NEWCASTLE 0-19 NEEDS ASSESSMENT

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NEWCASTLE CITY COUNCIL

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Contents

Executive Summary

TO BE COMPLETED

Introduction

The foundations for virtually all aspects of human development – physical, intellectual, emotional and social – are established in early childhood. It is therefore important that every child has the opportunity to have the best start in life. Building resilience and reaping the maximum benefits from education are important markers for good health and wellbeing throughout life *(Source: Marmot Review, CMO Report 2012)*.

The Healthy Child Programme (HCP) is an evidence-based, universal, clinical and public health programme for children and families from pregnancy to 19 years of age. It offers a programme of screening tests, immunisations, developmental reviews, information and guidance on parenting and healthy choices. Due to its universal reach the HCP aims to identify difficulties at an early stage and support those who may be at risk of poor health outcomes.

The objectives of the HCP are to:

- Identify and treat problems early;
- Help parents to care well for their children;
- Change behaviours which contribute to ill health; and to
- Protect against preventable diseases.

The HCP is delivered by public health nurses – health visitors and school nurses who lead on the HCP working in partnership with other health professionals, Sure Start Children Centres, schools and a range of voluntary agencies. Health visitors and school nurses have an additional specialist public health qualification and are supported by skill mix teams, consisting of staff nurses, nursery nurses and administrative support staff *(Source: Department of Health, 2009)*.

Aims

The aim of this needs assessment is to provide an overview of the needs of children and young people in Newcastle, as part of our review and competitive tendering process of our 0-19 services. The results of the needs assessment will influence future service configuration and development.

Objectives

The objectives of this needs assessment may be listed as follows:

- To summarise national guidance relating to the Healthy Child Programme;
- To provide an overview of the socio-demographics and health of children and young people in Newcastle;
- To provide information on service performance and service delivery, and identify any gaps between the health needs of children and young people and service provision; and
- To provide recommendations to address any gaps in service and current unmet needs.

Background

In 2013 as part of their responsibilities for the delivery of public health programmes, local authorities took on the responsibility for the commissioning of the school nursing service. School nurses are responsible for the delivery of the Healthy Child Programme (HCP) for 5-19 year olds.

From 1st October 2015, local authorities also took on the responsibility for the commissioning of the HCP for 0-5 year olds. This includes the health visiting service incorporating universal to targeted programmes, and the Family Nurse Partnership (FNP) which is a targeted programme for first-time teenage parents. In 2015/16, the public health grant that local authorities receive from the Department of Health was cut by £200 million nationally. In February 2016, the Department of Health confirmed that public health grant allocations will continue to face further reductions, reducing by an average of 3.9% every year in real terms until 2020. In publishing public health allocations for the next two years, government figures show that local authorities will receive £77m less in 2016/17, with a further cut of £83m in 2017/18. These cuts are additional to the £200m in year cut applied by government in 2015/16.

In light of these challenges, we are reviewing 0-19 services in the city in order to ensure the greatest benefit, both in terms of universal services and meeting the needs of specific groups and individuals through more targeted services.

The local policy context is outlined in Newcastle's 'Wellbeing for Life' strategy, shown in figure 1.

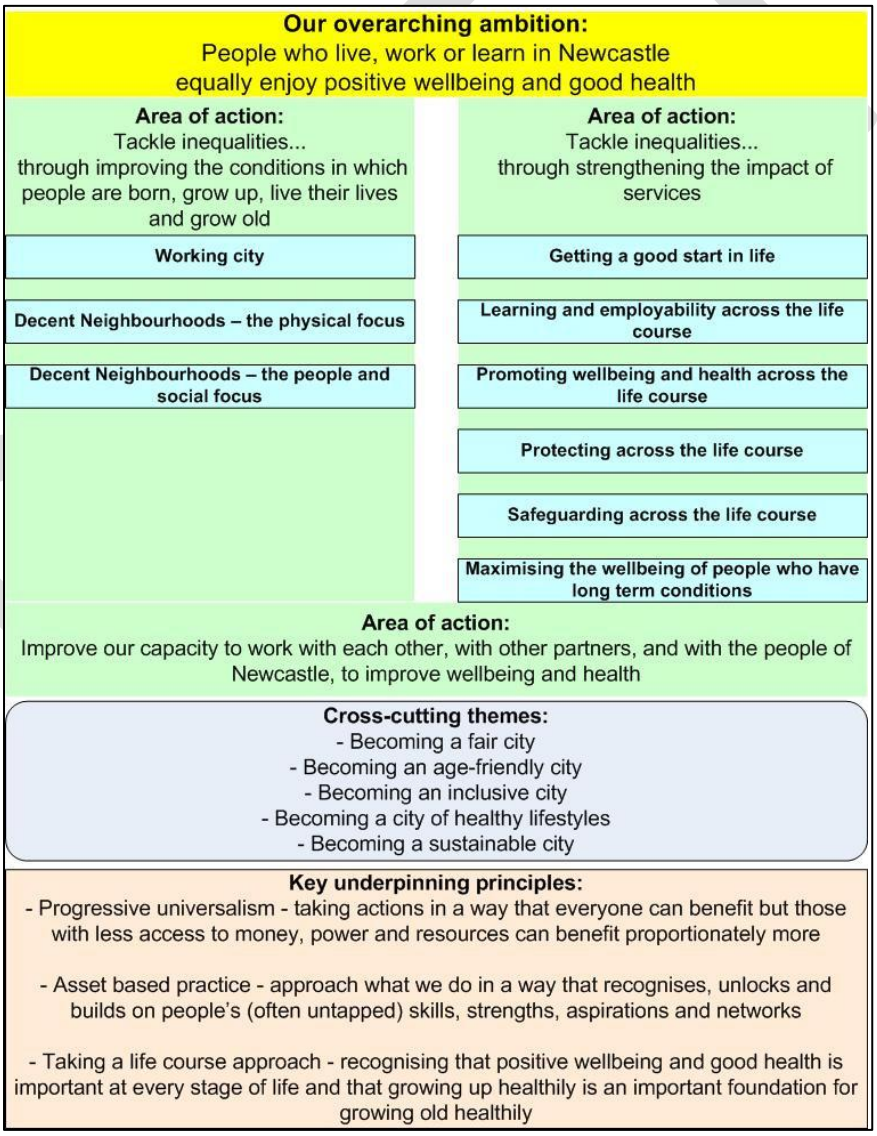

Figure 1: Newcastle's Wellbeing for Life Strategy. Source: Newcastle Wellbeing for Life Board.

The vision of the Newcastle 'Wellbeing for Life Strategy' is for anyone living, working or learning in Newcastle to be able to fulfil their potential by enjoying good health and wellbeing. Figure 1 sets out the overarching ambitions of the strategy and the key actions that underpin this ambition. The delivery of the healthy child programme within the 0-19 services will contribute to the Wellbeing for Life ambition of getting a good start to life and safeguarding across the life course. The 0-19 services are universal in that they are available to all families, children and young people living in Newcastle.

Overview of Current Services

0 – 5 services

Overview

The Department of Health has mandated local authorities to provide the following five universal elements of the HCP to ensure a national, standard format for universal coverage of these elements is delivered:

- Antenatal health promoting visits;
- New baby review;
- Six to eight week maternal mood assessment;
- One year assessment; and
- Two to two and a half year review.

Health visitors help to empower parents to make decisions that affect their families' health and wellbeing, and their role is central to improving the health outcomes of populations and reducing inequalities. In 2010, the government set out its expectations of what the families can expect from their local Health Visiting Service:

- *Community:* health visitors have a broad knowledge of community needs and resources available, e.g. Children's Centres and self-help groups, and work to develop these and make sure families know about them.
- *Universal:* health visiting teams lead delivery of the HCP. They ensure that every new mother and child have access to a health visitor, receive development checks and receive good information about healthy start issues such as parenting and immunisation.
- *Universal Plus:* families can access timely, expert advice from a health visitor when they need it on specific issues such as postnatal depression, weaning or sleepless children.
- *Universal Partnership Plus:* health visitors provide ongoing support, playing a key role in bringing together relevant local services to help families with continuing complex needs, for example where a child has a long-term condition.

Current service provision

Health visitors are geographically based across the city and this currently consists of four locality teams: East, North Inner West and Outer West. Health visitors work in small teams and are attached to a GP practice *(for a map of GP practices in Newcastle, see appendix)*. Their caseload of families is comprised of families registered with the GP practice. Each Sure Start Children's Centre has a named health visitor who sits on the Sure Start Partnership Board. The health visiting teams work closely with other professionals in the locality and work into the community family hubs for early help and family support *(for a map of community family hubs in Newcastle, see appendix)*.

The Family Nurse Partnership (FNP) is a voluntary home visiting programme for first-time young mums (and dads), aged 19 years or under. A specially trained family nurse visits the young mum regularly, from the early stages of pregnancy until the child is two. Young mums who choose to join the programme are allocated a specially-trained Family Nurse who visits regularly (every 1-2 weeks) from early in pregnancy until the child is two years old. In Newcastle, the FNP team consists of one nurse supervisor and four family nurses. Each nurse carries a caseload of a maximum of 25 clients. The service is based in the inner west of the city but accepts referrals from across the city.

5-19 Services

Overview

The Department of Health has developed a vision for school nursing which is similar to the vision for health visiting (*Source: Department of Health, 2014*). As shown in figure 2, the model for the national school nursing service is based on four levels of interaction with the community, families and individuals, with safeguarding as a theme through all levels. The four levels outline the continuum of support which children and young people can expect to receive through the school nursing services and multi-disciplinary working.

School nursing is a universal service, which also intensifies its delivery offer for children and young people with more complex and longer-term needs (Universal Plus). For children and young people with multiple needs, school nurse teams are instrumental in co-ordinating services (Universal Partnership Plus). The model aligns with the model for health visiting services to provide continuity of services from 0-19.

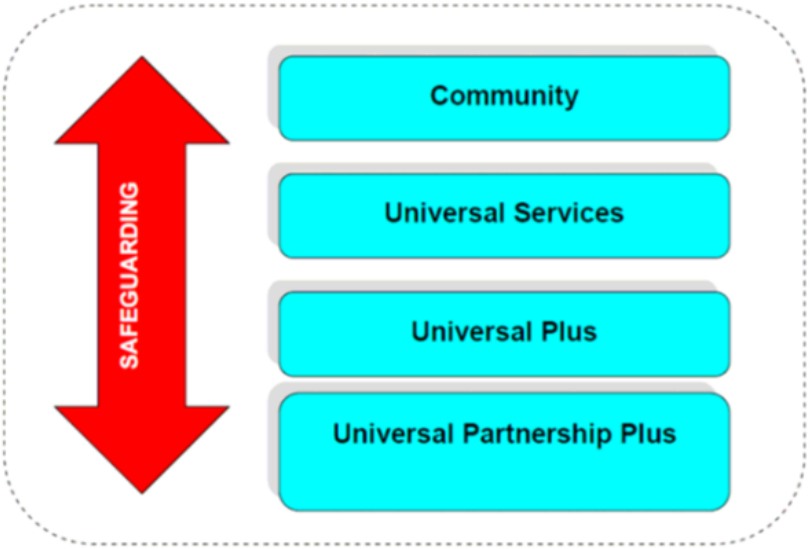

Figure 2: The school nursing service model. Source: Department of Health.

Community level

School nurses have an important public health leadership role in the school and wider community, for example by contributing to health needs assessment, designing services to reach young people wherever they are, providing services in community environments and working with young people and school staff to promote health and wellbeing within the school setting. Of particular importance is the school nurses' collaborative work to increase community participation in health promotion and protection, thus building local capacity to improve health outcomes.

Universal level

School nurses lead, coordinate and provide services to deliver the HCP for 5–19 year olds. They provide certain universal services for all children and young people as set out in the HCP, working with their own team and others including health visitors, general practitioners and schools.

Universal Plus level

School nurses are a key part of ensuring that children, young people and families get extra help and support when they need it. They offer 'early help', for example through care packages for children with additional health needs, for emotional and mental health problems and sexual health advice. At the Universal Plus level, school nurses provide care and/or refer or signpost people to other services. Early help can prevent problems developing or worsening.

Universal Partnership Plus level

School nurses are part of a multi-agency approach to providing ongoing additional services for vulnerable children, young people and families requiring longer term support for a range of special needs. These may include, for instance: disadvantaged children, young people and families; those with a disability; those with mental health or substance misuse problems; or those with risk-taking behaviours. School nursing services also form part of the high intensity multi-agency services for children, young people and families where there are child protection or safeguarding concerns.

Current service provision

The school nursing service in Newcastle works into the schools in each locality *(for a map of schools in Newcastle, see appendix)*. This consists of the secondary schools in the area and the primary schools that feed into it. The School nursing team is subdivided into four locality teams across the city: Inner West, Outer West, North and East *(for a map of these, see appendix)*. The school nurses are not commissioned to provide a full school nursing service to independent schools, but do offer the national immunisation programme. Immunisations in schools are commissioned under a separate contract with Public Health England.

Socio-Demographics

This section looks at the socio-demographics of children and young people in Newcastle. For a more accurate understanding of the service needs of a population, it is important to consider socio-demographics such as the current and projected size of the target population, as well as characteristics of that population that may warrant more targeted services. In this case, they include any kind of characteristic that put children and young people at a higher risk of ill health in future; the most important risk factors being indicators of deprivation such as poverty or a low education level. It is also important to consider characteristics that relate to specific needs, such as ethnicity or disabilities.

Age groups

Early years (0-4 years)

In 2014 in Newcastle, there were 3,283 live births and 17,400 children age 0-4 (*source: 2016 Child Health Profile for Newcastle upon Tyne, Public Health England*). Based on ONS projections, these numbers are expected to reduce to 16,200 by 2030 (a 4.6% reduction). However the Newcastle growth forecast – which reflects local policy intervention and migration patterns – suggests the population is more likely to increase over the period to 2030 (to 17,700). Figure 3 shows that the 0-4 population is not spread equally across the city (*source: Newcastle Future Needs Assessment*).

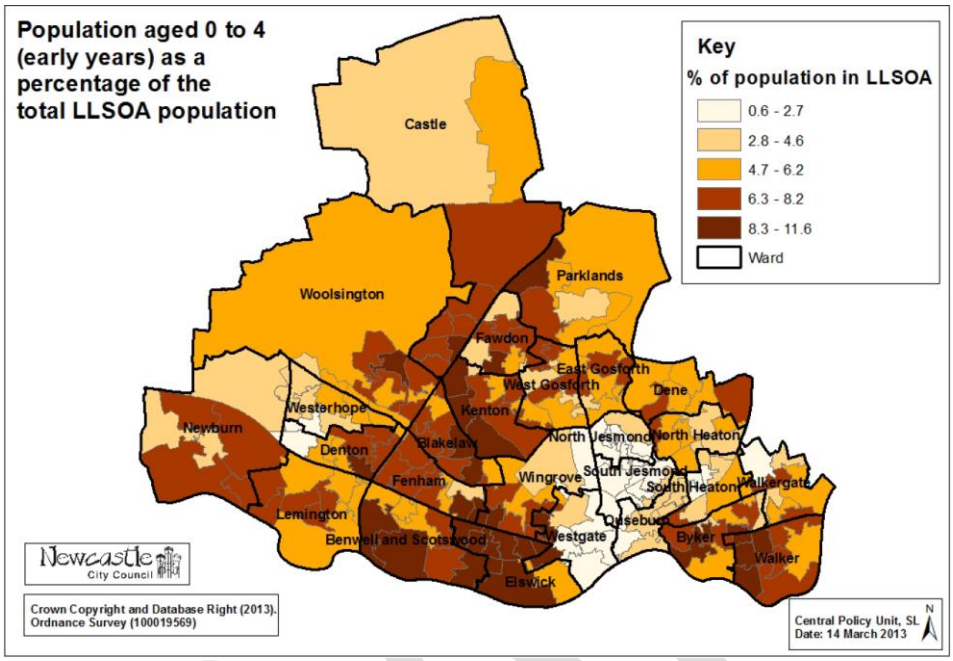

Figure 3: 0-4 year olds in Newcastle by Lower Level Super Output Area (LLSOA). Source: Newcastle Future Needs Assessment.

School years (5-14 years)

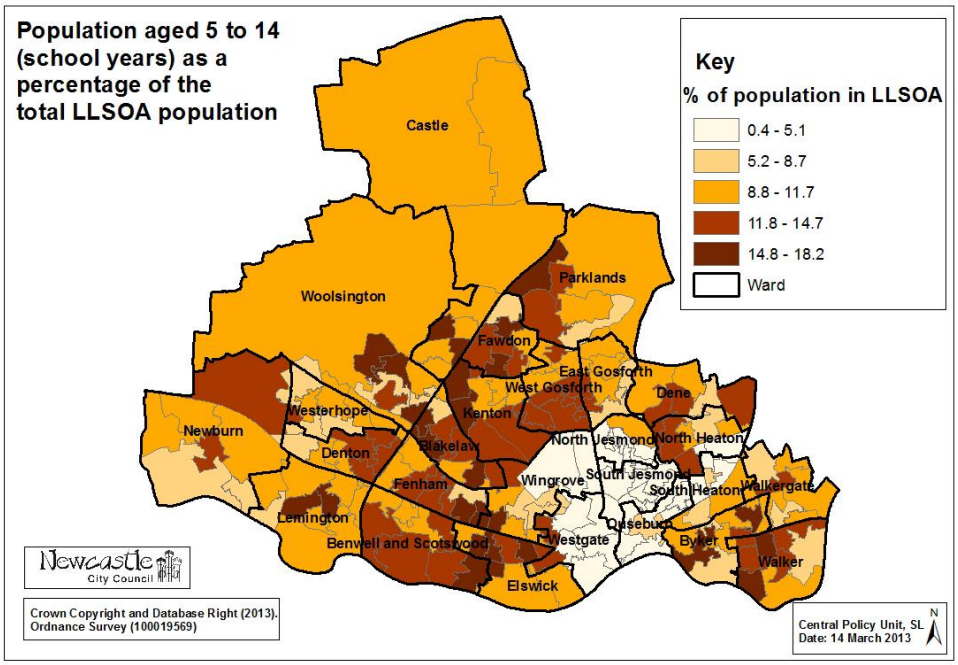

Figure 4: 5-14 year olds in Newcastle by LLSOA. Source: Newcastle Future Needs Assessment.

ONS data shows that in 2013, there were 28,800 children aged 5-14, and overall the number of children in this life stage is expected to increase by almost 11% by 2030. The Newcastle growth forecast shows a similar trend but a sharper increase over the same period (17.4%). The 10-14 year group are expected to grow more than the 5-9 year age group. Figure 4 shows that the age 5-14 population is not spread equally across the city (*source: Newcastle Future Needs Assessment*).

Transition years (15-24 years)

Based on ONS projections, there are currently around 59,100 people age 15-24 in Newcastle. If trends continue, this age group is expected to increase to 2030 with a continuing positive trend over the long term. The group aged 15-19 is forecast to increase by 8.1%. Figure 3 shows that the age 15-25 population is not spread equally across the city (*source: Newcastle Future Needs Assessment*).

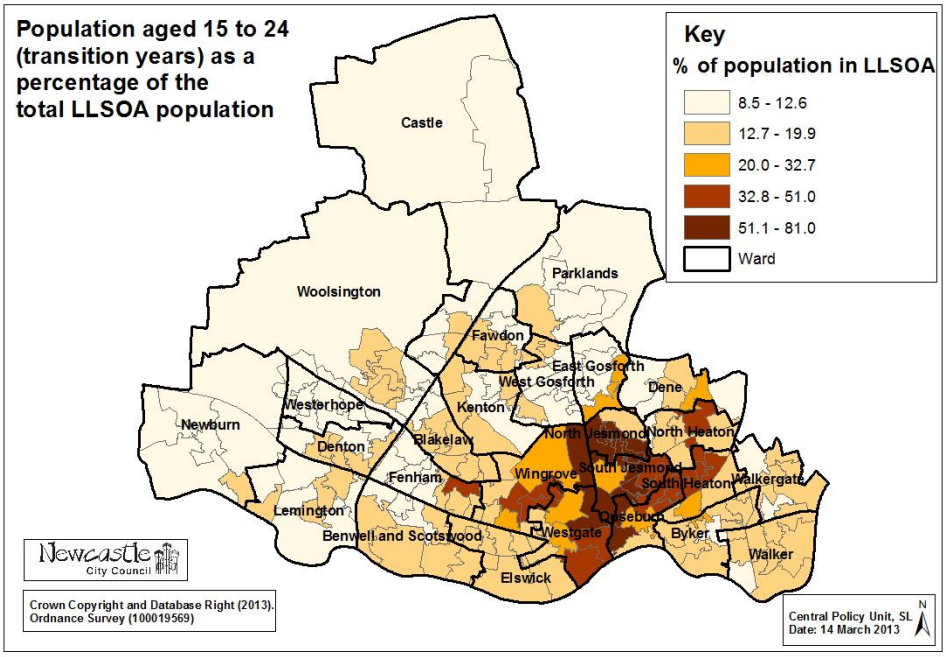

Figure 5: 15-24 year olds in Newcastle by LLSOA. Source: Newcastle Future Needs Assessment.

Ethnicity and first language

Ethnicity	Number	% of total 0-15 population
White	37,496	78.2%
Mixed/multiple ethnic group	1,590	3.3%
Asian/Asian British	6,203	12.9%
Black/African/Caribbean/Black British	1,404	2.9%
Other	1,281	2.7%
Total	47,974	-

Table 1: Ethnicity of children age 0-15 in Newcastle. Source: Newcastle Future Needs Assessment.

2015 data indicates that 27.1% of school children in Newcastle are of black or minority ethnicity (BME). This is lower than the England average (28.9%) but substantially higher than the North East average of 9.5% (*source: 2016 Child Health Profile for Newcastle upon Tyne, Public Health England*). It is also an increase on 2011, when 21.8% of children in Newcastle were BME. The 2011 Census

provides a more detailed breakdown of ethnic groups in Newcastle among children age 0-15 (shown in table 1).

Figure 6 shows a consistent pattern of an increasing proportion of children from BME backgrounds in the school population each year from 2007 to 2014. In 2007, BME children accounted for 16% of the school population. In 2014 this figure has risen to 26.5%. The pattern is similar for children with English as an additional language (EAL), although the rise over time is slower.

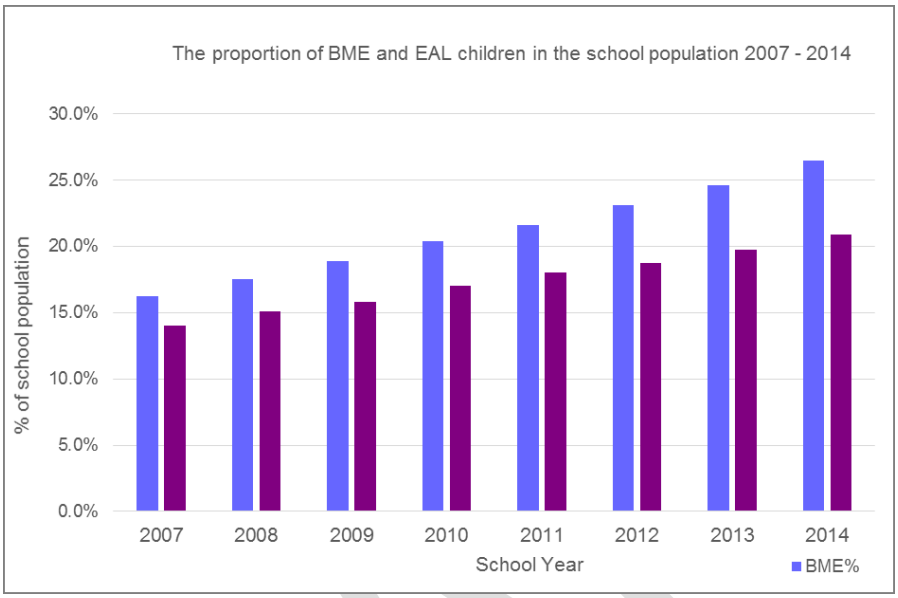

Figure 6: BME and EAL children in school population, 2007-2014. Source: Newcastle Future Needs Assessment.

Poverty

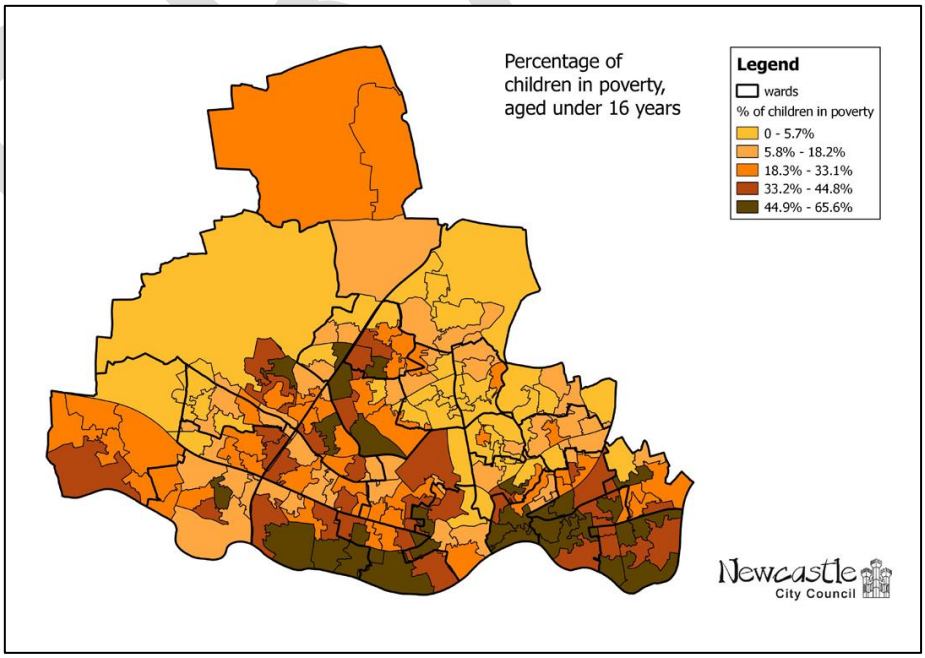

Figure 7: Children living in poverty by LLSOA. Source: Newcastle Future Needs Assessment.

There are a number of factors that influence the risk of a child living in poverty. Children in out-of-work households are at greater risk of poverty, however in terms of actual numbers there are now

more children classed as living in poverty who live in households where someone is working (in work poverty). Children of lone parents, disabled children, children in large families (4 or more children) and those from certain (but not all) BME backgrounds are also at greater risk of living in poverty. Highest levels of child poverty are seen in households with children aged 0 to 4.

2013 data indicates that 27.0% children age under 16 in Newcastle live in poverty, which is higher than the North East average (23.3%) and the England average (18.6% – *source: 2016 Child Health Profile for Newcastle upon Tyne, Public Health England*). Figure 7 shows that proportions of children living in poverty are not spread equally across the city (*source: Newcastle Future Needs Assessment*).

Education, training and employment

In 2014/15, 56.9% pupils in Newcastle achieved at least 5 GCSE's at grade A*-C including English and Maths. This is similar to the England average of 57.3%. However, in 2014, 6.7% of young people in Newcastle age 16-18 were not in education, employment or training which is a higher proportion than the England average of 4.7% (*source: 2016 Child Health Profile for Newcastle upon Tyne, Public Health England*).

Learning needs and disabilities

Special education needs

22% of children who live in Newcastle and attend a Newcastle state-funded school have special education needs (SEN), which corresponds to 5,924 children. Out of these, 578 (10%) have a SEN statement. Figure 8 shows that the proportion of children who have a SEN in Newcastle is not spread equally in the city, and tends to be higher in more deprived wards.

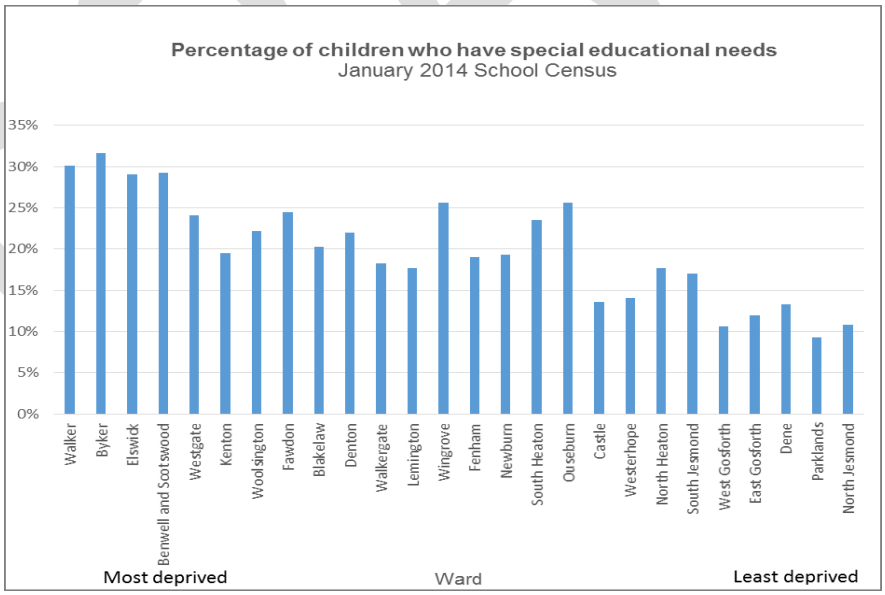

Figure 8: Children with SEN by ward. Source: Newcastle Future Needs Assessment.

Speech and language support

There is a rising trend in speech and language support among children age 0-5, though earlier identification through Sure Start may be a contributing factor for this increase. Table 2 shows the numbers of children age 0-5 with involvement from Newcastle's Early Education Additional Support Team (EEAST). Table 2 shows that this number has increased upon each academic year.

Academic Year	Nr children age 0-5 with involvement from EEAST	Nr children age 0-5 with high level needs	Nr children age 0-5 living in a deprived ward
2007- 08	126	75	45
2008 - 09	145	87	66
2009 - 10	168	107	54
2010 - 11	183	126	87
2011 - 12	227	149	92

Table 2: Children with speech and language support. Source: Newcastle's Early Education Additional Support Team (EEAST).

Disabilities

The Child and Maternal Health Observatory (ChiMat) provides estimates of the number of children in Newcastle with different types of disability. 2014 estimates indicate that, in Newcastle:

- 155 children age 5-9, 320 children age 10-14 and 555 children age 15-19 have a learning disability;
- 6,412 boys and 5,241 girls age 0-19 have a long-standing illness or disability; and
- 31 boys and 15 girls have a severe disability.

Children in need

A 'child in need' is defined under the Children Act 1989 as a child who is unlikely to reach or maintain a satisfactory level of health or development, or their health or development will be significantly impaired, without the provision of services, or the child is disabled. Newcastle's rate of children in need was 380 per 10,000 in March 2015. This is higher than the England average of 346 per 10,000.

A child protection plan should ensure that children who are likely to suffer significant harm are protected and that they and their families are receiving the services necessary to bring about the required changes in the family situation. At the end of March 2015, the number of children in Newcastle subject to a child protection plan was 429. This is a rate of 78 per 10,000, which is higher than the rate at the end of the previous two years. Newcastle's rate remains above the latest national rate of 42.1 per 10,000.

Children in care services

As at March 31st 2015, 505 children were in care services in Newcastle which corresponds to a rate of 90 per 10,000. This is higher than the England average of 60 per 10,000 (*source: 2016 Child Health Profile for Newcastle upon Tyne, Public Health England*). 114 children under age 5 in Newcastle were in care services, which corresponds to a rate of 66.2 per 10,000. This is also higher than the England average of 44.9 per 10,000 (*source: ChiMat*).

Newcastle has high levels of domestic abuse and high levels of Child Concern Notices from the Police. Currently, Newcastle has higher levels of high risk victims when compared to neighbouring authorities. Figure 9 provides a breakdown of the number of contacts with child social care services (CSC) in April 2009 – March 2012, with domestic violence (DV) as the presenting issue, by the age of the child. It shows that, by far, the majority of contacts are with young children (i.e. age 0-4).

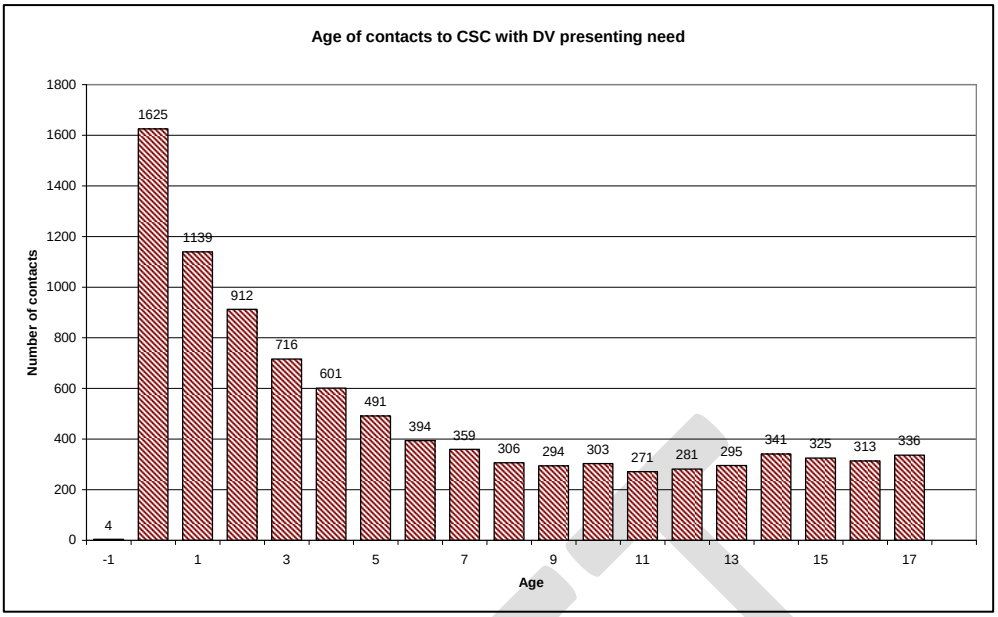

Figure 9: Contacts with child social care by age. Source: Newcastle City Council, CareFirst Social Care Case Management System.

Figure 10 shows the number of contacts with child social care services, in April 2009 – 31st March 2012, where the presenting issue was domestic violence. Data is broken down by ward. It shows that most contacts involved children living in the most deprived wards, particularly Byker, Walker, and Benwell and Scotswood.

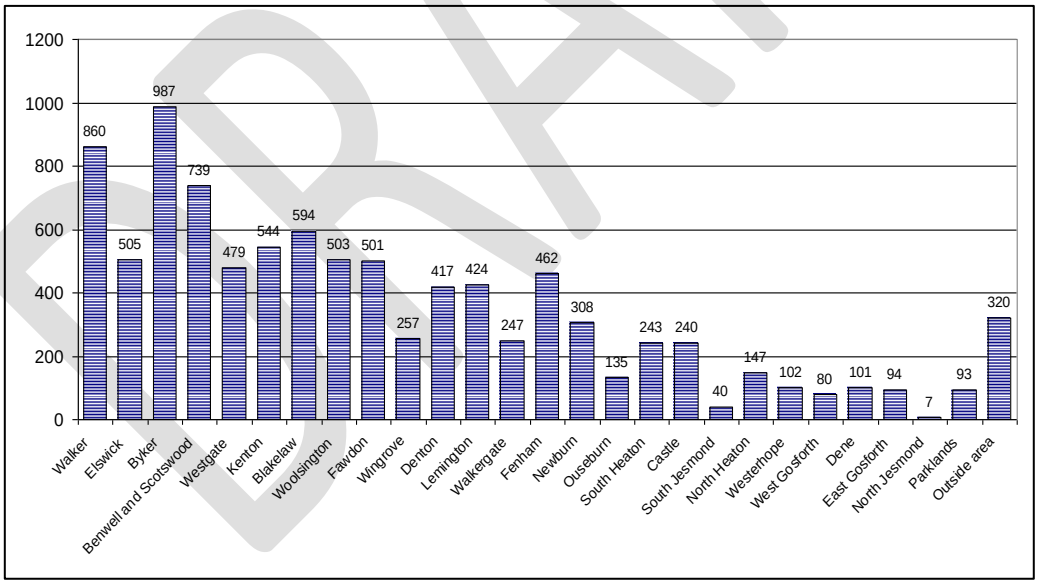

Figure 10: Contacts with child social care by ward. Source: Newcastle City Council, CareFirst Social Care Case Management System.

Children with caring responsibilities

In the 2011 Census, 2,355 children and young people aged 0-24 acknowledged that they provided unpaid care. 1,769 provided 1-19 hours, 299 provided 20-49 hours and 287 provided 50 or more hours each week. The 2011 Census also suggests that 4.8% of households (5,604 households) have dependent children living with someone who has a long-term health problem or disability (England 4.6%, North East 4.9%). This raises the possibility that additional children may also be affected by

having someone in the family with a long-term health problem or disability, but this will vary with family circumstances and the nature of any impact is unknown (*source: Newcastle Future Needs Assessment*).

Summary: socio-demographics

- In Newcastle, there are currently approx. 17,400 children age 0-4, 28,800 children age 5-14, and 59,100 young people age 15-24. These populations, especially age 10-14, are all expected to increase by 2030.
- Wards with the highest proportions of children age 0-14 are Benwell and Scotswood, Elswick (Inner West), Fawdon, Kenton, Blakelaw (North), and Byker, Walker (East of the city). Wards with the highest proportions of young people age 15-24s are just North of the city centre: North Jesmond, South Jesmond, Ouseburn, Westgate, and Wingrove.
- 27% children in Newcastle are of black or minority ethnicity and over 20% speak English as an additional language. These proportions are increasing.
- 27% children age under 16 in Newcastle live in poverty, which is higher than the national average. Wards with the highest density include Benwell and Scotswood, Elswick, Westgate (Inner West), Walker and Byker (East), and Kenton, Blakelaw, Fawdon (North).
- 6.7% of young people in Newcastle age 16-18 are not in employment, education or training which is higher than the national average.
- 22% of Newcastle children attending state-funded schools have a special education need; this is more common in more deprived wards.
- It is estimated that over 6,400 boys and over 5,200 girls in Newcastle have a long-standing illness or disability, and that 1,030 children age 5-19 have a learning disability.
- 380 per 10,000 children in Newcastle are in need; more than the national average.
- 90 per 10,000 children in Newcastle are in care services, which is higher than the national average. Contacts with social care involving domestic violence are most common for children age 0-4 and for children living in more deprived wards.
- 4.8% of all households in Newcastle (5,604 households) have dependent children living with someone who has a long-term health problem or disability, which suggests that these children may have caring responsibilities.

Health of 0-19s in Newcastle

This section looks at the health of children and young people in Newcastle, to provide a more accurate understanding of the issues that local services should work to prevent. This section covers maternal and infant health including teenage conceptions (an indicator of poorer health outcomes for both mother and child); nutrition, physical activity and weight; risky behaviours that contribute to poor health; and social and emotional wellbeing. This section also covers safeguarding issues that affect health, such as online safety and injuries.

Maternal and infant health

Teenage conceptions

Newcastle's rate of under 18 conceptions in 2014 was 34.7 per 1000, which corresponds to 151 conceptions. This is higher than the rate of under 18 conceptions in England (22.8 per 1000) and the North East (30.2 per 1000). Figure 11 shows that, between 2004 and 2014, there has been an overall

decrease in the rate of under 18 conceptions in Newcastle. Trend data also shows that Newcastle's rate has been consistently higher than the England average and – in more recent years – similar to the North East average.

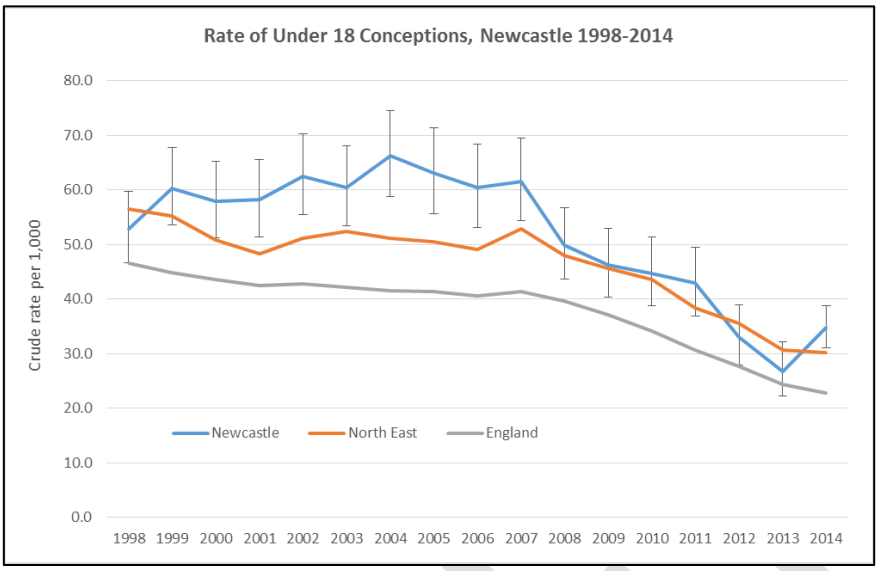

Figure 11: Rate of under 18 conceptions in Newcastle, 1998-2014. Source: Conception Statistics, Office for National Statistics.

Newcastle's rate of under 16 conceptions in 2014 was 6.8 per 1000, which corresponds to 28 conceptions. This is higher than the rate of under 16 conceptions in England (4.4 per 1000) and the North East (6.5 per 1000). Data on Figure 12 show that the under 16 conception rate in Newcastle has remained fairly stable since 2009, and that Newcastle's rate of under 16 conceptions has been consistently higher than the England average.

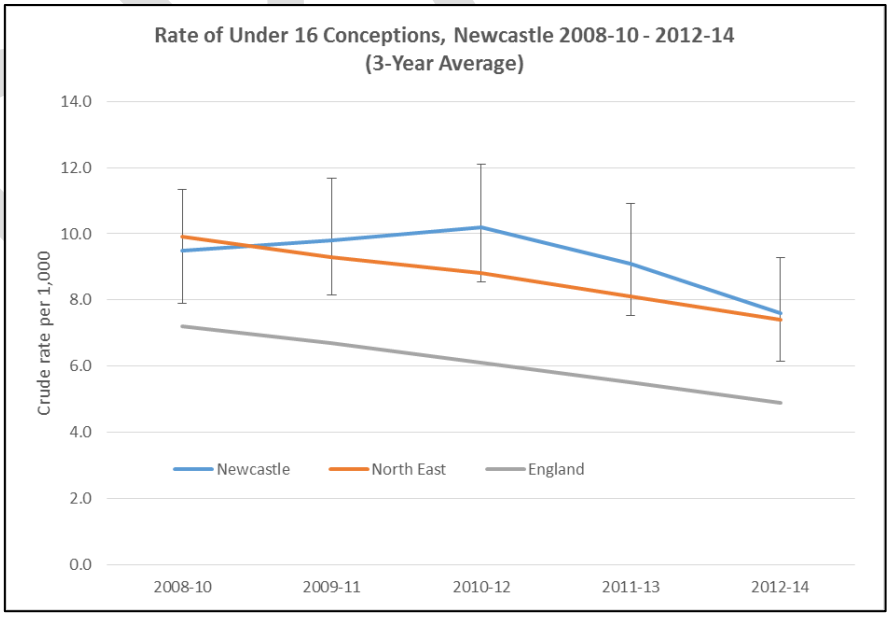

Figure 12: Rate of under 16 conceptions in Newcastle, 2008-10 – 2012-14. Source: Conception Statistics, Office for National Statistics.

In 2014, 42.4% of under 18 conceptions in Newcastle resulted in abortion. This is lower than the England average (51.1%) and similar to the North East average (40.1). Figure 13 shows that the proportion of under 18 conceptions resulting in abortion in Newcastle increased from 36.8% (1998)

to 42.4% (2014). In Newcastle, more under 18 conceptions resulted in maternities (20.0 per 1000) than in abortions (14.7 per 1000).

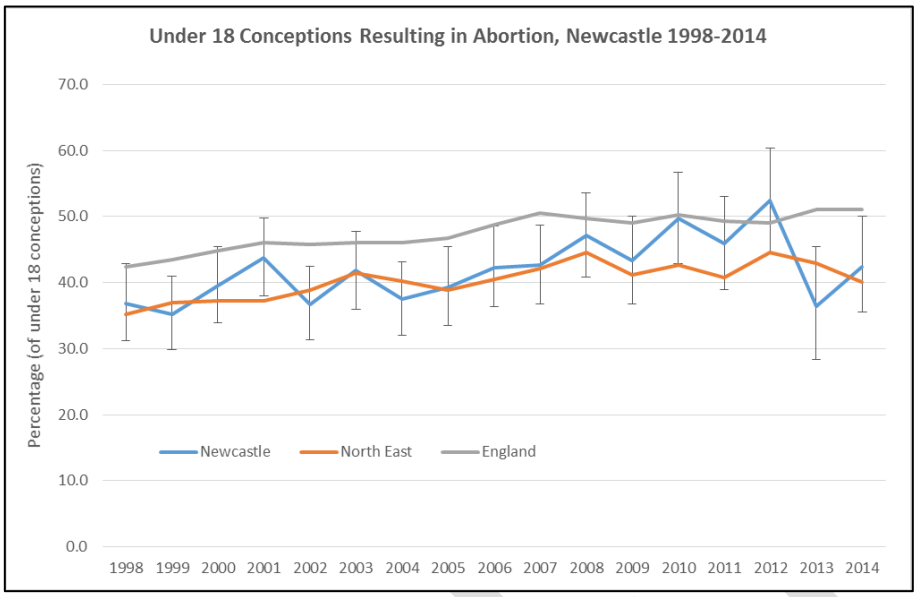

Figure 13: Under 18 conceptions resulting in abortion in Newcastle, 1998-2014. Source: Conception Statistics, Office for National Statistics.

In 2014, 53.6% of under 16 conceptions in Newcastle resulted in abortion. This is lower than the England average (63.0%) and similar to the North East average (54.7%). Figure 14 shows that the proportion of under 16 conceptions resulting in abortion in Newcastle has remained fairly stable, taking into account large error margins (*source: Conception Statistics, Office for National Statistics*).

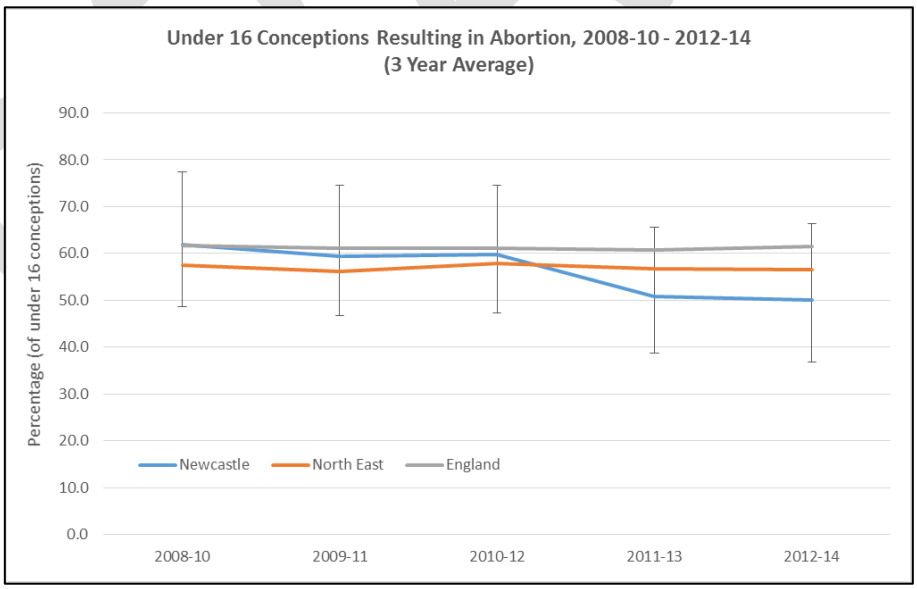

Figure 14: Under 16 conceptions resulting in abortion in Newcastle, 2008-10 – 2012-14. Source: Conception Statistics, Office for National Statistics.

Maternal mental health

The Child and Maternal Health Observatory (ChiMat) provides estimates of the numbers of women in Newcastle with various mental health issues during pregnancy and after childbirth. Table 3 shows

that the most common mental health issue is estimated to be adjustment disorders and distress, followed by mild-moderate depressive illness and anxiety.

Mental health issue	Estimated Nr
Postpartum psychosis	10
Chronic serious mental illness	10
Severe depressive illness	105
Mild-moderate depressive illness and anxiety	335-505
Post-traumatic stress disorder	105
Adjustment disorders and distress	505-1005

Table 3: Estimated numbers of women in Newcastle with pregnancy or postpartum mental disorders. Source: ChiMat.

Domestic abuse is a risk factor for mental health conditions among expecting or new mothers as well as their babies. An estimated 20.2 incidents per 1,000 occur (all ages) in Newcastle, which is higher than the England average of 15.6 per 1,000. Lack of support from the father is another risk factor for conditions such as antenatal and postnatal depression. The proportion of sole registrations at birth give an indication of the proportion of women who are likely to lack support from the father during pregnancy. In Newcastle, 7.5% of births are registered only by the mother which is higher than the England average of 5.4% (*source: ChiMat*).

Smoking in pregnancy

Smoking during pregnancy increases the risk of complications during pregnancy and labour, such as miscarriage, and can also result in low birth weight, genetic abnormalities such as cleft lip, and sudden infant death syndrome ('cot death').

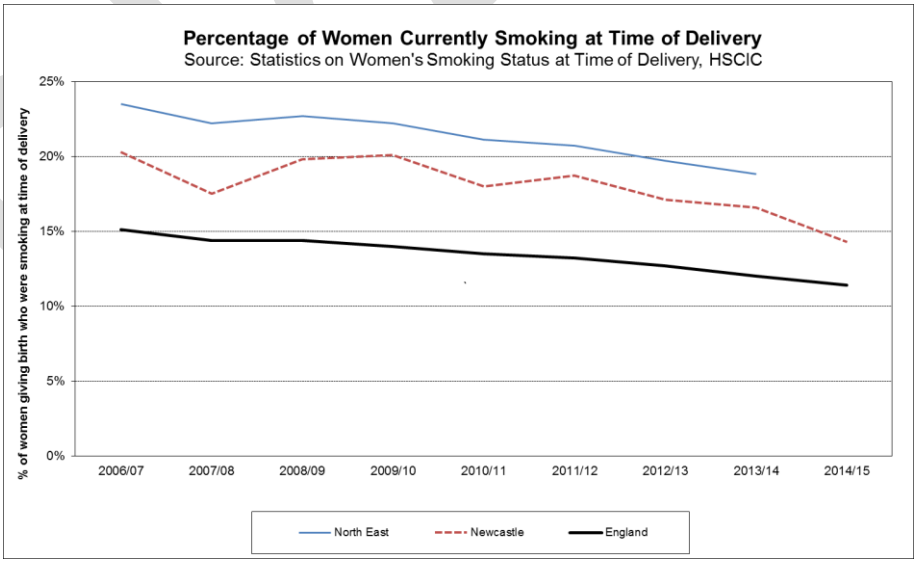

Figure 15: Women in Newcastle smoking at time of delivery, 2006/07 – 2014/15. Source: Smoking Status at Time of Delivery Collection, HSCIC.

In 2014/15, the Health and Social Care Information Centre (HSCIC) reported that Newcastle's rate of smoking among pregnant women (measured as self-reported smoking status at time of delivery) was 14.3%, which is higher than the England average (11.4%). However, figure 15 shows that this rate has decreased.

Low birth weight

Low birth weight increases the risk of childhood mortality and of developmental problems for the child and is associated with poorer health in later life. At a population level there are inequalities in low birth weight and a high proportion of low birth weight births could indicate lifestyle issues of the mothers and/or issues with maternity services. In 2014, 110 live births in Newcastle were considered low weight (<2500g) which represents 3.7% of all live births. This is an increase compared to 2005 (when it was 2.5%) and is significantly worse than the England average of 2.9% (*source: 2016 Child Health Profile for Newcastle upon Tyne, Public Health England*).

Infant and child mortality

In 2012-14, there were 14 infant mortalities (infants aged under 1 year) in Newcastle, which corresponds to a rate of 4.1 per 1,000 live births. This is similar to the England average of 4.0 per 1,000 live births. In that same time frame, the mortality rate among children age 1-17 in Newcastle was 11.3 per 100,000 (DSR), which is similar to England average of 12.0 per 100,000 (*source: 2016 Child Health Profile for Newcastle upon Tyne, Public Health England*).

Nutrition, physical activity and weight

Breastfeeding

The proportion of women initiating breastfeeding within 48 hours after delivery in Newcastle was 68.4% in 2014/15. This is higher than the North East average (60.1%) but lower than the England average (74.3%). Figure 16 shows that rates of breastfeeding initiation in Newcastle have increased over time, from 52.4% in 2006/07 to 68.4% in 2014/15.

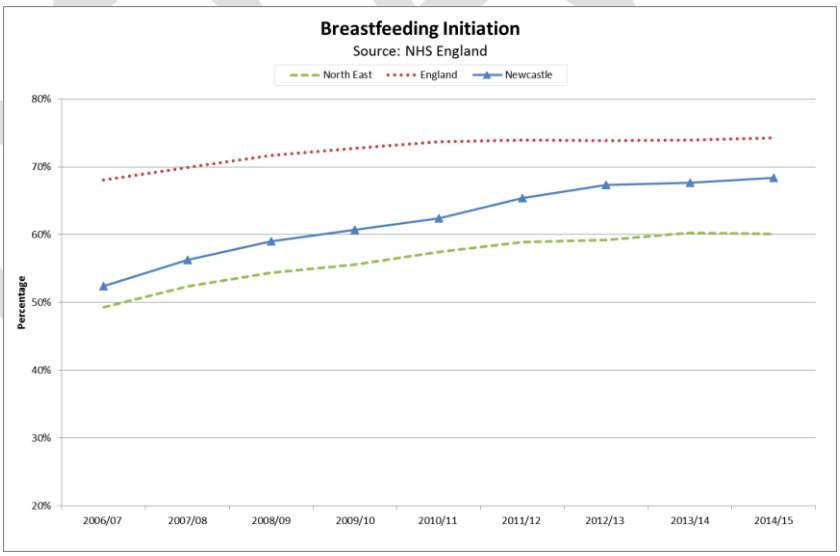

Figure 16: women initiating breastfeeding within the first 48 hours after delivery in Newcastle. Source: Breastfeeding Initiation Statistics, NHS England.

The proportion of women breastfeeding at 6-8 weeks after delivery in 2014/15 in Newcastle was 46.2%. Figure 17 shows that this is the highest rate since 2009/10 (when it was 40.9%), and higher than the England average. However, there are known inequalities between different parts of the city, with prevalence at 6-8 weeks ranging from 17% in Walker (Newcastle's most deprived ward) to 90% in North Jesmond (Newcastle's least deprived ward).

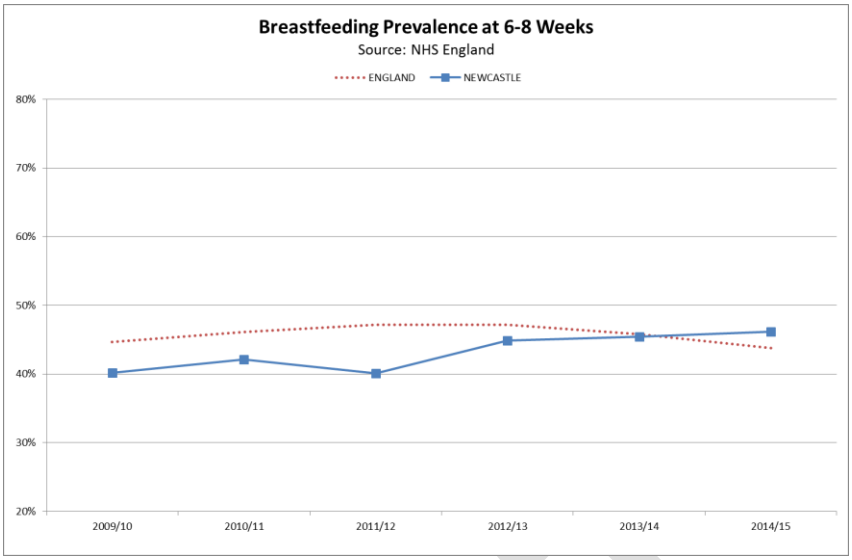

Figure 17: women breastfeeding at 6-8 weeks after delivery in Newcastle. Source: Breastfeeding at 6-8 Weeks Statistics, NHS England.

Nutrition

In the 2015 Health-Related Behaviour Questionnaire (HRBQ), which surveyed 3,430 primary school pupils (years 4 and 6) and 2,231 secondary school pupils (years 8 and 10) in Newcastle:

- A third (33%) of primary school pupils stated they had at least five portions of fruit or vegetables on the day before survey, which is significantly more than in 2011 (22%).
- Most (52% in primary, 62% in secondary) stated they eat sweets or chocolate on at least 2-3 days per week.
- 1 in 5 (22% in primary, 17% in secondary) stated they eat takeaway or fast food on at least 2-3 days per week.

Physical activity

In the 2015 HRBQ:

- 69% of primary and 42% of secondary school pupils stated that they think they are 'fit' or 'very fit'.
- Most (93%) primary school pupils stated they take part in physical activities, such as football or cycling, at least once a week which is similar to physical activity levels in 2013.
- Two thirds (66%) of secondary school pupils stated they do at least 3 hours of moderate intensity physical activity per week, which is significantly less than in 2011 (72%).

Overweight / obesity

The most robust data on excess weight and obesity among children are provided by The National Child Measurement Programme (NCMP). This is an annual programme that measures the height and weight of children aged 4-5 (reception) and age 10-11 (year 6) in England. Note that this is not the same cohort of children each year. Figure 18 shows trends in excess weight since 2006/07.

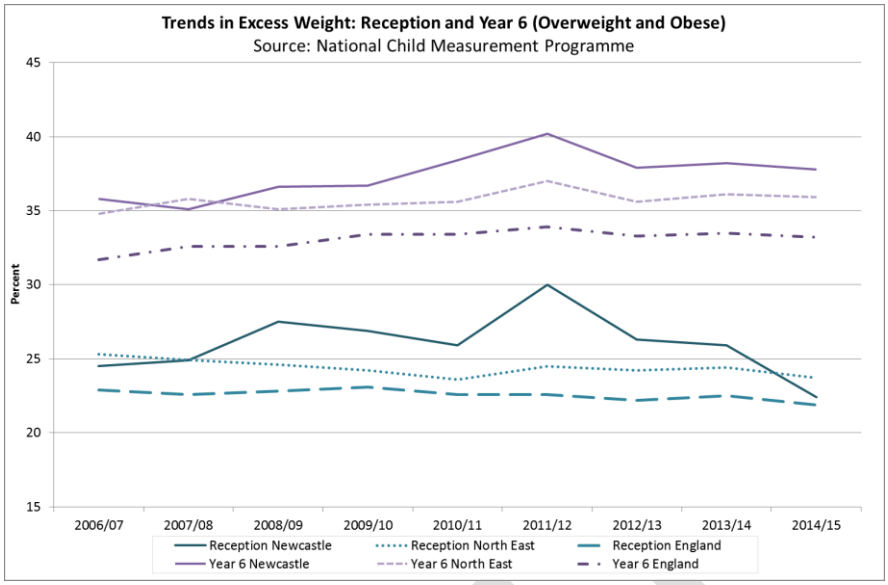

Figure 18: Children with excess weight in Newcastle, 2006/07 – 2014/15. Source: NCMP.

In 2014/15, 22.7% of Newcastle children in reception were either overweight or obese in 2014/15, which is similar to the national average (21.9%) and the regional average (23.7%). 10.1% of children in reception were classified as obese, which is similar to the England average (9.1%) and the North East average (10%). The proportion of children classified as overweight was 12.6%, similar to the national average (12.8%).

In 2014/15, the proportion of children classified as overweight or obese was 37.6%; this figure is significantly worse than both the North East (35.9%) and England (33.2%) average. 24% of year 6 children were classified as obese, more than double that at reception, and statistically significantly higher than the North East (21.5%) and England (19.1%) average. There is also an overall increasing trend in excess weight (overweight and obese) in year 6, with the proportion increasing from 35.8% in 2006/07 to 37.6% in 2014/15.

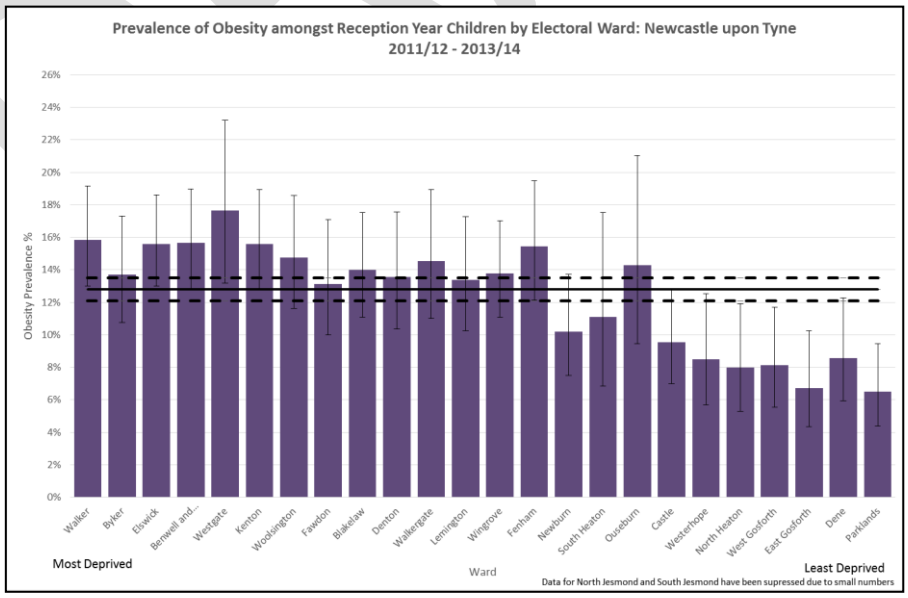

Figure 19: Obesity among children in Newcastle in reception year by ward. Source: NCMP.

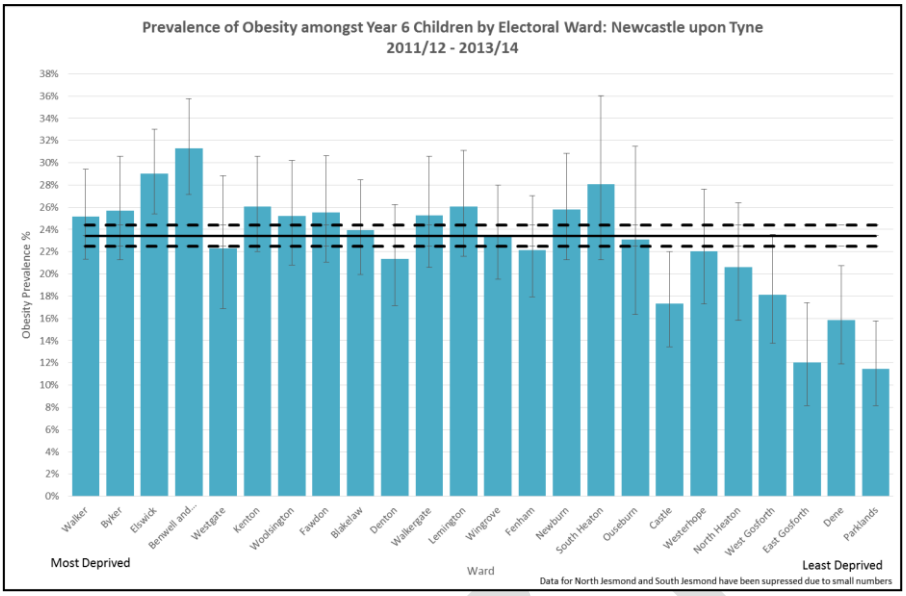

Figure 20: Obesity among children in Newcastle in year 6 by ward. Source: NCMP.

NCMP data also indicates that obesity among children is not spread equally across the city. Figures 15 and 16 show that the prevalence of obesity among children in reception year (figure 19) and year 6 (figure 20) is generally higher in more deprived wards, and below average in more affluent wards.

Dental health

In 2011/12, the proportion of children aged 5 years with one or more decayed, missing or filled teeth was 22.6%, which is lower than England average (27.9%). However, the crude rate of hospital admissions among children age 1-4 years in Newcastle for dental caries in 2012/13 – 2014/15 was 762.1 per 100,000, which is significantly worse than the England average of 322.0 per 100,000 (*source: 2016 Child Health Profile for Newcastle upon Tyne, Public Health England*).

Risky behaviours

Tobacco / e-cigarette use

The 2015 Health-Related Behaviour Questionnaire (HRBQ) surveyed 3,430 primary school pupils (years 4 and 6) and 2,231 secondary school pupils (years 8 and 10) in Newcastle. In the survey, 3% of primary school and 26% of secondary school pupils stated they had tried smoking. 33% of secondary school pupils stated they had tried e-cigarettes, and 1 in 10 (9%) stated they use them occasionally or regularly. Pupils who tried e-cigarettes were more likely to state they smoke tobacco occasionally or regularly (22% v 1%).

Secondary school pupils with a parent/carer who smokes were twice more likely to state that they have tried smoking (32% v 17%). Over a third (37%) stated that their parent/carer smokes, which is significantly less than in 2011 (45%) and 2013 (39%). In primary schools, approximately 1 in 10 stated that their parent smokes in the home (11%); a significant reduction since 2011 (when it was 19%).

Alcohol use

In the 2015 Newcastle Health Related Behaviour Questionnaire (HRBQ), 13% of young people in secondary schools stated that they had drank alcohol in the 7 days preceding the survey, which is similar to 2013 (13%) but higher than the national average of 8% (*source: Health and Social Care*

Information Centre). Of those who had tried alcohol, most (63%) stated that they drank alcohol to socialise and have fun. A third (33%) stated they drank alcohol in order to get drunk. 39% of the secondary school pupils surveyed reported that they had been drunk in the last year, which is a slight increase since 2013 (38%). 5% of the pupils surveyed reported that their personal safety had been at risk as a result of drinking alcohol; a further 5% didn't know. 4% reported that, as a result of drinking alcohol, they had accidentally injured or assaulted someone else.

Among young people in Newcastle (age 0-19), an estimated 355 people were picked up by ambulance in Newcastle in 2014/15 for alcohol-related incidents, which is an increase on 2013/14 (*source: North East Ambulance Service*).

Use of illicit drugs / NPS

In the 2015 Newcastle Health Related Behaviour Questionnaire (HRBQ), secondary school children were asked about their experiences with taking cannabis, other illicit drugs and novel psychoactive substances (NPS). In secondary schools, 21% stated they were offered cannabis, and 9% stated they had tried it. 10% stated they were offered NPS; 3% stated they had tried them. Of those that had tried a drug, 51% stated they first tried drugs at age 14, 19% had taken two drugs at the same time, and 51% had taken a drug together with alcohol.

Secondary school pupils were also asked about their perceptions on the safety of these drugs. 25% of secondary school pupils thought that cannabis is safe if used properly. 14% of secondary school pupils thought that legal highs are safe if used properly.

In 2014/15, there were 127 children and young people engaged with drug and alcohol treatment services across the community and secure estates within Newcastle. Key referral sources include the youth justice system (38%), children and family services (17%) and health and mental health services (20%). 80% of these children and young people are using two or more substances, predominantly cannabis and alcohol. Other key substances are stimulants and NPS. In Newcastle, the use of NPS is significantly higher than the national average (34% v 5%). The key age groups are age 14-17. For children and young people engaged with drug and alcohol treatment services, the rate of successful treatment completions is good at 77%, and the rate of re-presentation is low at 5% (*source: Young Peoples Substance Misuse Data: JSNA Support Pack, Public Health England*).

Offending

In 2014, the rate of youths age 10-17 first entering the youth justice system was 637.8 per 100,000. This is significantly higher than the England average of 409.1 per 100,000 (*source: 2016 Child Health Profile for Newcastle upon Tyne, Public Health England*).

Social and emotional wellbeing

Sex education

The 2015 Health-Related Behaviour Questionnaire (HRBQ) surveyed 3,430 primary school pupils (years 4 and 6) and 2,231 secondary school pupils (years 8 and 10) in Newcastle. In the survey:

- Most in primary school (90%) stated they would prefer to talk about puberty to their parents. But in secondary school, the main sources of information about sex for pupils were sex education class (40%) and friends (23%). Significantly more were also relying on the Internet: 13% (up from 9% in 2013).

- 55% of primary school pupils felt they know enough about how their body changes as they grow older. This is a significant decrease since 2011 (59%).
- 58% of pupils in year 10 stated they knew how to access contraceptive and sexual health advice services such as C-card.
- Most (81%) pupils in secondary school stated they think that young people start having sex at age 16 or less, though in reality just 18% of those in year 10 (age 15-16) stated they are sexually active.
- Out of sexually active year 10 pupils, 50% stated they 'always' use contraception.

Emotional wellbeing and bullying

In the 2015 HRBQ:

- In secondary school, girls worried a lot more than boys about everything. Their main worries were about exams and tests (56%), how they look (44%), and their weight (40%).
- Just over half (55%) in primary and a quarter (24%) in secondary felt that their views and opinions are listened to in school.
- Most pupils in primary (74%) and most (78%) in secondary rated their self-esteem level as 'high' or 'medium-high'.
- 23% in primary and 15% in secondary stated they were bullied at or near school in the year before survey. In primary schools, most thought they were bullied for their weight or looks.
- 69% in primary school and 40% in secondary school thought that their school takes bullying seriously.

Mental health issues

The Child and Maternal Health Observatory (ChiMat) provides 2014 estimates of the numbers of children in Newcastle with various mental or behavioural disorders, shown in table 4.

Type of disorder	Boys age 5-10	Boys age 11-16	Girls age 5-10	Girls age 11-16
Mental health disorders	1,010	1,200	495	1,370
Conduct disorders	695	775	280	460
Emotional disorders	215	430	245	515
Hyperkinetic disorders	290	235	50	35

Table 4: Estimates of children in Newcastle with various mental health issues. Source: ChiMat.

Table 5 below summarises the estimated numbers of children in Newcastle age 16-19 with mental health issues, by gender and type of mental health issue. It shows that mixed anxiety and depressive disorder, depressive episode, phobias and neurotic disorders tend to be far more prevalent among girls whereas generalised anxiety disorder is more common among boys.

Type of mental health issue	Females	Males
Mixed anxiety and depressive disorder	1,110	465
Generalised anxiety disorder	100	150
Depressive episode	245	85
All phobias	190	55
Obsessive compulsive disorder	85	85
Panic disorder	55	50
Any neurotic disorder	1,715	785

Table 5: Estimates of children in Newcastle with various mental health issues. Source: ChiMat.

ChiMat also provides estimates of numbers of children in Newcastle with autism spectrum disorders. It is estimated that, among children age 9-10, 25 in Newcastle have autism and 45 have other autism spectrum disorders. Among children age 5-9, an estimated 250 have an autism spectrum condition.

Hospital admissions for mental health issues

In 2014/15, 31 young people age 0-17 in Newcastle were admitted into hospital for a mental health-related condition which corresponds to a crude rate of 55.1 per 100,000. This is significantly lower than the England average of 87.4 per 100,000. Among young people age 10-24, in 2014/15 in Newcastle there were 256 hospital admissions related to self-harm. This corresponds to a rate of 388.9 per 100,000 (DSR) in Newcastle, which is similar to the England average of 398.8 per 100,000 (*source: 2016 Child Health Profile for Newcastle upon Tyne, Public Health England*).

Safeguarding

Female genital mutilation

Numbers of female genital mutilation (FGM) cases in Newcastle are typically very low and cannot be characterised in datasets due to low numbers. However, the most recent data from the Health and Social Care Information Centre indicates that, in October – December 2015, there were 14 newly recorded FGM cases in Newcastle/Gateshead CCG. Most (6) of these FGM cases were type 1, and most (11) attendances for FGM were for women between age 18 and 39. In most (10) cases, FGM was identified on examination. Most (6) had been born in Western Africa, where the FGM had also taken place. 13 were pregnant at the time of attendance, so this is – most likely – how these cases of FGM were first identified.

Hospital admissions for injuries

In Newcastle in 2013/14, there was a sharp increase from 2012/13 in the rate of recorded hospital admissions for unintentional and deliberate injuries among children age 0-14: from 131.8 per 10,000 in 2012/13 to 159.7 per 10,000 in 2013/14. 2012/13 and 2013/14 data indicate that most (approx. 60%) of hospital admissions for unintentional and deliberate injuries involving children age 0-4 were for boys.

In children age 0-14, the main cause of injury resulting in hospital admission in 2012/13 – 2013/14 was falls (37% of all admissions), followed by exposure to inanimate mechanical forces (21% of all admissions). Injuries that generally occur in and around the home represented at least 74% of all hospital admissions for unintentional and deliberate injuries in children age 0-14 in Newcastle.

Breakdown by sex shows that, among girls age 5-14, the most common cause of injury was 'intentional self-poisoning or exposure to non-opioid analgesics, antipyretics or antirheumatics' (55 cases). 'Intentional self-harm by sharp object' was the 5th most common cause (24 cases). These two causes were not among the top 10 most common causes for girls age 0-4 or for boys. Among boys age 5-14, 'pedal cyclist injured in non-collision transport accident' and 'hit, struck, kicked, twisted, bitten or scratched by another person' were among the top 10 causes, whereas this was not the case for boys age 0-4 or for girls. For children age 0-4, most (72%) injuries were to the head whereas for children age 5-14 most (73%) injuries were to the hands, wrists or forearms.

Ward-level data, on figure 21, shows that hospital admissions from unintentional or deliberate injuries are more likely to involve children who live in more deprived Newcastle wards.

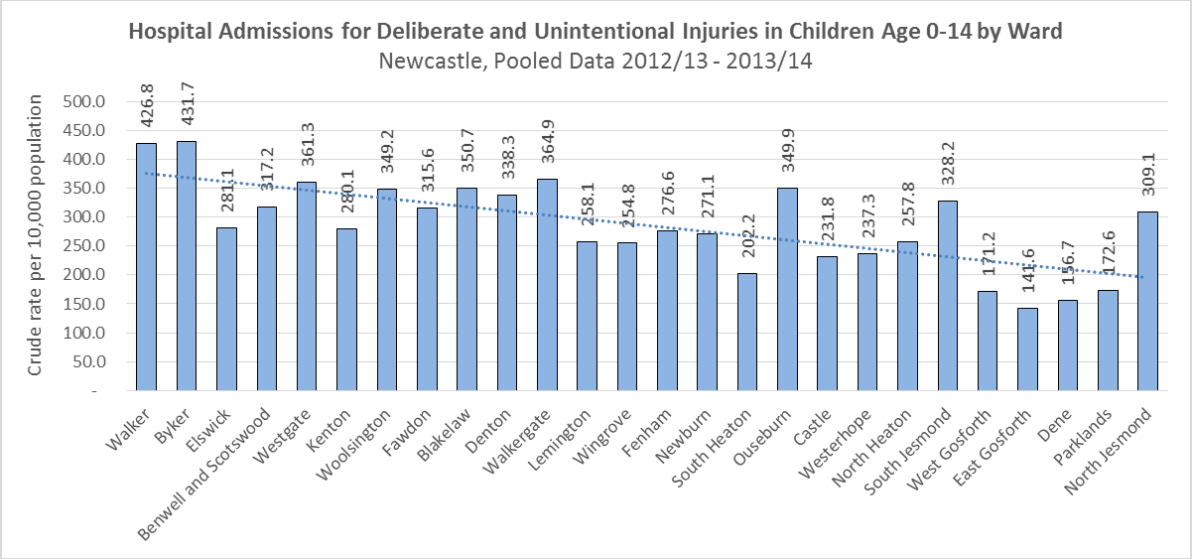

Figure 21: Hospital admissions for unintentional and deliberate injuries, children age 0-14 by ward. Source: Hospital Episode Statistics, Public Health England.

Online safety

The 2015 Health-Related Behaviour Questionnaire (HRBQ) surveyed 3,430 primary school pupils (years 4 and 6) and 2,231 secondary school pupils (years 8 and 10) in Newcastle. In the primary school survey:

- 24% stated they use Internet chat rooms or social networking sites (such as Facebook) 'often', 'very often' or daily. 79% stated they had been told how to stay safe online.
- 24% stated that they have seen adult-only images, and 11% stated they had met someone from the Internet in real life. 24% stated they had seen online pictures that were upsetting.

In the secondary school HRBQ:

- 79% stated they had been told how to stay safe online.
- 57% stated they have used an Internet chat room, and 12% stated they had received a scary or upsetting chat message.
- 48%, mostly boys, stated they have seen adult-only images online and 33% stated they had looked online for violent or pornographic images.
- 18%, mostly girls, stated that they had been asked to send an inappropriate image of themselves to another person.

Summary: health of 0-19s in Newcastle

Maternal and infant health

- Rates of under-16 and under-18 teenage conceptions are higher than the England average, but the overall trend is decreasing.
- An estimated 1,040-1,740 women in Newcastle have mental health issues during pregnancy or after birth.
- The rate of smoking in pregnancy has decreased but is higher than the England average.
- The rate of low birth weight in Newcastle has increased and is higher than the England average.

Nutrition, physical activity and weight

- The breastfeeding rate at 6-8 weeks has increased and is now higher than the England average, although breastfeeding rates are far lower in more deprived wards.
- Compared to 2011, more school-aged children are eating 5 portions of fruit and vegetables per day but less are getting the minimum level of physical activity required for optimum health (based on self-reported survey data).
- Rates of obesity among youth in reception and year 6 are higher than the national average, particularly in more deprived wards.

Risky behaviours

- In secondary school, 26% have tried smoking, 33% have tried e-cigarettes, and 9% are current e-cigarette users (based on self-reported survey data).
- 39% in secondary school state they have been drunk in the last year, which is more than in 2013. Ambulance pick-ups for alcohol-related incidents among 0-19s have increased.
- In a secondary school survey, 25% stated they think cannabis is safe if used properly, and 14% stated they think novel psychoactive substances are safe if used properly.
- The rate of Newcastle youth in the criminal justice system is higher than the England average.

Social and emotional wellbeing

- In secondary school, the main sources of information about sex are sex education class and friends. Pupils are also increasingly relying on the Internet (self-reported survey data).
- In secondary school, girls worry more than boys about various issues, especially their looks and weight (based on self-reported survey data).
- 25% in primary school and 15% in secondary school admit to being bullied in the last year. In primary schools, most pupils that were bullied thought they were bullied for the way they look or their weight.
- An estimated 2,210 boys and 1,865 girls age 5-16 have a mental health disorder.

Safeguarding

- In Newcastle, the rate of hospital admissions for injuries among children age 0-14 has increased. Most of these injuries are a result of accidents in or around the home, particularly falls. Rates tend to be higher in more deprived wards.
- In primary schools, 11% have met someone from the Internet in real life and 24% have seen adult-only images. In secondary schools, 18% - mostly girls – have been asked to send an inappropriate image of themselves to another person (self-reported survey data).

Service Performance

This section looks at the performance of 0-19 services in Newcastle, to help identify any gaps between the health needs of children and young people and service provision. Performance data covered in this section include data on health visiting, the Family Nurse Partnership, the school nursing service and immunisations.

Health visitor services

Public Health England has established an interim reporting system to collate the Health Visitor Service delivery metrics, until the Maternity and Children's Dataset is in a position to report more fully. It is proposed that this interim reporting will be used for the period 2015/16 – 2016/17. The method of data reporting is still evolving to meet required needs. The Health Visitor Service delivery metrics currently cover the antenatal check, new birth visit, 6-8 week review, 12 month assessment and 2-2½ year assessment. In general, Newcastle's performance with these in Q1 – Q3 2015/16 was better than the England average and similar to or lower than the North East average. Figures 22 – 24 summarise these data for Q1, Q2 and Q3 of 2015/16.

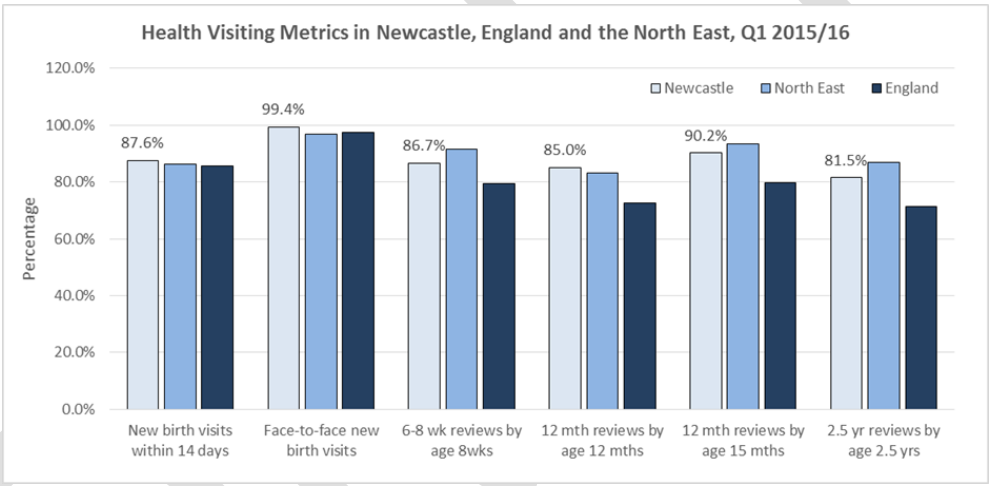

Figure 22: health visiting metrics in Newcastle for Q1 2015/16. Source: Public Health England.

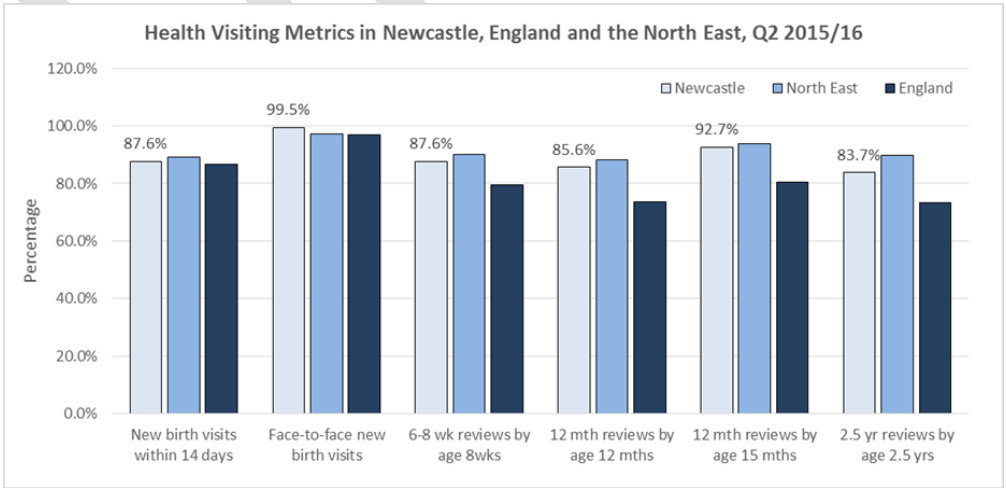

Figure 23: health visiting metrics in Newcastle for Q2 2015/16. Source: Public Health England.

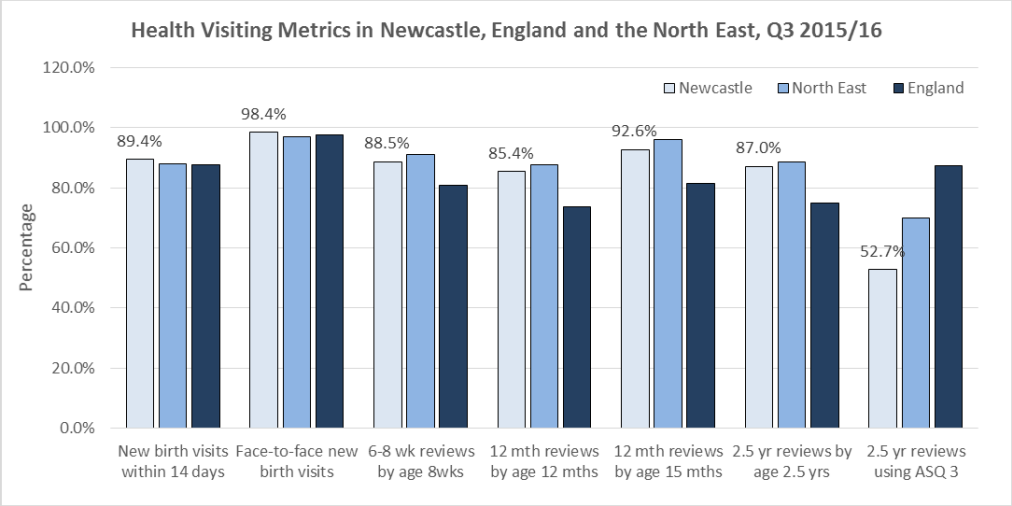

Figure 24: health visiting metrics in Newcastle for Q3 2015/16. Source: Public Health England.

Antenatal contact

It is not known how many Newcastle women received an initial face-to-face antenatal contact with a health visitor at 28 weeks or above in Q1 2015/16, as the template for collection was still in development. The number of Newcastle mothers who received a first face-to-face antenatal contact with a health visitor at 28 weeks or above was 747 in Q2, and 771 in Q3 of 2015/16.

New birth visits

In Q1 2015/16, 836 infants in Newcastle turned 30 days old. Out of those, 87.6% received a face to face new birth visit (NBV) within 14 days by a health visitor. This is higher than the North East average (86.3%) and higher than the England average (85.5%). A further 11.8% of these infants in Newcastle received a face-to-face NBV after 14 days by a health visitor, which is higher than the North East average (10.4%) and similar to the England average (11.9%). In total, the percentage of infants who received a NBV in Newcastle was 99.4%, which is higher than the North East average (96.8%) and the England average (97.3%). See figure 22.

In Q2, 847 infants turned 30 days old. Of those, 87.6% received a face to face NBV within 14 days by a health visitor. This is the same as in Q1, slightly lower than the North East average (89.1%), and similar to the England average (86.8%). A further 11.9% of these infants in Newcastle received a face-to-face NBV after 14 days by a health visitor. This is similar to Q1 2015/16, and higher than both the North East average (8.1%) and the England average (10.2%). In total, the percentage of infants who received a face-to-face NBV in Newcastle was 99.5%, which is similar to that in Q1 2015/16, and – as in Q1 2015/16 – higher than the North East average (97.2%) and England average (96.9%) – see figure 23.

In Q3, 830 infants turned 30 days old. Of those, 89.4% received a face to face NBV within 14 days by a health visitor. This is more than in Q2 2015/16, and higher than the North East average (88.0%) and England average (87.7%). A further 9.0% of these infants in Newcastle received a face-to-face NBV after 14 days by a health visitor. This is less than in Q1 & Q2, less than the England average (10.0%), and the same as the North East average (9.0%). In total, the percentage of infants who received a face-to-face NBV in Newcastle was 98.4%, which is less than that in Q1 & Q2, but higher than the North East average (97.1%) and England average (97.7%) – see figure 24.

6-8 week reviews

In Q1 2015/16, 780 infants in Newcastle were due a 6-8 week review by the end of the quarter. Of those, 86.7% received a 6-8 week review by the time they were 8 weeks old, which is lower than the North East average (91.5%) but higher than the England average (79.4%) – see figure 22. In Q2, 853 infants were due a 6-8 week review by the end of the quarter. Of those, 87.6% received a 6-8 week review by the time they were 8 weeks old. This proportion is slightly higher than in Q1 2015/16 and – as in Q1 2015/16 – is higher than the England average (79.4%), but lower than the North East average (90.0%) – see figure 23. In Q3, 777 infants were due a 6-8 week review by the end of the quarter. Of those, 88.5% received a 6-8 week review by the time they were 8 weeks old. This proportion is slightly higher than in Q1 & Q2 and higher than the England average (80.7%), but lower than the North East average (91.2%) – see figure 24.

12 month reviews

In Q1 2015/16, 828 children in Newcastle turned 12 months old. Of those, 85.0% received a 12 month review by the time they turned 12 months. This is higher than the North East average (83.1%) and notably higher than the England average (72.5%). In that same quarter, 796 children turned 15 months old of whom 90.2% received a 12 month review by the time they turned 15 months old. This is lower than the North East average (93.3%), but notably higher than the England average (79.9%) – see figure 22.

In Q2, 835 children turned 12 months old. Of those, 85.6% received a 12 month review by the time they turned 12 months. This is similar to in Q1 and notably higher than the England average (73.5%), but slightly lower than the North East average (88.2%). In that same quarter, 837 children turned 15 months old of whom 92.7% received a 12 month review by the time they turned 15 months old. This proportion is higher than in Q1 and higher than the England average (80.5%), but lower than the North East average (93.7%) – see figure 23.

In Q3, 855 children in Newcastle turned 12 months old. Of those, 85.4% received a 12 month review by the time they turned 12 months. This is similar to in Q1 & Q2 and notably higher than the England average (73.8%), but lower than the North East average (87.7%). In that same quarter, 848 children in Newcastle turned 15 months old. Of those, 92.6% received a 12 month review by the time they turned 15 months old. This proportion is similar to in Q1, lower than the North East average (96.0%) and higher than the England average (81.5%) – see figure 24.

2 – 2½ year reviews

In Q1 2015/16, 909 children in Newcastle were 2½ years old. Of those, 81.5% received a 2-2½ year review. This is lower than the North East average (86.9%), but notably higher than the England average (71.3%) – see figure 22. In Q2, 885 children were 2½ years old of whom 83.7% received a 2-2½ year review. This proportion is higher than in Q1 2015/16 and higher than the England average (73.4%), but lower than the North East average (89.7%) – see figure 23. In Q3, 769 children were 2½ years old of whom 87.0% received a 2-2½ year review. This proportion is higher than in Q2 and higher than the England average (74.9%), but lower than the North East average (88.4%) – see figure 24.

In Q3 2015/16, 52.7% of children aged 2½ years received a 2-2½ year review using the Ages and Stages Questionnaire (ASQ-3). This is lower than the North East average (70.0%) and England average (87.3%) – see figure 24.

Status of children on health visitor caseloads

Children on health visitor caseloads are assigned a red-amber-green (RAG) status depending on their needs and level of concern. Green means there are no major concerns and universal services apply. Amber means that some of the child's needs are not being met, or there are other signs of concern which require some targeted services. Red means the child is at risk of harm, and a child protection plan is required.

Figure 25 shows the RAG status of children on GP practice health visitor caseloads as at 13/04/2016, by GP. It therefore gives a recent snapshot of the level of service required by children on health visitor caseloads. The numbers at the top represent the total health visitor caseload for each GP. The chart shows that, while numbers of red-status children are generally low, the highest proportions of red- or amber-status children are in St. Anthony's, Grainger and Thornfield GPs.

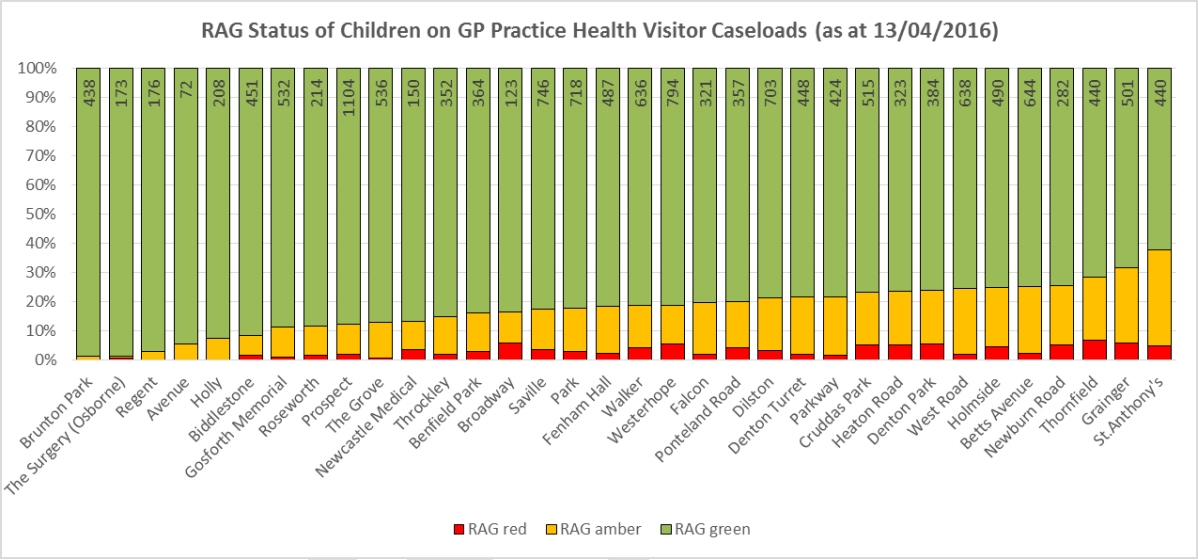

Figure 25: Status of children on health visitor caseloads. Source: Newcastle Health Visiting SystmOne.

In Newcastle as at 13/04/2016, of the 15,254 children on GP health visitor caseloads, 80.9% had green status, while 3.0% (461 children) had a red status and 15.7% (2,398 children) had amber status.

Family Nurse Partnership

In 2015/16, 50 clients completed the Family Nurse Partnership (FNP) programme's pregnancy stage in 12 months, and 30 clients completed the infancy stage in 12 months.

Table 6 summarises the most recent statistics on FNP services in Newcastle for 2015/16, in terms of the frequency of FNP visits during pregnancy and infancy. The national programme average is shown in brackets. The proportion of clients getting 80% or more expected visits during pregnancy is lower than the national average, while the proportion of those getting 65% or more expected visits after pregnancy is higher than the national average.

Frequency of FNP visits	
Clients getting 80% or more expected visits in pregnancy	46% *(59%)*
Clients getting 65% or more expected visits in infancy	70% *(59%)*

Table 6: Frequency of visits during pregnancy and infancy. Source: FNP.

Table 7 summarises statistics on FNP services in Newcastle in terms of the programme content of FNP visits made during pregnancy and infancy. The national programme average, where applicable, is shown in brackets. Table 7 shows that, in terms of programme content, statistics for Newcastle's FNP programme are similar to the national programme average.

Pregnancy	
Personal health 35-40%	37% *(36%)*
Environmental health 5-7%	11% *(10%)*
Life course development 10-15%	12% *(13%)*
Maternal role 23-25%	27% *(27%)*
Family and friends 10-15%	14% *(15%)*
Average length of visit in pregnancy (mins)	80 *(74)*
Infancy	
Personal health 14-20%	18% *(20%)*
Environmental health 7-10%	11% *(11%)*
Life course development 10-15%	11% *(13%)*
Maternal role 45-50%	48% *(44%)*
Family and friends 10-15%	13% *(13%)*
Average length of visit in infancy (mins)	76 *(69)*

Table 7: Programme content of FNP visits during pregnancy and infancy. Source: FNP.

Table 8 summarises indicators of child and maternal health for FNP clients. The national programme average, where applicable, is shown in brackets. Table 8 shows that smoking rates at intake in Newcastle are higher, but at 36 weeks gestation are lower than the national average. Breastfeeding rates in Newcastle are lower than the national average. In Newcastle, compared to the national average a higher proportion of infants had ASQ scores outside the cut-off range at 10 months, especially for gross motor development.

Indicator	**%**	**Nr. clients**
Smoking		
Clients who smoked in last 48 hours at intake	39% *(31%)*	27
Clients who smoked in last 48 hours at 36 wks gestation	24% *(28%)*	42
Breastfeeding		
Clients initiating breastfeeding	54% *(59%)*	47
Clients breastfeeding at 6 weeks infancy	5% *(19%)*	48
Clients breastfeeding at 6 months infancy	4% *(9%)*	52
Clients breastfeeding at 12 months infancy	4% *(5%)*	28
Birth statistics		
Full term infants (inc. twins) with low birthweight	0% *(5%)*	49
Infants (inc. twins) who spent time in SCBU at birth	7% *(11%)*	49
Infants born premature	10% *(8%)*	49
Child health and development		
Infants with up-to-date immunisations at 6mths infancy	92% *(91%)*	53
Infants with up-to-date immunisations at 12mths infancy	96% *(92%)*	28
Clients with 1+ visits to A&E due to ingestion/injury at birth-6mths	2% *(5%)*	53
Clients with 1+ visits to A&E due to ingestion/injury at birth-12mths	8% *(12%)*	28
Clients with 1+ visits to hospital due to ingestion/injury at birth-6mths	0% *(1%)*	53
Clients with 1+ visits to hospital due to ingestion/injury at birth-12mths	0% *(2%)*	28
Ages and Stages Questionnaire (ASQ) at 4 months		

Infants with scores outside cut-off range: Communication	0% *(1%)*	53
Infants with scores outside cut-off range: Problem solving	2% *(2%)*	53
Infants with scores outside cut-off range: Gross motor development	2% *(4%)*	53
Infants with scores outside cut-off range: Fine motor development	4% *(2%)*	53
Infants with scores outside cut-off range: Personal social skills	2% *(2%)*	53
Ages and Stages Questionnaire (ASQ) at 10 months		
Infants with scores outside cut-off range: Communication	3% *(1%)*	39
Infants with scores outside cut-off range: Problem solving	5% *(3%)*	39
Infants with scores outside cut-off range: Gross motor development	24% *(12%)*	39
Infants with scores outside cut-off range: Fine motor development	0% *(2%)*	39
Infants with scores outside cut-off range: Personal social skills	3% *(2%)*	39
Ages and Stages Questionnaire Social-Emotional (ASQ:SE)		
Infants with scores outside cut-off range at 6 months infancy	0% *(1%)*	53
Infants with scores outside cut-off range at 12 months infancy	5% *(1%)*	28

Table 8: Short-term child and maternal health indicators of FNP clients. Source: FNP.

School nursing service

The Public Health School Nursing (PHSN) service in Newcastle has developed a Core Personal Health and Social Education (PHSE) programme in line with the PSHE programme of study national guidance. The delivery programme is set out in three themes:

- Physical well-being
- Emotional well-being and positive relationships (including child sexual exploitation awareness)
- Sexual health and well-being

Throughout the academic year 2013/14, the PHSN team delivered 965 PHSE group sessions in Newcastle schools and undertook 436 sessions on a 1:1 basis with individual children and young people. Figure 26 shows that most of the group sessions were held in relation to health promotion – hygiene.

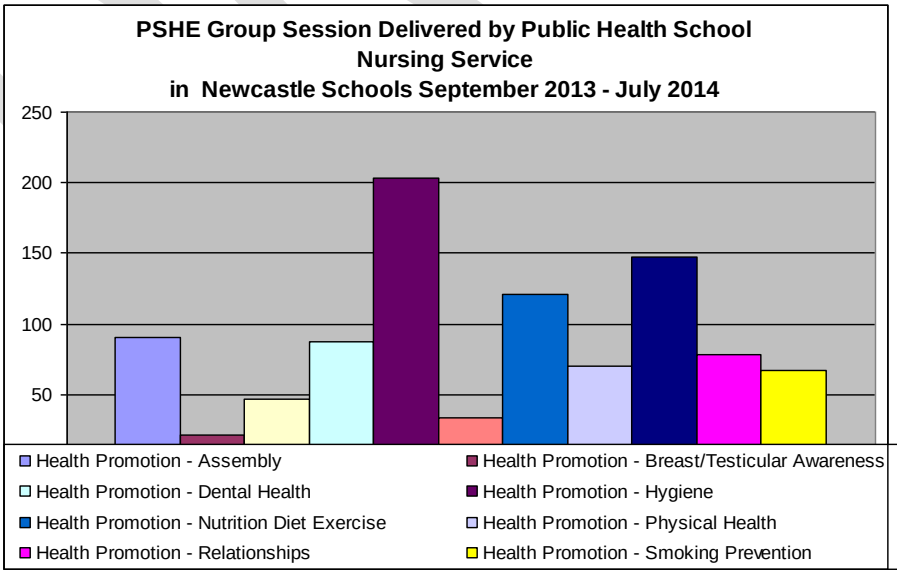

Figure 26: PSHE group sessions delivered in Newcastle, 2013/14. Source: Newcastle PHSN service.

The School Health Workforce has also been trained in Identification and Brief Advice (IBA), to provide PSHE in relation to alcohol and substance misuse. During the academic year 2013/14, 105 young people were identified by a school nurse as having used or using alcohol. IBA was undertaken with 45 of these young people. 25 refused intervention and 35 undertook extended IBA. Figure 27 shows the outcomes of IBAs and extended IBAs undertaken. In most of them, young people were provided with information and signposted to services.

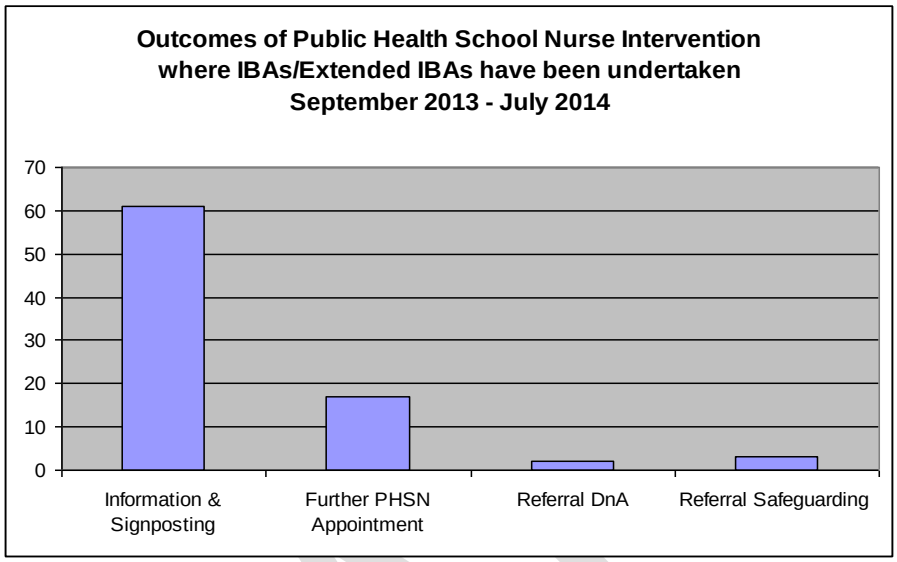

Figure 27: Outcomes of IBAs/extended IBAs, 2013/14. Source: Newcastle PHSN service.

Immunisations

The national immunisation programme requires children to receive a number of immunisations by their 1st, 2nd and 5th birthday. These include:

- Diphtheria, tetanus, pertussis, polio and Haemophilus influenza type B (DTaP/IPV/Hib)
- Diphtheria, Tetanus, Pertussis and Polio (DIP/TET/Polio/Pert) booster
- Measles, mumps and rubella (MMR)
- Pneumococcal Conjugate Vaccine (PCV)
- Haemophilus Influenza type B and Meningococcal group C vaccination (Hib/Men C Booster)

In 2014/15, Newcastle has seen improvements in most of the immunisations programmes, with rates of vaccination exceeding the England average for all but two programmes (DTaP/IPV/Hib and PCV at the 1st birthday). Newcastle is also achieving rates above the WHO target for DTap/IPV/Hib vaccinations at the 1st birthday, DIP/TET/Polio/Pert Boosters at the 5th birthday, and MMR at the 5th birthday.

DTap/IPV/Hib

In Newcastle 93.7% of children in 2014/15 completed the primary immunisation course for DTap/IPV/Hib by their 1st birthday. This is below the WHO recommendation of 95% and remains below the England average (94.2%). Figure 28 also shows that this is a decrease since last year (95.3%). By a child's 2nd birthday, 96.9% of the eligible population in 2014/15 had received the DTap/IPV/Hib immunisation.

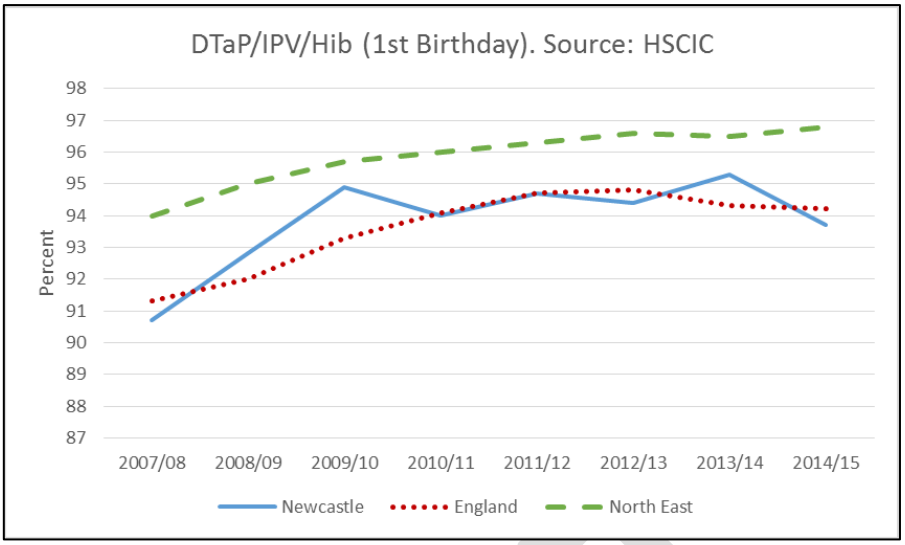

Figure 28: Children vaccinated for DTap/IPV/Hib by their 1st birthday. Source: NHS England.

DIP/TET/Polio/Pert

At a child's 5th birthday they are eligible for a DIP/TET/Polio/Pert booster. Newcastle has seen a consistent increase in coverage, which was 96.2% in 2014/15 (up from 94.2% in 2013/14). Figure 29 shows that this is slightly above the England average (95.7%), but has now slipped below the North East average (97.8%).

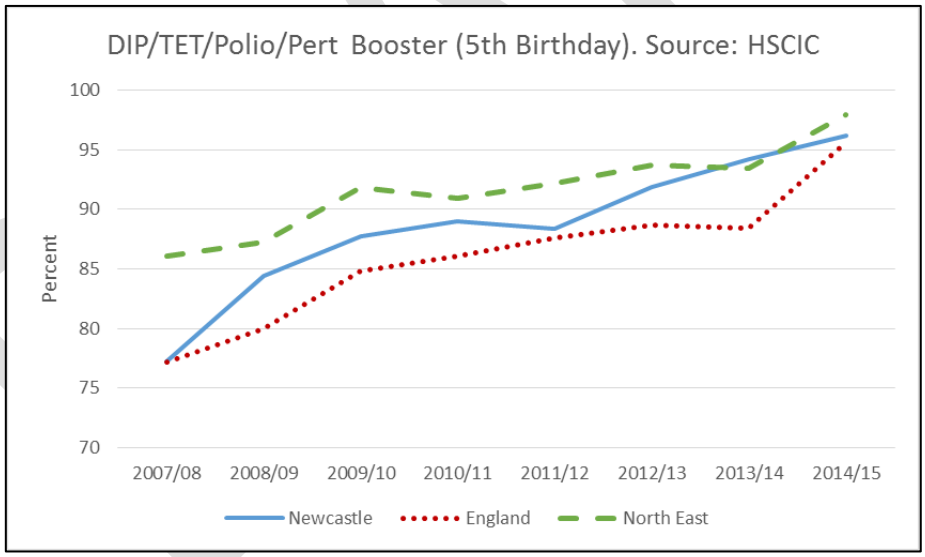

Figure 29: Children vaccinated with a DIP/TET/Polio/Pert booster by their 5th birthday. Source: NHS England.

MMR

In Newcastle, 94.7% of all eligible children received the first dose of MMR vaccination by their 2nd birthday in 2014/15, which was higher than the national average (92.3%) and just below the WHO target. By a child's 5th birthday 96.2% of the eligible population in Newcastle in 2014/15 received the MMR 1st dose. Figure 30 shows that there has been a steady increase since 2008/09. In 2014/15, 91.1% of the eligible population in Newcastle had received the 1st and 2nd MMR dose by their 5th birthday.

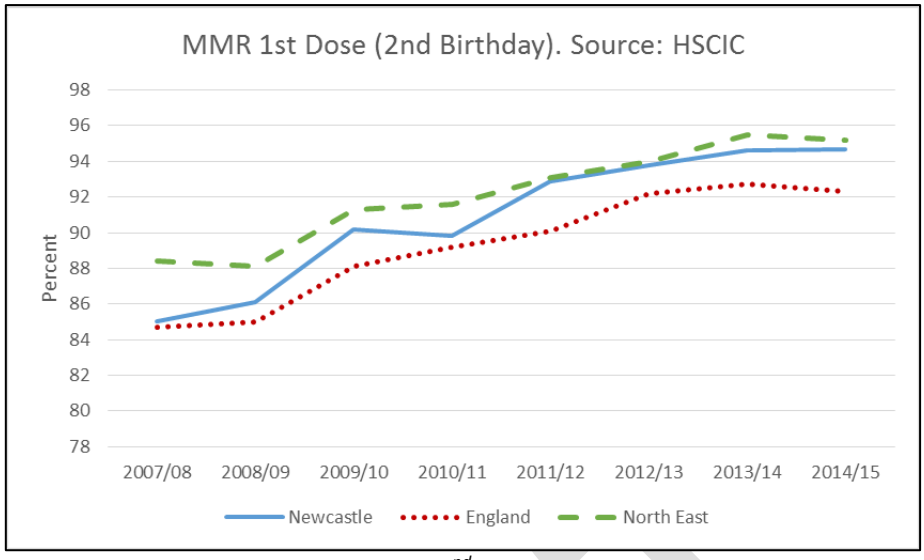

Figure 30: Children vaccinated for MMR by their 2nd birthday. Source: NHS England.

PCV

In Newcastle in 2014/15, 93.0% of the eligible population received the PCV by their 1st birthday. Figure 31 shows that this is a decrease since 2013/14 (94.6%). 94.1% of the eligible population in Newcastle received their PCV booster by their 2nd birthday.

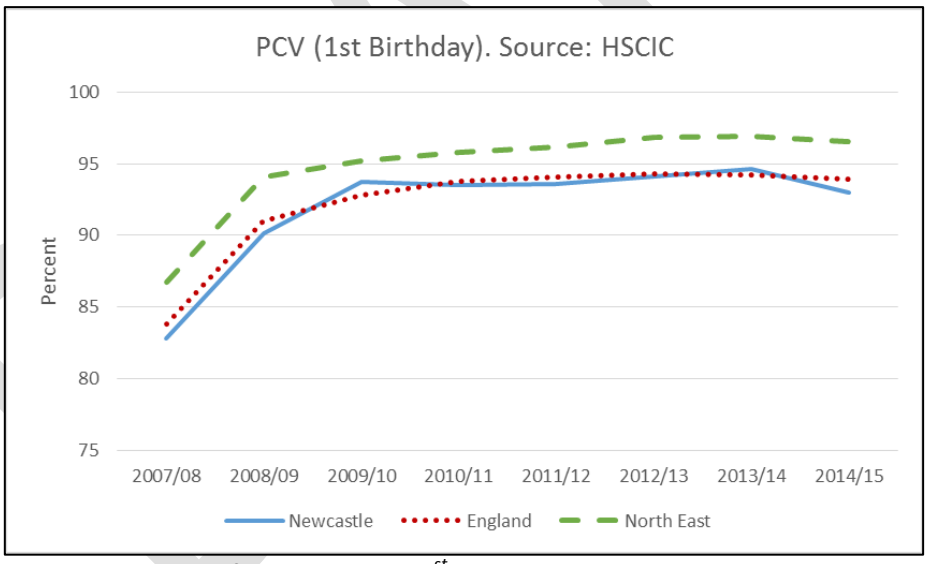

Figure 31: Children vaccinated for PCV by their 1st birthday. Source: NHS England.

Hib/Men C

In Newcastle in 2014/15, 94.3% of the eligible population received the Hib/Men C booster at 2 years which is similar to coverage levels in 2013/14 (93.8%). The percentage of the eligible population that received the Hib/Men C booster is also measured at the 5th Birthday. In 2014/15, rates in Newcastle were 94.8% which is a consistent increase – see figure 32.

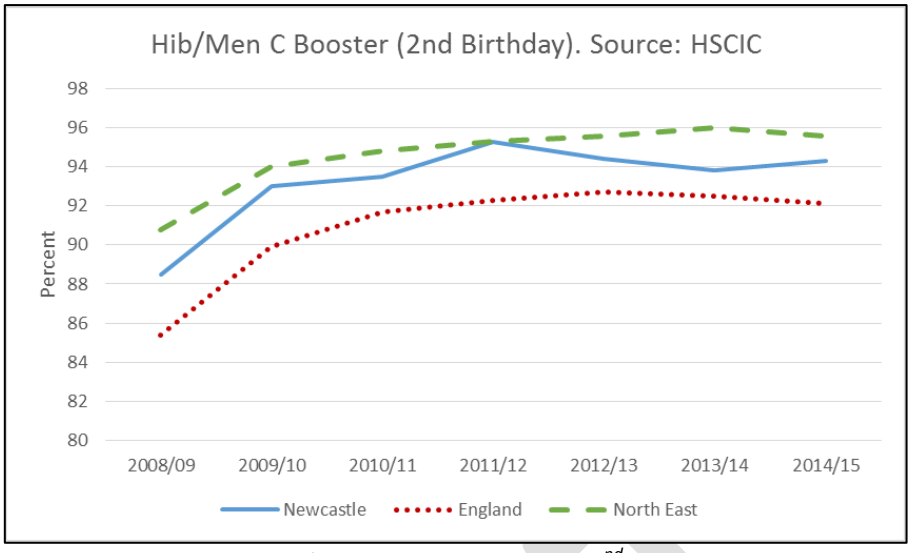

Figure 32: Children vaccinated for Hib/Men C booster by their 2nd birthday. Source: NHS England.

HPV

In the UK, all girls aged 12 and 13 years are offered the human papillomavirus (HPV) vaccine. It protects against two HPV types that cause over 70% of cervical cancers. In 2013/14, 88.3% of girls in Newcastle were vaccinated against HPV, which is higher than the England average of 86.7% but lower than the North East average of 91.3%. Figure 33 shows that vaccination rates in Newcastle have decreased slightly, from 90.6% in 2012/13.

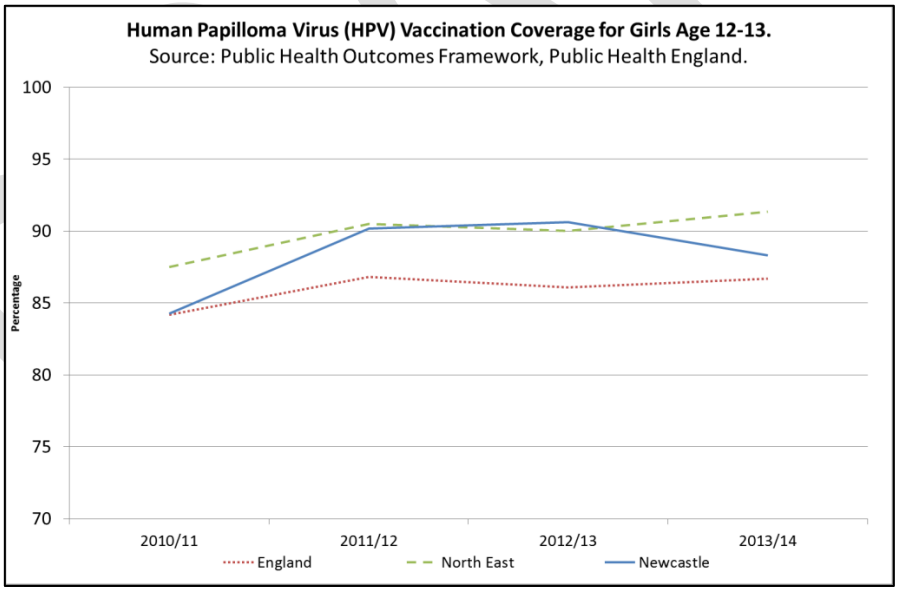

Figure 33: HPV vaccination coverage for girls aged 12-13. Source: Public Health England.

Summary: Service performance

- Newcastle's performance on health visitor services – the antenatal check, new birth visit, 6-8 week review, 12 month assessment and 2-2½ year assessment – is better than the England average.
- In Newcastle, 3% of children on health visitor caseloads are red status (require a child protection plan), and 16% are amber status (signs of concerns which require targeted services). However, the proportion of red/amber status children varies between GPs and is highest in St Anthony's, Grainger, and Thornfield GPs.
- In Newcastle's Family Nurse Partnership (FNP) programme, compared to the national programme average there are fewer visits during pregnancy but more during infancy, and the programme content is similar.
- Compared to the national programme average, clients of Newcastle's FNP programme smoke more at intake but less at 36 weeks gestation, breastfeeding rates are lower, and there is a higher proportion of infants with ASQ scores outside the cut-off range at 10 months, especially for gross motor development.
- In 2013/14, Newcastle's public health school nursing service conducted 965 PHSE group sessions, most of which were focused on health promotion – hygiene. The service also did 436 1:1 sessions and 45 intervention and brief advice sessions for alcohol and substance misuse, most of which signposted children to information or other services.
- Rates of childhood vaccination in Newcastle exceed the England average for all but two programmes (DTaP/IPV/Hib and PCV at the 1st birthday). Newcastle is also achieving rates above the WHO target for DTap/IPV/Hib vaccinations at the 1st birthday, DIP/TET/Polio/Pert Boosters at the 5th birthday, and MMR at the 5th birthday.

Service User and Stakeholder Views

TBC

Conclusions

- Demand for services is high in the most deprived areas – Benwell and Scotswood, Elswick, Fawdon, Kenton, Blakelaw, Byker, and Walker – as children's health indicators in these areas tend to be worse, and these areas also have the highest population density of children age 0-14. In line with this, Newcastle's proportion of children living in poverty is 27% which is notably higher than the national average. Service demand is likely to increase, since the 0-14 population in Newcastle is expected to grow over the next 15 years.
- It is important for services to take into account specific needs related to religion, ethnic or cultural background and language barriers, since 27% of Newcastle's children are BME and over 20% speak English as an additional language, and these populations are increasing.
- Targeted services are necessary to help young people not in employment, education, or training, children in need, and children in social care. Newcastle has higher proportions of these groups than the national average.
- Services should pay particular attention to children age 0-4 in the most deprived areas, as these represent the bulk of cases for social care services involving domestic violence. In Newcastle, 3% of children on health visitor caseloads are red status (children who require a

child protection plan), and 16% are amber status (signs of concerns which require targeted services). However, the proportion of red/amber status children varies between GP practices and is highest in St Anthony's, Grainger, and Thornfield GPs.

- In Newcastle, the rates of under-16 and under-18 conceptions have decreased, the rate of smoking at time of delivery has decreased, and the rate of breastfeeding is increasing. The proportion of children stating they eat 5 portions of fruit and vegetables per day has also increased. These are encouraging trends which likely reflect the effectiveness of universal services and targeted interventions throughout the city, particularly for children age 0-5.
- In line with this, Newcastle's performance on health visitor services – the antenatal check, new birth visit, 6-8 week review, 12 month assessment and 2-2½ year assessment – is better than the England average. The programme content of Newcastle's Family Nurse Partnership (FNP) programme is similar to the national programme average.
- Compared to the national programme average, clients of the Newcastle FNP programme smoke more at intake but less at 36 weeks gestation. Together with the drop in rates of smoking at time of delivery, this may reflect the relative success of targeted stop smoking interventions for pregnant women.
- In Newcastle, the rate of low birth weight has increased, fewer children than before report that they are physically active, and rates of obesity remain high, particularly for children in year 6. Indicators of problematic alcohol use (drunkenness, ambulance pick-ups for alcohol-related incidents) have increased. This reflects an ongoing and increasing need for services to help address these issues.
- Recent school surveys reflect a need for services to focus on young people's anxieties and negative behaviours related to weight and physical appearance, as these may lead to mental health issues in adolescence or later life. In schools, 25% in primary and 15% in secondary admitted to being bullied in the last year, and common reasons for being bullied were thought to be their looks and weight. Girls in secondary school in particular seem to show anxieties about their weight and how they look.
- In 2013/14, most PSHE group sessions by Newcastle's public health school nursing service were focused on health promotion – hygiene. The service also did 1:1 sessions, with 45 intervention and brief advice sessions for alcohol and substance misuse.
- Newcastle's rate of hospital admissions for injuries among children age 0-14 has increased. This reflects a need for services to help prevent injuries, particularly those arising from accidents in and around the home, with focus on children in more deprived wards.
- Survey data suggests that a sizeable proportion of children in primary school are meeting people from the Internet in real life or looking at adult-only pictures online, and that almost 1 in 5 secondary school children, in particular girls, are asked to send appropriate images of themselves to someone online. In secondary school, children are also increasingly relying on the Internet as their main source of sex education. This raises potential issues related to misinformation and sexual grooming, and the need for services to address these issues.
- Rates of childhood vaccination in Newcastle exceed the England average for all but two programmes (DTaP/IPV/Hib and PCV at the 1st birthday). Newcastle is also achieving rates above the WHO target for DTap/IPV/Hib vaccinations at the 1st birthday, DIP/TET/Polio/Pert Boosters at the 5th birthday, and MMR at the 5th birthday.

Recommendations

TBC

Sources

1. The Marmot Review Team (2010) *Fair Society, Health Lives*.
2. Chief Medical Officer (2012) *Our Children Deserve Better: Prevention Pays.*
3. Department of Health (2009) *Healthy Child Programme: Pregnancy and the First 5 Years of Life.*
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3. Public Health England (2016) *Child Health Profile for Newcastle upon Tyne*.
4. *Newcastle Future Needs Assessment*, KnowNewcastle.org.uk.
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6. *Conception Statistics*, Office for National Statistics.
7. *Smoking Status at Time of Delivery Statistics Collection*, Health and Social Care Information Centre.
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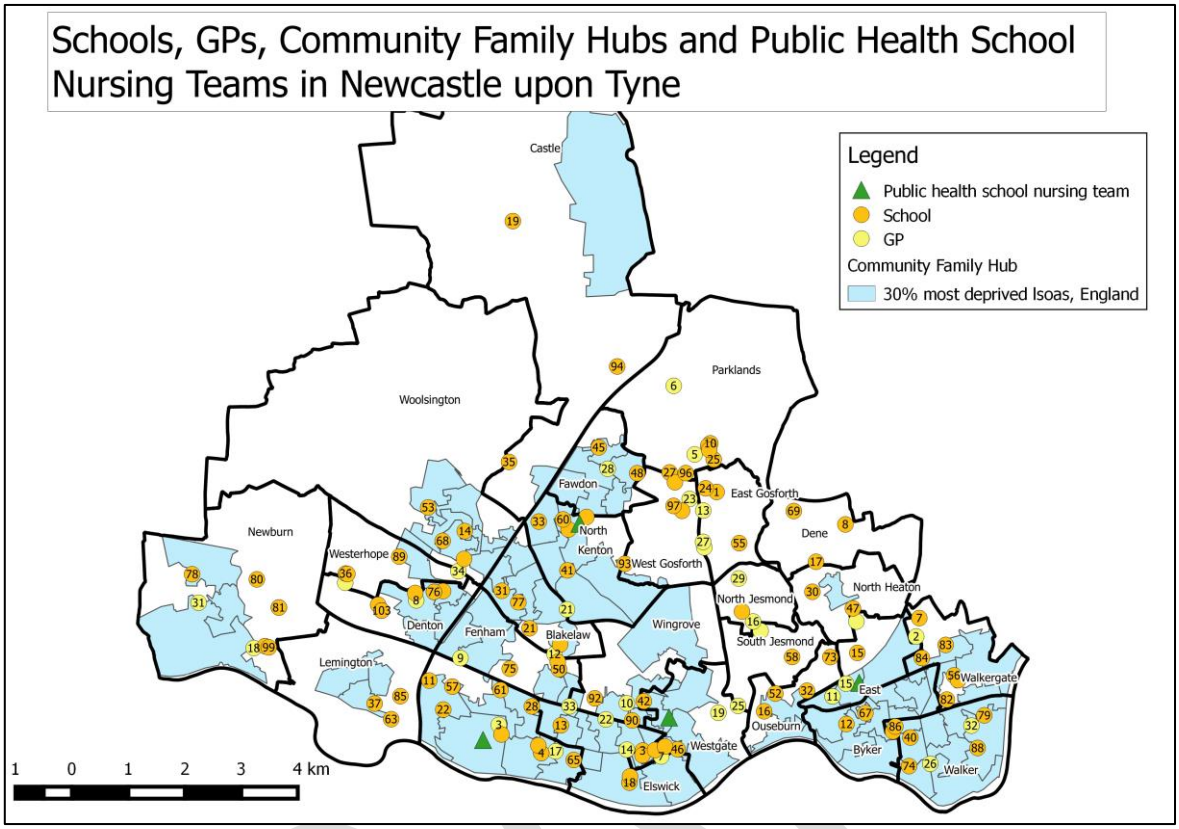
9. *Breastfeeding at 6-8 Weeks Statistics*, NHS England.
10. Schools and Students Health Education Unit (2015) *Health-Related Behaviour Questionnaire*.
11. *National Child Measurement Programme*, Health & Social Care Information Centre.
12. *Statistics on Ambulance Pick-Ups for Alcohol-Related Incidents*, North East Ambulance Service.
13. Public Health England (2016) *Young Peoples Substance Misuse Data: JSNA Support Pack*.
14. *Statistics on Female Genital Mutilation*, Health and Social Care Information Centre.
15. *Immunisation Statistics*, NHS England.

Glossary

BME – black and minority ethnicity; **ChiMat** – Child and Maternal Health Observatory; **CSC** – child social care; **DIP/TET/Polio/Pert** – diphtheria, tetanus, pertussis and polio booster; **DTaP/IPV/Hib** – diphtheria, tetanus, pertussis, polio and haemophilus influenza type B; **EEAST** – Early Education Additional Support Team; **FNP** – Family Nurse Partnership; **HCP** – Healthy Child Programme; **Hib/Men C** – haemophilus influenza type B and meningococcal group C; **HPV** – human papillomavirus; **HRBQ** – Health-Related Behaviour Questionnaire; **HSCIC** – Health & Social Care Information Centre; **IBA** – information and brief advice; **MMR** – measles, mumps and rubella; **NBV** – new birth visit; **NCMP** – National Child Measurement Programme; **NPS** – novel psychoactive substances; **PCV** – pneumococcal conjugate vaccine; **PHSE** – personal health and social education; **PHSN** – Public Health School Nursing; **RAG** – red amber green; **SEN** – special education needs.

Appendix



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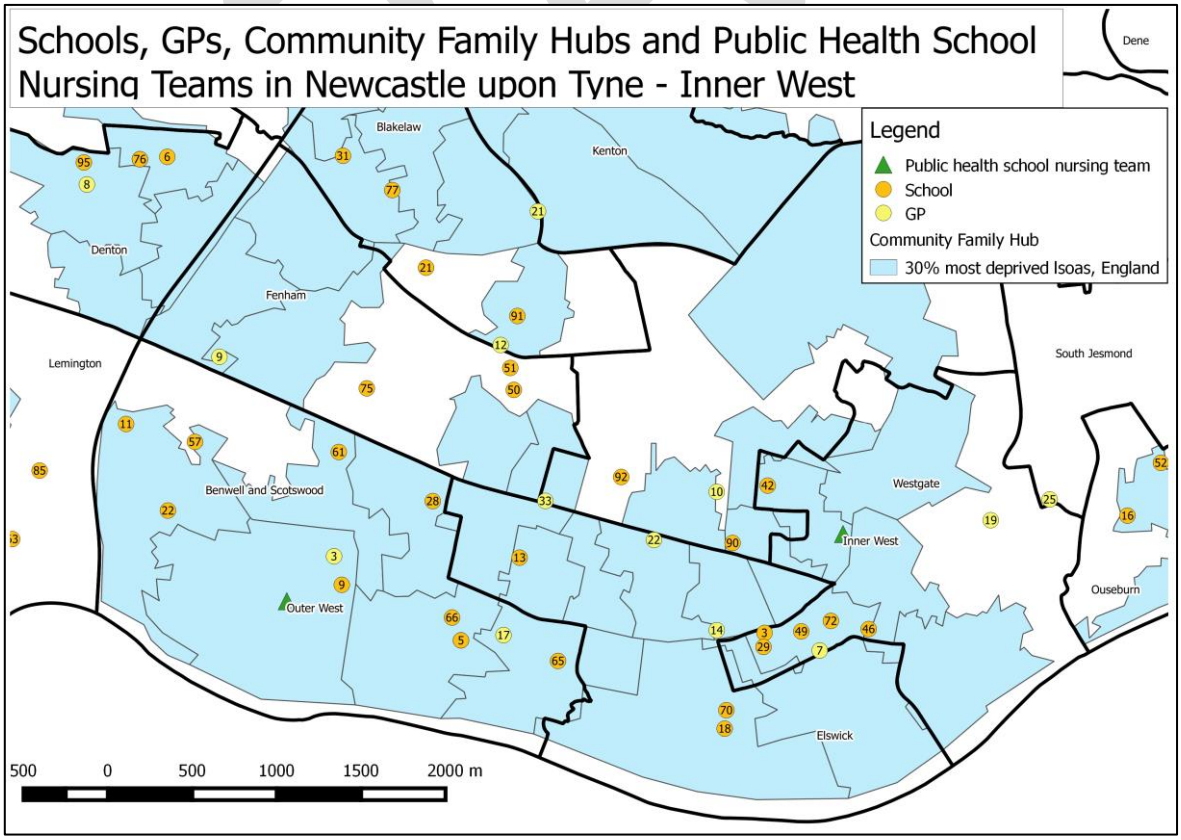

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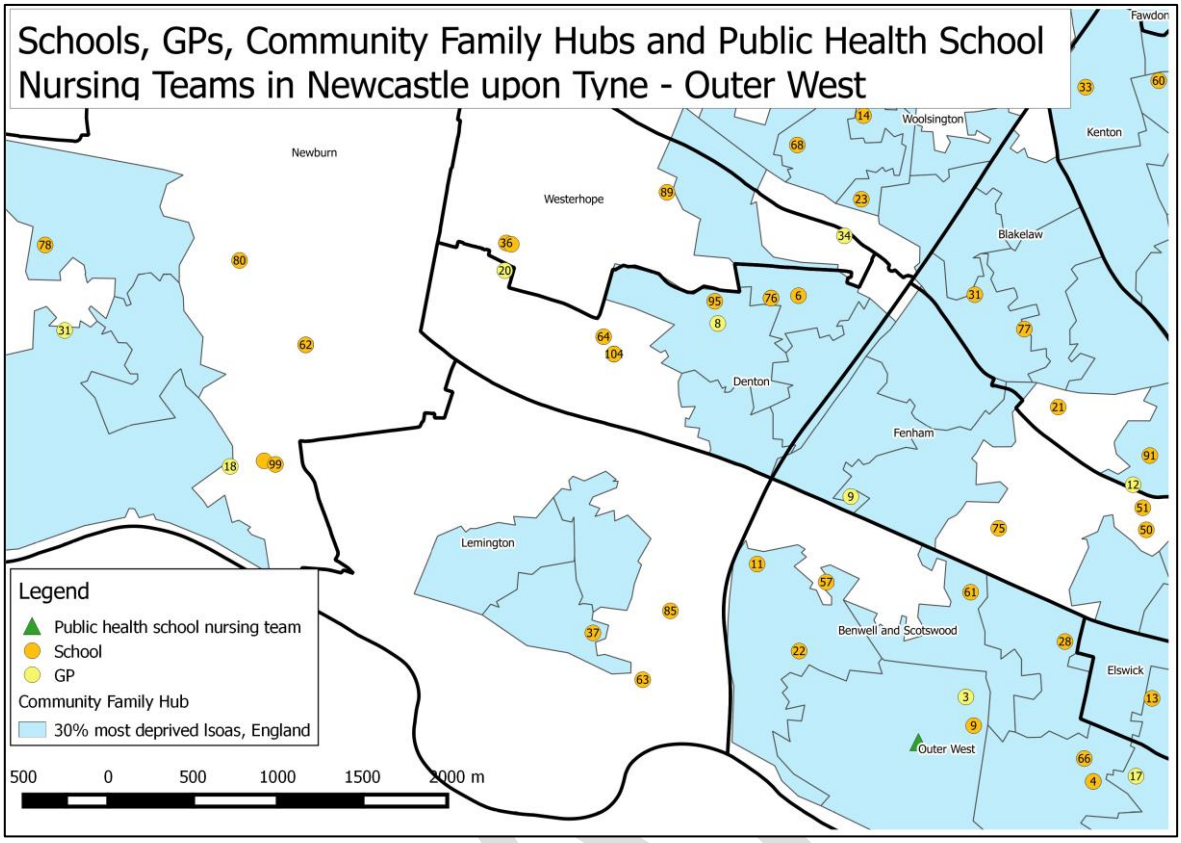

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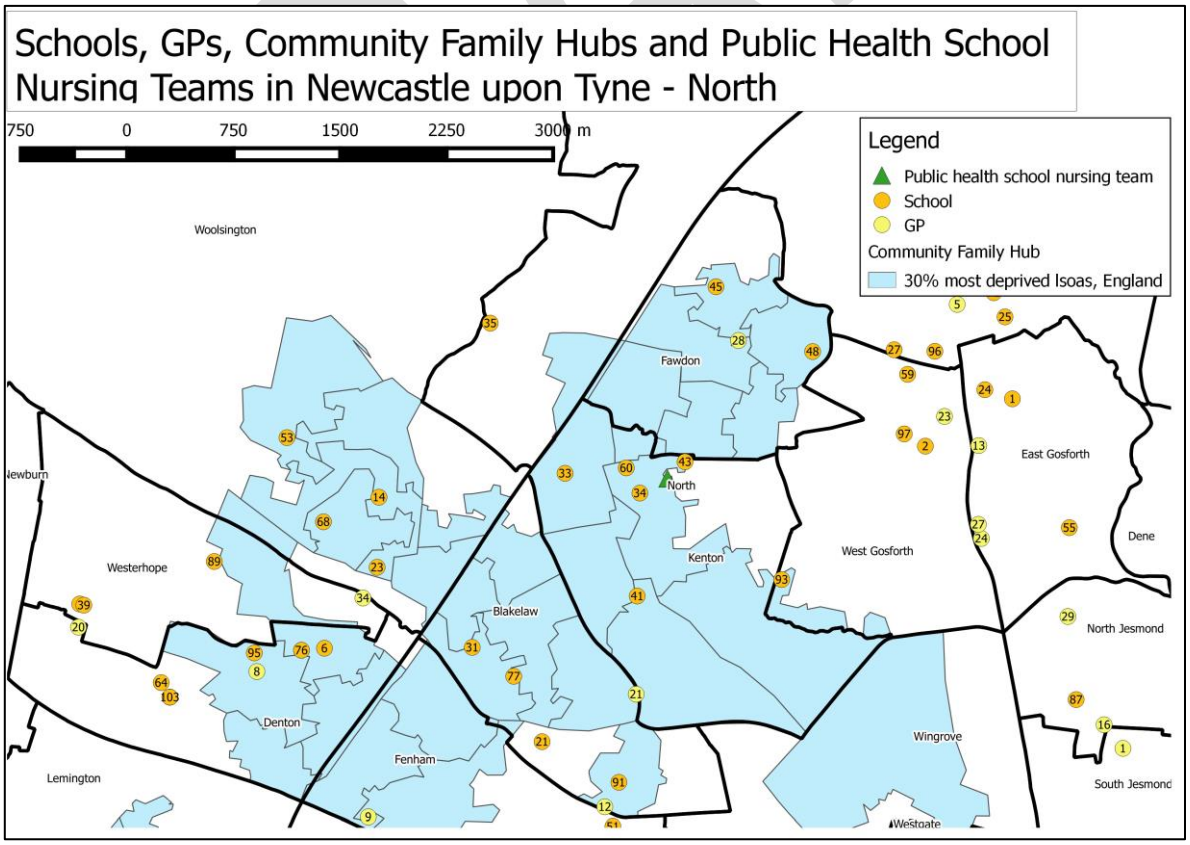

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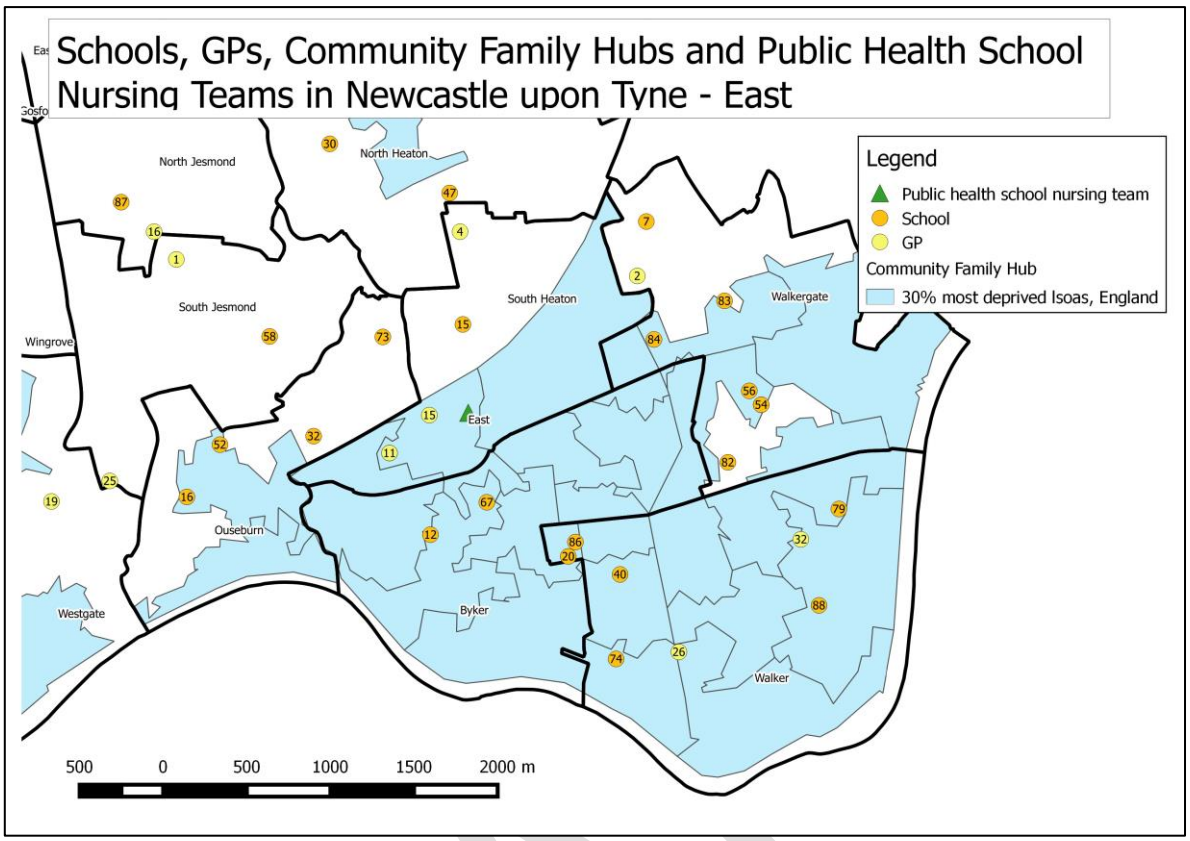

Figure A5. Crown copyright and database right 2016, Ordnance Survey [100019569].

Table A1: Corresponding list to map items, figures A1-A5.

Nr	School name
1	Archbishop Runcie CE (VA) First School
2	Archibald First School
3	Ashfield Nursery School
4	Atkinson Road Nursery School
5	Atkinson Road Primary School
6	Beech Hill Primary
7	Benfield School
8	Benton Park Primary School
9	Bridgewater Primary School
10	Broadway East First School
11	Broadwood Primary School
12	Byker Primary School
13	Canning Street Primary School
14	Cheviot Primary School
15	Chillingham Road Primary School
16	Christ Church C of E Primary School
17	Cragside Primary School
18	Cruddas Park Early Years Centre
19	Dinnington First School
20	Dunstanburgh Road Day Nursery
21	English Martyrs RC Primary School

22	Excelsior Academy
23	Farne Primary
24	Gosforth Central Middle School
25	Gosforth East Middle School
26	Gosforth Park First School
27	Grange First School
28	Hadrian School
29	Hawthorn Primary School
30	Heaton Manor School
31	Hilton Primary School
32	Hotspur Primary School
33	Kenton Bar Primary School
34	Kenton School
35	Kingston Park Primary School
36	Knoplaw Primary School
37	Lemington Riverside Primary School
38	Linhope
39	Milecastle Primary School
40	Monkchester Road Nursery School
41	Montagu Community Nursery
42	Moorside Community Primary School
43	Mountfield Primary School
44	Newburn Manor Nursery School
45	North Fawdon Primary School
46	Our Lady & St Anne's RC Primary School
47	Ravenswood Primary School
48	Regent Farm First School
49	Ryehill Community Nursery
50	Sacred Heart RC High School
51	Sacred Heart RC Primary School
52	Shieldfield Community Nursery
53	Simonside Community Primary School
54	Sir Charles Parsons School
55	South Gosforth First School
56	St Alban's RC Primary School
57	St Bede's RC Primary School
58	St Catherine's Catholic Primary School
59	St Charles RC Primary School
60	St Cuthbert's Catholic Primary School (Kenton)
61	St Cuthbert's Catholic High School
62	St Cuthbert's RC Primary School (Walbottle)
63	St George's RC Primary School
64	St John Vianney RC Primary School
65	St John's Primary School
66	St Joseph's RC Primary School

67	St Lawrence's RC Primary School
68	St Mark's RC Primary School
69	St Mary's RC School
70	St Michael's RC Primary School
71	St Oswald's Catholic Primary School
72	St Paul's CE Primary School
73	St Teresa's Catholic Primary School
74	St Vincent's RC Primary School
75	Stocksfield Avenue Primary School
76	Thomas Bewick School
77	Thomas Walling Primary School
78	Throckley Primary School
79	Tyneview Primary School
80	Walbottle Campus
81	Walbottle Village Primary School
82	Walker Technology College
83	Walkergate Early Years Centre
84	Walkergate Primary School
85	Waverley Primary School
86	Welbeck Primary School
87	West Jesmond Primary School
88	West Walker Primary School
89	Westerhope Primary School
90	Westgate Hill Primary School
91	Willow Avenue Community Nursery
92	Wingrove Primary School
93	Wyndham Primary School
94	Brunton Park First School
95	All Saints Church of England College Trust
96	Gosforth Academy
97	Gosforth Junior High Academy
98	Trinity School
99	Newburn Manor Primary School
100	Central Walker CE Primary
101	West Denton Primary School
102	West Newcastle Academy
103	Studio West Enterprise and Innovation Campus
104	Excelsior Primary

Nr	**GP name**
1	Avenue Medical Practice
2	Benfield Park Medical Group
3	Betts Avenue Medical Group
4	Biddlestone Health Group
5	Broadway Medical Group

6	Brunton Park Surgery
7	Cruddas Park Surgery
8	Denton Park Medical Group
9	Denton Turret Medical Centre
10	Dilston Medical Centre
11	Falcon Medical Group
12	Fenham Hall Surgery
13	Gosforth Memorial Medical Centre
14	Grainger and Scotswood Medical Practice
15	Heaton Road Surgery
16	Holly Medical Group
17	Holmside Medical Group
18	Newburn Surgery
19	Newcastle Medical Centre
20	Parkway Medical Centre
21	Ponteland Road Health Centre
22	Prospect House Medical Group
23	Regent Medical Centre
24	Roseworth Surgery
25	Saville Medical Group
26	St Anthony's Health Centre
27	The Grove Medical Group
28	The Park Medical Group
29	The Surgery
30	Thornfield Medical Group
31	Throckley Primary Care Centre
32	Walker Medical Group
33	West Road Medical Group
34	Westerhope Medical Group

School Nursing Team	**Location**
Inner West	Arthurs Hill Clinic
Outer West	Armstrong Road Clinic
North	Kenton Clinic
East	Geoffrey Rhodes Centre