



Methods for Analysing National 2012 NAISM Data

A. SCREENING UPTAKE CALCULATIONS – ALL INFECTIONS

- 1) An uptake will be calculated for each maternity unit/trust by quarter and infection.
- 2) Percent uptake is calculated as the number of women tested divided by the number of women booked, multiplied by 100:

$$\frac{\# \textit{screened}}{\# \textit{booked}} \times 100$$

- 3) Where the number of women booked is unavailable but the number of women offered screening is given, use the number offered as the booking figure. In these cases, if data on number offered are given separately for each infection, the greatest number of offers in that quarter should be used as bookings for all infections.
- 4) For a given quarter, maternity unit and infection, if both the number of women booked and offered screening for antenatal care and/or the number of women screened are unavailable, exclude this quarter from the infection's uptake calculation.
- 5) Where quarterly uptake is over 100% but less than or equal to 110%, make the number of tests equal to the number of bookings (uptake will equal 100%).
- 6) To calculate the regional annual uptake, take the sum of all included quarterly numerators (number of screening tests) and divide by the sum of all included quarterly denominators (number of bookings) and multiply by 100 to express the proportion as a percentage.
- 7) To calculate the national annual uptake, take the sum of all regional numerators and divide by the sum of all regional denominators and multiply by 100 to express the proportion as a percentage.

B. DECLINED SCREENING CALCULATIONS – ALL INFECTIONS

- 1) The proportion of women who decline screening will be calculated for each maternity unit/trust by quarter and infection.
- 2) The percent declined is calculated as the number of women who declined screening divided by the number of women offered, multiplied by 100:

$$\frac{\# \textit{declined}}{\# \textit{offered}} \times 100$$



- 3) If data on number offered are given separately for each infection, the greatest number of offers in that quarter should be used as the denominator in the decline calculation for all infections.
- 4) For a given quarter, maternity unit and infection, if the denominator (number of women offered screening) and/or the numerator (number of women who declined screening) are unavailable, exclude this quarter from the infection's decline calculation.
- 5) To calculate the regional annual percentage of women who declined screening, take the sum of all included quarterly numerators for and divide by the sum of all included quarterly denominators. Multiply by 100 to express the proportion as a percentage.
- 6) To calculate the national annual percentage of women who declined screening, take the sum of all regional numerators and divide by the sum of all regional denominators. Multiply by 100 to express the proportion as a percentage.

C. CALCULATION OF POSITIVE TEST RESULTS – HEPATITIS B AND HIV

- 1) Total proportion positive
 - a) A total proportion of women positive for hepatitis B and HIV will be calculated for each maternity unit/trust by quarter.
 - b) Total positive for hepatitis B and HIV are calculated as follows:

$$\frac{\# \text{ newly_diagnosed} + \# \text{ previously_diagnosed}}{\# \text{ tested} + \# \text{ previously_diagnosed} - \# \text{ retested}} \times 100$$

- c) If the number previously diagnosed and/or retested is missing, calculate the total positive as:

$$\frac{\# \text{ positive}}{\# \text{ tested}} \times 100$$

- d) Exclude from regional calculations records where any of the numerator or denominator variables are unavailable.
 - e) To calculate the regional annual proportion of hepatitis B or HIV positive antenatal women, take the sum of all numerators for eligible records and divide by the sum of all denominators for eligible records. Multiply by 100 to express the proportion as a percentage.



- 2) Proportion of women newly diagnosed
 - a) A proportion of newly diagnosed hepatitis B and HIV positive women will be calculated for each maternity unit/trust by quarter.
 - b) Proportions newly diagnosed positive for hepatitis B and HIV are calculated as follows:

$$\frac{\# \text{newly_diagnosed}}{\# \text{tested} - \# \text{retested}} \times 100$$

- c) Exclude from regional calculations records where any of the numerator or denominator variables are unavailable.
- d) To calculate the regional annual proportion of hepatitis B or HIV positive, take the sum of all numerators for eligible records and divide by the sum of all denominators for eligible records. Multiply by 100 to express the proportion as a percentage.

D. CALCULATION OF POSITIVE OR SUSCEPTIBLE TEST RESULTS – SYPHILIS AND RUBELLA

- 1) A proportion positive for syphilis and a proportion rubella susceptible will be calculated for each maternity unit/trust by quarter.
- 2) Positive syphilis and rubella susceptible results are calculated as the number of women testing syphilis positive or rubella susceptible divided by the number of women screened. Multiply by 100 for the percent syphilis positive or rubella susceptible:

$$\frac{\# \text{syphilis_positive}}{\# \text{screened}} \times 100 \quad \text{or} \quad \frac{\# \text{rubella_susceptible}}{\# \text{screened}} \times 100$$

- 3) For a given quarter, maternity unit and infection, if the numerator and/or denominator variables are unavailable, exclude this quarter from the infection's positive or susceptible results calculation.
- 4) To calculate the regional annual proportion of syphilis positive or rubella susceptible, take the sum of all included numerators (number of positive or susceptible test results) and divide by the sum of all included denominators (number of tests). Multiply by 100 to express the proportion as a percentage.
- 5) To calculate the national annual proportion of syphilis positive or rubella susceptible, take the sum of all regional numerators and divide by the sum of all regional denominators. Multiply by 100 to express the proportion as a percentage.