

## Annex C: Forecasts for the higher tariff provider MEM equality gap

The What happened to the COVID cohort? report contains forecasts for the higher tariff provider Multiple Equality Measure (MEM) equality gap. This Annex describes the methodology through which these forecasts were calculated.

### Inclusion criteria

As mentioned in footnote 3 of the main report, analysis of MEM uses the National Pupil Database (NPD, source Department for Education), and so is limited to English-domiciled 18 year olds only.

#### i) The impact of an additional 70 MEM group 1 acceptances to each high tariff provider in 2020

An increase of 70 MEM group 1 acceptances to each of the 38 Higher tariff providers that had at least one MEM group 1 accepted applicant would have produced a total of 5,415 MEM group 1 acceptances to higher tariff providers (compared to the 2,755 actually seen in 2020). This would have resulted in a 2020 MEM group 1 entry rate of 5.2% (compared to the actual value of 2.6%), which, taking the actual 2020 MEM group 5 entry rate of 31.6%, would have produced a group 1: group 5 ratio of 6.11 (compared to the actual value of 12.02).

The additional 3.5% growth in high tariff acceptances required is calculated by comparison of the total actual English 18 year old acceptances across all MEM groups in 2020 (76,090), to the same figure with the additional MEM group 1 acceptances included (78,750).

#### ii) Forecasting the time required to close the MEM higher tariff equality gap based on recent rates of progress

The time taken to close the equality gap was estimated by forecasting the entry rate for MEM group 1 in future years, based on recent trends.

Method:

- The mean yearly percentage point increase in the MEM group 1 entry rate to higher tariff between 2014-2019 was calculated (0.09ppt)
- The MEM group 5 entry rate was assumed to remain constant at its 2020 value (31.6%) over time.
- Starting with the year 2021, the expected MEM group 1 entry rate for a given year was calculated by adding the mean percentage point increase calculated above to the entry rate for the previous year.

- This process was continued until the MEM group 5 and MEM group 1 entry rates were equal, and so the entry rate ratio of MEM group 5: MEM group 1 was equal to one
- Based on the above procedure, it would take 332 years from 2020 for the equality gap to close

### **iii) Forecasting the time required to close the MEM higher tariff equality gap based on the annual additional MEM group 1 acceptances**

The time taken to close the equality gap based on the annual addition of extra MEM group 1 acceptances was estimated using a combination of the methods in sections i and ii

Method:

- Taking the yearly addition of 70 MEM group 1 acceptances to each higher tariff provider as an example, in 2020 this would have increased the MEM group 1 entry rate to 5.2% (see section i)
- This would have been a percentage point increase from the 2019 MEM group entry rate of (3.1ppt)
- Using the methodology in section ii, and starting with the year 2021, the expected MEM group 1 entry rate for a given year was calculated by adding this percentage point increase to the entry rate for previous year.
- For this calculation, the MEM group 5 rate was assumed to increase yearly at the average percentage point increase seen between 2014-2019 (0.31 ppt)
- This process was continued until the MEM group 5 to MEM group 1 entry rates were equal, and so the entry rate ratio of MEM group 5: MEM group 1 was equal to one
- The process was then repeated for different values of additional yearly acceptances
- The additional yearly expected growth in higher tariff acceptances was calculated using the method outlined in section i.

Notes:

In this calculation, the yearly percentage point increase in MEM group 1 entry rate is assumed to be constant over time. The number of additional MEM group 1 acceptances required each year to achieve this percentage point increase will vary with the size of the underlying MEM group 1 population. If the MEM group 1 population were assumed to be constant over time, then the same number of additional acceptances would be required each year to achieve the same percentage point increase in entry rate – this is the assumption made in this calculation. With the rising 18 year old population forecasted in the short-medium term, it is likely that slightly more than the stated number of additional acceptances would be required each year to achieve the same year percentage point increase. The stated number of additional yearly acceptances are provided here to indicate the degree of additional yearly participation required to close the entry gap within the timescales shown, based on 2020 values.

The additional yearly growth in higher tariff acceptances is the additional growth in capacity that would be required in each year to accommodate the additional MEM group 1 acceptances – this is beyond and above any other growth that may occur.