


Evaluating universal infant free school meals, Scotland: second monitoring report of school-meal uptake.

October 2016

Author Rachel McAdams

This resource may also be made available on request in the following formats:



 **0131 314 5300**

 **nhs.healthscotland-alternativeformats@nhs.net**

For further information on the Evaluation of Universal Free School Meals contact: Rachel McAdams, Public Health Adviser (Evaluation), NHS Health Scotland rachel.mcadams@nhs.net or visit healthscotland.com/freeschoolmeals

Published by NHS Health Scotland

1 South Gyle Crescent
Edinburgh EH12 9EB

© NHS Health Scotland 2016

All rights reserved. Material contained in this publication may not be reproduced in whole or part without prior permission of NHS Health Scotland (or other copyright owners). While every effort is made to ensure that the information given here is accurate, no legal responsibility is accepted for any errors, omissions or misleading statements.

NHS Health Scotland is a WHO Collaborating Centre for Health Promotion and Public Health Development.

Contents

Contents	1
Background.....	2
Methods	4
Findings	6
National data	6
Local authority data	8
School data	12
Recommendations	14
Web appendix: Additional tables.....	15

Background

Universal free school meals (UFSM) for primary 1 to 3 (P1-3) pupils in Scotland was introduced in January 2015. NHS Health Scotland is leading an evaluation of UFSM. The evaluation is ongoing and has three strands: consulting with parents; consulting with schools and local authorities; and monitoring changes in school-meal uptake. More information can be found at healthscotland.com/freeschoolmeals

The Healthy Living Survey collects data on school-meal uptake on a typical day in February each year. The UFSM evaluation uses the Healthy Living Survey data as an indicator to monitor changes in three key outcomes: increased school-meal uptake; financial benefits to families; and nutritional benefits to children. This report (the second monitoring report) updates the monitoring of school-meal uptake we first reported in 2015. Below we summarise the findings from the first report (published in 2015).¹

Our first monitoring report found that shortly after introduction of the policy, overall school-meal uptake (both free and paid) increased among primary children. There was an increase from 53.2% of primary pupils in 2014, to 64.8% in 2015. This increase in school-meal uptake was found to be because of increased uptake of (free) school meals among P1-3 pupils following the introduction of UFSM. In 2015, 79.3% of P1-3 pupils took a school meal (now free), compared with 53.1% of P4-7 pupils taking a school meal (both free and paid).

Increases in free-school-meal uptake suggested that more families were benefiting financially in 2015. Increases in school-meal uptake (free and paid) also suggested that more children were benefiting nutritionally.

¹ Note: the analysis from the first report is based on the unrevised school-meal uptake data that were available at the time of the publication (October 2015). The first report can be found at www.healthscotland.com/documents/26327.aspx

There was a lot of variation across local authorities and schools in terms of uptake of both free school meals and school meals (both free and paid). The change in uptake between 2014 and 2015 also varied. However, the most deprived 25% of schools continued to report the highest uptake of free school meals and overall school-meal uptake (both free and paid) in 2015. This suggested that families and children from the most deprived schools benefited the most financially and nutritionally from free school meals in 2015.

The first report on monitoring school-meal uptake, published in 2015, can be found at the link below. Note: this analysis was based on the unrevised Healthy Living Survey Data for 2015.

See: **www.healthscotland.com/documents/26327.aspx**

Methods

The Healthy Living Survey data are collated and prepared by the Scottish Government.² The national-, local authority- and school-level Excel data sets were used for this evaluation. The revised 2015 data – which were published alongside the 2016 data (in June 2016) – were used for the analysis presented in this paper. Note: the 2015 data analysed here are slightly different to those used for the first monitoring report published in 2015 – the findings of which are summarised in the *Background* section above.

The national- and local authority-level data were analysed using Microsoft Excel. These data are used to monitor longer-term trends in school-meal uptake at both a local authority and national level.

From 2015, national- and local authority-level data were disaggregated to present uptake data for P1-3 and P4-7. These data were used to monitor changes in uptake among P1-3 and P4-7 pupils.

School-level data from the 2014, 2015 and 2016 Healthy Living Surveys were also used. School-level data were not disaggregated to allow for monitoring of P1-P3 and P4-P7 uptake.

Data for each year were combined and cleaned. Schools with incomplete or withheld data were removed, leaving 1576 schools with complete data for analysis.³ The clean data set was analysed using both Microsoft Excel and IBM SPSS v19. A two-sample z-test for proportions was used to test for significant changes in school-meal and free-school-meal uptake.

² Details of the Healthy Living Survey methodology and access to the data sets are available from the Scottish Government website:
www.gov.scot/Topics/Statistics/Browse/School-Education/Pub-SS-ALM

³ During data cleaning 449 schools were removed from the combined data sets. Schools with incomplete data also included schools where deductive disclosure policies meant that data were withheld.

School-level data were used to explore variation in school-level uptake and were used to assess variation in uptake by school level of social deprivation. The estimated number of pupils eligible for free school meals in 2014 (prior to the introduction of UFSM) was used as an indicator of school-level social deprivation.⁴ Schools were ranked according to the estimated proportion of pupils eligible for free school meals in 2014, and then divided into four quartiles from most to least deprived. Variation in school-meal uptake across the four quartiles was then assessed.

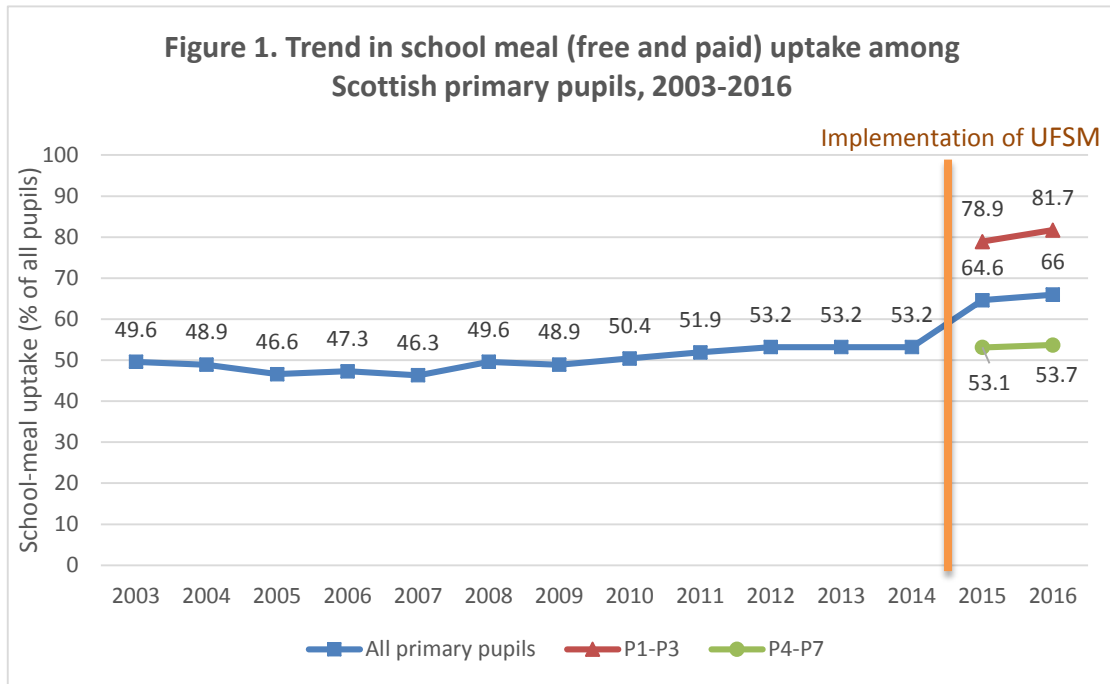
The Healthy Living Survey is a reliable source of routine national-level data on school-meal uptake, which provides school- and local authority-level data. However, the survey provides only a snapshot of activity on a single day of the year. The data, therefore, does not capture variation in school-meal uptake across a year, month or week. The data does not capture individual pupil-level data or what children eat. A school-level indicator of deprivation is used in the analysis. However, not all children or families within each school will share the same characteristics or levels of social deprivation. The findings should therefore be read with these limitations in mind.

⁴ The percentage of pupils registered for free school meals has traditionally been used as an indicator of school-level deprivation in Scotland. However, the introduction of some local policies since 2010, and UFSM since 2015, have widened the eligibility for free school meals in primary schools. This means this is no longer a useful measure of school-level deprivation, but no alternative measure is available. Between 2011 and 2014, the Scottish Government produced estimates of the proportion of pupils in each school who would be eligible for free school meals under the national policy criteria (pre-UFSM). Scottish Government recommended the use of these estimates as an indicator for school-level deprivation. For the second monitoring report analysis, the 2014 school-level estimates of the proportion of pupils eligible for free school meals under the old criteria were used as the indicator for school-level deprivation when assessing change in uptake between 2014 and 2015. This assumes there has been little change in the socio-economic profile of families attending the schools in the intervening 2 years.

Findings

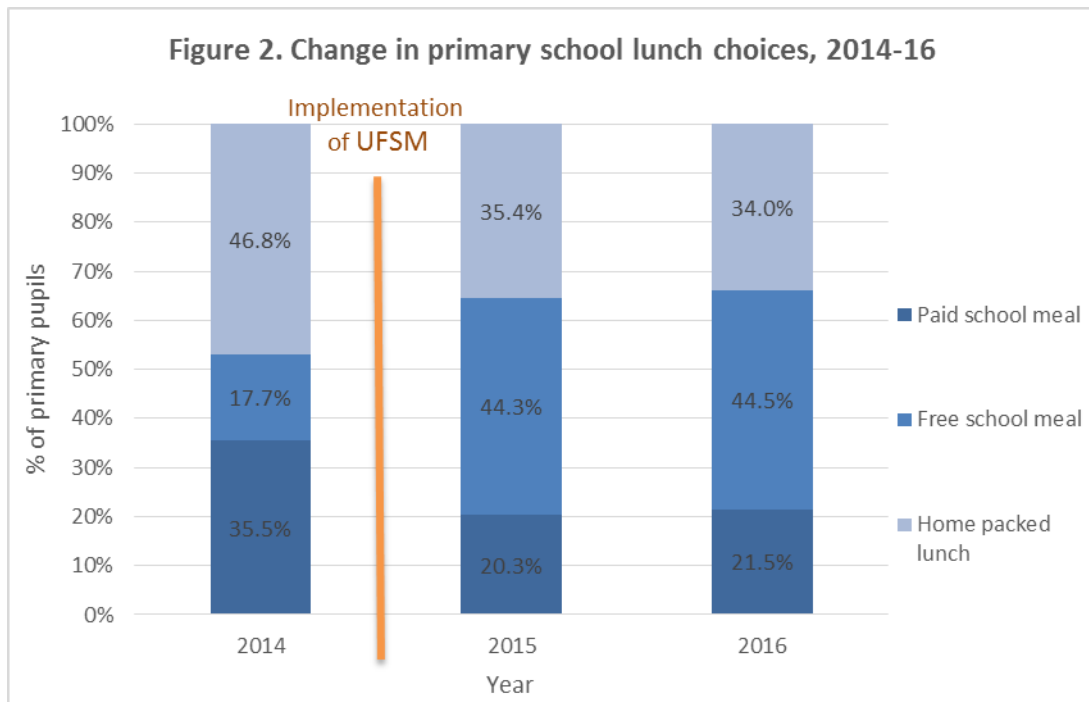
National data

There was a small but significant increase in the proportion of primary pupils taking a school meal (free and paid) in Scotland from 2015 to 2016, from 64.6% to 66% ($p < 0.000$) (Figure 1).

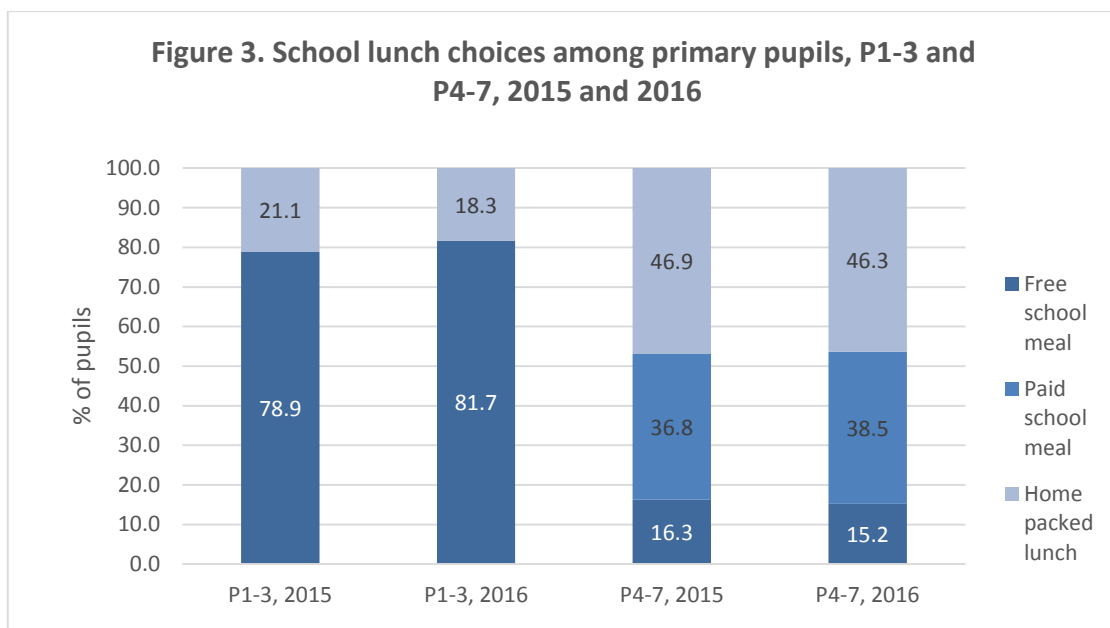


There was no significant change in free-school-meal uptake in Scotland among primary pupils between 2015 and 2016, which remained at 44% (Figure 2).

Uptake of free school meals among P1-3 pupils increased for the second year post introduction of the universal policy. This was a significant increase from 78.9% to 81.7% ($p < 0.000$) (Figures 1 and 2).



There was a small but significant increase in uptake of school meals (free and paid) among P4-7 pupils, from 53.1% to 53.7% ($p = 0.000$) between 2015 and 2016. However, free-school-meal uptake among P4-7 pupils decreased from 16.3% to 15.2% ($p < 0.000$) (Figure 3). Free school-meal uptake among P4-7 pupils should be monitored for further and consistent declines, which would warrant further investigation.



It would appear that the increase in overall school-meal uptake among P4-7 pupils was owing to more pupils paying for a school meal. Without pupil-level

data on school-meal uptake it isn't clear whether or not these pupils had been part of the first cohort of pupils moving from UFSM provision in P3 into targeted provision in P4. This would be worth further investigation, as it could indicate longer-term impacts of the universal policy on school-meal choices.

Local authority data

Changes in free-meal uptake were more varied at a local authority level in 2016. A total of 21 local authorities reported small but significant increases in free-meal uptake among P1-3 pupils, ranging from 1.2% to 10.5%. Four authorities reported small but significant decreases in free-meal uptake among P1-3 pupils, ranging from 3.3% to 5.3% (*Figures 4 and 5; Table 2 in web appendix*).

Figure 4. Change in free-school-meal uptake among P1-3 pupils, 2015-16

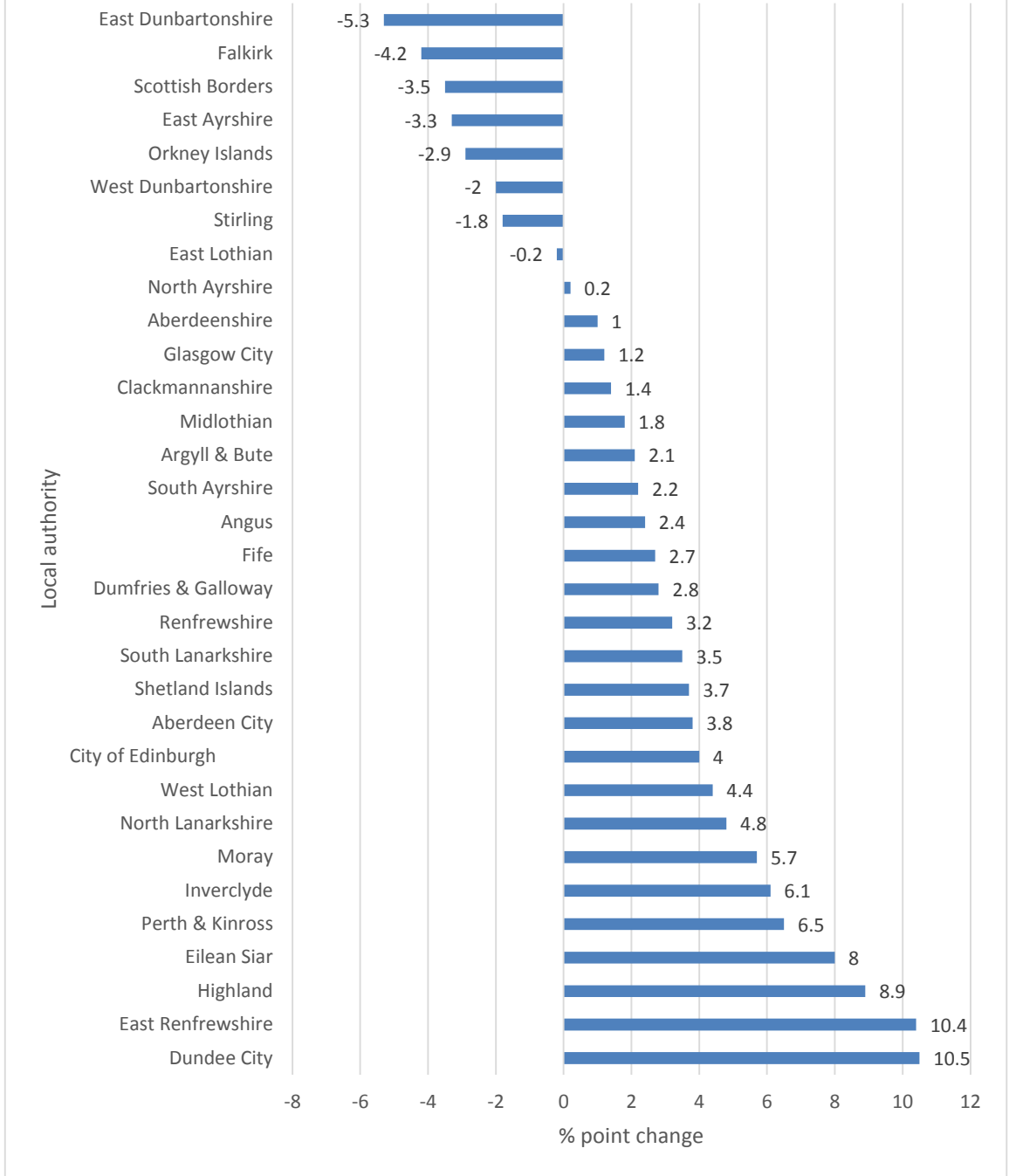
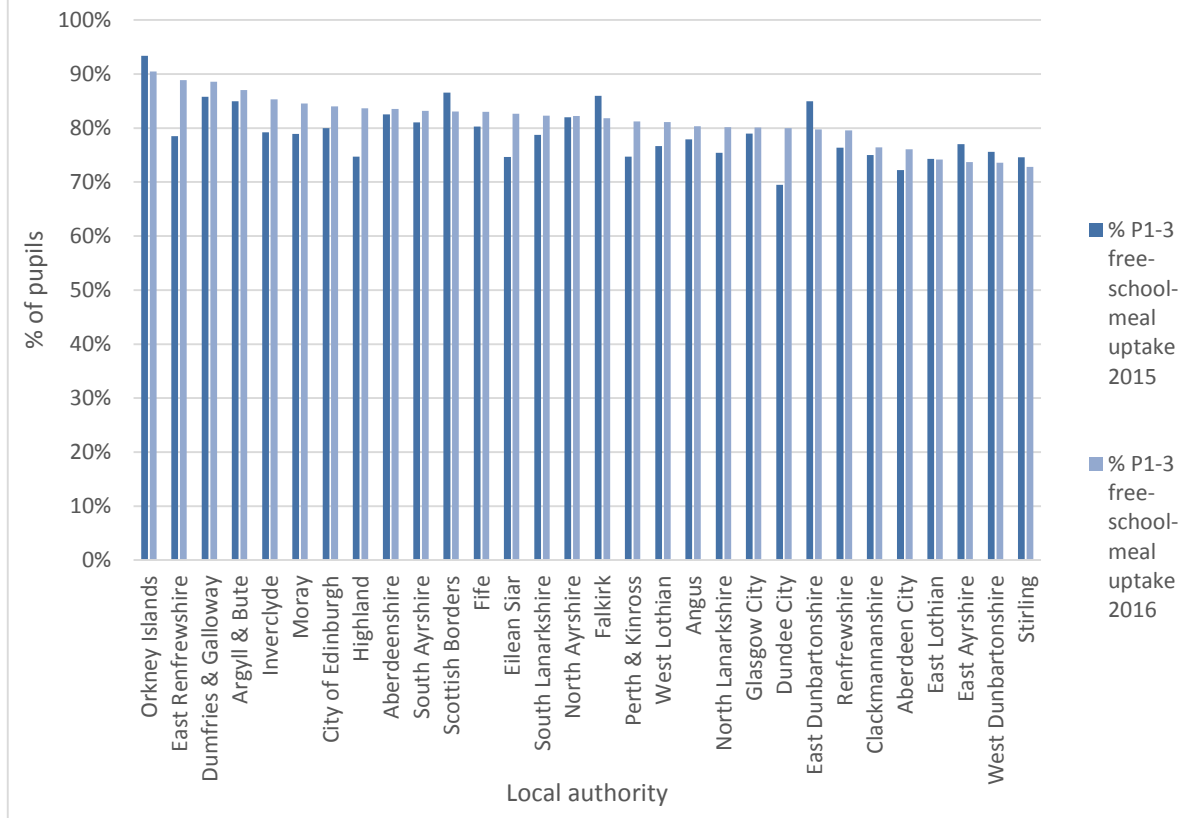


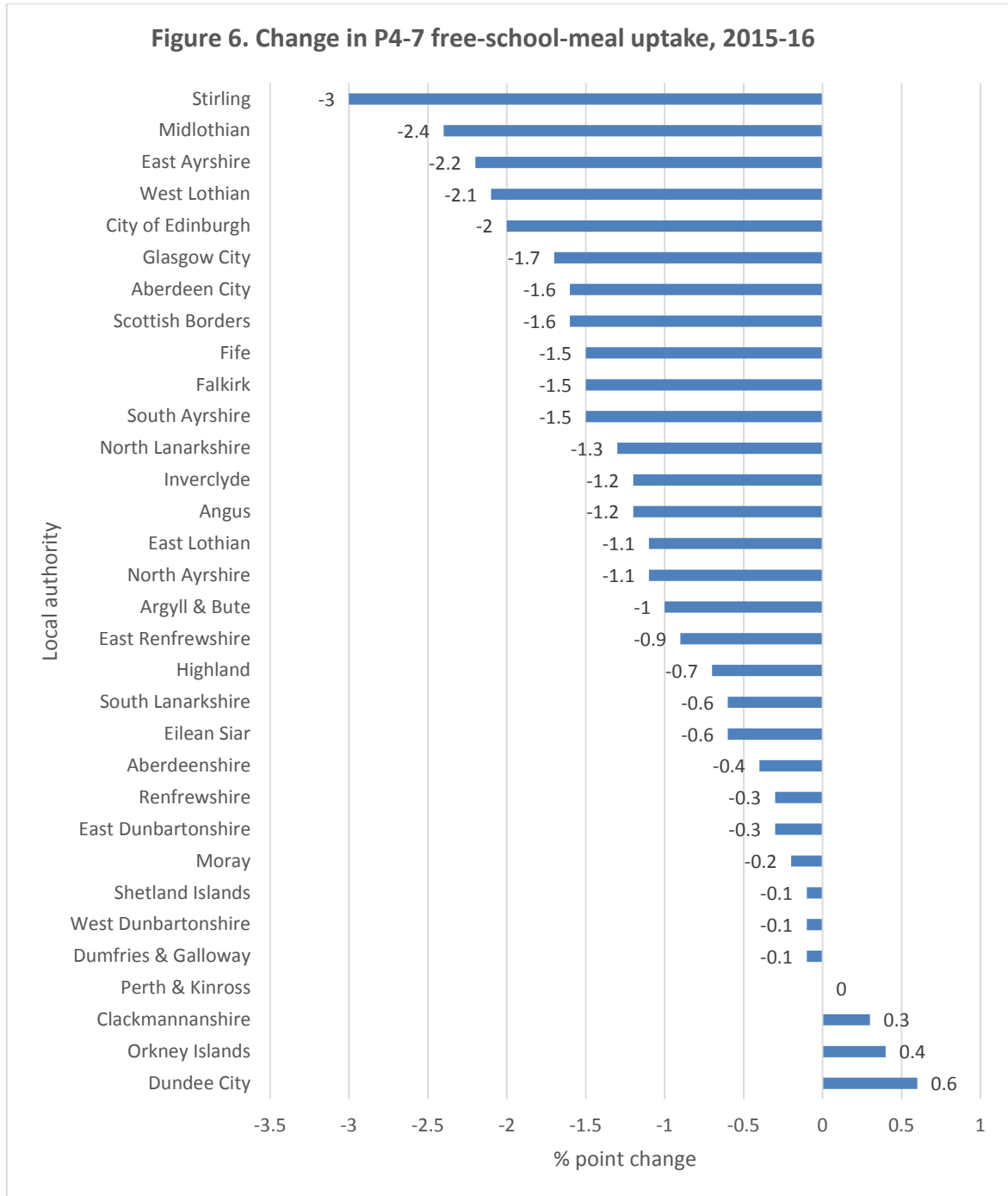
Figure 5. Free-school-meal uptake among P1-3, 2015 and 2016



Uptake of free meals among P4-7 pupils also varied between local authorities. There were 11 local authorities that reported small but significant decreases in P4-7 free-meal uptake in 2016, ranging from 1.3% to 3% (*Figure 6; Table 2* in web appendix).

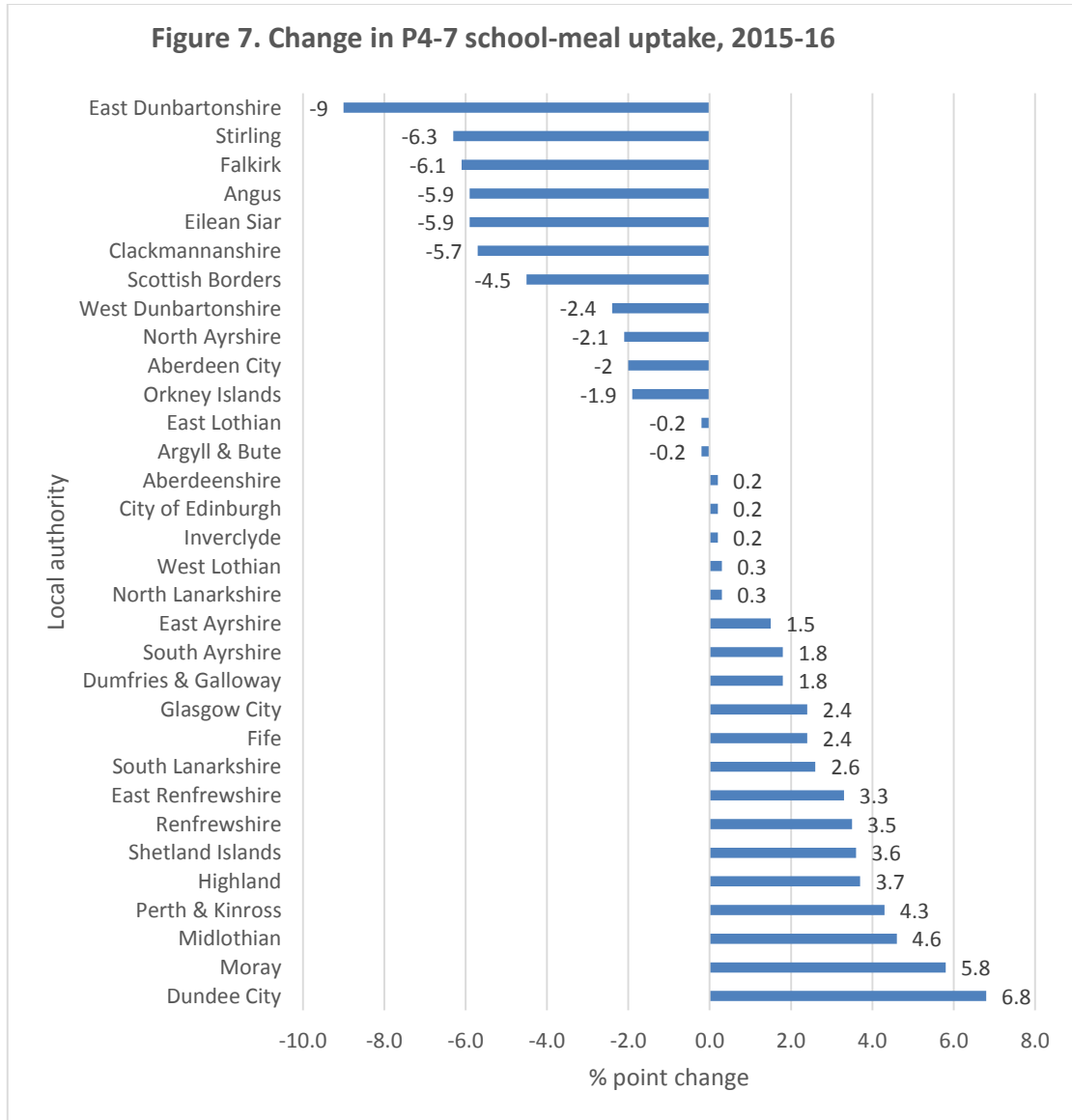
Without longitudinal disaggregated data we are unable to determine the natural year-on-year variation in uptake at a local authority level. However, with almost two-thirds of local authorities reporting a continued increase in P1-3 free-meal uptake, this is a positive indication of increased impact of the universal policy. P4-7 free-school-meal uptake should be monitored closely for further and consistent decreases which would warrant closer investigation.

Figure 6. Change in P4-7 free-school-meal uptake, 2015-16



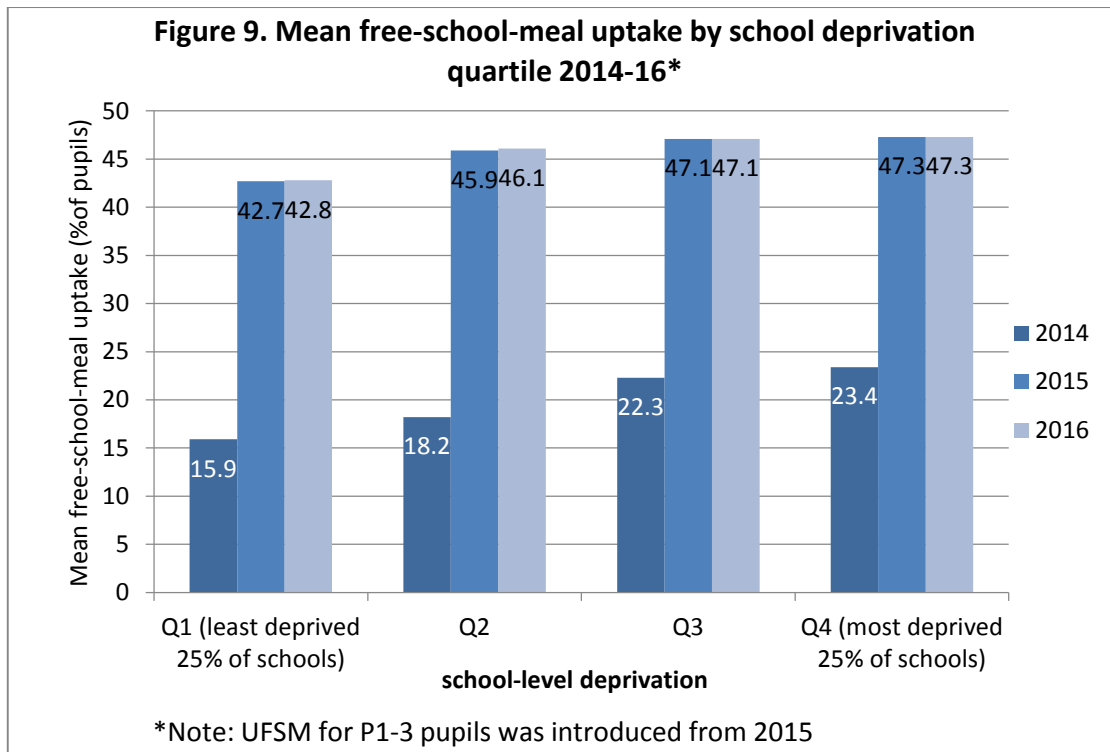
Change in school-meal (free and paid) uptake among P4-7 pupils also varied across local authorities in 2016. A total of 10 local authorities saw significant decreases, ranging from 2% to 9%, and 11 saw significant increases, ranging from 1.8% to 6.8% (*Figure 7; Table 2 in web appendix*).

Figure 7. Change in P4-7 school-meal uptake, 2015-16

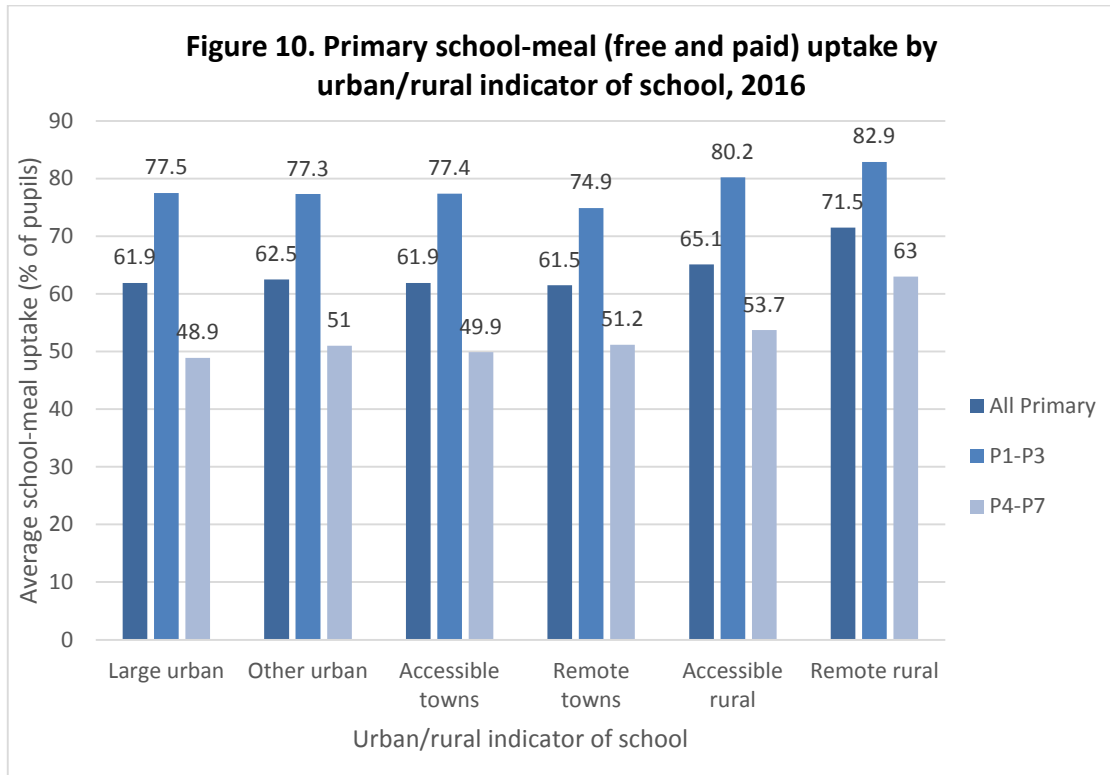


School data

In 2016, school-meal (free and paid) and free-school-meal uptake continued to vary by school-level deprivation. The most deprived 25% of primary schools continued to report the highest levels of free-meal uptake in 2016 (*Figure 9*).



Schools classified as remote/rural, which captures all of the island local authorities, had the highest levels of school-meal (free and paid) and free-meal uptake in 2016 (Figure 10).⁵



⁵ Source: Scottish Government (2016) Healthy Living Survey Statistics.

Recommendations

Continued monitoring of free-school meals and overall school-meal uptake would allow:

- assessment of the longer-term impact of UFSM on lunch choices of eligible children, especially after they move into primary 4
- monitoring of the impact of UFSM on school-meal uptake among older non-eligible primary pupils
- identification of schools and local authorities with lower levels of free-school-meal uptake which may require support to increase uptake.

Web appendix: Additional tables

See www.healthscotland.com/documents/28354.aspx for additional Excel data.

