PUBLIC HEALTH intelligence

NHS Cambridgeshire and NHS Peterborough
working in partnership

DRAFT Briefing : Cambridgeshire Child Measurement Programme, 2012/13 and combined time period 2008/09 to 2012/13

August 2014

1 Introduction

This report provides a summary of the key findings from the National Child Measurement Programme (NCMP) for Reception and Year 6 pupils in Cambridgeshire in 2011/13, as well as the five combined years of 2008/09, 2009/10, 2010/11, 2011/12 and 2012/13.

These findings are based on a cleaned dataset provided by KIT East through a joint agreement between Public Health England and the NHS Information Centre (IC). This is the source of all the tables and graphs presented.

The recorded obesity prevalence are presented by district, Middle Super Output Area (MSOA), sex, ethnicity, deprivation and Office for National Statistics (ONS) Area Classifications. The report mainly focuses on obesity but data are available on overweight, healthy weight and underweight if required.

It is important to note that these data only relate to maintained schools in Cambridgeshire and therefore excludes independent and special schools. It is estimated that nationally 5-6% of primary school aged children attend independent schools. The data also exclude pupils that are resident in Cambridgeshire but attend a non-Cambridgeshire school.

Data are supplied by both the school's Lower Super Output Area (LSOA) and the pupil's LSOA, based on their postcode. This report mainly focuses on the analysis by pupil's postcode, as this gives a better understanding of the spread of obesity within the county.

2 Summary

In 2012/13:

- The participation rate was 95.1% in Reception and 93.7% in Year 6, with both being higher than the national average. Cambridge City and Huntingdonshire had lower participation rates in Reception than the county average, as did Cambridge City and East Cambridgeshire in Year 6.

- Almost 6% of pupils in Reception and Year 6 were not measured as part of the NCMP programme in 2012/13. Of these, almost 70% of the non-measurement in Year 6 pupils was due to parental opt out, compared to 43% in Reception. The main reason for non-measurement of Reception pupils was due to absence.

- 7.6% of Reception pupils and 15.7% of Year 6 pupils were recorded as obese.

- Fenland had the highest proportion of recorded obese pupils in both school years, but the proportions did not differ significantly to Cambridgeshire. South Cambridgeshire had a statistically significantly low proportion of obese Year 6 pupils compared to the county.

- The majority of districts experienced decreases in their child obesity proportions between 2011/12 and 2012/13, with a notable decrease seen in Fenland for both Reception and Year 6 pupils. In general, the proportions in both school years decreased to around the 2010/11 levels for Fenland, Huntingdonshire, South Cambridgeshire and for Cambridgeshire as a whole. The Cambridge City Reception proportion in 2012/13 was lower than 2010/11 level but noticeably higher for Year 6 pupils.

For 2008/09 to 2012/13 (Cambridgeshire pupils only)

- 7.9% of Reception pupils and 15.8% of Year 6 pupils were recorded as obese.

- Fenland had a statistically significantly high proportion of obese pupils in both school years compared to Cambridgeshire, as well as a statistically significantly high proportion of overweight Reception pupils.

- Recorded obesity prevalence in boys was statistically significantly higher than girls in both Reception and Year 6.

- Recorded prevalence of obesity in Reception pupils was statistically significantly higher in the 'Black African' and 'Any Other Ethnic Group' ethnic groups when compared to the Cambridgeshire average. The ethnic groups 'Black Caribbean', 'Any other Black background', 'Bangladeshi', ' Any Other Asian Background', 'White and Black African', 'White and Black Caribbean' and 'Any Other Ethnic Group' were statistically significantly higher in Year 6 pupils compared to the county average. It is important to note that the numbers are relatively small and therefore prone to fluctuation.

- There appears to be a strong correlation between obesity prevalence and deprivation, especially in Year 6. Recorded obesity prevalence in both year groups is statistically significantly higher in the 20% most deprived areas of Cambridgeshire compared to the 20% least deprived areas, as well as the county average.

- When examining ONS Area Classifications groups, there were statistically significantly high proportions of obese Reception and Year 6 children in 'Disadvantaged Urban Communities' and 'Miscellaneous built up areas' compared to Cambridgeshire, and statistically significantly low proportions in 'Professional City Life' and 'Urban Fringe'.

- There were statistically significantly high proportions of obese Reception and Year 6 children in the ONS Area Classification (OAC) supergroups 'Blue Collar Urban Families', 'Countryside Communities', 'Mature Urban Households' and 'Small Town Communities' compared to Cambridgeshire. In Year 6, there were also statistically significantly high proportions of children in the 'Urban Terracing' and 'Resorts and Retirement' groups.

- When looking at the clinical setting thresholds for obesity (as detailed at the end of this report) there were 4.4% clinically obese Reception pupils and 9.8% Year 6 pupils in Cambridgeshire.

3 Nationally produced NCMP data

3.1 Participation rates

In 2012/13 the overall participation rates for Cambridgeshire were 95.1% in Reception and 93.7% in Year 6, both higher than the national averages. Cambridge City and Huntingdonshire had lower Reception participation rates than the county average, as did Cambridge City and East Cambridgeshire for Year 6 participation.

Table 1 : Participation rates by district, based on location of the school, 2012/13

District	Number of children measured		Participation rate	
	Reception	Year 6	Reception	Year 6
Cambridge	1,038	718	94.6%	91.0%
East Cambridgeshire	964	771	95.1%	92.9%
Fenland	1,000	880	95.2%	93.5%
Huntingdonshire	1,853	1,633	94.8%	94.6%
South Cambridgeshire	1,704	1,451	95.5%	94.8%
Cambridgeshire	6,559	5,453	95.1%	93.7%
England	587,678	489,146	94.0%	92.7%

Source : National Child Measurement Programme, The NHS Information Centre

Almost 70% of non-measurement in Year 6 pupils was due to parental opt out, compared to 43% in Reception pupils.

Table 2 : Reasons for non-measurement, 2012/13

Reason for non-measurement	Reception		Year 6	
	Number	%	Number	%
Parental opt out	149	43.3%	252	68.9%
Absent	195	56.7%	114	31.1%
Total	344	100.0%	366	100.0%

Source : National Child Measurement Programme, The NHS Information Centre

3.2 Based on pupil's postcode

The following section examines recorded child obesity proportions in Cambridgeshire based on the postcode of the pupil.

In 2012/13 7.6% of Reception pupils and 15.7% of Year 6 pupils living in Cambridgeshire (who attended a Cambridgeshire school) were recorded as obese, with both of these proportions being statistically significantly lower than England.

Fenland has around the national average of obese Reception and Year 6 pupils. None of the districts had statistically significantly high recorded obesity prevalence in Reception or Year 6 children compared to Cambridgeshire. South Cambridgeshire had a statistically significantly low Year 6 proportion compared to the county.

Table 3 : Recorded obesity proportion by district (based on pupil's postcode), 2012/13

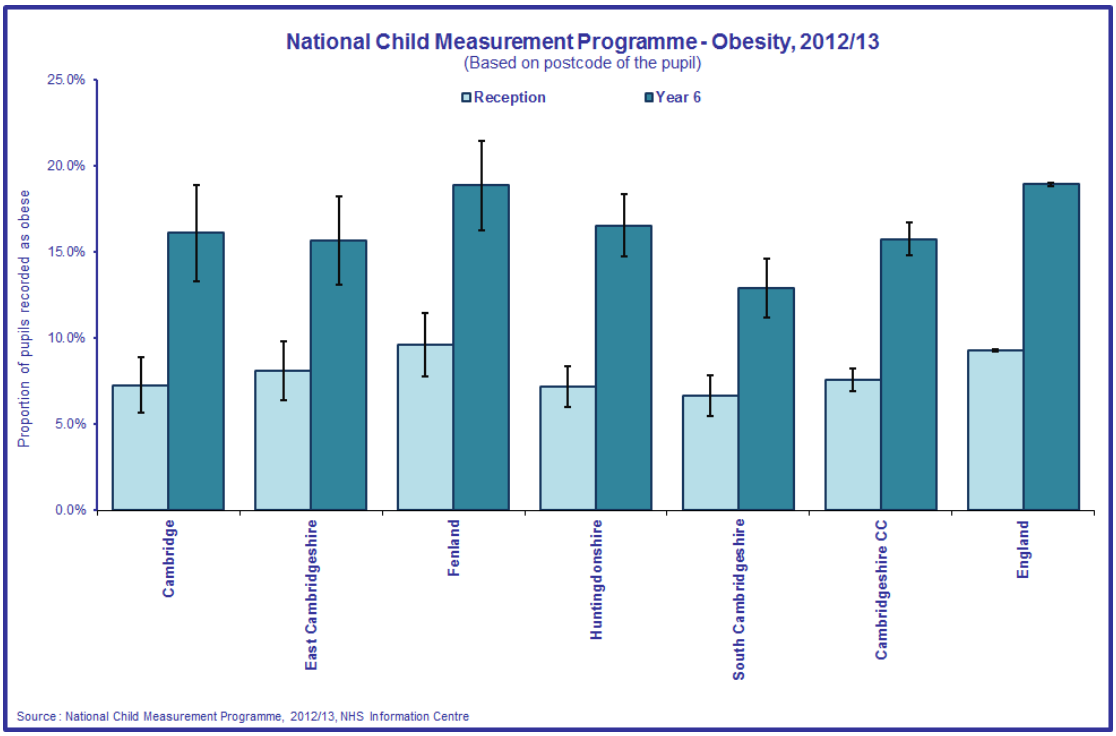
Local Authority	2012/13			
	Reception		Year 6	
	%	95% CI	%	95% CI
Cambridge	7.3%	(5.7% - 8.9%)	16.1%	(13.3% - 18.9%)
East Cambridgeshire	8.1%	(6.4% - 9.8%)	15.7%	(13.1% - 18.2%)
Fenland	9.6%	(7.8% - 11.5%)	18.9%	(16.3% - 21.4%)
Huntingdonshire	7.2%	(6.0% - 8.4%)	16.5%	(14.7% - 18.4%)
South Cambridgeshire	6.7%	(5.5% - 7.9%)	12.9%	(11.2% - 14.6%)
Cambridgeshire CC	7.6%	(6.9% - 8.2%)	15.7%	(14.8% - 16.7%)
England	9.3%	(9.2% - 9.3%)	18.9%	(18.8% - 19.0%)

Statistically significantly worse than Cambridgeshire
Statistically significantly better than Cambridgeshire

CI – Confidence interval
Source : National Child Measurement Programme, The NHS Information Centre

In general, the proportion of obese pupils doubles between the start and end of Primary School, as clearly shown in the chart below. All districts have statistically significantly high proportions of obese Year 6 pupils compared to obese Reception pupils. It is also apparent that Fenland has the highest proportion of obese pupils in both school years.

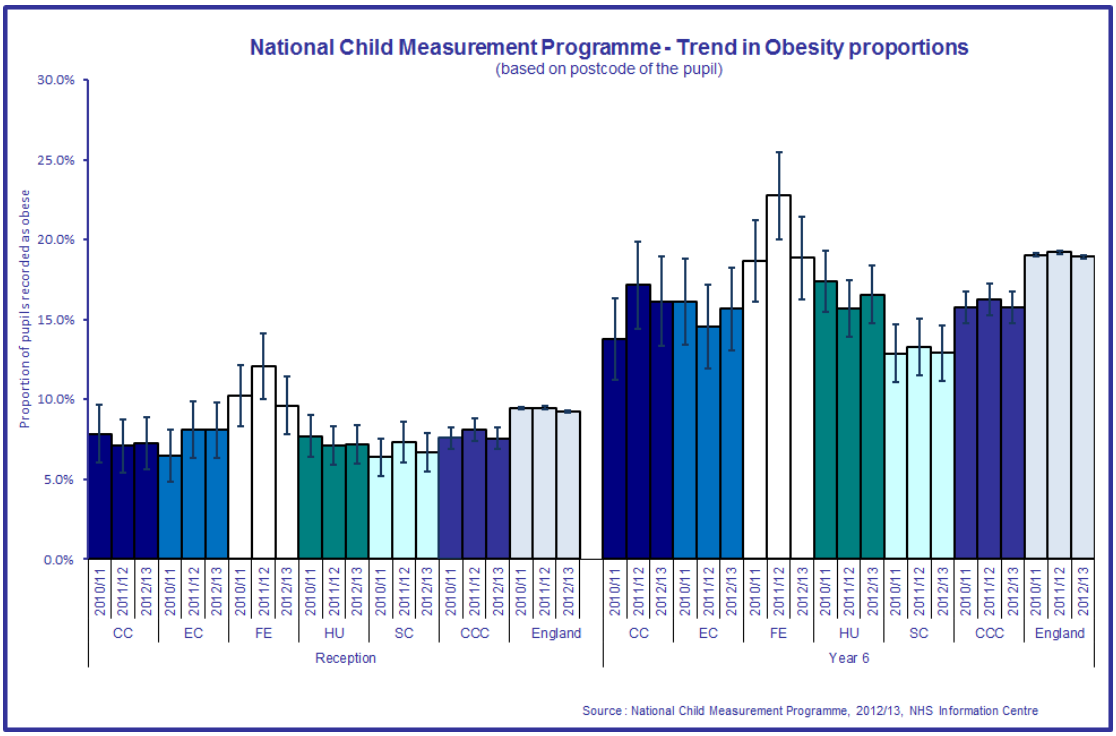
Chart 1 : Recorded obesity proportion by district, (based on pupil's postcode), 2012/13



The chart below shows the trend in obesity prevalence by district and school year. The proportions fluctuate annually but, in general, the majority of districts experienced a decrease in their obesity proportions between 2011/12 and 2012/13. The most notable decrease was seen in Fenland for both Reception and Year 6 pupils.

Due to the annual fluctuations in obesity rates, the majority of this report focuses on the combination of five years of data, i.e. 2008/09 to 2012/13. The combination of several years of data allows more valid comparisons of obesity patterns in and across Cambridgeshire.

Chart 2 : Trend in obesity proportion by district (based on pupil's postcode), 2010/11 to 2012/13



3.3 Based on school postcode

The following data are based on the postcode of the school to define districts and Cambridgeshire, which is comparable to previous years' data.

In 2012/13, 7.5% of Reception children and 15.8% of Year 6 children were recorded as obese in Cambridgeshire, with both proportions being statistically significantly lower than the England average. Overall, schools in Fenland had the highest proportion of obese pupils in both year groups, but were not statistically significantly high in comparison. South Cambridgeshire had a statistically significantly low proportion of obese Year 6 pupils in comparison to the county.

Table 4 : Recorded obesity proportion by district (based on school postcode), 2012/13

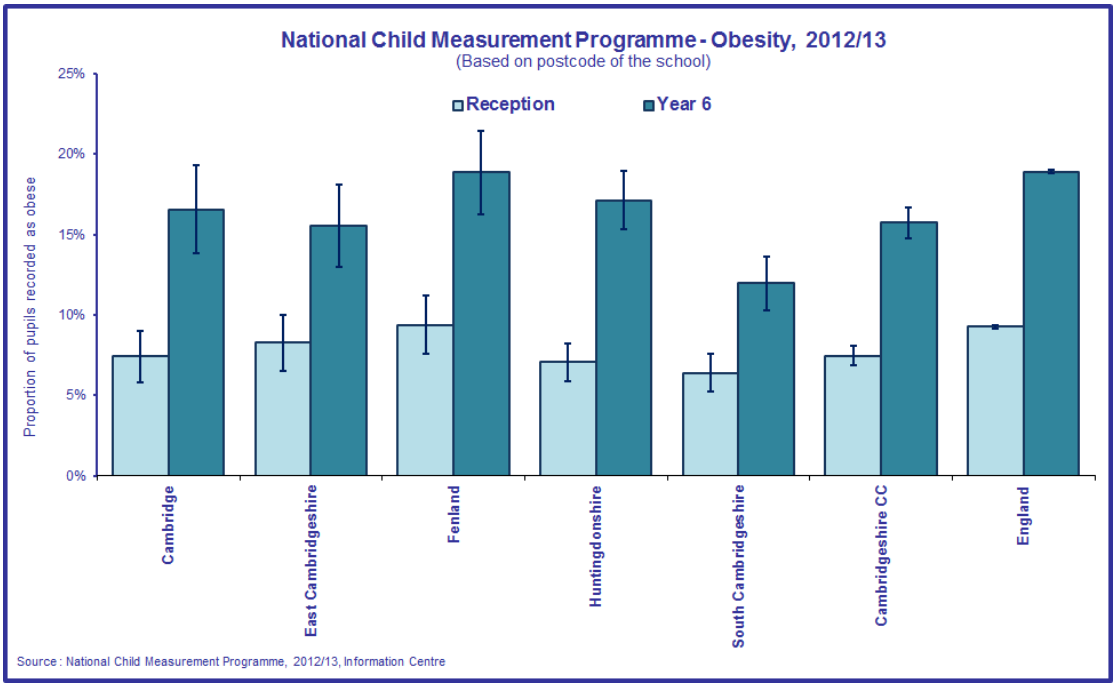
Local Authority	2012/13			
	Reception		Year 6	
	%	95% CI	%	95% CI
Cambridge	7.4%	(5.8% - 9.0%)	16.6%	(13.9% - 19.3%)
East Cambridgeshire	8.3%	(6.6% - 10.0%)	15.6%	(13.0% - 18.1%)
Fenland	9.4%	(7.6% - 11.2%)	18.9%	(16.3% - 21.4%)
Huntingdonshire	7.1%	(5.9% - 8.2%)	17.1%	(15.3% - 19.0%)
South Cambridgeshire	6.4%	(5.2% - 7.6%)	12.0%	(10.3% - 13.7%)
Cambridgeshire CC	7.5%	(6.8% - 8.1%)	15.8%	(14.8% - 16.7%)
England	9.3%	(9.2% - 9.3%)	18.9%	(18.8% - 19.0%)

Statistically significantly worse than Cambridgeshire
Statistically significantly better than Cambridgeshire

CI – Confidence interval
Source : National Child Measurement Programme, The NHS Information Centre

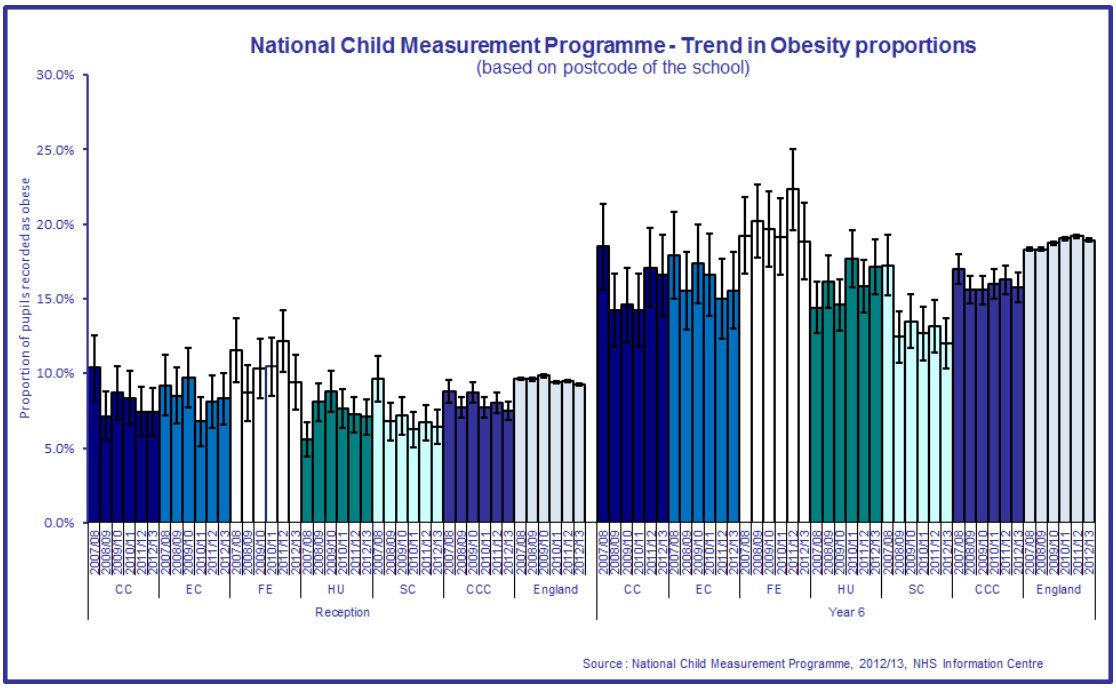
Overall, the pattern of obesity remains the same at district level whether using the data by pupil or school postcode. However, the analysis using the child's postcode gives the most accurate picture of obesity in Cambridgeshire.

Chart 3 : Recorded obesity proportion by district (based on school postcode), 2012/13



The chart below shows the trend in obesity levels. The rates fluctuate year on year and make it difficult to determine trends. For this reason the following section analyses five years of data together and gives a more valid indication of obesity levels in Cambridgeshire.

Chart 4 : Trend in obesity proportion by district (based on school postcode), 2007/08 to 2012/13



4 Local analysis on NCMP data, 2008/09 to 2012/13

This section of the report examines the recorded obesity prevalence for five combined years of NCMP pupil level data (2008/09, 2009/10, 2010/11, 2011/12 and 2012/13). All analyses are based on the postcode of the child. It is important to note these data do not include pupils living in Cambridgeshire who attend a non-Cambridgeshire school. Data for each of the separate years are also available if needed.

4.1 By district

4.1.1 Reception

For the time period 2008/09 to 2012/13, the recorded obesity prevalence in Cambridgeshire was 7.9% in Reception pupils, with an additional 13.3% overweight pupils. Fenland had statistically significantly high recorded obese and overweight proportions compared to Cambridgeshire. Consequently, the district had a statistically significantly low proportion of healthy weight pupils.

Table 5 : Recorded prevalence by weight category, Reception, 2008/09 to 2012/13

Reception	Underweight		Healthy Weight		Overweight		Obese	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
Cambridge City	0.8%	(0.6% - 1.1)	79.2%	(78.0% - 80.3%)	12.5%	(11.6% - 13.5%)	7.6%	(6.9% - 8.4%)
East Cambridgeshire	0.4%	(0.3% - 0.7%)	78.8%	(77.6% - 80.0%)	12.6%	(11.7% - 13.7%)	8.1%	(7.4% - 9.0%)
Fenland	0.5%	(0.4% - 0.8%)	74.4%	(73.1% - 75.6%)	15.0%	(14.0% - 16.1%)	10.1%	(9.3% - 11.0%)
Huntingdonshire	0.5%	(0.4% - 0.7%)	78.4%	(77.5% - 79.2%)	13.4%	(12.7% - 14.2%)	7.7%	(7.2% - 8.3%)
South Cambridgeshire	0.6%	(0.4% - 0.8%)	79.8%	(78.8% - 80.6%)	12.9%	(12.2% - 13.7%)	6.8%	(6.2% - 7.4%)
Cambridgeshire	0.5%	(0.5% - 0.6%)	78.3%	(77.8% - 78.8%)	13.3%	(12.9% - 13.7%)	7.9%	(7.6% - 8.2%)

Statistically significantly worse than Cambridgeshire
Statistically significantly better than Cambridgeshire

CI – Confidence interval
Source : National Child Measurement Programme (cleaned dataset), The NHS Information Centre

4.1.2 Year 6

Over the time period 2008/09 to 2012/13, 15.8% of Year 6 pupils in Cambridgeshire were recorded as obese, double the proportion of Reception pupils (7.9%). Fenland had a statistically significantly high proportion of obese Year 6 pupils compared to Cambridgeshire, with South Cambridgeshire having a statistically significantly low proportion.

Table 6 : Recorded prevalence by weight category, Year 6, 2008/09 to 2012/13

Year 6	Underweight		Healthy Weight		Overweight		Obese	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
Cambridge City	1.1%	(0.8% - 1.5%)	69.4%	(67.9% - 70.9%)	14.3%	(13.2% - 15.4%)	15.3%	(14.1% - 16.5%)
East Cambridgeshire	1.2%	(0.9% - 1.6%)	69.4%	(67.8% - 70.8%)	13.7%	(12.6% - 14.8%)	15.8%	(14.7% - 17.0%)
Fenland	0.9%	(0.7% - 1.2%)	64.8%	(63.4% - 66.1%)	14.4%	(13.4% - 15.5%)	19.9%	(18.8% - 21.1%)
Huntingdonshire	0.9%	(0.7% - 1.1%)	68.3%	(67.2% - 69.3%)	14.8%	(14.0% - 15.6%)	16.1%	(15.3% - 16.9%)
South Cambridgeshire	0.9%	(0.7% - 1.1%)	72.4%	(71.3% - 73.4%)	13.6%	(12.9% - 14.5%)	13.1%	(12.3% - 13.9%)
Cambridgeshire	1.0%	(0.8% - 1.1%)	69.0%	(68.5% - 69.6%)	14.2%	(13.8% - 14.6%)	15.8%	(15.4% - 16.2%)

Statistically significantly worse than Cambridgeshire
Statistically significantly better than Cambridgeshire

CI – Confidence interval
Source : National Child Measurement Programme (cleaned dataset), The NHS Information Centre

4.2 By sex

The recorded prevalence of obesity in boys was statistically significantly higher than in girls for both school years, with the proportion of Year 6 boys also being statistically significantly higher than Cambridgeshire as a whole.

Table 7 : Recorded prevalence of obesity by sex, Cambridgeshire, 2008/09 to 2012/13

Sex	Reception			Year 6		
	Number obese	% obese	95%CI	Number obese	% obese	95%CI
Male	1,313	8.5%	(8.1% - 9.0%)	2,360	17.1%	(16.5% - 17.8%)
Female	1,043	7.2%	(6.8% - 7.6%)	1,859	14.4%	(13.8% - 15.0%)
Total	2,356	7.9%	(7.6% - 8.2%)	4,219	15.8%	(15.4% - 16.2%)

Statistically significantly worse than Cambridgeshire
Statistically significantly better than Cambridgeshire

CI – Confidence interval
Source : National Child Measurement Programme (cleaned dataset), The NHS Information Centre

4.3 By ethnicity

The recorded prevalence of obesity in Cambridgeshire is statistically significantly higher in the 'Any other ethnic group' and 'Black African' ethnic groups for Reception pupils compared to the Cambridgeshire average. The ethnic groups 'Black Caribbean', 'Any Other Black Background', 'Bangladeshi', 'Any other Asian Background', 'White and Black African', 'White and Black Caribbean' and 'Any other ethnic group' were statistically significantly higher than Cambridgeshire for Year 6 pupils. It is important to note that the numbers are relatively small and therefore prone to fluctuation.

Table 8 : Recorded prevalence of obesity by ethnicity, Cambridgeshire, 2008/09 to 2012/13

Ethnicity		Reception			Year 6		
		Number obese	% obese	95%CI	Number obese	% obese	95%CI
White	White - British	1,785	7.7%	(7.3% - 8.0%)	3,406	15.4%	(14.9% - 15.9%)
	White - Irish	12	9.1%	(5.3% - 15.2%)	19	16.7%	(10.9% - 24.6%)
	Any Other White Background	153	7.9%	(6.8% - 9.2%)	241	15.4%	(13.7% - 17.2%)
Black	Black - African	34	21.0%	(15.4% - 27.9%)	24	19.7%	(13.6% - 27.6%)
	Black - Caribbean	-	-	-	14	27.5%	(17.1% - 40.9%)
	Any Other Black Background	-	-	-	16	29.6%	(19.1% - 42.8%)
Asian	Bangladeshi	20	10.3%	(6.7% - 15.3%)	53	28.0%	(22.1% - 34.8%)
	Indian	25	6.9%	(4.7% - 9.9%)	46	19.8%	(15.2% - 25.4%)
	Pakistani	13	8.0%	(4.7% - 13.2%)	20	17.4%	(11.5% - 25.3%)
	Any Other Asian Background	39	9.3%	(6.9% - 12.5%)	71	22.0%	(17.9% - 26.9%)
Mixed	White and Asian	20	5.6%	(3.7% - 8.5%)	26	10.4%	(7.2% - 14.8%)
	White and Black African	21	12.1%	(8.0% - 17.7%)	31	26.7%	(19.5% - 35.4%)
	White and Black Caribbean	25	10.6%	(7.3% - 15.2%)	41	22.0%	(16.7% - 28.5%)
	Any Other Mixed Background	38	8.2%	(6.0% - 11.0%)	55	15.3%	(12.0% - 19.4%)
Chinese		9	5.3%	(2.8% - 9.8%)	21	15.4%	(10.3% - 22.5%)
Any Other Ethnic Group		31	14.8%	(10.7% - 20.3%)	36	24.7%	(18.4% - 32.2%)
Not stated / Invalid		122	7.9%	(6.6% - 9.3%)	99	15.6%	(13.0% - 18.6%)
Total		2,347	7.9%	(7.6% - 8.2%)	4,219	15.8%	(15.4% - 16.2%)

Statistically significantly worse than Cambridgeshire
Statistically significantly better than Cambridgeshire

'-' denotes fewer than six children

CI – Confidence interval
Source : National Child Measurement Programme (cleaned dataset), The NHS Information Centre

4.4 By deprivation

Recorded obesity prevalence was statistically significantly higher in the 20% most deprived areas in Cambridgeshire for both Reception and Year 6 pupils when compared to the county average. In comparison, the fifth least deprived areas had statistically significantly low obesity prevalence for both year groups. In Year 6, obesity in the most deprived quintile is statistically significantly higher than each of the other quintiles.

Table 9 : Recorded prevalence of obesity by quintile of deprivation (based on MSOA), 2008/09 to 2012/13

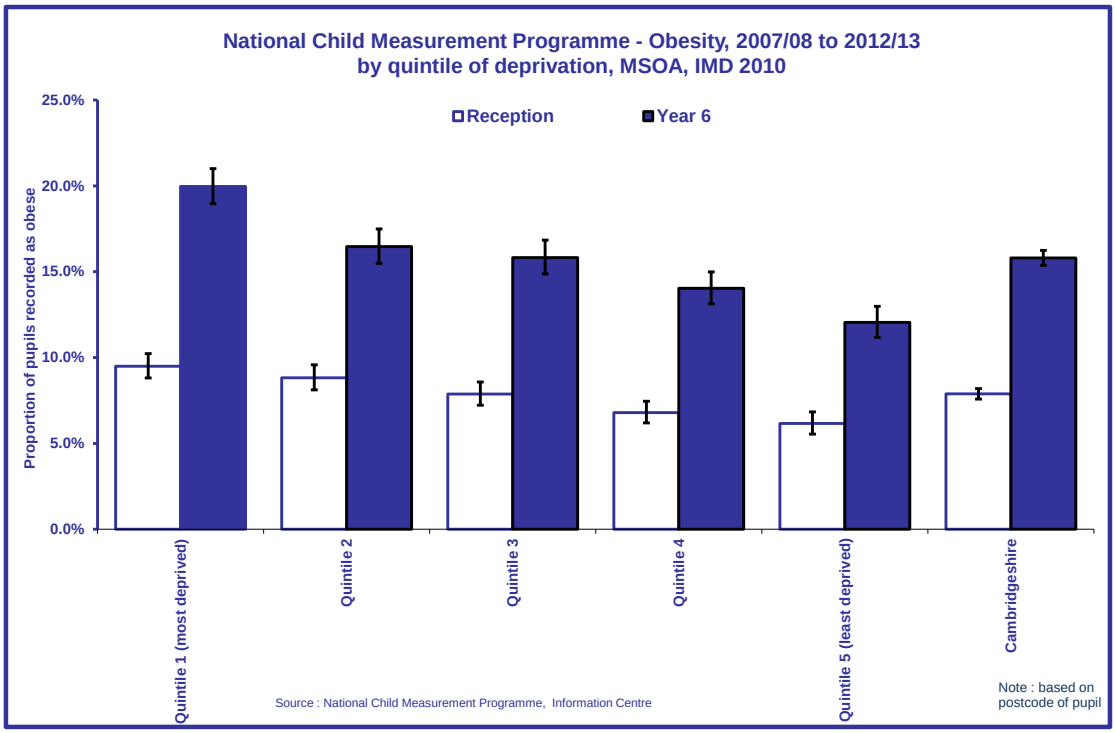
Quintile	Reception			Year 6		
	Number obese	% obese	95%CI	Number obese	% obese	95%CI
Quintile 1 (most deprived)	624	9.5%	(8.8% - 10.2%)	1,180	20.0%	(19.0% - 21.0%)
Quintile 2	512	8.8%	(8.1% - 9.6%)	862	16.5%	(15.5% - 17.5%)
Quintile 3	473	7.9%	(7.2% - 8.6%)	824	15.8%	(14.9% - 16.8%)
Quintile 4	415	6.8%	(6.2% - 7.5%)	750	14.0%	(13.1% - 15.0%)
Quintile 5 (least deprived)	332	6.2%	(5.5% - 6.8%)	603	12.1%	(11.2% - 13.0%)
Cambridgeshire	2,356	7.9%	(7.6% - 8.2%)	4,219	15.8%	(15.4% - 16.2%)

Statistically significantly worse than Cambridgeshire
Statistically significantly better than Cambridgeshire

CI – Confidence interval
Source : National Child Measurement Programme (cleaned dataset), The NHS Information Centre

It is clear from the chart below that obesity prevalence is higher in the most deprived areas of Cambridgeshire.

Chart 5 : Recorded obesity proportion by deprivation quintile, 2008/09 to 2011/12



4.5 Geography

The following section examines the levels of child obesity across Cambridgeshire by Middle Super Output Area (MSOA) geographical areas.

The table below shows the MSOAs that had statistically significantly high or low recorded obesity proportions compared to Cambridgeshire for the time period 2008/09 to 2012/13.

Table 10 : Recorded prevalence of obesity by quintile of deprivation (based on MSOA), 2008/09 to 2012/13

MSOA	Reception	Year 6
MSOA North Wisbech	15.0%	25.0%
MSOA Ramsey	10.9%	
MSOA Chatteris	10.7%	23.2%
MSOA Whittlesey	10.6%	
MSOA Soham	10.3%	
MSOA Foxton, Harston, Hauxton, Haslingfield and Little Shelford	4.6%	
MSOA Willingham and Over	4.1%	11.5%
MSOA Cottenham	4.1%	10.3%
MSOA West Chesterton	3.2%	7.5%
MSOA St Neots Eaton Socon		24.7%
MSOA King`s Hedges		22.1%
MSOA Parson Drove and Wisbech St Mary and Elm and Christchurch		22.1%
MSOA Huntingdon North		20.9%
MSOA Wimblington, Doddington and Manea		20.9%
MSOA Downham Villages and Sutton		20.8%
MSOA South Wisbech		19.8%
MSOA Histon and Impington		11.9%
MSOA Balsham and Linton		11.6%
MSOA Fenstanton and The Hemingfords		11.3%
MSOA Duxford, The Abingtons and Whittlesford		10.8%
MSOA Barton and Girton		9.7%
MSOA Burwell		8.8%
MSOA Caldecote, Comberton, Hardwick and The Eversdens		8.6%
MSOA Market and Newnham		8.1%
MSOA Castle		6.8%

Source : National Child Measurement Programme (cleaned dataset), The NHS Information Centre

4.6 Correlations

The following charts correlate the recorded obesity prevalence at MSOA level against the deprivation score for that area for both Reception and Year 6 pupils.

This shows that there appears to be an association between deprivation and obesity prevalence in Cambridgeshire, which is stronger and more apparent in Year 6. Over a third (37%) of the variation in obesity levels in Reception and 46% in Year 6 can be explained by the variation in deprivation in Cambridgeshire.

Chart 6 : Correlation of recorded obesity proportion against deprivation by MSOA, Reception, 2008/09 to 2012/13

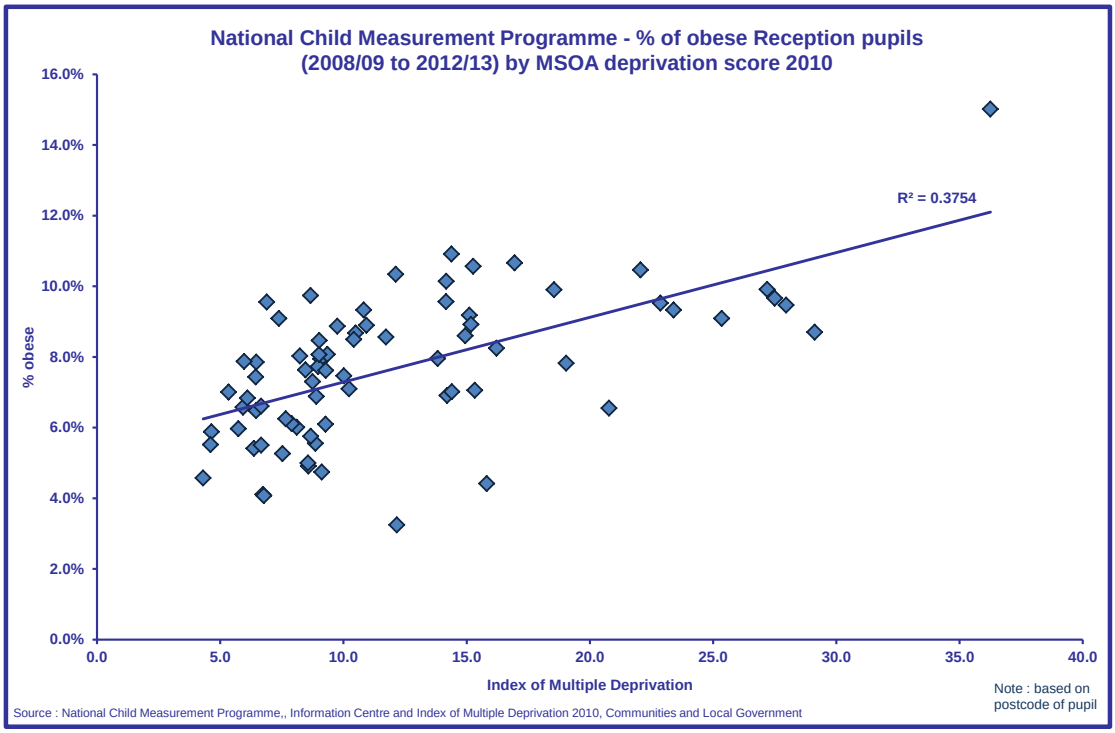
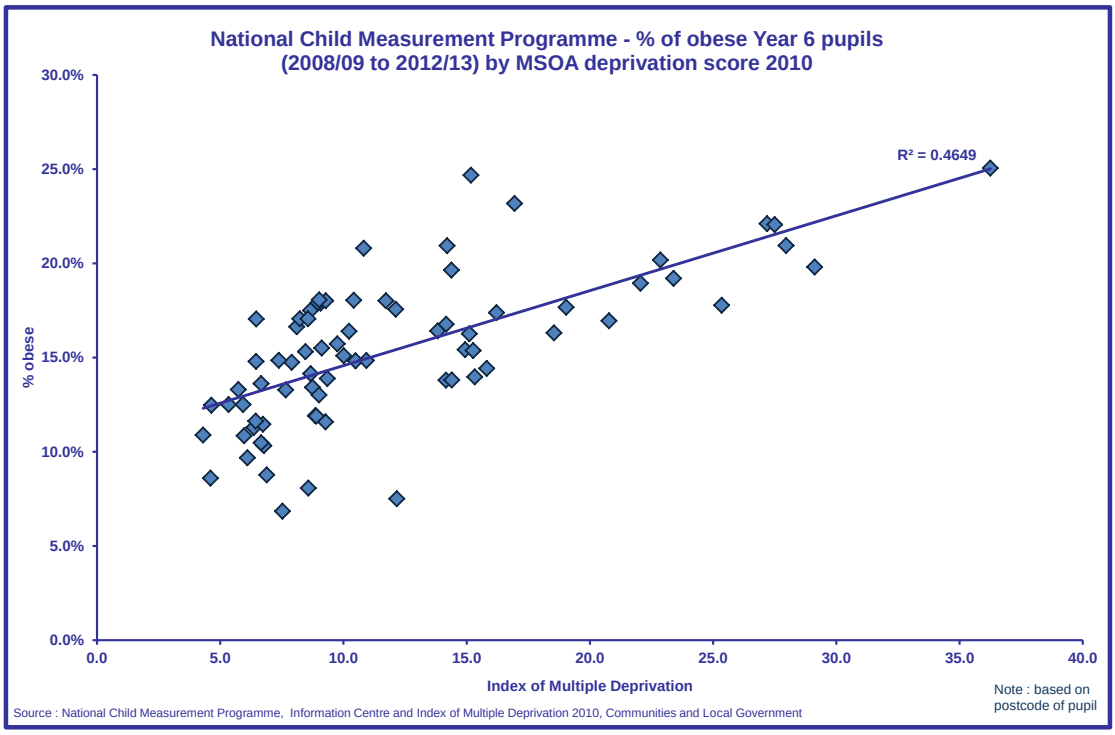


Chart 7 : Correlation of recorded obesity proportion against deprivation by MSOA, Year 6, 2008/09 to 2012/13

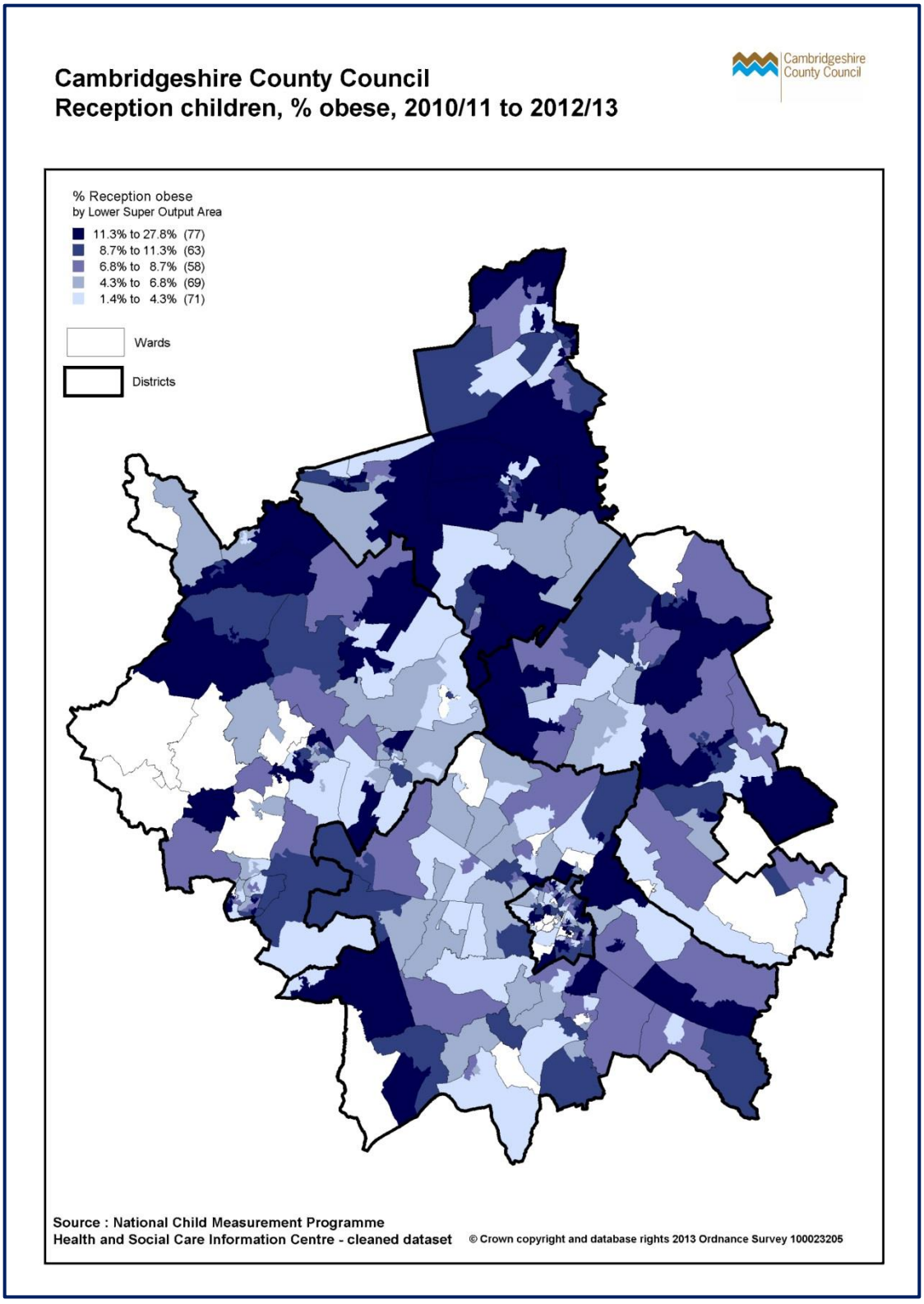


4.7 Maps

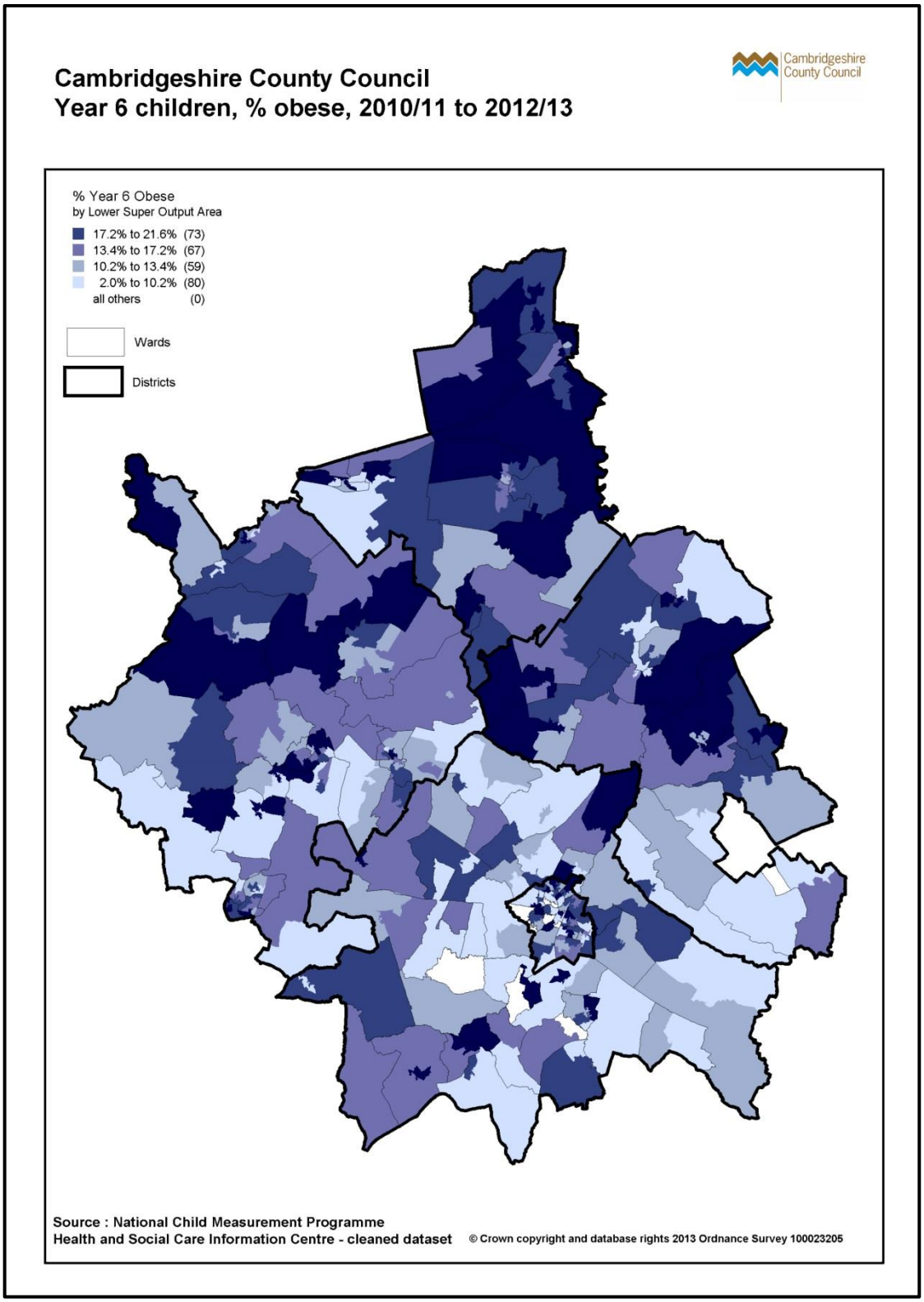
The following maps show the spread of recorded obesity and overweight prevalence across Cambridgeshire at Lower Super Output Area (LSOA) level. These maps show areas of potential concern and areas that could be targeted for preventive interventions. For example, the areas that have high recorded overweight in

Reception may progress to areas with high obesity levels by Year 6. As seen previously in this report, there is a noticeable increase in weight from the beginning to the end of primary school, so prevention is important in the early years of schooling and before.

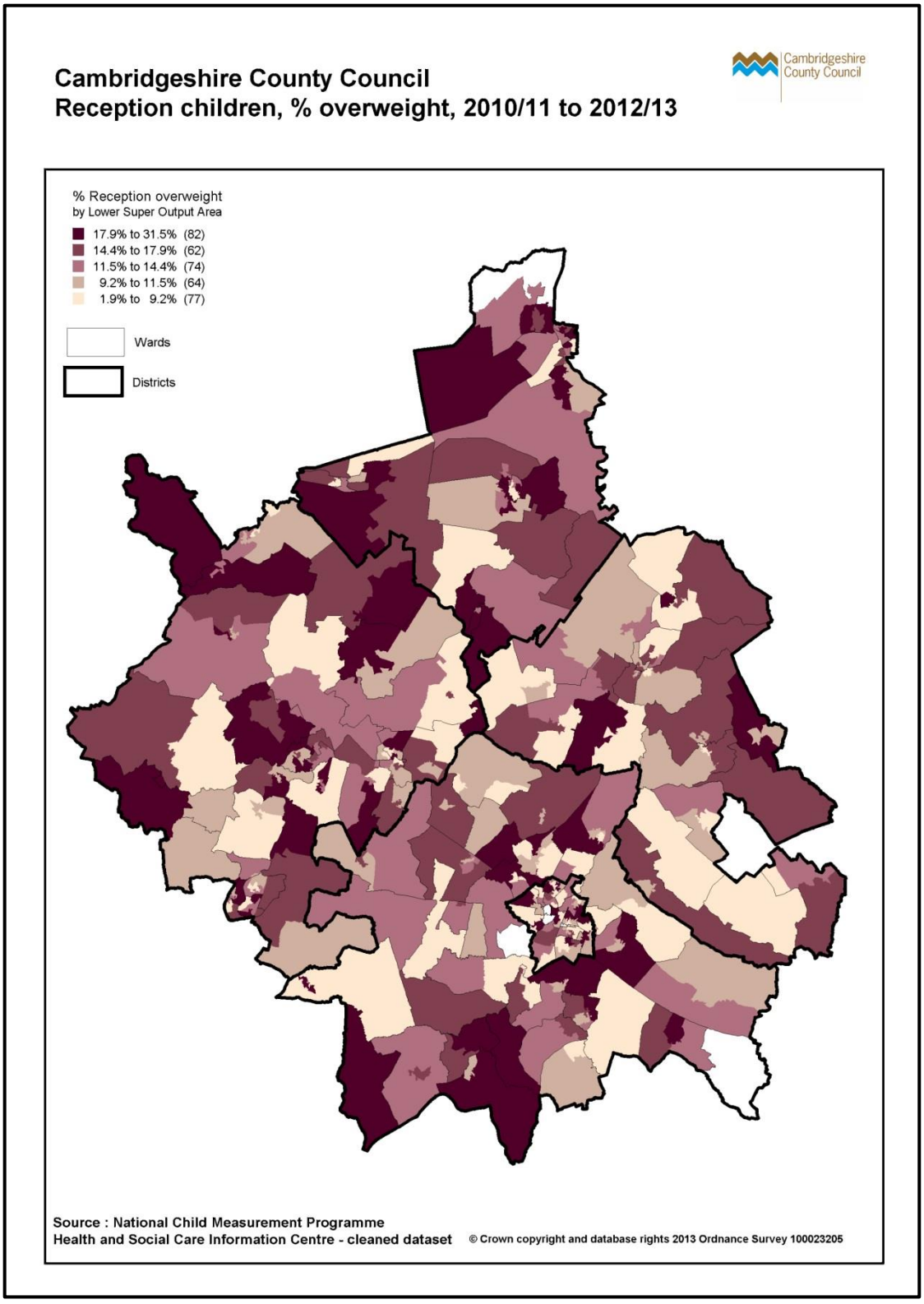
Map 1 : Recorded obesity prevalence, Reception, LSOA, 2010/11 to 2012/13



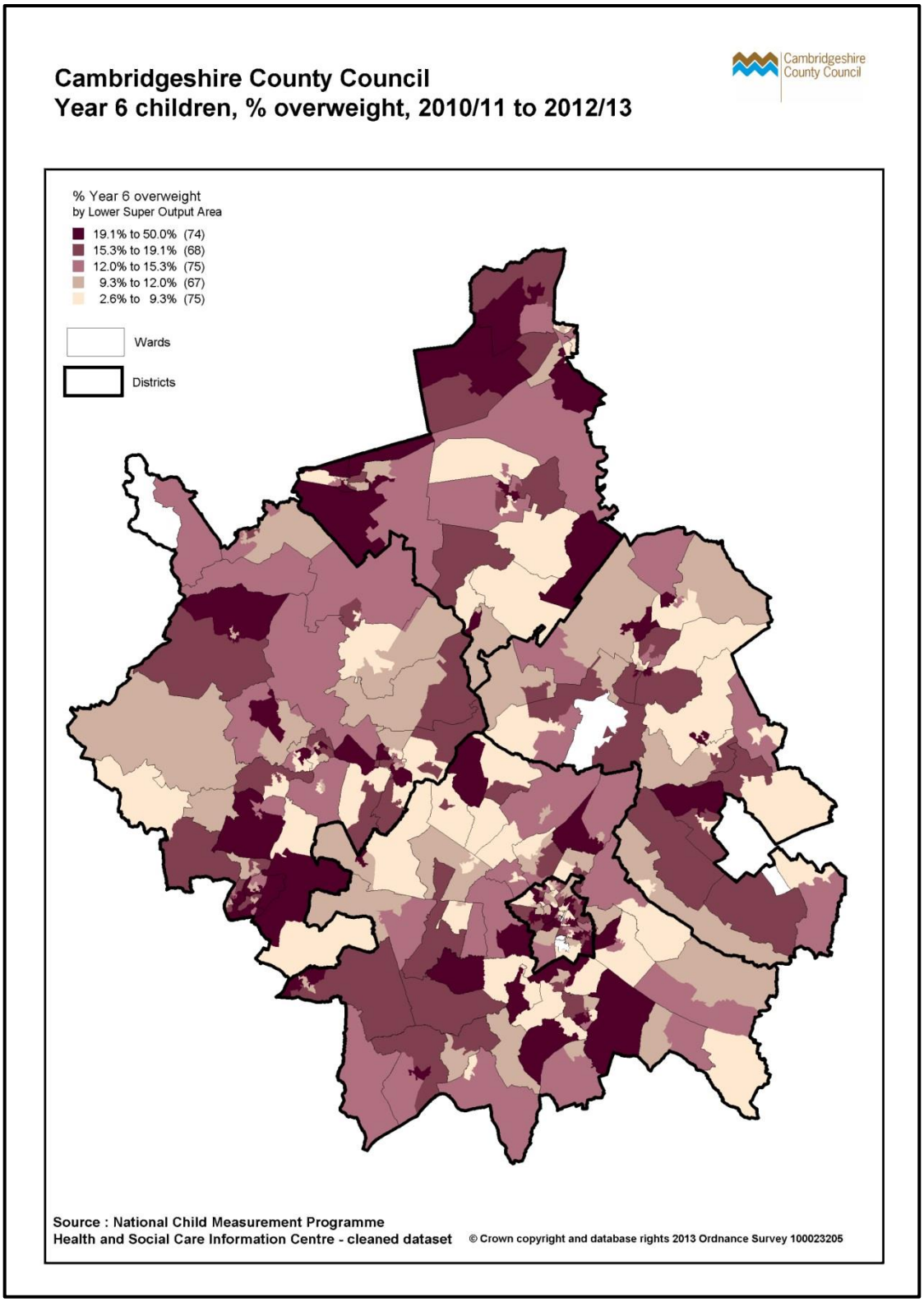
Map 2 : Recorded obesity prevalence, Year 6, LSOA, 2010/11 to 2012/13



Map 3 : Recorded overweight prevalence, Reception, LSOA, 2010/11 to 2012/13



Map 4 : Recorded overweight prevalence, Year 6, LSOA, 2010/11 to 2012/13



4.8 ONS Area Classifications

The cleaned dataset from the Information Centre includes ONS Area Classifications (OAC). OAC is a system of population stratification that categorises local areas based on a range of socio-demographic characteristics, including deprivation, ethnicity, and urban/rural environment. The categories are named in a way that describes the type of population predominant in those areas. There are different levels of OAC.

4.8.1.1 Supergroup

The table below shows the proportion of recorded obese pupils by OAC Supergroup.

There were statistically significantly high proportions of Reception and Year 6 obese children in 'Miscellaneous built up areas' and 'Disadvantaged Urban Communities' compared to Cambridgeshire and statistically significantly low proportions in 'Professional City Life' and 'Urban Fringe'.

Table 11 : Recorded prevalence of obese by ONS Area Classification Supergroup, 2008/09 to 2012/13

ONS Area Classification Supergroup	Reception			Year 6		
	Number obese	% obese	95%CI	Number obese	% obese	95%CI
Countryside	812	7.4%	(6.9% - 7.9%)	1,546	15.4%	(14.7% - 16.1%)
Disadvantaged Urban Communities	144	10.9%	(9.3% - 12.7%)	260	22.1%	(19.8% - 24.6%)
Miscellaneous built up areas	386	9.2%	(8.4% - 10.1%)	649	18.9%	(17.7% - 20.3%)
Professional City Life	96	5.8%	(4.8% - 7.1%)	157	12.7%	(10.9% - 14.6%)
Urban Fringe	212	6.0%	(5.2% - 6.8%)	400	12.4%	(11.3% - 13.6%)
White Collar Urban	706	8.6%	(8.1% - 9.3%)	1,207	15.9%	(15.1% - 16.8%)
Total	2,356	7.9%	(7.6% - 8.2%)	4,219	15.8%	(15.4% - 16.2%)

Statistically significantly worse than Cambridgeshire
Statistically significantly better than Cambridgeshire

CI – Confidence interval
Source : National Child Measurement Programme (cleaned dataset), The NHS Information Centre

4.8.2 Group

When examining ONS Area Classifications groups, there were statistically significantly high proportions of obese Reception and Year 6 children in the 'Blue Collar Urban Families', 'Countryside Communities', 'Mature Urban Households' and 'Small Town Communities' groups compared to Cambridgeshire. In Year 6, there were also statistically significantly high proportions of children in the 'Resorts and Retirement' and 'Urban Terracing' groups.

Table 12 : Recorded prevalence of obese by ONS Area Classification Group, 2008/09 to 2012/13

ONS Area Classification Group	Reception			Year 6		
	Number obese	% obese	95%CI	Number obese	% obese	95%CI
Affluent Urban Commuter	96	6.1%	(5.0% - 7.3%)	155	12.0%	(10.4% - 13.9%)
Blue Collar Urban Families	134	10.7%	(9.1% - 12.6%)	244	22.0%	(19.7% - 24.6%)
Countryside Communities	98	10.4%	(8.6% - 12.5%)	174	20.4%	(17.8% - 23.2%)
Educational Centres	39	5.6%	(4.1% - 7.6%)	69	12.6%	(10.1% - 15.7%)
Farming and Forestry	222	6.8%	(6.0% - 7.7%)	516	15.6%	(14.4% - 16.9%)
Mature City Professionals	57	6.0%	(4.7% - 7.7%)	88	12.7%	(10.4% - 15.4%)
Mature Urban Households	339	9.4%	(8.5% - 10.4%)	587	17.5%	(16.2% - 18.8%)
Resorts and Retirement	91	8.3%	(6.8% - 10.0%)	165	18.9%	(16.5% - 21.7%)
Rural Economies	492	7.3%	(6.7% - 7.9%)	856	14.5%	(13.7% - 15.5%)
Small Town Communities	182	10.2%	(8.9% - 11.7%)	279	19.8%	(17.8% - 22.0%)
Struggling Urban Families	10	12.8%	(7.1% - 22.0%)	16	23.9%	(15.3% - 35.3%)
Suburbia	94	8.9%	(7.3% - 10.8%)	160	17.1%	(14.8% - 19.6%)
Urban Commuter	116	5.9%	(4.9% - 7.0%)	245	12.7%	(11.3% - 14.2%)
Urban Terracing	19	7.6%	(4.9% - 11.5%)	45	21.2%	(16.3% - 27.2%)
Well off Mature Households	149	7.1%	(6.1% - 8.3%)	272	13.6%	(12.1% - 15.1%)
Young Urban Families	218	8.9%	(7.8% - 10.0%)	348	15.6%	(14.2% - 17.2%)
Total	2,356	7.9%	(7.6% - 8.2%)	4,219	15.8%	(15.4% - 16.2%)

Statistically significantly worse than Cambridgeshire
Statistically significantly better than Cambridgeshire

CI – Confidence interval
Source : National Child Measurement Programme (cleaned dataset), The NHS Information Centre

4.8.3 Population and Clinical obesity definitions

The NHS Information Centre has also provided data using the clinical obesity thresholds, as well as the usual population definition for obesity. For population monitoring, obesity is defined as having a Body Mass Index (BMI) greater than or equal to the 95th centile. In the clinical setting obesity is defined as a BMI greater than or equal to the 98th centile.

Using the clinical definitions for the time period 2008/09 to 2012/13, there were 4.4% clinically obese Reception pupils and 9.8% clinically obese Year 6 pupils in Cambridgeshire. In general, the same pattern emerges when examining gender as with using the population definition, i.e. male obesity is statistically significantly higher than female obesity.

Table 13 : Recorded prevalence of obesity, population and clinical definitions, 2008/09 to 2012/13

Sex	Population cut offs						Clinical cut offs					
	Reception			Year 6			Reception			Year 6		
	Number obese	% obese	95%CI	Number obese	% obese	95%CI	Number obese	% obese	95%CI	Number obese	% obese	95%CI
Male	1,313	8.5%	(8.1% - 9.0%)	2,360	17.1%	(16.5% - 17.8%)	719	4.7%	(4.3% - 5.0%)	1,513	11.0%	(10.5% - 11.5%)
Female	1,043	7.2%	(6.8% - 7.6%)	1,859	14.4%	(13.8% - 15.0%)	584	4.0%	(3.7% - 4.4%)	1,100	8.5%	(8.0% - 9.0%)
Total	2,356	7.9%	(7.6% - 8.2%)	4,219	15.8%	(15.4% - 16.2%)	1,303	4.4%	(4.1% - 4.6%)	2,613	9.8%	(9.4% - 10.2%)

Statistically significantly worse than Cambridgeshire
Statistically significantly better than Cambridgeshire

CI – Confidence interval
Source : National Child Measurement Programme (cleaned dataset), The NHS Information Centre