

UNDERSTANDING SERVICE NEEDS OF UNDER FIVE YEAR OLDS

DATA AND EVIDENCE TO SUPPORT STRATEGIC COMMISSIONING IN BIRMINGHAM

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TABLE OF CONTENTS

	Foreword	4
1	Introduction	6
2	Policy Context	6
3	Methodology	7
4	Overview of Indicators	8
5	Demography	15
6	Issues Through The Ages	18
7	Mortality	29
8	Supporting Children and Families	30
9	Safeguarding Children	42
10	Service Challenges to Meet Need	44

FOREWORD

This document draws together data and evidence that begins to describe the life course picture of our children and Young People in Birmingham. It also draws upon evidence of effectiveness of programmes or interventions which are aimed at improving the life chances, health, and wellbeing of children and young people.

Our children and young people live in the particular context of Birmingham. This is not only different from other parts of the West Midlands but can be different in different parts of the city. In order to be able to embrace this diversity of settings and experience a life course conceptual model that helps us to start from broad principles and then take into account local circumstances when translating responses into activities is proposed.

The Life course pathway, which incorporates the national Healthy Child Programme, is set out in Figure F1 and the Early Years component in F2.

The pathway and this document will point a way forward but will not provide 'all the answers' to the dilemmas and challenges our children and young people face. However where there is evidence that approaches or programmes are ineffective we should avoid using them. Where there is evidence of benefit we should utilise them. More commonly however there is insufficient evidence to decide. It is important to recognize that absence of evidence of benefit is not the same as evidence of no benefit.

The next step is to build upon this as a broad-based partnership of commissioners and providers, essentially the extended corporate family of our children and young people, to enable 'good outcomes'.

F1: LIFECOURSE PATHWAY FOR CHILDREN & YOUNG PEOPLE

	CONCEPTION	BIRTH	START SCHOOL	TRANSFER SECONDARY SCHOOL	LEAVE SCHOOL	WORK, TRAINING FURTHER EDUCATION
OUTCOMES	Control of Fertility	Maternal survival Foetal survival Neonatal survival	Attain Early Learning Goals Ready for School Fully immunised	Normal Healthy Weight	Educational Attainment Below Norm Use of tobacco, alcohol, or drugs	Retained in Education, training or work
INFLUENCES		Maternal Health	Parenting Style & Quality Opportunities for socialisation, play, & learning	School Attendance	Peers	
SETTINGS		Community & Specialist Maternity Children's Centres Community Early Years: Third Sector Community Early Years: Schools		Schools		Further Education Training Placement Workplace
INPUTS	Contraception & Sexual Health Preconception Health Advice	Community & Specialist Antenatal care Screening & Immunisation Service		Primary Care	Educational Opportunities PHSE Contraception & Sexual Health Recreational opportunities	Training Opportunities Work Opportunities
			Universal Community Health & Psycho-Social Care Services to Children & Families Universal Plus Targetted Health & Psycho- Social Care to Children & Families Targetted Complex Health & Psycho Social Care to Children & Families Immunisation Service		Community & Specialist Physical Disability Care Community & Specialist LD Care	
			Alcohol & Drug treatment services for Adults & Young People Smoking Cessation Services for Adults & Young People Primary Care			

F2: EARLY YEARS LIFECOURSE PATHWAY FOR CHILDREN & YOUNG PEOPLE

	CONCEPTION	BIRTH	START SCHOOL
OUTCOMES	Control of Fertility	Maternal survival	Attain Early Learning Goals
		Foetal survival	Ready for School
		Neonatal survival	Fully immunised
INFLUENCES	Maternal Health		
	Parenting Style & Quality		
	Opportunities for socialisation, play, & learning		
	Family Smoking		
	Family Alcohol Use		
	Family Drug Use		
SETTINGS	Community & Specialist Maternity		
	Community Health Visiting		
	Children's Centres		
	Community Early Years: Third Sector		
	Community Early Years: Schools		
	Primary Care		
INPUTS	Contraception & Preconception	Community & Specialist Antenatal care	
		Screening & Immunisation Service	
	Universal Community Health & Psycho-Social Care Services to Children & Families		
	Universal Plus Targeted Health & Psycho- Social Care to Children & Families		
	Targeted Complex Health & Psycho Social Care to Children & Families		
	Immunisation Service		
	Community & Specialist Physical Disability Care		
	Community & Specialist LD Care		
	Alcohol & Drug treatment services		
	Smoking Cessation Services		
Primary Care			

1. INTRODUCTION

- 1.1. This document provides data to underpin the development of city wide service strategies for the early years of our children's lives and to orientate commissioning intentions across Health, Local Authority, and voluntary sector activities through the Children and Young Peoples Partnership.

2. POLICY CONTEXT

- 2.1. National Policy development has seen an increasing focus on the needs of children aged under 5 years and in particular to develop early interventions to address the negative impacts of socio-economic circumstances and social and demographic factors.
- 2.2. This report is developed within the policy context of *Families in the Foundation Years* (2011) which is summarised as:
 - ▶ **Children's health.** Giving every child the best start in life is crucial to reducing health inequalities across the life course. The foundations for virtually every aspect of human development – physical, intellectual and emotional – are laid in early childhood. What happens during these early years (starting in the womb) has lifelong effects on many aspects of health and well-being.
 - ▶ **Good maternal mental health.** Overall children of mothers with mental ill health are five times more likely to have mental health problems themselves, resulting in both emotional and behavioural difficulties.
 - ▶ **Parenting style.** Effective warm authoritative parenting gives children confidence, a sense of wellbeing and self-worth. It also stimulates brain development and the capacity to learn.
 - ▶ **Learning activities.** The home learning environment has a greater influence on a child's intellectual and social development than parental occupation, education or income. What parents do with their children is more important than who they are and a home learning environment that is supportive of learning can counteract the effects of disadvantage in the early years.
 - ▶ **High quality early education.** Attending a high or medium quality pre-school has a lasting effect in promoting or sustaining better social/behavioural outcomes, in terms of increased 'self-regulation', higher 'pro-social' behaviour and lower 'anti-social' behaviour levels at age 11.
- 2.3. The Marmot review of health inequities aims to reduce health inequalities for the most deprived, quickest.
- 2.4. Marmot framed the case for early interventions as doing things earlier in the life course and intervening earlier in the trajectory of poor and inequitable outcomes.
- 2.5. This should lead to a narrowing of the gap in social inequalities both income and outcome based. They recognised the interconnectedness of economic, social, and health issues including the difficulty of disaggregating health needs from other needs.

2.6. A review by the Institute of Health Inequities, *Equal Start* (2012), presents a framework of evidenced based outcomes for children under 5 that aligns with core purposes of Children’s Centres, Ofsted KPI’s, Early Years Foundation Stage and Public Health Outcomes Framework. (Table 1.1)

2.7. Table 1.1 The Institute of Health Inequity Framework

Areas for focus		Proposed outcomes
Children are developing well	Cognitive development	1 All children are developing age appropriate skills in drawing and copying 2 Children increase the level to which they pay attention during activities and to the people
	Communication and language development	3 Children are developing age appropriate comprehension of spoken and written language 4 Children are building age appropriate use of spoken and written language around them
	Social and emotional development	5 Children are engaging in age appropriate play 6 Children have age appropriate self-management and self control
	Physical development	7 Reduction in the numbers of children born with low birth weight 8 Reducing the number of children with high or low Body Mass Index
Parenting enables development	Creating a safe and healthy environment	9 Reduction in the numbers of mothers who smoke during pregnancy 10 Increase in the number of mothers who breastfeed
	Promoting an active learning environment	11 Increased number and frequency of parents regularly talking to their child using a wide range of words and sentence structures 12 More parents are reading to their child every day
	Positive parenting	13 More parents are regularly engaging positively with their children 14 More parents are actively listening to their children 15 More parents are setting and reinforcing boundaries
Parent context enables good parenting	Good mental wellbeing	16 More parents are experiencing lower levels of stress in their home and in their lives 17 Increase in the number of parents with good mental wellbeing 18 More parents have greater levels of support from friends and/or family
	Knowledge and skills	19 More parents are improving their basic skills, particularly in literacy and numeracy 20 More parents are increasing their knowledge and application of good parenting
	Be financially self-support	21 Parents are accessing good work or developing the skills needed for employment, particularly the skills needed for employment, particularly those furthest away from the labour market

2.8. This framework is consistent with recent significant reports associated with the early years, which include:

- ▶ Early Intervention (Allen 2011)
- ▶ Better frontline services to protect children (Munro 2011)
- ▶ Foundations for Quality (Nutbrown 2012)
- ▶ The Early Years: Foundations for Life, Health and Learning (Tickell 2011)

2.9. The dominant driver of the social gradients of impact identified in these reports and research is child poverty and income deprivation. The local child poverty strategy is, therefore, an important contributor to improving early year’s health and wellbeing outcomes.

3. METHODOLOGY

3.1. The data is used to show the position of the city in relation to national averages and also in relation to other core cities where this data is available.

3.2. Outcomes in Birmingham are shown at the following local administrative level;

- ▶ Ten Parliamentary Constituency
- ▶ Forty LA electoral Ward

- ▶ Sixteen Children’s Centres/Integrated Family Support Teams service areas.
 - ▶ Five Quintiles of deprivation based on the of Income Deprivation Affecting Children Index (a subset of the Indices of Multiple Deprivation)
- 3.3. Statistical significance testing has been applied to area data to indicate where differences are statistically significant. This tries to show when differences are not due to the normal chance variation which occurs in biological and sociological observations. It hopes to identify when differences are due to some external factor which is hopefully amenable to change by interventions.
- 3.4. Caution is needed when interpreting data for small geographical areas and limited time periods. Data for a number of years and/or at units of geography is used where the numbers involved provide a stable and meaningful statistical analysis. Local planners and commissioners are often keen to see data at ever smaller geographical levels and for very short time periods, such as single years. This may increase the likelihood of erroneous conclusions being drawn. We have, therefore, tried to avoid this here.

4. OVERVIEW OF INDICATORS

- 4.1. A number of indicators have been used nationally to develop an overview of the population of Under 5s in Birmingham and other core cities.
- 4.2. Table 4.1 illustrates the current pattern of these indicators in Birmingham. A number of different timeframes have been used in these indicators, depending upon the need to avoid the small number effect outlined in paragraph 3.5. As a result it is not possible to develop time trend analysis of these indicators.
- 4.3. Table 4.2 illustrates the comparison with Core Cities for a selected number of the indicators, depending upon data availability. Birmingham has a birth rate, infant mortality rate, and low birth weight rate which is comparable with the highest quartile of the core cities group. This indicates poorer outcomes. Interestingly however Birmingham is currently in the highest performing group for the achievement of early learning goals.
- 4.4. Figures 4.1 to 4.8 show the variation in outcome indicators by Birmingham wards

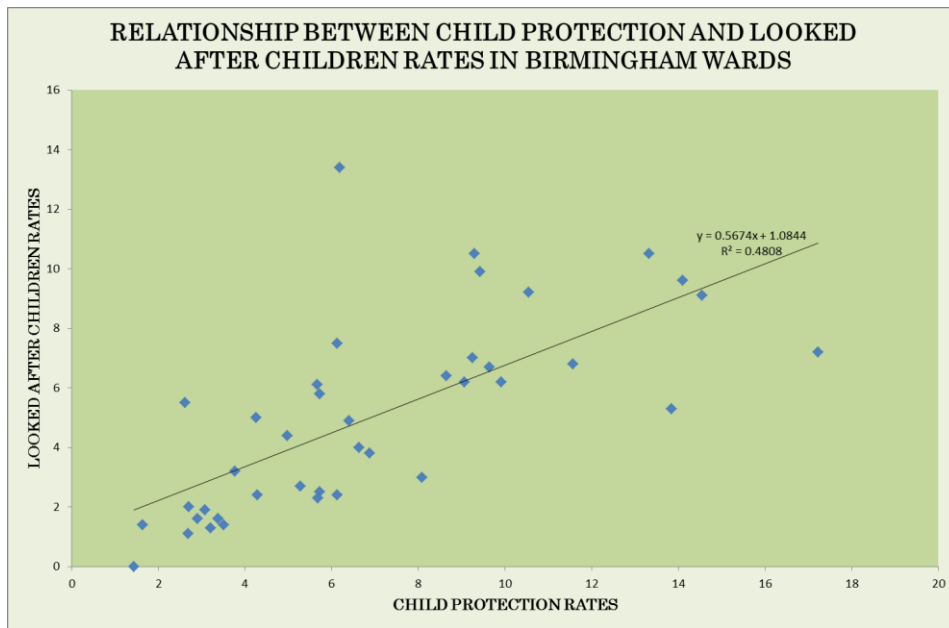
4.5. Table 4.1:

INDICATOR PERFORMANCE (BIRMINGHAM)	
BIRTH RATE 2010 (FEMALES 15-44)	72.5 /1,000
INFANT MORTALITY RATE 2008-10	7.3 /1,000
LOW BIRTH WEIGHT 2010	8.7 %
BREASTFEEDING AT PRIMARY VISIT 2009-12	57.7 %
BREAST FEEDING 6-8 WEEK CHECK 2009-12	47.1 %
AVERAGE POPULATION OF UNDER 5 YRS 2008-10	79874
PROPORTION OF TOTAL POPULATION UNDER 5YRS 2010	7.9 %
OBESITY RATE AT RECEPTION YEAR IN SCHOOL 2010/11	10.9 %
ACCIDENT RATE FOR UNDER 5 YRS 2008-11	17.0 /1,000
LONG BONE INJURIES AND ROAD TRAFFIC ACCIDENT RATE IN UNDER 5YRS 2008-11	11.3 /1,000
EARLY LEARNING GOALS ACHIEVMENT 2012	62.0 %
CHILD PROTECTION RATE 2009-12	6.8 /1,000
CAMHS REFERRAL RATE FOR UNDER 5 YRS 2009-12	6.8 /1,000

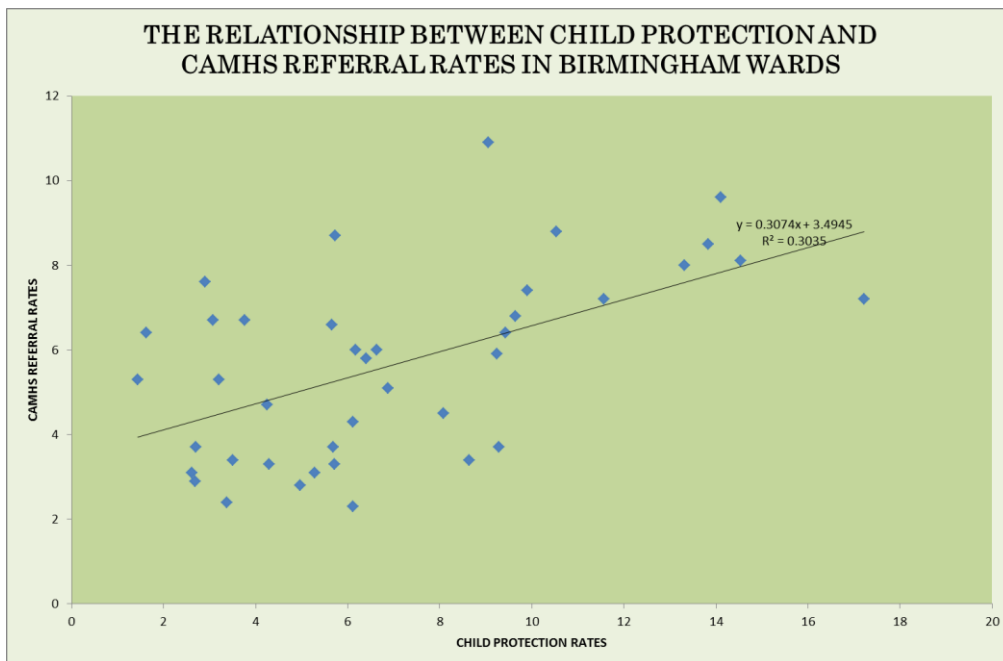
4.6. Table 4.2

SELECTED INDICATOR COMPARISON WITH CORE CITIES				
	BIRTH RATE	INFANT MORTALITY RATE	LOW BIRTH WEIGHT	ACHIEVING EARLY LEARNING GOALS
	per 1,000 FEMALES 15-44 2010	PER 1,000 LIVE BIRTHS 2008-10	% 2010	% 2010
WOLVERHAMPTON	72.3	7.7	7.7	47
LUTON	82.3	7.5	9.5	44
SANDWELL	79.6	7.5	9.8	41
BIRMINGHAM	72.5	7.3	8.7	49
MANCHESTER	60.7	6.1	7.1	48
NOTTINGHAM	54.1	5.6	9.1	52
LIVERPOOL	56.7	5.2	7.4	42
LEEDS	54.4	4.9	7.3	46
SHEFFIELD	53	4.8	7.3	47
NEWCASTLE UPON TYNE	51.5	4.2	8.5	45
BRISTOL	59	3.9	6.4	50

4.7. **FIGURE 4.1**

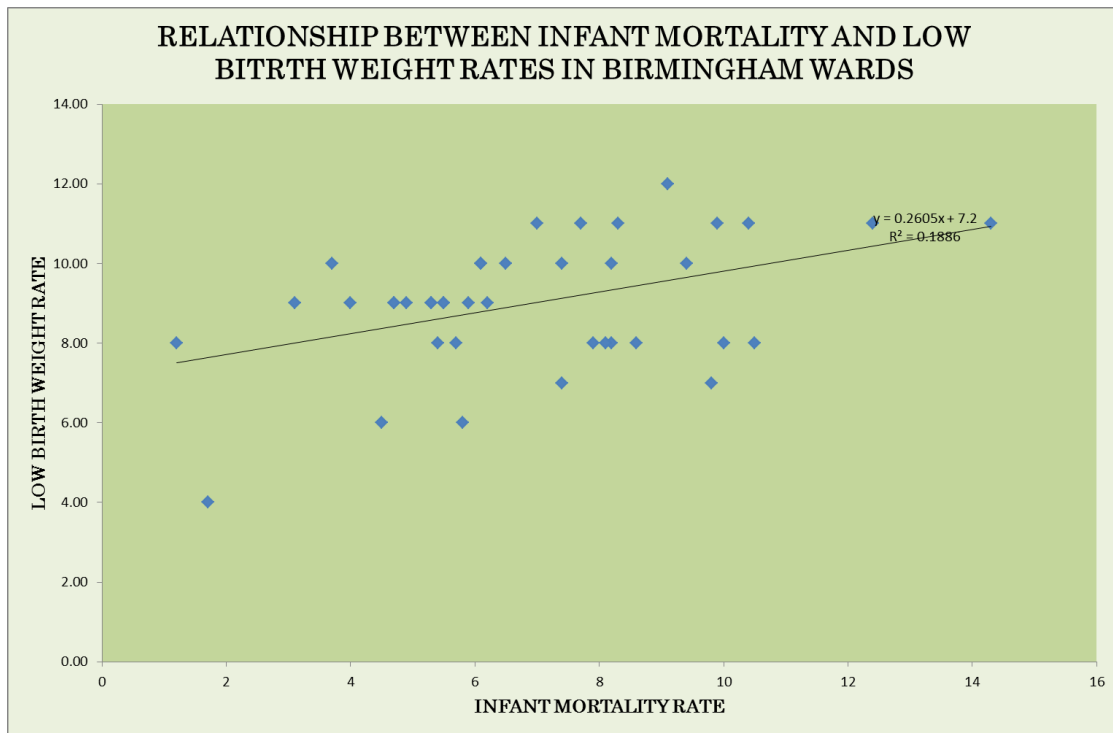


4.8. **Figure 4.2:**



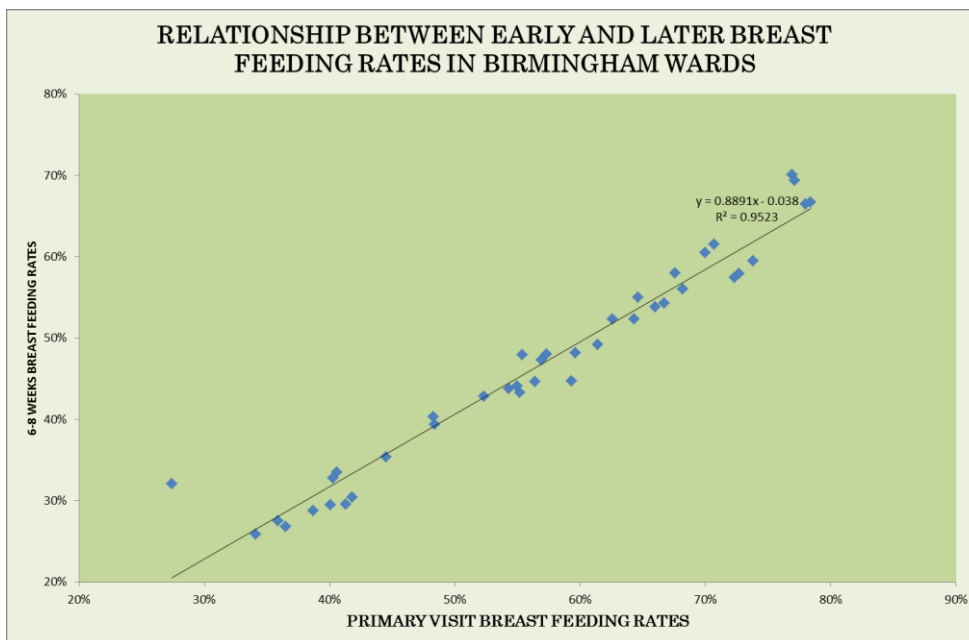
- 4.9. There is a strong correlation between child protection rates and Looked After Children rates. Ladywood ward is an outlier with moderate Child protection rates and the highest Looked After Children rates. Local investigation would be needed to understand this.
- 4.10. The relationship between Child Protection rates and CAMHS referral is less strong and suggests that there is more variation in these in Wards across the City. This suggests that the role of CAMHS in reducing the progression from in need to in need of protection is different across the City.

4.11. **Figure4.3:**

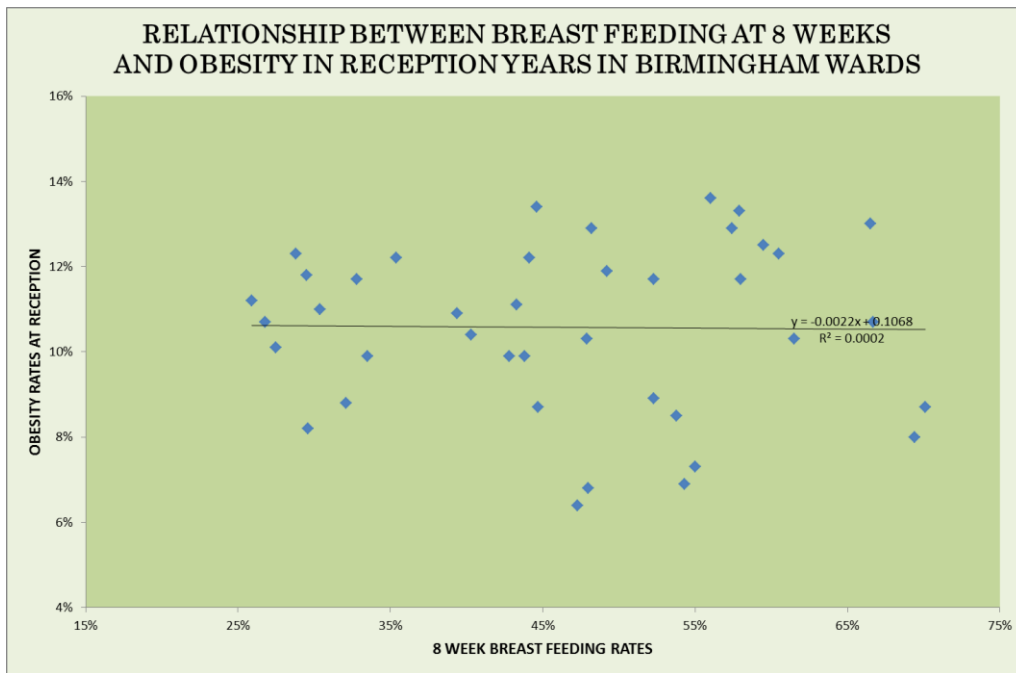


4.12. The relationship between Infant Mortality and Low Birth Weight rates is weak. There are some mid range Infant Mortality rate wards with higher Low Birth Weight but this data does not suggest any causal linkage. This would suggest that these two outcomes may need different approaches in service response.

4.13. **Figure 4.4:**

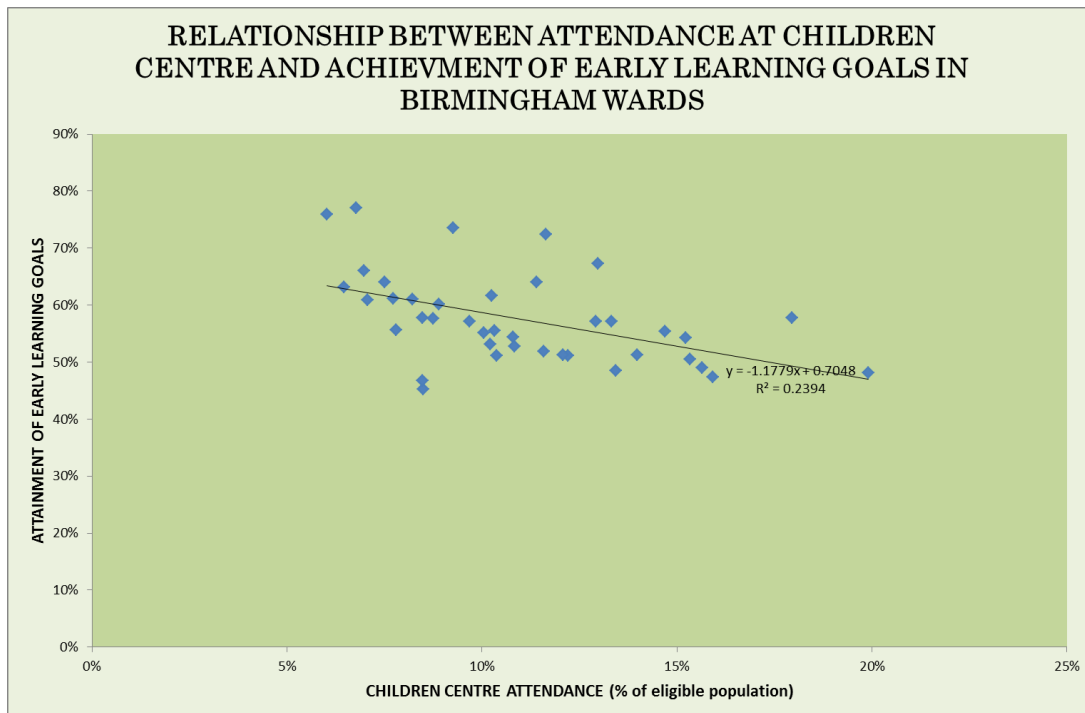


4.14. **Figure 4.5:**



4.15. There is a very strong correlation between the breast feeding rates at Primary visit and at 6-8 weeks. This suggests that many of those who start breast feeding do persevere. However there is little correlation between this later breast feeding rate and rates of obesity at local level.

4.16. **Figure 4.6:**

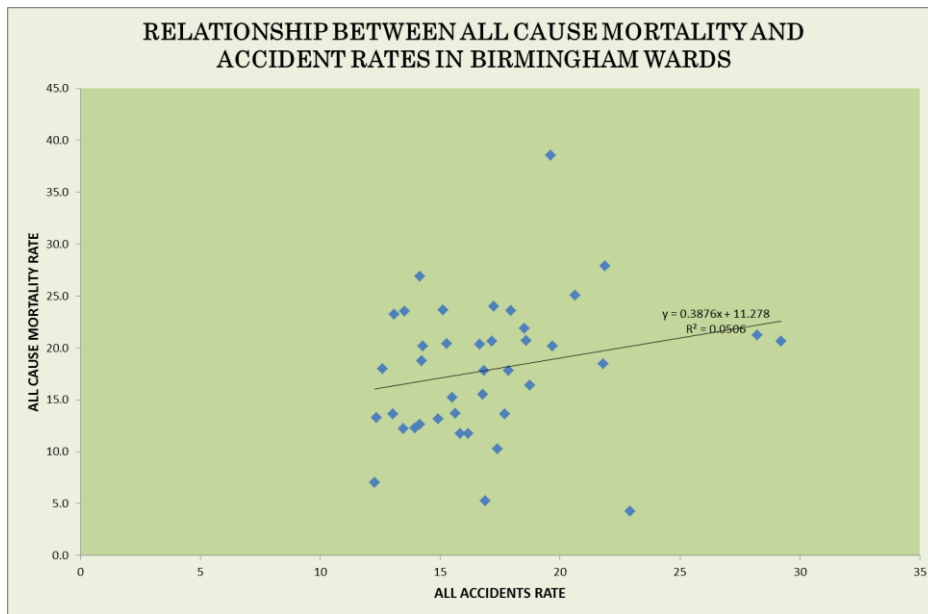


4.17.

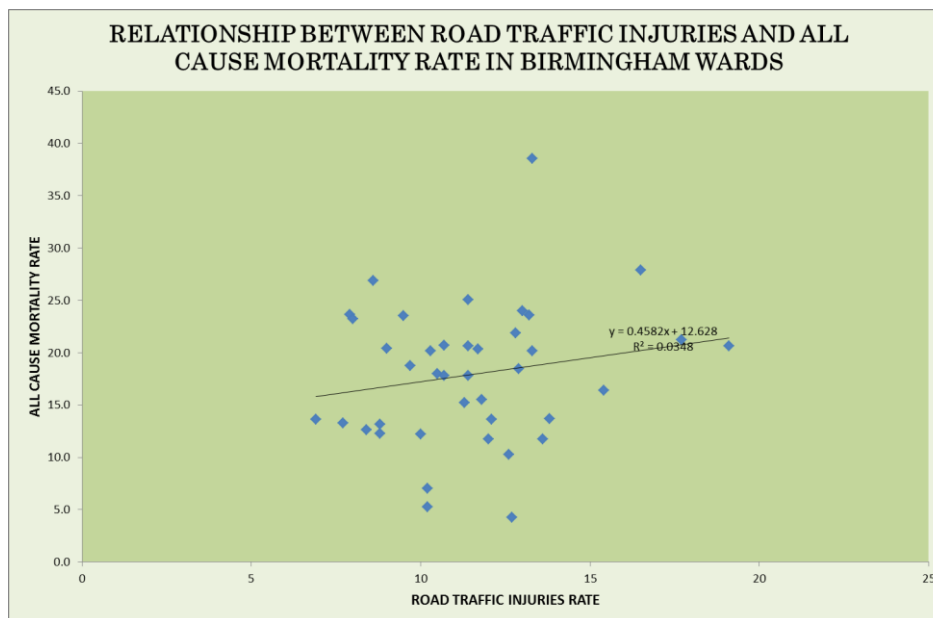
4.18. There is a negative correlation between attendance at rate of attendance at Children Centre and attainment of Early Learning Goals, namely the higher the visiting rate

the lower the attainment. This is a population level observation however and this data cannot exclude confounding factors. In particular it cannot relate actual attainment in those who do or do not attend Children Centres. Lower rates of attendance may indicate other social or cultural influences which also inhibit Early Learning Goal attainment.

4.19. **Figure 4.7:**



4.20. **Table 4.8:**



4.21. There is little correlation between All Cause Mortality rates and total or Road Traffic Accident rates. This suggests that accidents are common but death not so common.

4.22. This indicates the need for whole community preventative activities to continue to reduce accidental injury rates

4.23. **Table 4.3: Summary Of Electoral Ward Lowest Performance**

INDICATOR	LOWEST PERFORMING WARDS		
CHILD PROTECTION RATE PER 1,000 2009-12	NORTHFIELD	WEOLEY	HODGE HILL
NUMBER OF LAC PER 1,000 CHILDREN AGED <5 2010-12	LADYWOOD	BARTLEY GREEN	ERDINGTON
CAMHS TOTAL REFERRAL RATE PER 1,000 <5 YRS 2009-12	LONGBRIDGE	KINGSTANDING	BOURNVILLE
INFANT MORTALITY RATE PER 1,000	SHARD END	HARBORNE	PERRY BARR
LOW BIRTH WEIGHT 2008 - 10	QUINTON	LOZELLS AND EAST HANDSWORTH	HODGE HILL
BREASTFEEDING AT PRIMARY VISIT 2009-12	LONGBRIDGE	SHARD END	NORTHFIELD
BREAST FEEDING AT 6-8 WEEK CHECK 2009-12	KINGSTANDING	NORTHFIELD	TYBURN
OBESITY AGE 5 YRS 2008-11	SOHO	EDGBASTON	HANDSWORTH WOOD
DMFT AT AGE 5 2007/8	SPARKBROOK	BORDESLEY GREEN	MOSELEY AND KINGS HEATH
CHILDREN'S CENTRES ATTENDANCE AS % OF POPULATION	SUTTON FOUR OAKS	QUINTON	SUTTON VESEY
% ACHIEVING ELG 2009-11	LOZELLS AND EAST HANDSWORTH	SPARKBROOK	SOHO
ACCIDENT RATE PER 1,000 CHILDREN AGED <5 2008-11	LADYWOOD	SOHO	SUTTON TRINITY
LONG BONE INJURIES AND ROAD TRAFFIC ACCIDENT RATE PER 100,000 CHILDREN AGED <5 2008-11	LADYWOOD	SOHO	NORTHFIELD
ALL CAUSE MORTALITY CHILDREN <5 YRS RATE PER 100,000	WASHWOOD HEATH	STOCKLAND GREEN	SHARD END

4.24. A summary of the wards with the poorer outcomes in each indicator (Table 4.3) shows:

- ▶ Soho and Shard End wards commonly achieve poorer outcomes;
- ▶ Low breast feeding, higher child protection and CAMHS referral rates are commoner in predominately white ethnic wards; and
- ▶ The attendance at Children Centres indicator is probably an unreliable and confounded measure.

4.25. This emphasises the fact that different areas and community's within the city have different issues and needs based priorities. This will need to be addressed in any strategic commissioning responses.

5. DEMOGRAPHY

5.1. Births

5.2. There were 17,240 live births to Birmingham residents in 2010 (8,850 males & 8,390 females). This is 19.5% higher than in 2001.

5.3. Table 5.1 shows the number of live births and the current General Fertility Rate per 1,000 women 15-44 yrs. compared to the West Midlands. There is no significant difference.

5.4. Table 5.1: Live Births and General Fertility Rate in Birmingham (2010)

	Live Births	GFR
West Midlands (Met County)	40,012	71.1
Birmingham	17,240	72.5

5.5. Table 5.2: Births and General Fertility Rate by Children's Centre Consortia

Children's Centres Consortia	Babies	GFR
Saltley Plus	1,541	207
Colesheath	2,765	185
East Wards	2,657	171
FAYS	2,081	150
Erdington	1,309	98
Sparkbrook/hill	1,564	98
Aston/Nechells	1,180	74
Sutton	1,187	74
Perry Barr	1,053	73
Hall Green	1,298	62
Handsworth	836	59
Senneleys Park	473	45
Northfield/Longbridge	526	42
Ladywood	496	41
Kings Norton	572	33
Quinborne	477	32

5.6. The number of births and the General Fertility Rate by Children's Centre area is shown in Table 5.2. There is a serious variation which cannot be accounted for by the number of women in the child bearing age group alone. More of women in the

fertile age group become pregnant in high General fertility rate areas than those in lower.

- 5.7. Changes or variations in the General Fertility Rate at Ward level need to be reconciled with service configuration so that coverage is consistent with changing present and future needs.

5.8. **Population aged under 5 Years**

- 5.9. In 2010 the Office for National Statistics (ONS) estimated that the population of children under 5 years of age in Birmingham was 81,432; an estimated increase of 13% on the 2001 baseline and the population is set to continue to rise (Birmingham Demographic Unit 2011). The growth in the population has not been uniform across Birmingham Wards, with some wards under 5 population decreasing (Table 5.3).

5.10. **Deprivation**

- 5.11. The 2009 ONS estimation for the population of children under 5 in Birmingham is used to calculate the 2010 Indices of Multiple Deprivation and the Index of Deprivation affecting Children, also referred to as the Child Wellbeing Index.
- 5.12. The Birmingham population of children 0-5 years in 2010 was estimated at 81,432. There are 328 of Birmingham small areas in the most deprived quintiles (20%) of small areas of the national rankings. 50,290 (62.6%) of Birmingham's children were estimated to be living in these areas.
- 5.13. The local convention takes a different approach to determining the ranking positions of small areas in Birmingham. Local statisticians prefer to rank small areas by the deprivation Index and then divide the areas in the City into five equal number groups. This means that quintile comparisons cannot be made with national quintile analyses. The local method is used throughout this document, although it may underestimate the size of the impact. We do this in order to support local:
 - ▶ Performance monitoring of inequalities over time;
 - ▶ Setting of appropriate trajectories;
 - ▶ Consistency for strategic commissioning purposes and alignment of multi-agency Resources;
 - ▶ Developing service threshold criteria for service procurement and configuration;
 - ▶ Supporting localities in understanding and addressing needs;
 - ▶ a clear approach to improvement of performance across the social gradient; and
 - ▶ a consistent approach to the construction of a social gradient.

5.14. **Table 5.3: Number of Children under 5 Years (2008-10) by LA ward**

Ward	2008	2009	2010	% change
Edgbaston	838	891	978	14.3%
Ladywood	1,121	1,249	1,292	13.2%
Selly Oak	841	921	957	12.1%
Harborne	1,318	1,407	1,485	11.3%
Acocks Green	2,128	2,240	2,375	10.4%
Stockland Green	1,524	1,621	1,700	10.4%
Weoley	1,800	1,897	1,968	8.5%
Hodge Hill	2,364	2,528	2,581	8.4%
Brandwood	1,680	1,779	1,824	7.9%
Oscott	1,558	1,633	1,685	7.5%
Billesley	1,687	1,812	1,823	7.5%
Shard End	2,021	2,092	2,172	7.0%
South Yardley	2,633	2,752	2,823	6.7%
Kingstanding	1,903	1,989	2,040	6.7%
Kings Norton	1,749	1,882	1,871	6.5%
Handsworth Wood	1,770	1,825	1,880	5.9%
Bournville	1,526	1,591	1,617	5.6%
Moseley and Kings Heath	1,584	1,622	1,671	5.2%
Stechford and Yardley North	1,928	1,979	2,028	4.9%
Hall Green	1,811	1,881	1,901	4.7%
Sutton Vesey	1,121	1,140	1,175	4.6%
Sutton Four Oaks	1,223	1,250	1,281	4.5%
Erdington	1,583	1,592	1,657	4.5%
Bartley Green	1,695	1,752	1,774	4.5%
Birmingham	77,912	80,279	81,432	4.3%
Soho	2,242	2,324	2,343	4.3%
Springfield	3,104	3,242	3,230	3.9%
Nechells	3,207	3,233	3,335	3.8%
Perry Barr	1,722	1,765	1,785	3.5%
Northfield	1,644	1,666	1,702	3.4%
Quinton	1,709	1,706	1,751	2.4%
Longbridge	1,798	1,792	1,834	2.0%
Sutton Trinity	1,417	1,464	1,439	1.5%
Sheldon	1,352	1,330	1,368	1.2%
Sparkbrook	3,524	3,608	3,556	0.9%
Tyburn	1,858	1,860	1,872	0.8%
Bordesley Green	3,953	4,028	3,945	-0.2%
Sutton New Hall	1,143	1,147	1,134	-0.8%
Aston	3,308	3,280	3,249	-1.8%
Lozells and East Handsworth	3,123	3,128	3,061	-2.0%
Washwood Heath	3,402	3,381	3,270	-4.0%

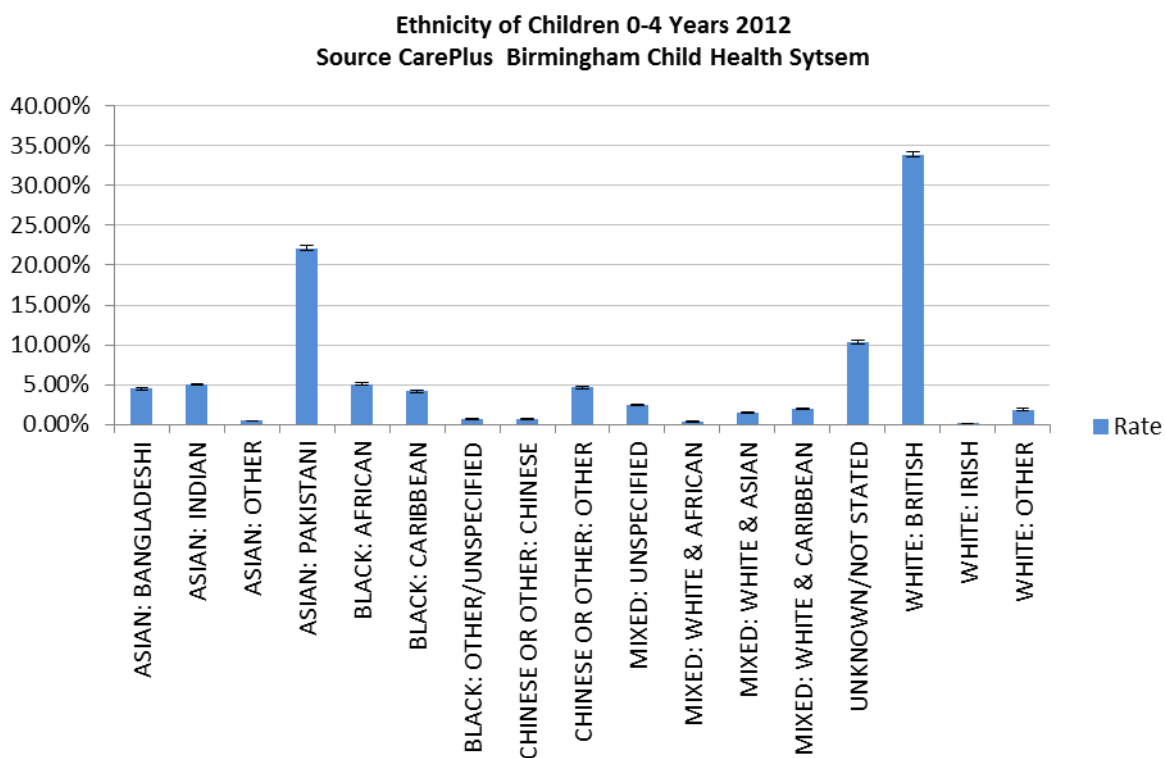
5.15. Ethnicity

5.16. A large proportion of Black and Minority Ethnic children under 5 years are living in areas of deprivation. Data from Care Plus, the local NHS Child Health Register (Figure 5.1), describes the distribution of ethnicity of children in Birmingham.

5.17. The largest ethnic category in Birmingham is white British (over 30%) followed by Pakistani (22.5%).

5.18. Whilst only 10% of White British children are in the most deprived Quintiles of small areas in the city, 55% of Black African; 53% of Bangladeshi; 43% of Black Caribbean; and 40% of Pakistani Children live there.

5.19. Figure 5.1: Ethnicity of Children under 5 years



5.20. Child Poverty

5.21. National analysis indicates that child poverty rates are higher amongst younger age groups, BME families and for families with disabled children.

5.22. The national data sets however use the population 0-15 years to calculate Child Poverty and therefore it is not possible to derive an accurate estimate of the numbers of children under 5 who are living in poverty.

6. ISSUES THROUGH THE AGES

6.1. Preconception and during Pregnancy

6.2. Outcomes through the life course for children under 5 are influenced by maternal health preconception and during pregnancy. Work undertaken for Birmingham and Solihull Strategic Maternity Needs Assessment (2011) showed clear socioeconomic gradients in need and risk for mothers resulting in poorer pregnancy outcomes.

6.3. Table 6.1 shows what risk factors result in poorer outcomes and would require a different level of specialist maternity service.

6.4. **Table 6.1: Maternity Risk Criteria for proposed antenatal care pathway**

SPECIALIST	Triplets or more	BMI 40+	Pre-existing heart disease	Pre-existing hypertension
ENHANCED	BMI <18	Alcohol consumption (any)	Previous miscarriages 3+ (<24 weeks)	No support from partner/family/friend
	BMI 35-40	Drug usage	Maternal age <18	Temporary accommodation
	Twins	Domestic abuse disclosed	No fixed abode	Non-English speaking (i.e. requires an interpreter)
	Pre-existing diabetes	Parity 5+	Failed asylum seeker	Referred for social factors (any)
CORE	Everyone else			

Source: pilot PbR antenatal care pathway, DH, 2011

6.5. This risk profile, which is based upon unpublished research but used as part of a payment by results pilot, highlights the need to identify maternal health and social risks that impact on children by service providers, including:

- ▶ Homeless households and those households that are transient or have insecure tenures;
- ▶ Households where there indications of Domestic violence;
- ▶ Maternal health including Mental health and substance misuse;
- ▶ Households containing smokers; and
- ▶ Young maternal age (under 20 years).

6.6. Wards containing high proportions of women with enhanced rates of social risk include: Aston, Bordesley Green, Handsworth Wood, Kingstanding, Ladywood, Lozells and East Handsworth, Nechells, Soho, Sparkbrook, Springfield and Washwood Heath.

6.7. All of these wards are within the most deprived quintile of deprivation.

6.8. **Low Birth Weight**

6.9. Low birth weight is correlated with poor outcomes in childhood and adulthood in terms of both health and educational/occupational attainment.

6.10. The rates of Low Birth Weight are greater in more deprived areas with the least deprived small areas in the city averaging a rate 7.3%, which is significantly below the Birmingham average (9.4%)

- 6.11. A proportion of low birth weight is potentially modifiable by addressing maternal risk factors such as smoking and nutrition.
- 6.12. The National Institute of Clinical and Healthcare Excellence (NICE) issued guidance on Maternal and Child Nutrition in 2008. These recommendations are relevant for all women who are pregnant (or planning to become pregnant), mothers of children and others who care for children aged under 5. They are particularly relevant for pregnant women, mothers and children from low-income and other disadvantaged backgrounds.
- 6.13. Women from disadvantaged groups have a poorer diet and are less likely to take folic acid or other supplements than those who are better off. They are more likely to be overweight or show low weight gain during pregnancy and their babies are more likely to have a low birth weight.
- 6.14. Healthy Start Scheme is a national government scheme to improve the nutritional health of low income pregnant women and families on benefits and tax credits. Beneficiaries can exchange Healthy Start vouchers in exchange for fruit, vegetables or milk. Healthy Start children's drops was launched in October 2006 and women's tablets in March 2007.
- 6.15. Uptake of Healthy Start Scheme in the West Midlands is above the England average in Q4, 2011/12 at 82.8% compared to 79.6%. Birmingham has among the highest uptake rates and distribution for women's and children's vitamins in the West Midlands, 85.5% to 86.7%.

6.16. **Breastfeeding**

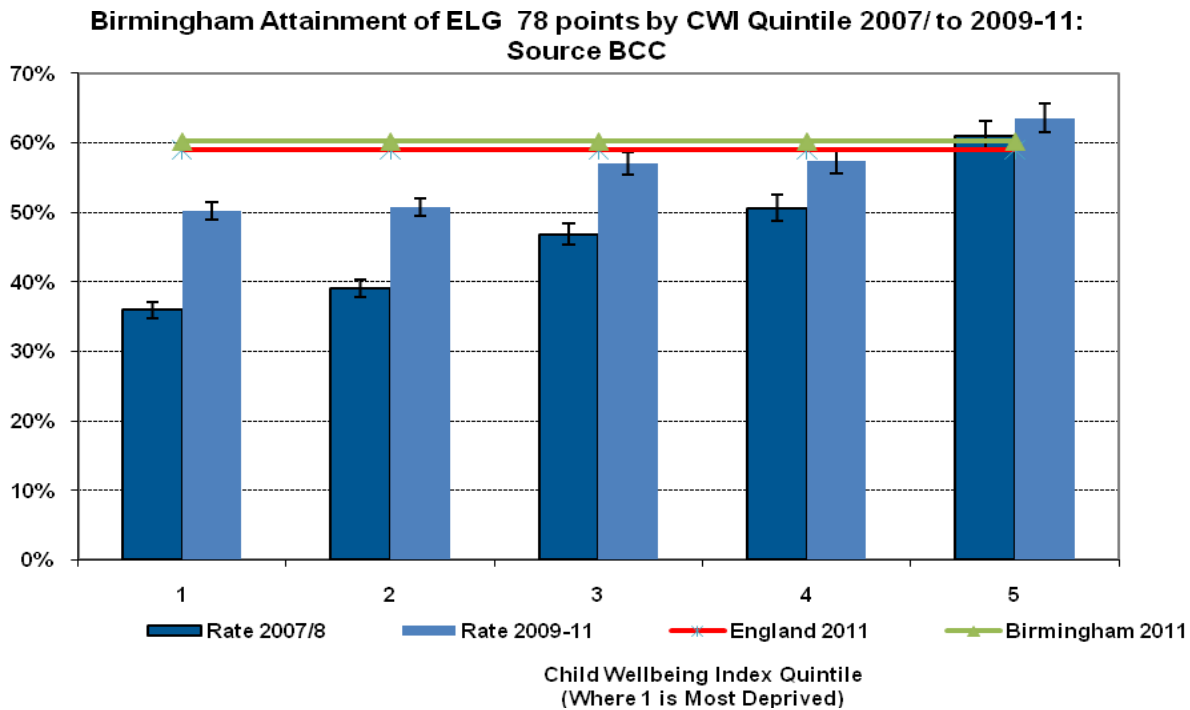
- 6.17. Early growth and nutrition is optimised by mother's breastfeeding their infants for 6 weeks or more. Research suggests that early learning goals attainment is higher in breast fed babies.
- 6.18. Birmingham has a variation in breast feeding rates which shows some correlation to socio-economic disadvantage. The local reasons for this trend are unclear but national research suggests that mothers from these areas are less likely to breastfeed and more likely to introduce solid foods earlier than recommended. As a result their children are more likely to be under-weight as infants but more prone to obesity later in childhood.
- 6.19. The local variation of breast feeding rates is discussed later.

6.20. **Attainment of Early Learning Goals**

- 6.21. Birmingham has seen a significant improvement in the proportion of children achieving the national benchmark of a good level of development as measured by the attainment of Early Learning Goals since the introduction of the Early Intervention Programmes. This is notable as other Core Cities have not shown the same and therefore this trend is not the result of other confounding national policy changes.
- 6.22. Figure 6.1 shows the improvement in attainment across the deprivation gradient in Birmingham between 2007/8 and 2009/11. The improvement in more deprived quintiles is large and statistically significant. Overall, the inequality gap has narrowed. It should also be noted that Birmingham children from the lower deprived

quintiles have an attainment rate above the England average and this is statistically significant.

6.23. **Figure 6.1:**



6.24. Nationally, the following has been noted:

- ▶ Between 2010 and 2011, the percentage of pupils achieving a good level of development increased for all broad groupings of pupils, regardless of gender, ethnicity, FSM eligibility, SEN stage or first language.
- ▶ Girls outperformed boys with 68 per cent of girls achieving a good level of development compared to 50 per cent of boys.
- ▶ Looking at the broad ethnicity groupings in 2011, the proportion of groups of pupils who achieved a 'good level of development' above the national average were those from White (60 per cent) and Mixed (60 per cent) backgrounds. The groups that achieved below the national average were those from Black (55 per cent) Asian (55 per cent) and Chinese (58 per cent) backgrounds.
- ▶ A higher proportion (60 per cent) of pupils whose first language is English achieved a good level of development compared with pupils whose first language was other than English (52 per cent).
- ▶ 44 per cent of pupils eligible for free school meals (FSM) achieved a good level of development compared with 62 per cent of other pupils (those not eligible for free school meals or unclassified).

6.25. Local outcomes show that:

- ▶ 40% of boys achieved the majority of the Early Learning Goals compared with 55% of girls;
- ▶ 37% of children eligible for free school meals achieved the majority of the Early Learning Goals compared with 52% of children not eligible for free school meals;
- ▶ Less than 40% of children from Black African/Somali, Pakistani and Arab/Yemeni communities achieved the majority of Early Learning Goals;
- ▶ 39% of children with English as a second language achieved the majority of the Early Learning Goals compared with 53% of children with English as their first language;
- ▶ 32% of looked after children achieved the majority of the Early Learning Goals; and
- ▶ Less than 40% of children living in Lozells and East Handsworth, Washwood Heath, Bordesley Green, Aston, Nechells and Sparkbrook wards achieved the majority of the Early Learning Goals compared with over 60% in Hall Green, Brandwood, Harborne, Bournville and the Sutton wards (Map 6.1)

6.26. This suggests that while there has been considerable local progress but there remain serious challenges within the City. This is demonstrated in Map 6.1.

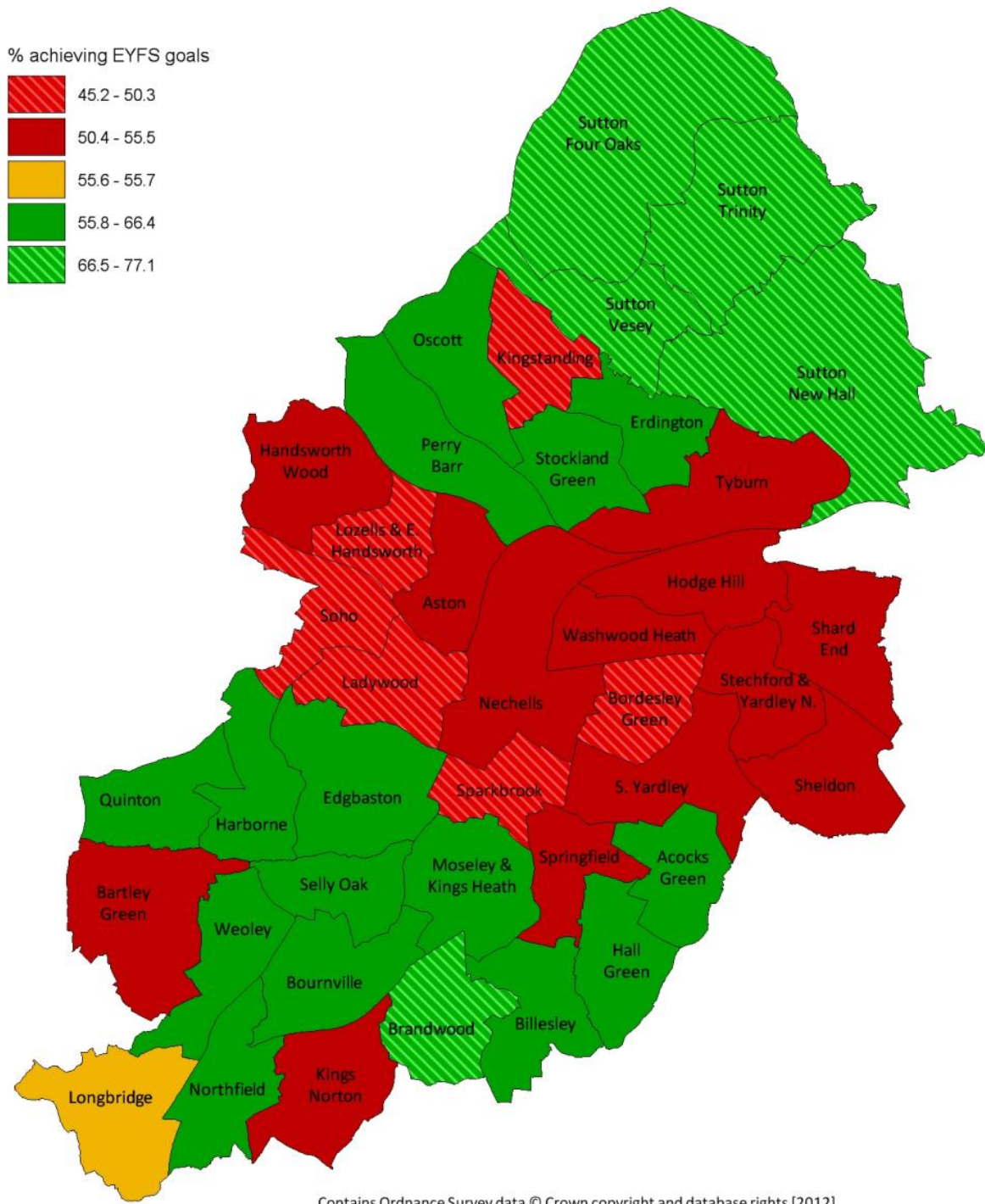
6.27. **Children's Behaviour**

6.28. A local survey of children's behaviour is conducted each year from 2007-2011. Parents views about their children were assessed through questionnaires based on the Strengths and Difficulties Questionnaire (Table 6.3). Numbers completing the survey were modest and the proportion from BME too small to generate results on the basis of ethnicity.

6.29. The pooled results in Table 6.3 indicate that approximately 87% of children were within a range indicating normal conduct; 6% with challenges; and 7% with a potential conduct disorder. There is no significant change in these findings over time.

6.30. Map 6.1 Attainment of Early Learning Goals by Area

The proportion of 5 year olds achieving the Early Years Foundation Stage (EYFS) goals, 2009 - 11



6.31. **Table 6.3: The Time Trends Of The Outcome Measures Of The Brighter Futures Survey In Birmingham**

SDQ total difficulties		0-13 normal	14-16 Borderline	17-40 Potential disorder
3-4yrs	2007	84%	6%	10%
	2008	90%	5%	6%
	2009	90%	5%	6%
	2010	82%	8%	11%
	2011	85%	8%	7%
5-6yrs	2007	92%	5%	3%
	2008	93%	0%	7%
	2009	88%	3%	9%
	2010	91%	3%	6%
	2011	81%	8%	11%
3-6yrs combined	2007	88%	6%	6%
	2008	91%	2%	6%
	2009	89%	4%	7%
	2010	87%	5%	8%
	2011	83%	8%	9%
Five year average		87%	6%	7%

6.32. **Oral Health**

6.33. The oral health of 5 year olds is surveyed every 3 years. The latest available data was collected in 2007/8.

6.34. Oral health is reflected in the rate of Drilled Missing or Filled Teeth (DMFT). The rate of DMFT is significantly better for children from less deprived areas.

6.35. National analysis shows Birmingham’s fluoridation policy to result in better than average decayed, missing and filled teeth scores compared to other core Cities, particularly those without water fluoridation.

6.36. The Dental Health Needs Assessment conducted for Birmingham & Solihull NHS cluster has consistently shown a strong relationship between deprivation and dental decay in 5 year olds. It identified that children in the Heart of Birmingham PCT area are more likely to have decayed, missing and filled teeth and are more likely to have teeth extracted under general anaesthetic. Fewer children in the West and Central area of Birmingham attend a dentist by age 2 or 3 but more frequently attend for extensive treatment at the Birmingham Dental Hospital.

6.37. **Obesity at Reception in school aged 5 years**

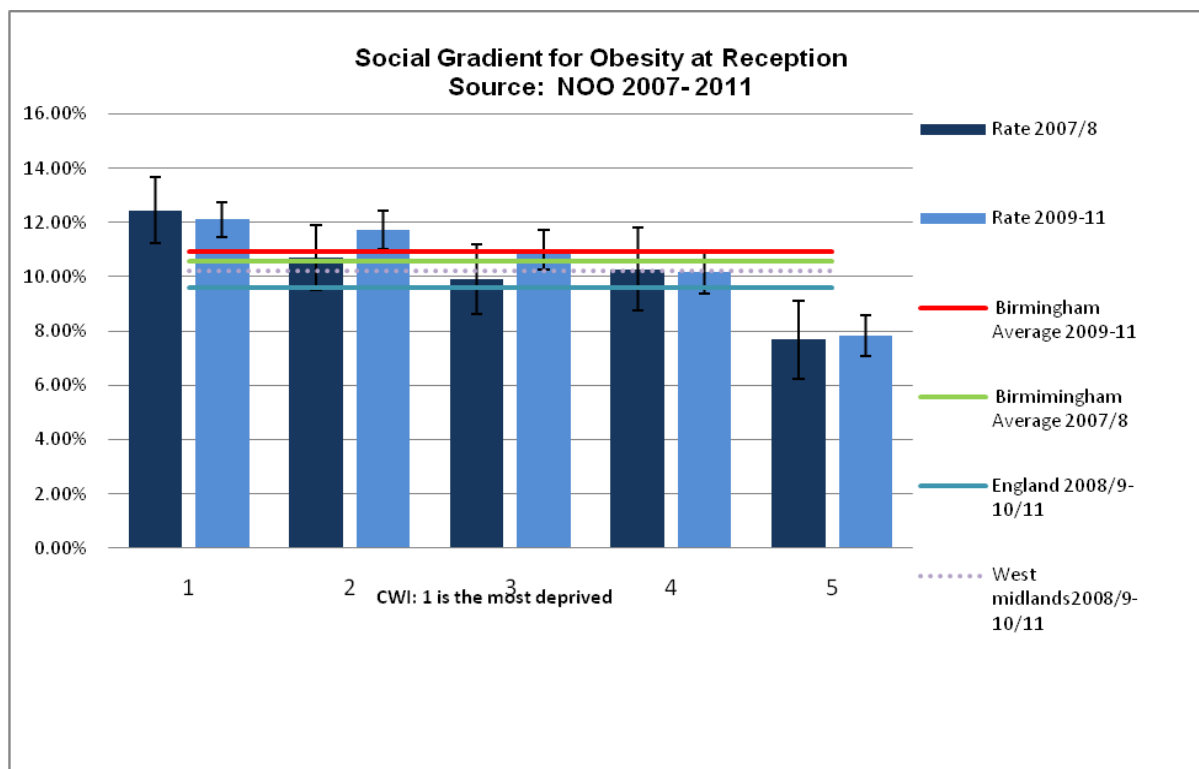
6.38. The overall rate of obesity at reception has marginally increased from 10.6% of children in school receptions in 2007/8 to 10.9% for the years 2009-11 and is not significant. However 23.4% of this group, and therefore 2.5% of the school Reception population, are severely overweight and/or obese.

6.39. These levels of obesity place Birmingham in the group of 20% of Local Authorities with the highest prevalence of obesity in children.

6.40. The relationship with deprivation is clearly seen in the geographical Map 6.2.

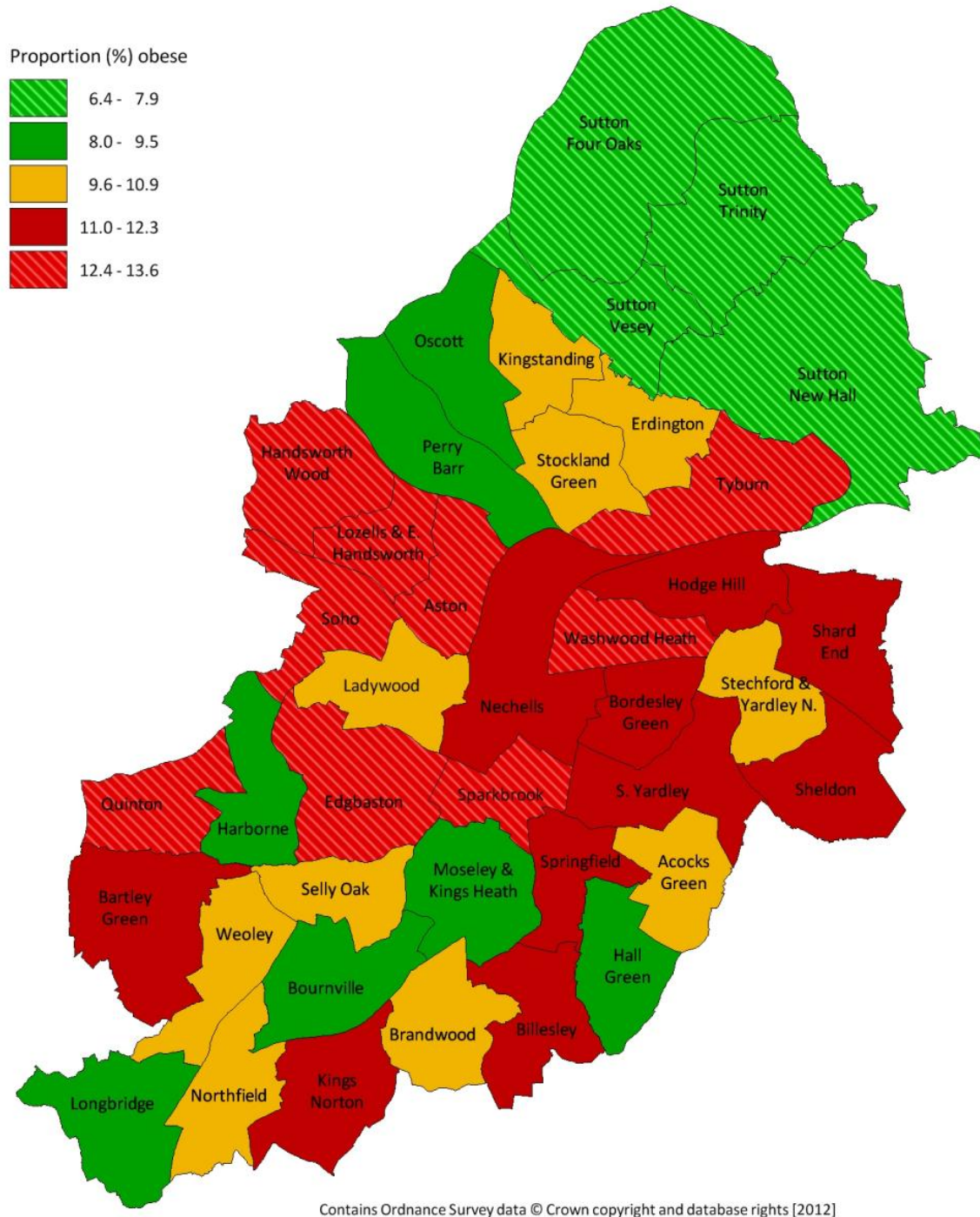
6.41. The difference in obesity between the least and the most deprived areas has narrowed from just over 6% in 2007/08 to just over 4% in 2009-11. This has however been due to a rise in obesity in less deprived areas rather than a fall in the most deprived areas (Figure 6.2).

6.42. **Figure 6.2: Obesity at reception to school by deprivation**



6.43. **Map 6.2: Obesity at reception for Birmingham electoral wards**

The proportion of Year Reception children measured by the NCMP who are obese, 2008/09 - 2010/11



6.44. Table 6.4 does not suggest that these differences are based upon ethnic/cultural differences. A whole population intervention, from birth to 5 years and with families, is therefore required to keep the focus on attaining and maintaining a healthy weight.

6.45. **Table 6.4 Obesity at reception by Ethnicity (2008-11)**

RECORDED ETHNICITY	% OBESE
Mixed: White and Black African	23%
Black: Any Other Black Background	16%
Black: African	14%
Unknown: Refused	13%
Black: Caribbean	13%
Asian: Pakistani	12%
Asian: Any Other Asian Background	12%
Mixed: White and Black Caribbean	12%
Asian: Indian	11%
Unknown: Information Not Yet Obtained	11%
Birmingham all children	11%
Asian: Bangladeshi	11%
Chinese & Other: Any Other Ethnic Group	11%
Mixed: Any Other Mixed Background	10%
Any Other White Background	9%
White: British	9%
Mixed: White and Asian	8%
White: Irish	0%
White: Traveller of Irish Heritage	0%
Chinese & Other: Chinese	0%
Chinese & Other: Gypsy / Roma	0%

6.46. It is acknowledged that the evidence base for tackling obesity is still developing but the following are interventions considered to show promise.

- ▶ Minimising weight gain during pregnancy
- ▶ Promotion of and support for continuation of breast feeding
- ▶ Support for mums to lose weight postnatal
- ▶ Practical skills and knowledge to support appropriate and timely weaning
- ▶ Healthy eating skills and knowledge
- ▶ Parenting skills to cope with the obesogenic environment and to encourage healthy lifestyle behaviours
- ▶ Parental role modelling
- ▶ Promotion of active play
- ▶ Lack of parental involvement may be the result of limited success in some programmes previously evaluated

- ▶ Development of food preference, activity levels and leisure activity selection are all shown to be influenced by the type of parenting and environment a child experiences in the first years of life
- ▶ More opportunities for Birmingham families to make healthy lifestyle choice

6.47. **Immunisation & Vaccination**

6.48. The UK routine childhood schedule offers routine vaccination to children under the age of 5 years. This provides protection against these infectious diseases;

- ▶ Diphtheria
- ▶ Tetanus
- ▶ Polio
- ▶ Pertussis (Whooping cough)
- ▶ Pneumococcal disease
- ▶ Haemophilus influenza type b (Hib)
- ▶ Meningococcal disease (group C)
- ▶ Measles
- ▶ Mumps
- ▶ Rubella (German measles)

6.49. There is variation in uptake rates by families with children. This variation has a number of drivers (Reducing differences in immunisation uptake, NICE 2009), including:

- ▶ Those who have missed previous vaccinations (whether as a result of parental choice or otherwise)
- ▶ Looked after children
- ▶ Those with physical or learning disabilities
- ▶ Children of teenage or lone parents
- ▶ Those not registered with a GP
- ▶ Younger children from large families
- ▶ Children who are hospitalised or have a chronic illness
- ▶ Those from some minority ethnic groups
- ▶ Those from non-English speaking families
- ▶ Vulnerable children, such as those whose families are travellers, asylum seekers or are homeless.)

6.50. Immunisation rates are recorded by GP Practices because they are the principal provider of the programme. The Health Protection Agency monitors the rates by practice and has raised a number of service issues from national research which may be impairing the ability of some practices to achieve optimal vaccination coverage. These include:

- ▶ Identifying children new to the area, particularly international migrants, and signposting these to services;

- ▶ Reconciling data held on different systems that do not connect with each other;
- ▶ Differential payment targets at 70% and 90% coverage which does not encourage optimal coverage of 90%;
- ▶ GP clinical systems using relevant/same Read Codes for ease of comparison and audit;
- ▶ Parent held Child Health Records (Red Book) are important for parents but different versions in different parts of the UK and an international version may be the only record of vaccination. This is difficult when establishing local coverage;
- ▶ Handwritten records e.g. Lloyd George records (GP), hospital records, discharge summary letters may contain relevant information but are not easily retrievable; and
- ▶ Sufficient vaccination appointments at every GP practice with enough appropriately trained competent registered immunisers to manage demand.

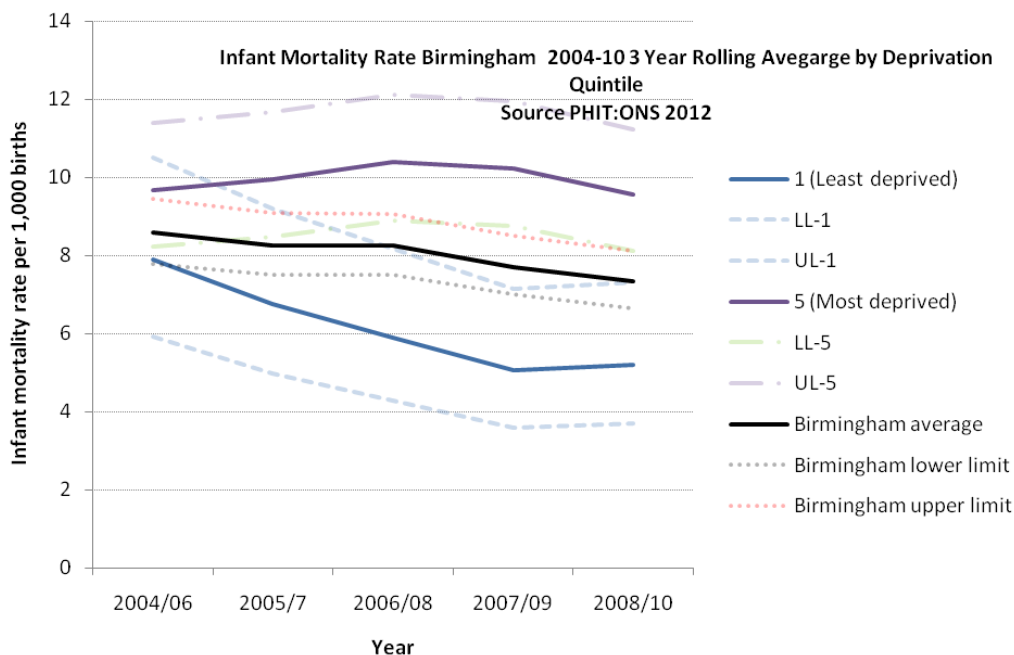
7. MORTALITY IN CHILDHOOD

- 7.1. The majority of deaths of children under 5 years of age occur before the end of the first full year of life (Infant mortality rate) as shown in Table 7.1. Birmingham registers a high rate of Infant mortality (7.3 per 1,000) compared to England (4.6 per 1,000). Infant Mortality has a socio-economic gradient (Figure 7.1).
- 7.2. All child deaths are reviewed by the Child Death Overview Panel of the Birmingham Safeguarding Children Board to ascertain a cause and whether there are identifiable factors which would reduce the likelihood of further similar deaths occurring. A more detailed report on the findings of the Child Death Overview Panel 2012-13 is expected to be presented to the Safeguarding Board later in 2013.

7.3. **Table 7.1: Age of Death in Children Under 5 years in Birmingham**

Deaths in 0-5 Year Olds	Number	%
All causes, ages under 28 days	481	52%
All causes, ages 28 days and over (< 1 year)	182	20%
All causes, ages > 1 & <5 year	255	28%

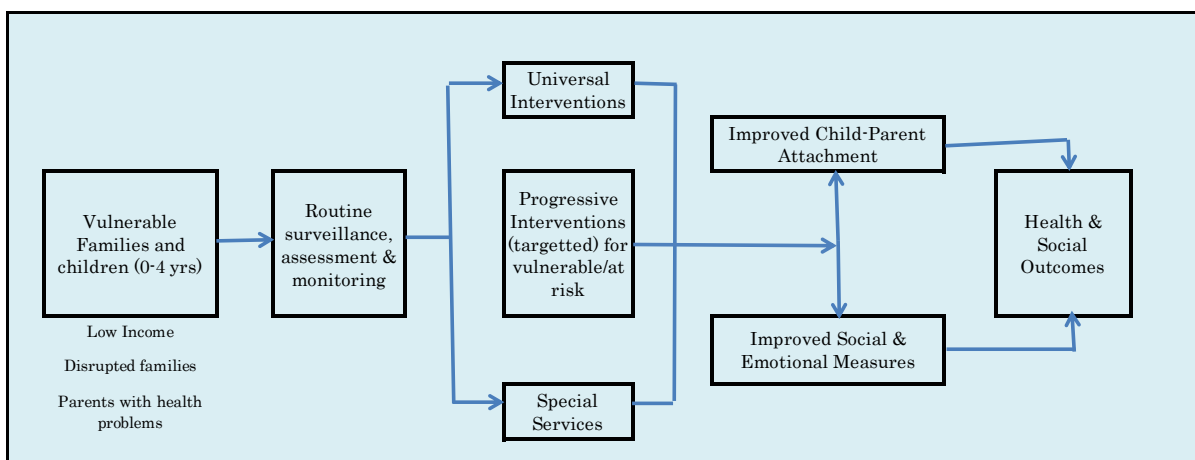
7.4. **Figure 7.1 Infant mortality 2004-10**



8. SUPPORTING CHILDREN AND FAMILIES

- 8.1. The Healthy Child Programme, introduced through the Every Child Matters programme (Children Act 2004), aims to encourage the development, health and wellbeing of all children but also enables targeting of those in greater need and is shown in the Foreword.
- 8.2. The conceptual links between the needs of vulnerable children and families, intervention options and improved outcomes is shown in Figure 8.1

8.3. **Figure 8.1.: Child Development programme (Healthy Child Programme)**



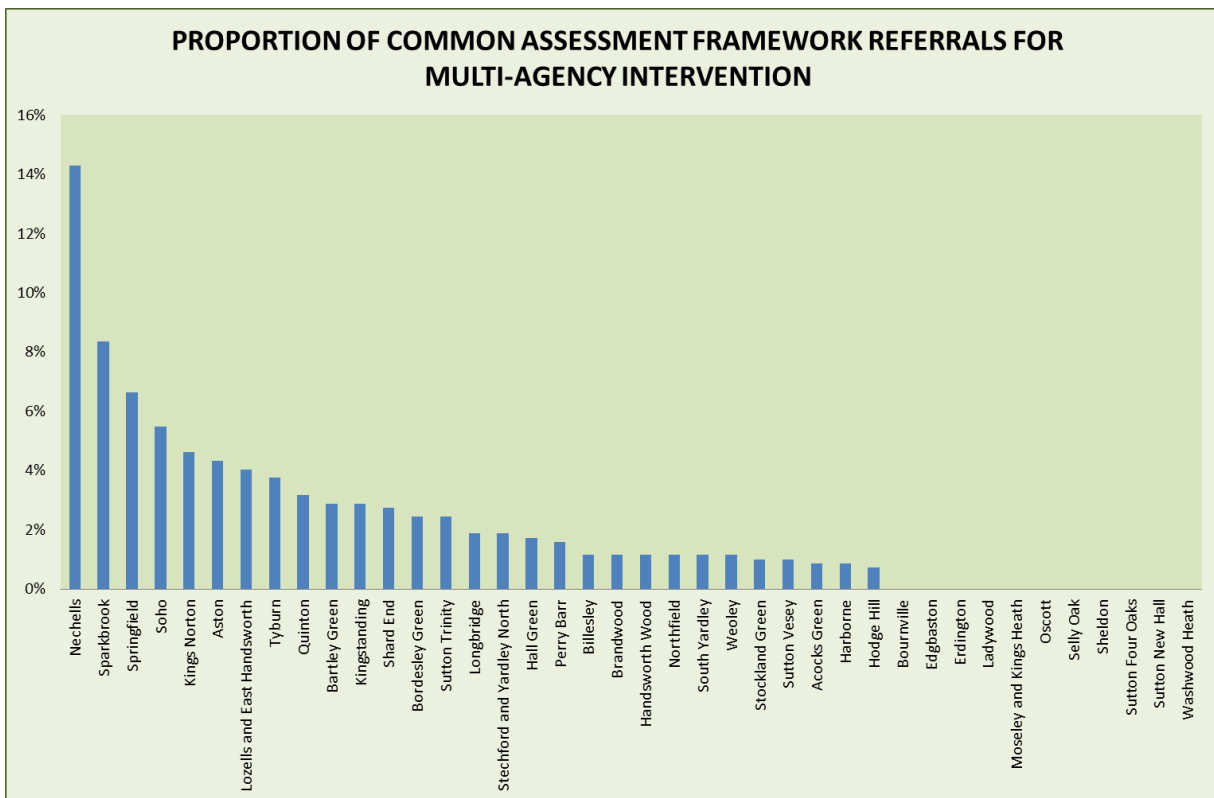
- 8.4. In order to identify the needs of children and families, staff with different expertise may need to undertake an assessment. In order that the information gathered may be used by all professionals involved, and therefore the family do not have to give

details repeatedly, a Common Assessment Framework for use by all practitioners was proposed. There is anecdotal evidence that the system is patchily used and therefore needs that are identified are not captured, undermining any attempt to intelligently commission and/or procure relevant elements of care packages based on family needs.

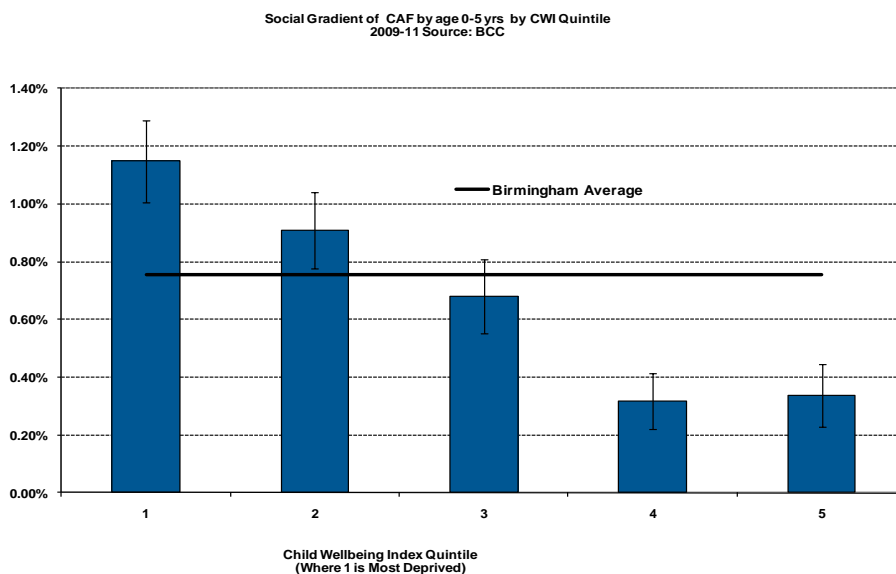
8.5. The distribution of Common Assessment Framework completions requiring multiagency intervention which have been identified is shown in Figure 8.2 by electoral ward. This shows a significant difference in referral rates by ward. This should have an implication for the distribution of services to support these families.

8.6. Figure 8.3 shows this relationship between social disadvantage and referral rates more clearly.

8.7. **Figure 8.2: Number of Common Assessment Framework referrals by Ward for 2 years 2009-11**



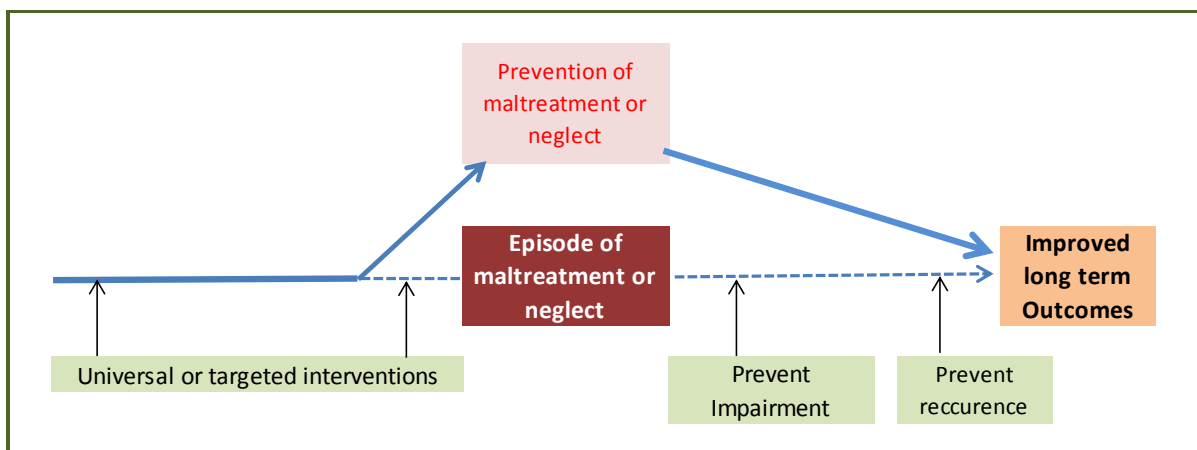
8.8. **Figure 8.3: Common Assessment Framework by Deprivation**



8.9. **The principle of early intervention** has developed in a number of ways in recent years and it is important to be clear about its scope. There are two approaches taken.

8.10. The first is to respond quickly as soon as a need is identified (**Reactive Early Intervention**) in order to prevent further deterioration in the family circumstances and the need for more complex interventions. In a report reviewing the state of safeguarding Children, Munroe described this reactive early intervention in a framework (Figure 8.4).

8.11. **Figure 8.4: Reactive Early Intervention Munroe Framework**



8.12. The second approach is to provide programmes of interventions which aid the development of child and family relationships (**Early Intervention Programmes**). These can be delivered universally or in particular communities of higher need. The

aim is to improve the child's development, attainment and ultimately their employment and socio-economic independence and contribution.

- 8.13. The case for providing key services and interventions early in a child's life has been based on longitudinal evidence of the impact on a child's development from social, familial, and economic factors.
- 8.14. The Sure Start approach had been intended to improve children's cognitive development, behaviour and social and health trajectories in this way. Evaluations of programmes and interventions focussed on early intervention have been considered promising but have not always sustained that promise over time.
- 8.15. The Marmot review supported the development of a family centred approach and also identified areas of activity which should be considered for disinvestment, particularly approaches focussed on leaflets and educational materials.
- 8.16. Marmot cautioned about scaling up programmes with positive evaluations which might have occurred only in favourable research or implementation conditions.
- 8.17. The Allen report summarised the evidence of benefit of a number of programme interventions and made a number of recommendations supporting their use. (Figure 8.5)

8.18. **Figure 8.5: Effective Interventions by age (Allen Report)**



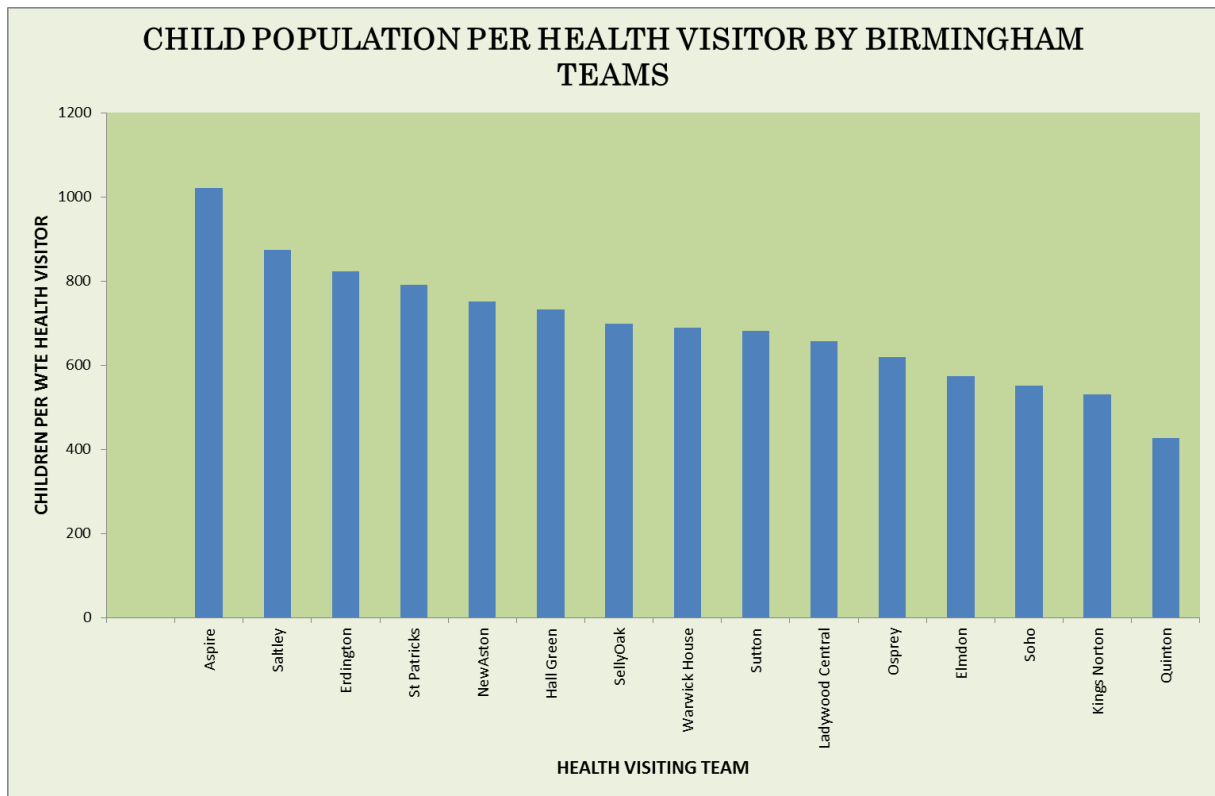
- 8.19. All of these reports add some insight into what might work and in which setting. However there is the need to translate this research and evidence in to local practice.
- 8.20. The development of Sure Start and the subsequent roll out of Children Centres probably provided the earliest largest scale intervention delivered early in children's lives. In Birmingham the Children's Trust Brighter Futures Strategy was based on conducting trials of four evidence based Early Intervention programmes. An evaluation of the benefits and impacts of the investment in these four programmes in Birmingham concluded that:
- ▶ **Incredible years** programme did show some improvement in behaviours and this was related to the length of the intervention, the higher the 'dose'; the better the effect. It was most effective if the programme methodology was closely adhered to and delivered in Children's Centres. The size of the improvement in behaviours (5%) may not be socially significant however.
 - ▶ **PATHS (Promoting Alternative Thinking Strategies)** produced mixed results with some improvement in the first 12 months which was lost by 24 months. There is however a confounding influence on this comparison. PATHS is a whole school programme which aims to improve all pupils' behaviour. In the control group of schools there were other whole school programmes which became available and were used. From this evidence it would seem that PATHS proves to be no better than other whole school programmes at producing beneficial change in pupils' behaviours.
 - ▶ **'Triple P' parenting course** showed similar rates of improvement in behaviours as the families on a waiting list, a control group really using a 'wait & see' approach. This lack of difference might therefore be the result of the natural changes in behaviour that occur with age related development. The published results of Triple P programmes, where the developer is involved, are much better. Is this the result of his enthusiasm and can he be everywhere at once? This may therefore be a serious flaw in the programme.
 - ▶ **Family Nurse Partnership** is a nationally supported programme and the Birmingham experience will be included in the national evaluation.
- 8.21. Despite these evaluations it is clear that the provision of and commitment to these programmes resulted in a significant improvement in the attainment of Early Learning Goals in Birmingham from 42% (Lowest quintile nationally) rising to 56% (highest quintile) in 2012.
- 8.22. In addition the NHS has commissioned:
- ▶ **Pregnancy Outreach Workers:** This approach is the subject of a randomised Control Trial which is due to be published in 2013. This trial however concentrates on an improvement in the maternity outcomes which, of course, the workers are not qualified to deliver. It was considered too difficult to measure changes in psycho-social outcomes and the researchers concentrated on very short term outcomes too.

- ▶ **Genetic Screening Programme:** This project is aimed at identifying and providing detailed support to prospective parents where there is a high risk indicated for genetic problems. This is currently in an evaluation stage.

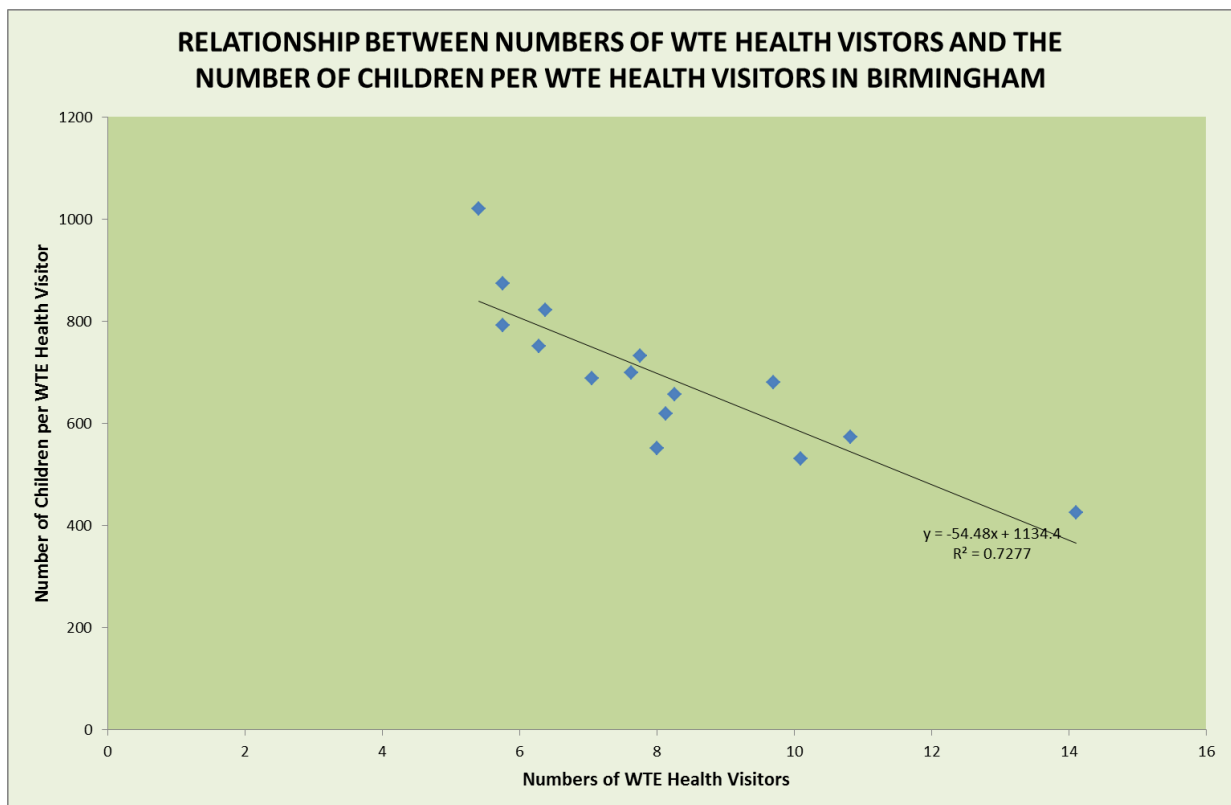
8.23. **Staff and Settings**

- 8.24. The Framework presented in the Foreword (F2) identifies the variety of settings and inputs which contribute to and impact on a child's early life course journey. The evidence of benefit and current outputs/outcomes of some of these are considered in this section.
- 8.25. In order to ensure **a healthy start to life and safe passage through pregnancy** the availability of midwives for all and appropriate specialist investigation and care when indicated is important. The Birmingham Maternity Services review is underway and will report during 2013. Its conclusions and recommendations will be important to consider.
- 8.26. Deriving a model for **the health visitor role** and staffing levels has been attempted in many areas of the country over the years. The traditional approach to this has used a simple model of developing equitably sized teams for the volume of children on a caseload and attempting to factor in other issues which consume practitioner time, such as new to area visits or number of primary visits, with some form of weighting based on deprivation or need. These analyses usually use expected numbers of child protection cases as a principal weighting factor.
- 8.27. Undoubtedly, an ever increasing level of sophistication could be applied to any staffing model but the current review, being co-ordinated by the area team of NHS England, recommends that the model is developed with 5 main factors.
- ▶ Absolute Caseload Volume
 - ▶ Volume of Primary visits
 - ▶ Volume of new to area (derived from Child Health system reconciled with GP referrals)
 - ▶ Modelling of Child protection cases and Children in Need Numbers
 - ▶ Modelling of rates of children with disabilities and Long term Life Limiting conditions
- 8.28. Numbers of Health Visitors in Birmingham vary by geographical location (Figure 8.6) but this is closely related to the number of children in the population (Figure 8.7).
- 8.29. The reported activity of Health Visitors in the Children's Centre consortia is seen in Table 8.1. Between the consortia there is a suggestion that workload is independent of the area's births (primary visits) or visits to children new to the area, an indicator of migration and particularly international migrations.
- 8.30. There is some indication that activity/caseload is influenced by disadvantage within the consortia. This suggests that at local levels the distribution of Health Visitors is influenced by other workload factors.

8.31. **Figure 8.6:**



8.32. **Figure 8.7**



8.33. **Table 8.1:**

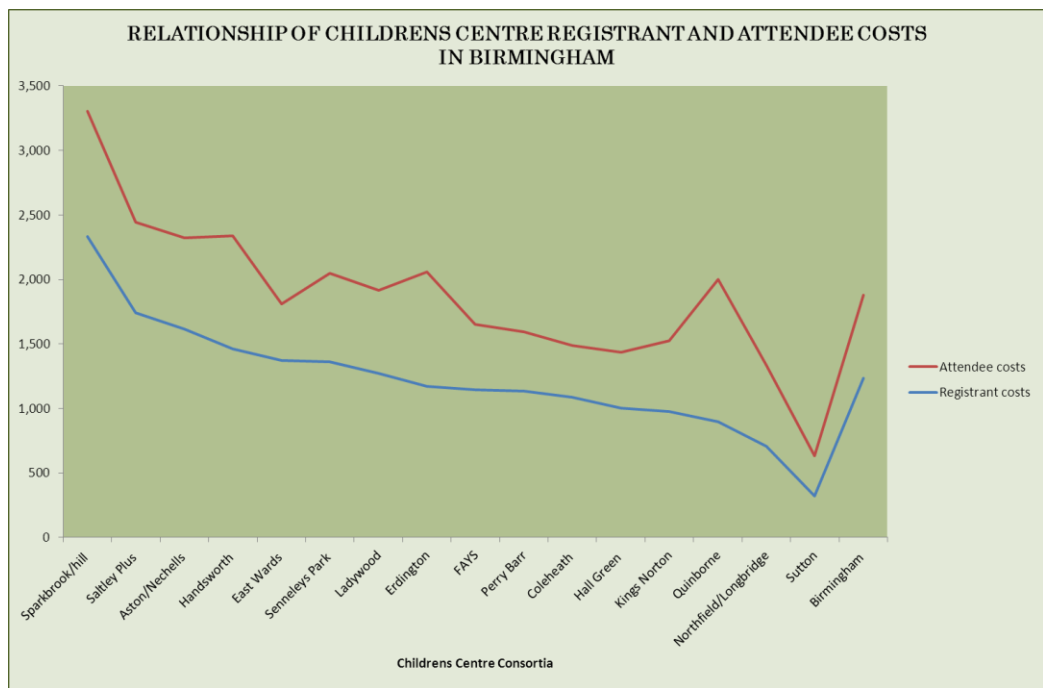
Health Visitor Activity by Children’s Centre Area and Deprivation

CHILDREN CENTRE CLUSTER	Child Wellbeing Index	Caseload	Primary visits	%primary of caseload	% of primary visits in all Birmingham	New to Area	%new to Area of caseload	% of New to Area in all Birmingham
Aston/Nechells	1	4158	821	20%	8.5%	279	7%	5.4%
Aston/Nechells	2	1567	307	20%	3.2%	57	4%	1.1%
Aston/Nechells	3	614	120	20%	1.2%	49	8%	0.9%
Coleheath Consortia	1	2499	504	20%	5.2%	181	7%	3.5%
Coleheath Consortia	2	3193	621	19%	6.4%	228	7%	4.4%
Coleheath Consortia	3	1614	288	18%	3.0%	109	7%	2.1%
Coleheath Consortia	4	199	33	17%	0.3%	2	1%	0.0%
East Wards	1	2019	470	23%	4.9%	123	6%	2.4%
East Wards	2	1812	393	22%	4.1%	100	6%	1.9%
East Wards	3	2179	474	22%	4.9%	139	6%	2.7%
East Wards	4	380	84	22%	0.9%	15	4%	0.3%
Erdington	1	599	140	23%	1.5%	36	6%	0.7%
Erdington	2	818	170	21%	1.8%	52	6%	1.0%
Erdington	3	1479	294	20%	3.0%	88	6%	1.7%
Erdington	4	1507	330	22%	3.4%	71	5%	1.4%
Erdington	5	314	71	23%	0.7%	11	4%	0.2%
FAYS	1	414	107	26%	1.1%	20	5%	0.4%
FAYS	2	798	174	22%	1.8%	40	5%	0.8%
FAYS	3	990	270	27%	2.8%	39	4%	0.8%
FAYS	4	1259	324	26%	3.4%	65	5%	1.3%
FAYS	5	466	140	30%	1.5%	14	3%	0.3%
Hall Green Consortia	1	430	95	22%	1.0%	26	6%	0.5%
Hall Green Consortia	2	1039	220	21%	2.3%	66	6%	1.3%
Hall Green Consortia	3	1612	343	21%	3.6%	115	7%	2.2%
Hall Green Consortia	4	2395	527	22%	5.5%	135	6%	2.6%
Hall Green Consortia	5	1316	308	23%	3.2%	116	9%	2.2%
Handsworth Consortia Cluster	1	1365	270	20%	2.8%	116	9%	2.2%
Handsworth Consortia Cluster	2	1813	398	22%	4.1%	171	9%	3.3%
Handsworth Consortia Cluster	3	1496	318	21%	3.3%	123	8%	2.4%
Handsworth Consortia Cluster	4	597	122	20%	1.3%	45	8%	0.9%
Handsworth Consortia Cluster	5	311	68	22%	0.7%	16	5%	0.3%
Kings Norton	1	686	144	21%	1.5%	35	5%	0.7%
Kings Norton	2	452	85	19%	0.9%	26	6%	0.5%
Kings Norton	3	1175	240	20%	2.5%	82	7%	1.6%
Kings Norton	4	1028	200	19%	2.1%	82	8%	1.6%
Kings Norton	5	895	178	20%	1.8%	80	9%	1.5%
Ladywood	1	2127	458	22%	4.7%	180	8%	3.5%
Ladywood	2	378	98	26%	1.0%	30	8%	0.6%
Ladywood	3	189	46	24%	0.5%	25	13%	0.5%
Ladywood	4	568	194	34%	2.0%	50	9%	1.0%
Northfield/Longbridge	1	612	154	25%	1.6%	38	6%	0.7%
Northfield/Longbridge	2	482	117	24%	1.2%	23	5%	0.4%
Northfield/Longbridge	3	1275	298	23%	3.1%	64	5%	1.2%
Northfield/Longbridge	4	468	112	24%	1.2%	29	6%	0.6%
Northfield/Longbridge	5	833	197	24%	2.0%	28	3%	0.5%
Perry Barr	1	709	156	22%	1.6%	33	5%	0.6%
Perry Barr	2	1177	249	21%	2.6%	40	3%	0.8%
Perry Barr	3	403	78	19%	0.8%	27	7%	0.5%
Perry Barr	4	1702	382	22%	4.0%	77	5%	1.5%
Perry Barr	5	790	196	25%	2.0%	39	5%	0.8%
Quinborne	1	382	78	20%	0.8%	28	7%	0.5%
Quinborne	2	204	30	15%	0.3%	11	5%	0.2%
Quinborne	3	856	185	22%	1.9%	64	7%	1.2%
Quinborne	4	599	137	23%	1.4%	46	8%	0.9%
Quinborne	5	1382	322	23%	3.3%	126	9%	2.4%
Saltley Plus	1	3056	595	19%	6.2%	227	7%	4.4%
Saltley Plus	2	1311	250	19%	2.6%	89	7%	1.7%
Senneleys Park	1	729	136	19%	1.4%	26	4%	0.5%
Senneleys Park	2	1694	328	19%	3.4%	104	6%	2.0%
Senneleys Park	3	505	114	23%	1.2%	52	10%	1.0%
Senneleys Park	4	596	110	18%	1.1%	40	7%	0.8%
Senneleys Park	5	198	34	17%	0.4%	15	8%	0.3%
Sparkbrook/hill	1	2847	538	19%	5.6%	170	6%	3.3%
Sparkbrook/hill	2	2858	518	18%	5.4%	188	7%	3.6%
Sparkbrook/hill	3	1754	345	20%	3.6%	99	6%	1.9%
Sparkbrook/hill	4	141	31	22%	0.3%	8	6%	0.2%
Sutton	3	324	67	21%	0.7%	18	6%	0.4%
Sutton	4	737	151	20%	1.6%	57	8%	1.1%
Sutton	5	3837	736	19%	7.6%	211	6%	4.1%
Birmingham		45488	9651	21%		2952	6%	

- 8.34. Reactive Early Intervention in Birmingham is mediated through **structural elements of Birmingham Children Services** which includes:
- ▶ Children's centres
 - ▶ Integrated Family Support teams
- 8.35. These have provided the focus of multi-agency delivery of community services including strong links with health visiting and other services.
- 8.36. In 2002 a group of facilities were built or developed to draw together services for children under 5 and their families in disadvantaged areas. The development of Sure Start and the roll out of Children's Centres is an example of Universal/targeted prevention. National evaluation of Sure Start demonstrated that children growing up in Sure Start areas:
- ▶ Experienced better physical health than children in non-Sure Start areas; and
 - ▶ Had lower average Body Mass Index than children in non-Sure Start areas. This was however due to their being less overweight but with no difference for obesity.
- 8.37. The positive effects associated with Sure Start areas for maternal wellbeing and family functioning were reported as:
- ▶ Providing a more stimulating home learning environment for their children.
 - ▶ Providing a less chaotic home environment for their children.
 - ▶ Experiencing greater life satisfaction.
 - ▶ Engaging in less harsh discipline.
- 8.38. Conversely;
- ▶ Mothers in Sure Start areas reported more depressive symptoms, although this may be a reporting bias.
 - ▶ Parents in Sure Start areas were less likely to visit their child's school for parent/teacher meetings or other arranged visits, although the overall incidence of such visits was generally low in all areas.
- 8.39. Local outcome data for Children Centres in Birmingham has yet to provide the level of detail reported in the national evaluation.
- 8.40. Birmingham has 73 children centres clustered into 16 localities, as a hub and spoke model, coterminous with Integrated Family Support Teams boundaries.
- 8.41. The expectation is that all Hub Centres will deliver the full Core Purpose and that Satellite centres will deliver one or more aspect of the Core Purpose, depending on local need. In this way, the full service will be delivered across localities with services focused on local priorities and needs. Services and activities will still be delivered at the local centres to ensure accessibility in communities maintaining 'pram pushing distance' and supporting locally based activities that meet local identified need as part of the core purpose.

- 8.42. The core business of each locality's centres is targeted outreach to engage with local families with children under the age of 11, especially as part of the Team Around the Family. The aim is to improve outcomes and narrow the gaps in:
- ▶ Parenting Capacity;
 - ▶ Health and wellbeing (including economic wellbeing); and
 - ▶ Child development and school readiness;
- 8.43. This improvement is to be achieved by:
- ▶ Assessing need in the local community to inform a local, integrated offer of support which ensures funding and resources are aimed at those in greatest need;
 - ▶ Provision of integrated support to children and families, with a portfolio of targeted evidence based interventions for those in greatest need;
 - ▶ Acting as a hub for the local community, building social capital; and
 - ▶ Support for other early years settings.
- 8.44. In order to achieve this in Birmingham, the Council has focused on actions to:
- ▶ Narrow the gap between those children who do well and those who do less well. (For example, tackle child poverty through working with Job Centre Plus to improve access to work and improve Early Years Foundation Stage Profile results).
 - ▶ Safeguard children and protect them from significant harm. (For example, Common Assessment Framework, Early Support, Designated Senior Person, Team Around the Child, Referrals, Reduction in hospital admissions caused both intentionally and unintentionally.)
 - ▶ Assess the needs of children and families from first contact through to service exit.
- 8.45. The commentary concerning Figures 4.1 to 4.8 on outcome measures at Ward level will hold true for the Children Centre areas. It is not possible to separate the data for attenders at Children Centres and therefore be able to use non-attenders as a control comparison group.
- 8.46. This then has to be seen in the context of the variation of unit costs shown in Figure 8.8 which shows serious variation by registrant cost and no relationship by attendee cost.
- 8.47. Attendance at Children Centres varies across the city and does not appear to be related to the pattern of disadvantage as there is no statistically significant difference between the attendance rates of the quintiles (Table 8.4 and 8.5). Registration at a Children Centre however appears to have a moderate association to lower numbers of Health Visitors in the area (Figure 8.9).

8.48. **Figure 8.8:**



8.49. **Table 8.4:**

CHILDREN CENTRE REGISTRATIONS AND ATENDANCES 2011-12

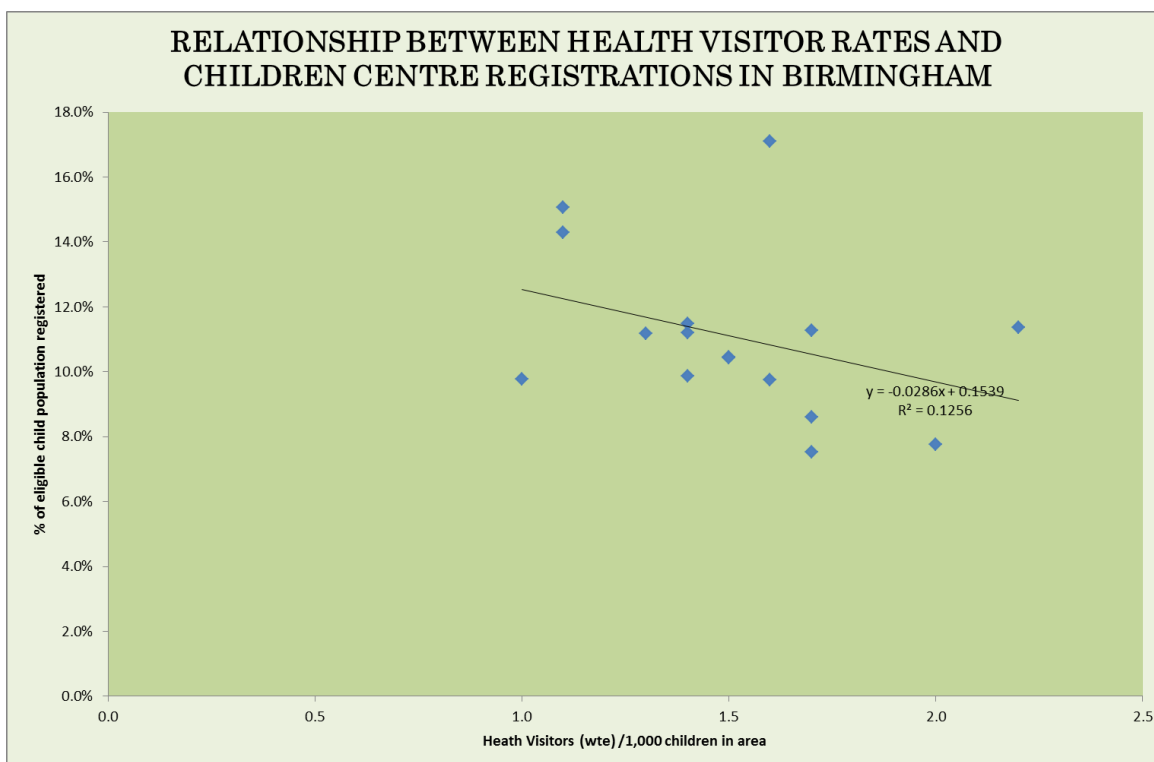
Locality	Number under 5s Sept 2012	REGISTERED		ATTENDED	
		Numbers Nov 2012	%	1/10/11-30/9/12	%
Saltley	6016	4571	76.0%	2977	49.5%
Cole Heath	6098	4626	75.9%	2676	43.9%
East Wards	6165	4266	69.2%	2282	37.0%
Ladywood	3946	3173	80.4%	1422	36.0%
Hall Green	6539	4124	63.1%	2161	33.0%
Aston/Nechells	6115	4018	65.7%	1995	32.6%
Sparkbrook/hill	7964	4834	60.7%	2567	32.2%
Senneleys Park	4009	2510	62.6%	1274	31.8%
Sutton	4791	3124	65.2%	1501	31.3%
Erdington	4551	2877	63.2%	1372	30.1%
Perry Barr	5395	3047	56.5%	1580	29.3%
FAYS	5709	3484	61.0%	1614	28.3%
Handsworth	6188	4208	68.0%	1676	27.1%
Kings Norton	4562	2565	56.2%	1206	26.4%
Longbridge	3484	1971	56.6%	847	24.3%
Quinborne	3461	1824	52.7%	626	18.1%
Total	84993	55222	65.0%	27776	32.7%
<i>Out of Birmingham</i>		1545		734	

8.50. **Table 8.5:**

Total number of Under 5 Yr olds seen at a Children's Centre by Deprivation Quintile

Local Deprivation quintile	Number under 5s 2010	Seen 1/10/11-30/9/12	% seen
1	21844	8970	41.1%
2	19808	7431	37.5%
3	15593	4960	31.8%
4	12782	3632	28.4%
5	11405	2783	24.4%
Total	81432	27776	34.1%

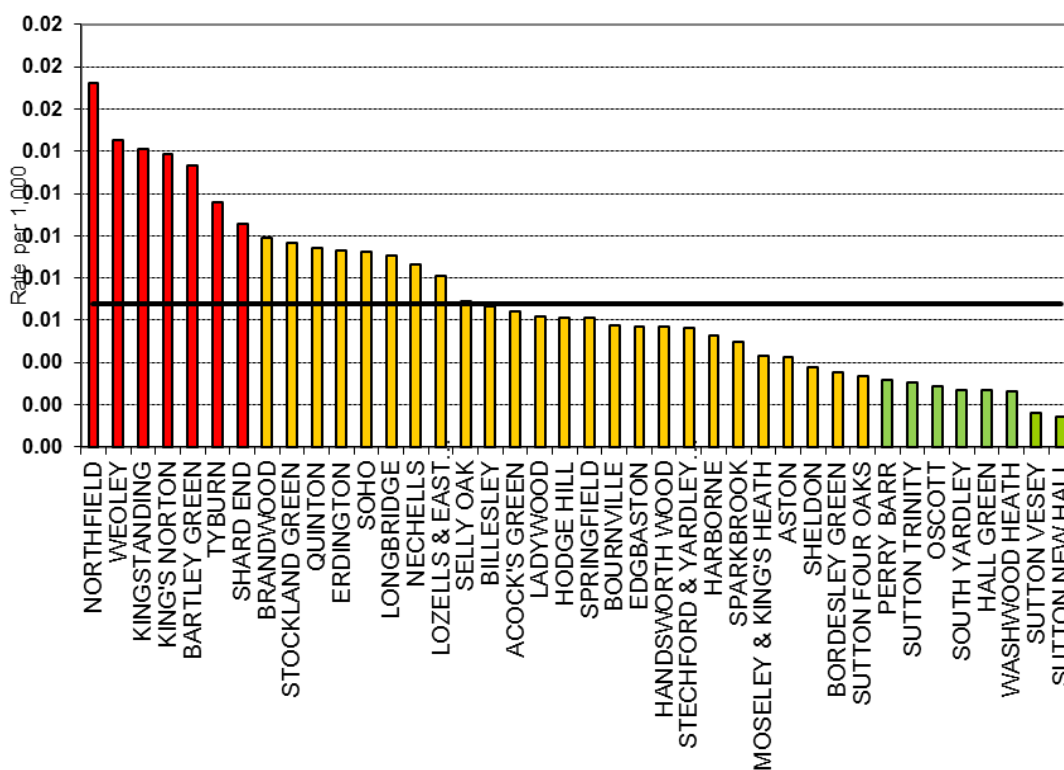
8.51. **Figure 8.9:**



9. SAFEGAURDING CHILDREN

- 9.1. Whenever concern is expressed about the safety of children an assessment of the risks and needs of the child(ren) and the family is undertaken. As a result of the assessment no action may be considered necessary. Often concerns remain but these are not strong enough to warrant the establishment of Child Protection arrangements. This group are considered to be families with children in need of support and a plan is agreed with and around the family.
- 9.2. Local data concerning the numbers and rates of Children in Need will be addressed in a future Children in Need strategy. During the period 2010-12 the average rate of children in Birmingham who were suffering harm and required to be looked after by the City Council under 5 years of age was 6.2 per 1,000 children.
- 9.3. Data from the previous Joint Strategic Needs Assessment observed a social gradient of Child Protection across the city, a greater rate of Child Protection in more deprived areas than less deprived areas (Figure & Map 9.1).
- 9.4. The variation of child protection rates across the city are also described and discussed in the context of wards in Figures 4.1 & 4.2.
- 9.5. **Figure 9.1**

Child Protection Children 0-5 Yrs by Ward 2009-11 3 Yrs
Source BCC

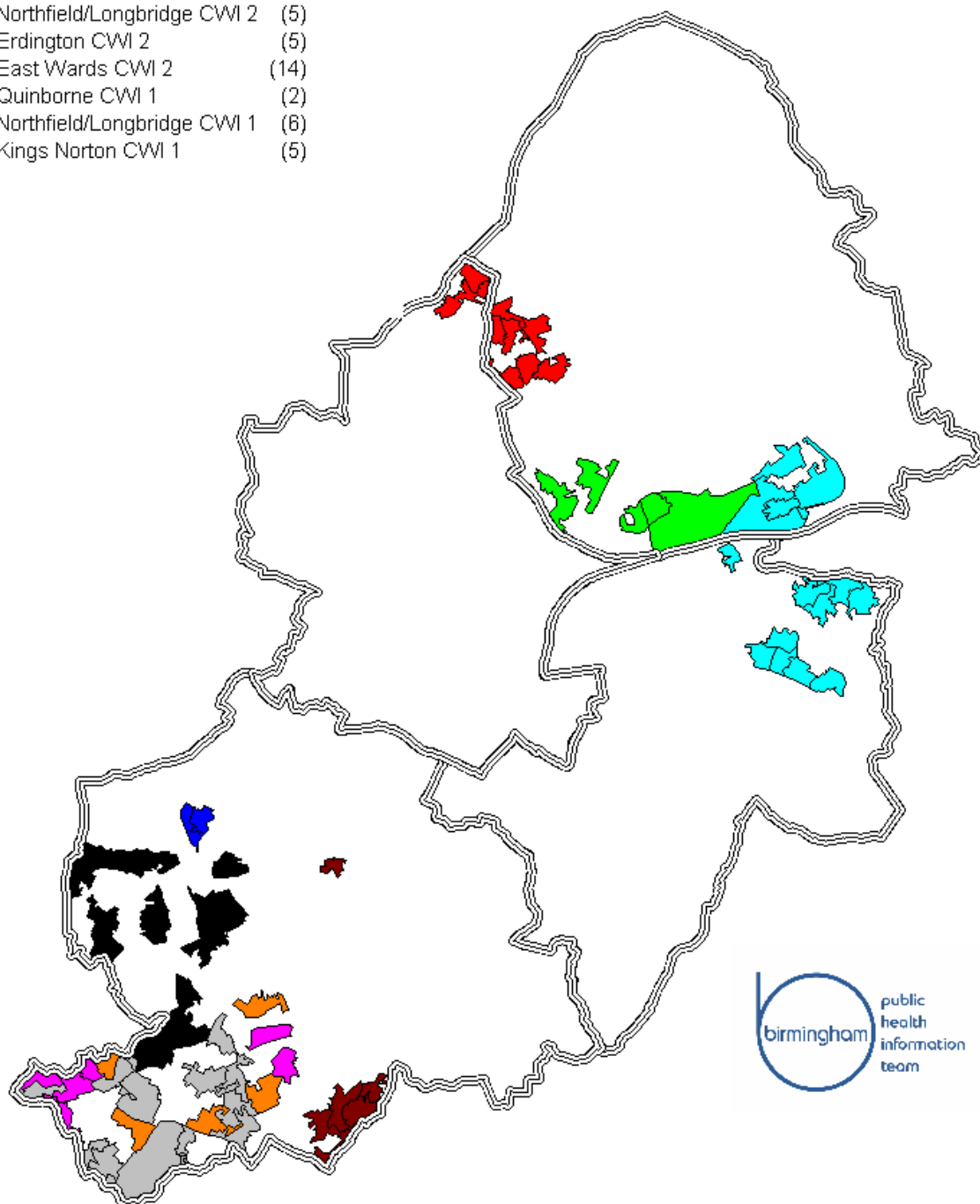


9.6. **Map 8.1**

Children's Centre Consortia
By IDACI Quintile

Northfield/Longbridge CWI 3	(12)
Senneleys Park CWI 2	(14)
Perry Barr CWI 2	(9)
Northfield/Longbridge CWI 2	(5)
Erdington CWI 2	(5)
East Wards CWI 2	(14)
Quinborne CWI 1	(2)
Northfield/Longbridge CWI 1	(6)
Kings Norton CWI 1	(5)

High child protection rates for children aged 5 (2010-12)



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10. SERVICE CHALLENGES TO MEET NEEDS

- 10.1. In the Foreword we introduced a pathway model as a framework to understand the needs and challenges of children in this first 5 years of life (F2). This section draws together these for the settings strand of the Framework.
- 10.2. **Maternity Care** impacts upon Infant Mortality and Low Birth Weight rates. The review of Maternity services should reshape services to deliver a tiered approach based on risk assessment determining the place of birth. Antenatal care must also become more systematic but accessible in localities to ensure engagement by pregnant women.
- 10.3. Breast feeding has been demonstrated to improve children's physical, emotional, and social health. It is clear from this data that if breastfeeding is established by the primary Health Visitor visit, it is likely to continue for at least 6 weeks. The challenge of increasing the initiation and establishment of breast feeding is still important but may be beyond the role of midwives. There is some limited local experience of support workers in this role but there is no useful evidence to demonstrate its impact yet.
- 10.4. Breast feeding, formula milk feeding and then weaning has an impact upon the spectrum of weights our children attain in these early years. The evidence here suggests that there has been little change in the pattern of obesity over recent years but unfortunately the proportion of obese children is higher than most of England.
- 10.5. The Health & Wellbeing Board's strategic priorities include strategic action to contain and reduce childhood obesity as measured between Reception and Year 6 in schools. The evidence here highlights that it is imperative to reduce the early years obesity pattern too with a whole population multifaceted approach. **Health Visitors and staff in Early Years settings, including Children Centres**, will play an important role in the delivery of this emerging strategy.
- 10.6. The maintenance of high levels of Immunisation & Vaccination coverage in our many diverse communities is important if outbreaks of infectious disease, with the attendant sickness and deaths, are to be avoided. The recent experience in South Wales with the measles outbreak should serve as a timely warning. The responsibility of maintaining coverage now lies with Public Health England partnering with the NHS England Area Team. The Health & Wellbeing Board should ensure that this is monitored in Birmingham.
- 10.7. Section 8 of this document explores the background and local experience of single agency and multiagency universal and targeted **child and family support**. Reactive and programmed Early Interventions are needed.
- 10.8. The local data explored here has largely been focussed on the programmed early Intervention and its beneficial impact upon Early learning Goals. This experience should be built upon.
- 10.9. The nearest experience of reactive early intervention considered here was the use of the Common Assessment Framework. The small numbers available suggests that this does not adequately capture the full picture of reactive early intervention in Birmingham. It suggests that the assessment framework is used more often in areas

of higher disadvantage and may indicate the need for more complex and multiagency responses for families in these areas.

- 10.10. The data on the use and work of **Health Visitors and Children Centres** seems to suggest that both resources are responding to different areas of need. They exhibit the Marmot principle of Proportionate Universalism. Much of this data however is activity output data. The beneficial impact they may (or not) deliver has not been captured.
- 10.11. The NHS England Area Team is currently modelling the Health Visitor role in the light of the national policy to increase the numbers of practitioners. We must influence this to reflect the needs and diversity of our communities. More local work may be required to document these issues.
- 10.12. The role, benefit, and positioning of Children Centres has not been well captured or illustrated by the routinely captured data used here. The absence of the opportunity to compare users with non-users of the Centres is key here. It is not possible to attribute the contribution that the Centres make to the ward based outcome indicators reported in section 4.
- 10.13. The need of a focus for multiagency partners in localities is underlined by the variation in these outcome indicators. Children Centres may have a role to play in this and as a well oiled 'front door' for families to access facilities.

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