Purpose of the Report

1. To provide an update to the Executive on the delivery and findings from the National Child Measurement Programme for Nottinghamshire for the 2015/2016 school year.

Information and Advice

Background

2. The National Child Measurement Programme (NCMP) is a statutory annual programme that was established in 2005/06. Findings from the programme are used to inform local planning and delivery of services for children and gather population-level surveillance data to allow detailed analysis of prevalence and trends in weight. Nottinghamshire County Council has the statutory responsibility to deliver the NCMP in Nottinghamshire schools. The NCMP is commissioned by County Council Public Health via the Children’s Integrated Commissioning Hub, and provided by Nottinghamshire Healthcare NHS Trust as part of the Integrated 0-19 Years Public Health Nursing Contract by the Healthy Families Team (HFT).

3. Parents and carers are informed of the programme in advance and have the option to opt out. The programme records the height and weight measurements of children in state-maintained schools in Reception (aged 4-5 years) and year 6 (aged 10-11 years) across England. These result are used to calculate the body mass index\(^1\) (BMI) of children. Through provision of a child’s result to their parents, the NCMP provides the opportunity to raise parents’ awareness of their own child’s weight status and potential health impacts and provide an opportunity to provide further support to families to make healthy lifestyle changes.

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\(^1\) Underweight – BMI less than or equal to the 2nd centile; Healthy weight – BMI greater than the 2nd centile but less than the 85th centile; Overweight – BMI greater than or equal to the 85th centile but less than the 95th centile; Obese – BMI greater than or equal to the 95th centile.
Participation

4. The NCMP ran across Nottinghamshire in 2015/16 with 100% of schools participating in the programme. The countywide participation rates in Reception and Year 6 were lower than the East Midlands and England rates in 2015/16 and 2014/15 (figure 1). There was also variation in participation rates between districts and boroughs.

Figure 1 NCMP Participation rates in Nottinghamshire compared with region and national 2014/15 and 2015/16

<table>
<thead>
<tr>
<th>Area</th>
<th>Participation 2015/16</th>
<th>Participation 2014/15</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Reception</td>
<td>Year 6</td>
</tr>
<tr>
<td>England</td>
<td>95.6%</td>
<td>94.0%</td>
</tr>
<tr>
<td>East Midlands</td>
<td>95.8%</td>
<td>93.2%</td>
</tr>
<tr>
<td>Nottinghamshire</td>
<td>93.0%</td>
<td>86.9%</td>
</tr>
<tr>
<td>Ashfield</td>
<td>95.0%</td>
<td>89.1%</td>
</tr>
<tr>
<td>Bassetlaw</td>
<td>91.3%</td>
<td>87.8%</td>
</tr>
<tr>
<td>Broxtowe</td>
<td>94.3%</td>
<td>88.4%</td>
</tr>
<tr>
<td>Gedling</td>
<td>93.1%</td>
<td>90.0%</td>
</tr>
<tr>
<td>Mansfield</td>
<td>94.5%</td>
<td>82.6%</td>
</tr>
<tr>
<td>Newark &amp; Sherwood</td>
<td>90.3%</td>
<td>82.7%</td>
</tr>
<tr>
<td>Rushcliffe</td>
<td>92.8%</td>
<td>87.5%</td>
</tr>
</tbody>
</table>

5. Figure 2 shows the year 6 participation rates have been lower than England since 2010/11 and in 2015/16 they were the 5th lowest in the country (lowest St Helens – 80.4%). The main reasons why children withdraw from the measurement are parental opt-out, child opt-out, or when children are unsuitable for measurement due to a physical impairment, or a child absent on the day of measurement.

Figure 2 Combined (Reception and Year 6) NCMP Participation rates for Nottinghamshire & England (2010/11 to 2015/16) (source Public Health England NCMP Local Authority Profile)
Reception age obesity prevalence

6. In 2015/16, 8.8% of Reception age children in Nottinghamshire were obese which represented an increase upon the previous year and brought the prevalence into the statistically similar range to England, whereas for previous years it had been significantly lower (figure 3).

Figure 3 Nottinghamshire Trend in Prevalence of obesity in Reception from NCMP

7. There continues to be variation in the prevalence of obesity in reception age children across the county, with Rushcliffe having the lowest prevalence; and Gedling, Bassetlaw, Mansfield and Ashfield having increased prevalence compared to previous years (figure 4). However, prevalence in all of these areas was in a statistically similar range to the England average.

Figure 4 BMI Distribution in Nottinghamshire in Reception Children from 2014/15 & 2015/16 NCMP
Year 6 obesity prevalence

8. The prevalence of child obesity in Year 6 in Nottinghamshire (16.7%) remained significantly lower than the national average in 2015/16 in line with the trend in the previous year (figure 5). It should be noted that obese rates of the Year 6 cohort continue to be approximately double the prevalence from Reception. The prevalence in 2009/10 when this cohort was in Reception was 8.7%. This doubling of obesity prevalence is in line with national trends. A recent cohort study conducted by Public Health England from areas of the country that were able to retrospectively track individual children’s records, found that this increase is in part driven by the number of overweight and healthy weight Reception children that become obese by Year 6, with most of the children in the obese category remaining in the obese category2.

Figure 5 Nottinghamshire Trend in Prevalence of obesity in Year 6 from NCMP

9. There continues to be variation in the prevalence of obesity in year 6 age children across the county, with the prevalence in Rushcliffe continuing to decrease since 2009/10. There were also statistically significant decreases in Newark & Sherwood and Broxtowe compared to the previous year (figure 6). These decreases may be masked by the decreases in participation in Rushcliffe and Newark & Sherwood.

Figure 6 BMI Distribution in Nottinghamshire in Year Six Children from 2014/15 & 2015/16 NCMP

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Prevalence of obesity by Index of Multiple Deprivation (IMD) Score

10. Analysis demonstrates that there continues to be a positive correlation between small area\(^3\) IMD score and obesity prevalence at Reception and Year 6 age. This correlation, as measured by the slope index of inequality, has increased over time in Year 6 (but not Reception), due to the obesity prevalence lowering to a greater extent in the least deprived compared to the most deprived areas.

### Figure 7 Trends in Year 6 Obesity Prevalence and Slope Index of Inequality over time

<table>
<thead>
<tr>
<th>Period</th>
<th>Year 6 Obesity Prevalence</th>
<th>Slope Index of Inequality</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007/08 to 2009/10</td>
<td>17.9%</td>
<td>9.3%</td>
</tr>
<tr>
<td>2008/09 to 2010/11</td>
<td>17.4%</td>
<td>9.7%</td>
</tr>
<tr>
<td>2009/10 to 2011/12</td>
<td>17.3%</td>
<td>9.9%</td>
</tr>
<tr>
<td>2010/11 to 2012/13</td>
<td>17.3%</td>
<td>10.9%</td>
</tr>
<tr>
<td>2011/12 to 2013/14</td>
<td>17.7%</td>
<td>12.0%</td>
</tr>
<tr>
<td>2012/13 to 2014/15</td>
<td>17.5%</td>
<td>13.6%</td>
</tr>
<tr>
<td>2013/14 to 2015/16</td>
<td>17.2%</td>
<td>14.1%</td>
</tr>
</tbody>
</table>

Keys Actions to Improve NCMP Performance

11. The Public Health team working on NCMP have investigated the reasons for low year 6 participation rates in Nottinghamshire. This has involved shadowing NCMP measurements, informal visits with head teachers, gaining intelligence from neighbouring authorities. The following recommendations are being proposed to improve uptake:

- **Reassess documentation**
  - Parents will be required to write a letter to opt out rather than complete a reply slip.

- **Improve relationships with external partners**
  - The Healthy Families Team (HFT) to attend Family of Schools meetings in localities to identify work within schools to engage parents.
  - The HFT to develop a work plan with the commissioned weight management service provider to ensure informed and co-ordinated service provision.
  - The HFT to engage with the School Health Hub for co-ordinated health and wellbeing approaches in targeted schools.

- **Staff competency and confidence**
  - Public Health and HFT to develop a training programme for HFT staff delivering NCMP.

- **Promotion and engagement**
  - Develop an NCMP toolkit with resources and guide along with engagement hints and tips will be developed for use by the NCMP co-ordinator in school.

Key Local Strategic Actions to Address Child Obesity

12. Action to address child obesity requires a whole system approach for diet and nutrition and physical activity across the lifecourse led by national policy and action, supplemented with local action.

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\(^3\) Middle Super Output area (MSOA)

14. The local approach was reported to the Health & Wellbeing Board in January 2017. This includes coordinated action with planners to develop healthy environments, increase healthier food choices in fast food outlets, work to increase physical activity at a County and District level, coordinated action around the school setting, active transport initiatives, and weight management pathways.

15. This approach will be reviewed in 2017/18 via the Tacking Excess Weight Steering Group to ensure the approach is aligned with emerging national policy and the refresh of the Health & Wellbeing Strategy.

RECOMMENDATION/S

1) The Children’s Trust Executive to note the issues and actions described in the report in relation to the delivery and findings of the national child measurement programme in Nottinghamshire.

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Background Papers


Except for previously published documents, which will be available elsewhere, the documents listed here will be available for inspection in accordance with Section 100D of the Local Government Act 1972.