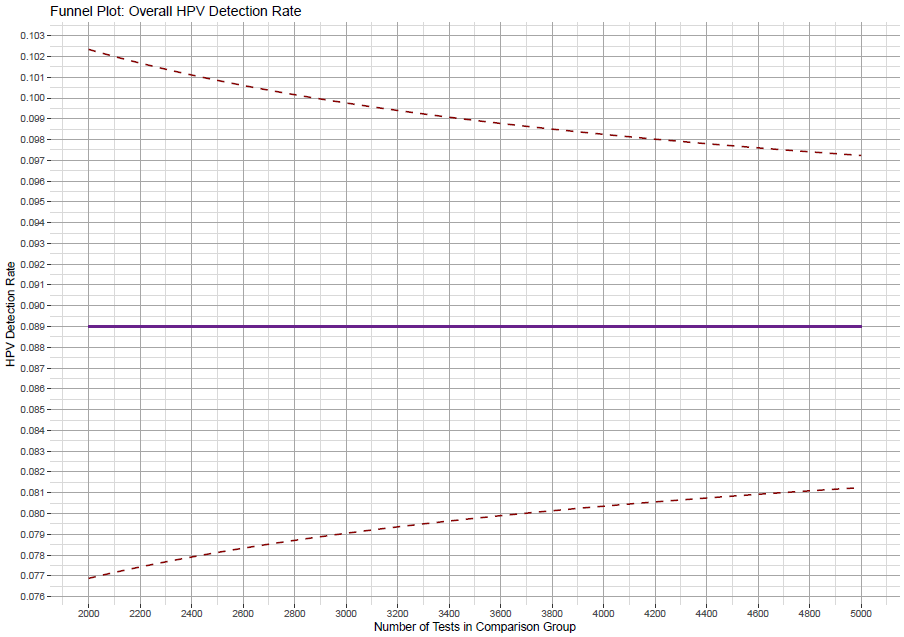
**Instructions for use**

Laboratories should compare the HPV detection rate using the funnel plot provided (see example, Figure 1). The horizontal line (Purple) corresponds to the National Benchmark for HPV positivity. The dashed red lines indicate the 95% confidence intervals for rates which should be considered significantly higher (above the upper line) and significantly lower (below the lower line).

**Figure 1. Sample Funnel Plot, National HPV detection rate = 0.089 (8.9%)**



**How to use the graph to determine HPV positivity relative to the benchmark:**

Use the x-axis to identify the number of tests in your batch.

Use the y-axis and identify the detection rate in your batch.

Where the detection rate falls outside the charted zone, it should be considered as significantly higher (if above plotted range) or significantly lower (if below the plotted range).

The point which corresponds to the number of tests and detection rate in your batch should be located on the chart (Figure 2).

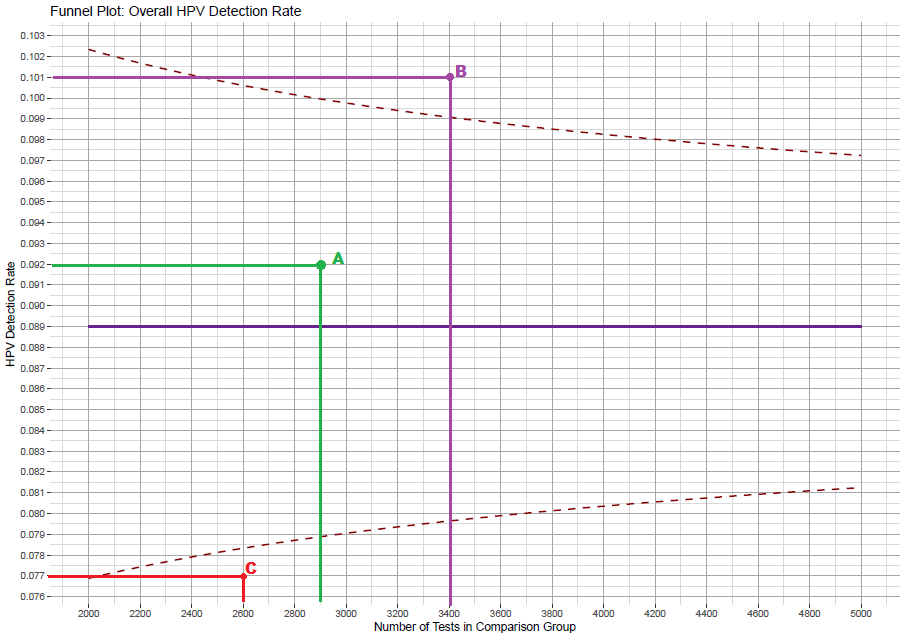
If the point falls between the red dashed lines it should be considered in range and no further action is required (Figure 2, Point A: 2900 samples in batch, detection rate = 0.092, 9.2%).

If the points falls above the upper dashed line then it should be considered significantly higher than the National Benchmark (Figure 2, Point B: 3400 samples in batch, detection rate = 0.101, 10.1%).

If the point falls below the lower dashed line it should be considered significantly lower than the National Benchmark (Figure 2, Point C: 2600 samples in batch, detection rate = 0.077, 7.7%).

Where a point is significantly higher or lower than the benchmark, action should be taken in accordance with the *Guidelines for managing the HPV positivity rate quality assurance process*.

**Figure 2 Example scenarios for in range, significantly high and significantly low HPV detection rates**



**How to use the CSV files to determine HPV positivity relative to the benchmark:**

For purposes of automation, or if the point for your batch falls close to the lines it may be preferable to use the CSV files provided.

Laboratories should identify the numbers of samples in their batch using the column “SampleSize”.

The number of samples in the batch is given in increments of 50 – labs should use the number which corresponds closest to their sample size. For example, if there was 2135 samples in the batch, the laboratory should use the limits which correspond to the value of 2150 in the “SampleSize” column.

Laboratories can then compare their detection rate to the lower and upper values in their respective columns.

Detection rates lower than the value in the “lower” column should be considered significantly lower, detection rates higher than the value in the “upper” column should be considered significantly higher.

Where a point is significantly higher or lower than the benchmark, action should be taken in accordance with the *Guidelines for managing the HPV positivity rate quality assurance process.*