Draft
Public Health
Annual Report
West Berkshire Council

Dr Lise Llewellyn
Strategic Director of Public Health
Public Health Services across Berkshire
Why children?

The Public Health role of local government is to improve the life expectancy of its residents and reduce health inequalities.

Across Berkshire, Wokingham, West Berkshire, Bracknell Forest and Windsor and Maidenhead have high levels of affluence and in line with this affluence have good life expectancy. Whereas Reading and Slough are less affluent and see more premature deaths (deaths before the age of 75 years).

Additionally within each LA we can see that life expectancy varies according to the affluence of the ward – 6.4 years for men and 6.9 years for women within West Berkshire.

Throughout the 20th century, infant mortality rates in England and Wales have steadily declined, largely due to ‘improved living conditions, diet and sanitation, birth control, advances in medical science and the availability of healthcare’. ¹ The reduction in infant mortality has been cited as the single greatest factor contributing to increased life expectancy over the past 100 years.

In his key report on health inequalities, Professor Marmot identified six policy priorities that would have an impact on reducing health inequalities in England. Two of these priorities focused on children:

“Give every child the best start in life”

and

“Enable all children, young people and adults to maximise their capabilities and have control over their lives” ²

The report clearly shows that disadvantage starts before birth and accumulates throughout life. Action to reduce health inequalities therefore must start before birth and be followed through the life of the child. Only then can the close links between early disadvantage and poor outcomes throughout life be broken.

For this reason, giving every child the best start in life is the highest priority recommendation given in the report to address inequalities.

This Annual Report presents some of examples across England and Berkshire of how health and other experiences of our children varies according to where they live. It also summarises some of the reasons for this pattern, and touches on other circumstances that alter the outcomes for children.

This year the commissioning responsibility of health visiting services has transferred into local government and this is an additional opportunity to support better outcomes for our children through fully integrating health and other early help services to support families and children.

I hope this report shows the importance of addressing children's health in relation to the public health duties in local government, and illustrates that whilst all families need support at some time, services should recognise that specific children and families need greater support. The evidence shows that if we give this support early we can make major improvements to the life chances of these families.
Infant Mortality

One of the most obvious measures of inequality is the rate of deaths in childhood. The level of childhood mortality can also be seen as a major indicator of the nation’s health as a whole. On a personal level, the death of a child is also probably the most difficult time in any family.

Death in childhood is measured in a number of ways.

**Still births** - children born after 24 weeks gestation where the child showed no signs of life

**Neonatal mortality** - deaths before age of 28 days per 1,000 live births

**Infant mortality** - deaths between birth and one year per 1,000 live births

**Child mortality** - deaths before age of 5 years

Infant mortality in England and Wales has decreased over the last 20 years.

In 1980, there were 12.0 deaths per 1,000 live births and in 2013 there were 3.8 deaths per 1,000 live births. This was the lowest level recorded in England and Wales.³

In contrast, 20 years ago mortality in the UK for under 19 years compared favourably with the rest of Europe. However, now we have one of the highest rates. If we compare ourselves against Sweden then every day 5 extra children under the age of 14 die in the UK.⁴ ⁵

Additionally, there is considerable variation across the regions in the UK with deaths between the ages of 1 to 17 having a three fold variation (7 to 23 deaths per 100,000 population), similarly infant mortality (2.2 to 8 per 1,000 live births) and perinatal mortality (4.2 – 12.2 per 1,000 live births).⁵
Most childhood deaths in England occur under 1 year of age, with the next highest rate being between 15-19 years.\(^5\)

**Age distribution of deaths among 0 to 19 year olds in the United Kingdom (2012)**

- Under 1: 61%
- 5-9: 6%
- 10-14: 6%
- 15-19: 17%
- 1-4: 10%

**Causes of childhood deaths**

Child death overview panels (CDOPs) are responsible for reviewing information on all unexpected child deaths.\(^6\) They record preventable child deaths and make recommendations to ensure that similar deaths are prevented in the future. Within Berkshire there is a CDOP that reviews cases across the county and reports into each Local Safeguarding Board.

CDOPs main functions are to collect and review details of children's deaths to identify:

- any matters of concern affecting the safety and welfare of children in the area of the authority
- any wider public health or safety concerns arising from a particular death or from a pattern of deaths in that area; and
- putting in place procedures for ensuring that there is a coordinated response by the authority, their Board partners and other relevant persons to an unexpected death

Within West Berkshire the main causes of children's deaths in 2015 were chromosomal, genetic and congenital anomalies perinatal and neonatal.

In older age groups accidents and injuries becoming increasingly important as causes of deaths and disability. Within this group road traffic accidents account for over a third of all incidents.

In 2011-13, 75 children were killed or seriously injured in road traffic accidents in Berkshire. The rate in England was 19 per 100,000 children (aged under 16). West Berkshire’s rates were similar to the national rate.
Childhood mortality

All children are exposed to injury as part of their everyday lives, but the burden is not evenly spread. Injuries disproportionately affect some children more than others.

Patterns of injuries vary by age, gender and also socio-economic class. The latter is complex, but key factors underpinning this relationship include:

- Lack of money (ability to buy safety equipment)
- Exposure to hazardous environments inside and outside the home (facilities for safe play; smoking parents; older wiring; lack of garden; small, cramped accommodation)
- Ability of parents/carers to supervise children (single parent families; parents’ maturity, awareness and experience; depression and family illness; large family size)
- Children’s attitudes and behaviour (risk taking)

Deaths from accidents and injuries are reducing, but at rates comparable to European countries that already have lower childhood mortality. This does not, therefore, explain our worsening relative position in childhood death rates within Europe.

The key areas where the UK rates appear to be relatively high are infant deaths and deaths among children and young people who have chronic conditions. The rate of improvement is relatively low in these key areas.
Wider influences

The link between deprivation and death rates are seen in infant deaths.

Infant mortality rates are highest for routine and manual occupations in England and Wales. In 2013, there were 5.4 deaths per 1,000 live births for these occupations, compared to 2.2 deaths per 1,000 live births for higher managerial, administrative and professional occupations and 3.2 deaths per 1,000 live births for intermediate occupations.

When the improvement in infant mortality is reviewed by ward, it is possible to see that wards that were relatively less deprived experienced a greater reduction in infant mortality rates compared to the national rates in England and Wales.¹ ⁸

Likewise when one looks at infant mortality across Berkshire, the differences in infant mortality according to deprivation can be seen.

West Berkshire is one of the most affluent areas in the country and we would therefore expect infant mortality to be lower than the England average. This is the case, as in 2011-13 there were 3.2 infant deaths per 1,000 live births compared to the England average of 4.0 per 1,000 live births.

In 2014, 10.2% (3,040) of our children in West Berkshire lived in poverty (defined as ‘children living in families in receipt of out of work benefits or tax credits where their reported income was <60% median income’).¹⁰ 9% of children (3,184) lived in the 10% most deprived wards in the Borough.
Studies have shown that babies who are breastfed have a 21% lower risk of death in their first year, compared with babies never breastfed. The reduction in risk rises to 38% if babies are breastfed for 3 months or more.\textsuperscript{12}

There is a clear association between reduced rates of breastfeeding and deprivation. The Infant Feeding Survey (2012) reported that in 2010 the prevalence of breastfeeding at all ages of babies up to nine months was highest among the highest Socio-Economic Classification group, whilst the incidence of breastfeeding decreased as deprivation levels increased.\textsuperscript{13}

In 2014/15, 74.3% of women giving birth initiated breastfeeding within the first 48 hours after delivery in England.\textsuperscript{10} Bracknell Forest, Reading, Slough, West Berkshire and RBWM all had significantly higher levels of breastfeeding initiation. Data for Wokingham was not published for data quality reasons.

The UK’s higher infant mortality rates are partly explained by the high numbers - nearly two thirds - of deaths that occur before a child’s first birthday that were born preterm and/or with low birth weight. UK rates of low birth weight and preterm births are higher than some other European countries, including the Nordic countries.

Rates of low birth weight are higher in less advantaged socio-economic groups\textsuperscript{11} and are particularly linked to a number of negative health behaviours such as poor prenatal care, substance abuse, poor nutrition during pregnancy and smoking which are more common in these groups.\textsuperscript{7}
Other inequalities

Smoking

Smoking reduces the amount of oxygen available to the foetus during pregnancy and increases the risk of low birth weight, a key risk for infant mortality. It has been shown that for first pregnancies smoking 20 cigarettes a day leads to a 56% increase in risk of infant death.

In the USA it was estimated that if all pregnant women stopped smoking, the number of foetal and infant deaths would be reduced by approximately 10%.

Smoking also has implications for the long term physical growth and intellectual development of a child. In 1999 the World Health Organisation concluded, “Parental smoking is associated with learning difficulties, behavioural problems and language impairment in children”. Studies consistently report that high social class is linked to low smoking rates before pregnancy and high rates of smoking cessation during pregnancy.

In 2014/15, 11.4% of mothers in England were smokers at the time of delivery. All of the Berkshire local authorities had a significantly lower level of smokers, from 6.3% in Wokingham to 9.2% in Reading.
Obesity

Maternal obesity is a significant risk to both the mothers’ health and that of the child.

The Confidential Enquiry in maternal and Child Health CEMACH report for the period 2003-2005 identified the risks of maternal obesity to the child as:

- stillbirth
- neonatal death
- congenital anomalies
- prematurity

National statistics for the prevalence of maternal obesity are not collected routinely in the UK. A national audit of extreme obesity during pregnancy between March 2007 and August 2008 identified that nearly one in every thousand women giving birth in the UK had a body mass index (BMI) of at least 50kg/m2 or weighs more than 140kg, whilst a later audit showed that 5% of women had a BMI of over 35 or weighed at least 100kg (a higher threshold than usually used for obesity). 2% had BMIs of over 40, which is morbidly obese.

UK studies within the last five years have shown an increase in the prevalence of obesity amongst pregnant women presenting to hospital for booking.

The impact of obesity on infant mortality and pregnancy complications is short term, but the impacts continue through the life of the child. There is a significant relationship between maternal obesity, large birth weight babies and the subsequent development of childhood and subsequent adult obesity.

A systematic review of the childhood predictors of adult obesity showed that maternal obesity and weight gain during pregnancy are related to higher BMI in childhood and subsequent obesity in adulthood. Children who are obese are more likely to have parents who are obese.

We have tried to describe in this report a ‘social gradient’ in health – that is a pattern in outcomes that show how outcomes get worse as the level of deprivation increases, such as infant mortality.

Sadly in the UK, socioeconomic inequalities have increased since the 1960s and this has led to wider inequalities in both child and adult obesity, with rates increasing most among those from poorer backgrounds. This worsening of health inequalities in relation to obesity is more marked for women. This pattern is repeated in children, with the socioeconomic inequalities in obesity being stronger in girls than boys.
The well described national picture that children in deprived areas are more obese is also mirrored in Berkshire. The more affluent local authority areas have lower levels of obesity in Berkshire, as shown in the table and map below. 18

<table>
<thead>
<tr>
<th>Local Authority</th>
<th>Reception</th>
<th>Year 6</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Most deprived</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slough</td>
<td>10.0%</td>
<td>24.5%</td>
</tr>
<tr>
<td>Reading</td>
<td>10.0%</td>
<td>19.8%</td>
</tr>
<tr>
<td>West Berkshire</td>
<td>7.2%</td>
<td>14.9%</td>
</tr>
<tr>
<td>Bracknell Forest</td>
<td>7.2%</td>
<td>14.6%</td>
</tr>
<tr>
<td>RBWM</td>
<td>5.6%</td>
<td>16.6%</td>
</tr>
<tr>
<td><strong>Least deprived</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wokingham</td>
<td>6.7%</td>
<td>13.8%</td>
</tr>
</tbody>
</table>

Locally within West Berkshire the pattern is shown across the wards and, as can be seen, the rate of obesity almost doubles between reception and year 6. 18
Obese children are more likely to have long terms health and other issues, such as being absent from school due to illness, experience health-related limitations and require more medical care than children of a normal weight. 19

**Type 2 diabetes** - Usually an adult illness, children as young as 7 are now being diagnosed with Type 2 diabetes in the UK. 95% of children diagnosed are overweight and 83% are obese. The rate of increase is higher in children from minority ethnic groups.

**Asthma** - a recent study has quantified that overweight and obese children are at a 40-50% increased risk of asthma compared to children of a normal weight.

**Cardiovascular (CVD)** - In the Netherlands, 62% of severely obese children aged under 12 years old have one or more CVD risk factors. Whilst in the USA, childhood obesity is associated with a quadrupled risk of adult hypertension.

Obesity not only increases cardiovascular risk in adulthood, but it is also associated with cardiovascular damage during childhood.

**Mental Health** - Strong evidence to suggest that by adolescence, there is increased risk of low self-regard and impaired quality of life.
Education and health

The relationship between health and education is complex. It is widely evidenced that in general those with higher educational attainment earn higher salaries. This may be the basis of the government policy which encourages more children to go to university as a route to promote economic growth.

Educational attainment is the most important of the factors examined in explaining poverty in both the UK and other EU countries studied. In the UK, those with a low level of educational attainment are almost five times as likely to be in poverty now as those with a high level of education. 20

However, the effect of education is not simply an increase in income. The association between education and health remains substantial and significant even after controls for income, job characteristics and family background are taken into account. The relationships of health and differences in valuing the future, access to health information, general cognitive skills, individual characteristics, rank in society, and social networks have also been tested. No single factor explains the relationship seen between education and improved health, however undoubtedly education has the potential to substantially improve health.

International and UK evidence shows that education is strongly linked to better health. Those with more years of schooling tend to have better health and well-being and healthier behaviours. 21

A substantial body of international evidence clearly shows that those with lower levels of education are more likely to die at a younger age and are at increased risk of poorer health throughout life than those with more education. 22

Cross country comparisons in Europe have produced similar findings. People with low education were more likely to report poor general health and functional limitations. Low education level has been associated with increased risk of death from lung cancer, stroke, cardiovascular disease and infectious diseases.

Associations have also been found between education and a range of illnesses including back pain, diabetes, asthma, dementia and depression.
Evidence suggests that those who achieve a higher level of educational attainment are more likely to engage in healthy behaviours and less likely to adopt unhealthy habits. For women in the United States, college education for a minimum of two years decreases the probability of smoking during pregnancy by 5.8% points. This is a large effect given that on average only 7.8% of the women in the sample smoked during pregnancy. 23

What influences education?

So if education has such a powerful impact on health, do all our children have the same educational success or the same chances of this success?

In the UK, the largest influence on a child’s success at school is their father’s education level. Young people are 7.5 times more likely to have a low educational outcome if their father has a low level of education, compared with a highly educated father. 19

The UK has a low level of earnings mobility across the generations, meaning that there is a strong ongoing relationship between the economic position of parents and that of their children. It could be inferred that improving educational attainment will have a lasting impact on the community in many aspects including health.

Lower income and social class does have a marked impact on educational attainment. Social class has a rapid impact on a child's attainment. Children with higher cognitive ability but from lower socio economic class in testing are overtaken in test results by children of lower ability but higher social background by the age of 7. 2
In the UK, children eligible for free school meals (FSM) are used as a proxy measure for families with lower incomes. To be eligible for FSM, the family must receive one of a series of income support mechanisms.

Pupils eligible for FSM are more likely to be absent from school than non-FSM pupils. In secondary schools the absence rate of FSM pupils is around double that of non-FSM pupils between Years 8 and 11. 

20% of boys eligible for free school meals did not obtain 5 or more GCSEs in 2013/14. This compares with 14% for girls eligible for free school meals and 6% for boys not eligible for free school meals. 10% of White British pupils eligible for free school meals did not obtain 5 or more GCSEs. This is a much higher proportion than that for any other ethnic group.

Interestingly, children eligible for FSM in cities generally enjoy a significant advantage over their peers who grow up in similar backgrounds, but in smaller cities and market towns. This reverses assumptions that educational inequality is an inner city burden.

In 2013/14, over 60% of pupils in Inner London who were eligible for Free School Meals achieved 5 A*-C grades at GCSE, which was almost 20% above the national average.

There has been good progress over the last decade across the UK, with more pupils from disadvantaged backgrounds achieving 5 A*-C grades at GCSE. However, the gap between these pupils and their wealthier classmates has remained the same or widened. In 2013/14, 71% of children in the South East who were not eligible for FSM achieved 5 A*-C grades at GCSE, but for poorer children this shockingly drops by 25% and even in inner London there is a 20% gap.

This ‘narrowing the gap’ issue is replicated in each of the local authorities in Berkshire. Bracknell Forest has the largest gap and, together with West Berkshire, is under the South East average attainment. In Slough we see the greatest success with exams in children eligible for FSM, where success is approaching the inner London achievement rates. In all authorities we must persist in tackling this enduring inequality.

<table>
<thead>
<tr>
<th>Area</th>
<th>Pupils eligible for Free School Meals</th>
<th>All other pupils</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bracknell Forest</td>
<td>27%</td>
<td>71%</td>
</tr>
<tr>
<td>Reading</td>
<td>38%</td>
<td>74%</td>
</tr>
<tr>
<td>Slough</td>
<td>50%</td>
<td>79%</td>
</tr>
<tr>
<td>West Berkshire</td>
<td>34%</td>
<td>75%</td>
</tr>
<tr>
<td>RBWM</td>
<td>43%</td>
<td>72%</td>
</tr>
<tr>
<td>Wokingham</td>
<td>44%</td>
<td>77%</td>
</tr>
<tr>
<td>London</td>
<td>56%</td>
<td>75%</td>
</tr>
<tr>
<td>South East</td>
<td>35%</td>
<td>71%</td>
</tr>
</tbody>
</table>
The difference in school attainment for children who receive Free School Meals is also evident in primary school. The Public Health Outcomes Framework includes 2 measurements of school readiness for children who are in Reception and Year 1 (ages 4 to 6). Evidence shows that gaps in attainment emerge early in life for children from different social backgrounds.  

Children are defined as having reached a good level of development at the end of Reception if they achieve the expected level in the early learning goals of personal, social and emotional development, physical development, communication and language and specific areas of maths and literacy. In 2013/14, 60.4% of children achieved a good level of development by the end of reception in England. This compared with 44.8% of children who were eligible for Free School Meals and was a gap of 15.6% points.

In 2013/14, only 36.1% of children eligible for free school meals in West Berkshire achieved a good level of development at the end of reception. While the cohort of eligible children in West Berkshire was low (169 children in Reception), this was one of the lowest achievement rates in England.

Children complete a phonics screening check at the end of Year 1. In 2013/14, 74.2% of pupils achieved the expected level in England. This compared to 61.3% of pupils who were eligible for Free School Meals, which was a 12.9% point gap.

West Berkshire's gap between pupils eligible for Free School Meals and all children was significantly worse than England’s at 24.4% points. Again the cohort in West Berkshire was quite small (185 children in Year 1), however this remains one of the lowest rates in England.

West Berkshire’s achievement gap was notably higher at 28.8% points and this was significantly worse than the England average.
Looked after children

As we have described in this report, affluence and deprivation are key factors that influence health. Improving the education of all our children should therefore improve the health of our children, by reducing the impact of low wages and poverty.

Only one or two studies have expressed these types of impacts in quantitative and costed terms. These have shown that the health benefit of education is equivalent to 15-60% of the wage effect. This is a substantial additional benefit that may indicate a major under-investment in education. 21

In a specific health area, an assessment of the monetary impact on the benefits of education for reducing depression were undertaken. This found that by taking women without qualifications to Level 2 (GCSE or equivalent) would reduce their risk of adult depression from 26% to 22% at the age of 42. It is estimated that this would reduce the total cost of depression for the population of interest by £200 million a year in the UK. 21

Inequalities in education and health drive a similar divide in the world of employment and later adult outcomes. The educational attainment gap often carries over into poor adult outcomes. For example, children on Free School Meals in Year 11 were more likely than those not eligible FSM to become NEET (Not in Employment, Education or Training) in the following three years. NEETs are more likely to have grown up in social disadvantaged households including low levels of employment, single parent families and parents with low educational qualifications.

<table>
<thead>
<tr>
<th>Area</th>
<th>Number</th>
<th>Rate per 10,000 population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bracknell Forest</td>
<td>105</td>
<td>37.0</td>
</tr>
<tr>
<td>Reading</td>
<td>205</td>
<td>57.0</td>
</tr>
<tr>
<td>Slough</td>
<td>195</td>
<td>49.0</td>
</tr>
<tr>
<td>West Berkshire</td>
<td>170</td>
<td>47.0</td>
</tr>
<tr>
<td>RBWM</td>
<td>100</td>
<td>30.0</td>
</tr>
<tr>
<td>Wokingham</td>
<td>75</td>
<td>20.0</td>
</tr>
<tr>
<td>Berkshire</td>
<td>850</td>
<td>40.3</td>
</tr>
<tr>
<td>England</td>
<td>69,540</td>
<td>60.0</td>
</tr>
</tbody>
</table>

Children eligible for free school meals are not the only children that do less well in terms of educational attainment and health outcomes. A child who is being looked after by the local authority is known as a child in care. They might be living:

- with foster parents
- at home with their parents under supervision of social services
- in residential children's homes
- other residential settings like schools or secure units

The rate of looked after children in Berkshire is below the England average. This is to be expected, since the risk of becoming a looked after child is related strongly to deprivation – overcrowding, single parent families, reliance on income support. However, there are still 850 children in this vulnerable group.
The educational achievement of looked after children as a group remains low and the Children Act 1989 places a duty on local authorities to promote their educational achievement. Worryingly, only 15% of looked after children in the South East achieved 5 GCSEs graded A*-C in 2014 (Local numbers cannot be shown as they are too small to publish.)

Whilst each looked after child must have a personal educational plan that promotes the quality of support and personal achievement, attendance at school in this vulnerable group of children is often worse than their counterparts and has been so for a significant period.

Locally we can seen that absence rates fluctuate quite markedly across the years, which reflect the small and changing numbers of children in each Local Authority.

<table>
<thead>
<tr>
<th>Area</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bracknell Forest</td>
<td>1.0</td>
<td>1.1</td>
<td>0.5</td>
<td>1.7</td>
<td>1.0</td>
</tr>
<tr>
<td>Reading</td>
<td>0.6</td>
<td>0.8</td>
<td>1.6</td>
<td>1.8</td>
<td>0.7</td>
</tr>
<tr>
<td>Slough</td>
<td>2.6</td>
<td>0.7</td>
<td>0.5</td>
<td>0.5</td>
<td>0.6</td>
</tr>
<tr>
<td>West Berkshire</td>
<td>0.4</td>
<td>1.0</td>
<td>0.2</td>
<td>1.6</td>
<td>0.8</td>
</tr>
<tr>
<td>RBWM</td>
<td>0.8</td>
<td>1.7</td>
<td>0.7</td>
<td>0.0</td>
<td>0.3</td>
</tr>
<tr>
<td>Wokingham</td>
<td>1.4</td>
<td>1.3</td>
<td>0.3</td>
<td>1.2</td>
<td>1.1</td>
</tr>
<tr>
<td>South East</td>
<td>1.5</td>
<td>1.4</td>
<td>1.2</td>
<td>1.1</td>
<td>1.2</td>
</tr>
<tr>
<td>England</td>
<td>1.5</td>
<td>1.5</td>
<td>1.2</td>
<td>1.1</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Looked after children and young people share many of the same health risks and problems as their peers, but often to a greater degree. Children often enter the care system with a worse level of health than their peers, in part due to the impact of poverty, poor parenting, chaotic lifestyles and abuse or neglect. Longer term outcomes for looked after children remain worse than their peers.

Mental health disorders are more common in looked after children
- 50% of boys and 33% of girls aged 5-10 have an identifiable mental disorder.
- 55% of boys and 43% of girls aged 11-15 have an identifiable mental disorder.
- This compares to around 10% of the general population aged 5 to 15

A major survey of looked after children found that two thirds had at least one physical health complaint. Problems with speech and language, bedwetting, co-ordination difficulties and eye or sight problems were more common.

Young people leaving care are particularly vulnerable. Both young women and young men are more likely than their peers to be teenage parents. Studies have shown that 25-50% of young women leaving care become pregnant within 18 to 24 months of leaving care.

The health of care leavers also worsens in the first year after leaving care. They are almost twice as likely to have problems with drugs or alcohol and report mental health problems. ‘Other health problems’ such as asthma, weight loss, allergies and flu are also far more likely.
One of the key duties of the Children’s Act requires the local authority to assess the health of all their looked after children annually. This includes arrangements for mental and dental care, such as immunisations and dental check-ups, as well as a short behavioural screening questionnaire (SDQ).

The SDQ should be completed for each looked after child between the ages of 4 and 16 and is completed by the main carer. It assesses:

- emotional symptoms
- conduct problems
- hyperactivity/inattention
- peer relationship problems
- prosocial behaviour

The SDQ is an important measure of emotional distress in this vulnerable group. In 2014, 68% of looked after children had an SDQ score submitted in England, but the submission rate across Berkshire did vary significantly from 29% in West Berkshire to 93% in Bracknell Forest.

Higher SDQ scores highlight concerns with the emotional and behavioural health of children. The average score for all 5 to 15 year olds in England is 8.4, however the scores for looked after children are higher at 13.9 in 2014. This is as the research findings would suggest. Higher scores are associated with poorer health experiences and highlight the particular and consistent health needs of this group.
So far in this report the evidence shows that deprivation is linked to medium and longer term poorer health outcomes and educational attainment. However, the SDQ scores in the health assessments of looked after children clearly show that there are immediate mental health issues for this vulnerable group.

The Children's Act clearly gives responsibility to local government and health services to work together to ensure that children receive the services they need in response to their health assessments. National evidence shows that there is substantial local variation in the availability of services with a large focus on mental health services to meet the needs of children and young people, including those who are looked after. Increasingly, innovative Children and Adolescent Mental Health Service (CAMHS) partnerships are providing designated or targeted CAMHS provision for looked after children.

Looked after children are not the only at risk group for worsened mental health. There is well documented evidence that children in poverty are also at increased risk of poor mental health.

For example, a recent survey in Scotland showed that people from the most deprived areas are more than three times as likely to be treated for mental illness. The report stated: "The more deprived an area, the higher its rate of psychiatric inpatient discharges". 29
Use of hospital services

So far in this report we can see that not only does deprivation have an impact on longer term health outcomes, but also effects educational levels, which is a key way to actually reduce deprivation. We can now explore how deprivation also effects immediate use of health and other services.

The consensus of the evidence available on the relationship of health service use in relation to deprivation is that GP use is broadly equitable by social economic group. However, evidence highlights a number of systematic differences between the use of secondary care by residents in deprived areas and compared to those in more affluent areas.

Compared with people in more affluent area, those living in deprived areas:
- use more emergency care
- use a similar amount of elective care
- attend A & E more frequently
- access outpatient care more via emergency channels
- fail to attend a larger proportion of outpatient appointments

The pattern of A & E attendance has the steepest gradient, particularly in the relationship between attendance and the most deprived communities.

From 2008/09 to 2012/13, twice the number of attendances in all types of A & E departments have been by those living in the most deprived 10% of areas, compared to those in the least deprived 10%. This national picture is replicated in the pattern of children’s attendances in Berkshire.
Studies demonstrate a relationship between A & E use and deprivation for all assessed triage severities. This is most noticeable at the most severe end of the triage category, with five times the rate in most deprived communities. This compares to twice the rate for more minor illnesses and injuries. The higher use of A & E in more deprived communities can be partly explained by higher rates of illness and accidents, with the rate of accidents more prevalent in lower SEC groups. This also shows differing behaviours in response to illness and injury.

It is not just the relationships between deprivation and A & E use that is of relevance here. Children are key users of services, especially A & E, and are a key area of pressure in the NHS currently.

In recent years, numbers of A & E attendances have risen faster than the growth in the population nationally. This is largely driven by more minor (type 3) types of attendances which have risen at 11 times the rate of population, though the recent trend has dipped. Nationally the highest percentage of A & E attendances are for very young children and those in their early twenties.

In 2012/13, there were at least 500 attendances at type 1 departments for every 1,000 people aged either under 2 or over 83 years in England. If this aspect of care is reviewed in more depth nationally, the proportion of attendances for over 64s at type 3 departments decreased by 2.2% points between 2008/09 and 2012/13. The proportion of attendances for under 10s increased by 3.4% points.

This pattern is also seen locally, driven by a rise in the 0-4 age groups.

The total number of A & E attendances in Berkshire has increased over the last two years. Children aged 0 to 10 have seen an increase of over 6% in this time period.

0-4 year olds use A & E the most across the UK, accounting for 3% of all attendances. People aged 80 account for less than 1% of all attendances.

Similarly, the 0-4 age group has the highest number of emergency admissions, with approximately 225,000 nationally. This is a similar rate of attendances as 80 year olds.
In 2013/14, there were 31,493 A&E attendances for children aged 0-4 years in Berkshire. Reading and Slough had the highest rates, and Reading’s were significantly worse than the national rate at 763 per 1,000 population. This higher rate could be driven by the local proximity of the A&E department, as all rates of attendance are higher in this local authority.  

In each local authority, the highest rate of admissions were in the 0-4 year old age band. Other Berkshire local authorities had significantly better rates compared to England.

The rate of A & E attendances for 0-4 year olds is stable in all of the Berkshire local authorities, apart from Reading where it has increased over the past two years with a large increase from 2012/13 to 2013/14.

Finally whilst national data shows less of a relationship between inpatient admissions and deprivation, across all of the Berkshire local authorities it can been that children in more deprived communities are admitted more than their counterparts in more affluent areas.
Conclusions

The report pulls together a snapshot of the inequalities that exist with our children currently, and also describes the impact of these inequalities in later life and on current services. The evidence shows that if we are serious in addressing inequalities in our communities then the early years period presents a key intervention point.

The change of responsibility in commissioning health visiting services provides an opportunity to integrate how we support families and communities. Local authorities know their communities and understand local need, so links can be made with established wider services, such as housing and early years services, to enable the integration of children’s services.

Babies are born with only 25% of their brains developed, but by the age of 3 their brains are 80% developed. If neglect and other adverse experiences occur in this period, it can profoundly effect a child’s development. 33

The mandated services for health visiting are :
• antenatal check at 28 weeks
• new born visit;
• 6 to 8 week review;
• 12 month assessment;
• 2 to 2½ year assessments

As the only universal service, health visitors can develop close working relationship with families and identify any support required. This can then be delivered through the community or multi disciplinary services.

In addition, health visitors are trained in recognising the risk factors, triggers of concern, and signs of abuse and neglect in children. They also know what needs to be done to protect them.

In a time of budgetary constraints the tendency would be to focus services on children once they have presented with an issue to prevent escalation. However return on investment studies on a range of well-designed early years’ interventions show that the benefits significantly exceed their costs: ranging from 75% to over 1,000% higher than costs. In addition the early years foundation estimates that spending on ‘late intervention’ on children (i.e. spending which could have been prevented) costs the NHS £3bn per year. 34

A recently published OFSTED Chief Inspector’s report identifies the important role that health visitors have in school readiness and the take up of free childcare for disadvantaged children has on system wide economic and societal benefits. 35

Universal support to families will enable us to prevent issues developing and act quickly when problems occur. However integrating services in communities is not the only opportunity to address the current inequalities in health that exist in our population. The NHS tends to take a clinical/medical view of children and families, whilst local government is more adept at supporting at risk individuals and working in communities. If the NHS also adopted this approach then prevention could be targeted in a broader way and address a wider range of issues rather than specific clinical conditions and have a larger impact.
“Building their essential social and emotional capabilities means children are less likely to adopt antisocial or violent behaviour throughout life. It means fewer disruptive toddlers, fewer unmanageable school children, fewer young people engaging in crime and antisocial behaviour. Early intervention can forestall the physical and mental health problems that commonly perpetuate a cycle of dysfunction.”

Graham Allen Early Intervention: The Next Steps 33
References

2 The Marmot Review (2010); Fair society, Healthy Lives: A Strategic Review of Health Inequalities in England Post-2010; University College London
3 Office for National Statistics (2014); Child Mortality Statistics 2013
4 Wolfe, I et al (2013); ‘Health services for children in Western Europe ‘; Lancet 2013 April, 381(9873) p1224-34
5 Annual Report of the Chief Medical Officer 2012 (2013); Our Children Deserve Better: Prevention Pays; Department of Health
6 HM Government (2015); Working together to safeguard children: A guide to inter-agency working to safeguard and promote the welfare of children
7 Towner, E et al (2005); Injuries in children aged 0–14 years and inequalities : A report prepared for the Health Development Agency; Department of Child Health, University of Newcastle upon Tyne
8 Wolfe, I et al (2014); Why children die: death in infants, children and young people in the UK: Part A ; Royal College of Paediatrics and Child Health and National Children’s Bureau
9 Office for National Statistics (2015); Childhood, Infant and Perinatal Mortality in England and Wales, 2013
10 Public Health Outcomes Framework 2015
13 McAndrew, F et (2012); Infant Feeding Survey 2010; Health and Social Care Information Centre
14 Richardson, K (2001); Smoking, Low Income and Health Inequalities: Thematic Discussion Document; Report for Action on Smoking and Health and the Health Development Agency
16 Confidential Enquiry into Maternal and Child Health (2007); Saving Mother’s Lives: Reviewing maternal deaths to make motherhood safer -2003-2005
17 Public Health England (2015); Maternal Obesity
18 Health & Social Care Information Centre (2015); National Child Measurement programme: England, 2014/15 school year
20 Office for National Statistics (2014); Intergenerational transmission of disadvantage in the UK & EU
21 Feinstein, L et al (2006); ‘What are the effects of education on health?’; Measuring the effects of education on health and civic engagements: Proceedings of Copenhagen Symposium; OECD
22 Cutler, DM et al (2007); ‘Education and Health’; National Poverty Center Policy Brief #9; The University of Michigan
23 Higgins, C et al (2008); Health Impacts of Education: A Review; Institute of Public Health in Ireland
24 The Poverty Site
25 Department for Education (2015); GCSE and equivalent attainment by pupil characteristic: 2014
26 Department for Education (2015); Children looked after in England including adoption: 2014 to 2015
27 Department for Education (2015); Outcomes for children looked after by local authorities: 2014
28 Department for Children, Schools and Families (2009); Statutory Guidance on Promoting the Health and Well-being of Looked After Children
29 Information Services Division Scotland (2015); Mental Health Hospital Inpatient Care: Trends up to 31 March 2014; 30 McCormick, B et al (2012); Are hospitals used differently in deprived areas? Evidence to identify commissioning challenges; Centre for Health Service Economics & Organisation
31 Health & Social Care Information Centre (2013); Focus on Accident & Emergency: December 2013
33 Allen, G (2011); Early Interventions: The Next Steps; HM Government
34 Department of Health (2015); Universal Health Visitor Reviews: Advice for local authorities in delivery of the mandated health visitor reviews from 1 Oct 2015
35 OFSTED (2015); Report of Her Majesty’s Chief Inspector of Education, Children’s Services and Skills 205: Early Years