

Methodological Change Notice

Statistics on Women's Smoking Status at Time of Delivery

Background

The Statistics on women's smoking status at the time of delivery is a long running publication series which has been based on aggregate data collected from commissioning organisations on a quarterly basis since 2005/06 in England. This is referred to as the Smoking at time of delivery (SATOD) data collection. It monitors trends in women's smoking status around the time of when they give birth. The publication is badged as Official Statistics.

In 2015, the Maternity Services Dataset (MSDS) was launched in England. The latest version (2.0) has been in use since April 2019. Trusts are required to submit patient-level data on activity carried out by Maternity Services relating to mother and baby, every month. This is activity from the point of the first booking appointment until they're discharged from maternity services. The smoking status around the time of delivery can also be submitted.

Due to lack of funding and in order to reduce burden on the NHS, there has been an impetus to replace the historic SATOD data collection using data from the Maternity Services Dataset (MSDS), especially as the data quality in MSDS has matured over time.

After a period of dual reporting on a quarterly basis in 2024/25, which shows that the smoking rates are in close alignment nationally, we have now retired the SATOD data collection. Key stakeholders have been involved, and a consultative approach has been taken. For the first quarterly report in 2025/26, the plan is for only MSDS data to be included and become the primary source of information on smoking at time of delivery.

Description of changes

A Working Group consisting of clinical, policy and analytical expertise was formed to agree a methodology for constructing a SATOD measure from MSDS. The methodology was agreed based on an optimal solution in terms of alignment with the existing SATOD methodology. There remains some differences which are accepted as MSDS allows for more detailed reporting at patient level.

Definition of Smoking at Delivery

The SATOD data collection did not clearly define “Smoking at Time of Delivery”. For MSDS, it was agreed that + or – 3 days from the date of delivery (onset of labour or caesarean) allows for some leeway around when smoking status is recorded and how this is reflected in the MSDS data. Midwives confirmed in most cases, smoking status is not asked on the delivery date and this was clearly evidenced when looking at the data which supported a +/- 3 day window. There was concern around moving to a window greater than +3 days as it would risk reporting on the postnatal period when smoking statuses could change. We also considered -14 days from delivery. It was felt that moving to this method would blur with smoking information from the 36-week appointment which is to be a separate new metric in future for the Saving Babies Lives Care Bundle: [NHS England » Saving babies’ lives: version 3](#)

Recording smoking status

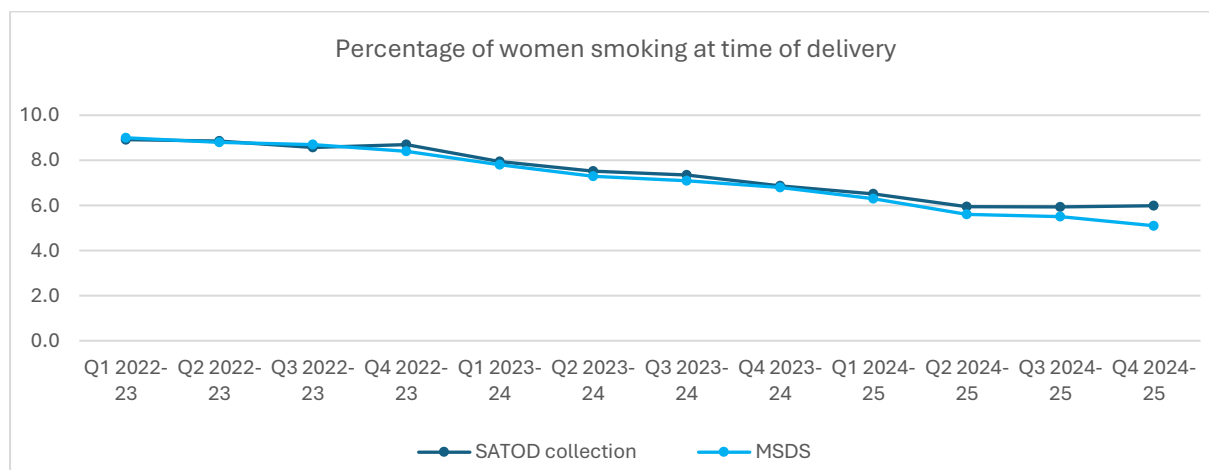
The SATOD data collection collects self-reported data on smoking status based on the use of combustible tobacco products. The information is submitted into the data collection with counts of women smoking, not smoking or smoking status unknown at time of delivery.

Similarly, MSDS also collects self-reported information, but this relies on staff in Trusts to submit this information via clinical codes. Some guidance was issued to submitters along with a webinar to explain how to do this: [Recording smoking status data in MSDS - NHS England Digital](#). Most submitters were already submitting a smoking status, but the guidance was more prescriptive in terms of which codes to submit and into which tables.

We had to consider how to interpret any conflicting smoking statuses in the +/-3 days window. It was agreed to treat these with an unknown status and to work with submitters to ensure that the guidance is followed so only one code is submitted in this window.

Impact

The chart below shows the differences in the smoking rates at delivery from the two data sources for the 2022-23 to 2024-25 period which has been dual reported in the 2024-25 publication series.



Estimates in the quarterly time series are closely aligned, indicating that MSDS is a good replacement as the data source for this publication. The decision to retire the SATOD data collection was based on this close alignment of estimates. There is some slight divergence in the latest Q4 2024-25 estimate due to some data quality issues reported from a handful of submitters of the SATOD data collection, where a number of them had implemented new electronic patient reporting systems which resulted in some anomalies in their figures. It is likely that these estimates may not have diverged if it hadn't been for such issues.

Future reporting

Estimates in previous statistical publications will not be revised.

Data from the SATOD data collection were badged as Official Statistics and will remain the primary source of reporting SATOD up until 2024-25. It will then be replaced by MSDS, which is also to be badged as Official Statistics. Below is an example showing how a future time series would be presented based on annual estimates which would be accompanied with notes to explain the break in the time series.

Percentage of women smoking at time of delivery

