

## **Announcement of methodological change for calculating confidence intervals for NHS Outcomes Framework indicators in domain 1**

From May 2014, the methodology for calculating confidence intervals for directly standardised mortality indicators in the NHS outcomes Framework will be changed to reflect the method used for directly standardised rates (DSR's) by the association of Public Health Observatories (APHO).

This change affects the following indicators:

- 1a – Potential years of life lost (PYLL) from causes amenable to healthcare – Adults and children
- 1a.i – Potential; years of life lost (PYLL) from causes considered amenable to healthcare – Adults
- 1a.ii – Potential years of life lost (PYLL) from causes considered amenable to healthcare – Children
- 1.1 - Under 75 mortality from cardiovascular disease
- 1.2 - Under 75 mortality from respiratory disease
- 1.3 - Under 75 mortality rate from liver disease
- 1.4 - Under 75 mortality rate from cancer
- 1.5 - Excess under 75 mortality rate in adults with serious mental illness

### Rationale

The change has been carried out to bring the calculation of confidence intervals for the above indicators in line with the equivalent indicators in the CCG outcomes indicator set as well as the compendium. For consistency and comparison purposes, the entire time series for each indicator has been recalculated using the new methodology.

The previous method used for calculation of confidence intervals is likely to be unreliable when there are fewer than 50 cases in an area, hence confidence intervals for rates based on less than 50 cases needed to be viewed by caution.

The 'unreliability of the method when there are fewer than 50 cases in an area has been addressed by Public Health Observatories (known as Association of Public Health Observatories or APHO). Their recommended method is the method that has been adopted.

### New Method

The new method for calculating confidence intervals for directly standardised rates can be seen in the APHO spreadsheet, available at <http://fingertips.phe.org.uk/documents/APHO%20Tech%20Briefing%203%20Common%20PH%20Stats%20and%20CIs.pdf>

The new methodology can be found in the domain 1 indicator specification document available on the NHS Digital website using the following link: using the following link: [https://files.digital.nhs.uk/2B/8F23BC/NHSOF\\_Domain\\_1\\_S.pdf](https://files.digital.nhs.uk/2B/8F23BC/NHSOF_Domain_1_S.pdf)