

# Average offer rate lookup table

## To be used in conjunction with the 'Sex, area background and ethnic group' reports

The table below allows an assessment to be made about whether the difference between the offer rate and the average offer rate statistic for a group is likely to have resulted purely by chance. If the average offer rate for a group is taken as fixed, there will be a range of random variability around the observed offer rate even if the underlying chance of receiving an offer is equal to the average offer rate. This variability is greater when the June deadline applications from a group is smaller. For example if the average offer rate for a group is 50 per cent, the observed offer rate for a group with 150 applications, could range by up to around 10 percentage points from 50 per cent through random variations alone. When the size of the percentage point difference between the offer rate and an average offer rate is greater than the range of random variability, the offer rate can be considered to be different from the average offer rate.

To use the table choose the closest value to the average offer rate to select the right row and then select the column with the closest June deadline applications from the group. This will give the approximate range of random variation. If the difference between the offer rate and the average offer rate is greater than the range of variation then it is unlikely to have arisen by chance.

**Table 1: Approximate ranges of random variability for offer rates based on different June deadline applications for comparison against the average offer rate**

Average offer rate	June deadline applications						
	50 to 150	150 to 250	250 to 750	750 to 1,500	1,500 to 3,000	3,000 to 7,500	7,500 or greater
20-25%	±9.0	±6.8	±4.2	±2.7	±1.9	±1.3	±1.0
25-30%	±10.0	±7.0	±4.2	±2.8	±2.1	±1.3	±0.9
30-35%	±10.7	±6.8	±4.7	±3.0	±2.2	±1.5	±1.0
35-40%	±10.4	±7.4	±4.6	±3.1	±2.1	±1.4	±0.9
40-45%	±10.0	±7.1	±4.7	±3.1	±2.0	±1.3	±0.8
45-50%	±9.8	±6.6	±4.6	±3.0	±2.1	±1.4	±0.9
50-55%	±9.7	±6.7	±4.3	±2.8	±2.0	±1.4	±0.9
55-60%	±10.0	±6.5	±4.3	±2.6	±1.9	±1.3	±0.9
60-65%	±9.1	±6.4	±4.0	±2.5	±1.8	±1.2	±0.8
65-70%	±9.2	±6.1	±3.9	±2.4	±1.7	±1.2	±0.7
70-75%	±8.5	±5.5	±3.7	±2.3	±1.6	±1.1	±0.7
75-80%	±8.0	±5.2	±3.4	±2.1	±1.5	±1.0	±0.6
80-85%	±7.2	±4.9	±3.3	±2.0	±1.4	±1.0	±0.6
85-90%	±6.5	±4.2	±3.0	±1.9	±1.3	±0.9	±0.5
90-95%	±5.4	±3.8	±2.5	±1.5	±1.0	±0.7	±0.5
95-100%	±3.7	±2.6	±2.0	±1.0	±0.7	±0.5	±0.4

The random variability ranges are constructed through a simulation process. For each combination of provider and characteristic, an offer or no offer is simulated for each application from a specific group (for example men, or the Black ethnic group). Then the offer rate for this group is calculated, alongside the difference between this offer rate and the average offer rate. This is repeated many times to obtain a distribution for the differences between the offer rate and the average offer rate for that group. This is done for all groups and the differences aggregated according to the intervals which define the rows and columns of the table. The reported ranges of random variability are the values that lie within the 99th percentile range of the differences for that combination of provider and characteristic.