

Understanding your PE7 and PE8 Result Statistically

Practices are asking how they can assess if their patient survey result was statistically significant. If the confidence intervals of your survey result was >7% then the survey has not reached the level of statistical significance the survey was designed to reach.

Explanation of the 95% confidence interval

For each real practice population there is a “real” proportion of people who would report they can see a GP quickly or book ahead.

The number of questionnaires sent is varied between practices according to their size, and an estimate of the likely return rate.

The number sent is calculated so that the practice results for each specific payment question are statistically significantly close enough to the real population.

The agreement reached nationally was that for each practice, for each payment question, there would be a 95% chance (confidence level) that the “true” result would be within 7% (confidence interval) of the measured result. Where 95% confidence interval is 7% or less the survey has performed as designed. Where it is more than 7%, it has not.

Obtaining the confidence intervals of your results

PCTs have for each practice:

- (1) Base number – those who answered they had tried to see a GP quickly (PE7) or book ahead (PE8)
- (2) Those who reported they were able to see a GP quickly (PE7) or book ahead (PE8)

The % achievement is (2) divided by (1) expressed as a percentage

PCTs have also been given the confidence intervals for all practices, but not all have sent them to practices. BBOLMC has already asked all five Thames Valley PCTs to provide this information to practices, but you can do the same for your own results. A valid confidence interval should be 7% or less.

Example

If your PCT tells you the confidence interval was 9%, then we are 95% sure that the measured result is within 9% of the true result, ie the result is less significant than was intended.

Assessing how many returned questionnaires your practice needs to obtain a 7% confidence interval

This should only be necessary if your PCT has not given you the confidence intervals for both PE7 and PE8. A practice can assess how many returned questionnaires would be needed to have a 95% chance (confidence level) that the “true” result would be within 7% (confidence interval) of the measured result”

Go to <http://www.surveyguy.com/SGcalc.htm> (“Survey Guy Sample Size Calculator”)

Click the 95% confidence level and put 7 in the “margin of error” box
Your list size should go in the “Population Size” Box

The sample needed is calculated

You should compare this with the figure for the number of patient survey results for PE7 and PE8 given to you by your PCT

If the latter is lower than the calculated number then there is <95% chance that you PE7 and PE8 result is within 7% of the real figure for you practice size

The above text has been written after help from Guy Watkins (Camb LMC) and Mike Forster (Gloucs LMC)