



Key Stage 2 attainment - Doncaster

Tailoring services to local needs

Aims

Doncaster MBC and Doncaster PCT, using neighbourhood renewal funding, commissioned Mayhew Associates (MA) to undertake a detailed assessment of population and deprivation in Doncaster. Based on administrative data sources, MA *nkm techniques* were used to estimate the Doncaster population. Using the data base created, this case study identifies sub-groups most at risk of achieving lower quartile scores at Key Stage 2 (KS2 LQ). KS 2 tests are sat at age 11 by all pupils in all state schools. By lower quartile we mean that, after aggregating the scores for each test and then ranking the combined scores from high to low, we identified those in the lower quartile of results and used this as our 'risk outcome'. Understanding the kinds of factors that may be associated with or contribute to a child being in the lower quartile can help to tailor interventions to particular schools and children. Our starting point was all children sitting KS2 in 2006.

What we did

In partnership with the PCT and local authority, we obtained and linked data from each agency to the Local Property Gazetteer. We then risk assessed 2006 KS2 pupils using the following socio-demographic risk factors: single parent household, social housing tenure, English as a second language and Special Educational Needs (SEN) to see which were most linked to being in the lower quartile score (see table).

Row	number in category	single parent household	living in social housing	English as second language	SEN	% in KS2 LQ	lower confidence limit	upper confidence limit
1	22			Y	Y	90.9	70.8	98.9
2	9	Y		Y	Y	88.9	51.8	99.7
3	164		Y		Y	83.5	77.0	88.9
4	83	Y	Y		Y	80.7	70.6	88.6
5	440				Y	70.5	66.0	74.7
6	142	Y			Y	69.0	60.7	76.5
7	3		Y	Y	Y	66.7	9.4	99.2
8	9		Y	Y		33.3	7.5	70.1
9	33			Y		30.3	15.6	48.7
10	216		Y			27.3	21.5	33.8
11	164	Y	Y			22.6	16.4	29.7
12	450	Y				17.8	14.4	21.6
13	1790					13.9	12.3	15.5
14	4	Y		Y		0.0	0.0	52.7
15	0	Y	Y	Y				
16	0	Y	Y	Y	Y			
total	3529	852	639	80	863	30.6	29.1	32.1

*Risk table demonstrating relative risk factors for KS2 LQ:
Base: all KS2 pupils 2006*

Outputs

Our logistic regression model confirmed that each factor was statistically significant, and each had the tendency to increase the odds of falling into the lower quartile. Odds ranged from 1.1 times for single parent households to 2.7 times for English as a second language. In other words the results were very similar to those obtained for pupils sitting KS1 at age 7. SEN stood out as the most important factor, increasing the odds of being in the lower quartile 14 times (18.9 times at KS1). As is seen the presence of SEN is associated with an average of 66.7% to 90.9% of pupils being in the lower quartile, as shown in rows 1 to 7 in the table.

