including board books and picture books to encourage early shared reading.
- **Bookstart gifting**, ensuring families receive books and guidance to encourage and support reading at home.
- **Regular storytimes and rhyme-times**, helping children develop language, communication skills, and confidence in a social setting.
- **Creative play opportunities**, including craft activities, toys, games, Lego clubs and imaginative play sessions that strengthen early learning and social development.
- **Workshops and performances**, that reach across urban, rural and coastal areas enabling more families to take part, more often, thereby offering learning opportunities and supporting their wellbeing.
- **Information for families** including curated collections such as Reading Well for Families and signposting to local and national opportunities and support organisations.

Libraries work closely with nurseries and schools, welcoming group and class visits that act as a supported step toward independent family library use. This helps embed reading for pleasure from the earliest age and strengthens links between early years settings, their local library and families who may be less likely to engage without support.

CONSISTENT MESSAGING

Further work on messaging to support parents to improve the home learning environment was agreed as a useful way forward. It was felt that this messaging should be salient to people who are not currently promoting a positive home learning environment and should be consistent to help reinforce messages.

For this reason, it was suggested that the existing Early Help Partnership should be expanded to formally include residents on low incomes and the VCSE sector and that this group would review communications and act to develop and test new communications which may be more effective.

It was felt that the messages should be available through a range of media, not just digital and that parents should be engaged with the information in places where they go.

IMPROVING THE HOME LEARNING ENVIRONMENT

The Early Help Partnership to develop consistent effective messages

- The Early Help Partnership to be refreshed to include delivery partners, the VCSE and parents. The Partnership to review current messaging from all providers and co-create parent friendly communications (considering health literacy evidence base) around the school readiness pathway in Northumberland and ensure messages have consistency across delivery partners and platforms.
- Organisations to use a range of media and consider developing non-digital, parent friendly guidance materials that can be shared through places that parents/carers visit.
- Use phrase 'early education and childcare' rather than just 'childcare'.
- Materials should be tested for their ability to increase behavioural intent to improve parenting and clearly outline the milestones children should be achieving at key points in their school readiness journey and the role of parents in providing the opportunities and experiences needed to enable them to be met. Ongoing monitoring of the efficacy of messaging is needed to ensure that it is driving the behaviour changes needed.
- The importance of sending children to early years education and childcare in this journey should also be communicated, but as an extra step, not an alternative to engaging with other services such as family hubs.

The Refreshed Early Help Partnership to consider the best methods for engaging parents

- The Refreshed Early Help Partnership to also identify best methods for engaging parents with these messages wherever parents choose to go, in a way that ensures they can both attend a parenting course in a Family Hub and use early years education and childcare.
- The Early Help Partnership to coordinate training of practitioners from all services regarding key messages including timing of messages.
- Assigned team to coordinate all communications around best start in life (BSIL) from integrated services.
- The efficacy of this coordinated messaging and engagement to be regularly evaluated and continually improved.

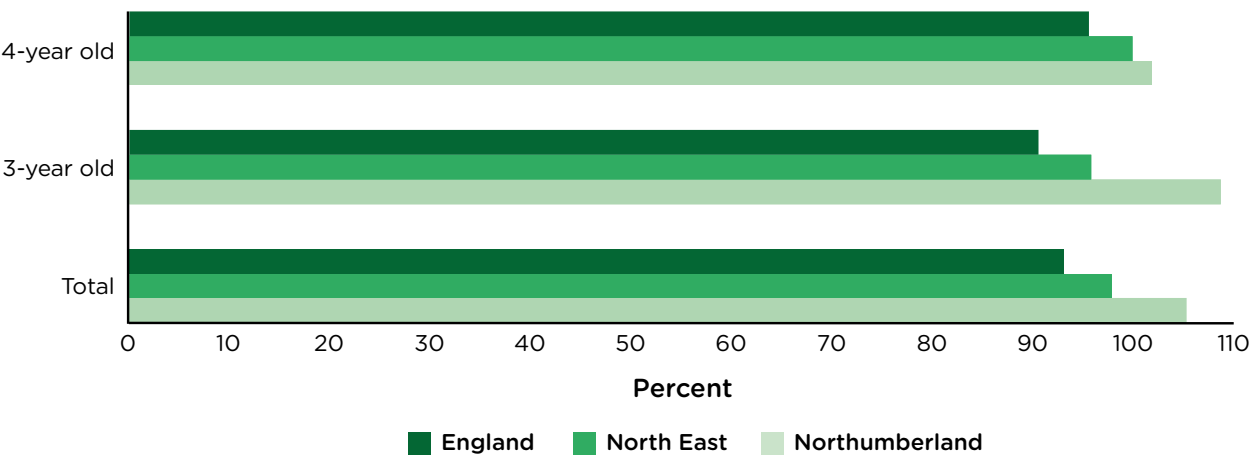


BETTER DATA AND ACCESS TO SERVICES

SERVICE PROVISION IN NORTHUMBERLAND

Teams in Northumberland are proud of the services that they provide to ensure that everyone has access to good quality education and childcare (EYEC). Figure 15 demonstrates that the Northumberland and the North East is doing better than England.

Figure 15. Registration of eligible children for free 15-hour entitlement to Early Years Education and Childcare, percent, Northumberland, North East, and England, 2025



Source: DFE, 2026.

IMPROVED DATA TO REDUCE INEQUALITIES

However, while service delivery is above average across Northumberland, we know from Figure 5 on page 19 that there are some areas where outcomes are below the England average and outcomes where they are above the England average. In these areas we need to know what percent of families (whose children would be eligible for FSM) are taking up EYEC and for what duration. In addition, we need to know the outreach of Family Hubs and health visitors to these areas. It could be that lack of use of services is driving this relationship and then we would need to understand why and help families overcome barriers. To do this, we need to create a dashboard of locally available information and map this.

Some work is already underway which is highly relevant to improve evidence on the efficacy of family hub outreach. Northumberland is part of the Government Test, Learn and Grow programme, a three-year initiative aimed at reshaping how public services are delivered across the UK. Northumberland is part one of two workstreams, looking at how Local Authorities can build capability to embed a ‘test and learn’ approach in the development and delivery of services with a focus on Best Start Family Hubs. The main focus to date has been to increase the reach and targeted reach of Family Hubs to support Good Level Of Development. Work has taken place in rural and coastal areas, in small, 12 week test cycles, building evidence bases for scalability.

We should also look at areas that are doing better than expected, for instance in Hirst and Ashington the children are doing as well as the England average if they are eligible for FSM, and in other areas they may be doing even better. Learning from the services that are performing the most strongly is essential. Box 4 provides an example of a highly regarded provider of EYEC.

While service provision is generally above average, stakeholders also felt that they were unsighted on the efficacy of services, and so there was a desire to have better joined up data and to work with others to deliver this.

Box 6. Spittal First School

Spittal First School is based in Berwick. Over a third of children are in receipt of Free School Meals and over 40% receive Early Years Pupil Premium. Around 20% of these children are on the school's SEND register. Leaders recognised that their children needed a curriculum which closed gaps in their learning and development and met their unique needs. To help identify what this curriculum should include, the staff team created 'The Spittal Child'. This is a one-page profile of children's experiences, family life, family aspirations and needs. Staff use this to identify what they need to offer within their curriculum to meet the needs of the unique children at Spittal First School. To support children as best as they can, leaders carefully consider how Early Years Pupil Premium and school Pupil Premium is spent. The school value and prioritise building children's cultural capital, as they know many children arrive in nursery having had limited experiences. External professionals are brought in to share their expertise and passion with children. This includes companies such as Boogie Beats, Yoga teachers and the Newcastle Football Foundation. The children also spend time each week with nursery practitioners in the gardening and nature group. Here they learn how to care for the environment and live more sustainably, supporting the school's wider work to achieve their 'Silver Wild Challenge Award'. All these activities focus on building children's basic skills and holistic development, helping them to be ready for the National Curriculum when they start Year 1. Communication and language development is a priority area for many children. To support with this, nursery children go to the local library every Friday. Here they are read to by the library team, they sing songs and rhymes and choose a book to take home. All children are individually enrolled as library members so they can visit with their families out of school time. To further promote a love of stories and reading, funding is used to purchase a book for every nursery child each month. This is a free gift for families so they can read the stories children have been introduced to at school in their own home.

At Spittal First School early identification and intervention is of utmost importance. The Deputy Head and nursery teacher, Emma, is quick to start the graduated approach when gaps in learning and development are identified. Emma works closely with relevant professionals, where needed, to ensure the right support is promptly put into place. When the Family Hub introduced the Peep programme, Emma was keen to work with them to pilot 'Pop Up Peep'. This is a series of Peep sessions which parents and carers are invited to take part in with their child. The sessions take place in school so teachers and practitioners can interact with parents and adapt their interactions according to the needs of the families attending. To incentivise parents to come along to Peep, school offered tea, coffee and treats before the session and put out children's learning journals so parents can see what their child has been up to at nursery. Photographs are taken throughout the session and shared on the school's social media pages. This has encouraged other parents to come along to the next session if they can. The response from parents who have attended has been overwhelmingly positive. They report feeling more confident in interacting with their child and better understand how to support their development. Communication with parents is highly valued at Spittal First School. Staff take the time to educate parents about what their child will be learning. This is done in many ways, including weekly newsletters which include 'words to use with your child' and 'rhymes to sing', and phonological awareness sessions for nursery parents. This helps families to understand how best to support their child's learning at home.

Children who are in receipt of Early Years Pupil Premium are given a little extra. Targeted communications are shared with their parents which include ideas and actions for parents based on their child's unique learning needs. Parents are also given additional parent evenings, where they are supported with home learning and have the opportunity to share and review their child's progress and next steps. Along with the ordinarily available provision already mentioned, targeted interventions are in place for those children who need something additional. The Early Years Pupil Premium funding is used to run interventions focused on the prime areas of learning. This includes programmes such as Nursery Narrative, Early Talk Boost and ELKLAN but also small group and 1:1 time to pre-teach key vocabulary and core texts. This supports children to be ready for the learning to come. Children are read with daily in 1:1 and in small groups. All these actions focus on giving children the strong foundations they need to access the next stage of learning. All the strategies that Spittal First School put in place to support their children are focused on supporting every child to be future ready. Their aim is to have confident, independent children who can express themselves effectively with the support of the adults in their lives, and this begins as soon as they start their nursery provision.

Local voice – barriers to using services

We spoke to a few residents in Northumberland who were not taking up EYEC services and to the manager of the Lighthouse project in Newsham, who provides support for families in poverty.

This work was not done at scale, and it is important that further work to embed the voice of residents that are not engaging with services is carried out. Nevertheless, the emerging insights from this work are informative, and action to address the issues raised should help to reduce barriers to access.

Inability to access free childcare offer because of the times available

Parents mentioned difficulties with accessing childcare because there was insufficient time to drop or pick up other children from school and get to the EYEC or school on time. Most people on low incomes do not have access to a car which compounds the issue. School nurseries are a popular choice because they address this barrier, but they can be oversubscribed.

Parents also mentioned rushing from work to pick up children and fear of fees for being late. Ultimately, it was clear that if the EYEC does not integrate into their daily lives, they will not use it.

Some migrants were unable to utilise EYEC because they needed to attend compulsory English language courses. This project has highlighted this issue and funds may be available in the future to address this.

Concern over hidden costs

Families on low incomes are concerned that there may be additional costs, such as for food or resources. Indeed, nurseries do charge for food, and the amount would be prohibitive to a family on a very low income, however it is likely that parents could also bring in packed lunches for their children. Further work to check that ‘free’ provision is free in practice, and that this is well communicated is needed.

Concern over safety

Concerns were raised regarding the safety of leaving children with strangers; an example was given of stories in the news of abuse by EYEC practitioners. In addition, parents had heard stories of the wrong food being given to children, more than once, and this resulted in one parent taking their children out of nursery.

Difficulties with the system

Parents were not sure which EYEC to choose that would be best for their child, and there were also reports of difficulties with generating a ‘code’ that would enable people to access childcare. Family hub staff have provided support to families with this system, and ensuring continuation of this offer would be beneficial.

RECOMMENDATIONS

BETTER ACCESS TO SERVICES

Increase uptake where those eligible for free school meals are falling significantly behind English average in terms of Good Level Of Development

- Results for children in many areas of the South-East of Northumberland are significantly behind the English and Northumberland average, and the NCP should drive forward work in partnership with local families not utilising provision to inform/co-design any changes needed to ensure the uptake of health visitor visits and early years education and to mitigate against barriers.
- Results for boys in Northumberland eligible for FSM are significantly behind the English average. Further focus groups with providers and parents may help to provide additional context that could inform why this might be, which should inform the messaging being developed and service delivery.
- Good practice, from areas where children on FSM have higher levels of development, should be shared to help inform other areas, such as Early Years provider networks and school improvement teams.

Help Early Years Education settings provide a service that is accessible for all

- NCP via early years provider networks and school improvement colleagues to work together to improve accessibility, by for example:
- Early years education and childcare settings providing flexible hours/locations so parents can pick up/drop off other children/attend work/skills training.
 - NCC/VCSE to provide 'Hand holding' services to help households apply for a 'code' and choose the right provision for them.
 - Considering innovative transportation solutions to help parents access early years education and childcare where there is no local provision.
 - Add new services where needed according to evidence.

Free, funded and safe childcare provision

- Continue to ensure sufficient free provision of childcare for families on low/middle incomes.
- Ensure that there are no additional costs for food or resources to those on low incomes. Support should be provided to childcare providers to ensure that this does not act as a disincentive to take children from lower income families.
- Nurseries to be very clear regarding safety procedures and routines to reduce anxiety in parents and carers..

BETTER DATA

Using joined up data to strengthen service provision

A Northumberland Systemwide Intelligence Group has been established to strengthen a shared, systemwide approach to data and insights across Northumberland, bringing together key partner organisations. The group should play a central role in advancing data sharing, data linkage, population health management, and other priority areas that underpin robust, evidence-based decision making. It will act as a catalyst to enable the development and delivery of the data recommendations outlined below:

- A BSIL data group to produce a shared dashboard and map(s) to illustrate at the lowest geographical level available, results from the Ages and Stages questionnaire by granular domains, level of development by eligibility for FSM and other indicators such as domestic abuse, obesity and low birthweight statistics. This should be presented alongside information on deprivation level, services available and uptake. Ensure join up with Neighbourhood Health work through the Systems Wide Intelligence Group.
- Establish a targeted offer for all family support (delivered by health, family hub and VCSE) which reflects the needs of communities in response to this shared data with a focus in the short term on improving the offer for more deprived households.
- Review and monitor the targeted offer to ensure it is meeting needs.
- Given that GLD outcomes are often worse for children eligible for FSM in less deprived areas than in more deprived areas, NCC to review the GLD scores in those areas and determine whether service improvement is required.

Create a longitudinal data set (from 24 weeks) of all children in Northumberland

- Build one single data system (and data sharing agreements) for informing the delivery of services, outreach of services, monitoring progress and impact of services, building on established systems (i.e. School Readiness Passport) and including birth registration, address and household income information.
- Link with Community Services/Stronger Communities regarding the gathering birth registration data.
- Quality assure the effectiveness and impact of agreed processes at statutory checkpoints, with a specific focus on the two-year integrated review.

Improve knowledge of lived experience

- More information is needed on the lived experience of the client group regarding barriers and facilitators to utilising existing services.
- Improve management information to ensure that there are feedback loops so practitioners can report on barriers that people mention during visits and services can address these.
- NCC to formalise a dynamic method to ensure that the voices of those on low and middle incomes have a positive influence on service design, with an aim of improving services so that they both a) address need and b) reduce stress.



FURTHER WORK REQUIRED

The focus of this report has been to identify actions that could reduce inequalities in health through a reduction in the gap in attainment at the end of reception by FSM eligibility using the key levers of the home learning environment, good quality early years education and a reduction in poverty.

However, even though tackling low incomes will help to reduce stress and strain on families, additional work to reduce the prevalence of Adverse Childhood Experiences on outcomes may also be warranted. While conducting the research for this report, it became evident that many children in the area had witnessed some form of domestic abuse and this can have a negative impact on outcomes now and into later life.

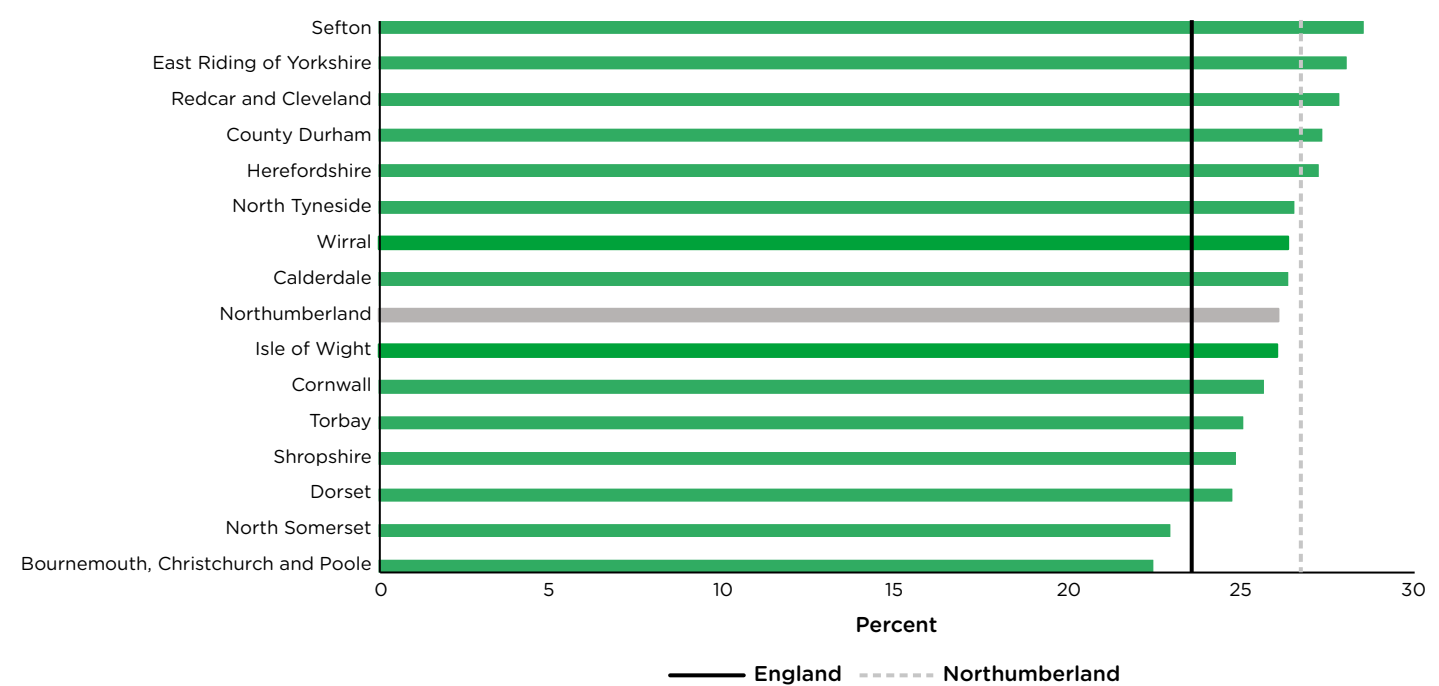
There are also other parts of the schooling system that are important and require more focus. For example, educational outcomes tend to decline in the transition between primary and secondary school and the start of secondary school. [13]

In addition, there are areas of health that warrant attention. For example, childhood obesity at reception age (four-five years) significantly increases risks for immediate physical health issues, including breathing difficulties (sleep apnea), joint pain, and early signs of Type 2 diabetes. It also poses serious psychological risks, such as low self-esteem, social isolation, and bullying. Children with obesity are more likely to remain obese into adulthood, increasing long-term risks of premature disability and mortality. [14] We also know that childhood obesity exhibits a strong socioeconomic profile, with children in more deprived areas in England being at twice the risk of obesity compared to children in less deprived areas. [15]

Figure 16 illustrates that more reception children in Northumberland are overweight or obese than the national average. This is something Northumberland should monitor and seek to reduce.

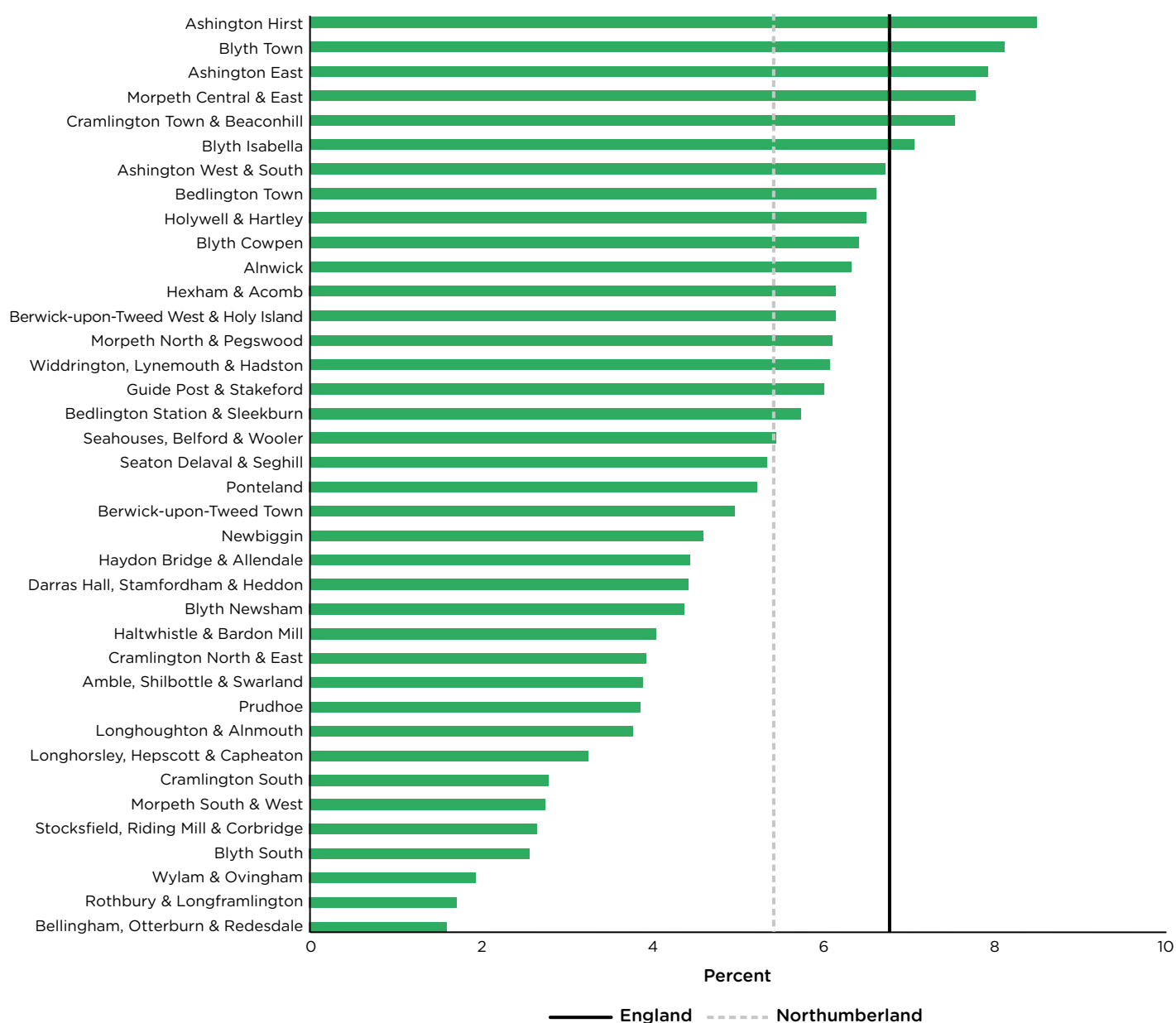
Inadequate nutrition in pregnancy, smoking while pregnant, substance and alcohol misuse, teenage pregnancy and pregnancy related complications, are all related to higher prevalence of low birth weight. This matters because low birth weight is a risk factor for infant mortality, developmental problems in childhood, and poorer health in later life and, therefore, should be prevented where possible. [16] Figure 17 illustrates regional variation within Northumberland in terms of low birth weight of babies for four years to 2022. There is a statistically significant difference between those areas with the lowest and highest prevalence of low birth weight. In Ashington, Blyth and Cramlington Town and Beaconhill, there were statistically more low birth weight babies than in Rothbury, Longframlington, Bellingham, Otterburn and Redescale. Although the numbers are relatively low in total, there is a clear socioeconomic correlation here, with higher rates of low birth weight in more deprived areas.

Figure 16. Reception aged children who are overweight or obese, percent, Northumberland, CIPFA nearest neighbours, North-East, and England, 2024/25



Source: OHID, 2026

Figure 17. Low birth weight of live babies, percent, Northumberland wards, Northumberland, and England, 2018-22



Source: OHID, 2026



THE SCALE OF ACTION NEEDED TO CLOSE THE ATTAINMENT GAP AND INDICATORS

THE SCALE OF ACTION NEEDED TO CLOSE THE ATTAINMENT GAP

This section seeks to help us identify how many more children need to be helped to reduce the gap in attainment at age five. A fuller discussion of the literature and effect sizes can be found in Annex 2.

In this section we try to quantify what meaningfully reducing household income related inequalities in child development would look like.

Figure 18. Number tree, quantifying the expected distribution of current 0-3-year-olds by the time they are five

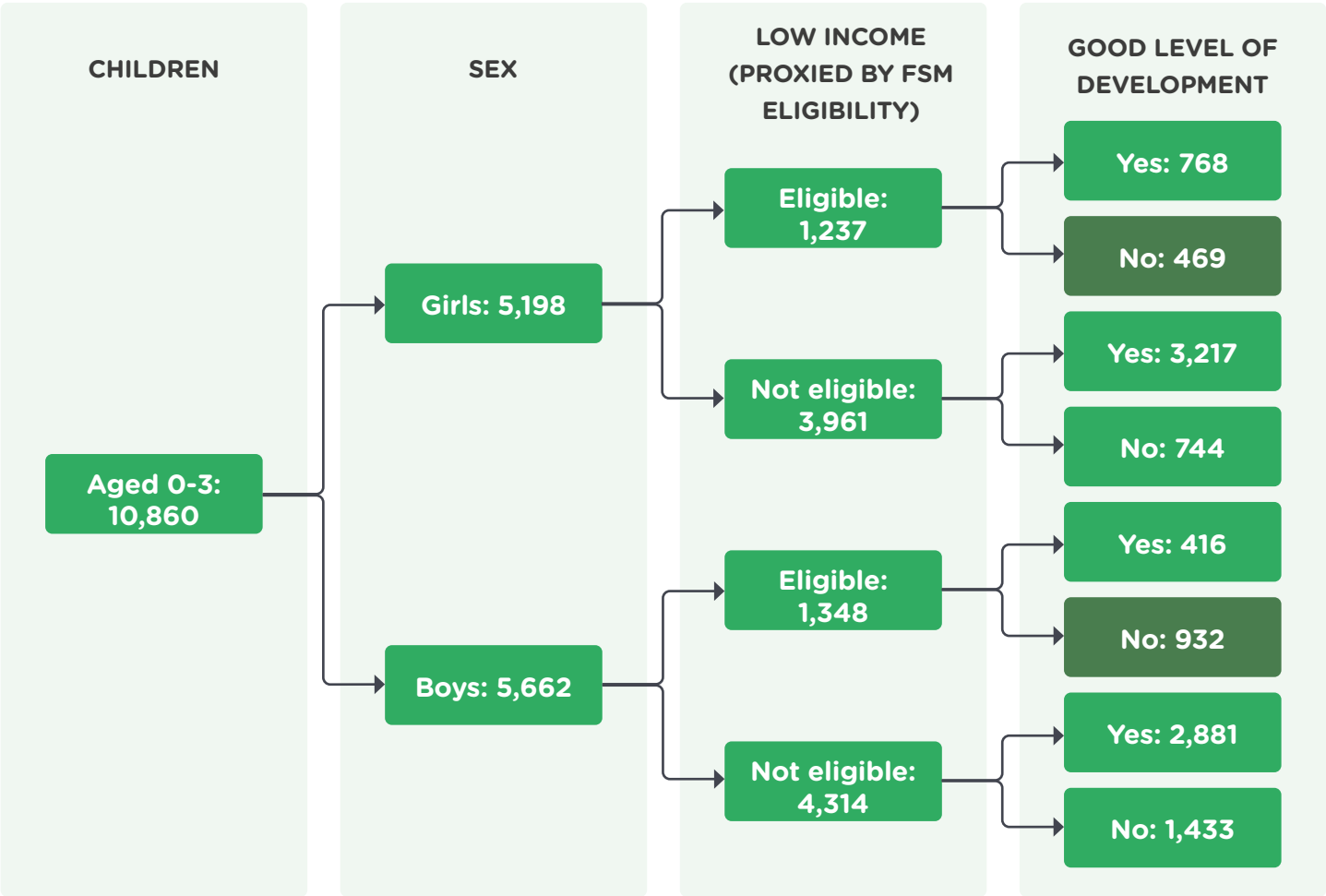


Figure 18 is a number tree, depicting the level of development (at age five) that can be expected for the current cohort of children aged three and under in Northumberland. This is assuming the associations observed in 2024/25 between sex, FSM eligibility and child development remain stable over the next five years.

ONS mid-year estimates suggest that there were 10,860 children aged three or under in Northumberland in 2024. [17] There were marginally more boys than girls (5,662 vs 5,198). 23.8% of school children in Northumberland were eligible for FSMs in 2024/25. [18] Assuming the household income distribution is the same for school age children as it is for children aged three and under, this suggests that up 2,600 of Northumberland’s children under three are living in low-income households (around 1,250 girls and 1,350 boys). If the association between FSM eligibility and not meeting development expectations remains as it currently is, we may expect around 1,400 of the children in low-income households not to achieve a Good Level Of Development by the time they are five (around 470 girls and 930 boys). These are the children who stand to benefit most from the recommendations in this report.

It should be acknowledged there are also children who are not eligible for FSMs and will not meet their development expectations. In absolute terms, we expect this group to be larger (just under 2,200), but as a proportion of all children who are not eligible for FSMs it is much smaller. However, this report broadly focuses on what may reduce the income related inequalities in childhood development, rather than what may improve child development overall. One important factor is that poverty does not stop with eligibility for FSMs. With the rising cost of living, many children still experience the effects of low-income even in households living just above the threshold for FSMs.

Table 1. Four Scenarios

Scenario	Description
Status quo	Status quo expectation
	Status quo expectation (by sex)
1	10% reduction in FSM eligible children not achieving a Good Level Of Development at age five
	10% reduction in FSM eligible children not achieving a Good Level Of Development at age five (by sex)
2	Increase in the percentage of FSM eligible children achieving a Good Level Of Development at age five to that of FSM ineligible children.
	Increase in the percentage of FSM eligible children achieving a Good Level Of Development at age five to that of FSM ineligible children. (by sex)
3	Increase in the percentage of boys in Northumberland achieving a Good Level Of Development at age five to the national average for boys
4	Increase the percentage of children achieving a Good Level Of Development to 78.2%, including an increase among children eligible for FSMs to 57.1%

Table 2 presents the total numbers of children in Northumberland, from 2024/25's cohort of children three and under, that need to achieve a Good Level Of Development in order to meet the targets set out in each scenario.

Table 2. Scenario planning table

Scenario	Sex	Total cohort		Children aged 0-3					
		FSM		Eligible				Not eligible	
		Learning goals		GLD		Not GLD		GLD	
				Boys	Girls	Boys	Girls	Boys	Girls
Status quo	Status quo expectation			1184		1401		6098	
	Status quo expectation (by sex)			416	768	932	469	2881	3217
1	10% transition among those eligible for FSM			1324		1261		6098	
	10% transition among those eligible for FSM (by sex)			509	815	838	422	2881	3217
2	Parity between FSM eligibility status			1905		680		6098	
	Parity between FSM eligibility status (by sex)			993	912	355	325	2881	3217
3	Boys to national average across the board (boys)			587	768	761	469	2847	3217
4	78.2% overall, including 57.1% of FSM eligible children			1476		1109		7017	

Table 3 presents the marginal number of children needed to meet each target. In other words, the number of children above the number we currently expect if the 2024/25 association between FSM eligibility and poor development at age five remains constant. This is the number of children aged three and under whose development needs to improve if Northumberland is to reach national targets and reduce its income related inequalities in early child development.

Table 3. the number of additional children needed to reach a GLD at age 5 to reach the scenario target

Scenario	Sex	Total cohort		Children aged 0-3			
		FSM		Eligible		Not eligible	
		Learning goals		GLD		GLD	
				Boys	Girls	Boys	Girls
1	10% transition among those eligible for FSM			140		0	
	10% transition among those eligible for FSM (by sex)			93	47	0	0
2	Parity between FSM eligibility status			721		0	
	Parity between FSM eligibility status (by sex)			577	144	0	0
3	Boys to national average across the board (boys)			171	0	34	0
4	78.2% overall, including 57.1% of FSM eligible children			292		918	

Scenario 1: 10% reduction in FSM eligible children not achieving a Good Level Of Development at age five

A 10% reduction in the number of FSM eligible children not achieving a Good Level Of Development means successfully raising just 140 children living in low-income families from not good development (sometimes referred to as 'emerging') to good levels of development. To do this equally across the sexes, it would mean an additional 93 boys and 47 girls reach a GLD.

Scenario 2: Increase in the percentage of FSM eligible children achieving a Good Level Of Development at age five to that of FSM ineligible children (parity across FSM eligibility).

To achieve parity across FSM eligibility at age five for the current generation of children aged three and under, 720 children who would otherwise not have achieved a Good Level Of Development need to achieve it. This means changing the development pathway of around half of those children in very low-income households who would otherwise not have achieved a Good Level Of Development. To achieve parity within each sex, this would mean that approximately 580 boys and 140 girls would need to improve their development.

Scenario 3: Increase in the percentage of boys in Northumberland achieving a Good Level Of Development at age five to the national average for boys.

At the national level (England), in 2024/25 43.5% of boys in very low-income households achieved a Good Level Of Development at age five, compared to just under 31% in Northumberland. For boys who were not eligible for FSMs, these percentages were 62% and 61%. Note that it is not boys in general who are achieving lower than expected levels of development in Northumberland, just boys in very low-income households.

To increase the percentage of boys in very low-income households achieving a Good Level Of Development from 31% to 43.5% would require just 170 boys in low-income households to making the transition from not good to good levels of development.

Scenario 4: Meet the government target of 78.2% of children achieving a Good Level Of Development by age five by 2028, including 57.1% of FSM eligible children.

Meeting and sustaining this target by 2028 will first require working with the current cohort of zero to three-year-olds.

To raise the proportion of FSM eligible children achieving a Good Level Of Development from our expected proportion of 45.8% to the target 57.1% would require an extra 292 children to meet the criteria. To also raise the total proportion of children achieving a Good Level Of Development from our expected 67% to the target 78.2% would require a further 918 children to meet the criteria, whether they are eligible for FSMs or not. In total, meeting and sustaining this government target will require an extra 1,210 of the current cohort of zero to three-year-olds to achieve good learning development by age five, on top of the 7,282 we already expect to meet the target.

Note that our expected overall proportion of this cohort of children that will achieve a Good Level Of Development is lower than the Department for Education's current overall estimate for Northumberland. This is because the ONS mid-year population estimates for Northumberland show a skew towards boys among the current cohort of zero to three-year-olds. This is not the case for the current cohort of five to eight-year-olds (who the DfE estimates are based on). As boys are less likely to achieve a good level of learning by age 5, the overall proportion may go down in coming years unless something else changes.

IMPROVING THE HOME LEARNING ENVIRONMENT

- Active schemes to increase use of public libraries by children who are eligible for FSMs (not currently measured)
- Public libraries per capita (as far as we are aware, not routinely measured)
- Smoking status at time of delivery (percentage of mothers known to smoke)
- Percentage of babies whose first feed is breast milk
- Deliveries to young women and girls aged 12 to 17 (count may be more useful than proportion)
- Domestic abuse related incidents and crimes
- Proportion of new birth visits completed within 14 days
- Proportion of infants receiving a 6-8-week review
- Proportion of children receiving a 12-month review
- Proportion of households in fuel poverty

REDUCE CHILD POVERTY AND MITIGATE AGAINST ITS EFFECTS

- Number of 0-4-year-olds in absolute low income
- Number of 0-4-year-olds in relative low income
- Percentage of primary school pupils eligible for and claiming FSM
- Proportion of LSOAs in the most deprived three deciles of the Children and Young People Sub-domain IMD Decile
- Proportion of LSOAs in the most deprived three deciles of the Income Deprivation Affecting Children Index (IDACI) Decile
- Percentage of households that are workless (currently unclear when/whether this will be updated)
- Proportion of the population who are economically active
- Proportion of the population who are economically inactive, by reason
- Employment rate of the local population

INCREASE UPTAKE OF EARLY YEARS EDUCATION AND CHILDCARE/HEALTH VISITING TO HOUSEHOLDS WITH LOWER TO MIDDLE INCOMES

- Proportion of eligible children registered for funded early education and childcare
- Number of eligible children for funded early education and childcare
- Number of registered children for funded early education and childcare (each of the above can be broken down by age group and eligibility type)

Overall progress on reducing inequalities in early childhood development

- Percentage of 5-year-olds at 'expected level' across all communication and language early learning goals
- Percentage of 5-year-olds at 'expected level' across all literacy early learning goals
- Percentage of 5-year-olds at 'expected level' across all maths early learning goals
- Percentage of children aged 4 to 5 classified as at a healthy weight
- Percentage of boys achieving a Good Level Of Development
- Percentage of girls achieving a Good Level Of Development
- Percentage of boys eligible for free school meals achieving a good level
- Percentage of girls eligible for free school meals achieving a good level
- Percentage of black and minority ethnic children achieving a good level
- Percentage of children achieving a Good Level Of Development aged 2 and 2 and half years

ANNEXES

ANNEX 1. STAKEHOLDERS AND CONSULTATION PARTNERS: STEERING & FOCUS GROUPS:

STEERING GROUP

Samantha Anderson

Harrogate and District NHS Foundation Trust

Helen Bowyer

NHS Northumberland CCG

Patrick Boyle

Northumberland County Council - Head of Social Care, Safeguarding

Tim Bryce

Northumberland County Council - Public Health Project Manager

Abi Conway

Citizens Advice - CEO

Jessica Conway

Northumberland County Council - Head of SEND

Angela Donkin

UCL Institute of Health Equity - Senior Advisor

Julie Dowson

Northumberland County Council - Senior Economic Analyst

Nicola Duffy

Thriving Together

Clare Elliott

Northumberland County Council - Senior Public Health Manager

Pamela Forster

Northumberland County Council - Senior Public Health Programme Manager - Health Intelligence

Hannah Gregory

Thriving Together

Alistair Hill

Northumberland County Council - Senior Analyst

Ashley Icton

Harrogate and District NHS Foundation Trust - Head of Public Health Nursing

Dionne Illingworth

Northumberland County Council - Education and SEND Improvement and Development Manager

Audrey Kingham

Northumberland County Council - Executive Director of Children's, Young People & Education, Director of Children's Services

Helen Lancaster

Northumberland County Council - Senior Project and Development Manager - Children's Social Care

Karen Lounton

Northumberland County Council - Head of Community Services

Jackie McCormick

Northumberland County Council - Senior Manager - Early Intervention & Prevention

Victoria McLeod

Northumberland County Council - Director of Children, Young People & Families

Megan Mitchell

NHS NorthEast and Cumbria ICB - Mental Health Programme Lead

Gill O'Neill

Northumberland County Council - Executive Director of Public Health, Inequalities & Stronger Communities

Alison Peaden

Northumberland County Council - Library Service Manager

Tara Prescott

Northumberland County Council - Senior Manager - Specialist Services

Emma Richardson

Northumberland County Council - Senior Manager Specialist Services - Poverty Lead

Rachel Rispin

Harrogate and District NHS Foundation Trust - Service Manager

Marie Roberts

Northumberland County Council - Head of Service, Social Care and Early Help

David Sanderson

Northumberland County Council - Senior Analyst

Louise Shirley

Harrogate and District NHS Foundation Trust - Service Manager

Brian Smeaton

Northumberland County Council - Senior Children's & Corporate Performance Manager

Tammy Smith

Northumberland County Council - Public Health Principal

David Street

Northumberland County Council - Director of Education, SEND & Skills

Kay Summers

Northumberland County Council - Early Years Adviser

FOCUS GROUPS:

Alison Alden
NCEA Castle School

Carla Anderson
Northumbria Healthcare NHS Foundation Trust -
Public Health Matron

Samantha Anderson
Harrogate and District NHS Foundation Trust -
Service Manager

Nicola Barren
NHS

Helen Bowyer
NHS Northumberland CCG - Head of Commissioning

Patrick Boyle
Northumberland County Council - Head of Social Care,
Safeguarding

Paul Brooks
Northumberland County Council - Head of Northumberland
Communities Together

Katinka Bryan
Northumberland County Council - NIES Manager -
Psychological Services

Tim Bryce
Northumberland County Council - Public Health Project
Manager

Franki Clark
Places for Leisure

Beth Clarke
Northumberland County Council - Family Help Locality Manager

Abi Conway
Citizens Advice - CEO

Jessica Conway
Northumberland County Council - Head of SEND

Sam Davis
Cabinet Office

Ciara Dawson
Women's Workshop

Rosy Dickinson
Northumberland County Council - Early Years Consultant

Angela Donkin
Institute of Health Equity

Julie Dowson
Northumberland County Council - Senior Economic Analyst

Nicola Duffy
Thriving Together

Clare Elliott
Northumberland County Council -Senior Public Health Manager

Emma Farrar
Northumberland County Council - Public Health Manager

Bethany Farrier
NHS

Pamela Forster
Northumberland County Council - Senior Public Health
Programme Manager - Health Intelligence

Hannah Gregory
Thriving Together

Lesley Grieve
Northumberland County Council - Family Help Locality Manager

Sharon Hanson-Cooper
Women's Workshop

Alistair Hill
Northumberland County Council - Senior Analyst

Jessica Hunt
Department for Education

Ashley Iceton
Harrogate and District NHS Foundation Trust -
Head of Public Health Nursing

Dionne Illingworth
Northumberland County Council - Education and SEND
Improvement and Development Manager

Claire Johnson
Northumberland County Council - Early Years Consultant

Audrey Kingham
Northumberland County Council - Executive Director of
Children's, Young People & Education, Director of
Children's Services.

Helen Lancaster
Northumberland County Council - Senior Project and
Development Manager - Children's Social Care

Kathryn Lissaman
Northumbria Healthcare NHS Foundation Trust -
Head of Midwifery

Karen Lounton
Northumberland County Council - Head of Community
Services

Julia Lyford
Women's Workshop

Karen McCabe

Northumberland County Council – Senior Public Health Manager

Jackie McCormick

Northumberland County Council – Senior Manager – Early Intervention & Prevention

Dr Angela McHenry

Netherfield House Surgery - GP

Victoria McLeod

Northumberland County Council – Director of Children, Young People & Families

Jane Miles

NHS

Megan Mitchell

NHS North East and Cumbria ICB – OOP

Becci Murray

Berwick Trust

Gill O'Neill

Northumberland County Council – Executive Director of Public Health, Inequalities & Stronger Communities

Alison Peaden

Northumberland County Council – Library Service Manager

Tara Prescott

Northumberland County Council – Senior Manager – Specialist Services

Amy Richardson

Northumberland County Council – Activity Programme Manager

Emma Richardson

Northumberland County Council - Senior Manager Specialist Services - Poverty Lead

Jan Rigby

Cumbria, Northumberland, Tyne and Wear NHS Foundation Trust

Rachel Rispin

Harrogate and District NHS Foundation Trust - Service Manager

Marie Roberts

Northumberland County Council - Head of Social Care - Early Help

David Sanderson

Northumberland County Council – Senior Analyst

Louise Shirley

Harrogate and District NHS Foundation Trust - Service Manager

Brian Smeaton

Northumberland County Council – Senior Children's & Corporate Performance Manager

Tammy Smith

Northumberland County Council – Public Health Principal

David Street

Northumberland County Council – Director of Education, SEND & Skills

Kay Summers

Northumberland County Council – Early Years Adviser

Dr Graham Syers

Chair of Health & Wellbeing Board

Gill Turner

Northumberland County Council – Educational Psychologist

Jane Walker

integrated Care Boards - Head of MHLDN Northumberland and North Tyneside Local Delivery Team

OTHER:

Wendy Atkinson - Newsham Primary School - Senior Leader

Gemma Gowland - Northern Parent Carer Forum

Keda Norman - Hexham Youth Initiative

Fiona Wardlaw - Escape Family Support.

Lara Young - Amble Youth

Gill Smith - Northern Learning Trust.

GROUPS AND FORUMS

Inequalities Cross Party Working Group

VCSE Inequalities Task Force

Northumberland GP Collaborative

Northumberland Health and Wellbeing Board

Northumberland County Partnership

Healthy Families Partnership Board

ANNEX 2. EFFECT SIZES ASSOCIATED WITH IMPROVING THE HOME LEARNING ENVIRONMENT AND ATTENDING CHILDCARE

BEST SOURCES OF INFORMATION ON THE FACTORS ASSOCIATED WITH GOOD CHILD DEVELOPMENT AT AGE FIVE IN ENGLAND

There are two recent, high-quality sources of information on factors associated with early childhood development in England.

Violato and colleagues use the Millennium Cohort Study (MCS) to look at associations between a wide range of household, parenting style and demographic factors with behaviour, expressive language and non-verbal, cognitive problem solving. [19] The MCS is a nationally representative longitudinal study following a group of around 19,000 children born between 2000 and 2002.

Melhuish and Gardiner use the Study of Early Education and Development (SEED) to look at associations between a wide range of household, parenting style, demographic factors and use for formal and informal care and education with early levels of cognitive development and self-regulation. [20] This is based on a group of 3,930 children and their families, purposefully sampled to be spread across household income bands.

Key, high level findings:

Violato and colleagues find that:

- There is a statistically significant association between household income and early childhood development.
- Much of household income's effect on early childhood development is mediated through a combination of parental stress and parental investment. In other words, higher household income helps parents maintain decent mental health and enables them to invest in decent home learning environments.
- When modelled alongside household income and parental stress, parental investment (the home learning environment) showed the largest and most significant associations with child development.
- From a policy perspective, where it is not possible to increase household incomes, it may be possible (and/or preferable) to encourage early childhood development more directly through interventions that facilitate improved home learning environments. Interventions that increase the frequency with which children are read to or taken to the library may be particularly effective.

Melhuish and Gardiner find that:

- Early childhood education and care are positively associated with early childhood development.
- Contrary to previous observations, this association can be seen across all levels of household income. The authors hypothesise that education and care services may have improved in recent decades such that they are now of benefit to all children, rather than mainly low-income children as has been seen in previous studies.
- The largest and most significant associations, however, are between factors associated with the home learning environment and types of common parent/child interactions with childhood development. This corroborates the findings of Violato and colleagues.

AN 'EVIDENCE-TO-POLICY' CHALLENGE

The evidence presented by Violato and colleagues and Melhuish and Gardiner is not perfectly aligned with the objectives of this work or the framing of the government's Early Years Foundation Stage Profile Results. They quantify changes in standardised outputs that are associated with changes in standardised interventions. For example, 'a two standard deviation improvement in the home learning environment is associated with a 0.26 standard deviation change in naming vocabulary.'

This gives us an idea about how much improvement we may see in a child if their home learning environment improves. However, it does not tell us how much more likely that child is to pass the 'Good Level Of Development' threshold. If a child is far from passing it, a 0.26 standard deviation improvement may not be enough to get them across the line. If they only just fell short, however, it may get them a long way past it. As such, in this scenario planning exercise it is not possible to predict a quantified change in the percent of children meeting expected levels of development.

Instead, we present the relative size of associations between different inputs and childhood development. This indicates which areas of policy may be the most effective at bringing children above the threshold. Melhuish and Gardiner suggest, as a rule of thumb, that effects between 0.02 and 0.05 standard deviations should be considered small and effects between 0.05 and 0.1 should be considered of medium. By implication, effects above 0.1 may be considered large.

We also quantify the number of children that need to be brought up to expected levels to reach certain targets under four different scenarios.

INTERVENTIONS TO INCREASE EARLY CHILDHOOD DEVELOPMENT

The following tables present the most policy relevant and statistically significant associations found by Violato [17] and colleagues and Melhuish and Gardiner. [18]

Table 4. Key results from Violato and colleagues

	Behaviour - TDS	BAS naming vocabulary	BAS picture similarity
Double household income from £10k (controlling for a wide range of demographic factors, but not parental stress or investment)	-0.19	0.08	0.10
Maternal child-health production behaviours	-0.28	0.03	0.07
Mother never reading to child compared to reading every day	0.489	-0.266	~
Mother reading to child several times a week compared to reading every day	~	-0.082	~
Father reading to child every day compared to several days a week	~	0.124	0.127
Child taken to the library several times a week compared to never	-0.103	~	0.085
Child taken to the library occasionally compared to never	-0.06	0.122	0.077
Mother breastfed 3-6 months compared to never	~	0.079	0.14

The numbers presented in Table 4 are the standard deviation changes in the column heading associated with the change in row heading. For example, a parent never reading to a child, compared to reading every day, is associated with a 0.489 standard deviation increase in bad behaviour and a 0.266 standard deviation deterioration in expressive language. Assuming a causative relationship, and taking Melhuish and Gardiner's rule of thumb, these are very large impacts.

The income related line (the top line) may be interpreted today as a very low-income household (earning around £20,000 per annum), rather than as a £10,000 per annum household. The data collected for this analysis was around 2006, since when inflation has roughly halved the value of the pound. To give context, the personal tax allowance in 2006 was £4,985, compared to £12,570 today.

Overall, doubling the income of a very low-income household, maternal-child health production behaviours, reading to a child every day and regularly taking them to the library are all associated with large improvements in behaviour. Regularly taking a child to the library is also associated with large improvements in expressive language and medium improvements in non-verbal cognitive problem solving. Fathers reading to the child every day rather than just several days a week is associated with large improvements in both language and non-verbal development. While the doubling of household income and the health production behaviours appear important for reducing bad behaviour, their associations with language and non-verbal development are small to medium.

This table focuses specifically on two parent households. The authors also present equivalent information for single parent household. The overall picture is similar.

Table 5. Key early childhood education and care results from Melhuish and Gardiner

	Type of early childhood education and care		
	Formal	Informal	
	Group	Childminder	Friends and relatives
Cognitive development			
Naming vocab			0.048
Picture similarities	0.044		
HTKS tasks			
Socio-emotional problems			
SDQ total difficulties			0.039
Hyperactivity			
Emotional symptoms			
Conduct problems	0.044		
Peer problems	-0.087		
Socio-emotional strengths			
Prosocial behaviour	0.041		
Behavioural self-regulation	0.056		
Emotional self-regulation			
Co-operation			

The numbers presented in Table 5 are the standard deviation changes in the row heading associated with 10 extra hours of childcare (as per column heading) a week. For example, 10 extra hours a week of formal group childcare is associated with a 0.044 standard deviation improvement in non-verbal development. 15 extra hours of childcare may be associated with something closer to 0.06-0.07 standard deviation improvements across behaviour, social skills and cognitive development. Using the given rule of thumb, 10-15 hour increases in different forms of childcare have a general but small to medium associations with child development by age five.

Table 6. Key results on the home learning environment from Melhuish and Gardiner

	Home environment labels					
	Home learning environment	Household chaos	Parent's psychological distress	Limit setting	MORS invasiveness	MORS warmth
Cognitive development						
Naming vocab	0.26			0.228	-0.132	0.158
Picture similarities	0.161			0.123	-0.084	0.07
HTKS tasks	0.178		-0.073	0.121	-0.104	0.082
Socio-emotional problems						
SDQ total difficulties		0.247	0.242		0.609	-0.266
Hyperactivity		0.234	0.147	0.128	0.431	-0.187
Emotional symptoms		0.12	0.303	-0.081	0.402	-0.098
Conduct problems		0.249	0.129	0.203	0.596	-0.161
Peer problems		0.074	0.148	-0.196	0.324	-0.356
Socio-emotional strengths						
Prosocial behaviour	0.139	-0.174			-0.238	0.513
Behavioural self-regulation	0.179	-0.094		0.124	-0.299	0.285
Emotional self-regulation	-0.075	-0.251	-0.136	-0.089	-0.607	0.136
Co-operation		-0.185		-0.098	-0.415	0.414

Associations between early child development and the home environment, however, were found to be more widespread and larger than those with formal and informal childcare. The numbers presented in Table 6 are the standard deviation changes in the row heading associated with a two-standard deviation change in the column heading. For example, a two-standard deviation improvement in the home learning environment is associated with a 0.26 standard deviation improvement in expressive language. Overall, there were large and widespread associations between child development and the home learning environment, limit setting (extent to which parents set limits for their children) and warm (versus invasive) parenting styles.

To summarise, across both studies we have strong evidence that improvements in the home learning environment are associated with large improvements in child development by age five. Extra time in education and care and increased household income also help, but the associations with child development at age five are smaller. However, specifically with respect to income, it should be recognised that an increase in income may be the mechanism through which a family is able to improve its home learning environment.

REFERENCES

1. UK Government (2026), Early years foundation stage profile results data. Available at: <https://explore-education-statistics.service.gov.uk/methodology/early-years-foundation-stage-profile-results>
2. Donkin, A and Jones, A. (2025) Reducing inequalities in health in Northumberland through work.
3. Donkin, A and Jones, A. (2025) Reducing inequalities in health in Northumberland through work.
4. The Marmot Review Team. (2010). Fair Society, Healthy Lives.
5. UK Government (2025), Early years foundation stage profile results. Available at: <https://explore-education-statistics.service.gov.uk/find-statistics/early-years-foundation-stage-profile-results/2024-25#releaseHeadlines-summary>
6. UK Government (no date), Apply for free school meals. Available at: <https://www.gov.uk/apply-free-school-meals>
7. Joseph Rowntree Foundation and Trussell Trust (2026), Guarantee our Essentials: reforming Universal Credit to ensure we can all afford the essentials in hard times. Available at: <https://www.jrf.org.uk/social-security/guarantee-our-essentials-reforming-universal-credit-to-ensure-we-can-all-afford-the>.
8. Stone, J and Padley, M. (2026), A Minimum Income Standard for the United Kingdom in 2025.
9. Robinson, E., Stone, J. and Padley, M. (2026) Households living below a Minimum Income Standard: 2008–2024
10. Donkin, A and Jones, A. (2025) Reducing inequalities in health in Northumberland through work.
11. Donkin, A. (2024) Reducing Inequalities in Health in Northumberland through Housing.
12. Northumberland County Council (2024), Childcare Sufficiency Assessment. Available at: <https://northumberlandeducation.co.uk/wp-content/uploads/2025/10/Northumberland-CSA-Full-Report-FINAL-VERSION.pdf>
13. Jindal-Snape, D., Bradshaw, P., Gilbert, A., et al (2023). Primary–secondary school transition experiences and factors associated with differences in these experiences: Analysis of the longitudinal Growing Up in Scotland dataset. *Review of Education*, 11, e3444. <https://bera-journals.onlinelibrary.wiley.com/doi/10.1002/rev3.3444>
14. Sahoo, K. et al (2015), Childhood obesity: causes and consequences. *J Family Med Prim Care*. Apr-Jun;4(2):187-92.
15. Lacobucci, G. (2024), Childhood obesity in England's most deprived areas is double that in affluent areas, *BMJ*. Available at: <https://www.bmj.com/content/387/bmj.q2457.long>
16. World Health Organisation (no date), Low Birth Weight. Available at: <https://www.who.int/data/nutrition/nlis/info/low-birth-weight#:~:text=Select%20language-,Global,growth%20restriction%2C%20prematurity%20or%20both.>
17. ONS. (2025) Population projections for local authorities by single year of age and sex, England. <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationprojections/datasets/localauthoritiesinenglandz1>
18. North East Child Poverty Commission and Schools North East (2025) Free school meals and auto-enrolment in the North East. https://nechildpoverty.org.uk/content/images/uploads/NECPC_Schools_North_East_briefing_FSMs_and_auto_enrolment_in_the_North_East.pdf
19. Violato, M. et al. (2011), Family income and child cognitive and behavioural development in the United Kingdom: does money matter?, *Health Economics*, 20(10), pp. 1201–1225. Available at: <https://doi.org/10.1002/hec.1665>.
20. Melhuish, E. and Gardiner, J. (2021) SEED: Impact study on early education use and child outcomes up to age four years. Available at: https://assets.publishing.service.gov.uk/media/61964e22e90e07043c35f311/SEED-Age_4_RESEARCH_REPORT.pdf