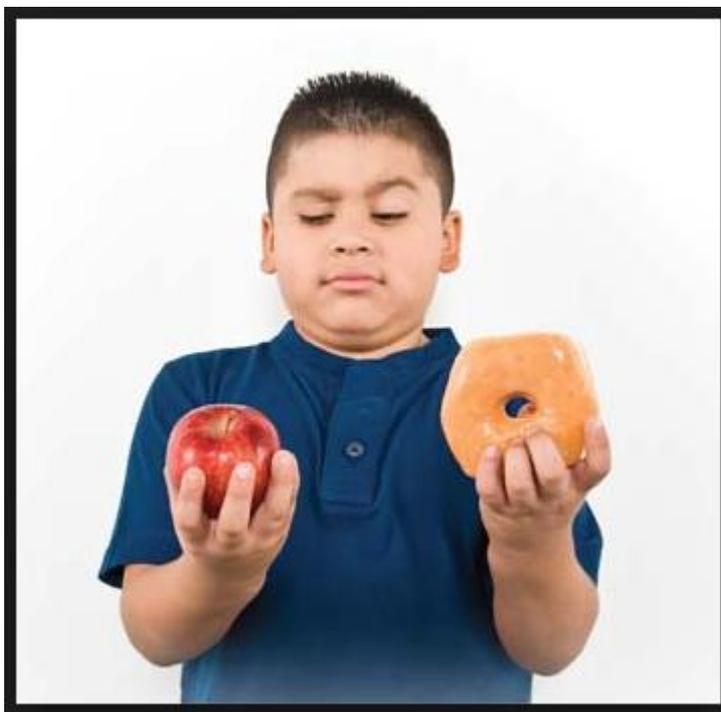


National Childhood Measurement Programme (NCMP)

Swindon Unitary Authority Summary Report

2016/17 academic year



Main finding

In Swindon, in 2016/17 academic year prevalence of obesity has risen (since 2015/16) in Reception year and Year 6. Whilst in Reception the long term trends are essentially flat, in Year 6, the figures from 2016/17 show a continuation of a small but discernible long-term upward trend in those with obesity or any excess weight. Swindon is in the middle of the pack on all weight measures when compared to authorities in its benchmarking 'cluster'. However, large inequalities are seen between affluent and deprived areas.

Introduction

Children in Reception year (aged 4-5 years) and Year 6 (aged 10-11 years) in primary schools in England are measured for height and weight, generally by the school nurse team.

Data has been collected since 2006/07 at local level across England, for Swindon Unitary Authority (UA), South West region and England as a whole. This report shows the prevalence of underweight, healthy-weight and excess weight i.e. overweight and obesity (according to British 1990 growth reference curves) from 2006/07 until the latest year of available data (2016/17).

In 2016, Public Health England (PHE) revised all its tools containing NCMP data to allocate individuals to local authority areas based on pupil postcodes (rather than the school attended) and this report follows that convention.

There are individual clinical definitions and population definitions of childhood obesity. Table 1 shows the definition of NCMP population weight status.

Table 1: NCMP definition of weight status

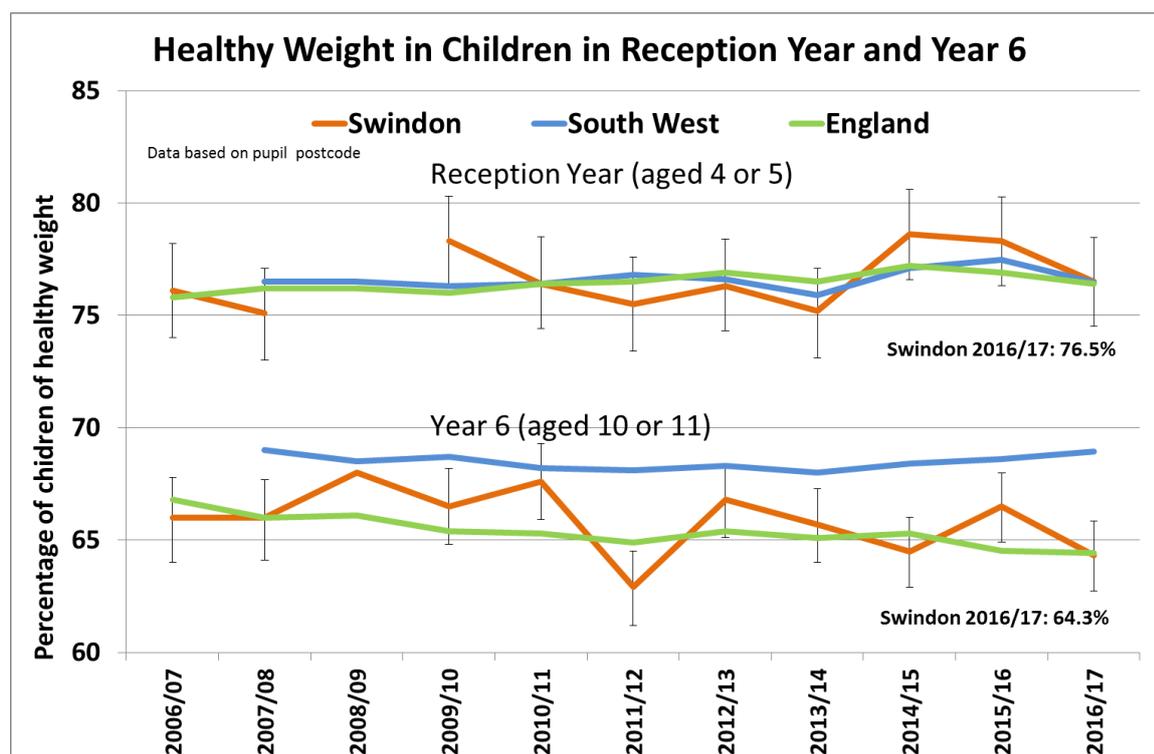
Status	Definition
Underweight	BMI less than 2nd centile of the British 1990 growth reference according to age and sex (UK90)
Healthy-weight	BMI between 2nd and less than 85th centile of the UK90
Overweight	BMI is on or above the 85th centile and on or below the 95 th centile of the UK90
Obese	BMI greater than 95th centile of the UK90
Excess weight (i.e. overweight or obese)	BMI is on or above the 85th centile of the UK90
Severely obese	BMI greater than or equal to the 99.6th centile of the UK90

Healthy weight

Healthy weight encompasses all those children who have a BMI between the 2nd and 85th centile of the British 1990 growth reference curves. Therefore, all children with excess weight (whether mildly overweight or excessively obese) and all children classed as underweight are not included.

Figure 1 shows the proportion of healthy weight children (Reception year and Year 6) in Swindon, the South West region and England. 95% confidence intervals are shown for Swindon.

Figure 1: Healthy weight in Children in Reception and Year 6



Source: NCMP Local Authority tool (PHE)/NCMP 2016/17 report (NHS Digital)

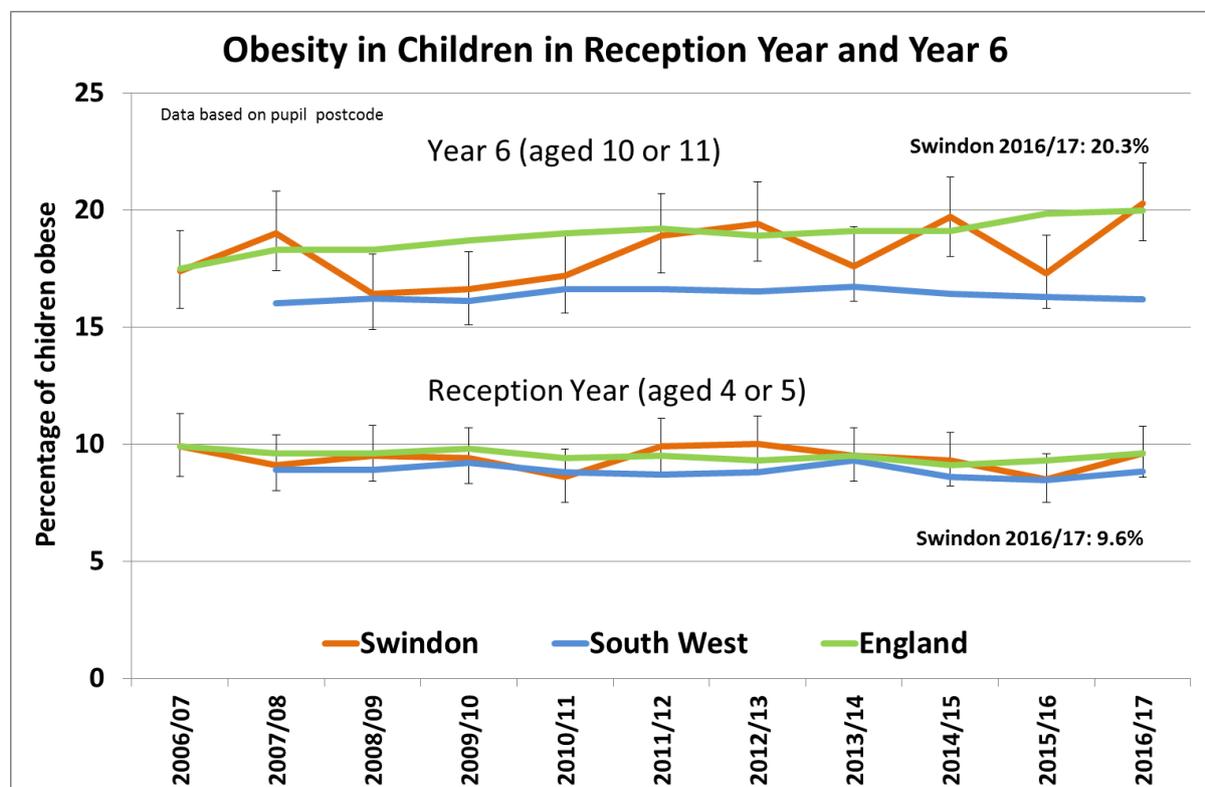
Note: There are no data for Swindon for 2008/09 in the NCMP tool. The reason given is that the data has been suppressed to avoid disclosure by differencing.

Figure 1 shows that the prevalence of healthy weight in Swindon in 2016/17 was 76.5% in Reception year and 64.3% in Year 6. There are small but discernible trends in healthy weight. In Reception year, the average increase [i.e. getting better] each year is 0.15% whereas in Year 6 the average decrease [i.e. getting worse] is around 0.2%. Apart from 2009/10, the proportion of healthy weight pupils in Reception year in Swindon has not differed significantly from either the regional or national averages. After two years of Swindon's proportion being higher than England and the South West it has now decreased and is the same as the South West rate and very similar to England. The prevalence of healthy weight children in Year 6 has been consistently lower [i.e. worse] in Swindon than in the South West region since 2007/08 and statistically significant lower since 2013/14.

Obesity

Figure 2 shows the proportion of obese children (Reception year and Year 6) in Swindon, the South West region and England. 95% confidence intervals are shown for Swindon.

Figure 2: Obesity in Children in Reception and Year 6



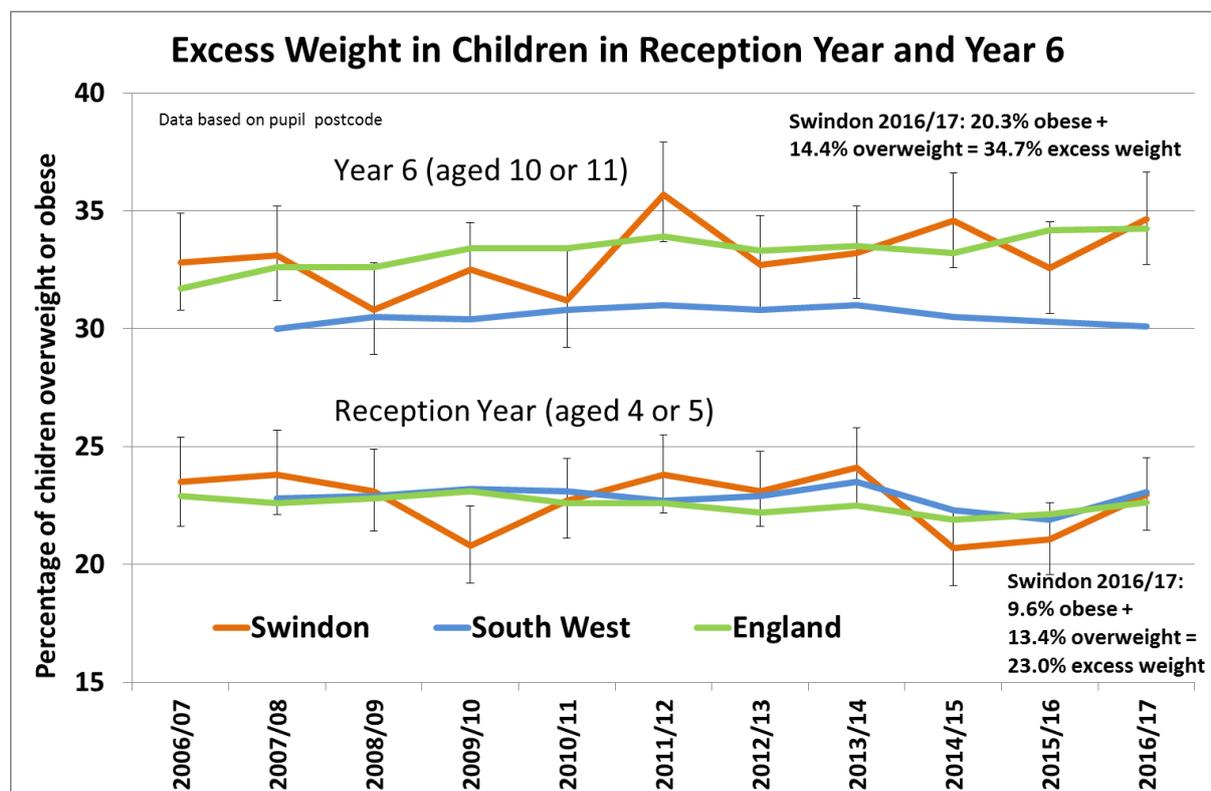
Source: NCMP Local Authority tool (PHE)/NCMP 2016/17 report (NHS Digital)

Figure 2 shows that the prevalence of obesity in Swindon in 2016/17 was 9.6% in Reception year and 20.3% in Year 6. In 2016/17, the proportion of obese pupils in Reception year and Year 6 has not differed significantly from either the regional or national averages other than compared to the South West in Year 6 where Swindon now has a significantly higher proportion of obese children. The trend in obesity in Swindon is essentially flat for Reception year, as it is for England. However, in Year 6 there is a 0.2% increase on average each year in Swindon. Additionally, the PHE trend analysis of the last nine years shows a statistically significant (99.8% significance) upward trend in obesity in Year 6. The prevalence of obese children in Year 6 has been consistently higher in Swindon than the South West region (not always statistically significantly). In 2016/17, there were 271 Swindon children measured as obese in Reception year and 463 Swindon children measured as obese in Year 6.

Excess weight (obese or overweight)

Figure 3 shows the proportion of children (Reception year and Year 6) with excess weight (i.e. overweight children and obese children) in Swindon, the South West region and England. 95% confidence intervals are shown for Swindon.

Figure 3: Excess weight in Children in Reception and Year 6



Source: NCMP Local Authority tool (PHE)/NCMP 2016/17 report (NHS Digital)

Figure 3 shows that the prevalence of excess weight in Swindon in 2016/17 was 23.0% in Reception year and 34.7% in Year 6. The trend in excess weight in Swindon is slightly downward in Reception year (an average of 0.13% each year), almost double the rate compared to England. In Year 6, the trend in excess weight in Swindon is a 0.2% increase on average each year, the same as for England. The prevalence of children with excess weight in Year 6 has been consistently higher in Swindon than the South West region and statistically significantly higher since 2013/14. In 2016/17 there were 648 Swindon children measured as having excess weight in Reception year and 791 Swindon children measured as having excess weight in Year 6.

Severe obesity

In 2016/17 the category of severe obesity has been reported on nationally for the first time. In Reception year, 2.9% of Swindon children (81) were found to be severely obese. This was slightly higher than the England rate of 2.35% and statistically significantly higher than the South West rate of 1.8%. Swindon also had the highest rate out of its ONS cluster of 11 'Expanded Areas'.

In Year 6, 3.7% of Swindon children (84) were found to be severely obese. This was slightly lower than the England rate of 4.1% but statistically significantly higher than

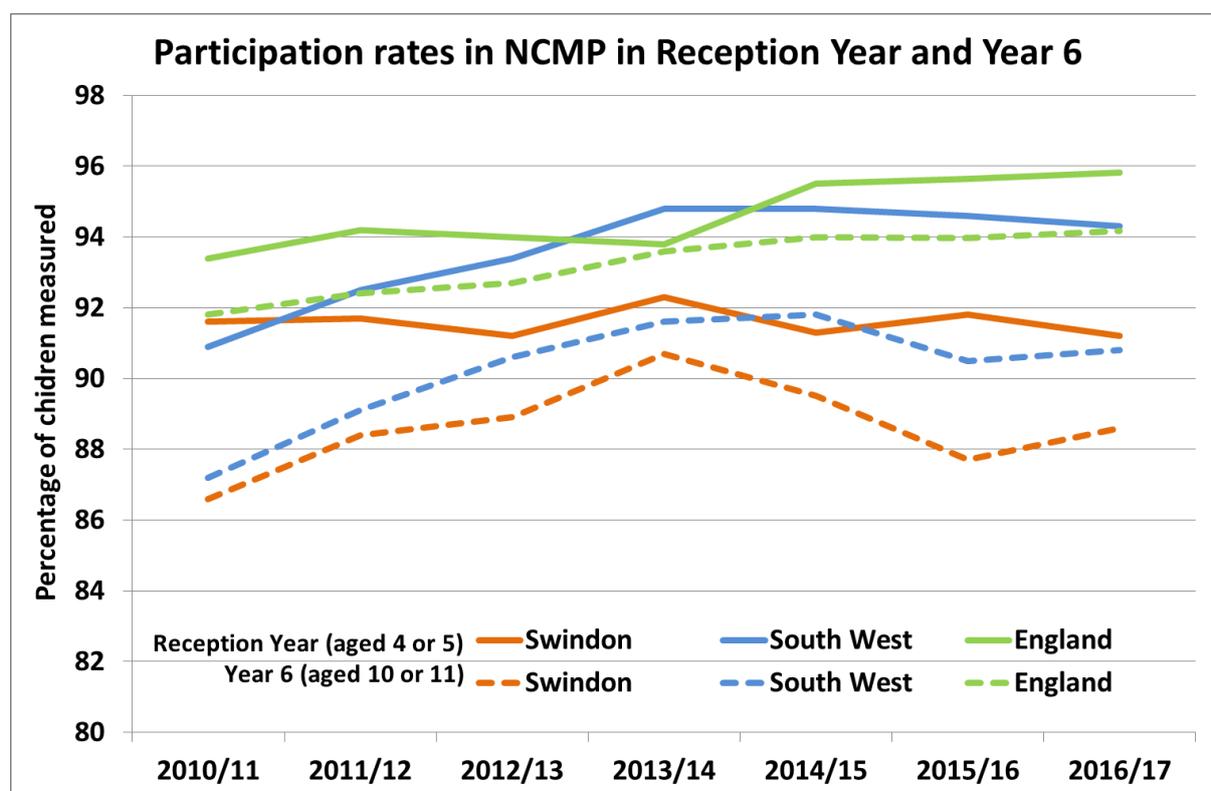
the South West rate of 2.8%. Swindon had a similar rate to other authorities in its ONS cluster.

Participation

Public Health England (PHE) guidance suggests that Local Authorities should achieve participation rates of at least 85% of eligible children to ensure the information collected provides an accurate picture of the population. PHE also ask that participation rates are improved upon from one year to the next. Swindon has achieved the target participation rates since the programme began in 2006/07.

Figure 4 shows the participation rate in NCMP for Swindon, the South West region and England for 2010/11 to 2016/17.

Figure 4: Rate of participation in NCMP in Reception and Year 6



Source: NCMP Local Authority tool (PHE)/NCMP 2016/17 report (NHS Digital)

Figure 4 shows that the participation rate has remained at about 92% in Reception year in Swindon from 2010/11 to 2016/17 but for Year 6 peaked in 2013/14 at just under 91% before falling back to about 89% in 2016/17. In 2016/17, the participation rates in England and the South West were higher than in Swindon for Reception year and Year 6 children. The participation rate is generally higher in Reception year than in Year 6.

Data summary for 2016/17

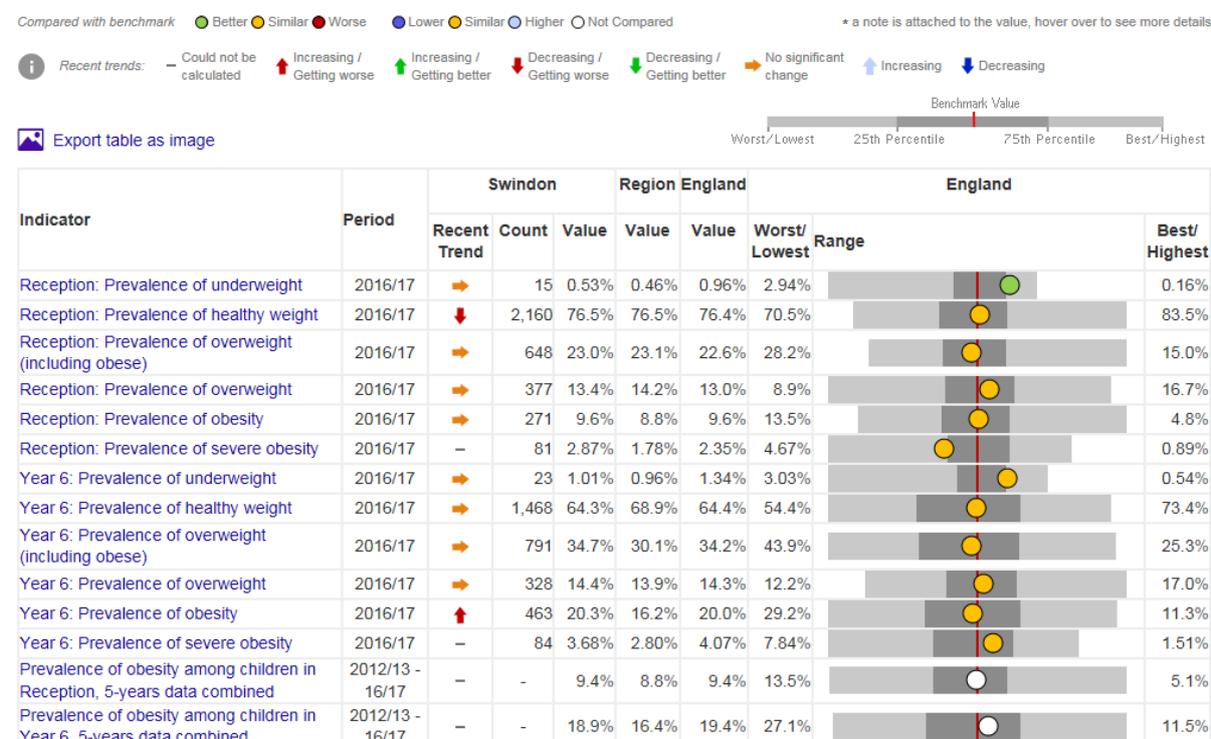
The prevalence of different levels of BMI in 2016/17 are summarised in Table 2 and Figure 5.

Table 2: Summary of 2016/17 NCMP data for Swindon, South West and England

Percentages for 2016/17	Reception year, age 4-5 years			Year 6, age 10-11 years		
	Swindon	South West	England	Swindon	South West	England
Underweight	0.53%	0.46%	0.96%	1.01%	0.96%	1.34%
Healthy weight	76.5%	76.5%	76.4%	64.3%	68.9%	64.4%
Overweight	13.4%	14.2%	13.0%	14.4%	13.9%	14.3%
Obese	9.6%	8.8%	9.6%	20.3%	16.2%	20.0%
Excess weight	23.0%	23.1%	22.6%	34.7%	30.1%	34.2%

Source: NCMP Local Authority tool (PHE)/NCMP 2016/17 report (NHS Digital). Figures may not total to 100% because of rounding.

Figure 5: NCMP data for 2016/17 – national and regional summary comparison



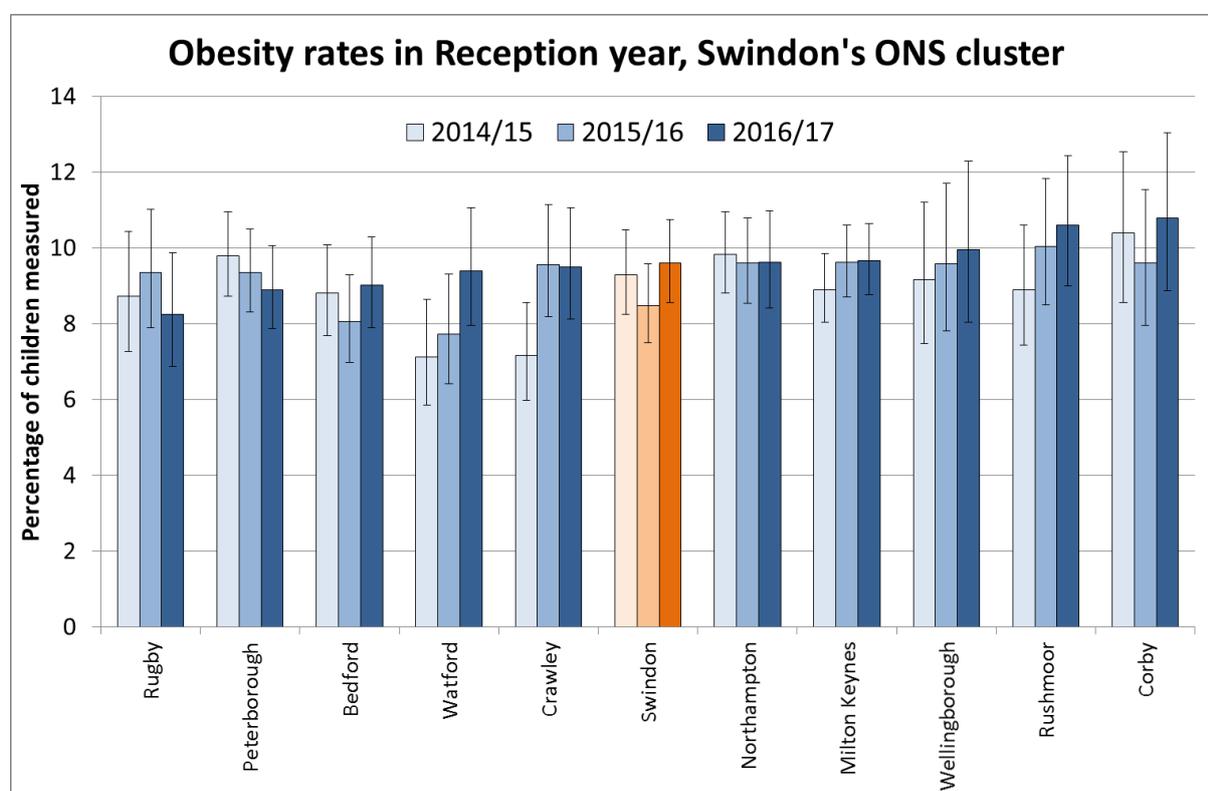
Source: NCMP Local Authority tool (PHE) (based on pupil postcode). Note: spine chart colour coding benchmarks Swindon against the England figures.

Comparator Areas

There is a group of 11 Local Authority areas (Bedford, Corby, Crawley, Milton Keynes, Northampton, Peterborough, Rugby, Rushmoor, Swindon, Watford and Wellingborough) which are in the same Office for National Statistics (ONS) cluster, called Expanded Areas. Thus it is useful to compare Swindon with some of these areas for the purpose of comparative and benchmarking exercises. Towns that are frequently compared with Swindon are Bedford, Peterborough and Milton Keynes, although detailed comparisons with other towns in the cluster are also sometimes made.

Figure 6 shows the proportion of **obese Reception year children** in Swindon and its comparator areas in 2014/15, 2015/16 and 2016/17. 95% confidence intervals are shown.

Figure 6: Obesity in Reception year, Swindon and ONS cluster comparators



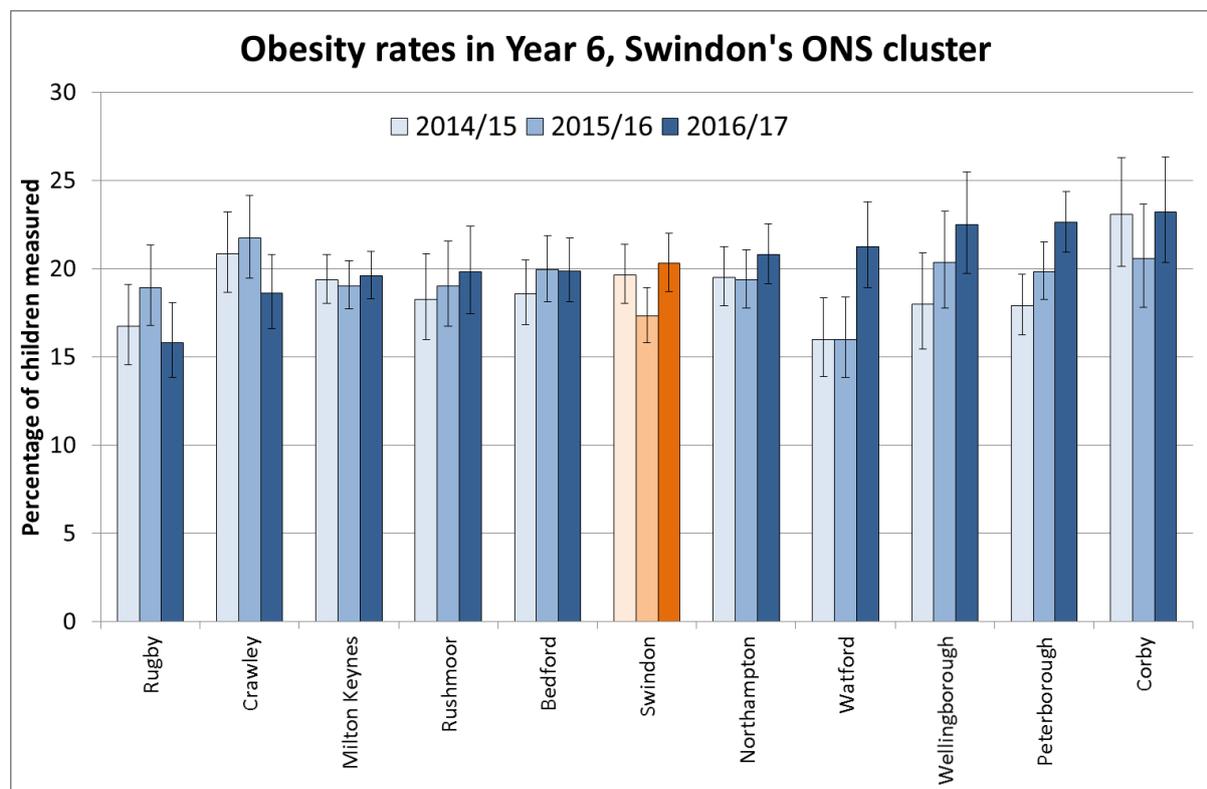
Source: NCMP Local Authority tool (PHE)/NCMP 2016/17 report (NHS Digital)

Figure 6 shows that the proportion of obese Reception year children in Swindon (9.6%) was consistent with comparator areas in 2016/17, with a rank of 6th lowest out of 11 areas (3rd in 2015/16).

In 2016/17, Bedford (9.0%), Milton Keynes (9.7%) and Peterborough (8.9%) had broadly similar obesity levels in their Reception year children as Swindon.

Figure 7 shows the proportion of **obese Year 6 children** in Swindon and its comparator areas in 2014/15, 2015/16 and 2016/17. 95% confidence intervals are shown.

Figure 7: Obesity in Year 6, Swindon and ONS cluster comparators



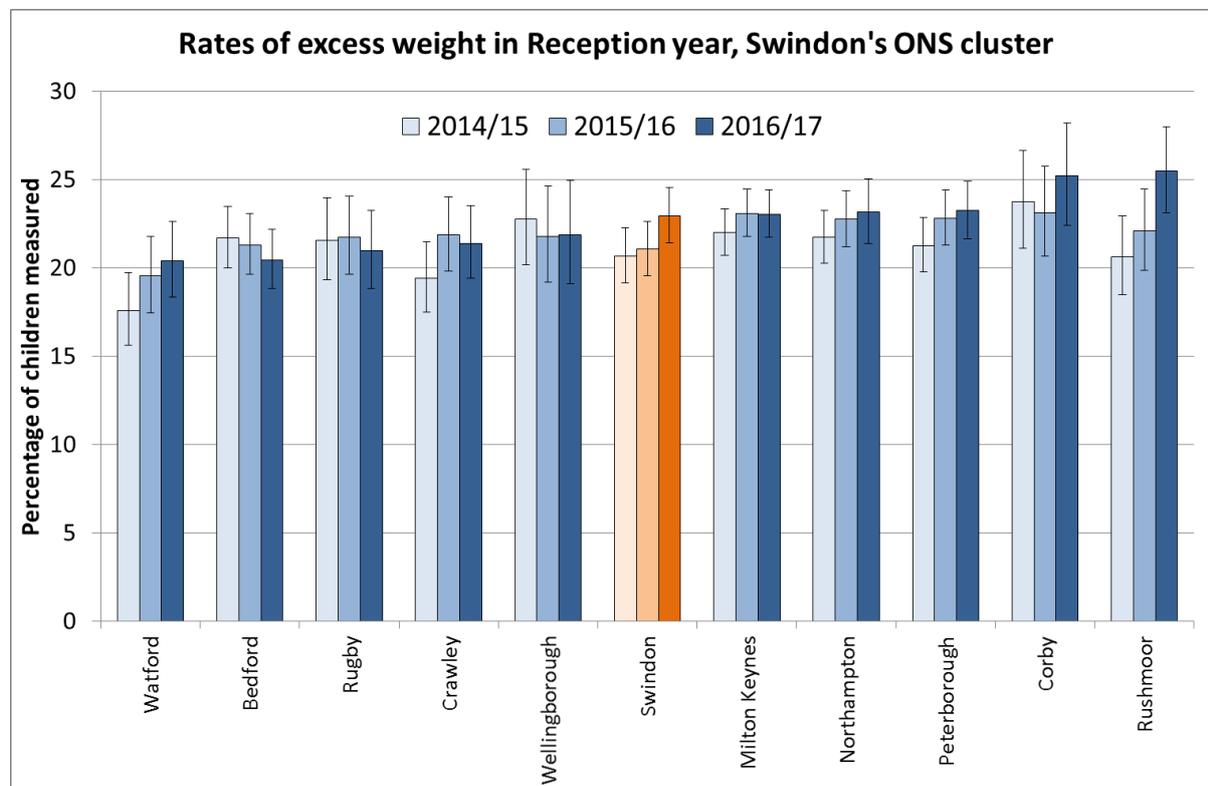
Source: NCMP Local Authority tool (PHE)/NCMP 2016/17 report (NHS Digital)

Figure 7 shows that the proportion of obese children in Year 6 in Swindon (20.3%) was consistent with comparator areas in 2016/17, with a rank of 6th lowest out of 11 areas (2nd lowest in 2015/16). In 2016/17, Swindon had a significantly higher obesity rate than Rugby.

In 2016/17, Bedford (19.9%), Milton Keynes (19.6%) had slightly lower obesity levels in Year 6 children than Swindon but they were higher in Peterborough (22.6%).

Figure 8 shows the proportion of **Reception year children with excess weight** in Swindon and its comparator areas in 2014/15, 2015/16 and 2016/17. 95% confidence intervals are shown.

Figure 8: Excess weight in Reception year, Swindon and ONS cluster comparators



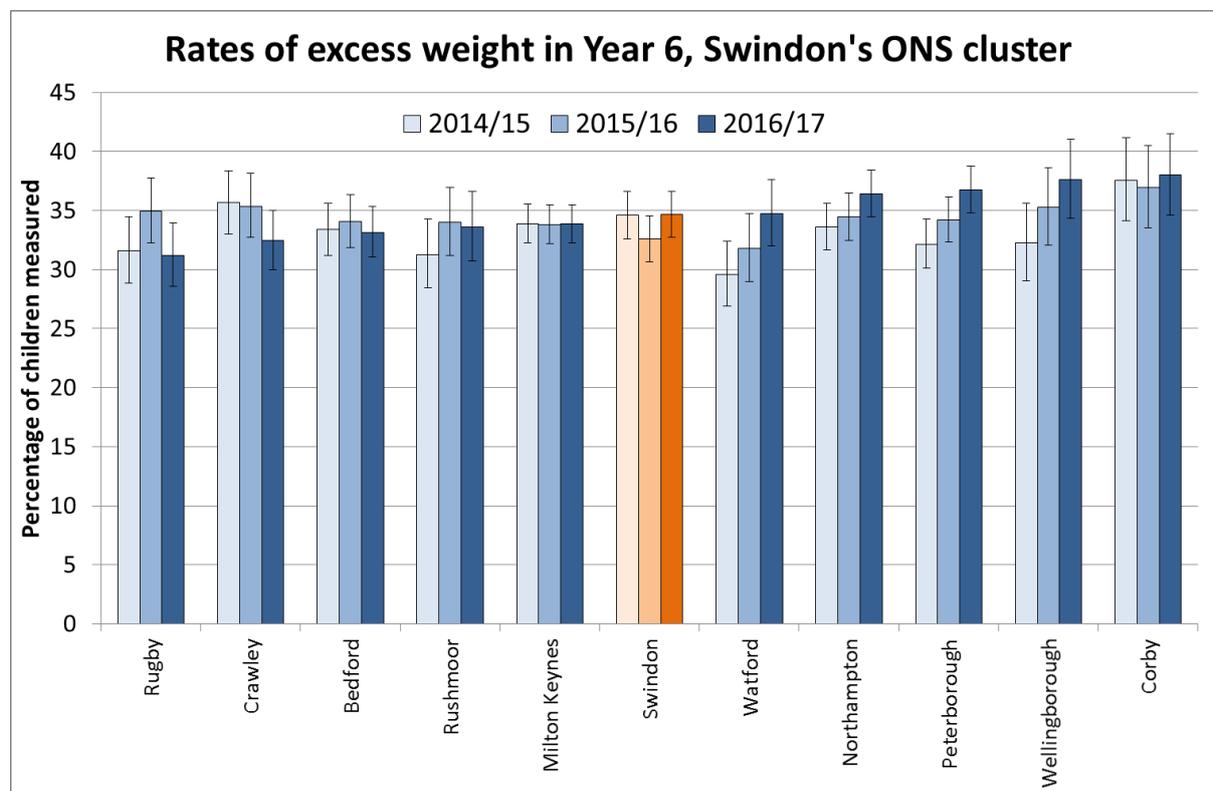
Source: NCMP Local Authority tool (PHE)/NCMP 2016/17 report (NHS Digital)

Figure 8 shows that the proportion of Reception year children with excess weight in Swindon (23.0%) was the 6th lowest out of all the comparator areas in 2016/17, (2nd lowest in 2015/16).

In 2016/17, Bedford (20.4%) had a lower level of excess weight in their Reception year children than Swindon. However, Milton Keynes (23.0%) and Peterborough (23.2%) had similar levels.

Figure 9 shows the proportion of **Year 6 children with excess weight** in Swindon and its comparator areas in 2014/15, 2015/16 and 2016/17. 95% confidence intervals are shown.

Figure 9: Excess weight in Year 6, Swindon and ONS cluster comparators



Source: NCMP Local Authority tool (PHE)/NCMP 2016/17 report (NHS Digital)

Figure 8 shows that the proportion of Year 6 children with excess weight in Swindon (34.7%) is the 6th lowest out of the comparator areas in 2016/17 (2nd lowest in 2015/16).

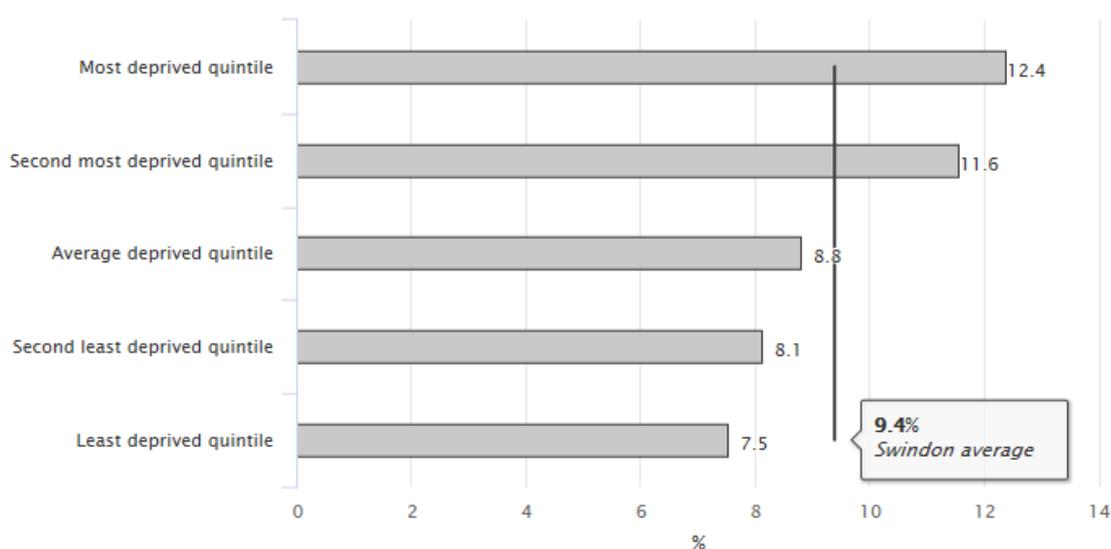
In 2016/17, Bedford (33.2%) and Milton Keynes (33.9%) all had lower levels of excess weight in Year 6 children than Swindon but Peterborough (36.8%) had higher levels.

Inequalities

PHE have also calculated the prevalence of obesity amongst Reception year and Year 6 pupils (2012/13-2016/17) in order to explore inequalities at local authority level.

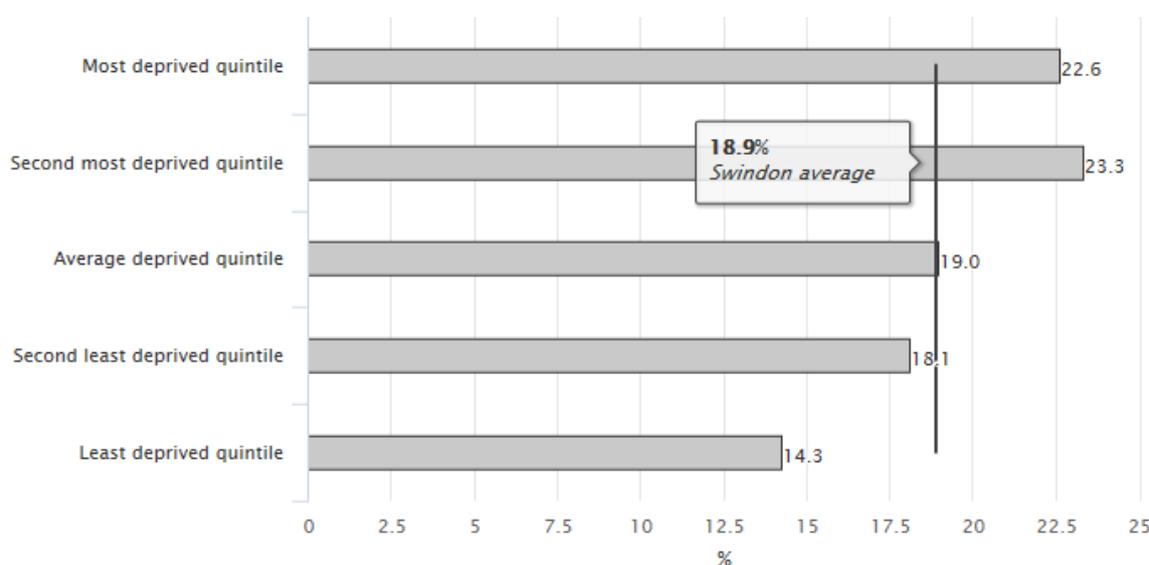
Figures 10 and 11 show the prevalence of obesity in Swindon across five deprivation quintiles derived from the Index of Multiple Deprivation 2015. In Reception year, the prevalence of obesity in the most deprived quintile (12.4%) is nearing double that in the least deprived quintile (7.5%). In Year 6, the prevalence in the two most deprived quintiles is higher than the Swindon average by about 4% and nearly 10% higher than the prevalence in the least deprived quintile.

Figure 10: Prevalence of obesity among children in Reception, 5-years data combined Swindon, 2012/13 - 16/17



Source: NCMP Local Authority tool (PHE)

Figure 11: Prevalence of obesity among children in Year 6, 5-years data combined Swindon, 2012/13 - 16/17



Source: NCMP Local Authority tool (PHE)

Conclusion

Swindon is generally similar to England, the South West region and ONS cluster comparator areas with regards to children being measured as underweight, healthy weight or excess weight. However, large inequalities are seen between affluent and deprived areas.

Participation rates are lower in Swindon than England or the South West and have levelled off in recent years whereas in other areas they continue to rise. Following measurement, feedback letters are sent to excess weight children's parents. Parents may not be aware that their child may not be of a healthy weight and so subsequent engagement with weight management services may be slow.