

# Analysis of the 2016 Change4Life Local Campaign in Kent

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## | 1. Executive Summary

### 1.1 Key Findings

#### 1.1.1 Change4Life Uptake & Reach

- In 2016, there were 1,660 registrations to the Change4Life local campaign across Kent. Overall, we can estimate that 1.5% of the Kent families, with at least one child aged under 10, may have registered for Sugar Smart, 2016.
- There was little evidence for differences in uptake within wards with high densities of population from target schools and general practices.
- Across the Kent districts, higher levels of uptake, in terms of registrations by families with youngest child aged under 10, were evident for Canterbury, Shepway and Swale and lower levels for Dartford, Gravesham and Sevenoaks.
- Across the Kent districts, there were relatively lower levels of uptake in Ashford, Dartford and Gravesham in the context of higher overweight and obesity prevalence within reception and year 6 in 2014/15.
  - Wards within the highest quintile of overweight and obesity prevalence but with the lowest quintile for uptake have been identified. Although limitations of ward level analysis should be recognised.
- There is no evidence to suggest any differences in uptake by area deprivation. However, only very limited analysis has been possible in the absence of a person-level dataset with individual measures of socio-economic position.

## 1.2 Call to Action

Across the Kent districts, lower levels of uptake were found within Dartford and Gravesham, alongside higher levels of excess weight in comparison to Kent. Within these districts, ward level analysis has highlighted a number of wards with higher overweight and obesity prevalence but lower level of uptake from registrations as a percentage of families with youngest child under 10. This may provide further direction on targeting campaigns.

## | 2. Introduction & Objectives

The Change4Life local campaign was launched in February 2016. This represented the continuation of the national Sugar Smart campaign, launched in January 2016, that aimed to encourage and support families to reduce the amount of sugar they consume, with a focus on families with children aged 5-11 from socially disadvantaged backgrounds.<sup>1</sup>

The Change4Life local campaign:

- Aimed to get more children in Kent to eat healthier foods and reduce amounts of sugar consumed, by supporting, extending and amplifying the local effect from the national Sugar Smart campaign.
  - The campaign was timed between 1st February and 1st May 2016 and used local press and digital content to promote the campaign.
- The campaign particularly focused on 36 schools and 199 general practices, where leaflets and posters were distributed.
  - They describe that the campaign has a particular focus on areas with increased levels of excess weight.

Analysis of uptake of the 2016 Change4Life local campaign in Kent is required to inform planned targeted preventive action.

In particular the analysis seeks to explore:

- How registrations and uptake by families with children aged 5-11 varies across Kent; with a particular focus on wards with high densities of population from target schools and general practices, as well as, areas with increased levels of excess weight.

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<sup>1</sup> Public Health England (2016) Sugar Smart 2016 <https://campaignresources.phe.gov.uk/resources/campaigns>

### | 3. Change4Life

Overall, there were 1,660 registrations to the Change4Life local campaign across Kent since February 1st 2016.

**Table 1: Change4Life Registrations**

	<b>Registrations</b>
Ashford	130
Canterbury	174
Dartford	94
Dover	129
Gravesham	95
Maidstone	173
Sevenoaks	98
Shepway	136
Swale	192
Thanet	168
Tonbridge and Malling	152
Tunbridge Wells	119
<b>Kent</b>	<b>1660</b>

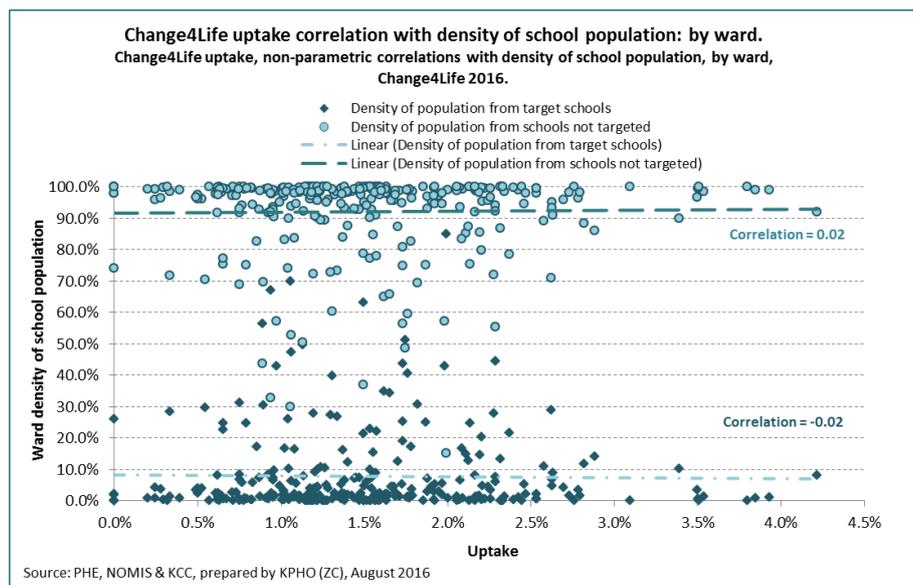
Source: PHE prepared by KPHO (ZC) August 2016

### 3.1 Target Schools & General Practices

Change4Life 2016 uptake (i.e. ward-level sign up to Change4Life<sup>2</sup> as a percentage of the numbers of families with youngest child aged under 10) has been analysed in the context of wards with high densities of population from target schools and general practices,<sup>3</sup> since this represents the target audience for this campaign.

Non-parametric correlation was explored, as data was not normally distributed and a meaningful measure for the strength of association was needed.<sup>4</sup>

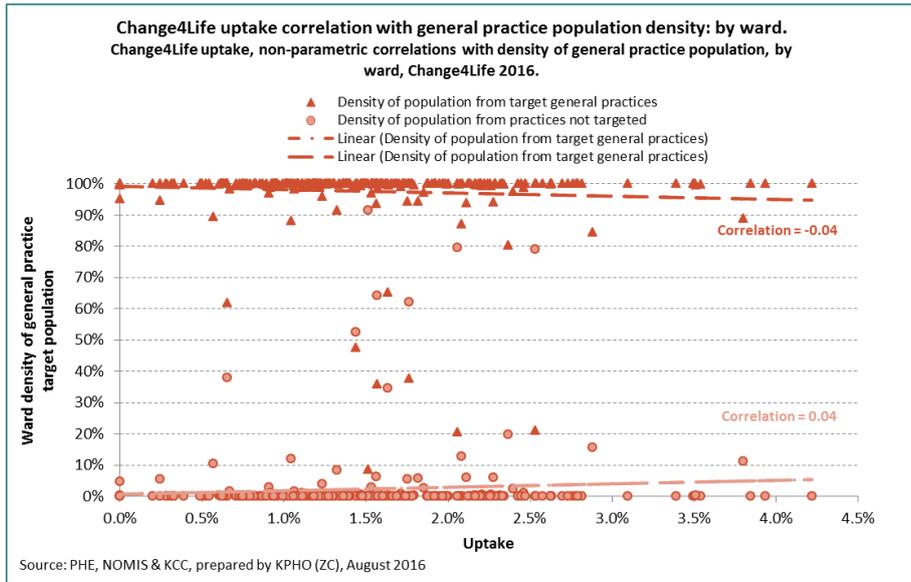
- There was no relationship between Change4Life uptake and ward density of school or general practice target population.
- Therefore, there was not greater uptake within wards with higher densities of population from targeted schools or general practices. This suggests that the campaign may not have led to higher reach in these areas.



<sup>2</sup> It should be noted there that the numbers of registrations at ward level are small averaging 5 per ward.

<sup>3</sup> Using aggregated school and general practice LSOA distribution data.

<sup>4</sup> Kendall's Tau was used for non-parametric correlations

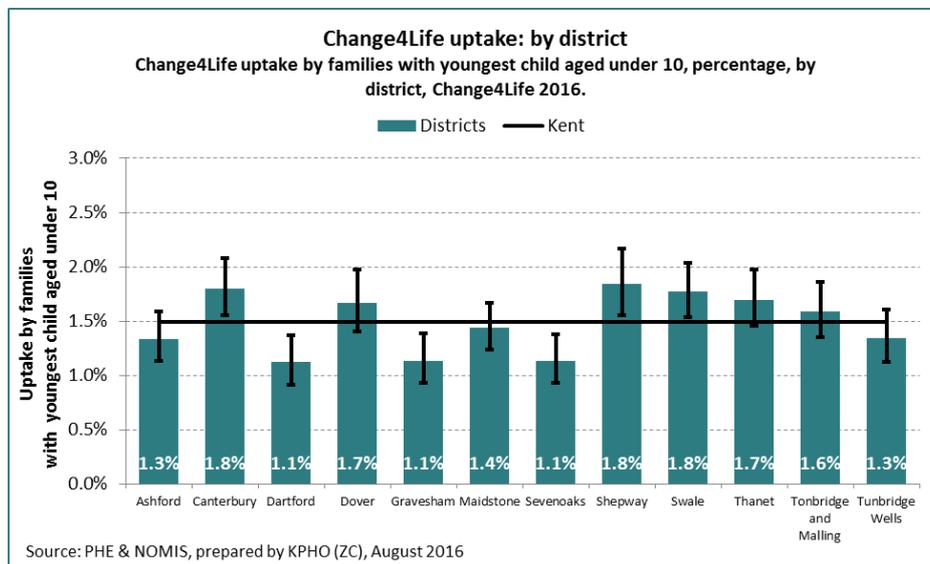


### 3.2 Uptake by District

District level Change4Life uptake has also been analysed in relation to the numbers of families with youngest child aged under 10 at a district level.

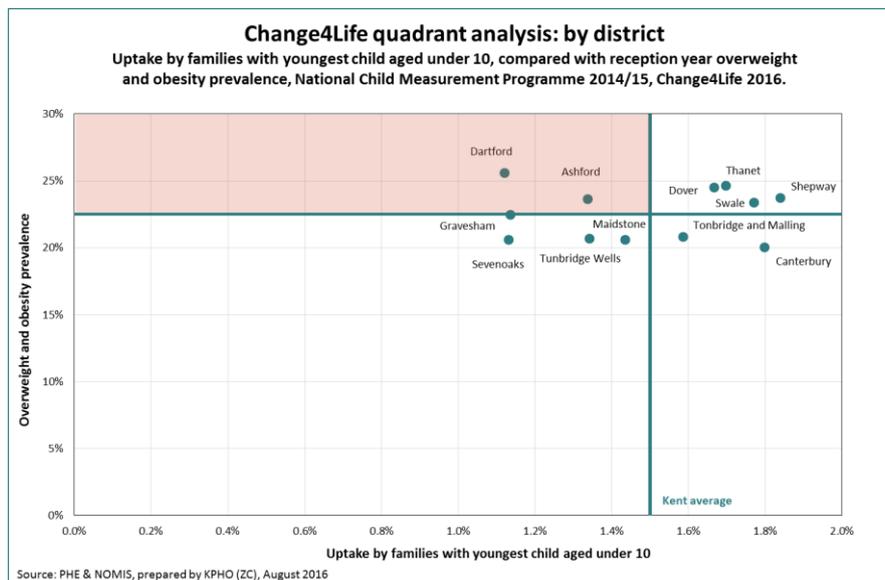
Overall, we can estimate that 1.5% of the Kent families, with at least one child aged under 10, may have registered for the local Change4Life campaign, 2016. Although, we cannot say with certainty that uptake was exclusively by families. But uptake varied across the Kent districts:

- Uptake was **lower** than the Kent average in Dartford, Gravesham and Sevenoaks.
- Uptake was **higher** than the Kent average in Canterbury, Shepway and Swale.

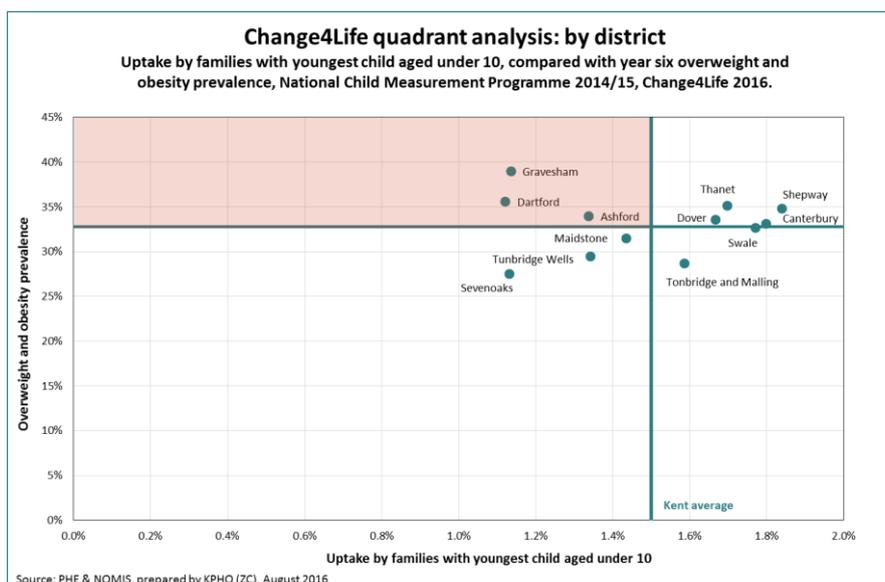


The charts below highlight districts, within the left upper quadrant, with higher obesity prevalence but lower Change4Life uptake. The first chart represents the analysis for reception year and the second year six. The horizontal and vertical lines represent the Kent prevalence of excess weight at 22.5% and 32.8% within reception and year six, as measured by the National Child Measurement Programme in 2014. The vertical and horizontal lines represent the Kent averages.

Uptake was **lower** in Ashford and Dartford, alongside higher overweight and obesity prevalence in reception year in 2014/15.



Uptake was also **lower** in Ashford, Dartford and Gravesham, alongside higher obesity prevalence in year six pupils in 2014/15.

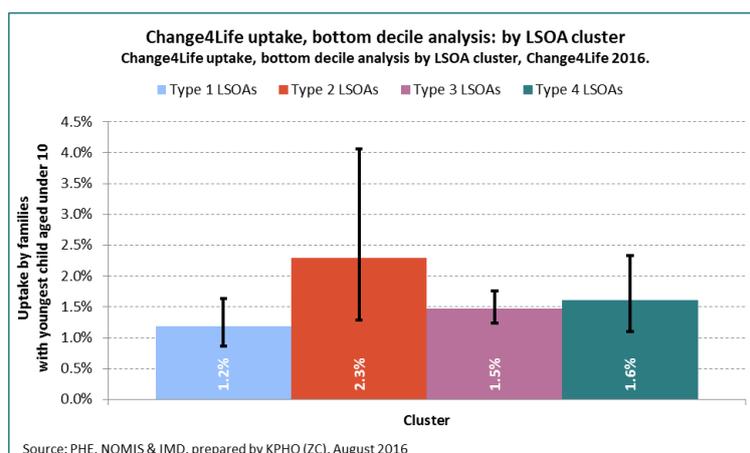
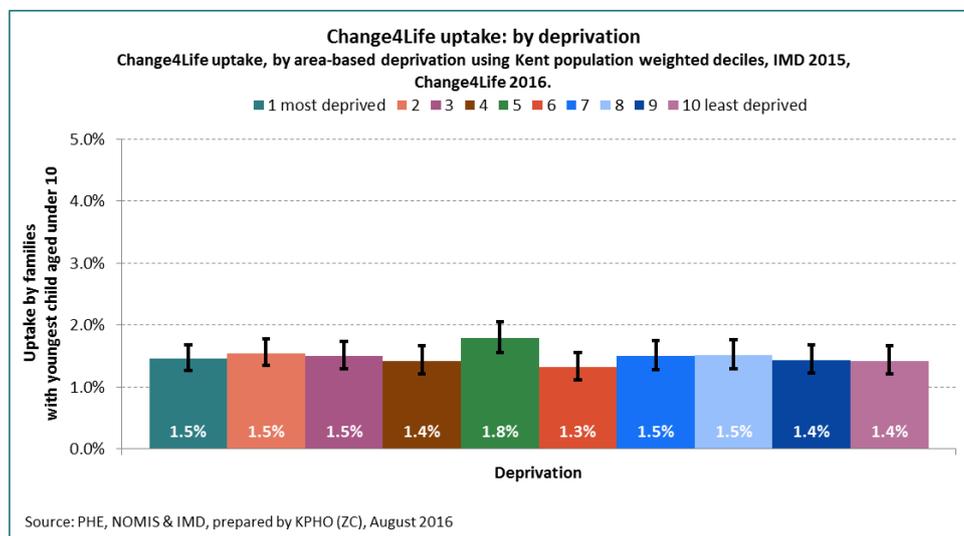


### 3.2 Uptake by Deprivation

Analysis explored Change4Life by area-based deprivation using Kent population weighted deciles, as well as, the bottom decile by lower super output area (LSOA) cluster. The ‘*Mind the Gap 2016*’ report<sup>5</sup> grouped Kent’s most deprived LSOAs into four deprivation types;

- Type 1 LSOAs – young people lacking opportunities
- Type 2 LSOAs – deprived rural households
- Type 3 LSOAs – families in social housing
- Type 4 LSOAs – young people in poor quality accommodation

Uptake did not differ across the Index of Multiple Deprivation deciles or within the bottom decile by LSOA cluster.

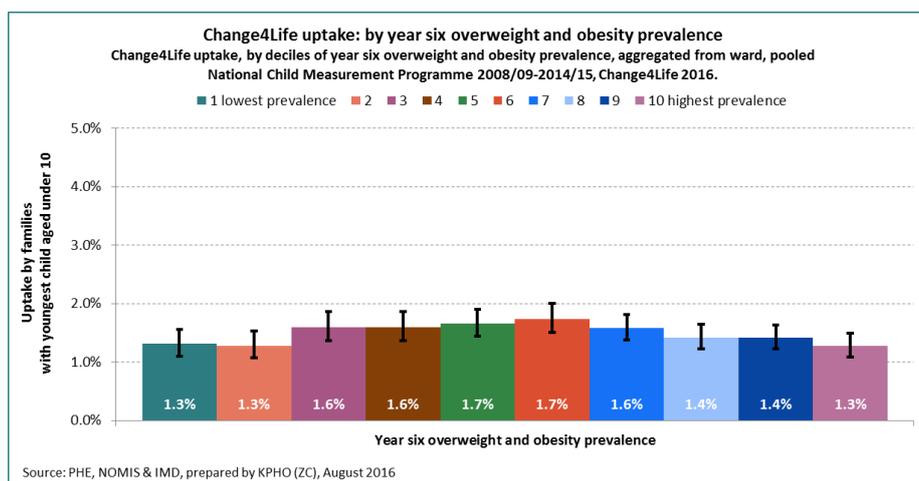
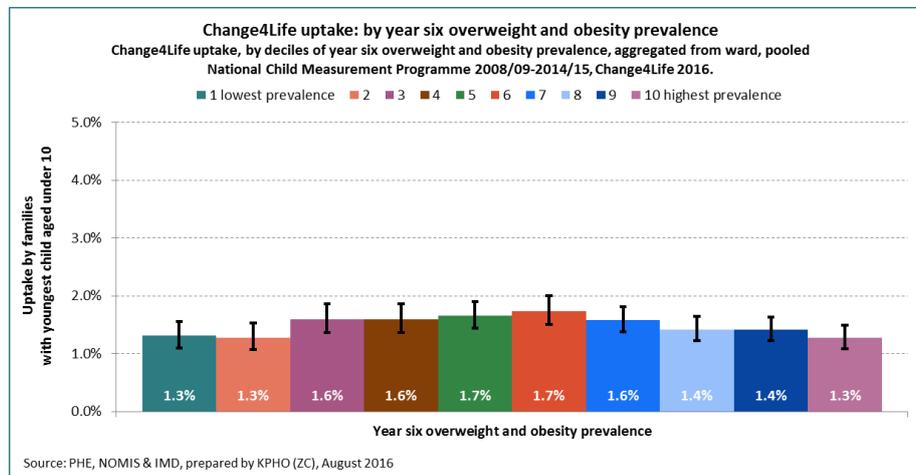


<sup>5</sup> Jayatunga W., et al. (2016) Mind the gap 2016: health inequalities strategy for Kent.

### 3.3 Uptake by Overweight and Obesity Prevalence

Whilst the dataset does not allow direct analysis of Change4Life registrations by excess weight prevalence, it is possible to explore whether there are any differences in uptake across deciles of excess weight prevalence. This used surveillance measurements of overweight and obesity from the National Child Measurement Programme during 2008/09 to 2014/15. If any differences are evident this may imply differences in uptake by deciles of excess weight.

- No relationship was found between Change4Life uptake and deciles of reception year or year six overweight and obesity prevalence.

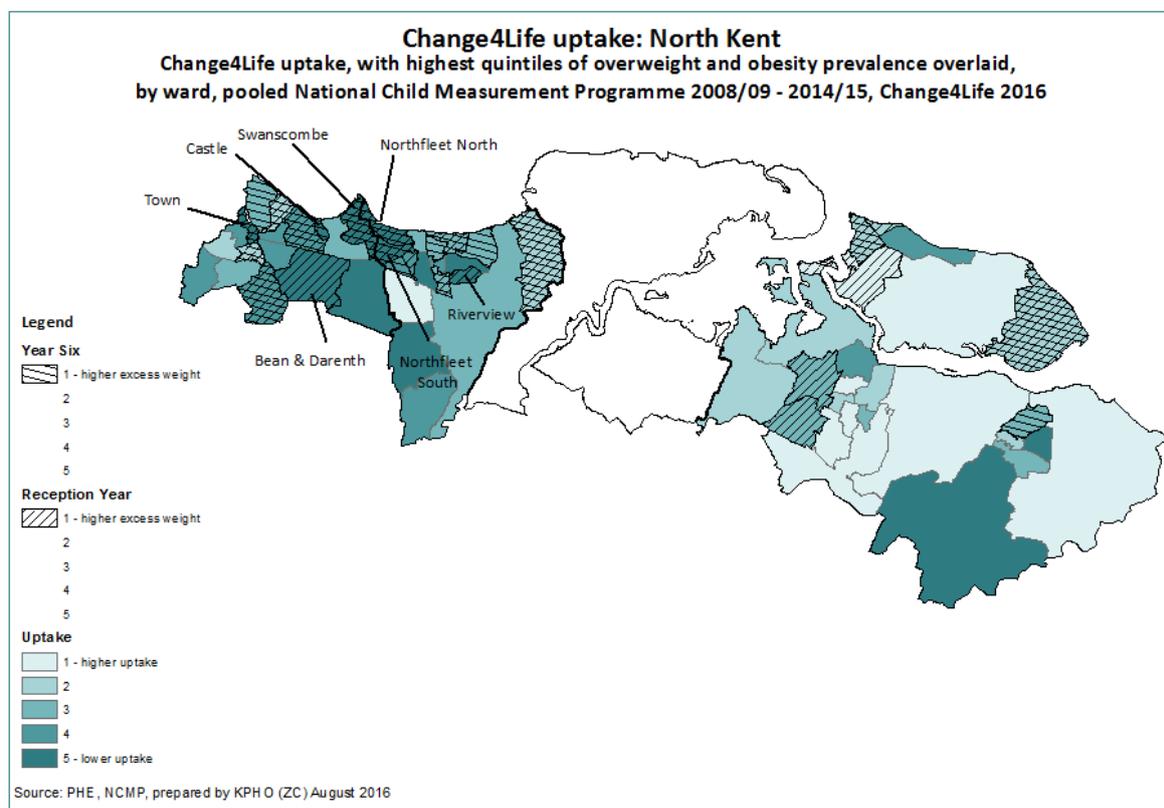


### 3.4 Uptake by Ward

We couldn't identify a relationship between Change4Life uptake and decile of excess weight prevalence. But there are some individual wards with high levels of need from higher excess weight prevalence but relatively low Change4Life uptake.

Wards within the top quintiles of overweight and obesity prevalence but with the bottom quintile with lowest uptake for Change4Life have been identified. It should be noted there that the numbers of registrations at ward level are small; but we have pooled several years of data from the National Child Measurement Programme to increase stability.

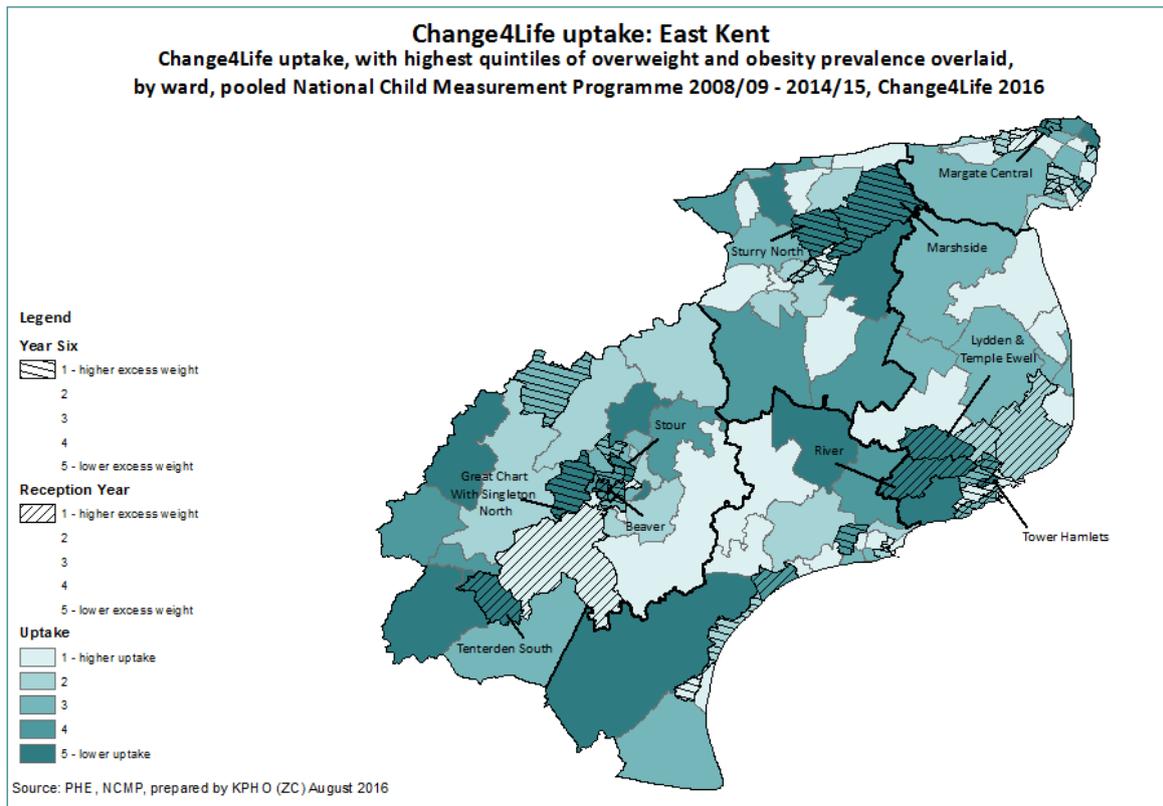
The map below shows the findings for North Kent.



This analysis highlights the following wards as having high overweight and obesity prevalence but low levels of uptake of Change4Life;

- Within Gravesend; Riverview, Northfleet North and Northfleet South.
- Within Dartford; Bean & Darenth, Castle, Town and Swanscombe.

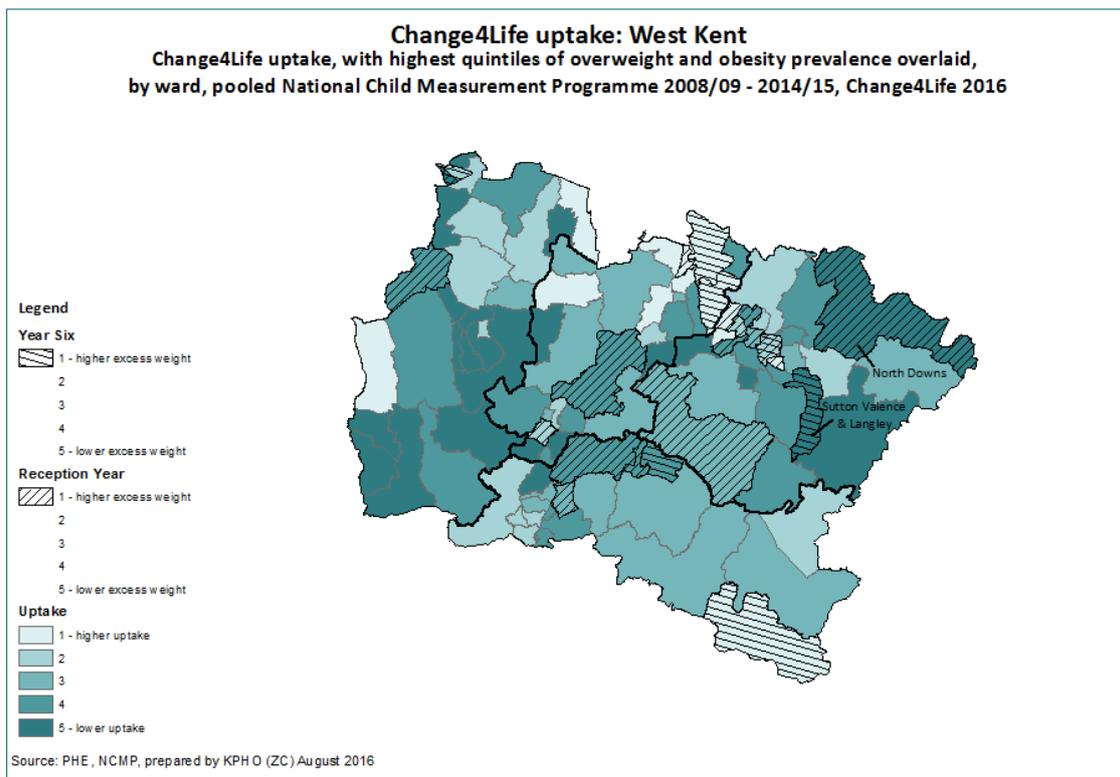
The map below shows the findings for East Kent.



This analysis highlights the following wards as having high overweight and obesity prevalence but low levels of uptake of Change4Life;

- Within Ashford; Beaver, Great Chart with Singleton North, Tenterden South and Stour.
- Within Canterbury; Marshside and Sturry North.
- Within Dover; River, Lydden & Temple Ewell, Tower Hamlets.
- Within Thanet; Margate Central.

The map below shows the findings for West Kent.



This analysis highlights the following wards as having high overweight and obesity prevalence but low levels of uptake of Change4Life;

- Within Maidstone; North Downs and Sutton Valence & Langley.

## | 4. Conclusions

Generally speaking, there was little evidence for differences in uptake within wards with high densities of population from target schools and general practices. Meaning that uptake was similar regardless of targeted schools and general practices.

The campaign had a particular focus on targeting areas with increased levels of excess weight. Uptake levels are similar regardless of level of excess weight across Kent. Also, analysis has shown that the campaign reached similar proportions of families regardless of deprivation levels, including those living in the most deprived decile in Kent.

Across the Kent districts, lower levels of uptake were found within Dartford, Gravesham and Sevenoaks. And this is in the context of higher levels of excess weight in Dartford and Gravesham.

Also, there are some individual wards that can be identified with high overweight and obesity prevalence but relatively low levels of uptake. Identification of these wards may provide further direction on targeting for future campaigns.