

Analysis Method Notice

Of those women who had their initial assessment and gave birth within the same Health Board, the percentage of pregnant women who gave up smoking during pregnancy (by 36-38 weeks of pregnancy).

This notice describes an Analysis Method that has been developed for use in the production of published national outcome indicators, performance measures and/or currencies, which are derived directly from NHS Wales data.

The Analysis Method has been reviewed by the Analysis Methodologies Group and its output submitted to the Welsh Information Standards Board (WISB) for potential accreditation.

*It should be noted that, where the data flow on which the analysis is being undertaken has not been reviewed by WISB (see 'Status of WISB Data Standards Assurance' below), accreditation of the analysis method **cannot** be interpreted as an approval of the underlying data standards or the quality of the data used.*

It is recognised that formal review and/or assurance of the data flow may have been undertaken by other bodies, where those data are being formally published; for example, as 'Official Statistics'. In such circumstances, users of this method are advised to contact the relevant organisations should they require further information on the underlying quality of the specified data source.

For further details about the group, including Terms of Reference and membership, please visit the following website:

<http://howis.wales.nhs.uk/sites3/page.cfm?orgid=742&pid=56696>

WISB Reference: ISRN 2018 / 002

Please address enquiries about this Analysis Method the NHS Wales Informatics Service Data Standards Team.

E-mail: data.standards@wales.nhs.uk / Tel: 029 2050 2539

WISB Analysis Method Appraisal Assessment	<p>Accredited This Analysis Method has been appraised by WISB and is felt to:</p> <ul style="list-style-type: none"> • Meet the specified indicator requirement, in that it is suitable for its calculation / derivation; • Is reproducible by organisations, where appropriate.
WISB Analysis Method Appraisal Outcome(s)	

Status of Data Standards Assurance	<p>WISB Reviewed The data used in this Analysis Method are based on data item standards that have been through the Information Standards Assurance Process.</p>
WISB Decision	Approved
Data Standards Assurance Outcome(s)	

Indicator

Of those women who had their initial assessment and gave birth within the same Health Board, the percentage of pregnant women who gave up smoking during pregnancy (by 36-38 weeks of pregnancy).

Target:

Annual improvement

Rationale / Context

Protecting a baby from tobacco smoke is one of the best things a woman can do to give a child a healthy start in life.

Stopping smoking will help both the mother and baby immediately. Harmful gases, such as carbon monoxide, and other damaging chemicals will clear from the mother's body. When a woman stops smoking:

- it will reduce the risk of complications in pregnancy and birth;
- the woman will be more likely to have a healthier pregnancy and a healthier baby;
- it will reduce the risk of stillbirth;
- the baby is less likely to be born too early and have to face the additional breathing, feeding and health problems that often go with being premature;
- the baby is less likely to be born underweight: babies of women who smoke are, on average, 200g (about 8oz) lighter than other babies, which can cause problems during and after labour. For example they are more likely to have a problem keeping warm and are more prone to infection; and
- it will reduce the risk of cot death, also known as sudden infant death syndrome.

Stopping smoking during pregnancy also helps a baby later in life. Children whose parents smoke are more likely to suffer from asthma and other serious illnesses that may need hospital treatment.

The sooner a pregnant woman stops smoking, the better. But even if they stop in the last few weeks of your pregnancy this will benefit to both the mother and baby.

Data Source(s)

Maternity Indicators Data Set (MI ds)

Definitions:**Definitional Guidance:****Data Items:**

n/a

Terms:

n/a

Detailed Specification

This measure is derived from merged Initial Assessment (IA) and Birth records. The merged file contains births within a specific period and the associated IA record where the birth and IA occur in the same

Health Board.

Number of women who were smokers at IA: Smoker at Initial Assessment/Booking Visit = 1 or 2

Number of women who were non-smokers at 36-38 weeks or onset of labour: Smoker at 36-38 weeks or onset of labour = 3 or 4

Total number of women who were smokers or non-smokers at 36-38 weeks or onset of labour: Smoker at 36-38 weeks or onset of labour = 1, 2, 3 or 4 (excludes 9)

Calculation:

Numerator

Number of women who were smokers at initial assessment and non-smokers at 36-38 weeks or onset of labour

Denominator

Number of women who were smokers at initial assessment

Reporting Format / Frequency

Reporting Frequency	Annual
Time Delay of Reported Data?	n/a

Discussion Points / Areas for Future Development

This section details any areas the Analysis Methodologies Group felt needed further consideration / review by the 'owner' of the method.

Appendix A – Additional Information

n/a

Appendix B – SQL Code (where applicable)

```
select distinct left(m.IAProviderCode,3) as IAProvider
                ,PregnancyID
                ,SmokerAtInitialAssessment
                ,SmokerAtOnsetOfLabour

into #p5
from mat.Maternity_Extract_201617HW_Wales_HBmerged as m

if
(Select(Sum(Case when SmokerAtInitialAssessment in (1,2,3,4) then Cast(1 as float)
else 0 end)/Cast(Count(*) as float)*100)
from mat.Maternity_Extract_201617HW_Wales_HBmerged)>=80
and
(Select(Sum(Case when SmokerAtOnsetOfLabour in (1,2,3,4) then Cast(1 as float) else 0
end)/Cast(Count(*) as float)*100)
from mat.Maternity_Extract_201617HW_Wales_HBmerged)>=80

--80% is the quality criteria
--If quality criteria met then SQL will calculate the indicator using the next bit of
code

Select IAProvider,
Sum(Case when SmokerAtInitialAssessment in (1,2) and SmokerAtOnsetOfLabour in (3,4)
then Cast(1 as float) else 0 end) 'Numerator'
,Sum(Case when SmokerAtInitialAssessment in (1,2) and SmokerAtOnsetOfLabour in
(1,2,3,4) then Cast(1 as float) else 0 end) 'Denominator'
,Sum(Case when SmokerAtInitialAssessment in (1,2) and SmokerAtOnsetOfLabour in (3,4)
then Cast(1 as float) else 0 end)/(Sum(Case when SmokerAtInitialAssessment in
(1,2)and SmokerAtOnsetOfLabour in (1,2,3,4)
then Cast(1 as float) else 0 end))*100 'Proportion'
From #p5
group by IAProvider order by 1
```