Public Health
Annual Report
Reading Borough Council

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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 Local Authorities we can see that life expectancy varies according to the affluence of the ward – 10.2 years for men and 5.2 years for women within Reading.

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 2 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 2010 Marmot[1] identified 6 policy priorities that would have an impact on reducing health inequalities in England . Two of these priorities focused on children:

"Giving every child the best start" *and*

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

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 the health and other experiences of our children varies according to where they live and summarises some of the reasons for this pattern, but also 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 some children and families need greater support.

Positively 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 inequalities is in rates of death and additionally the level of childhood mortality can be seen as a major indicator of the health of a nation [1,2].

On a personal level the death of a child is the 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

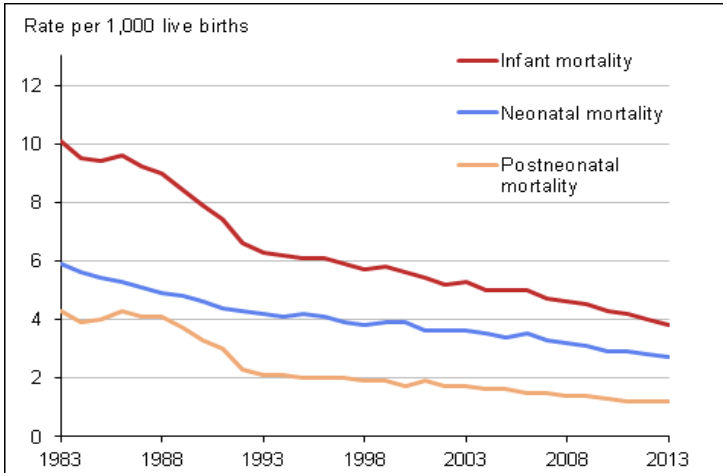
Neonatal mortality - deaths before age of 28 days per 1000 live births

Infant mortality - deaths between birth and one year per 1000 live births

Child mortality - deaths before age of 5 years

Infant mortality in the UK has decreased in the last 20 years - see figure

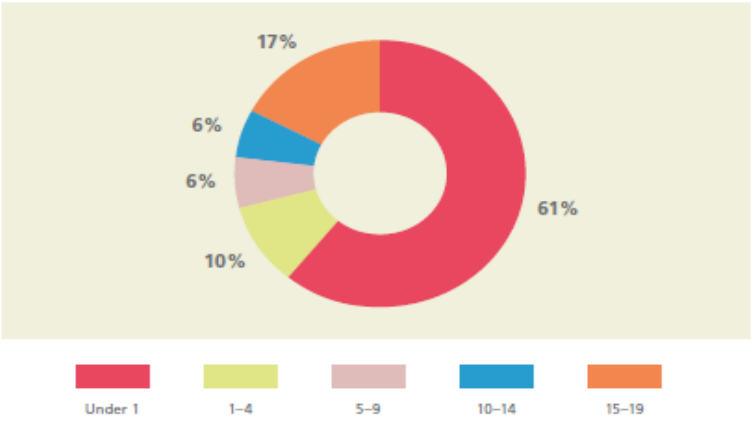
- 2011 - infant mortality rate - 4.2 deaths per 1,000 live births, the lowest level recorded in E&W
- 2010 - 4.3 deaths per 1,000 live births
- 1981 - 11.1 deaths per 1,000 live births [3]



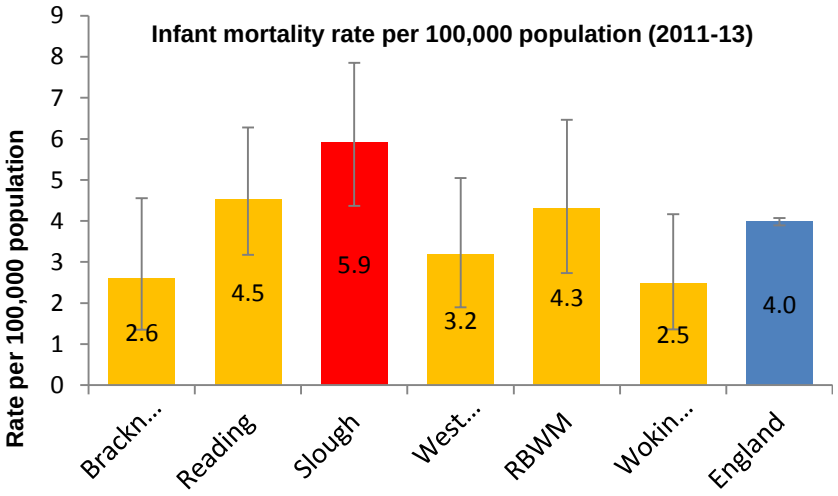
However for 20 years ago mortality in the UK for under 19 years compared favourably with the rest of Europe. Now we are among the highest and if we compare ourselves against Sweden **then every day 5 extra children under the age of 14 die in the UK .** [4 5]

Additionally there is considerable variation across the regions in the UK with deaths between the ages of 1 – 17 having a three fold variation (7-23 deaths per100,000) , similarly infant mortality (2.2 – 8 per100,000) and perinatal (4,2 – 12,2 per 100,000). [5]

As can be seen below across England most deaths occur under 1 years of age, with the next highest rate being between 15-19 years[5]



Data source: "Deaths by single year of age tables, England and Wales, 2012" ONS http://www.ons.gov.uk/ons/rel/vsob1/death-reg-sum-tables/2012/rft-deaths-syoa-tables--2012.xls



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 Berkshire and reports into each local safeguarding Board.

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

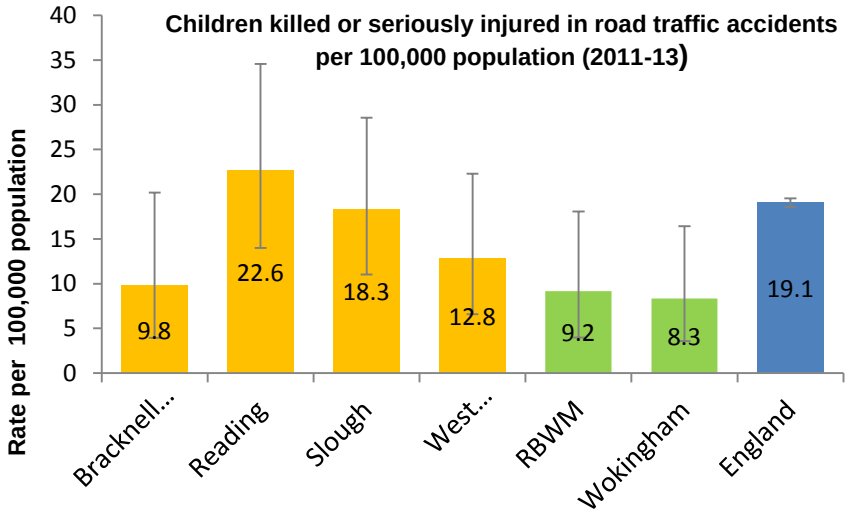
- any matters of concern affecting the safety and welfare of children in the area of the authority
- any wider public health or safety concerns arising from a particular death or from a pattern of deaths in that area; and
- putting in place procedures for ensuring that there is a coordinated response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

Within Reading 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). Wokingham and Royal Borough Windsor and Maidenhead's rates were significantly lower than England's, while the other Berkshire LAs were similar to the national rates

Childhood mortality

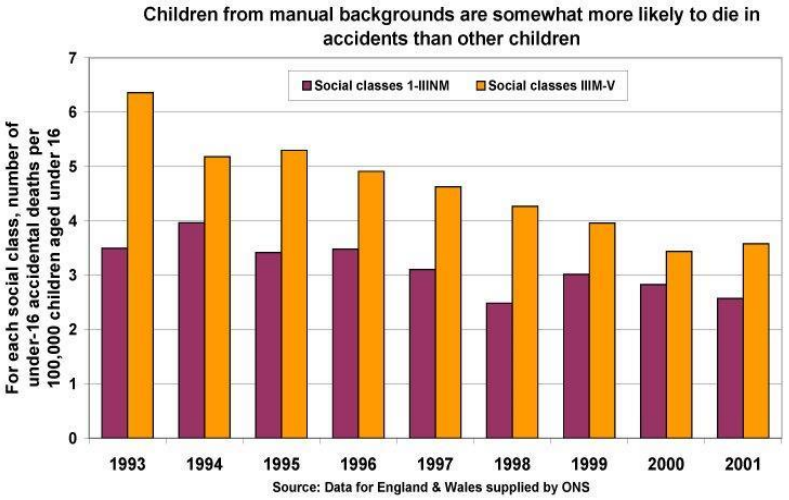


All children are exposed to injury as part of their everyday lives, but the burden is not evenly spread: injuries disproportionately affect some children more than others

Patterns of injuries vary by age, gender but also by 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) [7]

- 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 those European countries with lower childhood mortality. Therefore do not 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.[8] Whilst improving , the rate of improvement is relatively low in these key areas.

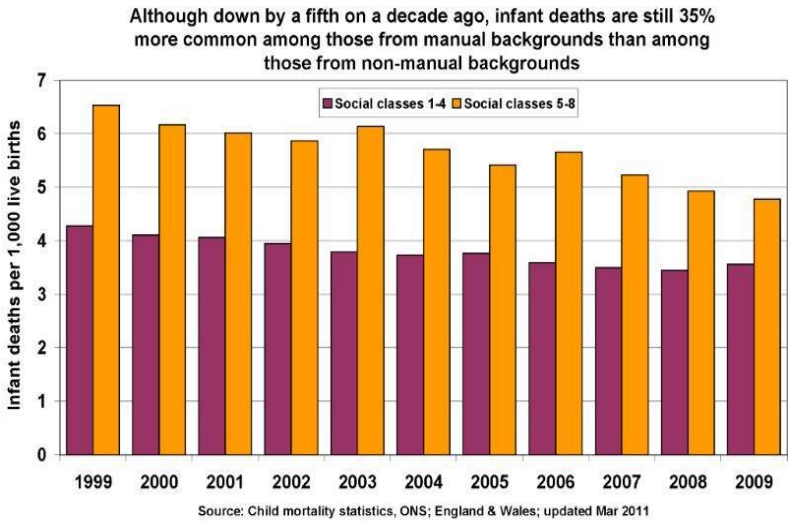
Wider influences

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

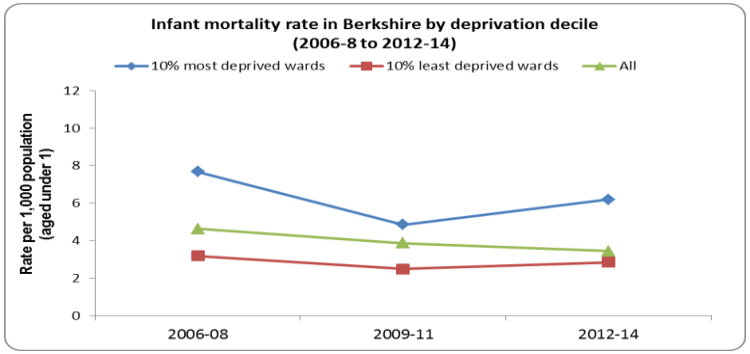
Infant mortality rates are highest for the routine and manual occupations with 5.4 deaths per 1,000 live births.

In contrast there were 2.2 deaths per 1,000 live births for higher managerial, administrative and professional occupations.
3.2 deaths per 1,000 live births for intermediate occupations.

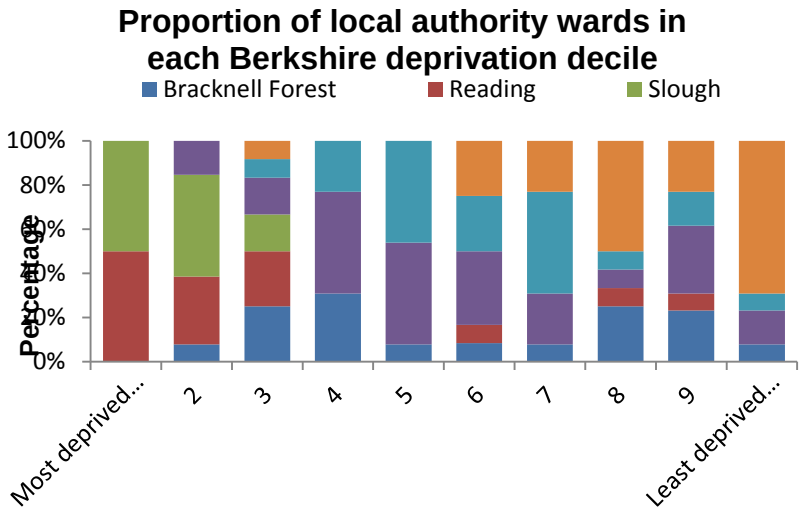
When the improvement in infant mortality is reviewed by ward then it is seen that wards which became relatively less deprived experienced a reduction in infant mortality rates greater than that for national rates in England and Wales. [1 8 9]



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



- Reading when compared to other authorities has average / just below average levels of deprivation being in decile 6 (where 10 is the most affluent) in the country. Therefore we would expect mortality levels to be around the England average, though the levels are slightly worse than the England average (4.5 v 4.0 deaths per1000 live births);
- In 2014 19.4% (5900) of our children in Reading live in poverty ' – defined as children living in families in receipt of out of work benefits or tax credits where their reported income is <60% median income';
- and 6000 children (16.8 %) live in the most deprived wards in Reading. [10]



The higher infant mortality rates in the UK, are partly explained by the high numbers - nearly two thirds - of deaths that occur before their first birthday 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.

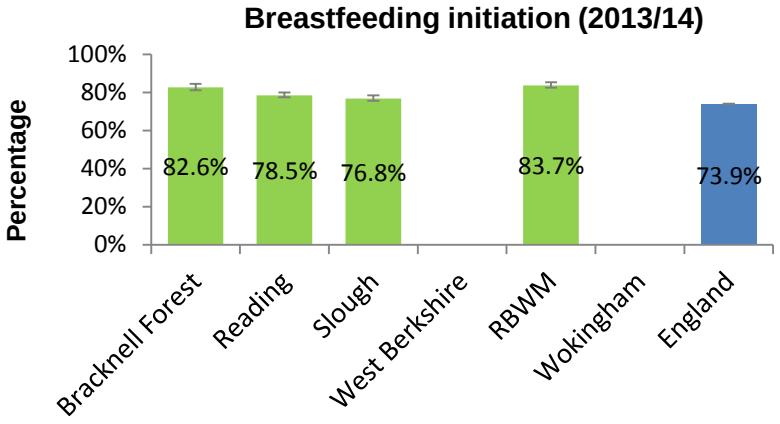
Rates of low birth weight are higher in less advantaged socio-economic groups [11] and are particularly linked to a number of negative health behaviours such as poor prenatal care, substance abuse, poor nutrition during pregnancy and smoking which are more common in these groups [7] .

Breast feeding

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. [12]

There is a clear association between reduced rates of breastfeeding and deprivation.

The Infant Feeding Survey published in 2012 reported that, in 2010 the prevalence of breastfeeding at all ages of baby up to nine months was highest among the highest SEC group , whilst the incidence of breastfeeding decreased as deprivation levels increased.



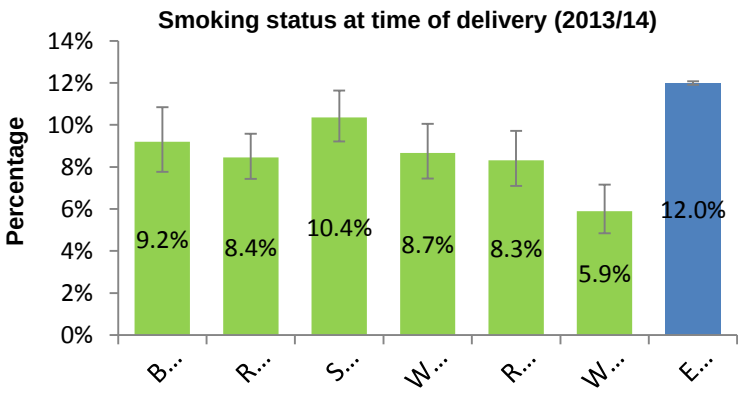
Other inequalities

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. [13] It has been shown that for first pregnancies smoking 20 cigarettes a day leads to a 56% increase in risk of infant death. [14]

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%.

But also smoking also as implications for the long term physical growth and intellectual development of the child. In 1999 WHO 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 (Graham 2003)*



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 identifies the risks of maternal obesity to the child as:[14]

- 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 has 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 4O – morbid obesity.

And unfortunately in line with the trend that over recent years there are increasing numbers of women who are 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.

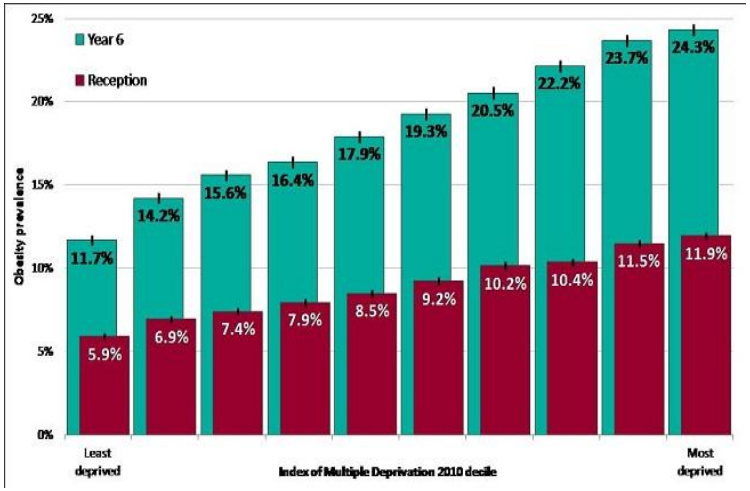
The impact of obesity on infant mortality and pregnancy complications is short term but the impacts continue through the life of the child.

Obesity during pregnancy continues to have an impact 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 [15]

We have tried to describe in this report a 'social gradient' in health – that is a pattern in outcomes that shows that outcomes get worse as the level of deprivation increases e.g. 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 more deprived areas are more obese, is mirrored in Berkshire

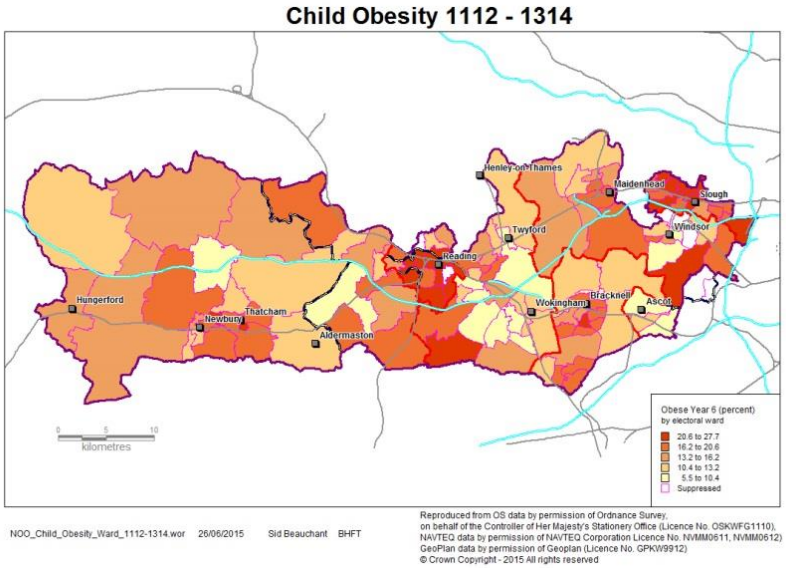


- Source: National Child Measurement Programme

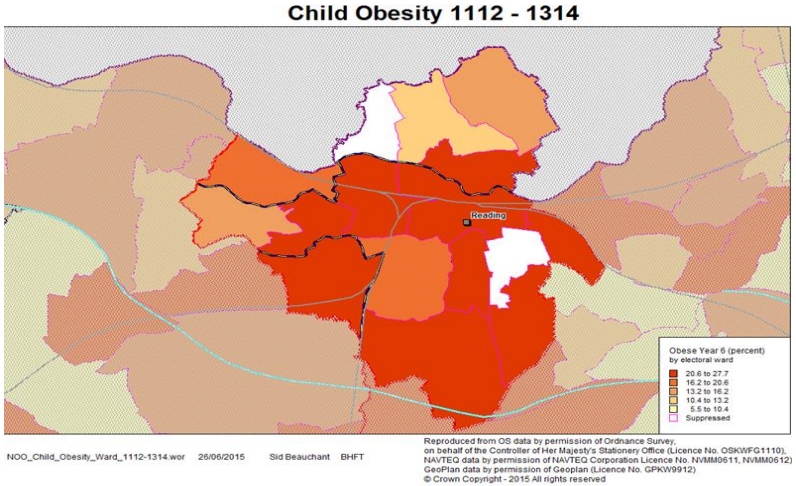
Across Berkshire we can easily see that more affluent local government areas have less obesity

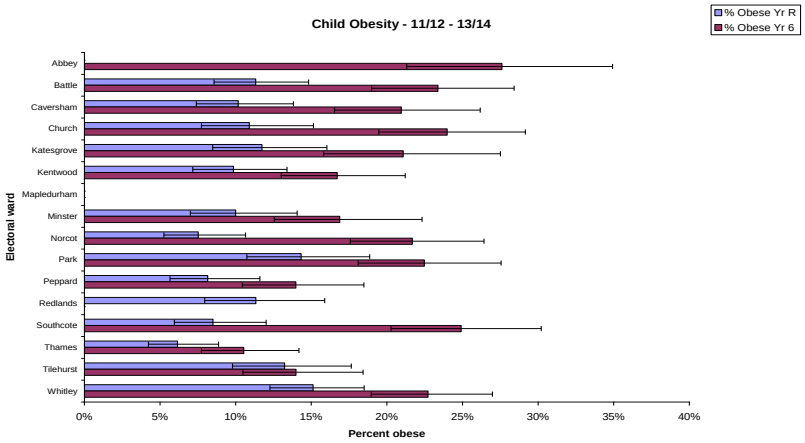
	4-5 year olds who are obese	
Local Authority Name	%	Number
Windsor and Maidenhead	6.8	130
West Berkshire	6.4	126
Reading	10.8	249
Bracknell Forest	6.4	109
Wokingham	6.6	143
Slough	11.9	300

And in year 6 the same pattern is repeated



Locally in within Reading the pattern is also shown across the wards, and as can be seen the rate of obesity almost Doubles between reception and year 6 .





The importance of this information is that obese children are more likely to have long terms health and other issues,: be absent from school due to illness, experience health-related limitations and require more medical care than normal weight children.[16]

Type 2 diabetes **-** Usually an adult illness children as young as 7 are being diagnosed in the UK. In in children 95% of cases were overweight and 83% 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 normal weight children.

Cardiovascular (CVD) **-** In Netherlands 62% of young (≤12 years of age) severely obese children already had 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

This relationship between health and education is complex.

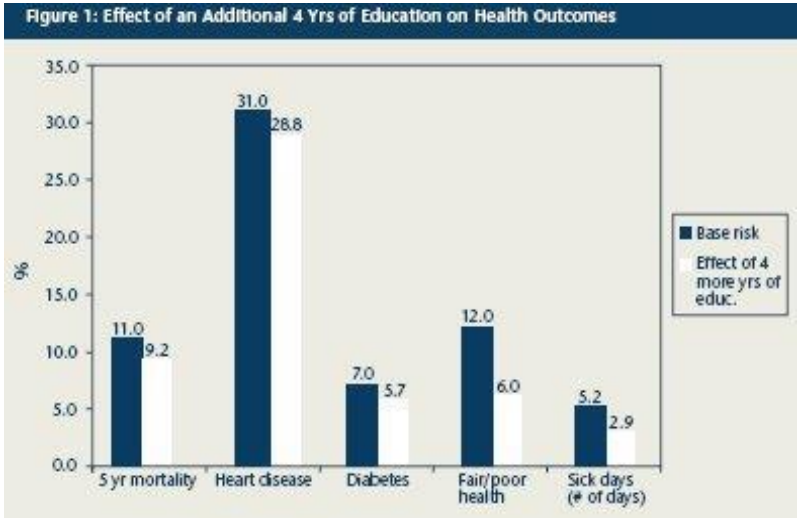
It is widely evidenced that in general those with higher educational attainment earn higher salaries. This may be the basis of the government policy which encourages more children to go to university as a route to promote economic growth.

Educational attainment is the most important of the factors examined in explaining poverty in both the UK and the 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. [19]

However the effect of education is not simply due to improved income , this association remains substantial and significant even after controlling for job characteristics, income, and family background. 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 been tested. No single factor explains the relationship seen between education and improved health, however undoubtedly educational 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. [17]

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.



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. [18]

For women in the United States college education for a minimum of two years decreases the probability of smoking during pregnancy by 5.8 percentage points. This is a large effect given that on average only 7.8% of the women in the sample smoked during pregnancy.

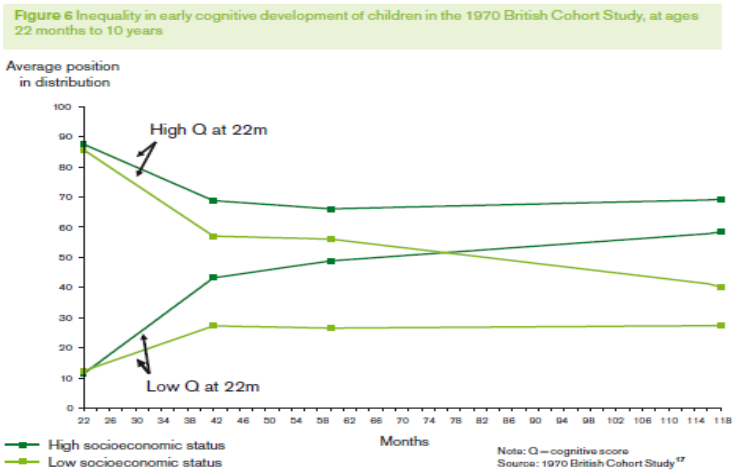
What influences education ?

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

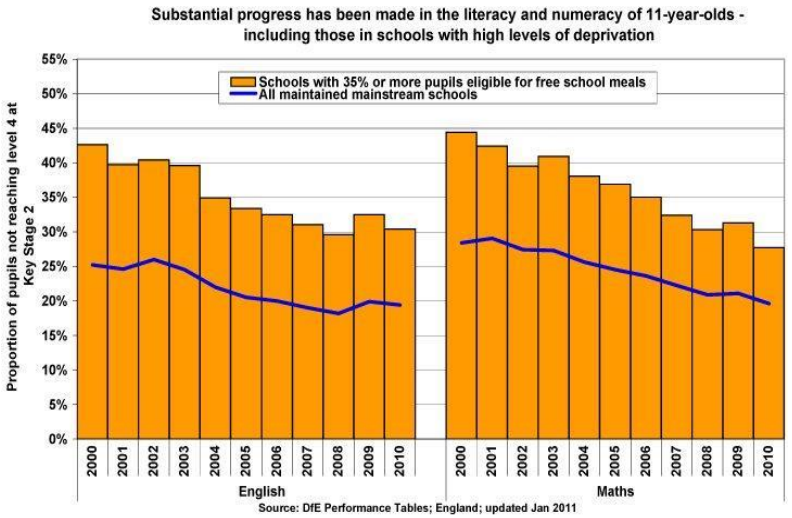
In the UK the largest influence, on a child success at school is father's education level. Young people are 7.5 times more likely to have a low educational outcome if their father has a low level of education, compared with a highly educated father. [10]

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. So 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 by 7 years overtaken in test results by children of lower innate ability but higher social background .



Whilst educational achievements have improved across all sectors of the community there is a persistent gap between the achievements of those children in with low income.

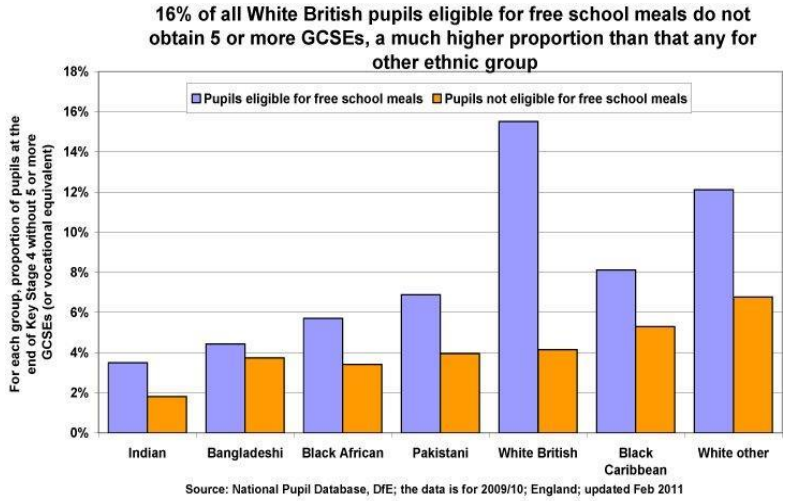


In the UK Children eligible for free school meals (FSM) are used as a proxy measure for families with lower incomes (since to be eligible their family must receive one of series of income support mechanisms).

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. [18]

15% of boys eligible for free school meals do not obtain 5 or more GCSEs. This compares with 10% for girls eligible for free school meals and 5% for boys not eligible for free school meals.

16% of White British pupils eligible for free school meals do 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 – reversing assumptions that educational inequality is an inner city burden.
In inner London nearly 55% of pupils eligible for Free School Meals (FSM), achieve the 5 A* -C Grade GCSE almost 20% above the national average.

Across the UK there has been good progress over the last decade, with more pupils from disadvantaged backgrounds achieving 5 GCSEs at grades A* - C. The gap, however, between these pupils and their wealthier classmates has remained the same or widened. In 2013/14 71% of children in the south east not on free school meals achieved 5 GCSEs at grade A*-C – but for poorer children, this shockingly drops by 25% and even in in inner London there is a 20% gap.

It can be see across Berkshire that this narrowing the gap issue is replicated in each of our Unitary authority areas. 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 are authorities we must persist in tackling this enduring inequality.

% age of students achieving 5 A* - C grade GCSE - 2013/14		
Area	% Pupils eligible for FSM s	% All other pupils
South East	35.4	70.7
Bracknell Forest	27	71.3
Reading	38	74
Slough	50	78.5
West Berks	34	74.5
Windsor & m'head	43	72
Wokingham	44	77
London	56.4	74.5

Looked after children

As we have described in this report affluence / deprivation is a key factor that influences health. So improving the education of all our children should, by reducing the impact of low wages / poverty and also directly, improve the health of our children.

Only one or two studies have expressed these types of impacts in quantitative, costed terms. These have shown that the health benefit of education is in costed terms equivalent to an additional benefit of 15-60% of the effect due to increase in outcomes attributable to the increase in wages. This is a substantial additional benefit that may indicate a major under-investment in education.[20]

In a specific health area, an assessment of the monetary impact of the benefits of education for reduced depression was undertaken. Simulating the effects of taking women without qualifications to Level 2 in the United Kingdom would lead to a reduction in their risk of adult depression at age 42 from 26% to 22%. It is estimated that this would reduce the total cost of depression for the population of interest by GBP 200 million a year. [22]

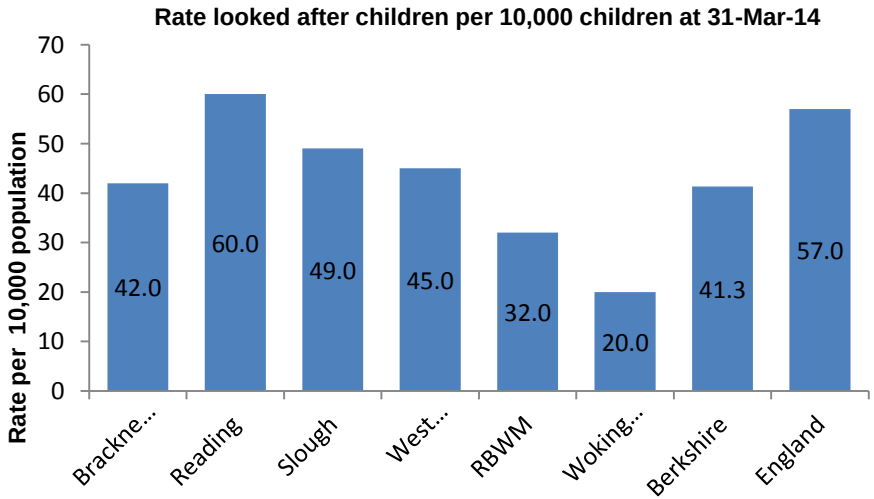
Inequalities in education and health drive a similar divide in the world of employment and later adult outcomes.

For example: The educational attainment gap often carries over into poor adult outcomes. - children on FSM 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. Young people NEET 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.

Children eligible for free school meals are not the only children that do less well in terms of educational attainment and health outcome

A child who is being looked after the local authority is known as a child in care. They might be living:

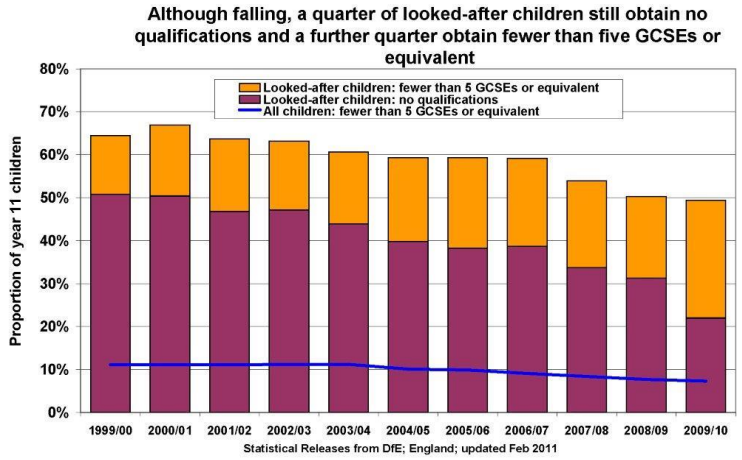
- with foster parents
- at home with their parents under the supervision of social services
- in residential children's homes
- other residential settings like schools or secure units.



Whilst the rate of looked after children in most of the unitary authorities in Berkshire is below the England average , this is to be expected since the risk of becoming a a looked after child is related strongly to deprivation – overcrowding, single parent families, reliance on income support.

Area	Number of LAC on 31-Mar-14
Bracknell Forest	115
Reading	210
Slough	190
West Berkshire	160
RBWM	105
Wokingham	75
Berkshire	855
England	64,470

However there are almost 900 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 the educational achievement . Worryingly in the South East 32% of LAC achieved 5 GCSEs a*-c . (Local numbers cannot be shown as the numbers are too small.)

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 Unitary authority

%age of sessions lost due to Unauthorised absence: LAC						
						Non-LAC
	2009	2010	2011	2012	2013	2013/14
England	1.6	1.5	1.5	1.2	1.1	1.1
South East	1.9	1.5	1.4	1.2	1.1	1.0
Bracknell Forest	1	1	1.1	0.5	1.7	0.9
Reading	0.5	0.6	0.8	1.6	1.8	1.3
Slough	1.3	2.6	0.7	0.5	0.5	1.1
West Berkshire	0.8	0.4	1	0.2	1.6	0.7
Windsor & M'head	2.2	0.8	1.7	0.7	0	0.7
Wokingham	4.6	1.4	1.3	0.3	1.2	0.7

Looked after children

Looked after children and young people share many of the same health risks and problems of 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 [22]

Mental health disorder are more common:

- 5-10 year old LAC , 50% of boys and 33% of girls had an identifiable mental disorder.
- Among 11-15 year olds, the rates were 55% for boys and 43% for girls.
- This compares to around 10% of the general population aged 5 to 15

The major survey of LAC found that two thirds of all looked after children had at least one physical health complaint. Problems such as speech and language problems, bedwetting, co-ordination difficulties and eye or sight problems are more common

Young people leaving care are particularly vulnerable. Both young women and young men ire more likely than their peers to be teenage parents, 25-50% of young women leaving care became pregnant within 18 to 24.

in the year after leaving care health has been shown to worsen. almost twice as likely to have problems with drugs or alcohol and mental health problems and 'other health problems' such as asthma, weight loss, allergies, flu pregnancy..

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. [21]

	Number of LAC 31 march2013 - 12 months	% of LAC annual health assessment	% of LAC up to date imm'ns	% of LAC dental check
ENGLAND	47,200	87.3%	83.2%	82.0%
SOUTH EAST	5,960	85.6%	86.7%	85.4%
Bracknell Forest	75	93.3%	86.7%	93.3%
Reading	165	90.9%	84.8%	100.0%
Slough	115	91.3%	100.0%	91.3%
West Berkshire	95	89.5%	100.0%	78.9%
Windsor and Maidenhead	65	92.3%	100.0%	92.3%
Wokingham	45	88.9%	100.0%	100.0%

This includes a short behavioural screening questionnaire (SDQ) for each of their looked after children between the ages of 4 and 16 inclusive completed by the main carer.
It assesses:

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

So is an important measure of emotional distress in this vulnerable group

As is shown below completion of the SDQ varies between authorities

Percentage of children for whom a Strengths and Difficulties Questionnaire (SDQ) score was submitted by Local Authority			
	2011	2012	2013
England	70	71	71
South East	58	62	63
Bracknell Forest	54	64	82
Reading	86	87	96
Slough	70	97	100
West Berkshire	46	90	78
Windsor and Maidenhead	87	93	94
Wokingham	x	69	56

Mean scores for 5-15 yr olds across Britain are 8.4 but as could be expected from research findings SDQ scores are higher for LAC in England and the local scores show this increased score and level of distress . Higher scores are associated with poorer health experiences and highlight the particular and consistent health needs of this group.

Average score per child			
	2011	2012	2013
England	13.9	13.9	14.0
South East	15.0	15.2	14.8
Bracknell Forest	11.8	15.5	15.3
Reading	17.8	18.6	17.9
Slough	14.4	15.7	14.2
West Berkshire	15.7	15.8	16.4
Windsor and Maidenhead	13.5	15.4	13.9
Wokingham	x	16.6	16.1

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 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 [21]. However the 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 Child and Adolescent Mental Health Service (CAMHS) partnerships are providing designated or targeted CAMHS provision for LAC.

However LAC are not the only at risk group for worsened mental health , there is well documented evidence that children in poverty are at increased risk of poor mental health . [23]

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 [23]

Use of hospital services

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

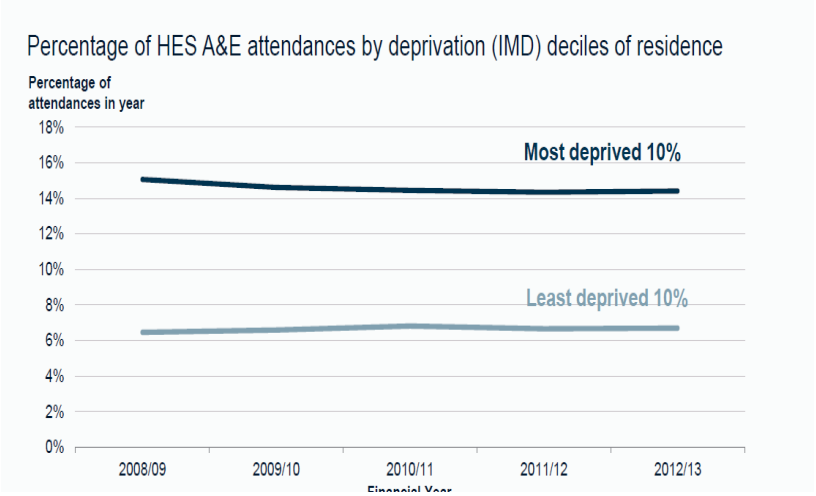
The consensus of the evidence available on the relationship of health service use in relation to deprivation, is that GP use is broadly equitable by social economic group, however it highlights a number of systematic differences between the use of secondary care by residents in deprived areas and compared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

Compared with people more affluent areas, those living in deprived areas:

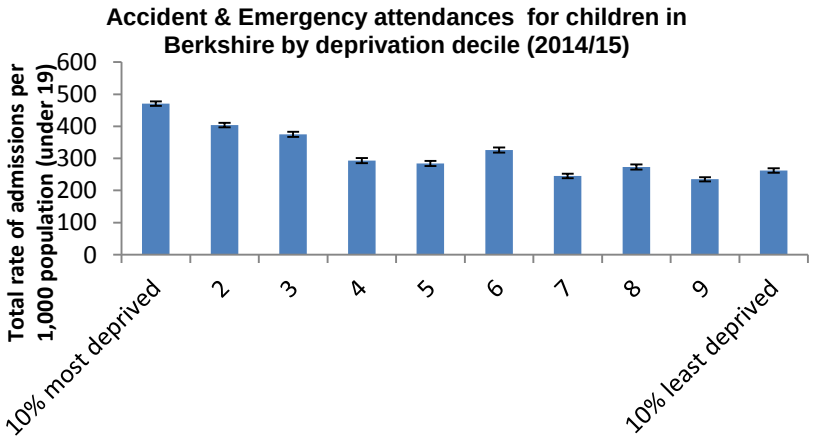
- used more emergency care
- used a similar amount of elective care
- attended A & E more frequently
- accessed outpatient care more via emergency channels
- failed to attend a larger proportion of outpatient appointments [24]

Pattern of A & E attendance has the steepest gradient, particularly in the relationships between attendance and the most deprived communities. [25]

In each of the last 5 years at least twice the number of attendances in all types of A & E departments have been by those living in the most deprived 10% of areas than those in the least deprived 10%.



This national picture is replicated in the pattern of children's attendances in Berkshire.



Studies demonstrate a relation between A & E use and deprivation for all assessed triage severities . This is most noticeable at the most severe end of the triage category (5x rate in most deprived communities) than for more minor illness / injury (rate is x2) .. [27]

The higher use of accident and emergency in more deprived communities can be partly explained by higher rates of illness and accidents with the rate of accidents being more prevalent in lower SEC groups but also shows differing behaviours in response to illness and injury.

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

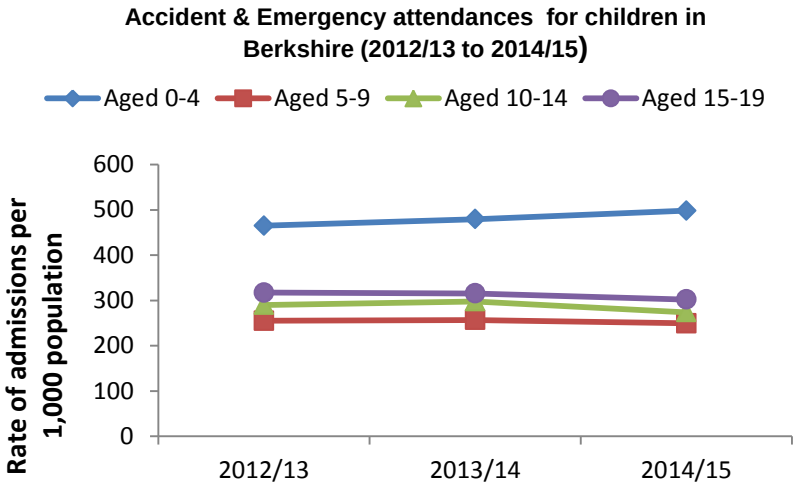
Nationally in recent years numbers of A & E attendances have risen faster than the growth in population : this is largely driven by more minor (type 3) types of attendances which have risen at 11 times the rate of population, though the recent trend has dipped . [26]
Nationally the highest percentage 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 1000 people aged under 2 or over 83 in England

If this aspect of care is reviewed in more depth nationally the proportion of attendances for over 64s at type 3 departments has decreased by 2.2 percentage points between 2008/09 and 2012/13 [26] .

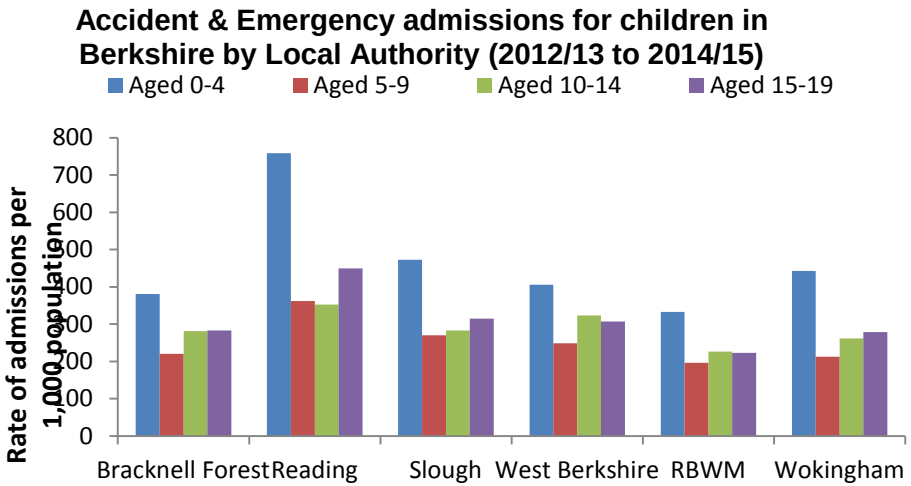
Whilst the proportion of attendances for under 10s has increased by 3.4 percentage points. [25]

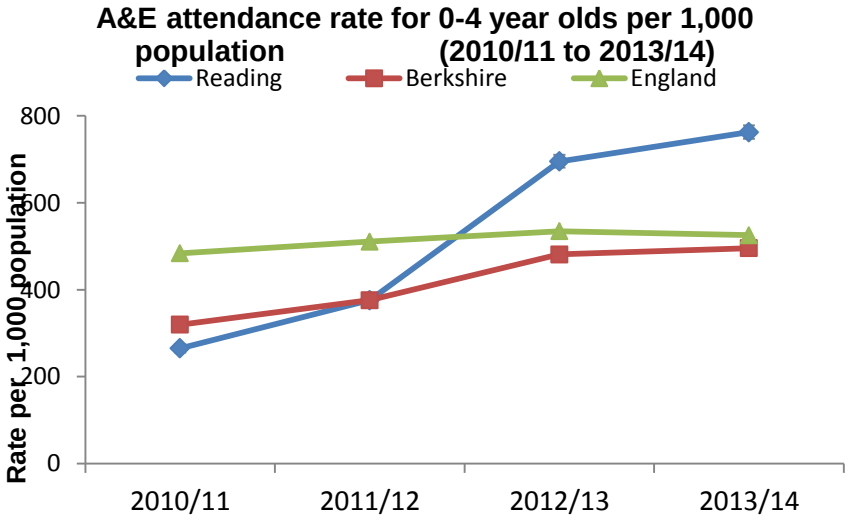
This pattern is also seen locally, driven by a rise in the 0-4 age groups.



In the past two years within Berkshire the total number for A & E attendances:

- In 0 – 10 year olds has increased as well - but by an increased amount 6% .
- 0-4 year olds are the age group that use A & E the most across the UK accounting for 3% of all attends.
- Similarly 0-5 year old age group has the highest number of emergency admissions - approximately 225,000 nationally which is a similar rate of attendances as that of 80 year olds .

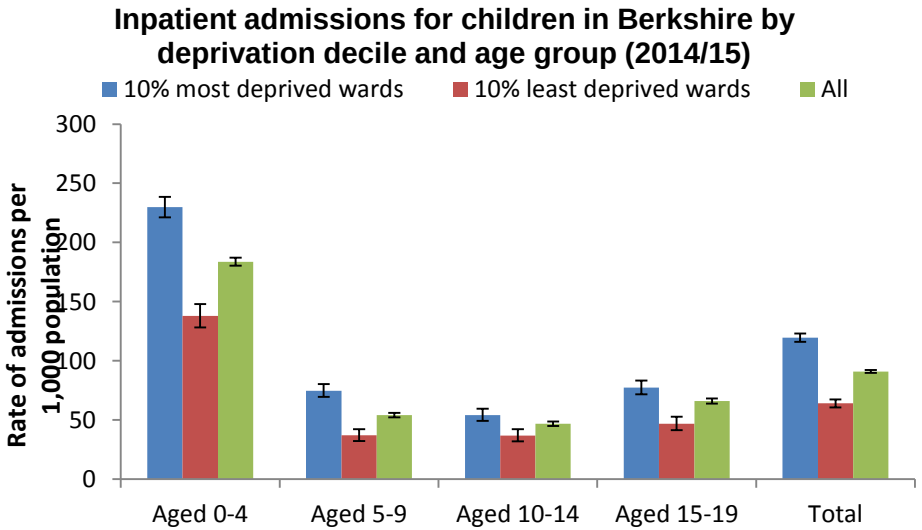




If we focus on the 0-4 year old group in 2013/14, there were 31,493 A & E attendances for children aged 0-4 years in Berkshire.
Reading and Slough show the highest rates but in Reading (not the most deprived local government area) the rate of attendances was significantly
worse than the national rate 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 UA , however in each area we see the highest rate in 0-4 age groups. The other Berkshire LAs all had significantly better rates compared to England.

In addition whilst in the other UAs the rates of attendance in 0-4 yr olds is stable, in Reading the rates have increased over the past two years with a large increase in the past year.

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



Conclusions

The report tries to pull together a short snap shot of the inequalities that exist within our children currently but also to describe 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 a further opportunity to integrate how we support families and communities. LAs know their communities and understand local need, links can now 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 per cent of their brains developed, but by the age of 3 their brains are 80 per cent developed. If In that period, neglect, and other adverse experiences occur then it can profoundly effect on how children develop.

The mandated services for health visiting are :

- the antenatal check 28 weeks
- new born visit;
- the 6 to 8 week review;
- the 12 month assessment;
- and the 2 to 2½ year assessments

As the only universal service health visitors can develop close working relationship with families, and identify any support required 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.

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.

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. Whist 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

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