Contextualised Admissions briefing - Triangulation of contextual data: building a clearer picture of the individual applicant

September 2014

Introduction

The aim of using contextual information and data in admissions is to form a more complete picture of the characteristics of an individual applicant. Our 'gold standard' will therefore be data that relates directly to the individual. However, the data that is actually available in admissions is often less granular, relating to household, school or area/neighbourhood.

Using this less granular data runs a risk, however – we cannot be certain that the characteristics of the neighbourhood (for example) accurately reflect the disadvantage experienced by the individual.

The aim of triangulation is to mitigate this risk by combining data from several sources to reduce the likelihood of false positives.

As an example, let us imagine a hypothetical neighbourhood measure where a low score indicates substantial socio-economic deprivation within a particular postcode area. This is, of course, an average – some households within the area will be better off than their neighbours, some worse off.
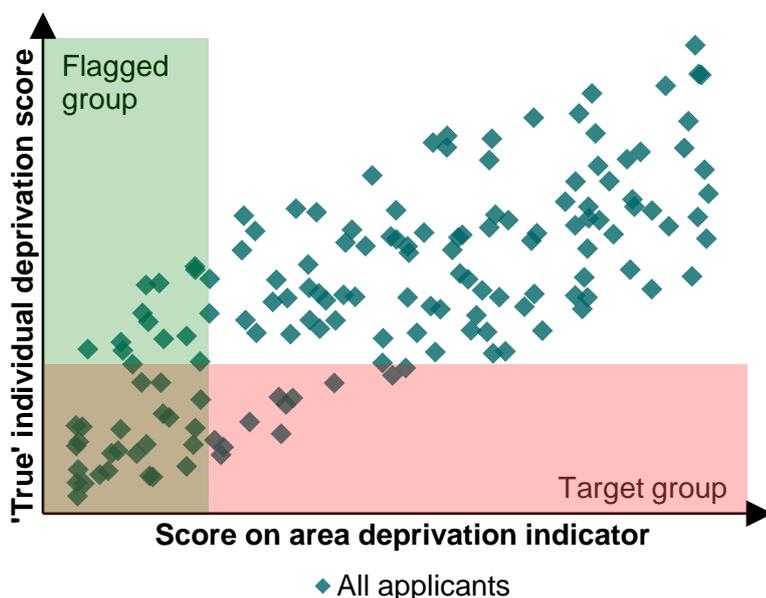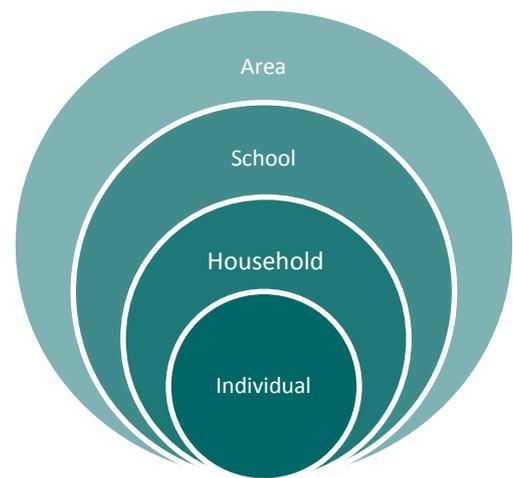
If we plot the true deprivation level of individual applicants against their score on the indicator (remembering that a low score equals high deprivation), we can see a good correlation between the score on this measure and the true level of deprivation, but also evidence of variation.

Our target group, as indicated in **red** on the chart, is those applicants who have experienced the highest level of disadvantage – those with a low 'true' score.

At the point of application, however, we do not know the true level of disadvantage, we only have the neighbourhood measure to work with. The **green** area shows who would be flagged if we picked the bottom quintile scores on the neighbourhood measure.

In the overlap between the green and red areas – the bottom left of the chart – we see that we have successfully flagged many of the most disadvantaged students. However, we are also flagging a number of students who are not much worse off than the rest of their peers (the pure green area), *and* failing to flag a number of applicants who have a high level of 'true' disadvantage (the pure red area).

Triangulation uses a second item of contextual data – say a school performance measure – to sense-check the flag from the first measure. The primary aim of this is to identify and eliminate false positives, the applicants that appear more disadvantaged than they actually are when we look at the neighbourhood measure. It can also help to identify false negatives – applicants whose actual disadvantage is not reflected in their score on the first indicator.
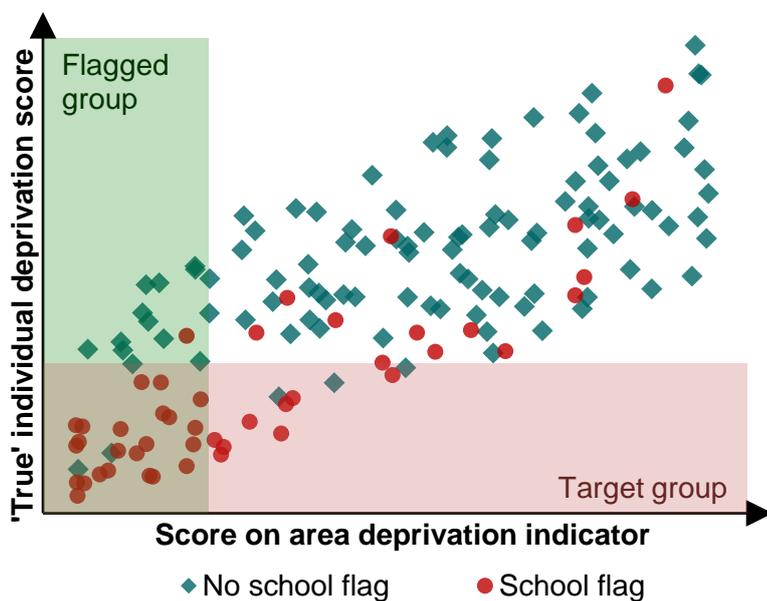
In this version of the graph red dots indicate applicants who have also received a flag for their school's performance. It is clear that applicants with both flags are highly likely to be in the target group, while most of the false positives from the area indicator have been eliminated. Similarly, using both flags eliminates most of those with a school flag who are not particularly disadvantaged in reality.

We do, however, still see a number of applicants with a high level of disadvantage but only one flag (or no flag at all). The system is not perfect, but has been improved, and could be further improved by using three or more measures.

Rather than only giving additional consideration to those with two flags, a better model may be to think in terms of likelihood of true disadvantage. If we add in a third indicator – say whether the applicant has participated in a widening participation scheme, we can map number of flags onto a broad measure of how likely a substantial level of disadvantage is, and use this to guide any additional considerations.

Care must be taken with this approach. Using two indicators that are overly similar to each other would effectively 'double count' that form of disadvantage. Conversely, triangulating multiple different indicators may prioritise mild

disadvantage of several forms over severe disadvantage in one regard. This can be balanced out to some degree by using ranked measures to give a sense of degree of likely disadvantage on each indicator, or by designating some indicators to be of particular priority – for example, some HE
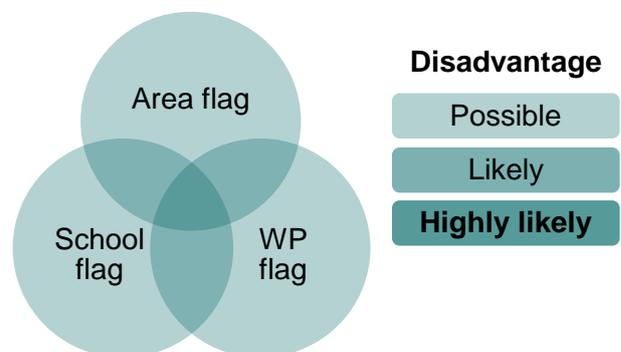
providers use a 'superflag' for care-leavers to ensure they receive additional consideration regardless of whether they are flagged against any other contextual data item.

Triangulation, then, will not provide a perfect indication of 'true' disadvantage for each applicant and does not provide the 'gold standard' of directly describing the applicants themselves. However, it does to a certain degree mitigate the risks associated with using neighbourhood and school measures to predict an applicant's likely level of disadvantage and allows for a more nuanced consideration of contextual data and information.

For more information contact SPA Enquiries at **enquiries@spa.ac.uk** or see our website **www.spa.ac.uk**

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