Early Development Instrument – 2016 East Lothian results

Particular thanks to Offord centre
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Mary Preston
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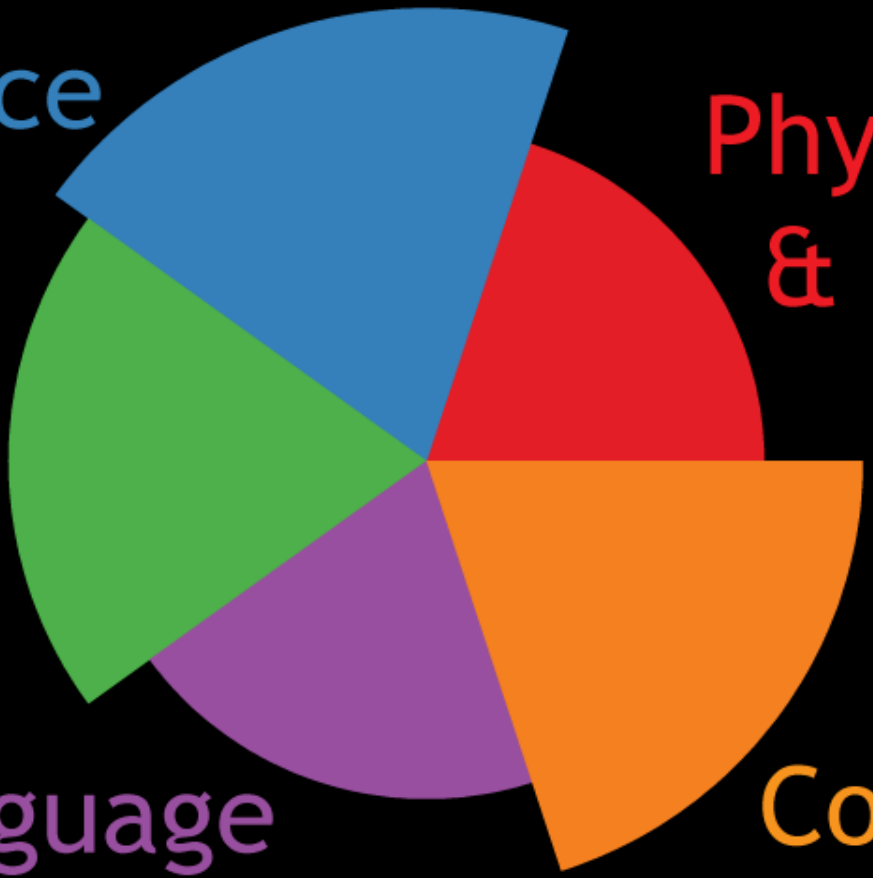
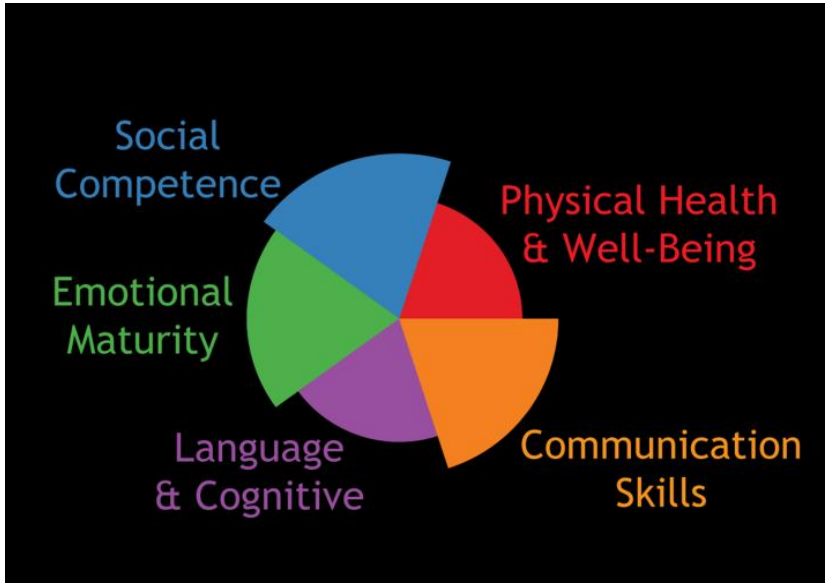
East Lothian P1 teachers and their Head teachers

What Does the EDI Measure?



Definition of vulnerable

- Score in each domain of development for each child
- Range of scores for each domain
- ‘Low’* score means in bottom 10% of scores for whole East Lothian area



- Children who score ‘low’ in *one or more* of the five domains of the EDI = “vulnerable overall”*

*Note: this is the terminology used worldwide in reporting of the EDI

The 2016 Sample

- Teacher assessment carried out January / February 2016
- Total = 1259 (116 excluded / 1143 included)
- 105 - identified as having an additional support need
- Female 50.6% Male 49.4%
- Average age 5.56yrs (range 4.87 – 6.76)
- 99.1% attend a pre school nursery provision

Table 7. Descriptive statistics of the EDI domains for Scotland 2016

		Physical Health and Well-being	Social Competence	Emotional Maturity	Language and Cognitive Development	Communication and General Knowledge
N	Valid	1142	1143	1128	1142	1142
	Missing	1	0	15	1	1
Mean		**8.85**	**8.41**	**8.12**	**8.89**	**8.26**
Median		9.23	9.04	8.45	9.62	9.38
Std. Deviation		1.35	1.68	1.46	1.55	2.22
Minimum		1.67	1.54	1.33	1.15	0.00
Maximum		10.00	10.00	10.00	10.00	10.00
Percentiles	**10**	**6.92**	**5.96**	**6.15**	**6.92**	**5.00**

Headlines

East Lothian are comparable with other international surveys of children's readiness to learn using EDI.

The majority of children entering P1 have the skills needed for successful learning, but there is significant variation in children's 'readiness to learn' across the county, and across socio economic groups.

Gender and age differences are important factors in vulnerability in school readiness at P1

Comparison with the survey undertaken in 2012 indicate that the number of children who are vulnerable in their readiness to learn on entry to P1 has increased slightly between 2012 and 2016. However, some improvement is noted in specific domains for children in SIMD groups 2 and 3.

Increase in children's vulnerability in physical health and well being and emotional maturity are mirrored in other international studies

Comparing 2012 - 2016

The number of children in SIMD categories 1 & 2 has increased over the time period of the two surveys.

The number of children who have a special needs categorisation rose from 3.6% (N=42) in 2012 to 8.3% (N= 105) in 2016. Further analysis is needed to explore the reasons for this increase.

Boys remain significantly more like to be 'vulnerable' on one or more of the EDI domains than girls. Overall boys scored less well on all the developmental domains but with the greatest difference seen in emotional maturity and in communication and general knowledge.

Overall the developmental pattern across the five domains of EDI observed in 2012 remains in 2016.However, there was a reduction in the average scores across all domains in 2016 compared to 2012. The largest reduction in average scores was in the language and cognitive development domain.

There remains a clear socio-economic gradient to 'vulnerability' across the county with almost 55% of children in SIMD 1, and 38% for SIMD 2 compared to 23% for SIMD 5 considered to be vulnerable in their readiness for learning. Overall there was an increase in the number of children who were in the bottom 10th percentile of one or more domain and therefore described as 'vulnerable' in their readiness to learn. The figure for 2012 was 27.3% which increased to 31.1% in 2016.

The largest increase in vulnerability was for children in the SIMD category 1 (NB - For East Lothian this is a small number of children, only 4.9% of the sample or 56 children, which means some caution is needed in interpreting comparisons between 2012 and 2016)

Increases in vulnerability were largely due to changes in the percentage of children who fell into the bottom 10th percentile for the physical health and well being and emotional maturity domains. It is noted that this pattern is seen in other international studies using EDI. Is it possible to speculate that this may be the result of long term changes to the opportunities that children have for unstructured play and in particular for outdoor play?

Small decreases in the percentage of the children vulnerable on the ‘social competence’, ‘language and cognitive development’ and ‘communication and general knowledge’ were noted between 2012 and 2016. Is it possible to speculate that this may be a result of investment in pres school programmes such as Bookbug, PEEP, playgroups and the almost universal uptake of nursery ?

Figure 10. Change in percent vulnerable between 2012 and 2016

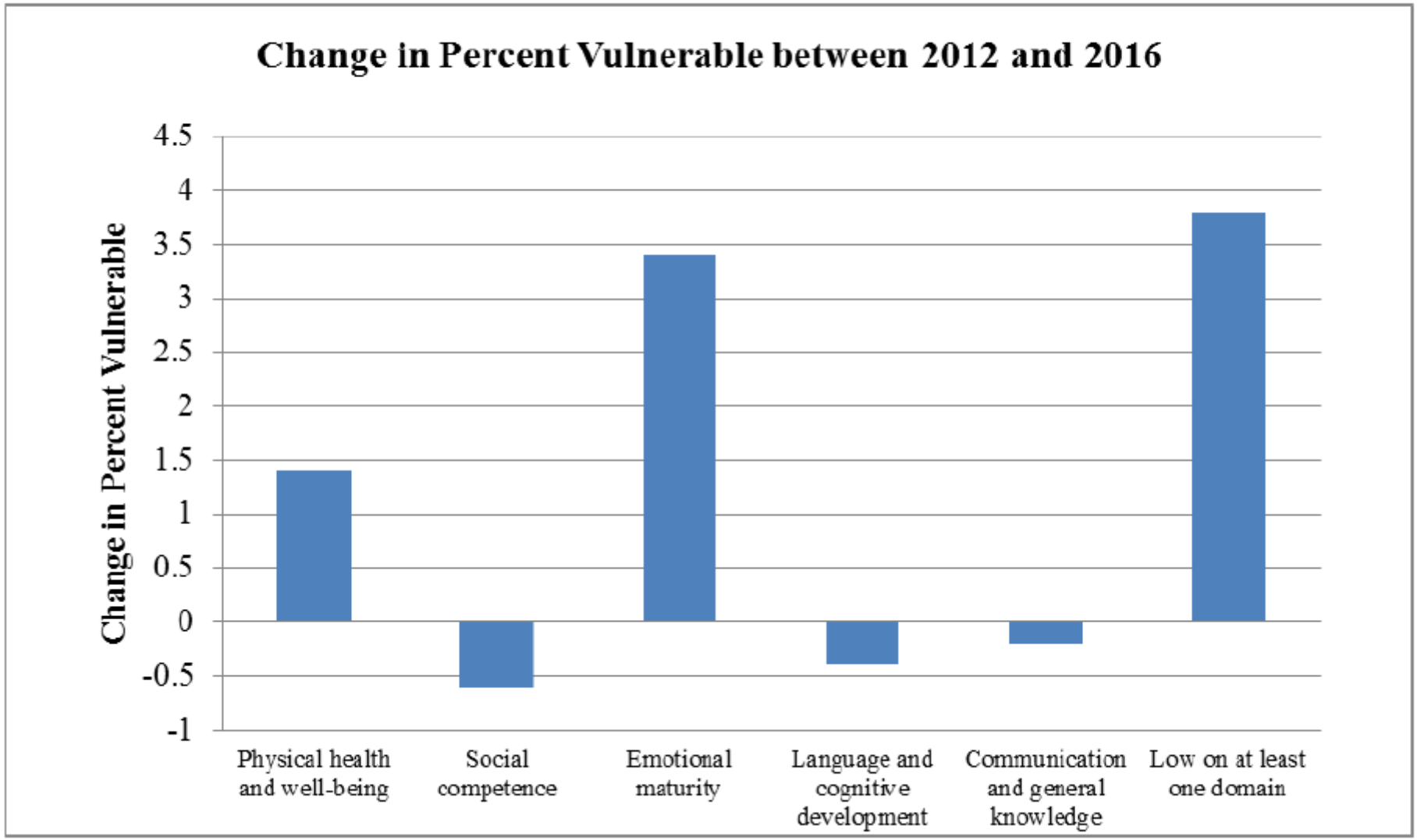
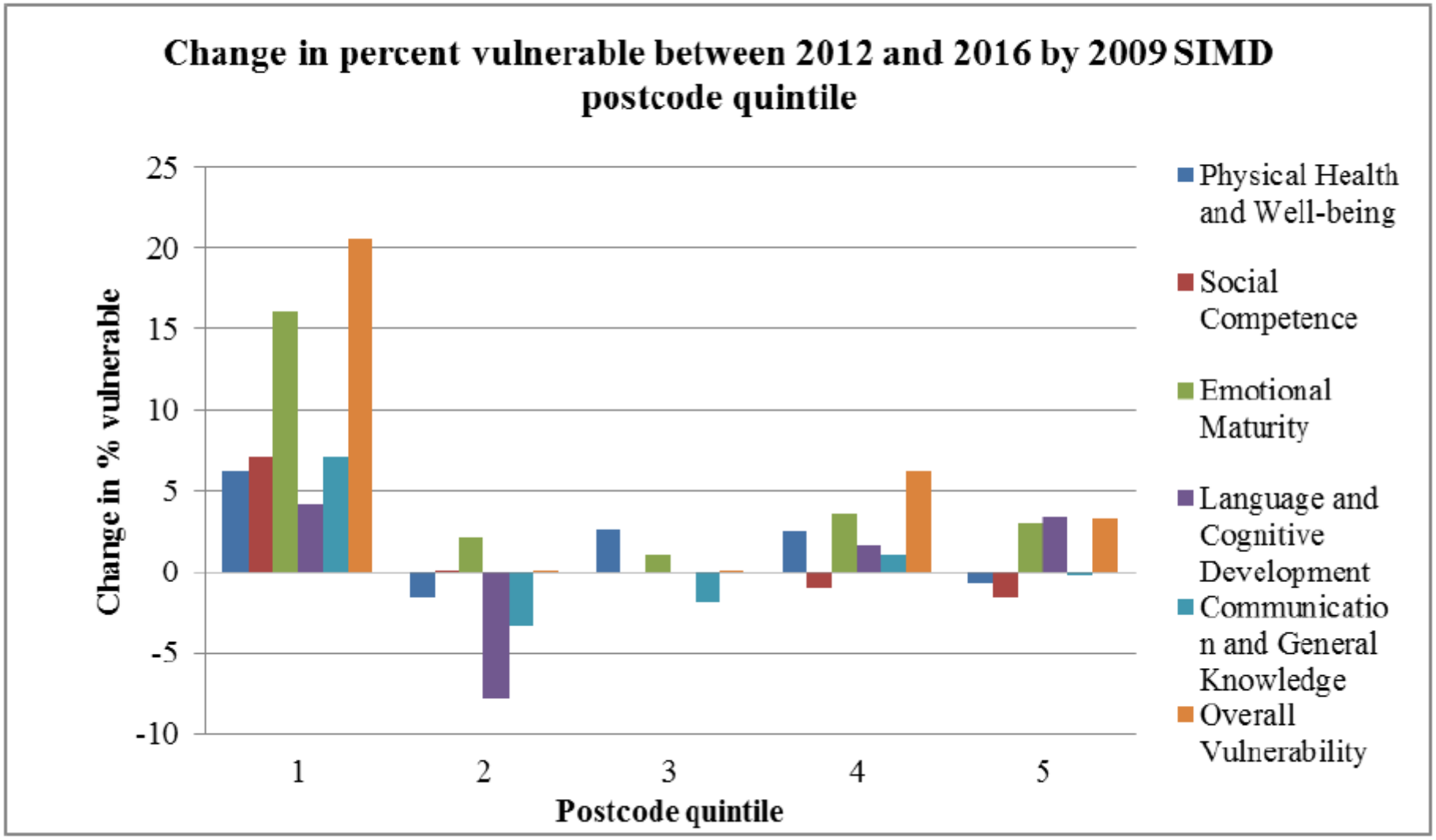
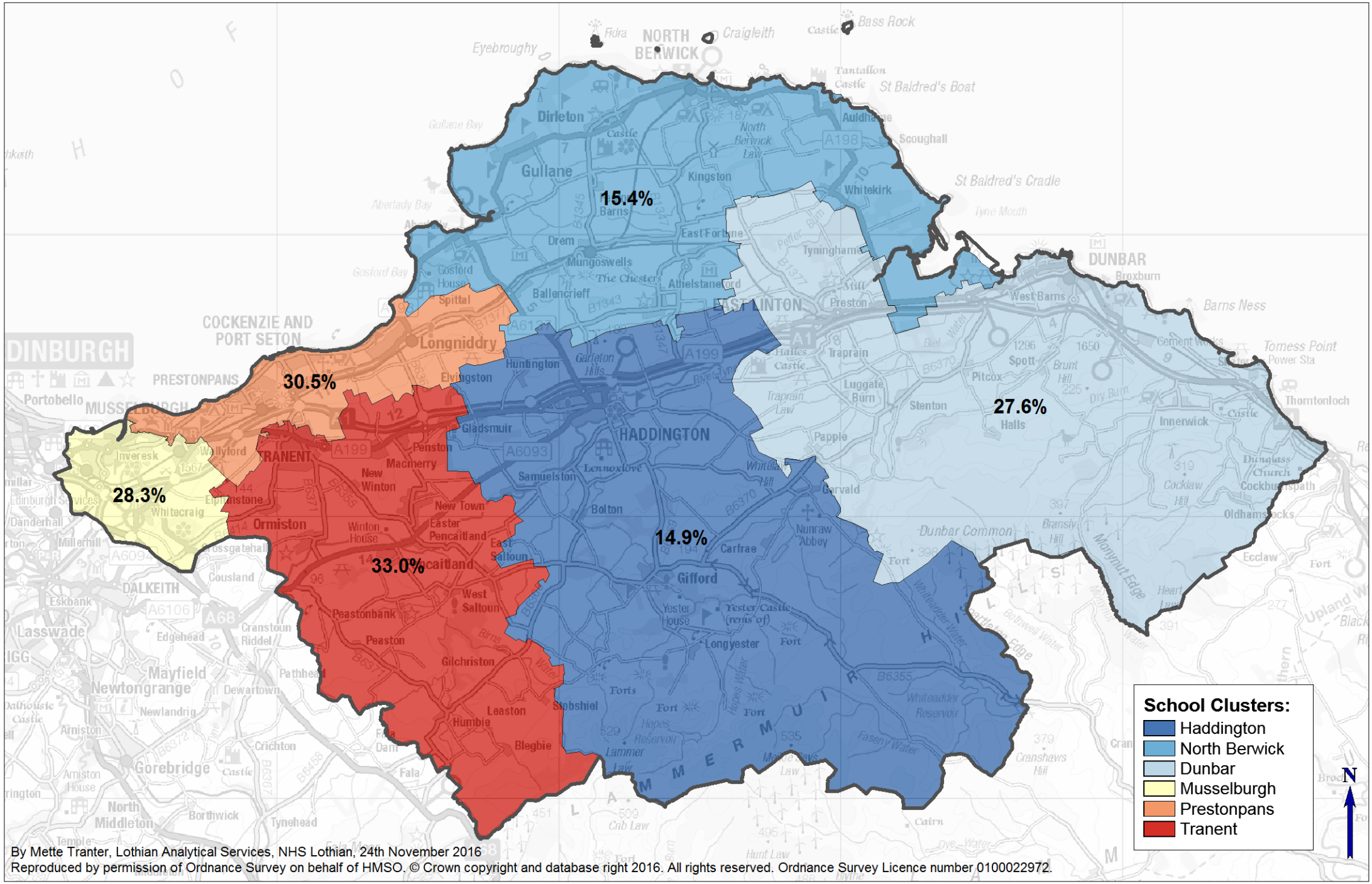


Figure 12. Change in percent vulnerable by postcode quintile between 2012 and 2016



Percentage of children who score low on one or more domains of development

by school cluster area (2016)



By Mette Tranter, Lothian Analytical Services, NHS Lothian, 24th November 2016

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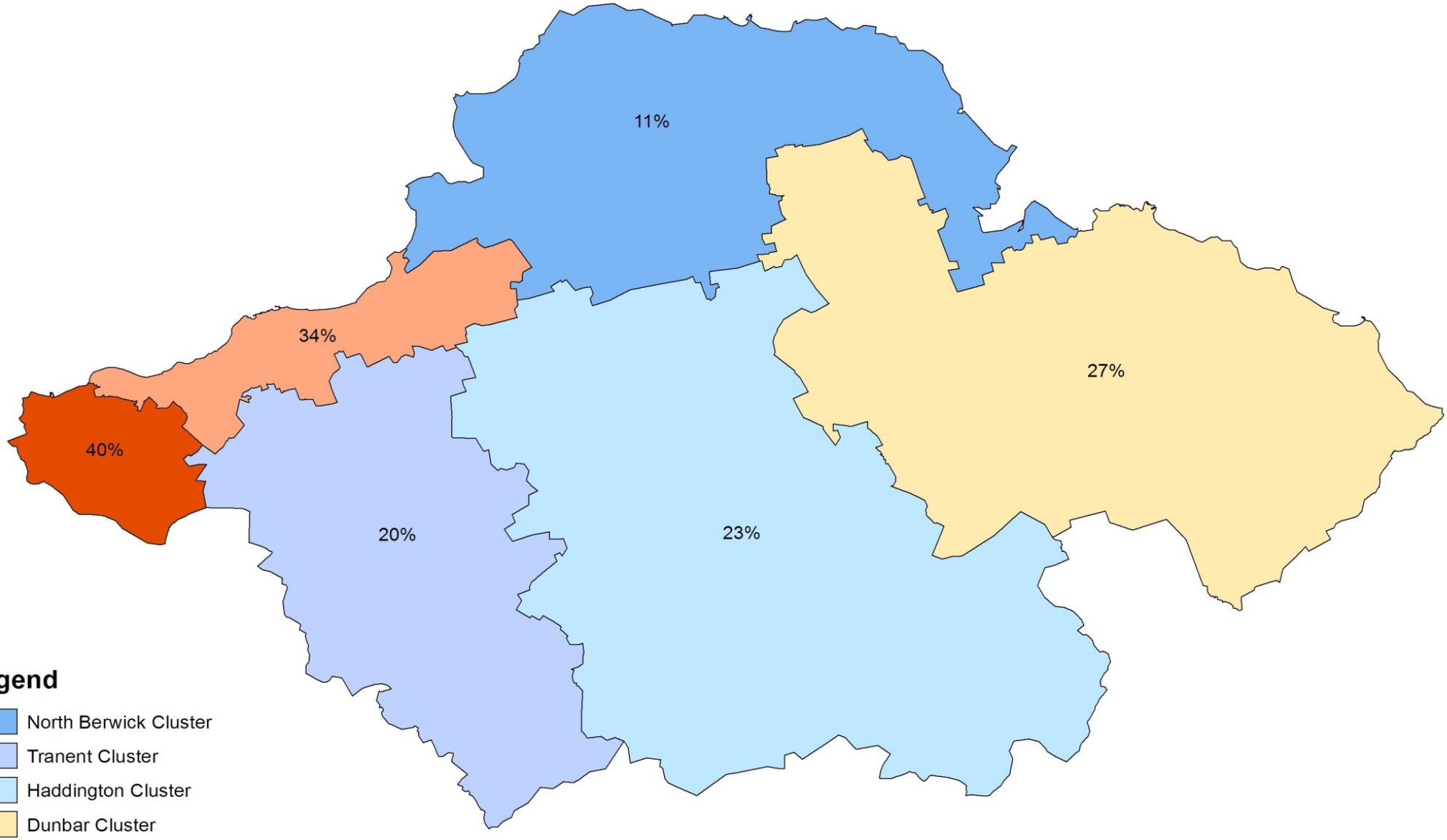
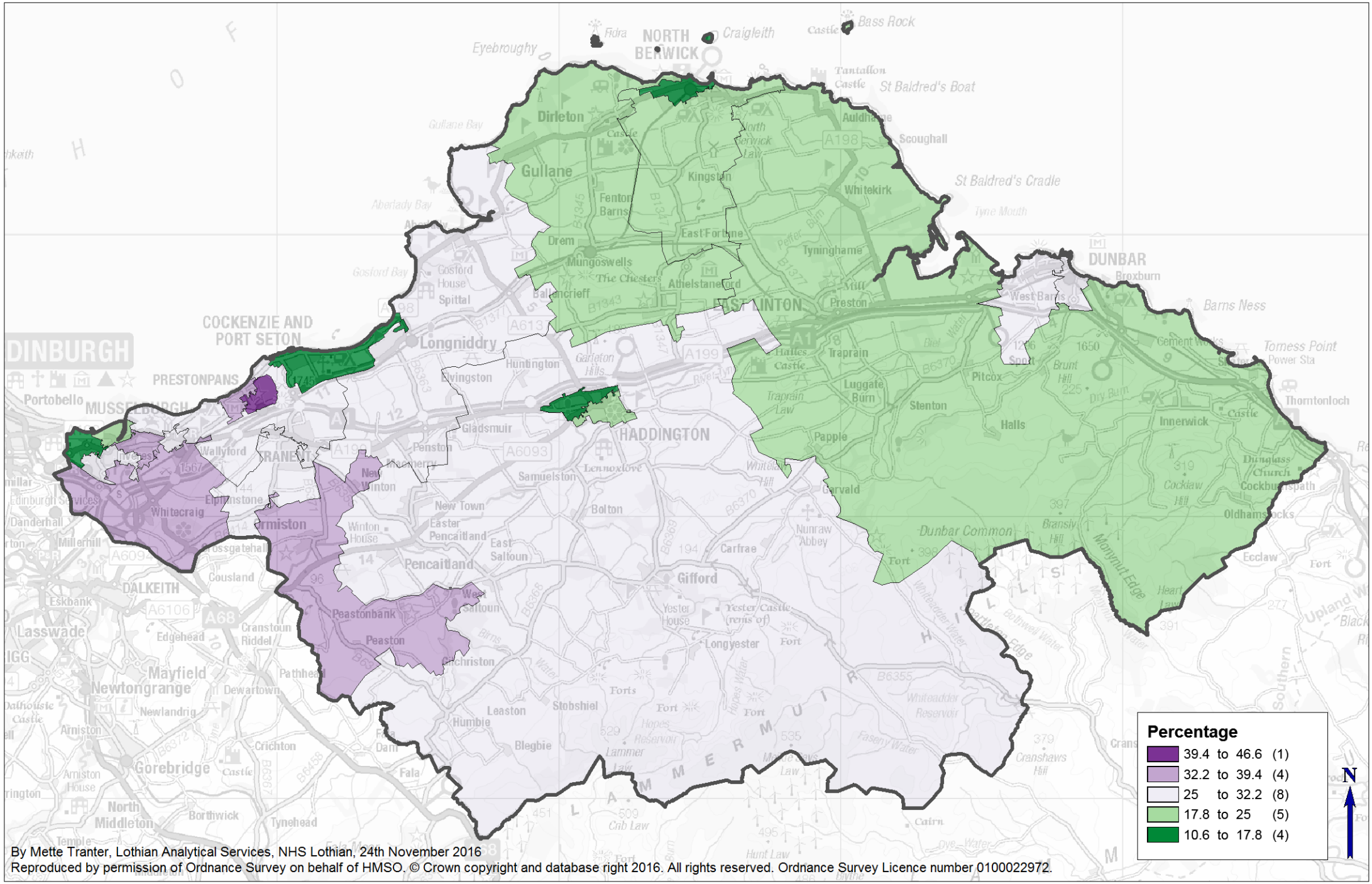


Percentage of children who score low on one or more domains of development

by intermediate zones (2011)



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Questions

- What significance can we give variation between the two samples?
- What are the areas to focus future research on?
- Can we link this data to other data sets e.g. 27-30 month check ?
- How can we use this data to guide / plan improvement work?